The Development of the Libyan Health System to Improve the Quality of the Health Services

A thesis submitted to the Manchester Metropolitan University in partial fulfilment of the requirements of the degree of Doctor of Philosophy in the Faculty of Health, Psychology and Social Care

By

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Dedication

This work is dedicated to:

My late parents

Who imparted the values and strengths by which I live; may ALLAH bless them, grant them a place in the hereafter and give them a place in his paradise.

My beloved family

My wife Faiza, my sons Husamedin and Malik, my daughter Yasmin, my daughter-in-law Anna Elisabeth and my grandsons Zackaria and Mika'iil, for their unfailing love, sincere support and prayers for me throughout the course of this study, even when they were tired of my absences (literal or virtual).

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Abbreviations

Only the most important or commonly used abbreviations are listed below:

A&E	Accident and Emergency
AIDS	Acquired Immune Deficiency Syndrome
CD	Communicable Disease
CME	Continuous Medical Education
CPD	Continuous Professional Development
CSDH	Commission on Social Determinants of Health
DHA	District Health Authority
DOTS	Direct Observed Treatment Short-Course
EMRO	Eastern Mediterranean Regional Office (WHO)
EPI	Expanded Programme on Immunisation
EU	European Union
GAI	General Information Authority
GDP	Gross Domestic Product
HE	Higher Education
HIC	Health Information Centre (in the Libyan MOH)
HIS	Health Information Systems
HNA	Health Needs Assessment
HR	Human Resources
HRD	Human Resources Development
HRH	Human Resources for Health
HRM	Human Resource Management
HS	Health System

HSG	Healthcare System Governance
HSS	Health System Strengthening
ICT	Information and Communications Technology
IMR	Infant Mortality Rate
LNHS	Libyan National Health Services
LPHS	Libyan Private Health Service
LRC	Libyan Red Crescent
LYD	Libyan dinars
MDGs	Millennium Development Goals
MENA	Middle East and North Africa countries
MOF	Ministry of Finance
MOH	Ministry of Health
NCD	Non-Communicable (Chronic) Disease
NCDC	National Centre for Disease Control (Libya)
NGO	Non-Governmental Organisation
NHS	National Health Service
NTC	National Transitional Council (Libya)
OECD	Organisation for Economic Co-operation and Development
OOP	Out-of-pocket (payment)
OPD	Outpatient Department
PAF	Performance Assessment Framework (WHO)
PHC	Primary Health Care
PHS	Public Health System
PPP	Public-Private Partnership

RTAs	Road Traffic Accidents
TA	Treatment Abroad
UK	United Kingdom
UN	United Nations
UNDP	United Nations Development Programme
UNICEF	United Nations Infant and Children's Fund
USA/ US	United States of America
WB	World Bank
WHO	World Health Organisation
WHR	World Health Report

Abstract

Health Systems (HSs) are playing a more vital and influential role in people's lives more than ever before. Unfortunately, however, they can also misuse their power, waste their potential, and do more harm than good. It is believed that most people in developing countries are not satisfied with the quality of health services provided to them and feel that something should be done. In Libya, evidence has shown that the HS is currently facing a considerable number of challenges. These include the increasingly common practices of paying personally for treatment in the private healthcare sector and/or travelling for Treatment Abroad (TA). The general population perceive the HS as inadequate, if not poor, and they are dissatisfied with all levels of health services, even though Libya has achieved some improvements in the quality of its health services and in the general health of the population over the past few decades. The Libyan HS is obviously based on the HS conceptual frameworks of the WHO, which may or may not be applicable to Libya, as the status of the HS and the quality of the healthcare it provides have not been fully assessed. Therefore, this comprehensive study is one of the first attempts to undertake this task with the aim of generating a reliable evidence-based framework as the basis of the reform and/or rehabilitation of the country's national HS.

The overall aim and intended outcomes of this study were: to provide a foundation for the development of a framework and evidence-base, based upon the perspectives of healthcare stakeholders; to inform policy-makers and healthcare providers in devising and developing policies and strategies to re-engineer/reform the HS at the national level; and to introduce and/or improve quality initiatives at the health facility level. Specifically, the following primary objectives were developed to address the above overall aim and intended outcomes of this study:

1. To assess patients' perspectives on the quality of healthcare in Libya.
2. To analyse health stakeholders' perceptions of the HS and the quality of healthcare in Libya.
3. To contribute to the development of knowledge about the HS and the quality of healthcare in Libya.

A concurrent mixed-methods (quantitative and qualitative) approach was used: the quantitative method to identify patients' perspectives on the quality of hospital care, and the qualitative method for exploring health stakeholders' perceptions of the HS and the quality of healthcare. A specifically designed self-administered questionnaire for the purposes of this study was used to collect the quantitative data from 550 patients in public and private hospitals in Benghazi. The qualitative data was collected via semi-structured interviews with 40 individuals, 10 health experts and officials, 20 health professionals, and 10 hospital inpatients in Benghazi City. The quantitative data was analysed using descriptive inferential statistics and multivariate analysis with SPSS for Windows Version 19. Statistical significance was set at $p \leq 0.05$. The transcripts of the qualitative data were analysed manually using the framework approach and thematic analysis.

The findings suggest that the majority of the respondents experienced lengthening waiting times to access healthcare. Furthermore, the results reflect the large number of respondents who have travelled for treatment abroad (43.1%). The analysis revealed that patients were dissatisfied with many aspects of care provision in hospitals. The overall quality score of hospital care was generally low (50.16%); the scores for the private hospitals were higher (52.82%), while public hospitals scored 49.02%. Overall, patients are more concerned about the quality of technical services than the interpersonal aspects of services. The analysis suggests that the service itself had more influence on satisfaction than the characteristics that the patients themselves possessed. The Regression model was highly significant and explained 92% of the variation in satisfaction. Behavioural intention, perceived quality of the service, availability, responsiveness, patient safety and atmosphere all had strong effects on satisfaction with services across the two types of hospitals.

The qualitative findings pointed to broad areas of obstacles and problems which affect the provision of high-quality and efficient healthcare, while the people's choices about health services were influenced by the HS's responsiveness. The findings demonstrated various constraints in equity, accessibility, availability, waiting times and the referral system, which all lead to poor responsiveness to patients' needs. They also showed that the HS has misused its power and squandered its potential, as it is poorly structured, inefficiently organised and badly led. Broad areas of difficulties emerged such as polices, regulation and organisation, legislation, supervision and inspection, and the HIS, as well as various constraints regarding the HS's financing and human and physical resources. Furthermore, cultural aspects and health awareness play both direct and indirect roles that negatively affect the quality of the provision of healthcare.

The overall conclusion of this thesis is that the modern approaches and advances of the technical side of the Libyan HS have not been matched by developments in HS governance and managerial processes; beneath the surface, there lies a less developed HS of paternalism and bureaucracy. This unique situation produces a number of questions which require answers in order for Libya to evolve into the role of the twenty-first century country that the government and population desire.

This study offers a dynamic model based on the findings, which gives a comprehensive view of a high-quality HS, incorporating its main components, structure, activities, and outcomes as well as the HS's internal and external environmental factors, with an increase in the scope and participation of people and communities. Due to the convergence and similarities between HSs and their components, this model can be widely utilised, especially in developing countries.

Chapter 1: Introduction

This chapter introduces the study for this thesis through three sections. Section 1.1 provides an overview and justification for the study. Section 1.2 presents the study's overall aim and intended outcome, the research question and objectives. Finally, Section 1.3 describes the outline of the thesis structure.

1.1. Overview

Quality in healthcare is increasingly becoming a central health policy issue in the health systems (HS) in both developed and developing countries (Shaw and Kalo, 2002; Øvretveit, 2004). Since the 1990s, profound economic, political and social changes have contributed to a dramatic shift in healthcare policies around the world, resulting in greater emphasis on improving performance and quality (WHO, 2000; Lloyd, 2004; Harteloh and Verheggen, 1994; Ruiz, 2004). Hence, debate has passed from a discussion of the appropriateness of healthcare to policies and methods to improve their quality.

Interest in the quality of healthcare has been driven by political and financial imperatives, including limited resources, rising medical costs, and increasing consumer expectations. Healthcare reforms in many countries have also contributed to more attention being given to the quality and efficiency of healthcare service policies in both developed and developing countries, a recognition of the existence of service quality problems in HSs, and the need for a systematic approach to the analysis and improvement of the these problems (Bassett et al., 1997; Reerink and Sauerbom, 1996; Shaw, 1993; Satia and Dohlie, 1999).

Øvretveit (2004) believed that there is a need to find an appropriate "way to quality" in developing countries, because most people in such countries are not satisfied with the quality of public and private healthcare and feel that something should be done. In the Middle East and North African (MENA) countries, quality of healthcare has received growing interest in the past decades. To some extent this may be due to the increasing and vast global attention given to the subject, which has built on the work of Donabedian, Øvretveit and many others, coupled with the development of national and international organisations dedicated to improving the quality of healthcare services.

The increased concern is reflected at two levels. The first is the healthcare system governance (HSG) level (i.e. policy-making), where the attention is reflected in policy documents that are dedicated to the visions and strategies for improving quality. The second level is the implementation level (at facility level) where the practicalities of how to bring about quality improvements are dealt with. Often, there is a wide gap between policy development and implementation.

Although improving healthcare is clearly the main aim of the HS, it is not the only aim, as good healthcare itself is really twofold. It consists of the best attainable average level *(Quality of Healthcare)*, which means the HS response well to what people expect of it; and the smallest feasible differences among individuals and groups *(fairness)*, which means it responds equally well to everyone without discrimination (WHO, 2000). Thus, HSs try to achieve three fundamental goals (WHO, 2000:8):

- "Improving the health of the population they serve;
- Responding to people's expectations;
- Providing financial protection against the costs of ill-health".

However, because these aims are not usually achieved, people dissatisfaction with the way healthcare is provided or financed is on a grand scale, with accounts of delays, errors, rudeness, indifference and hostility on the part of Human Recourses for Health (HRH), and denial of care or exposure to catastrophic financial risks by insurers and governments widespread (WHO, 2000).

The quality of care is influenced by three main perspectives: managerial (economic efficiency), professional (clinical effectiveness), and patient (Øvretveit, 2004). Patients' views on healthcare services have become widely recognised as a central theme in healthcare policy in general and healthcare reform in particular (Calnan and Gabe, 2001; Moullin, 2002; Coulter and Magee, 2003; Greenhalgh and Eversley, 1999). Hence, quality is a multidimensional notion and patients' views are an important theme in this discussion. An analysis of the literature indicates that there is widespread agreement as to the importance of eliciting patients' views and taking them into account when setting priorities for improving healthcare (Neuberger, 1998; Wensing et al., 1998; Michel et al., 1998; Grol et al., 1999; Wensing and Elwyn, 2003; Grol, 2001). As Larsson et al. (2005) pointed out, patients' views in this sense are seen as one aspect of quality and an "endpoint in quality evaluation".

Evidence from empirical research identifies compelling links between taking into account patients' views and their satisfaction (Wensing and Elwyn, 2003; Larsson et al., 1999; Larsson and Larsson, 1999; Lewis, 1994; Schneider and Palmer, 2002; Haddad et al., 2000; Haddad et al., 1998; Williams, 1994). Satisfied patients are more likely to comply with and adhere to doctors' instructions and treatment plans (Lewis, 1994). Dissatisfied patients, on the other hand, are likely to distrust their doctors, opt out of treatment plans, miss appointments, and either seek referral to another doctor or seek alternative providers, for example in the private sector (Williams, 1994). Patients' views are also a significantly valuable source for providing feedback to those evaluating performance, and in highlighting information about service quality and areas needing improvement (Wensing and Elwyn, 2003; Stevenson et al., 2004; Bower et al., 2003; Bower, 2003; Coulter and Elwyn, 2002; Wensing and Elwyn, 2002; Ryan et al., 2001; Donabedian, 1995; Øvretveit, 1998).

There are two important arguments for encouraging a focus on quality in HSs (WHO, 2006a:3):

- "Even where [HSs] are well developed and resourced, there is clear evidence that quality remains a serious concern, with expected outcomes not predictably achieved and with wide variations in standards of healthcare delivery within and between [HSs].
- Where [HSs] – particularly in developing countries – need to optimise resource use and expand population coverage, the process of improvement and scaling up needs to be based on sound local strategies for quality so that the best possible results are achieved from new investment".

The influence of international organisations on developing countries, especially the World Health Organisation (WHO), non-government organisations (NGOs) and donor funding, has also concentrated attention on the quality of the healthcare that HSs provide, especially when compared with the private sector. This increased attention includes countries such as Libya, and this thesis is one of the first attempts at studying how far and how well the Libyan Ministry of Health (MOH) has addressed the quality of healthcare in the nation.

Over the past five decades, the Libyan HS has achieved some improvements in the delivery of healthcare and in the population's general state of health. Where healthcare services have been developed, many infectious diseases have been eradicated, resulting in a reduction of the infant mortality rate (IMR) and a rise in life expectancy. For instance, the IMR has dropped from 160 per 1,000 live births in 1960 (Elfituri, 2000) to only 11 per 1,000 live births in 2010 (HIC, 2010), while life expectancy at birth has risen from 47 years in 1960 (UNICEF, 1997) to 72.3 years in 2009 (HIC, 2010). Additionally, the crude mortality rate has declined from 15 per 1000 in 1970s to 4 per 1000 in 2010. Additionally, the doctor/patient ratio has improved from one doctor per 3860 people in 1970 to one doctor per 526 people by 2010 (HIC, 2010; WHO, 2011b).

However, "over the years, the organisation of the health services was changed from a centrally controlled system to a completely decentralised system and .... [about seven years ago (March 2006)], back again to full centralisation. This vacillation led to serious effects on the quality of the health services" (Benamer et al., 2009:243). Thus, the HS is currently facing considerable challenges, and its overall performance was and remains poor compared to other countries in the region (i.e. MENA countries) (Al-Gbail, 1999[1]; Saleh, 2006[2]; ElTaguri et al., 2008). Improvements are particularly needed in areas such as quality of healthcare provision and patient safety.

"Libyan citizens perceive the public [HS] as inadequate, if not poor" (Benamer et al., 2009:243), and they are dissatisfied with all levels of healthcare services (Al-Gbail,

[1] Director of healthcare services in the Libyan MOH in the 1990s.
[2] Director of the Health Information Centre (HIC) in the Libyan MOH from the 1990s to the present.

1999; Saleh, 2006; WHO, 2007a; El Taguri et al., 2008; Benamer et al., 2009). Consequently, health tourism to neighbouring countries has flourished (El-Taguri, 2007). For instance, despite guaranteed free healthcare in the Libyan National Health Service (LNHS), many Libyans are opting to purchase healthcare from the Libyan Private Health Services (LPHS) in hopes of receiving a better service. For more serious procedures, Libyans travel for treatment abroad (TA), at great expense to the citizens who pay personally, in addition to what the MOH spends annually for the critical medical TA of Libyan citizens (e.g. 60 million Libyan Dinars [LYD]) (HIC, 2004; WHO, 2007b and 2010a); some sources mention that every time the MOH agrees to send someone for treatment, it spends $10,000 (HIC, 2010; WHO, 2013a).

The HS and the quality of healthcare in Libya have been a central issue in many policy documents and a key objective of health sector reform policies, including the issue of the first national health strategy and the establishment of quality departments at MOH and hospital levels. Such quality of healthcare initiatives are still in their infancy at all levels of the Libyan HS, however, even though it has been reported that quality of the healthcare provided is poor (Al-Gbail, 1999; Saleh, 2006; WHO, 2007a; El Taguri et al., 2008). In addition, a general model in healthcare is lacking, and there is no clear agreement as to the way in which quality initiatives should be implemented in the Libyan HS (Abdelmotleb, 2008). The Libyan HS is obviously based on the HS conceptual frameworks of the WHO (WHO, 2000 and 2007c), which may or may not be applicable to Libya, as the status of the Libyan HS, and the quality of the healthcare it provides, have not been fully assessed. Therefore, this study undertakes this task with the aim of generating a reliable evidence-based framework as the basis of the reform and/or rehabilitation of the country's national HS.

The researcher's experience also reflects his own interest in the subject matter: he has spent more than 20 years working and being involved in and around the health sector at the local and the central levels. This has been enriched by additional experience at regional and international levels. With this extensive experience, the researcher had the opportunities to become involved in, participate with, and learn from health management and development. The researcher will draw on the literature as well as on his personal experience to research, analyse and discuss the wider implications of the HS and quality of healthcare with the intention to yield learning and provide new insights, ideas and opinions on how to improve ongoing and future HS reform processes that ultimately should contribute towards better health outcomes.

This thesis considers a framework for how the two levels of healthcare quality can be studied by identifying the various steps through which a country must go to move from HS policies at national level to real quality improvements that are observable at the health facility level. The study looks at the whole HS in Libya; additionally, a field study took place in Benghazi City's hospitals as a case study[3] at user, operational

[3] Benghazi is the second largest city in Libya, with a population of approximately three-quarters of a million. There are about 3,525 beds available in 13 government hospitals, which provide free healthcare to all patients, in addition to 12 private hospitals with about 205 beds (HIC/MOH, 2010).

and strategic levels, with the hope that a similar approach can be adopted in studying the process in other MENA countries now taking HSs and quality of care as an important issue. To date no mixed-methods studies have been done on the Libyan HS and quality initiatives at the national level and/or at facility level to assess patient perception of quality of health services.

The study begins with a consideration of the quality of care initiatives in Libya, looking at both documentation and perceptions of the healthcare stakeholders (i.e. senior policy-makers; healthcare decision-makers; healthcare experts, healthcare professionals, and patients). At HSG level (i.e. policy-making), while quality has been a key issue in health sector reform policies, experience has shown a great deal of disconnection between the development of quality policies, quality improvement strategies, quality organisation, and the quality assurance (QA) methods used (Whittaker et al., 1998; Zanten, 1996).

The study then looks at the Libyan HS and the extent to which such policies on healthcare quality, as can be identified, have been developed into strategic plans for implementation. Patients' views on the quality of Benghazi City's hospitals, as expressed via a questionnaire, are then assessed as a means of measuring the success of the implementation of quality initiatives at facility level. Simultaneously, the perceptions of the healthcare stakeholders (patients, health professionals, officials and experts) are examined via semi-structured interviews, to identify and explore issues around the HS and the quality of healthcare in Libya.

In summary, this study attempts to provide a foundation for the development of a framework and evidence base to re-engineer the HS and its governance in Libya and to inform policy-makers and healthcare providers in devising quality policies and strategies for introducing and/or improving quality initiatives.

1.2. Overall aim, research question and objectives of the study

1.2.1. Overall aim and intended outcome

In general, this study intends to address health management problems that compromise the efficiency and effectiveness of the HS's policies, strategies, plans and interventions. It is hoped that this study will provide new insights, ideas and opinions on how to improve ongoing and future healthcare reform processes that ultimately should contribute towards better health outcomes.

The overall aim and intended outcome of this study are: to provide a foundation for the development of a framework and evidence base, based upon the perspectives of healthcare stakeholders; to inform policy-makers and healthcare providers in devising and developing policies and strategies to re-engineer/reform the HS at the national level; and to introduce and/or improve quality initiatives at the health facility level.

1.2.2. Research question

The HS is trying to achieve the three overall aims mentioned by the WHO (2000): good health (*Quality of Healthcare)*, responsiveness to the expectations of the population, and fairness of financial contributions. The research question for the present study is: To what extent does the Libyan HS develop, manage and provide healthcare services at an acceptable level of quality, and respond equally to the reasonable needs and expectations of the population, as well as protecting them against the financial costs of illness?

1.2.3. Statement of objectives

Specifically, the following objectives were developed to address the above overall aim and intended outcome of this study:

- ***Primary objectives:***

1. To assess patients' perspective on the quality of healthcare in Libya.
2. To analyse health stakeholders' perceptions of the HS and the quality of healthcare in Libya.
3. To contribute to the development of knowledge about the HS and the quality of healthcare in Libya.

- ***Secondary objectives:***

1. To identify the basis upon which individuals choose private healthcare in Libya and/or abroad.
2. To determine which aspects of quality of healthcare provision are most likely to influence satisfaction with healthcare and to account for any differences.
3. To assess the association between the characteristics of the respondents and their ratings of the quality dimensions of healthcare
4. To identify the key determinants of satisfaction with the quality of healthcare provided by the LNHS and LPHS in Benghazi.
5. To describe the quality initiatives of the HS at national level and health facility level.
6. To determine the ways in which the HS is responsive and fair to the population's expectations.
7. To explore the extent of the efficiency and effectiveness of the HS in order to develop quality policies at the national level.
8. To assess the existence of quality components and/or the implementation of any quality initiative at health facility level.

1.3. Thesis structure

The thesis is presented in nine chapters:

- ***Chapter One: Introduction***

This chapter provides an overview, justification and rationale for conducting the research, and concludes with the study's overall aims and outcomes, the research question and objectives, and an outline of the thesis structure.

- ***Chapter Two: Health Systems***

This chapter reviews the literature of HSs, which covers the concept, the global HS challenges at different levels of development, and the current HS challenges and reforms with a focus on the developing countries. It also discusses the developments in the approaches of HSs, which provides different views on HSs, the thinkers involved and the levels of application, as well as a critical analysis of current HS thinking.

- ***Chapter Three: Quality in Healthcare Services***

This chapter consists of two parts. Part one will review literature on the quality of healthcare. It focuses on key issues related to the assurance and improvement of quality from theoretical perspectives, from organisation theory introduced by quality theorists. The extension of these ideas from the industrial sector to the public sector, including healthcare, is also discussed. Different attempts in the literature to conceptualise quality and define it from a pluralistic approach are presented, as well as a definition and discussion of the quality concept, and quality dimensions.

Part two will present a review of the literature relating to monitoring and assessment methods of quality in healthcare, as well as a historical and current account of the development of the role of patients in healthcare services. Reviews of some of the main challenges facing the evaluation of service quality, given its complexity and multidimensionality, are discussed, as well as the evaluation, measurement and assessment methods of healthcare quality, including developing countries (i.e. Arab countries and Libya). Finally, the chapter comments on the implications of the literature review and its relevance to the Libyan context.

- ***Chapter Four: Libya: the country, culture and health system***

This chapter provides a general background about the country highlighted in the study, and summarises its socio-economic development and challenges. It provides insight into the specific setting of the study, the Libyan HS, including the health policy environment – particularly the health policy reform, quality policy development and quality programmes. It therefore presents the context in which the research was conducted.

- ***Chapter Five: Methodology***

This chapter presents the study's design, methods used, and rationale for the choice of methods to elicit and evaluate different stakeholders' perspectives within the Libyan HS. It describes separately, and in detail, the methods employed to conduct the empirical work. A concurrent mixed-method strategy is used, which combines quantitative and qualitative data derived from a self-administrated questionnaire of patients along with semi-structured interviews with HS stakeholders.

- ***Chapter Six: Results: Quantitative Findings***

In this chapter, the quantitative findings of the empirical fieldwork for this study (the self-administrated questionnaire for patients) are presented and discussed. The findings are presented in five parts: (i) Respondents' socio-demographic characteristics, (ii) Characteristics of patient experiences with health services, (iii) Respondents' evaluation of the quality of healthcare, (iv) Association between the characteristics of patients and their satisfaction with the quality of healthcare, and (v) Key determinants of satisfaction. Throughout these sections, comparisons between the quality of the healthcare services provided by LNHS and LPHS are made.

- ***Chapter Seven: Results: Qualitative Findings***

In this chapter, the findings derived from analysing the contents of semi-structured interviews with 40 healthcare stakeholders (HS officials and experts, health professionals, and patients) are presented, with a focus on the quality of healthcare and the HS. The findings of the thematic analysis are presented under five main dimensions: (i) Quality of healthcare provision, (ii) Adaptation and acceptability, (iii) Healthcare and its governance, (iv) HS financial and resource profiles, and (v) External factors.

- ***Chapter Eight: Discussion***

In this chapter, the study's findings are interpreted within the context of the findings of previous studies. The chapter concludes by highlighting development implications of the study.

- ***Chapter Nine: Summary, conclusions and recommendations***

This chapter presents the contribution of the current study to the body of literature in this field, the conclusions of the study together with recommendations, the study's limitations and constraints and areas for future research.

Chapter 2: Health Systems

2.1. Introduction

This chapter reviews the literature of HSs, covering the concept, the global HS challenges at different levels of development, and the current HSs challenges and reforms, with a focus on the developing countries. Reference is made to the key health determinants and the key problems and constraints encountered, including the HSs for which more adequate management is required. This chapter in general alludes to the current HSs thinking about these issues, focusing on the chronology of the way people have addressed HSs. It recognises the complexity and diversity of HSs and the way HSs are currently perceived. Developments in HSs approaches will also be discussed, including different views on HSs and the levels of application. The chapter also illustrates different models of HSs by different authors. Finally, it provides a critical analysis of current HSs thinking, analyses current methodologies in HSs, and realises shortcomings in all aspects of health.

This review provides a conceptual framework for the study, and explores what other approaches and methodologies can offer, in order to develop a framework for the Libyan HS which is more relevant in theory and practice than the other functionalist frameworks that Libya has adopted (i.e. WHO, 2000 and 2007c). It is hoped that this framework will also shorten the gap between HSs goals and performance.

2.2. Overview

A system is a set of connected elements which form a whole, thereby possessing the properties of the whole rather than of its component parts (Checkland, 1981). The literature advocates that a system is a comprehensive concept that can be used to express very different connotations and levels of analysis (Sambo, 2009). A system's activity is the result of the influence of one component on another. These influences are called feedback, which can either be positive (amplifying) or negative (balancing) in nature (Senge, 1990). A system can be closed or open. Closed system is completely autonomous and independent of the activity around it, in contrast to open systems which interact with their environment (Atun and Menabde, 2008). Systems are dynamic and complex, made up of many interconnected and interdependent elements which form extensive networks of feedback loops with time delays and non-linear relationships; it is these characteristics that are the sources of dynamic complexity in systems (Atun and Menabde, 2008). The concept of systems in sociological analysis without further clarification can raise controversies because participants may have different ideas in mind when they speak of systems. M'Pherson (1974) argues that the concept of wholeness (*gestalt* in German) in the structure and behaviour of a natural, biological or societal organisation is poorly conveyed by the word 'system', loosely used in common English (M'Pherson, 1974; Sambo, 2009).

Given this interconnectedness and complexity, a system response occurs as a result of the interactions among its elements, rather than as the result of change in any part. This is the essence of system thinking: the ability to see the world as a complex system comprised of several inter-connected and inter-dependent components (Sterman, 2001). "System thinking is an approach to problem-solving that views 'problems' as part of a wider, dynamic system. [It] involves much more than a reaction to present outcomes or events. It demands a deeper understanding of the linkages, relationships, interactions and behaviours among the elements that characterise the entire system" (de Savigny and Adam, 2009:33). Systems thinking, which has its roots in a range of disciplines such as computing, engineering, cognitive psychology and cybernetics, views a system as a whole rather than as its individual component parts. It takes into consideration the behaviour of the system over time instead of fixed 'snapshots' (Senge, 1990; Atun and Menabde, 2008). System thinking is commonly used in many areas where interventions and systems are complex. The application of system thinking in the healthcare area is accelerating a more realistic understanding of what works, for whom, and under what circumstances (National Cancer Institute, 2007; HMN, 2008).

HSs play an important role in improving health. The WHO estimates that between 1952 and 1992, half the gains in global health resulted from the application of new technology and knowledge in HSs, with the remaining gains due to income development and better education (WHO, 1999). The organisation of HSs has long been considered more an operational problem and less a domain for research. This changed with the re-emerging attention to the Health System strengthening (HSS) and the demand of policy-makers for evidence to support their decisions. The scientific community has oriented itself towards HSs research, presently defining and developing the domain (Bennett et al., 2011; Gilson et al., 2011; Mills, 2011; Sheikh et al., 2011; van Olmen et al., 2012a).

The way that the term 'health system' currently perceived and used is vague and inconsistent, confusing and fragmented. Theory descriptions are inconsistent, and the words used to convey messages or mental images of related events, experiences, or perspectives are not standardised. They may mean different things to different people. The analysis and design of HSs according to selected properties or dimensions is sometimes difficult because of a lack of conceptual ordering, or different views by different theorists. Another explanation could be the fact that HSs thinking is lagging behind the systems thinking movement. Current HSs thinking does not address human relations or behavioural and cultural aspects that are so important in terms of health promotion. There is a need to sharpen the definition of the HS to enhance the clarity of its concept and make it more socially relevant. System ideas could help in understanding current HSs thinking, developing concepts and relationships to make up a consistent framework of thinking that could be used to explain and predict HSs phenomena. This would improve the dialogue among HSs theorists and practitioners (Sambo, 2009).

2.3. Concept of the health system

HSs are defined as comprising all the organisations, institutions and resources that are devoted to producing health actions. Health action is defined as any effort, whether in personal healthcare, public healthcare services or through inter-sectoral initiatives, whose primary purpose is to improve health (Musgrove et al., 2000).

HSs are in principle meant to promote and improve the population's health; HSs of some sort have existed as long as people have tried to treat diseases and protect their health (WHO, 2000). Most countries have several distinct provision and health financing sub-systems, embracing several types of traditional practice as well as public, private and non-profit health facilities, sometimes offering services for limited population sub-groups such as civil servants (Jamison et al., 1999).

HSs have undergone overlapping generations of reforms in the past 100 years, including the founding of national HSs, the promotion of Primary Health Care (PHC) as a route to achieving *Health for All*, and affordable universal coverage. A criticism of this route has been that it has given very little attention to people's *demand* for healthcare, and instead concentrated almost exclusively on people's perceived *needs* (Musgrove et al., 2000). This gave room to universalism in health – a form of public intervention that has governments attempting to provide and finance everything for everybody. This philosophy has dominated for about 20 years since the early 1970s, and it shaped the formation of well-established HSs that have achieved important health successes. However, universalism has failed to recognise both resource constraints and the limits of government.

Since the start of the new millennium, there has been a gradual shift towards what the WHO (1999) calls the *new* universalism. This shift has been partially due to the profound political and economic changes of the past three decades, including the transformation from centrally planned to market-oriented economies, reduced state intervention, fewer government controls and more decentralisation. The WHO (1999) advocates a *new* universalism that recognises government limits, but retains government responsibility for leadership, regulation and financing of HSs. The new universalism welcomes diversity and recognises that services are to be provided for all, but not all services can be provided. It foresees that the most cost-effective services should be provided first. It welcomes private sector involvement but it entrusts the public sector with the fundamental responsibility to provide strategic orientations, stewardship, and finances to deliver care for all.

The key features for progress to a new universalism in health are: *membership*, defined to include the entire population, and *universal coverage*, meaning coverage for all, not coverage for everything. The *patients do not make the provider payment* at the time they use the healthcare service (Out-of-pocket [OOP] payment results in an inequitable financing burden and barriers to access for the poorest; pre-payment allows more efficient purchasing services). Services may be offered by *providers of*

all types, as long as health practices and facilities meet certain quality standards. Such arrangements will allow a very large number of private healthcare providers who are essentially the first points of contact with the HS to be brought within a structured but pluralistic HS (Jamison et al., 1999).

2.4. Global health system challenges

The HS is a very important determinant of the health status of a population. HSs across the world have attained different levels of development; this has been determined by the countries' degree of socio-economic development, resource allocation, management capacity and technical-scientific developments in the health field. The WHO (1999) recognises that in general, health development is directly related to economic development, and vice-versa. In the past, HSs were characterised by rigid bureaucratic and centralised administrations, a curative orientation, inequities between the rich and poor, and non-responsiveness to the needs of individuals and communities. HSs remain in a dynamic process of change, and therefore public health sector managers must deal with multiple problem-contexts in this changing world.

A further issue is that weak managerial skills in healthcare organisations and the narrow vision of health, sometimes limited to the scope of medicine, are among the factors contributing to the failure of health reforms. The complex, pluralistic, multi-vital and dynamic definition of health as a 'state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' (WHO, 1946:100) and the role of health in development create more challenges and call for a more systemic approach to health reform. The internal environment of HSs needs also to be re-thought and re-adapted to meet the challenges imposed by the changing external environment. It is proposed here that the application of new research methodologies contributes to expanding the knowledge basis particularly in terms of defining the key objects of HSs, defining HSs boundaries, addressing health determinants, accommodating the contexts of change (environmental, technological, demographic and epidemiological transitions), and being more responsive to individual and community needs and expectations.

At the policy level, fundamental issues are systematically raised. First, the health sector, in the context of development, is usually considered non-productive and resource-consuming, and is therefore not prioritised in terms of resource allocation. Secondly, what are the best ways to ensure sustainable healthcare financing without exacerbating existing inequities? Thirdly, why haven't the global policies, goals and initiatives led to meaningful changes in the health status of local communities?

Healthcare delivery in most of the developing countries is organised within the context of national health services (NHSs), and MOHs are responsible for overall HSs policies, reforms, development and management. The public sector plays an important role, particularly in preventive care and in the control of endemic diseases and epidemics. The WHO (1973), following a study of basic healthcare services,

concluded that most people in the world have limited or non-existent access to healthcare services. Healthcare services put emphasis on cutting-edge technology centrally located in many cities, which is often not relevant to the population's needs or local realities; there is also evidence of imbalances in promotive, preventive, curative and rehabilitative healthcare.

In addition, HSs in most developing countries including Libya are still predominantly centralised in terms of policy development, management of resources, and delivery of quality healthcare. The decisive role is played by the government, with responsibilities that ranges from creating an enabling environment for the leadership and management of the health development process within evolving socio-economic contexts, to delivering the essential health interventions.

2.5. Current health system challenges and reforms

A health phenomenon is complex, and health conditions are related to health determinants. Some of these determinants are changing and some of the changes cannot be foreseen; therefore there is a degree of uncertainty in relation to factors that influence health. Diversity is another feature of HSs, with different health stakeholders having different interests and influencing the way health actions are processed, which consequently affects health outcomes.

The Commission on Social Determinants of Health (CSDH) recognises the importance of inter-sectoral action for improved health and argues that healthcare is just one of the social determinants of health status; but the high burden of diseases responsible for appalling premature loss of life arise in large parts because of the conditions in which people are born, live and work. It asserts that a toxic combination of bad politics, unfair economic arrangements and poor social policies is in large measure responsible for the fact that a majority of people in the world do not enjoy the good health that is biologically possible; and as a consequence, social injustice is killing people on a grand scale (CSDH, 2008).

With the increasing access to Information and Communications Technology (ICT), awareness of recent health science breakthroughs and technological developments is more widespread, as is people's aspirations for their health. The implementation of HS reforms aimed at improving the performance of HSs and ultimately the health status of people is still far from providing universal access to quality healthcare and the achievement of the highest possible levels of health. Some of the intractable problems are related to governance, financing, resource management, health information systems (HISs), logistics, co-ordination, consensus-building, inter-sectoral collaboration, and community participation.

Narrowing the focus to the developing countries, a sub-Saharan study on HSs reform (Lambo and Sambo, 2003) analysed reports from 39 African[4] countries and concluded that most HSs reforms occurred in the following contexts:

- ***HSs and healthcare services delivery:*** poverty and inequity in access, poor quality of healthcare, inadequate financing, uncoordinated actions of health stakeholders, the existence of vertical programmes, lack of drugs and supplies, poorly motivated HRH, inadequate community participation, institutional weaknesses, and poor responsiveness to patient expectations.
- ***Health problems:*** deterioration of health indicators, increasing demand for services, poor health status of the people, emerging diseases (e.g. epidemiological changes).
- ***Political and policy factors:*** no clear definition of roles and functions, new international health initiatives, disasters, democratisation and change in political leadership, donors, partner-driven reforms, and public HS reforms.
- ***Economic factors:*** rapid economic growth, economic crises and macroeconomic reforms, inadequate resources, and inefficiencies in resource utilisation (Lambo and Sambo, 2003).

The study also revealed that the most significant factors constraining the implementation of HS reforms have been inadequate HRH and financial resources; increasing poverty; political instability and civil strife; inadequate institutional capacity; resistance to change, even by potential beneficiaries; lack of national HS policies, plans, legislation, and guidelines; lack of appropriate HISs; ineffective intersectoral collaboration; and inadequate communities and people participation (Lambo and Sambo, 2003).

In addition, the study shows that most of the components of reform are focused on the following policy objectives, in order of preference: improved access and coverage (i.e. equity), improved quality of healthcare, improved health status of the population, improved efficiency, the mobilisation of more resources for health, improved community participation and Patient Satisfaction (PS), and revitalised local/district HSs (Lambo and Sambo, 2003).

It seems that many of these issues are systemic problems in a broad sense throughout most of the developing countries, including Libya. The nature of the health problems can range from biomedical to social and managerial. Biomedical problems are related to the research and development of new health technologies for diagnosis and treatment and the prevention of diseases. Social and managerial problems are associated with limited progress towards pre-defined goals, issues of inter-sectoral co-ordination, and a lack of synergy among a HS's components. Problems and complications arise from competing interactions between different health stakeholders, the inadequate management of human ecology, a high level of illiteracy

[4] All these countries in the African Region of the WHO; Libya did not included, as it is in another Region (MENA).

(especially among women), the absolute poverty of most of the people, and weak capacities for better management and improved response to people's health needs. Most of the problems facing HSs are inter-related and call for a systems approach.

Although health-related problems are complex and interrelated, the policies design, planning and practice of current HSs are not maximising the use of systems ideas and methods. The current literature on HSs reveals different models, with some success in their application but also with shortcomings in both goal attainment and accommodating people's perceptions. There are also no clear criteria for defining what should be inside a HS and what belongs to its environment. A HS's boundary judgment remains a critical issue still open for debate, and it is not clear who should define the boundary. The epistemic vagueness could be reduced by bringing more insights into the understanding of HSs thinking. Because of unclear theories and the limitations of current perceptions, the concepts of HSs remain ambiguous. Alternative social arrangements could empower HSs actors and promote effective community participation in the policy development of HSs, as well as the design of HSs and their management of healthcare. This could improve the overall performance of the HSs and their response to patient health needs and expectations.

2.6. Developments in health systems approaches

Debates around HSs have dominated the international health agenda for many decades. A massive of contributions has been made to describing, defining and explaining HSs through multiple frameworks and models proposed and developed to date. The array of HSs frameworks and models arguably provide opportunities for identify various appropriate approaches to meet different country-specific challenges. At the same time, the multiplicity of HSs frameworks and models also creates confusion at the country level as to which conceptual framework of model to refer to for designing HSS interventions. Additionally, most debates have focused on conceptualising HSs objectives, functions and performance measurement approaches. Some are meant to describe or analyse existing situations, while others give guidelines for where to go and are more prescriptive. There has been rather less focus on identifying practical approaches to collective actions to strengthen HSs (Shakarishvili et al., 2010).

A number of HS frameworks and models have been published, especially over the last decade. These have served different purposes, whether to describe or analyse existing situations, or to being predictive or prescriptive. Comprehensive frameworks at the national level include the widely used WHO models (WHO, 2000; WHO, 2007c; WHO, 2009b), some of which were adapted for evaluation (WHO, 2008b) or participatory planning (de Savigny and Adam, 2009). Other frameworks focus on specific 'building blocks', the interaction between actors, or on the interface between different components (Atun et al., 2009; WHO, 2005; WHO, 2008b; WHO, 2010b). Some give an analytical and comprehensive overview of the differences in existing HS models and frameworks (e.g. Shakarishvili et al., 2010). This section illustrates

detailed examples of some important HSs frameworks and models, mostly in chronological order, to show the different possible areas of focus.

2.6.1. PHC approach

The WHO (1973) has mentioned the critical health situation in the world and the dissatisfaction of populations, summarising the causes as:

> *"…a failure to meet the expectations of the populations; an inability of the health services to deliver a level of national coverage adequate to meet the stated demands and the changing needs of different societies; a wide gap (which is not closing) in health status between countries, and between different groups within countries; rapidly rising costs without a visible and meaningful improvement in service; and a feeling of helplessness on the part of the consumer, who feels (rightly or wrongly) that the health services and the personnel within them are progressing along an incontrollable path of their own which may be satisfying to the health professions but which is not what is most wanted by the consumer" (WHO, 1973).*

It was agreed at global level that the main social target would be the attainment by the year 2000 of a level of health that would permit all peoples to lead socially and economically productive lives (WHO, 1978). The International Conference on PHC held in Alma-Ata in 1978 expressed the need for urgent action to respond to the minimum requirements for health development worldwide. The Alma-Ata Declaration strongly reaffirmed that health is a fundamental human right, and the attainment of the highest possible level of health is the most important worldwide social goal, whose realisation requires the action of many other social and economic sectors in addition to the health sector.

The International Conference defined PHC as:

> *"…essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process" (WHO, 1978:3-4).*

This is a public health philosophy or approach that is expected to guide the organisation and management of the national HSs. The components of the PHC to be delivered at the first level of a national HS include at least:

"…education concerning prevailing health problems and the methods of preventing and controlling them; promotion of food supply and proper nutrition; an adequate supply of safe water and basic sanitation; maternal and child care, including family planning; immunization against the major infectious diseases; prevention and control of locally endemic diseases; appropriate treatment for common diseases and injuries; and provision of essential drugs" (WHO 1978:4).

In terms of the levels of healthcare within a national HS, PHC has an operational definition rather than a philosophical one: the provision of integrated, accessible services by HRH who are accountable for addressing a most of personal healthcare needs, developing a continuous collaboration with patients, and practising in the context of family and community (Slee et al., 1996).

The World Health Report (WHR) 2008 reflects the growing demand for PHC and explores mechanisms to make HSs more equitable, inclusive and fair. It insists on the need for putting people at the centre of healthcare, and takes into account their expectations about health and healthcare and ensuring that their voices and choices decisively influence the way in which healthcare services are designed and operate. The report recognises the significant improvements in world health since the Alma-Ata Conference (1978) but warns that the substantial progress in health over recent decades has been deeply unequal. It calls attention to the changing nature of health problems resulting from ageing and poorly managed urbanisation and globalisation, as well as the complex web of inter-related factors including climate change, food insecurity and social tensions. The report also warns that HSs are not isolated from political and economic crises that affect the state and institutional responsibilities to ensure access, delivery and financing. It realises that the world is witnessing the flourishing of the unregulated commercialisation of health. The ICT has transformed the relations between citizens, professionals and politicians. Finally, the report revisits the ambitious vision of PHC values and principles for guiding the development of HSs (WHO, 2008a).

To respond to the current challenges, four sets of reforms are envisioned based on PHC philosophy which reflects a convergence between the values of PHC, the expectations of people, and the common healthcare performance challenges that cut across all contexts**.** According to the WHR 2008, they include (WHO, 2008a:ix)**:**

- *'**universal coverage reforms** that ensure that [HSs] contribute to health equity, social justice and the end of exclusion, primarily by moving towards universal access and social health protection;*
- ***service delivery reforms** that re-organize health services around people's needs and expectations, so as to make them more socially relevant and more responsive to the changing world, while producing better outcomes;*
- ***public policy reforms** that secure healthier communities, by integrating public health actions with primary care, by pursuing healthy public policies across*

sectors and by strengthening national and transnational public health interventions; and

- ***leadership reforms*** *that replace disproportionate reliance on command and control on one hand, and laissez-faire disengagement of the state on the other, by the inclusive, participatory, negotiation-based leadership indicated by the complexity of contemporary [HSs]'.*

The legitimacy of health authorities increasingly depends on how well they assume responsibility for developing and reforming the HS according to what people value in terms of health and healthcare and what is expected of a HSs in the society (WHO, 2008a).

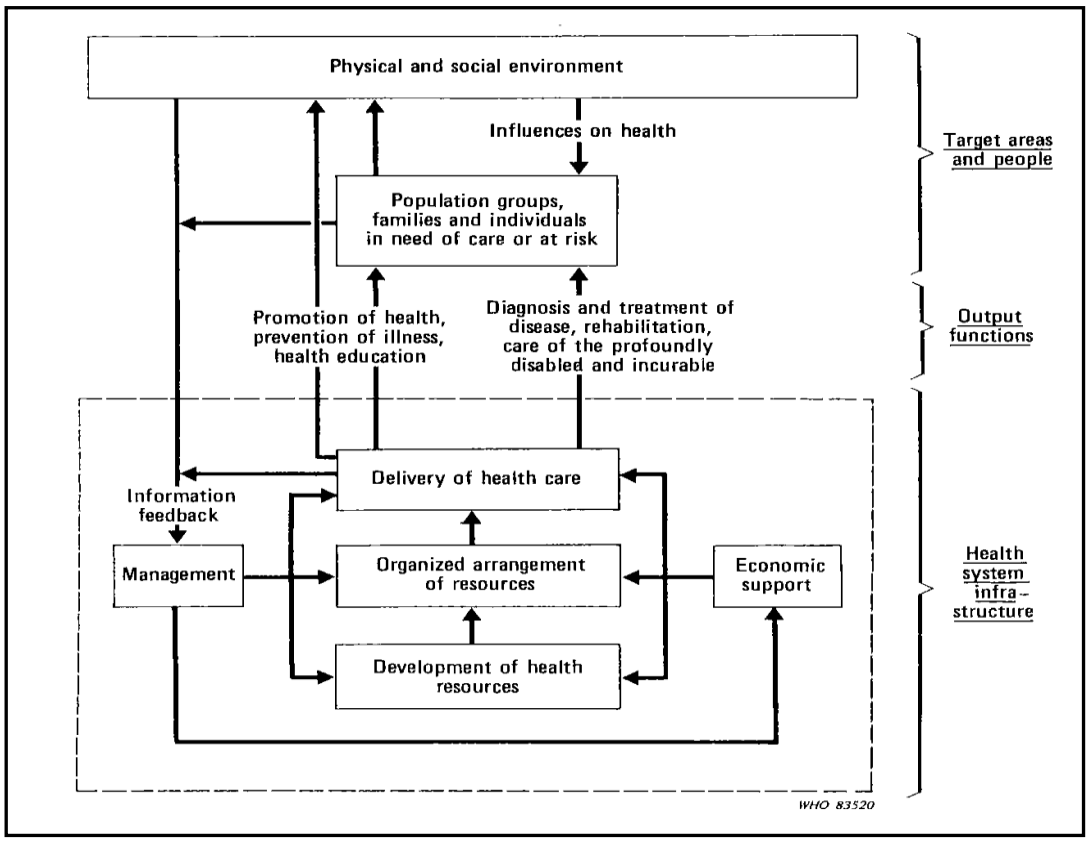
2.6.2. Kleczkowski, Roemer and Van Der Werff's model

A HS is seen as a coherent whole, consisting of many inter-related component parts, both sectoral and inter-sectoral, as well as the community itself, all of which produce a combined effect on a population's health. The design of a HS depends on its fundamental objectives and values, and its analysis depends on the degree of thoroughness intended. To create a purposeful HS, all parts must work together and adjust to each other (Kleczkowski et al., 1984). They stated that at the most elementary level, the structure and functional interrelationship of any country's HS can be analysed according to the model shown in Figure 2-1. There are five main components in this simplified HS model, which are directly or indirectly related: the development of HS resources, the organised arrangement of resources, the delivery of healthcare, and economic support and management (Kleczkowski et al., 1984).

The broken line around these main components in Figure 2-1 defines the boundaries of the HS infrastructure. Influences on health may arise in the environment or in people's biological makeup. The activities of the HS for health promotion, prevention and treatment of disease, rehabilitation, and care of the profoundly disabled and incurable are directed towards the people, though some activities are also directed towards the environment in which people live. These activities are represented by arrows directed away from the HS infrastructure. The HS is able to exercise its functions as a result of the development and allocation of resources. The total of the resources that can be allocated sets the limits on budgets for new investments and current expenditure.

In almost all societies, the demand for healthcare services exceeds the available resources. Priorities have therefore to be set for the goals and objectives that the HS will be expected to achieve. The results of health activities can be measured and the information fed back to management. Such information may relate to both the functioning of the HS (i.e. volume, distribution, and quality of outcomes) and the effect that activities may have on the population (e.g. impact on the health situation and social benefits). Through this feedback mechanism, management exercises its regulatory functions (Kleczkowski et al., 1984).

Figure 2.1: Model of a national HS: its structure and functional interrelationship



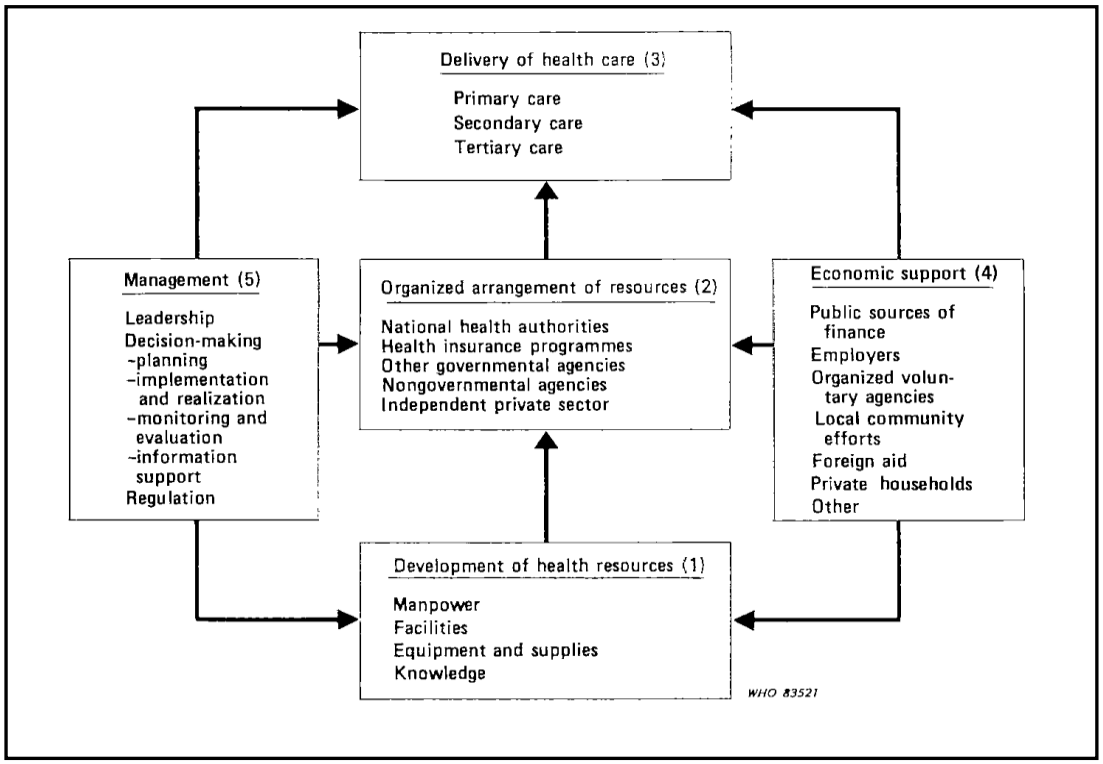
Source: Kleczkowski et al., 1984

If a HS is to be redirected to achieve specific goals (e.g. following the PHC approach), it is necessary to analyse in detail the five main components of its infrastructure, as shown in the model in Figure 2-2 (Kleczkowski et al., 1984):

- ***Development of health resources:*** This refers to basic resources that must be produced or obtained and that are essential for the operation of any HS. They include: HRH, healthcare facilities, health technology, and knowledge (financing being regarded as a medium of exchange, convertible into resources or services). The production of all resources requires input from various other sectors such as education, construction, and manufacturing. The quantity and quality of resources in a HS depends largely on the wealth of a country and sometimes on the political will that assigns high priority to the HS.
- ***Organised arrangement of resources:*** The organisation of programmes is necessary for the utilisation of several types of resources to achieve certain ends; healthcare services are often organised into programmes. As governments have assumed increasing responsibility for the general operations of HSs, the major public agency in charge has been the MOH or some broader body encompassing such a ministry.
- ***Delivery of healthcare service*****:** is the provision of all forms of healthcare services to people (i.e. diagnosis, treatment, rehabilitation, disease prevention, health promotion). The services deliver at all levels. PHC involves embracing all basic

strategies for health promotion and disease prevention. Secondary healthcare provides specialised medical services to ambulatory patient and low-intensity long-term care. Finally, tertiary healthcare services require highly specialised skills and sophisticated technology, typically in teaching or reference hospitals.

Figure 2-2: Main components of a national HS infrastructure



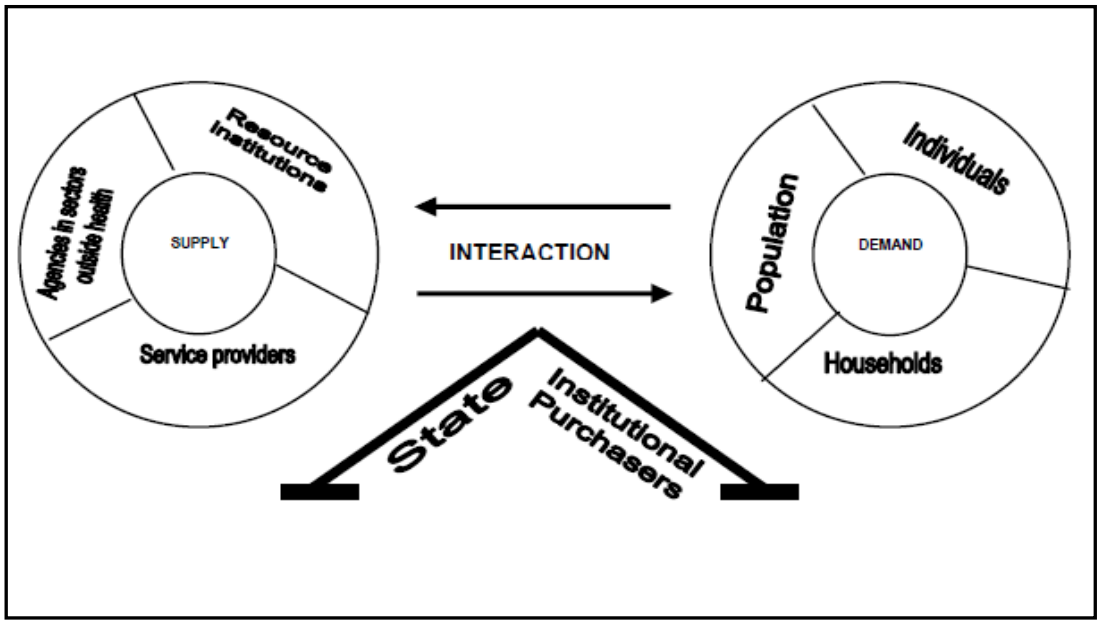
Source: Kleczkowski et al., 1984

- ***Economic support for a national HS:*** All national HSs ensure the development of all healthcare resources and their organisation into programmes, as well as the provision of services. The aspects related to financing the systems involve both the state and groups within the sector and society in general. The main five sources for financing are: the public (a national treasury), the social security system (social works, insurance and prepayment plans), the private sector (OOP, welfare/philanthropic entities, foundations and NGOs), and the external sector (bilateral, multilateral and NGOs). To some extent in every country, private individuals finance healthcare for the treatment of personal health problems. Charitable donations are another type of support that may take the form of donated labour or money.
- ***Management of a national HS:*** This supports the operations of the HS and includes planning at central and/or local levels (e.g. applying for the production of resources, developing health programmes, providing services). Administration encompasses many functions such as organisation, delegation, communications, co-ordination, supervision, and evaluation. Regulation involves the enforcement of certain standards of performance. Finally, legislation is used for crystallising and clarifying health policies so that everyone can understand them.

2.6.3. Janovsky and Cassels's model on Key actors

Janovsky and Cassels (1996) considered that despite some differences in interpretation, there is increasing convergence in defining the key actors in a HS and the nature of the functional interactions between them. They classify healthcare providers and users in terms of supply and demand. The institutional purchasers and state govern the interaction between supply and demand (Figure 2-3). Hence, they considered the following HS elements (adapted from Cassels, 1995 and Frenk, 1994):

Figure 2-3: Janovsky and Cassels's model of HS



- ***Demand side*** *(individuals, households and populations):* People acting individually or collectively as households can produce health benefits by individual or collective actions and behaviour, as seekers of healthcare and as purchasers of care. People forming groups (e.g. users, committees, trade unions) can influence the form, cost, quality and content of health services. Behavioural choices influence risk exposure and the prevention of disease.
- ***Interaction:*** *Institutional purchasers*: Organisations such as health insurance funds, district health authorities or health maintenance departments define health needs for specific populations and purchase clinical and support health services from providers using a variety of contractual mechanisms. The state: Government institutions are responsible for the financing, purchasing and provision of healthcare. The state aggregates resources, channels them to the providers, and interprets the interests and demands of the population.
- ***Supply side:*** *Resource institutions*: produce the HRH and physical resources for healthcare. They are concerned with the basic and in-service training of HRH and health-related Research and Development (R&D). Resource institutions include universities, medical schools, schools of public health, R&D of private companies, and foundations. Service providers: In the public, private, NGOs or traditional

sectors, many individuals give informal unpaid care at home. Others work in some kind of institutional setting such a hospital, healthcare centre or PHC facility. Clinical and support services are offered. Agencies in sectors outside health: produce benefits indirectly because of the goods or services they provide in areas such as agriculture, education, communications, employment, housing, and water supply (Janovsky and Cassels, 1996).

2.6.4. The WHO's Performance Assessment Framework (PAF)

The publication of the WHR 2000 (WHO, 2000), devoted entirely to HSs, introduces the WHO's Performance Assessment Framework (PAF), which was formulated by Murray and Frenk (1999 and 2000). The WHR 2000 was a landmark event in HSs thinking and brought new developments to the HSs concept. It regarded a HS as "comprising all the organisations, institutions and resources that are devoted to producing health actions" (WHO, 2000:xi). Its operational definition and delineation of a HS is "all the activities whose primary purpose is to promote, restore or maintain health" (WHO, 2000:5), which broadened the conventional conceptualisation beyond healthcare service provision and management (Frenk, 2010b).

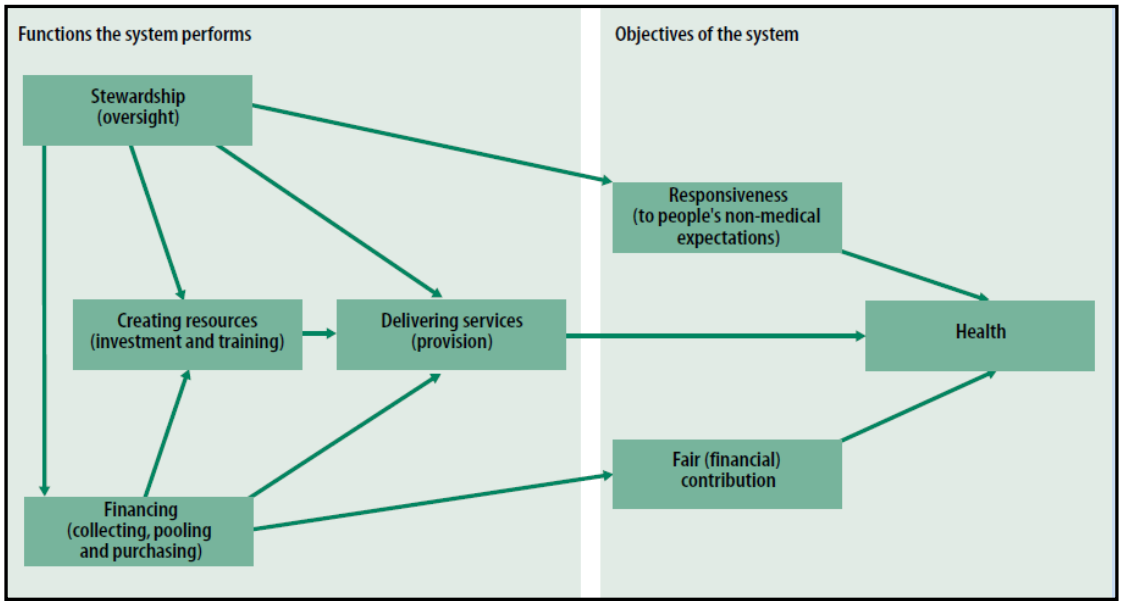
Several issues merit attention. First, the WHR 2000 introduced the notion of stewardship, which is a response to the better governance (Kaufmann et al., 1999). Whereas the WB called for governance in strategies to control corruption and make governments more efficient, the WHO used the term 'stewardship' for the steering and regulating role within HSs (van Olmen et al., 2012c). Second, a major advantage of the primary intent criterion is that it includes all actors and organisations that see their primary purpose as contributing to improve health. It is critical to recognise that efforts to improve determinants of health, such as educating the poor or reducing social inequalities, are clearly part of the HS; these inter-sectoral actions are intended to improve health and therefore fulfil the primary intent criterion.

The authors recognise that the definition of a HS's boundary is somehow arbitrary, depending on the context and the need to define an operational boundary. Third, the WHR 2000 explicitly regarded three fundamental goals for HSs as the government's responsibilities: "Better health is unquestionably the primary goal of a [HS]. But because healthcare can be catastrophically costly and the need for it unpredictable, mechanisms for sharing risk and providing financial protection are important. A second goal of [HSs] is therefore fairness in financial contribution. A third goal – responsiveness to people's expectations in regard to non-health matters – reflects the importance of respecting people's dignity, autonomy and the confidentiality of information" (WHO, 2000:21). In addition, the report aimed to show that HSs differ in their performance (van Olmen et al., 2012c).

The defining goal or reason for which a HS exists is "to improve health (both the average level and its distribution across individuals)" (Murray & Frank, 1999:10). There are two goals common to all systems: the system's responsiveness to the

legitimate expectations of the population, and fairness in the system's financing. Among other things, responsiveness means "reducing the damage to one's dignity and autonomy, and the fear and shame that sickness often brings with it" (WHO, 2000:24). The distribution of responsiveness matters, just as the distribution of health does; therefore, responsiveness is always a social goal.

Figure 2-4: the WHO's Performance Assessment Framework (PAF)
(Relations between functions and objectives of a HS)



Source: WHO, the World Health Report 2000.

The aim of good health itself is really twofold: the best possible average level, or goodness, and the smallest feasible differences amongst individuals and groups, or fairness. "Goodness means a HS responding well to what people expect of it; fairness means it responds equally well to everyone, without discrimination" (WHO, 2000:xi).

The goal of fairness in financing should be associated with the protection of families from financial risk. The health, education or security system may, and most likely will, affect the attainment of the defining goals of other systems. There are cross-system goals for the HS such as how much the HS helps or hinders education, democratic participation, and economic production (Murray & Frank, 1999).

The WHR 2000 considered that every HS has to perform four key functions (WHO, 2000) (see Figure 2-4):

First, the provision of healthcare services is the most familiar, and in fact the entire HS is often identified with just the delivery of service. Its classification emphasises that the provision of healthcare services is something the system *does*; it is not what the system *is*.

Second, the financing of HSs is a process whose purpose is to collect revenue and put it at the system's disposal. Much of what is included in the financing function occurs outside what is usually considered to be the HS.

Third, resource generation refers to the input into the provision of services such as HRH, healthcare facilities, supplies, equipment, and knowledge. Every HS makes some investments in creating resources, but these also are sometimes regarded as coming from outside the HS itself. The HS is able to exercise its functions because of the development and allocation of resources. It has a responsibility to invest wisely, as there is a need to manage the balance between the demand for healthcare services and the resources made available for it.

The **fourth** function is called stewardship. The concept is well described and defined as "the careful and responsible management of something entrusted to one's care" (Meriam Webster's Dictionary, 1998 and 2013). The HS has a responsibility to protect people's bodies and use their money wisely and well. The government is particularly called on to play the role of a steward, and a large part of stewardship consists of regulations. But the concept embraces more than just regulation: it involves defining the strategic directions of the HS as a whole, for instance the overall design of the HS including policy formulation, performance assessment, priority-setting and consensus-building, inter-sectoral advocacy, promoting policies in other systems that advance the HS's goals, sanitary regulation of goods and services, healthcare regulation, and consumer protection. When the stewardship is properly conducted, it has a pervasive influence on all the workings of the HS.

These functions are identifiable in widely differing HS structures (Murray et al., 1994; Murray & Frank, 1999). The results of the HS's activities can be measured and fed back to management. Such information may relate to the functioning of the HS and the *effect* on the population and through this feedback management exercises its regulatory functions. The financing function is clearly most important for the aim of fairness in paying for the HS, but how it is carried out also affects the HS's outcomes and even has some effect on responsiveness. The provision of services is most tied to HS outcomes, but also matter greatly in relation to responsiveness, while stewardship affects everything (WHO, 2000).

It could be argued that the WHR 2000 applied the Donabedian principles of linking processes to outcome in identifying the quality of care (Evans, 1981) in the HS as a whole. The conceptual contributions of the WHR 2000 have become widely accepted, but the attempt to determine and quantify the performance of individual HSs was widely criticised, particularly by national governments weary of international comparisons (Navarro, 2000; Frenk, 2010b). Reflecting the methodological challenges of measuring performance, research would focus over the next decade on the understanding and improving of HSs rather than on the measurement of performance (van Olmen et al., 2012c).

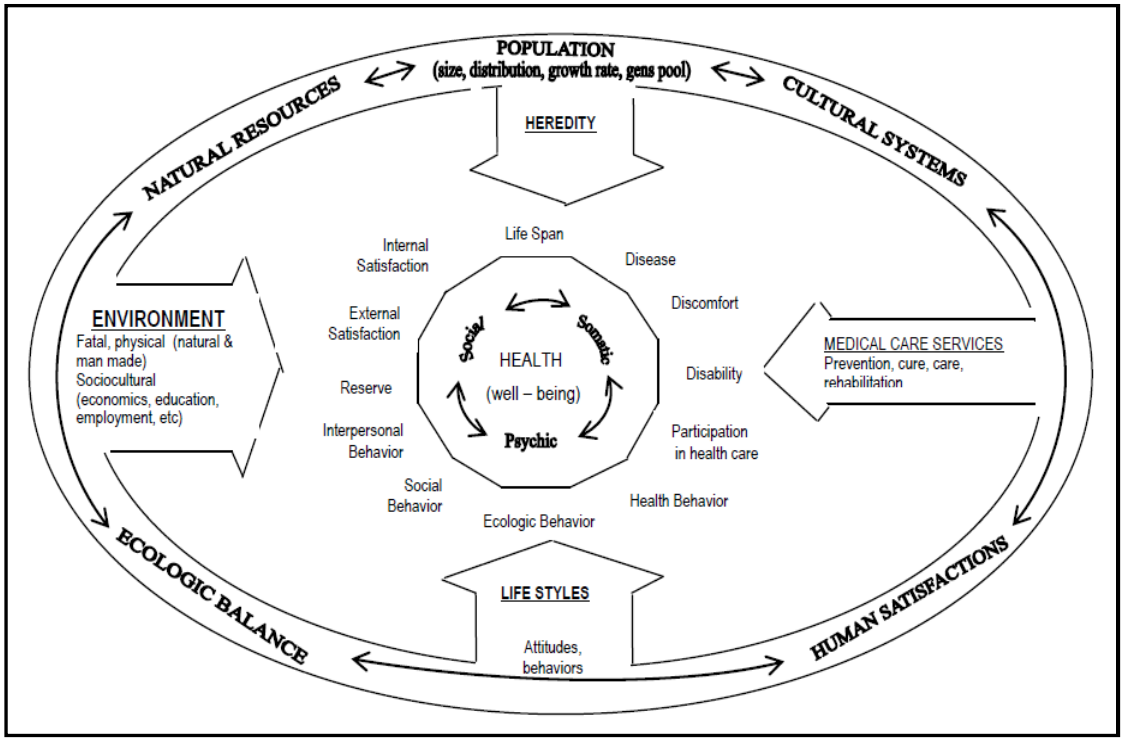
The WHR 2000 somehow anticipated the renewed attention to HSs that emerged between 2000 and 2005, in the wake of the realisation that targeted interventions and programmes could not function without powerful HSs (Travis et al., 2004; Hafner and Shiffman, 2012). This coincided with the main challenges faced by global health

initiatives in implementing their programmes. Key HS functions, including the HRH, were acknowledged as constraints, and in response, HSS became the new catchword (Travis et al., 2004; Van Damme et al., 2008; van Olmen et al., 2012c).

2.6.5. Thinking on system environment and health determinants

Health phenomena are complex and involve the simultaneous integration of many variables, including mental, physical, chemical and biological processes in different social, cultural, economic and environmental contexts. This complexity requires the use of an interdisciplinary framework for critical analysis. A system understood as a set of interrelated components and actors with a common goal should be conceived and designed in different particular contexts according to its purpose, which defines its identity and distinguishes it from other systems. The goal or desired result of a HS is to provide a better state of health for people and communities, increasing their capacity to realise their potential for social and productive lives towards overall human development. The political, economic, educational, cultural, and ecological systems are often more important and determinant than the health sector, which is increasingly under human control, in influencing the behaviour and outcomes of HSs.

Figure 2-5: Blum's Environment of Health Framework



Source: Monaghan et al., (2003).

While recognising the important role of the HS in providing leadership and advocacy to improve the health status of people and communities, the 2008 Report of the CSDH argues that a lack of healthcare is not the cause of the huge global burden of illness. It clarifies that water-borne diseases are not caused by a lack of antibiotics but by dirty water and the political, economic and social forces that fail to make clean water

available to all. Similarly, heart disease is not caused by a lack of coronary care units but by the lives people lead. Therefore, the main actions for health come from outside the HS (CSDH, 2008). HS development can be understood as an inter-sectoral process of change that is unpredictable and depends on permanent negotiations/interactions between relevant structures/elements/actors in their efforts to fulfil essential public health functions. It is a highly complex sector operating in different contexts, to which it should adapt in order to perform its functions well.

Blum (1974 & 1981) proposed an 'environment of health' framework (see Figure 2-5) in which he has usefully combined the determinants of health within a model which includes the four fields of environment, lifestyle, heredity (genetics), and medical services.

Blum suggests that the width of the four inputs contributing to health indicates assumptions about their relative importance. The four fields relate to and affect one another by means of an encompassing wheel containing population, cultural systems, mental health, natural resources and ecological balance.

The key question to answer is how these four determinants operate when analysed for different specific diseases, or how they operate in a state of wellness when no disease exists. Some public health theorists argue that health is a result of the balance between human beings and their environment. Others say that in spite of its elusive nature, the understanding of the interactions between 'man and environment' is critical for enhancing health and preventing diseases in individuals and communities (Dever, 1984).

2.6.6. WHO strengthening health systems

The WHO (2007c) report: *'Everybody's Business: Strengthening Health Systems to Improve Health Outcomes'*, proposed practical ways to organise HSs into six operational 'building blocks' (WHO, 2007c). It maps out priorities for clarify and strengthen each component and the WHO's role in supporting these changes (van Olmen et al., 2012c), as it concentrating on how the WHO can provides more effective support to national HSs and its partners (WHO, 2007c). The building blocks framework is a helpful means to describe, classify and locate, HS constraints, to identify where and why investments are needed, and explaining what will happen as a result and by what means the change can be monitored (Shakarishvili et al., 2010).

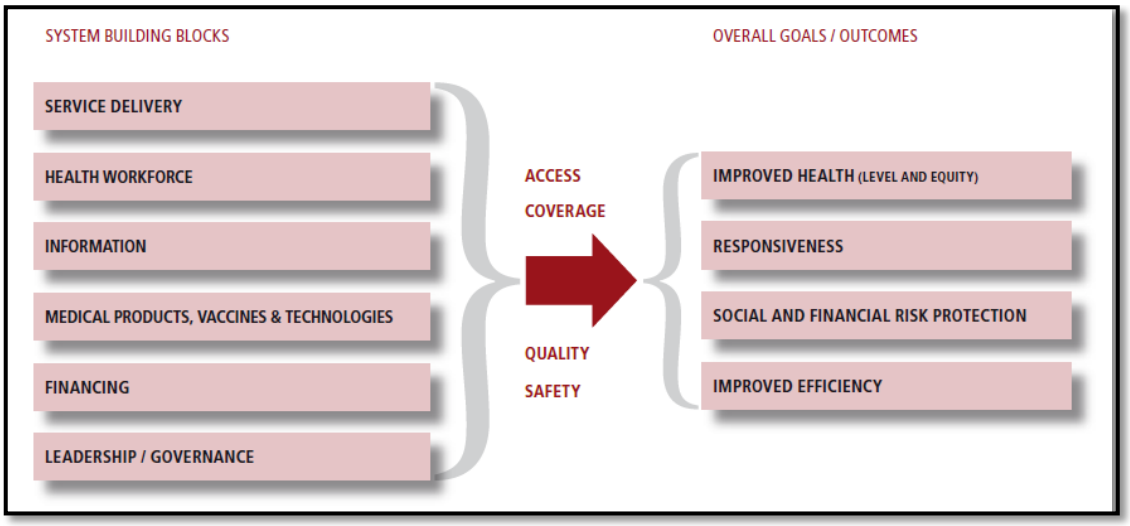
These 'building blocks' are based on the functions defined in the WHR 2000. These components are as follows (WHO, 2007c:vi):

- "Good **health services** are those which deliver effective, safe, quality personal and non-personal health interventions to those who need them, when and where needed, with minimum waste of resources.
- A well-performing **health workforce** is one that works in ways that are responsive, fair and efficient to achieve the best health outcomes possible, given

the available resources and circumstances (i.e. there are sufficient staff, fairly distributed; they are competent, responsive and productive).

- A well-functioning **health information system** is one that ensures the production, analysis, dissemination and use of reliable and timely information on health determinants, [HS] performance and health status.
- A well-functioning [HS] ensures equitable access to essential **medical products, vaccines and technologies** of assured quality, safety, efficacy and cost-effectiveness, and their scientifically sound and cost-effective use.
- A good **health financing** system raises adequate funds for health in ways that ensure people can use needed services, and are protected from financial catastrophe or impoverishment associated with having to pay for them. It provides incentives for providers and users to be efficient.
- **Leadership and governance** involves ensuring strategic policy frameworks exist and are combined with effective oversight, coalition-building, regulation, attention to system design, and accountability".

Figure 2-6: The WHO Health System Framework (Building Blocks)



Source: WHO, 2007c.

The growing recognition of the complexity of HSs and the response to the challenges of the Millennium Development Goals (MDGs) called for frameworks and models that exceeded the current mechanical representation of HSs. Recognising the dynamics inter-relations between blocks in this model, de Savigny and Adam (2009) developed a framework on the basis of systems thinking that draws attention to the complex nature of HSs, the interactions and feedback loops between the building blocks, the role of the people, and the resulting unpredictable effects of changes (van Olmen et al., 2012c).

2.6.7. Analysis of the context, the HS, and health programmes

The framework presented by Atun et al. (2006) is multi-method analytical approach offering a means to better understand the relationship between a HS and the context

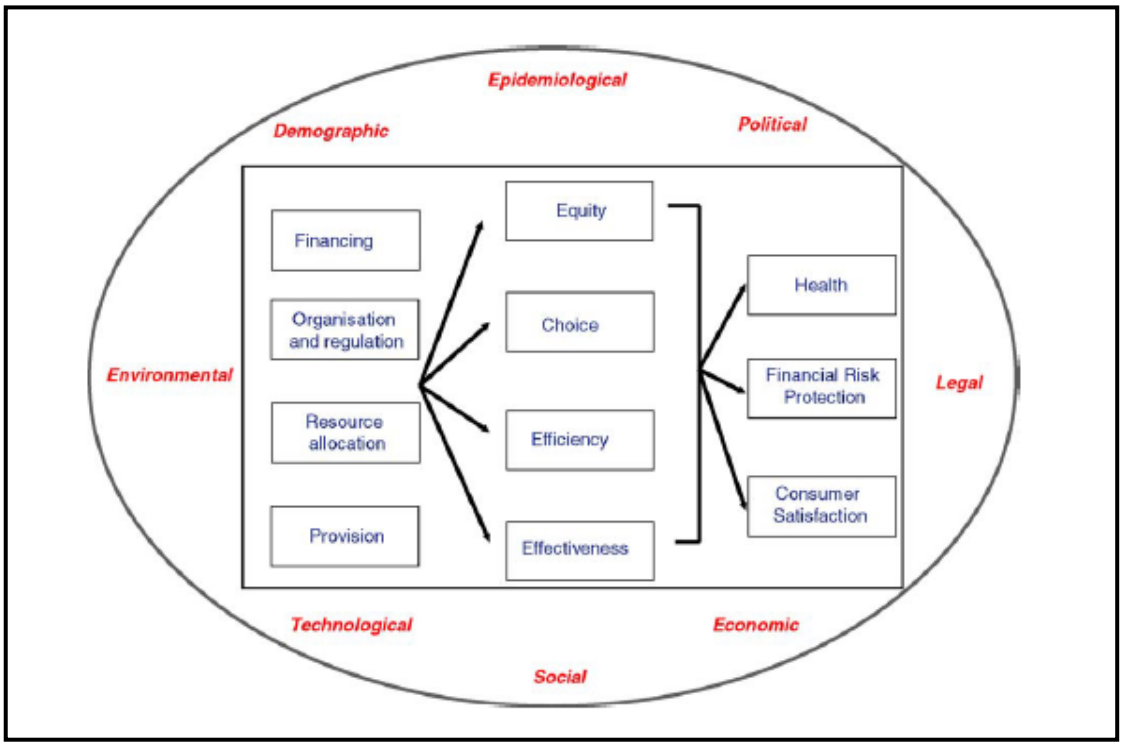
within which it exists (Atun and Menabde, 2008). The framework is based on the assumption that a HS is consists of components that interact to formation a complex system. The interactions of these components affect the achievement of the HS's objectives, though these objectives may vary within the concentration between various countries. The HS interacts with the broader context in which it is situated. Figure 2.7 describes the framework which enables simultaneous analyses of the HS's functions and the context.

As with the WHO PAF and the analytical frameworks developed by Hsiao (1992 and 2003) and Frenk (1994 and 2004), this framework targeted health, financial protection issues and PS as the ultimate HS goals, but further expands them to take into consideration the contexts within which the HS functions – these are, the demographic, epidemiological, political, legal, economic, social, technological and environmental contexts. As every country and HS has a distinguished history that affects the course of system developments, the analysis of the context also picks up the political economy of the HS. Collectively, an analysis of these contextual components provides the opportunities and the threats faced by the HS in the short and the long term to be determined. The framework sets out four 'levers' available to policy-makers when manage the HS. Modifying these levers enables policy-makers to fulfil several intermediate aims and objectives. These levers include:

- 'Stewardship and organisational arrangements', which describe the policies and regulation in the organisational environment, stewardship function and structural arrangements for buyers, service-providers and actors;
- 'Financing' (how the funds are collected and pooled);
- 'Resource allocation and provider payment systems' – how the allocation of pooled funds and other available resources such as HR, investment or equipment are allocated, and the mechanisms and methods used to pay healthcare services providers; and
- 'Service provision', which refers to the 'content'; that is, the services that the health sector provides, instead of the structures within which this 'content' is delivered.

The intermediate goals identified in the framework as: equity, technical and allocative efficiency, effectiveness and choice, which are frequently reported by others as the end goals in themselves. The framework is extended and used in developing a Systemic Rapid Assessment (SYSRA) tool that allows the examination of the broad context, the HS, and the features of health programmes such as Communicable Diseases (CD) control programmes. The SYSRA tool is units in structure and has two associated components that are applied at the same time: a "horizontal" component to analyse the HS within which the CD control programme is embedded, and a vertical component to analyse the programme itself.

Figure 2-7: A framework for analysing health systems and the context



Source: Atun et al. 2006.

Atun and Menabde (2008) argued that using the framework and the approach described, they have been able to demonstrate in a number of settings that the context and its interaction with HS components affect the way bases, norms and enforcement mechanisms are interpreted to generating system responses, which may not be easy to predict and could actually be counter-intuitive (Atun et al., 2005a; Atun et al., 2005b).

Atun and Menabde (2008) emphasised that when attempting to manage CD programmes to control epidemics (i.e. HIV or TB), technical solutions alone are not adequate to mount effective and sustainable scaled-up responses. Because the responses are influenced by complex HS organisation design and financing and the socio-political environment within which the CD programmes are embedded. An effective scaled-up response to the prevention and control of such conditions and challenges must take these factors into account. Thus, understanding the HSs contexts and embedding CD programmes within them is a necessary prerequisite to scaling up new programmes and achieving sustained success.

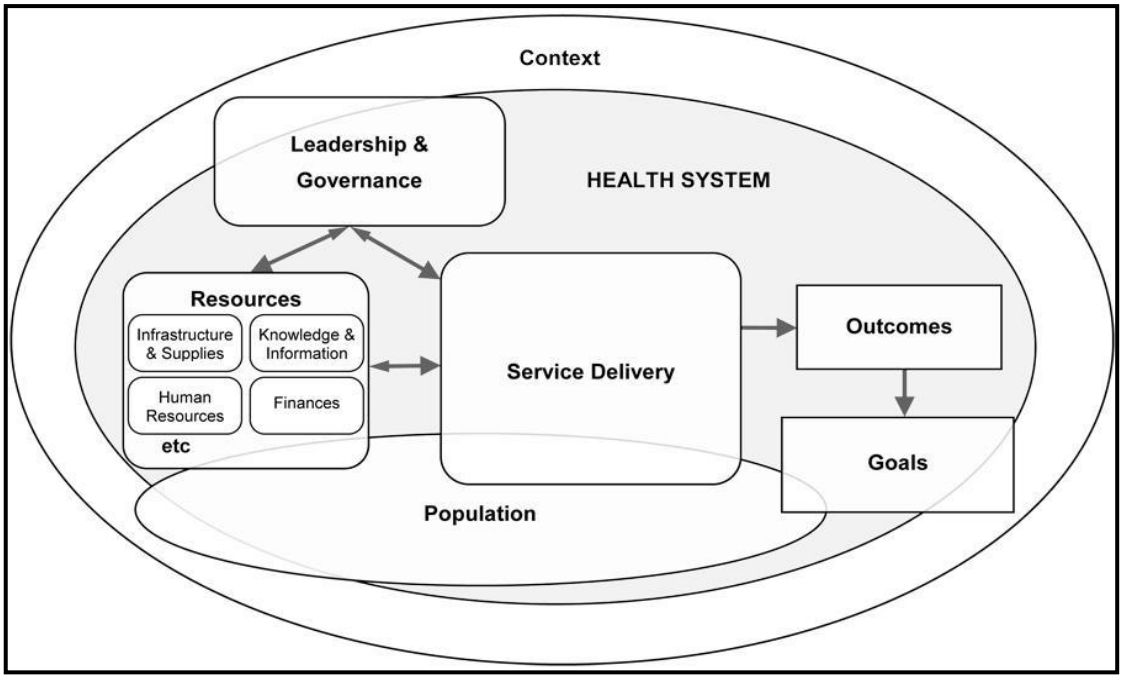
2.6.8. The health system dynamics framework

While the HS dynamics framework incorporates elements of existing frameworks such as the WHO building blocks (WHO, 2007c), the authors argue that it goes further than most. It emphasises that a HS should be geared towards outcomes and goals, but jointly adds that they are, and should be, based on explicit choices of values and principles. The framework also considers some elements to be more important than others. The authors assert that the organisation and delivery of healthcare

services are the core of the central axis that includes leadership, governance, and the interaction with the population and other actors. The framework therefore made up of ten components and their vital interactions (van Olmen et al., 2012a) (see Figure 2-8). The authors argue that the HS dynamics makes possible to describe any HS at central, intermediate or local level. It can be also used as a normative framework for analysis and evaluation, which can contribute to the development of strategies for actions (van Olmen et al., 2012b).

The dynamic dimension of this framework is essentially based upon the concept of complex adaptive systems (Paina and Peters, 2012). HSs are in essence social systems consisted of several actors and organisations that interact with each other. This lead to a non-linear processes of communication, co-ordination and regulation and therefore are, at best, hard to predict. Furthermore, interactions between components take the form of feedback loops and contribute to generative processes. These interactions lead to the emergence of temporary equilibriums. The elements of the framework, central axis and interactions between the respective blocks are shown below (van Olmen et al., 2012a).

Figure 2-8: The Health System Dynamics Framework



Source: van Olmen et al., 2010a, 2012b and 2012b.

I. ***Outcomes and goals***

Similarly to the WHO (2000), the authors define outcomes as the direct results of the organisation of healthcare delivery (e.g. universal coverage, quality of care and responsiveness), and goals as the expected impact in terms of improved health, responsiveness and social and financial protection. The HS and other factors such as social, political, economic are all key determinants of people's health and well-being. The package of healthcare should take into consideration rationally defined health

needs. And evolve together with changes in those needs and demands (van Olmen et al., 2012a).

II. ***Values and principles***

HSs are social institutions and they are shaped by and express values through their structure, institutions and respective interpersonal relationships (Freedman, 2005; Gilson, 2003). These values and principles vary among societies and actors. Their effects on the HS are thus channelled through power structures and relations within society. Certain values relate to processes such as effectiveness, efficiency and sustainability. A core function of HSG when setting the priorities is therefore to seek a balance, taking into consideration the technical criteria and broader societal values and principles, while existing power balances cannot be ignored (van Olmen et al., 2012a).

III. ***Context***

Because HSs are basically open systems, they are formed and affected by broader societal change. This means that each country has a HS that reflects its political decision-making and historical evolution (Riley, 2008). It also implies a continued need for response to new developments and transitions such as the constantly evolving disease burden composition, the changing expectations of patients and service providers, and the changing roles of the state in the health and social sectors (van Olmen et al., 2012a). In this regard, the framework of the CSDH points to the broad impact of social and economic policies on health and social protection and their distribution in the population (CSDH, 2008).

IV. ***Service delivery***

Service delivery is closely associated to all other components in the HS. The management availability of HR and physical resources, determines the possibilities for service delivery. A broad range of activities require organisation, from the focused to general services. In practice, health delivery interventions are often 'bundled'. The choices of integrating interventions in one delivery platform are informed by intervention-related characteristics, the capacity of the health service to implement the interventions, the capacity of the HS governance to co-ordinate actors and give managerial support, contextual factors (e.g. disease burden, regulation capacity), and historical evolutions (Unger et al., 2003a).

In most HSs, providers form a complex mix, partly as a result of organisation and planning and partly because of individual initiative or the spontaneous evolution of forces in the wider context (Meessen et al., 2011a; Nishtar, 2010). The authors believe that at the local level health providers should operate within an integrated HS where there are no gaps in access, where different tiers operate in complementary rather than

competing ways, and where there is an optimal flow of patients and information so that the patient is assisted at the most suitable level (Unger and Criel, 1995).

V. ***Population***

The empowerment of people both at individual and community levels calls for different approaches from the supply and demand sides that improve opportunities for people's voices to be heard (Perez et al., 2009). This is also enabled through the fair process of decision-making. As providers' behaviour can be steered, so can that of people seeking healthcare (van Olmen et al., 2012a).

VI. ***Governance***

Governance entails policy directions to the entire HS; the regulation and co-ordination of various functions, levels and actors in the HS; the optimal resources allocation; and accountability to all stakeholders. Government actors have a central role in the steering of the HS, since they have a public mandate. Ensuring the protection of citizens against ill health and its financial and social consequences is a significant element of their legitimacy as public servants. In practice, however, the power of the state is often undermine by forces at several levels (Reich, 2002). A wide range of actors, including market and civil society, politicians, professional organisations and co-operative structures have an influence on governance. Ensuring the effective participation and involvement of multiple stakeholders and the linkage between different levels is essential to facilitate the bottom-up influencing of policy-making and the implementation of policies (van Olmen et al., 2012a).

VII. ***Organisation of resources***

- *Financing*

Healthcare financing has a direct bearing on efficiency, equity and sustainability. This involves the acquisition, collecting and allocation of financial resources in a way that it contributes to attaining the desired goals and outcomes (van Olmen et al., 2012a). Basically, health financing needs to guarantee access to healthcare services while protecting people from financial consequences (WHO, 2008c).

- *Human resources (HR)*

To usefully contribute to the performance of the HS, competent and professional HRH that can perform up to the standard are of most importance (van Olmen et al., 2012a). A comprehensive HRH policies incorporate organisation and planning the training, staffing, remuneration and deployment, adjusted to the evolving models of healthcare delivery, workloads and the evolution of the HR (Marchal and Kegels, 2003; Narasimhan et al. 2004).

- *Infrastructure and supply of pharmaceuticals, technologies and goods*

The development of the infrastructure of a HS means ensuring that there are sufficient healthcare facilities within proper access of the people which are equipped, maintained and adapted to the specific needs of those making use of them. Medications are a vital product in any HS. Lack of availability, supply, poor quality, high cost and insufficient prescriptions are frequent HSs problems (van Olmen et al., 2012a).

- *Information and knowledge*

Knowledge and information are needed for communication, analysis of health trends, evaluation, monitoring and research, clinical decision-making, organisational management and planning. The priorities of HISs should be to develop, maintain and contribute to informing decision-making, limiting the data collection is necessary for that purpose. Information and knowledge need to be shared across the HS, so that the ongoing processes of practicing, educating and researching can feed each other (van Olmen et al., 2012a).

2.7. A critical analysis of current HSs thinking

Before the PHC movement, the vision of international health favoured an approach based more on health technologies with a special focus on cutting-edge technological curative healthcare concentrated in urban areas. Major biomedical research breakthroughs produced new technologies and medicines that inspired healthcare professionals and people with the sense that technologies were the answers to people's health needs. However, technology provides only part of the answer, and at a high cost that some people cannot afford. The PHC approach offered a social model of healthcare, but was understood to have a different emphasis according to the different contexts of the societies in which it was applied. Different aspects of PHC such as values and principles, specific public healthcare services, or even the levels of the healthcare pyramid were the focus of interpretation by specific countries.

The logic frameworks are based on linear relationships between HS structures, resources, activities, processes, outputs and outcomes, and have been used extensively to support HS development, reform and assessment. Whereas it is helpful in describing HSs, the linear nature of the logic frameworks makes it hard to pick up the complex relationships within large, multi-dimensional, multi-faceted HSs (Atun and Menabde, 2008; Sambo, 2009; Shakarishvili et al., 2010; van Olmen et al., 2012b; van Olmen et al., 2012c).

Systems are dynamic and complex; they are made up of many interconnected and interdependent elements which form extensive networks of feedback loops with time delays and non-linear relationships. It is these characteristics that are the sources of dynamic complexity in systems (Atun and Menabde, 2008). Systems thinking postulates that disturbances in systems arise because of a certain type of complexity,

namely ‘dynamic complexity’. Hence, an understanding of this complexity is vital in understanding the underlying issues of complexity in systems thinking. There are three key drivers of ‘dynamic complexity’ in systems (Forrester, 1961; Richardson, 1995; Sterman, 1994; Sterman, 1989a; Sterman, 1989b; Atun and Menabde, 2008):

- The existence of feedback loops
- variable time lags between the cause and effect of an action, and
- The presence of non-linear relations between the system’s components.
- ‘Dynamic complexity’ arises in the following cases: the short- and long-term consequences of the same procedure are differ greatly;
- the consequences of a procedure in a part of the system are quite different from its consequences elsewhere in the system; and
- Clearly well-intentioned procedures lead to unclear counter-intuitive outcome.

The responses (effect) of the system to procedure (cause) are not always linear proportional. The existence of such relationships in a system increases complexity because the response of the system to a disturbance going to be different, depending on its status. The same procedure could lead to totally unexpected consequences, as the response of the system is depends on the existing balance of power along the feedback loops (Atun and Menabde, 2008).

Despite the comprehensiveness of the WHO’s definition of health (WHO, 1948), the current descriptions of HSs are not holistic enough to capture all key health determinants in order to respond to the health needs of people and communities. Firstly, they address parts of the organisation rather than the whole. Secondly, they fail to recognise that concentrating on the performance of one part of the HS may have damaging effects for the whole HS. Thirdly, they fail to address the influence of human nature, HRH, people and communities in the relationships among different parts of the HS. Fourthly, they are designed to work in a stable environment. And finally, they do not provide a structural response to cope with the variety of healthcare stakeholders. However, many scholars (e.g. Sambo, 2009; de Savigny and Adam, 2009; Paina and Peters, 2012; Sheikh et al., 2011; van Olmen et al., 2012a) have argued that none of these frameworks reflect the most recent debates on HSs and their complexity and system dynamics.

To a large extent, these efforts have failed because attributions proved very difficult, measurement tools were not strong enough, and various variables were very diverse for a useful classification (Riley, 2008; McPake et al., 2009; Paris et al., 2010). Recently, researchers have called for the application of more appropriate research designs to identifying mechanisms and assessing the influence of context in the pathways of change (Mills, 2011; Sheikh et al., 2011). The WB monograph on how to improve the delivery of health services (Peters et al., 2010) and the publication of ‘Good Health at Low Cost’ (Balananova et al., 2011) aim to identify such patterns by in-depth case study analyses.

2.8. Summary

The study of HSs is an important but confused field, with unclear boundaries, overlaps and multiple interpretations of terms, and therefore requiring conceptual clarification. In light of the available evidence, it is very important to realise that the current HSs thinking addresses individual parts rather than the whole HS. Secondly, it fails to recognise that concentrating on the performance of one part of the HS may have damaging effects for the whole HS. Thirdly, current HSs thinking fails to address the views, interests and influence of HRH involved in the implementation of reform, and how people and communities are expected to benefit from it. Fourthly, it does not take into account the different meanings, perceptions, cultural values and beliefs that may influence the very different institutions and structures belonging to a HS and working towards the same goals. Fifth, the structural parts of HSs are designed to work in a stable environment, rather than addressing the ever changing-context. Finally, HSs thinking does not provide a structural response to cope with the variety of healthcare stakeholders.

The way HSs are currently understood may contribute to their weak performance. The current understanding is fundamentally functionalist, because the practice has focused on the definition of the structure, units and functions at different levels of recursion. The analysis of the literature demonstrates that most existing HSs are underpinned by functionalist approaches (e.g. WHO, 2000). This justifies the focus of this study, which looks at the current situation in the Libyan HS and explores what other approaches and methodologies can offer to make the Libyan HS – and other HSs – more relevant in theory and practice, and also shorten the gap between HSs goals and performance.

Chapter 3: Quality in Healthcare Services: A Review of the Literature

3.1. Introduction

This chapter consists of two parts. Part one will proceed to examine different aspects of the concept of 'quality' and explore its different definitions as given by quality scholars. The discussion will focus on some of the major theories which have laid the foundations of quality literature; the applications of these theories are firmly rooted in many countries' HSs.

Part two will present a review of the literature relating to monitoring and assessment methods of quality in healthcare, giving more attention to the patient perception and satisfaction approach; identify how developments in other countries (e.g. the UK) can inform future development in Libya; and give a brief account of the literature of the concept and implementation of community participation.

This review provides a conceptual framework for the study so that the conclusions and recommendations from the study can best inform policy-makers and health providers in devising a quality policy and strategy for introducing quality improvement strategies or initiatives in healthcare in developing countries in general and in Libya in particular.

- ***Part One: Quality and Management***

3.2. Overview

The concept of quality is multi-dimensional. Quality may mean an excellent product or service. In the modern world of commerce, industry and technology, concern with quality has occupied a prominent position. The concern ranges across a gamut of ideas extending from a simple notion to a sophisticated paradigm. Although the control of quality in products or services has long been a goal in human endeavour, it is not exactly known when the notion of quality began. Quality in healthcare is often taken to be an innovation of the late twentieth century, but concern about the quality of healthcare is as old as medicine itself (Maxwell, 1984). The quality of healthcare as an administration system started early in the 20th century, it has been inherent in the industry field before it applies the scientific tools and methods in the healthcare sector (Ben Said, 1997).

Historians of quality such as Racine (1995) point out discrepancies in the literature concerning the actual start of quality development in healthcare. Historians who subscribe to the industrial tradition go further back and contend that quality development is as old as the human race. Discrepancies between scholars from the industrial and healthcare traditions arise from the fact that "most historians in healthcare define quality assurance as the formal and systematic evaluation of

healthcare, which they associate with the activities of the last half of the twentieth century" (Racine, 1995:16). Ellis and Whittington (1993:9) dispute this and state that "its gestation has a much longer history."

Before the 1980s, few countries paid systematic attention to the quality of healthcare, and developing countries have been even slower to catch up (De Geyndt, 1995; Brown et al. 2001; Al-Mandhari, 2002). From 1980s onwards, however, quality started once again to appear high on the healthcare agenda at both national and international levels. Many countries developed their own national health policy based on community participation (Rhode, 1983; WHO, 1983). This also led to the evaluation of the PHC approach set out at the Alma-Ata conference in 1978, with the WHO playing a major role in promoting and marketing it (WHO, 1983). Since the 1980s, the WHO has played a central role in promoting the concept of quality in healthcare at the international level, and published its first monograph on the concepts and methodology of QA in healthcare in 1982 (WHO, 2003).

In some developing countries, healthcare providers have adopted quality initiatives mainly influenced by the WHO and the US Agency for International Development (USAID), which promote an increasing international awareness of quality programmes especially in PHC. Both organisations sponsor financially the implementation of quality programmes in developing countries. This is done through either direct help by sending quality experts to assess quality and its potential improvement (Nicholas et al., 1991) or by organising international conferences to enhance discussion, global promotion and dissemination of the quality concept.

However, despite sceptical views of quality, these days there is a general consensus on the importance of quality programmes, where quality is recognised as the most important part of a strategy for health providers to stay in business in the healthcare industry, and it is fast becoming a global issue equally important in rich, middle-income and poor countries. Modern thinking on the quality of healthcare incorporates concerns for the views of both the service-providers and the service-users. However, the implementation of these programmes faces a number of challenges, starting from the lack of an explicit definition of quality, clearly defined methods of quality evaluation, and identification of who should determine evaluation criteria (Attree, 1996).

Defining the meaning of quality is the first step towards understanding these challenges, and this will be discussed in the following section.

3.3. Quality Concept and Definition

Quality means different things to different people. In our normal lives we use words such as a "top-quality" product or service. It might refer to reputation, the durability of a product, the right price, high standards, prompt service, a friendly reception, the availability of service and some other things. In plain English, quality means "degree or grade of excellence". According to the Oxford Word Power Dictionary (Steel,

2001), according to Webster's New World College Dictionary (2010), quality is "the degree of excellence which a thing possesses". Quality can mean how good or bad something is, or a high standard or level. In Arabic, the word "quality" means something very good or something which has been done in a perfect way, which usually translates the English word. The term "quality" is elusive in nature, sometimes being employed in the manner of "goodness, or luxury, or shininess, or weight" (Crosby, 1979), sometimes referring to "fitness for purpose", reflecting a belief that quality is the responsibility of an individual department in an organisation by working in accordance with specifications to achieve fitness for use (Juran, 1989).

Some quality experts, such as Crosby (1979), have defined quality as conformity to requirements. In this case, it is assumed that quality variables are taken care of by the requirements which Deming (1982) defines as a never-ending cycle of continuous improvement. For Deming, quality is not a destination, but rather a journey (Asubonteng et el., 1996). According to Glynn and Perkins (1995), quality is an objective and systematic approach.

Indeed, quality is a multidimensional and multifaceted concept. This partly explains the large number of definitions of the term, the many approaches to measuring and assessing it, and the variety of approaches to ensure and improve it. Beckford (2002) explains other issues through the discussion of three quality imperatives. The first is the economic imperative for quality, where the "gurus" promise that achieving quality will reduce costs and improve productivity. The imperative is therefore survival for the individual organisation and ultimately the total economy. Secondly, Beckford explains that the social imperative for quality stems from the responsibility of all managers to minimise the waste of costly HRs and maximise satisfaction through working with their colleagues in order to support social cohesion within their own sphere of influence. Third is the environmental imperative for quality, in which the management have the additional responsibility of considering the total effectiveness of the organisation in terms of its use of all resources, the environmental impact, and the implications for the organisation they manage. This may mean undertaking additional investments to reduce and avoid environmental damage (Beckford, 2002).

3.4. Quality in Healthcare

The WHO defines health as a "state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 1946:100), while care is the management of, responsibility for, or attention to the safety and well-being of another person or other persons (Wenzel, 1992).

Without question, quality is expected to be an integral component of all healthcare services. Despite this universally accepted belief, however, the measurement of quality and what constitutes an acceptable level of quality is still debatable. Scholars and researchers, healthcare providers and individual consumers of healthcare all bring different perspectives to the debate.

Research has shown the emergence of significant preventable and avoidable adverse events such as patient injuries occurring in health services organisations, particularly in hospitals, which have increased the cost of medical care (Leap, 1994). As HSs struggle to achieve a balance between cost and access, clarifying the roles of clinical quality and the service community in achieving the desired outcomes becomes increasingly important. Other authors argue that low-quality healthcare services waste the limited resources that could be used to provide healthcare for those who are most in need (Øvretveit, 1992).

Health services organisations (and other service industries) will inevitably compete for quality. Orme et al. (1992) succinctly describes the goals of quality improvement (QI) efforts in healthcare as the improvement of the process of providing services, thus increasing PS (service outcomes), to improve patients' health (clinical outcomes), and reduce the cost of delivering healthcare.

Nowadays it is evident that healthcare users have become more critical; they have expressed demand for better quality and expectations in health services (Donabedian, 1992; Mossialos, 1997; Sitzia and Wood, 1997). By the same token, health stakeholders, including politicians, policy-makers, health-providers and patients have become more concerned about the quality of healthcare due to an increase in medical errors, poor health services, and increasing patient expectations, in addition to a growing general belief that there might be effective quality methods for assuring quality and safety in healthcare. As a result, improving the quality of healthcare and ensuring the safety of patients and personnel have become priorities for HSs in developed and developing countries alike (Øvretveit, 2003).

A different view is taken by the WHO working group on quality, which discusses the different rationales behind improving the quality of healthcare; these can be economic, social, political, and professional. In 1998, the WHO resolution of "Health for All in the 21st Century" continued to emphasise quality improvement at global, regional, and national levels (WHO, 1998b).

The following sub-sections discuss the concept and definition of quality in healthcare and quality dimensional definitions.

3.4.1. Quality in Healthcare Concept and Definition

In terms of healthcare, there is no overall consensus on a single definition for quality. Nevertheless, there is general agreement that "quality" is a multi-dimensional concept.

Avedis Donabedian is possibly the greatest commentator on the issue of quality in healthcare in at least the past three decades (Donabedian, 1966-2000). He claimed that the simplest way to define quality is by looking at the complete model of management of care that is provided by a doctor to a patient (Donabedian, 1980). He divided this

into three aspects: technical care, interpersonal care and amenities of care (Donabedian, 1980, 1988, 1992 and 2003).

- Technical care (science of medicine) is the application of medical sciences and technology and their implementation in the management of health problems. Good quality of care, which includes medical science and technology, maximises benefits to health without correspondingly increasing risk.

- Interpersonal care (art of medicine) is the management of the social and psychological interactions between the doctor and his patient. Although Donabedian pointed out that this aspect of care is more difficult to assess, he suggested that high-quality interpersonal care can be measured by "the extent of conformity to values, norms, expectations, and (patient) aspirations" (Donabedian, 1980:5). He also indicated that the interpersonal process is not isolated from the technical process, and can contribute to the success or failure of technical care by contributing to the balance of risks and benefits.

- Amenities of care include the comfort, privacy, courtesy, and acceptability of care (e.g. pleasant and restful waiting room, clean sheets). Donabedian viewed amenities as a component of the definition of quality, while stressing that they should not be seen as an exclusive component in their own right, but linked with the management of interpersonal care. However, this definition has been criticised, as it having several important limitations. It maintains the static approach to quality, as well as the tendency to focus on professional control and on certain aspects of performance; there is no provision for patients' views on quality, in addition to reflecting the individualism in quality (Linsk, 1990; Vuori, 1991). Laffel and Blumenthal (1993) add another limitation, which is that it tends to underemphasise the contributions of non-physicians and organisational processes generally.

Roemer and Montoya-aguilar (1988) define quality (in healthcare) as: "proper performance, according to standards of interventions that are known to be safe and affordable to the society in question, and that have the ability to produce an impact on morbidity, mortality, disability, and malnutrition". This definition broadens the quality concept to include both the process of care interventions and their outcomes.

There is often a connotation with the term "excellence of service". In healthcare, a high-quality service is increasingly being seen as a service that meets patient needs using the available resources. Øvretveit (1998), in an attempt to simplify the definition, emphasised that the goal of quality is not simply to improve technical and professional performance but should include "meeting the health needs of those most in need at the lowest cost, and within regulations" (Øvretveit, 1998:231). This implies that services can demonstrate quality despite the level of resources expended on them, provided that they use the resources in an efficient way. This definition is recognised in this thesis and elsewhere.

From the above we might agree with Doyle and Haran (2001), who have consistently argued for the pragmatic view that "quality of care does not mean sophisticated or exclusive care, but is concerned with fully meeting the needs of those who need the service most, at the lowest cost to the organisation, within the limits set by higher authorities". From this perspective we can say that quality is achieved in healthcare when accessible services which meet the needs of the patients are provided in an efficient, cost-effective, and acceptable manner.

Interestingly, although the literature is replete with attempts to define healthcare quality, such attempts appear to have failed to come to a unified definition (De Geyndt, 1995; Attree, 1996; Blumenthal, 1996; Campbell et al., 2000; Al-Assaf and Sheikh, 2004). This appears to be because quality is a an abstract concept that has to satisfy a number of requirements and interest groups which are often in conflict, and thus one definition is not likely to embrace the many different perspectives on the concept. For example, patients and service providers may have totally different views on what constitutes quality.

Consequently, the diversity of perspectives on what quality means for different interest groups makes it difficult to achieve a unified definition. Many existing quality definitions are therefore seen as "objective definitions" and are primarily used by different professionals to advance their interests (Øvretveit, 1998).

Øvretveit argues that these definitions, which are based solely on service features, miss the idea of client responsiveness that should be central to the quality approach. He stresses that quality should address the perspectives of all stakeholders of health services, including managers, professionals and patients. This requires a fine balance of attention, and emphasis is placed on different aspects such as specification, measurement, attitudes and relationships, increasing productivity, reducing cost, and raising PS. In healthcare, for instance, quality includes at least three perspectives (Øvretveit, 1992; Kaldenberg and Regrut, 1999; Al-Assaf and Sheikh, 2004):

- The patients' perspectives: reviewing care when needed as quickly as possible and, most importantly, by the provider that the patient chooses;
- The professionals' perspectives: might mean providing the best possible healthcare to patients; and
- The administrators' perspectives: providing effective healthcare in a cost-conscious environment, and within limits and directives, particularly if resources are limited.

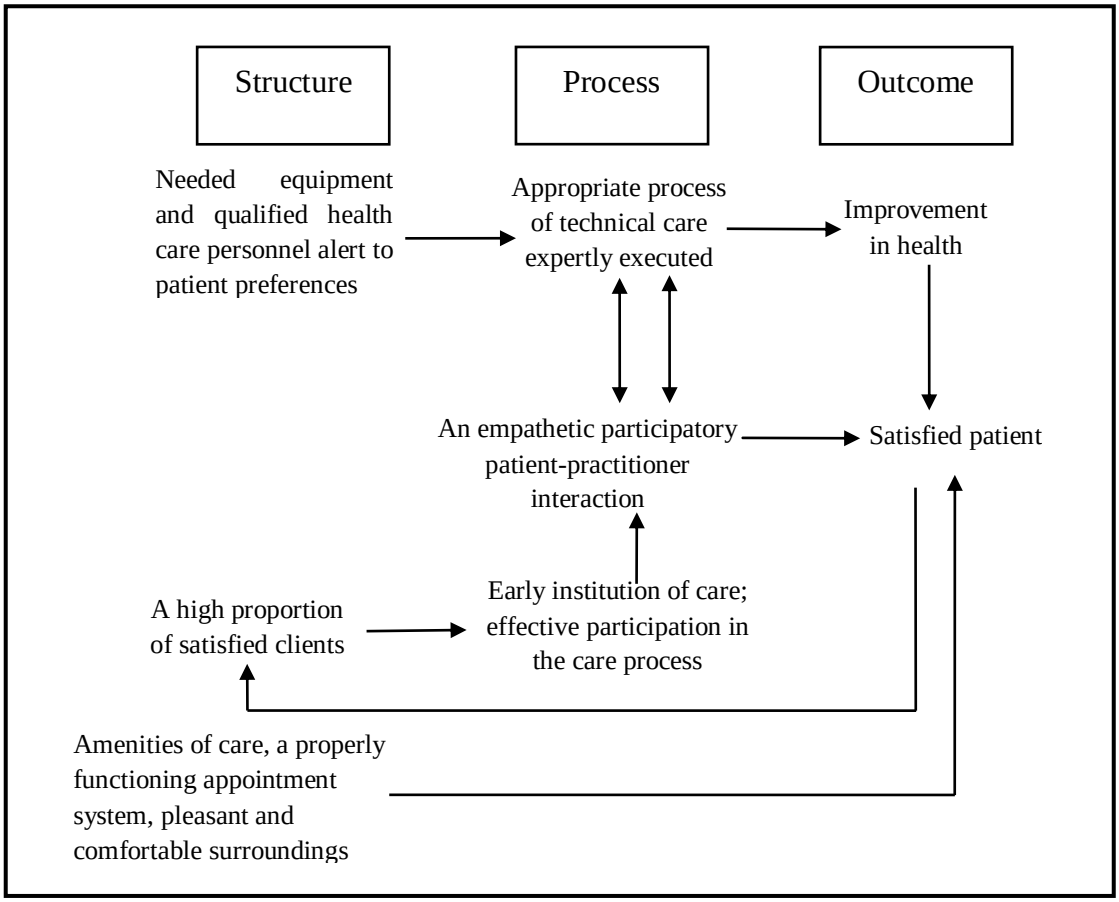
Some commentators agree that a simple definition of quality would be appropriate in some cases, such as organisational quality programmes to communicate the concept to the healthcare team. Others, for instance Øvretveit (1998), point out that some authors have tried to define quality in terms of evaluating the features of services, and have suggested selected criteria that might be useful for assessing the quality of healthcare Øvretveit. He also stated that a simple definition of quality, such as "the ability of

services to satisfy consumers", may be appropriate in the commercial sector, but will give rise to problems when applied to public services. He argues that such a definition is of little use for quality evaluation, because patients lack the technical ability to judge professional quality, and such a definition also fails to recognise different interest groups' requirements for quality (Øvretveit, 1998). Thus, for the purpose of quality evaluation in public healthcare services, a specific definition or criterion is needed to enable the evaluator to address the evaluation objectives.

3.4.2. Quality Dimensional Definitions

Given the difficulties of agreeing on a consistent definition of quality, many commentators began to develop an alternative approach, particularly for evaluation purposes. This is known as the "dimensional" definition of quality (Øvretveit, 1998).

Figure 3-1: Hypothetical relationship between characteristics of structure, process and outcome



Source: (adopted from Donabedian, 2003:50)

Avedis Donabedian (1986:100) defined quality as "the maximisation of PS considering all profits and losses to be faced in a healthcare procedure". Donabedian is perhaps most famous for introducing the conceptualisation of the dimensional definition of quality (structure, process, and outcome) that has long been used as a framework for assessing quality in healthcare (Ellis and Whittington, 1993; Harteloh and Verheggen, 1994; Hill and Chung, 1995; Huycke and All, 2000). From the

standpoint of this model, the most important aspect of quality initiatives is that they are organised in systematic ways that are capable of being described practically by criteria, indicators and standards (see Figure 3-1).

Structure: the physical and organisational framework within which care is given. This includes the staff, facilities and equipment available, the environment within which the care is delivered, and the documentation of procedures and policies.

Process: the actual procedures and practices implemented by staff in their prescription, delivery and evaluation of care.

Outcome: the effect of care on the client, plus the cost of providing that care (Moullin, 2002:71).

Al-Assaf and Sheikh (2004) argue that Donabedian's model of measuring quality is based upon "simple system theory", which describes any HS as a "fully developed" system with a set of objects and components. Donabedian's triad has come to predominate in health services research (Calnan and Ferlie, 2003).

Maxwell (1984) interpreted a quality services as those which give dignity, personal worth, individual fulfilment, respect and individuality to all human beings. He provided a useful six-dimensional framework for defining and evaluating quality in healthcare, which Øvretveit can be "helpful for deriving criteria for a quality evaluation" (Øvretveit, 1998:235). These criteria are: (Greenhalgh and Eversley, 1999)

- Effectiveness of services provided (i.e. success in meeting policy and programme objectives).
- Efficiency and economy of resource use (i.e. optimum use of resources needed to reach objectives and value for money).
- Social acceptability (to the users of available services, i.e. social barriers, and professionals).
- Accessibility of services: (i.e. location of and waiting times for services).
- Equity or fairness of healthcare services for different people.
- Relevance (appropriateness) of type or pattern of services to the needs of the population.

Linsk (1990:222) divided quality into "primary" and "secondary".

- Primary issues are the physician's goal and function to "finding and treating the disease rapidly ... [without] unnecessary acts".
- Secondary issues are: "efficient admission procedures, polite personnel, functioning elevators ... [toilets] ... clean floors, responsive dietary, prompt laboratory and X-ray turn-around, prompt response to the call signal, etc".

Pajak (1992) defined quality of care as consisting of three elements: responsiveness, effectiveness and reliability. Along the same lines, The Joint Commission on

Accreditation of Healthcare Organisation (JCAHO) (from Wilkinson, 1990:22) also shares some of the quality dimensions mentioned by Maxwell, which are listed below:

- **Efficacy:** is the intervention (care/procedures) useful?
- **Appropriateness:** is it right for the patient?
- **Accessibility:** if right, can the patient get it?
- **Acceptability:** if right and available, does the patient want it?
- **Effectiveness:** is it implemented well?
- **Efficiency:** is it implemented in a cost-effective way?
- **Continuity:** did it proceed without obstruction and with suitable follow-up, interaction and referral?

Dimensional approaches to defining quality of healthcare are, however, problematic, and have been criticised. It is argued that in such approaches, the emphasis on quality as an integrated whole is lost (Ellis and Whittington, 1993). Øvretveit (1998) further contends that the perception of quality is a combined perception of these dimensions which is greater than the sum of the individual dimensions. He states:

"The perception of quality is also a feature of how quality is created: quality assurance and quality programmes have to ensure that different quality activities link to create an impact which is more than the sums of the activities. This is an important aspect of quality to bear in mind in a quality evaluation, and something which the dimensional or reductionist definition rarely captures" (Øvretveit, 1998:236).

Thus, Øvretveit suggests that quality management can be regarded as "an umbrella or a co-ordinated set of staff and organisational development activities" that aims to enable staff to use new methods to improve quality in a systematic way. Such an approach should be built on existing strengths and good practices as well as introducing new methods.

In short, quality in healthcare is seen as a multi-dimensional concept with some definitions that appear to regard quality as attributes or properties of healthcare services, whilst others define quality according to the perceptions and priorities of the person who receives those services. It is not surprising; therefore, that there is difficulty in achieving consensus on an appropriate operational definition of quality, and this has handicapped the development of effective quality methods (WHO, 1985).

Whilst the specific quality dimensions that one might be interested in, in any particular context, will depend on the type of service provided and the social context of the population being served, six quality dimensions are recognised as important in most contexts: effectiveness, acceptability, efficiency, access, equity, and relevance to need (Maxwell, 1984, 1992; Ellis and Whittington, 1993; Øvretveit, 1998).

For the purposes of this thesis, a definition that characterises quality in healthcare and HSs will be used as suggested from the WHO (2006a) perspective. This suggests that

HS should develop in six domains of quality. These areas require that healthcare services be WHO (2006a:9-10):

- "Effective, delivering health care that is adherent to an evidence base and results in improved health outcomes for individuals and communities, based on need;
- Efficient, delivering healthcare in a manner which maximises resource use and avoids waste;
- Accessible, delivering healthcare that is timely, geographically reasonable, and provided in a setting where skills and resources are appropriate to medical need;
- Acceptable/patient-centred, delivering healthcare which takes into account the preferences and aspirations of individual service users and the cultures of their communities;
- Equitable, delivering healthcare which does not vary in quality because of personal characteristics such as gender, race, ethnicity, geographical location, or socioeconomic status;
- Safe, delivering healthcare which minimises risks and harm to service users".

In general, the definition is suitable for this study as it is includes concepts developed from various definitions of quality in healthcare services, and contributes to the aim and objectives of the study.

However, adapting quality within the a country HS is important, but it should consider the complexity of the political, social, cultural, demographic and economic diversity, as well as the health situations of people and communities, other institutions that influencing health and a numerous expectations of users, thus, it is vital that quality is flexible as much as possible (Ben Said, 1993). For instance, various issues should be taking into account when discuss the quality of healthcare in Libya, as outlined below.

- The Libyan population is classified as urban, rural and Bedouin, and there are some differences between these societies in terms of economic, cultural and social features, which are reflecting in their health-related behaviour.

- Libya is one of the developing countries; elderly people have generally not received much education; mainly healthcare services provided by the MOH with no health insurance system.

- Understanding the differences between these societies characteristic and how they affecting the health-related behaviour will help in identify the proper methods for delivering the healthcare and identifying the available social and cultural norms, values, and behaviours in order to utilise them in improving the healthcare. These values and norms also playing a vital role in define the overall framework of individuals' attitudes towards health and illness, which affect the health education programmes as well as PS.

- ***Part Two: Evaluating and Measuring Quality of Healthcare***

3.5. Quality Measurement and Assessment Methods

"What cannot be measured cannot be controlled" (De Geyndt, 1995:4).

Continuous success can only be achieved where there is feedback, evaluation and improvement. There must be monitoring and planning systems which continually drive the organisation to expand its horizons. There is acknowledgement that lack of an explicit and operational definition of quality weakens quality evaluation and measurement (Hall, 2004). The literature suggests that the absence of a definition of quality has contributed to the "shortage of specific criteria with which care quality can be measured" (Attree, 1996:13). Moreover, because defining quality is problematic, the literature seems to drift away from attempts to define it to focus on its technicalities. Toon (1994:4) shares this view:

> *"What is striking is the lack of open discussion of the fundamental principles on which the various political decisions and standards are based, and of explicit theories of what is good and why. There is much discussion of particularities. Debates about personal lists and the use of deputizing services are interminable, but very little discussion takes place on what holds our views on these things together to give general practice a coherence and unity.... If we take the concepts of good practice and quality of care seriously, we need to consider what the assumptions we make about it are, and whether they are in fact true. Surprisingly, these issues have not been comprehensively addressed."*

Sarvimaki and Benko (2001:130) commented that: "Much of the literature, however, seems to be preoccupied with models for quality improvement, formulation of standards and criteria, and problems of measurement, while the definition of quality and good care is missing (Rantz et al. 1998). The existing definitions, again, are often vague or contradictory".

The lack of a unified quality definition has led to a proliferation of evaluation types, derived mainly from four evaluation perspectives: experimental, economic, developmental, and managerial (Øvretveit, 1998). The latter argues that the perspective of the evaluator will be influenced by these important issues: the goal of the evaluation (i.e. what to evaluate), methodology and approach to knowledge (i.e. training and disciplinary background), and for whom the evaluation is carried out.

Traditionally, the quality of healthcare used to be evaluated and measured by healthcare professionals (Shelton, 2000; Brook et al., 1996). This was usually done through setting standards (e.g. mortality and morbidity rates) and evaluating quality against these standards (Ellis and Whittington, 1993). Øvretveit (1998) argued that it is worth noting that quality evaluation differs from quality measurement. This is because measurement is a concept which tends to mean the process of quantifying the

amount of an item and does not involve judging its value. Øvretveit asserts that this does not mean measurement is not without value judgements, since "what is selected for measurement involves a judgement of value in that the selected phenomenon is important in some way". On the other hand, Øvretveit explains that evaluation, although it involves measuring quality, differs from measurement because "the evaluation framework shapes which particular quality measures are to be used, and it is within this context that measures allow the users of the evaluation to judge value". Thus, quality measurement is a quantity-driven concept and quality evaluation is a value-driven concept.

However, a number of changes have contributed to a dramatic shift in this situation. Brook et al. (1996:966) suggested that two main factors driving this change are:

- The considerable advances in patterns of practices patterns and the quality of healthcare, and clinicians increasingly becoming interested in receiving substantive information on their practice; and
- Patients and buyers demanding to learn more about the quality of healthcare available for them.

Shelton (2000) also contended that assessment measures used by health professionals to evaluate and ensure quality, such as clinical and cost-effectiveness, are insufficient to ensure quality of healthcare because such measures do not give rise to PS and loyalty.

Problems seem not only to concern who should evaluate quality, but also what is to be evaluated and which aspects of quality are the most appropriate to evaluate. Øvretveit (1998) identified three common approaches to evaluating the quality of care: outcome, process, and experimental evaluation. In outcome measures of quality, the focus tends to be placed on outcome only, regardless of the service process and its internal activities. An example of this approach is the evaluation of PS and functioning after receiving healthcare (Øvretveit, 1998). Process evaluation tends to be more helpful for service providers, as more insight is given into internal activities that contribute eventually to the outcomes of care. The last approach is experimental evaluation, which is intended to introduce continuous improvement in methods (Øvretveit, 1998). In this approach, certain attributes of the service are examined for their potential links to the production of high- or low-quality healthcare.

Brook et al. (1996:967) identified five methods that can be used to measure quality based on the process or outcome data. The first three are implicitly and the last two are explicit:

- Implicit methods: no prior standards or agreement about what reflects good or bad quality. For example, a review of data sources after healthcare services have been delivered (e.g. medical records) might answer the following questions. *Method* 1: was the process of services adequate? *Method* 2: could better services have

improved the outcome of healthcare? *Method* 3: was the overall quality of services acceptable?

- Explicit methods: *method* 4: explicit process criteria. *Method* 5: the use of prior-to-services explicit standards to determining if the observed results are combatable with the outcome predicted by a model that has been verified based on scientific evidences and clinical judgement.

Brook et al. (1996) pointed out that the results of quality measurement will differ depending on the method utilised. Moreover, explicit process-based methods are stricter than implicit outcome methods. They provide an example of the extent to which using different measurement methods can lead to different results. Brook and Appel (cited in Brook et al., 1996:969) report that the results of explicit process methods suggested that 2% of patients receive appropriate healthcare, while the implicit outcome measurement methods in the same setting inferred that 63% received adequate healthcare. Such a wide variation in findings raises questions about the validity of some methods used to measure the quality of healthcare; however, it is important to recognise that the selection of sources of data can also be very diverse.

Variations in findings derived from outcome and process research methods can be due to methodological limitations, both at the empirical and theoretical levels. Attree (1996:13-14) reviewed the literature in this area and concluded:

> *"In order for abstract and multi-dimensional concepts such as 'Quality Care' to be reliably and validly measured, the fundamental concept needs to be operationally defined, and the underlying theory made explicit… For the results of a quality assessment to be credible the measurement techniques need to be reliable, valid and sensitive, and sufficiently sophisticated to be able to reflect the complex and multiple dimensions and perspectives of the concept of 'Quality Care'. It is suggested that methodological difficulties originate from the theoretical deficiencies which are created in turn by conceptual ambiguity".*

3.6. Measuring/Monitoring Quality Using Models or Frameworks

It has been suggested that the Donabedian's framework of structure-process-outcome (See Figure 3-1) be used for the assessment of quality measurement (Buck and McWhinney, 1980; Peters, 1993; Sitzia and Wood, 1997; Westaway et al., 2003). Croskerry et al. (2002) and Graff et al. (2002) have employed Donabedian's framework in studying the quality of services in emergency medicine. Structure refers to these things that are present before the patients visit the hospital; process refers to these things occur while the patients are in the hospital; whilst structural issues are relevant to quality initiatives that are less practical, accessible, and amenable to change than are process issues. Therefore, it is process that is usually the focuses of quality development endeavours. Outcomes are these things occur after the patients leave the hospital; they include morbidity, mortality and quality of life. Øvretveit

(1992), Roberts (1993) and Andaleeb (2001) revealed the importance of defining, assessing, and monitoring the outcome to measure patients' judgements of the quality of healthcare, and to be used as part of a quality cycle to ensure effective action and continuous improvement.

Whichever measures are used, there is a need for indicators that can be measured before and after quality improvement activities in order that the success of quality interventions can be identified. Thus, a useful quality framework requires steps for assessing baseline and post-intervention quality levels. Monitoring quality should also identify the variance or the gap between the actual situation and the standards that have been set. Thus, the monitoring of quality improvement often looks at indicators of process, such as the standards set for delivering certain clinical procedures, and at indicators of outcome, such as PS. These should be monitored before and after the quality improvement intervention has been implemented so that the success of the quality improvement activities can be assessed.

3.7. Different Perspectives of Evaluating Quality: A Pluralistic Evaluation

Concerns about the limitations of traditional approaches to the evaluation of quality of healthcare services have given rise to the pluralistic evaluation approach, which Hall (2004:23) defines as "an evaluation which is meaningful to the diverse stakeholders involved". Pluralistic evaluation is founded on at least three assumptions. Firstly, traditional approaches to quality evaluation are dependent on a "presumption rationality", which assumes that the development of a health service follows a "systematic process", and that specific interventions will achieve predetermined targets; hence variables (i.e. patients) can be excluded from service development (Hall, 2004). The latter pointed out that these assumptions have been contested by many scholars, particularly Smith and Cantley, who "dispute these rationalistic assumptions and the effectiveness of traditional approaches to evaluation" (Hall, 2004:23). Øvretveit agrees with Smith and Cantley that success is a pluralistic notion which should not be measured by one perspective only, since other perspectives such as those of patients will be neglected. Second, the pluralistic approach to evaluation makes possible the involvement of patients. Hall (2004) cited the growing acknowledgement in many countries of the importance of the social accessibility of health services, as well as the outcomes of health services, to the satisfactory experience of the health services delivered. Third, pluralistic evaluation is possibly independent of hierarchy, and hence offers a sensitive methodological framework capable of eliciting diverse viewpoints (Hall, 2004).

Accordingly, Attree (1996) argued that perspectives on the quality of healthcare are not only important for evaluation purposes, but are an important element of any quality model. He lists three principal attributes of quality in healthcare services: (i) structure, process, and outcome criteria, (ii) context/environment, and (iii) perspectives.

HSs around the world are facing escalating challenges, necessitating radical reforms. As Birch et al. (2000:20) put it, "Both the medical profession and the professions allied to medicine are having to review their current arrangements for ensuring quality of professional practice, and develop and implement new forms of performance management to meet the demands of the new quality agenda".

Øvretveit (1998:130) lists the following steps as necessary for a pluralistic evaluation:

- Identifying the main stakeholders;
- Understand and describe the interpretations that various parties make of events and the agencies with which they are involve, especially their interpretation of what constitutes 'success';
- Documenting the strategies used by each party to promote their interests;
- Using a variety of information sources and methodology triangulation.

Recognition that different interest groups have different perspectives on what constitutes good quality, and therefore on how it can be evaluated, is crucial (Coulter et al., 2002a). Generally, there are four broad perspectives on quality (Birch et al., 2000): professional/medical, patient, managerial and political. The latter outline how quality is viewed from three of these perspectives: professional/medical, patient, and managerial (Cited from Birch et al., 2000:27-28).

- "Quality from a professional point of view includes ensuring the technical competence of staff, reviewing medical practice (through, for example, training, continuing professional development and medical audit), autonomous practice, achieving desired outcomes, and continually seeking to expand the limits of medical knowledge through the appropriate means."
- "Quality from a patient perspective typically relates to access, responsiveness, good inter-personal communication, information provision, appropriate treatment, relief of symptoms and improvement in health status."
- "Quality from a *management/commissioning* perspective incorporates factors such as the most appropriate use of resources, ensuring that the care provided is of high quality, risk management, and developing services to take into account changes in both the 'external' and 'internal' environment."

This is because quality is multidimensional and different health services stakeholders' view and evaluate quality from different perspectives (Øvretveit, 1998). The latter argues that the management perspective is concerned with two issues: ensuring that things are done correctly, and that available resources are used to best effect. In the past, managers evaluated health organisations by collecting facts through simple and uncontested objectives, because at that time they tended to view the HS as 'a rational mechanism for implementing policy'. However, managerial perspectives have changed due to the recognition of other competing interest groups who view facts and policy values differently (Øvretveit, 1998). In this regard, Hull (2004:25) stated:

"It is acknowledged that the views of professionals alone rarely reveal the limitations of services with the clarity and recognition offered by those who use services (Heyman, 1995). Gathering the range of views illustrates the existence of a problem. Then, as the findings are so rich, this illuminates the process of care to show how and why limitations arise".

3.8. Importance of Patients' Perceptions of Quality

Although professionals' and other healthcare stakeholders' perceptions of the quality of healthcare services are important for this study, patients' perceptions are the main focus in this part. A salient theme is that service quality differs from manufacturing quality, and thus different considerations have to be taken into account when evaluating it. Service quality is a multidimensional, value-laden concept and therefore different stakeholders (patients, doctors, managers, etc.) will have different perceptions and opinions regarding its value and assessment (Øvretveit, 1998). It is increasingly being recognised that patients' perspectives on quality, alongside those of other stakeholders, are very important in any quality initiative.

3.8.1. Why Elicit Patients' Perceptions?

A wide range of contexts can be identified to explain the growing importance of eliciting patients' perceptions in general. For example, there is a quality agenda where patients' perceptions are increasingly seen as an essential part of service evaluation (Øvretveit, 1998; Hall, 2004). Another context is the tendency, at least in Western societies, to emphasise a political perspective and the need to democratise or counteract the democratic deficit in healthcare services through public participation and a market economy approach to healthcare services (Harrison et al., 2002a; Harrison et al., 2002b). As Carr-Hill (1992) pointed out, in this mode, patients' perceptions can be seen not only as a counterpoise to the hegemony of medical professionals, but also as a component in a wider "consumer sovereignty" where healthcare services should be shaped and tailored according to patients' "demands and preferences". There is also an ethical dimension, particularly for certain groups of patients such as the chronically ill, who need to be fully informed about the benefits and risks of their treatments (Tritter and Calnan, 2002).

Two of the above contexts have particular relevance to healthcare quality. Firstly, patients' perceptions and experiences of the healthcare they have received are an important aspect of general evaluation and can contribute, if used, to the improvement and development of health services (Tritter and Calnan, 2002). In an evaluation of the quality of healthcare, it is important to take into account not only clinical effectiveness, economic efficacy, and equity, but also patients' perceptions of quality, and whether or not the healthcare provided is acceptable to them. Thus, different stakeholders' perspectives (managers, professionals, and users) need to be given equal weight, or at least be taken into account. In the UK, Tritter and Calnan (2002) note that the importance of patients' role as evaluators of the healthcare they receive is

increasingly stressed. The legislation of successive governments has emphasised the importance of eliciting patients' perceptions, and it has become a statutory duty for the National Health Service (NHS) to respond to these perceptions by putting the required changes into practice.

Secondly, patients' perceptions can also be considered as part of a wider initiative of involving patients in democratic participation and the decision-making process (Harrison et al., 2002b). In this sense, patients' perceptions can be employed at several stages, and thus there are a number of degrees to which patients can be involved. At one end of the spectrum there is passive involvement (that can be regarded as minimal-level involvement in healthcare services), where providers elicit patients' perceptions about particular aspects of the healthcare they receive. A further level is active involvement, which includes getting patients involved in electing members of the community to the policy-making body of healthcare services, so that they have the opportunities to participate in the decision-making processes. Whether or not a higher level of involvement automatically leads to better quality has yet to be empirically tested.

Considering patients' perceptions is vitally important for the general evaluation of healthcare quality because if they are not taken into account, negative patient attitudes may affect the impact of quality programmes – patients might not comply with treatment, miss appointments, be unhappy, dissuade other patients, not get better, etc. – and adversely influence the outcome of the health service. Moreover, the managerial (economic efficiency) and professional (clinical effectiveness) agendas of quality programmes may be unachievable if patients' perceptions and perspectives on quality are not synthesised and amalgamated in a quality evaluation initiative.

There is agreement among scholars that the quality of healthcare is considered to be a multi-dimensional concept, and it has been given different meanings in the literature. As Larsson and Larsson (1999:34) indicate, "Patients' views on what is important in connection with the care they receive may be seen as one aspect of quality of care, and PS has increasingly come to be used as an indicator of this quality". Consequently, patients' perspectives of what constitutes good quality of healthcare are being increasingly recognised as an important source of quality indicators.

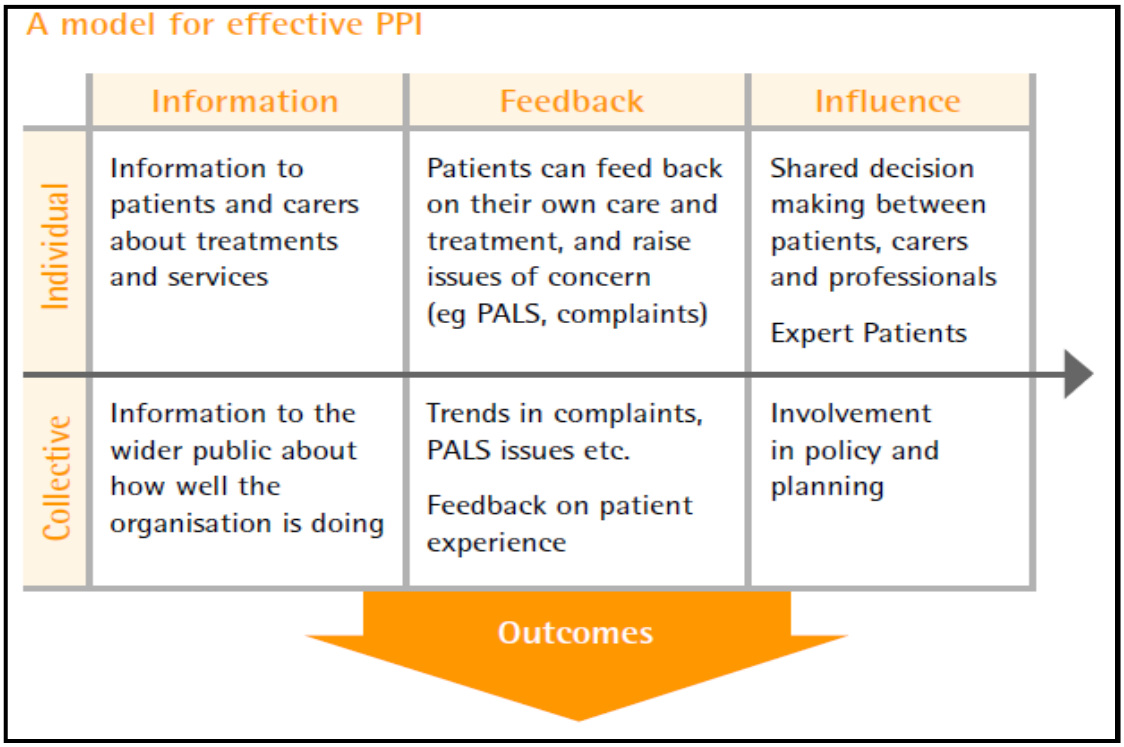
In short, the realisation of the importance of patients' perceptions of healthcare services has developed over a long period of time and has been strengthened by a number of academic disciplines. As Marshall and Campbell (2002:3) pointed out, "Demands to improve the quality of healthcare are part of a bigger picture, reflecting the changing society in which we live." An account of the main forces contributing to change in current health services would require a broad look at changes that have taken place within the HS due to economic constraints, increased demand for healthcare (Graham, 1995), and the decline of power and orientation from treatment to prevention (Reeder, 1972) within the political system (i.e. interest to use health

issues for election purposes) and, most importantly, within society (i.e. demographic changes, narrowing knowledge gap, cyberchondria [BBC , 2004]).

3.8.2. Patient, Public Collectivist and Community Involvement in Healthcare Services

Realisation of the importance of patients' perceptions has not arisen out of a vacuum. Throughout history there have been a number of developments led by different scientific disciplines. However, before these developments can be briefly outlined, it is important to define patients' perceptions and the differences between patient and public collectivist involvement in health services.

Figure 3-2: A model for effective patient and public involvement



**PALS =Patient Advocacy and Liaison Services*
Source: CHI, 2004:9

3.8.2.1. Patients' Involvement

Pragmatically, patients have perceptions and perspectives about the healthcare services they receive, irrespective of whether they have been asked or consulted. For example, patients express their perceptions through a complaints system, the media, surveys, interviews, etc. (Richards, 1999), and the health services provider's role is to give attention to these perceptions and address them. Thus, the patient is given a role, albeit minimal, of involvement in healthcare services by expressing his/her perceptions and preferences. Patients' perceptions in this sense could contribute to a policy shift, such as where patient advocacy groups, for instance self-help groups, may impose patients' perceptions on a policy agenda, a "bottom-up" approach as opposed to a "top-down" one. Harrison et al. (2002b:1) argue that patient involvement

is taken in the literature to mean "specific debates about appropriate governance for specific services". Caution is needed, however, when using the terms "patients' perceptions" and "patients' involvement". Patients' perceptions of quality will be taken in this thesis to mean the involvement of patients in the evaluation of quality.

3.8.2.2. Public Collectivist Involvement

In contrast to the above, public collectivist involvement means the engagement of a large number of the public with strategic decisions and policy-planning involving health services at both local and national levels (Harrison et al., 2002b; Florin and Dixon, 2004). It is further argued that public involvement has the dual advantage of promoting education and, at the same time, is an intrinsic means of restoring shaken public confidence in the democratic process, by supplementing inadequate democratic representation. Therefore, public involvement as depicted in the literature is a term that embraces a variety of activities or objectives (Florin and Dixon, 2004).

3.8.2.3. Differences between Patient and Public Collectivist Involvement

Figure (3-2) illustrates different activities in the HS undertaken by both individual and public groups. It also summarises the above discussion, and illustrates degrees of patients/public involvement in health services. The table moves from a minimal level (provision of information) to a more active level (shared decision-making). Research on the quality of health services, such as this study, may fit into the middle and final levels of this schematic framework.

3.8.2.4. Community Participation

The concept of community participation was envisaged by the WHO not only as a means of providing a sense of responsibility and rights to the local community, but also as a means of providing more efficient and equitable healthcare. Community participation encourages the local community to become involved in matters concerning their own health, and also promotes social justice and equality (Bandesha and Litva, 2005). The WHO's vision and the anticipated benefits resulting from a community participation programme can be summarised as follows (cited from Bandesha and Litva, 2005:241):

1. "Coverage - involves more people than non-participatory projects;
2. Efficiency: promotes better co-ordination of resources;
3. Effectiveness: goals and strategies are more relevant as a result of participation;
4. Equity: promotes notion of providing for those in greatest need;
5. Self-reliance: increases people's control over their own lives."

However, although the concept of community participation occupies a central place in the WHO's view of healthcare services, little is known about how the concept of participation is operationalised and implemented at local and national levels in many developing countries, including Libya. Literature from Western countries, particularly

the UK, not only provides examples of how the concept can be operationalised, but also examines more closely the theoretical foundations and the underpinning changes that have led to the emergence and shift towards greater public involvement in healthcare services.

Many commentators, such as Pickard and Smith (2001), argue that the concept of lay participation derives from two different theoretical frameworks, the consumerist framework and the citizenship framework. According to Rowe and Shepherd (2002), the consumerist framework is conceived in "instrumental terms", as a way to elicit consumers' perceptions and preferences concerning the services they receive. In other words, the consumerist framework theoretically translates the concept of participation into consumers' rights to information, access to services and redress. In contrast, the citizenship framework seems to take a different approach, placing greater emphasis on development through democratisation. This approach, which the WHO espouses (Brown, 1994), is further explained by Rowe and Shepherd (2002:278), who assert: "In the democratic model, participation is seen as a means of legitimising decisions by enabling citizen users to challenge and force those in power to consider and justify their practices. It is seen as a force for democratic renewal, bringing decision making closer to the people and mobilising them to take part in local affairs".

However, this is a biased picture of the success these initiatives have achieved, particularly in increasing local community understanding and the acceptance of the concept of community participation and the associated health gains from such initiatives (Bandesha and Litva, 2005). Others who hold optimistic perceptions include Pritchard (1981), Poulton (1999) and Crawford et al. (2002). Alborz et al. (2002:25) argue that there has been a "genuine desire to involve the public and willingness to try to do so in the face of so many competing priorities... [Community participation is high on the agenda] as evidenced by the appointment of lay board members, the establishment of public participation working groups, and the development of written strategies for involving the public." In contrast, those who hold pessimistic perceptions argue that there is an absence of clear evidence for the impact and influence of community policy-making and decisions and the concept of patient participation is not fully understood, either by health professionals or by patients themselves (Alborz et al., 2002). Most commentators are also in agreement that health professionals are still reluctant to engage fully with the community, as Poulton (1999:1289) rightly indicated, "due to professional protectionism, which works against sharing power and demystifying knowledge".

3.9. Quality Dimensions of Patient Perception and Satisfaction

There is no consensus on the number of the components underlying patient perception of the quality of healthcare and PS. Hall and Dornan (1988a) conducted a meta-analysis involving 221 studies on PS and quality of health services. They showed that 25% of the studies used only one dimension (although multiple items were used to refer to that dimension), 46% of studies used two to four dimensions, and the other

studies tapped five or more dimensions. Taking into account the potential shortcomings of multi-dimensional measures of patients' perceptions of quality of care and PS fails to consider all aspects of satisfaction important to patients (Ware et al., 1978), and it is wrong to equate all information derived from PS surveys (Ware et al., 1983).

In the USA, one of the few experimental studies designed specifically to identify the important dimensions of quality from the patient's perspective was conducted at an urban hospital with out-patients. They were asked to rate both the absolute and relative quality of six dimensions of quality. The results of the ranking task revealed that the most important dimensions were "behaviour of doctors and nurses", followed by "Service Results", "Needs vs. Clinic Services and Clinic Assistants & Helpers". The least important were access to the facilities, appointment arrangements and waiting times (Pascoe and Attkisson, 1983). In the UK, Williams and Calnan (1991) conducted a study to assess the relative importance of various dimensions of satisfaction in a number of UK healthcare settings including general practices, dental practices and hospitals. Irrespective of the medical context, the most important factors were the professional competence and the kind and quality of user-professional interactions.

An international study conducted amongst different European countries asked PHC patients to prioritise 38 items of healthcare services. The findings revealed that the top ten items were related to access, the patient-doctor relationship, communication, competence, courtesy, and privacy (Grol et al., 1999). Bowers et al. (1994) suggested that a useful way to organise the findings from these different studies in developed countries on the underlying dimensions of quality is to divide them into two rather distinct categories, "quality of technical care" and "quality of interpersonal care".

The differences in the relative importance of quality perception and PS might be attributed to the satisfaction models used and, in particular, the study instruments used. Calnan (1988) claimed that the contents of these instruments are biased towards issues that interest the healthcare services providers rather than the patients. This perception was supported by the results of a meta-analysis, concluded that patients were usually asking to assess issues such as availability and accuracy, while issues like professionals competency and empathy were less frequent included, and issues like effectiveness were rarely included at all (Wensing et al., 1994).

3.10. Methods of Assessing Patients' Perceptions of Quality and Satisfaction

The literature review of methods used to obtain patients' perceptions of the quality of healthcare indicates that there are several approaches for measuring patient perceptions. These main broad categories can be grouped primarily into: (i) quantitative research derived from positivistic inquiry and (ii) qualitative research (Lewis and Williamson, 1995; Murphy et al., 1998; Birch et al., 2000; Pope and

Mays, 2001; Runciman, 2002; Denzin and Lincoln, 2003; Creswell, 2003; Neuman, 2003; Bruster, 2005). These approaches include, for instance, counting and categorising complaints, examining critical incidents and adverse events, and satisfaction surveys (Sofaer, 1999; Bowling, 2002). The following sections elaborate on these two approaches.

3.10.1. Quantitative Approach

As previously indicated, recent shifts in management thinking in the field of quality in healthcare services have stimulated interest in eliciting patients' perceptions. Measurement of PS was felt to be the most appropriate method for achieving this goal, and since the 1980s this has been the most widely used approach (Williams, 1994; Crow et al., 2002). The literature is replete with studies which seek to assess how satisfied patients are with the healthcare (or components of care) received.

Several instruments have been developed to assess PS (e.g. van Campen et al., 1995; Beattie et al., 2002; Castle et al., 2005). These instruments nearly all ask patients to evaluate the services received at either a global level (e.g. overall satisfaction with healthcare) or a service-specific level (e.g. satisfaction with nursing care).

Many commentators (e.g. Wensing et al., 1994; Lewis, 1994; Concato and Feinstein, 1997; Wensing et al., 1998) have attempted to empirically examine which components of healthcare are important and related to the quality of healthcare. In their study to identify patients' priorities in general practice, Grol et al. (1999) asked patients (n=3540) from different European countries to prioritise 38 items of healthcare. They found that the top ten items identified by patients were related to access, the doctor-patient relationship, communication, competence, courtesy and respect for privacy.

Similarly, Bower (2003) identified two "overarching" domains related to quality: access (are care facilities accessible when needed?) and effectiveness, which can be further divided into the quality of technical care and the quality of interpersonal care (is care any good when accessed?). Moreover, Bower identified a list of eight further sub-domains relevant to patients' assessments (Cited from Bower, 2003:1):

- Access, such as waiting times for consultations, out-of-hours care, physical accessibility and financial barriers to access.
- Quality of technical care such as medical knowledge, effectiveness, and safety.
- Aspects of the doctor-patient relationship such as patient-centeredness, knowledge of the patient, communication skills, humaneness, involvement in decision-making, empathy, information provision and support, and trust.
- Continuity: both the duration of relations with PHC practitioners, and the proportion of consultations with a particular practitioner.
- Co-ordination of care by PHC practitioners.

- Organisation of care, such as the suitability of premises and the availability of particular services within practices.
- General satisfaction with care
- Outcomes of care in terms of symptoms, functioning, and quality of life.

The measurement method most commonly used was the Likert-type scale: a "quality rating" that ranges from "excellent" to "poor" or a "satisfaction scale" ranging from "very satisfied" to "very dissatisfied", or a "declarative scale" ranging from "strongly agree" to "strongly disagree" (Rosenthal and Shannon, 1997).

There are also different approaches for measuring patient views which focus primarily on assessing elements that shape the judgement of PS. For instance, Cleary et al. (1991) developed an instrument-oriented method based on problems that were identified from patient and family focus groups. The main aim of this instrument type is to minimise the subjectivity of the assessment and the confounding effect of patients' prior expectations. Similarly, Parasuraman et al. (1988) developed a 22-item SERVQUAL scale to measure the quality of services in retail industries. This scale was later adapted to health services (Babakus and Mangold, 1992) and included questions about patients' perceptions of the actual services delivery and expectations of the HS in providing these services.

The quantitative approach to elicit patients' perceptions, and in particular PS research, has attracted wide debate and criticism. For example, Birch et al. (2000) stress that although satisfaction survey methods produce valuable results, it is important to identify those aspects of healthcare which are important to patients; they may be very satisfied with one aspect of healthcare which may not necessarily be that important in healthcare provision, such as catering or support services (Coulter et al., 2002b). The 'gap' between PS and salience could have a profound effect on patients' evaluations of the provision of services, especially if the services do not provide what patient feeling they want (Birch et al., 2000). Moreover, patients' perceptions of the quality of the health service may generate moot points with service providers, since what patients feel they need may be judged by providers as non-medical necessities.

Furthermore, despite the enormous popularity of PS surveys since the 1970s (Pascoe, 1983), as an important means of eliciting patients' perceptions of quality they have failed to produce the expected level of quality improvement; thus, many would argue, they have had little impact. Cleary (1999) suggests that there is general agreement that satisfaction surveys are flawed measures of the quality of health services, a view echoed by Williams et al. (1998:1351) who state, "Despite their widespread use, satisfaction surveys have been frequently criticised on both theoretical and methodological grounds; in addition their usefulness in generating change in health services provision has also been questioned."

Others have pointed to several pitfalls attached to PS research, particularly on two fronts: logical and empirical weakness (Sitzia and Wood, 1997; Cleary, 1999). On the

logical front, PS is frequently criticised for lacking a "well-supported" definition as well as a psychological model of satisfaction (Pascoe, 1983). The latter suggests this is because research on PS has been preoccupied with examining socio-demographic associations with satisfaction, rather than on efforts to develop a "solid socio-demographical theory" of satisfaction. Despite this, he identified three commonly used theories of satisfaction:

- Attitude theory (value expectancy) models;
- Discrepancy theories; and
- Fulfilment theories.

All these theories have been derived from job satisfaction research. According to Pascoe (1983), each of these theories defines satisfaction differently. He also notes that most PS research applies discrepancy theories because researchers seek to match expected care with patients' views of the quality of care received. He claims that PS research has not acquired the conceptual and empirical development of market-based research and therefore implicitly criticises it, calling it consumer-satisfaction research.

Sixma et al. (1998:82) concur with Pascoe regarding the lack of a theoretical framework in PS research, and comment: "Theory and methodology in this field appear to have developed along separate lines of interest." However, they refute the idea of dissimilarity between market-based research and PS research. They claim that the business-based SERVQUAL model of consumer satisfaction, developed by Parasuraman et al. (1994), can fill the gap between theory and practice in PS research.

The empirical weakness attributed to satisfaction research has also been the focus of much attention. Surveys have been criticised for lacking minimal standards of conceptual or methodological rigour, for their weak design, for not producing the expected quality improvements, and even for misleading those working to improve quality processes (Cleary, 1999). Studies show that responses to such surveys are subjective and difficult to interpret because of the complex function of expectations and almost exclusive focus on "hotel" services of care, such as quality of food. Furthermore, the validity of the scales developed assessing PS has been continually criticised. In this regard, Larsson and Larsson (2002:682) assert: "While several of these scales may be creatively designed, a major criticism against most of them is their lack of theoretical foundation. The selection of indicators has generally not been related to empirically based models of patients' conceptions of the area… Consequently, one cannot be sure that the attributes chosen in the scales are those most important to quality of care". Therefore, instruments used in assessing patients' perceptions "should be studied in the context of their intended application. Quantitative as well as qualitative approaches can be used to measure patients' views, and the validity and reliability of the methods should be examined. The effectiveness and efficiency of the methods should be studied in terms of their consequences for process and outcomes of healthcare" (Wensing and Elwyn, 2002:157).

PS research usually produces high rates of satisfaction, which have been measured at over 90% (Cohen et. al., 1996; Dufrene, 2000; Schneider and Palmer, 2002). The evidence in the literature suggests that asking about overall satisfaction gives a high level of satisfaction (83% - 97%) and provides an overly optimistic evaluation of patients' experiences of healthcare services. Different picture emerged when patients were asked to report or evaluate specific aspects of their experiences of care (Williams and Calnan, 1991; Jenkinson et al., 2002).

Many authors (including Fitzpatrick, 1991a and 1991b; Williams, 1994; Batchelor et al., 1994) have attempted to identify the reasons why PS surveys are rarely able to elicit negative perceptions from the patients studied. In this regard, Fitzpatrick (1991a:888) comments, "One reason is the reluctance of many patients in the NHS to express critical comments about their healthcare." Other authors appear to support this view, referring to some patients' concerns about confidentiality or their desire to appear grateful (Bower, 2003). This problem not only exists in the UK, but is also seen at the global level (Schneider and Palmer, 2002).

The most significant point is that PS surveys are usually created according to professionals' agendas. Carr-Hill (1992) acknowledges the drawbacks of satisfaction surveys, particularly their deficiencies in contributing to overall quality improvements, and their limited sensitivity in detecting variations in the quality of health services; but nevertheless points to the growing interest in their use. He argues that this may indicate that service providers are keen to know what is right, but not what is wrong. Politicians are also able to make capital out of results which indicate high satisfaction, even if they are superficial.

The impacts of satisfaction research and methodological/theoretical flaws are two distinctly different things and are not necessarily directly related. A more sensitive method of eliciting patient perceptions might have a more powerful impact, particularly one that is capable of capturing diverse opinions and is responsive to local needs.

The review above shows that several frameworks exist for measuring patient views. Although each examines patient views from a different conceptual perspective, it is likely that measurements based on these alternative frameworks would be reasonably correlated (Cleary et al., 1992; Rosenthal and Shannon, 1997). Castle et al. (2005) conducted a comprehensive review (1980-2003) of survey instruments used for assessing patients' views of hospital healthcare. This review covered studies conducted in the USA, Europe and the Middle East. The review reported that there are many instruments being used for measuring patients' views of hospital healthcare. These instruments are different in terms of their domains, the mode of administration to respondents, and characteristics of performance, especially their psychometric properties.

3.10.2. Qualitative Approach

There are a number of sources which can be used to identify key issues that are important for patients. Bruster (2005:61-62) notes these sources can include the media, previous research, letters of complaint, and speaking with staff. However, he argues that:

> *"There is no substitute for asking patients themselves to identify the key issues and what is most important to them. For all the surveys used as part of the National Survey Programme and all surveys designed by Picker Institute Europe, a significant amount of development has been undertaken with patients. It must be recognised that good quantitative work has to be based on a foundation of good qualitative work, and so much of the development work has been based on qualitative work with patients in the form of focus groups or in-depth interviews."*

In-depth studies (utilising both quantitative and qualitative approaches) focuses on fields such as the illness experiences, perceived needs, and attitudes towards the healthcare delivered. In a sense, qualitative methods do not impose anything on the patient, because they have their own ideas and conceptions about quality (Cleary, 1999). Thus, eliciting patients' perceptions in a qualitative manner will lead to the discovery of other factors that are important to patients (Lewis and Williamson, 1995; Murphy et al., 1998; Runciman, 2002; Creswell, 2003; Neuman, 2003; Bruster, 2005).

As well as advocating the use of qualitative methods as a precursor to quantitative research, new trends in the literature appear to give increasing importance to report-assessment-based methods for eliciting patients' perceptions (Wensing and Elwyn, 2002). In this approach patients are asked to report on specific aspects of healthcare such as access, waiting times, and the availability of services or medication.

Bower (2003:552) asserts: "focussing on reports of specific aspects of care (e.g., waiting times and availability of services) rather than evaluations. The use of reports is predicated on evidence that patients can accurately report objective aspects of care, such as access and continuity". In this regard, Cleary (1999:720) states:

> *"It is now widely recognised there is a need for rigorous methods, other than clinical conversations, to elicit patients' views on such matters as treatment decisions and the quality of care received. Much effort has therefore been devoted to developing and evaluating survey measures that elicit reports about specific care experiences that reflect quality of care, not amenities. Such questions are less subjective and less influenced by patient characteristics, are more interpretable, and thus may be acted on for quality improvement purposes."*

3.10.3. Mixed-Methods Approach

As pointed out by McWhinney (1991:1), the debate over research methods is misleading because each has its strengths and weaknesses. "There are many differences between methods of research other than whether they use quantification, and to suggest there is a strict dichotomy is misleading: many of us, for example, use both qualitative and quantitative methods in the same study. It is also misleading to think only in terms of two methods when there is in fact a continuum, ranging from classical experimental approaches, through descriptive research, to ethnographic methods. Furthermore, becoming overly concerned with names can lead to confusion, because there can be many names used for the same methods. It could be argued that it is not always necessary to give a method a name". Brody (1991:130) goes on to argue that "both qualitative and quantitative methods have appropriate applications in primary care research, even though in theory the latter better reflects the unique defining features of primary care."

Recently many researchers, such as Borkan (2004) and Creswell et al. (2004) have suggested that integrating both qualitative and quantitative research design in a single study holds the potential of providing healthcare research with the level of rigour that has been long pursued by researchers. Borkan (2004:5) notes, "The promise of combined generalisability and contextual interpretive relevance, offered by comprehensive designs, may be the holy grail of research and too tempting to resist. Yet, as Creswell and colleagues have noted, and as a search of the literature confirms, relatively few primary care investigators have taken this path and few studies can be found."

A mixed-methods approach is also important for research on patients' perceptions because many commentators such as Froberg and Kane (1989), McIver (1993), Penelope (1999), and Wensing and Elwyn (2002, 2003) have argued that the collection and synthesis of users' perceptions of the quality of health services provides a rigorous methodological foundation. Such an approach equips researchers with the methodological tools that will enable them to explore new ground from a pluralistic perspective, which may not be possible with a single method.

3.11. Evaluating Quality of Healthcare in Developing Countries

The literature on the quality of health services is very much derived from developed countries. There are few studies referring to developing countries (De Geyndt, 1995; Atkinson and Haran, 2005), and even fewer referring to the Libyan context (e.g. El Taguri et al., 2008; Abdul Salam et al., 2010a and 2010b). Atkinson and Haran (2005) cite Sitzia and Wood (1997), who reported that by 1994, the number of published papers on PS in the US and the UK amounted to almost a thousand. De Geyndt (1995) counted 22 studies on the quality of health services in developing countries published between 1981 and 1993. In all, outcome as a measure of quality was almost absent; seven studies had used structural indicators to measure quality, twelve had used

process indicators, and three had used both. They attributed this emphasis on quantifiable and measurable inputs to the fact that most studies had been carried out by researchers with a background in economics. They also attributed the absence of outcome measures in developing countries to the fact that: "Improving outcomes is a presumptive result of improving the process and is not documented, mainly for lack of valid and reliable measuring tools and indicators, the expense involved, and the tenuous cause-effect relationship between process and outcome" (De Geyndt, 1995:32).

Haddad et al. (1998) maintain that the lack of research in the area of service quality in developing countries may be due to a lack of interest in the idea itself. They believe there are two reasons for this. First, priority has long been given to improving the availability of healthcare in circumstances where there have been extensive needs, which have rarely been fulfilled. Second, the authorities in charge of health services have felt that evaluation and ensure quality are luxuries reserved for developed countries. According to Haddad et al. (1998), confusion about the meaning of quality has slowed progress, and the general assumption that PHC simply consists of services which do not require or possess complicated technologies has led to less urgency in setting quality standards.

Furthermore, the quality of healthcare in developing countries is usually defined and expressed by health professionals from a technical perspective. The delivery of quality health services is a major challenge that health service providers face by emphasising the importance of patient perspectives in assessing quality in health services (Tangcharoensathien et al., 1999; Andaleeb, 2001; Alasad and Ahmad, 2003).

Haddad et al. (1998:381) noted the recent rise in interest in the quality of healthcare in developing countries, and the practical steps, actions and studies being taken to ensure acceptable standards of quality. According to them, such a trend "undoubtedly translates the concerns raised by the implementation of strategies to improve the continuity and effectiveness of…services. It is also the consequence of the repeated observation of strong links between the quality of services and use of these services."

The next three sub-sections will review studies of existing methods of PS and quality evaluation in developing countries, Arab countries and the Libyan HS.

3.11.1. Patient Satisfaction and Quality Perception in Developing Countries

In developing countries the literature of users' views on quality and satisfaction is limited compared with the volume of research that has been published in developed countries (Bernhart et al., 1999). Despite this, the available literature shows that patients' views on the quality of healthcare services are a multidimensional concept (Haran et al., 1993; Haddad et al., 2000; Yildiz and Erdogmus, 2004). For instance, Haran et al. (1993) conducted a study in the out-patient departments of two hospitals

in Ghana, which aimed to identify the quality factors as perceived by the patients. The main factors that the patients perceived as influencing the quality of healthcare were "the availability of a doctor", "the availability of medicine" and "the availability of information on diagnosis", in addition to the relationship between patient's perceptions of the quality of the service received and their sense of satisfaction with the health services. Tengilimoglu et al. (2001) conducted a study to measure PS in a public hospital in Ankara, Turkey, and three composite factors were identified: "the accessibility and availability of services", "perceived quality of patient care", and "organisational and administrative issues".

In 2004, a nationwide survey covering 1,100 patients in 31 hospitals was conducted in Turkey (Yildlz and Erdogmus, 2004). Seven factors were found that explained PS with the quality of hospital care: "physician care", "nursing care", "nutritional care", "room cleanliness", "room atmosphere", "procedure of incoming patients" and "other serving factors". In South Korea, a study was conducted to investigate the relationship between services quality dimensions and out-patient satisfaction. The findings revealed four dimensions of quality relating to PS: "physician concern", "staff concern", "convenience of the care process", and the "tangibles dimension" (Choi et al., 2005).

3.11.2. Patient Satisfaction and Quality Perception in Arab Countries

In Saudi Arabia, a study was conducted to identify which main aspects of public hospital services are important to patients and have an influence on satisfaction. The findings showed 11 statistically significant items: "cleanliness of the hospital", "nutrition services", "perceived quality of nurses", "perceived quality of physicians", "staff kindness", "availability of medicine", "hotel services", "simplicity of admission procedure", "availability of advanced medical technology", and "availability of recreation facilities" (Al-Omar, 2000). In the United Arab Emirates (UAE), a study comparing the quality of private and public hospital care using the SERVQUAL model identified five factors explaining the variance in the quality of hospital care: "empathy", "tangibles", "reliability", "administrative responsiveness", and "supporting skills" (Jabnoun and Chaker, 2003). Another study conducted in the UAE investigated the relationships between services quality dimensions in UAE hospitals using these five SERVQUAL-scale dimensions (Jabnoun and Al-Rasasi, 2005). The findings from the analysis of 242 patients and 201 hospital employees revealed that the quality of hospital services was positively associated with all dimensions of service quality.

In 2003, a study on PS with PHC services was conducted in two districts in Egypt using exit interviews. The results showed high PS with accessibility, waiting area conditions and the performance of doctors and nurses. However, low satisfaction was reported with the availability of prescribed drugs, laboratory investigations, and the lack of privacy during clinical examination (Gadallah et al., 2003). Another Egyptian study on patient views of the quality of hospital care employed the SERVQUAL

model, and three factors explained 67% of the variation in PS: “quality of human performance”, “human reliability”, and “quality of facility”. It is interesting to note that in this study the author argued that the results do not support the five-component structure of the SERVQUAL scale (Mostafa, 2005).

In 2006, Zineldin conducted a study to examine the major factors affecting the cumulative satisfaction among hospital patients in Egypt and Jordan. The results of analysing 224 in-patients’ completed and usable questionnaire revealed five quality dimensions: “quality of object”, “quality processes”, “quality of infrastructure”, “quality of interactions”, and “quality of atmosphere”. In Jordan, a PS study was conducted to identify the influence of factors representing quality dimensions on PS. The study results revealed that the dimensions of quality, which included the client-provider relationship, information exchange, continuity of care, and the availability of services, had a significant effect on PS (Mawajdeh et al., 2001).

This review of patients’ perceptions of the quality of healthcare in developing countries suggests that the quality dimension categories of “quality of technical care” and “quality of interpersonal care” are equally applicable in developing countries.

3.11.3. Patient Satisfaction and Quality Perception in Libya

Free-of-charge healthcare services are widely available in Libya. Unfortunately, the Libyan medical service is characterised by:

- The absence of common work standards for all staff to follow,
- A lack of qualified doctors and nurses,
- The presence of a mixture of staff nationalities (Arabic & non-Arabic speakers),
- A poor referral system from PHC, and
- The absence of quality champions to motivate improvement and staff participation in quality projects.

In Western HSs, patients’ perceptions are increasingly seen as a key element in healthcare evaluation (Stanlszewska and Henderson, 2004). Although the Libyan HS closely resembles the Western model, and is a collectivist system like the NHS in the UK, the idea of eliciting patients’ perceptions is not yet established. This remains a neglected area of research, since quality of healthcare is a recent initiative in Libya. Especially within the scope of the MOH, there is little experience of measuring patient perceptions in such settings, and data in this field is limited.

The analysis suggests there are two main reasons for the lack of interest in eliciting patients’ perceptions in Libya. First, healthcare services in Libya are primarily seen as welfare services; these include all healthcare facilities – hospitals, PHC centres, etc. This fact, among other factors, may cause healthcare planners in Libya to marginalise patients’ perceptions and only concentrate on government strategies. In this regard, Al-Shahrani (1999:5) comments:

> *"In many developing countries, social science research may not be a popular endeavour for political reasons. As a result, health and social services are rendered to people without evaluating the successes or failures of services…The very few existing studies represent the point of view of healthcare administrators and healthcare professionals, who are usually the respondents in these studies. This may give a slanted picture, since these health administrations and professionals are employed by the government, which is represented by the Ministry of Health."*

In Libya, therefore, all initiatives concerned with improving services or expanding new ones are mainly based on the government's own strategies, and are not influenced by or shared with patients. This is not the case in other countries where services are "open to the private sector", which makes them "highly competitive" and leads to concern about researching the HS (Hasin et al., 2001).

The second main reason for the lack of interest is the fact that the impact of scientific research on developed countries' HS policies is far more influential than in developing countries, including Libya. Moreover, the few existing studies have been based upon other studies, particularly those derived from Western literature, and their findings can be criticised on two fronts. First, most depict a high level of satisfaction which, as will be explained later, may be superficial and illusory. Second, they fail to capture aspects of healthcare that are really important to patients, because most satisfaction surveys are pre-designed by researchers who neglect issues which patients might wish to include in the survey design. Although a number of studies have been conducted in Libya (e.g. Al-Obaidi et al., 2005; Alwan and Abubaker, 2008; Mohapatra and Al Shekteria, 2009; Abdul Salam et al., 2010a and 2010b; El-Hudiri, 2010; Aiead, 2013), many of these, although helpful in looking at new issues in the Libyan HS (e.g. hospital organisation, crises management), have either failed to capture the dynamic of pluralistic views on quality, or have focused on a higher level of healthcare, such as hospitals. Consequently, there are no national standards or instruments for measuring patient perceptions of healthcare facilities in Libya. It is therefore important for the HS to take advantage of the available experience in other developed countries and specialised organisations to create instruments that are acceptable, valid and reliable in a cost-effective and timely manner.

In summary, thus far patient quality perceptions and satisfaction have gained widespread recognition as a measure of a quality, and as quality indicators of the performance of a HS (Newsome and Wright, 1999). The attention given to patient perceptions and PS is linked to the drive for greater public accountability, which in turn has led to several significant implications for the examination of patients' perceptions of quality and PS (Sofaer and Firminger, 2005). Moreover, Thompson and Sunol (1995) claimed that a real improvement in the quality of healthcare cannot take place unless patients are involved, and healthcare evaluation will not be satisfactory if it focuses only upon measures of clinical effectiveness and economic efficiency without including measures of patients' perceptions. Also, it has been

argued that the identification of client priorities among different quality dimensions could lead to the increasingly efficient and effective allocation of limited health resources (Choi et al., 2005).

3.11.4. Criticism of Quality Evaluation in Developing Countries

Quality evaluation in developing countries appears to be influenced by technocrats (health professionals or managers) and, less frequently, the local community (Haddad et al., 1998). According to the latter, studies based on technocratic perspectives are becoming more frequent; they put forward the viewpoints of other health professionals, and possibly the government which employs them. However, they criticise this type of evaluation for relying on a normative definition of quality in which the quality of healthcare services is judged to be good or bad insofar as it does or does not reach certain predefined standards (Haddad et al., 1998).

In contrast to technocratic evaluation, Haddad et al. (1998) assert that evaluation based on community perspectives is more appropriate, because the recipients of healthcare play a central role in defining and assessing quality. Moreover, they argue that quality improvement programmes are meaningless if the intention is not to provide client-oriented care and to specify consumer satisfaction as the goal for quality programmes. They also give other important reasons for quality evaluation based on community perspectives:

> *"The evaluation of the quality perceived by the public is justified in the desire to meet users' expectations, thereby contributing to 'the process of democratisation of healthcare services' (Calnan, 1988). It also legitimacy practical considerations, since the viability of the health resources appears to be closely linked to the perceptions that communities have of the quality of the services they offer" (Haddad et al., 1998:382).*

The gap between developing countries (including Libya) and developed countries appears to be related to two important areas. First, power conflicts appear to be an influential factor in shaping new reform strategies, including the shift from traditional evaluation to a more pluralistic approach. Those who run the service may feel their position and social status are threatened.

Second, the literature, at least from developing countries, seems to ignore different perspectives on the quality of healthcare, because much attention has been given to the conceptualisation of quality itself (i.e. structure, process, and outcome). For example, in what is regarded as a working manual for quality assurance in PHC for developing countries, Roemer and Montoya-Aguilar (1988) present a detailed account of Donabedian's triad and its assessment, with virtually no reference to the patient's perspective. A WHO and International Society for Quality in Healthcare (ISQHC) document on strategies for sponsored quality in healthcare improvements in middle- and low-income countries (WHO and ISQHC, 2000) lacks any reference to patients'

perceptions of quality, while much emphasis is given to the technicalities (monitoring, accreditation, etc.) and methodologies of quality.

Although Donabedian's triad of structure, process, and outcome remains predominant in healthcare services research (Egdahl and Gertman, 1976; Øvretveit, 1998; Campbell et al., 2000; Calnan and Ferlie, 2003), his conceptualisation is more than thirty years old, and there have been major advances in the literature since then. His triad is frequently criticised for its linear relation between structure, process and outcome, and its failure to capture the dynamics of the relationship between major interest groups, systems, interventions, and outcomes (Huycke and All, 2000). Focusing on Donabedian's model in this manner revealed the predominance of the "absolutist"[5] definition of the quality of healthcare services (Haddad et al., 1998; Haddad et al., 2000).

The UK and many other developed countries introduced QA programmes during the 1980s for various reasons, but the drive for change was mainly influenced by British health services researchers and policy analysts (Donaldson, 2000). These groups have continued to produce suggestions inspired by Donabedian's original model in order to accommodate the dynamics of the delivery of health services. Patients' perceptions of quality are high on the healthcare agenda and the important issue now is not whether a patient is happy about quality, but what quality means to the patient (Coulter et al., 2002b).

Huycke and All (2000) indicate that models based on Donabedian's work, such as the Quality Healthcare Outcome Model developed by the American Academy of Nursing Experts' Panel on Quality Healthcare, place more focus on the pluralistic approach towards evaluating quality. More importantly, the impact of scientific research in developing countries (including Libya) on healthcare policies has not been fully examined. One explanation provided by Atkinson and Haran (2005:502) is that studies on PS derived from developing countries either lack explicit focus on PHC or "tend to be descriptive, with only limited, ad hoc exploration of what influences variation in user satisfaction."

It thus appears that there is a general trend in quality research in developing countries to place more emphasis on patients' perceptions and satisfaction research. As discussed above, the changing culture of health services around the world makes such a shift inevitable. In this regard, Atkinson and Haran (2005:502) comment: "In order to improve healthcare provision, managers need to be able to differentiate between factors they have control over, and those that are part of a wider social and political context."

[5] Donabedian (1980) suggested three different definitions of quality in health services: individualised, absolutist, and social. In the absolutist definition, health professionals, as experts in the field, have the prerogative to contribute to the definitions of health and quality of health: "Management is expected to achieve the best balance of health benefits and risks." Therefore, the professionals' task is to recommend and set out standards for quality.

3.12. Implications of the Literature Review, and its Relevance to the Libyan Context

The overall picture that can be deduced from the review of the literature provided in this thesis is that quality and its measurement have become important issues in many HSs. There is much anticipation about the important role that these factors can play in promoting and co-ordinating efficient, effective and affordable health services. Since quality plays a central role, improving it is a necessity rather than an optional extra.

The concept of quality of care originated from manufacturing quality, but it dramatically differs in its intangibility and, above all, its multidimensionality: different people define, evaluate and prioritise it differently. Recent developments in this field suggest that a pluralistic approach to quality of healthcare would be the most appropriate strategy to put all diverse views into one context. Advocates of the importance of assessing patients' perceptions of quality support their position with a number of research findings, for example that satisfied patient is more likely to complies with treatment plans. Furthermore, assessing patients' perceptions is important not only for the purpose of understanding their expectations, but also because their perceptions are an essential and even exclusive source of information about the accessibility or effectiveness of care (Haddad et al., 2000).

In Libya, the study of patients' perceptions of quality has so far been a neglected area, and little or no research has been carried out. The very few studies that have been carried out have focused on the quality of healthcare or PS. Moreover, these kinds of studies have been criticised either for their lack of generalisability, or for employing standardised methodologies developed in other countries, which in most cases provide superficially high levels of PS and neglect the aspects of quality that really matter to patients. They also rely too heavily on health professionals' judgements about quality (Haddad et al., 1998; Al-Shahrani, 1999; Shelton, 2000; Baltussen et al., 2002).

The policies on quality in many countries, including Libya, have been dominated by providers because of their powerful positions, and involving the patient in the policy-making process may therefore be viewed as a threat. The pluralistic model of quality is novel to Libya, where approaches to quality have been dominated by providers to the neglect of other people's perceptions, particularly the patient's. Thus, in this study a pluralistic approach is espoused in order to attempt to capture the way patients perceive quality.

The review of the literature has equipped this study with an understanding of the methodological considerations attached to studying patients' perceptions of health services. Moreover, because research on patients' perceptions and quality evaluation has inevitably come from Western literature, the research strategies employed in Western studies have to be adapted to the context of developing countries. Thus, there is a profound need to develop a sensitive tool that is capable of capturing diverse opinions, but which is also sensitive to local needs.

In short, studying patients' and other stakeholders' perspectives on quality is a new theme in Libya and has the potential to greatly benefit large sectors of the Libyan HS, including patients, managers, professionals, experts and senior policy-makers. Given the paucity of prior studies, an exploratory research approach is required to fill the present gap in the literature and pave the way for further research.

3.13. Summary

Part one: Quality improvement is based on individual and organisational changes in attitude and awareness. It is about both system and culture. Quality in healthcare is an important issue that is recognised as a global concern, as all countries must ensure that they provide high-quality healthcare. The notion of quality in health is quite old, but as an administration system started in the 20th century. The meaning of quality in healthcare is flexible in that it has several and different attributes, dimensions and measurements.

This section has reviewed the literature on quality in general and the quality of healthcare in particular. It has described the emergence of the quality concept in the public sectors, particularly in healthcare and the dimensions of quality of healthcare. There is no universal consensus on the definition of quality. Many attempts have been made, and the existing definitions are often vague or contradictory. There is also no particular definition of quality in healthcare, because it depends on what it is, for whom, and for what intention. The definition for the purpose of this study includes several concepts, which recognised by several definitions of quality in healthcare. There is a general agreement that quality is a multi-dimensional concept which includes at least three perspectives: professional quality, management quality, and patient quality. Thus quality is not just a matter for the medical professional, but it is also an organisational matter and a patient concern as well. This section has also discussed the useful approaches of quality dimensions, and has examined an overall picture of quality development, looking specifically at how it benefits healthcare services.

Part two: This section has provided a historical and current account of the development of the role of patients in health services. Recent changes in modern societies, as well as growing concern about economic costs, have forced healthcare organisations to introduce reforms into their HSs. Traditionally, the patient was seen as a passive and dependent partner in healthcare. Nowadays the patient's role within many HSs has changed. Several social and economic factors have contributed towards the shift of power from health professionals to patients.

The previous review of the literature on the role of the patient in healthcare indicates that history repeats itself. Despite the lack of empirical and theoretical studies from developing countries, emerging patterns in the literature suggest that what happened in Europe forty to fifty years ago is now occurring in developing countries. Libya, for example, is still applying the collectivist model of healthcare services, and growing

concerns about the loss of power of the health profession and bureaucratic managerial thinking generate opposition to change, including the move towards the quality era. Those sceptical about the motives of health professionals accuse them of narrowing the focus of quality to issues concentrating purely on its clinical aspects, such as setting guidelines and indicators. This trend, according to Bower (2003), not only reflects the power of the "evidence-based medicine paradigm" but also leads to the conceptualisation of quality as simply a reflection of expert opinion and judgement. Although professional views and inputs into the quality of care are undoubtedly central to quality improvement initiatives, patient power is also growing, and patients are demanding more involvement in health policies.

Treating patients as consumers and focusing on PS as a goal for the health services organisation are extremely important. Evidence shows that satisfied patient is more likely to complies with their treatment procedures and develop long-term relationships with the staff than "shop around for alternatives" (Meakin and Weinman, 2002). Translating this into practice requires many steps, but responding to patients' perceptions is central to this effort. In short, quality is better understood and assessed if patients' perceptions of it are identified and addressed. Evidence has shown that patients are able to report on and evaluate the care they receive (Lewis, 1994; Coulter and Elwyn, 2002; Bower, 2003). In the UK, the NHS has recognised the importance of reviewing its healthcare policies and has introduced several new initiatives (Calnan and Gabe, 2001). However, in Libya there is no evidence of the patients' role in healthcare policy development. Anecdotal evidence suggests patients' perceptions are not addressed in current policy-making in Libya, and research is needed to empirically verify this.

The following chapter presents a profile of Libya from different perspectives, and includes information about the setting where the study took place.

Chapter 4: LIBYA: the country, culture and health system

4.1. Introduction

This chapter provides background information and a profile of the country. Particular attention will be given to the setting where the study was undertaken, as this will affect any quality initiatives in the healthcare services as well as the reform and/or rehabilitation of the country's national HS; it is also hoped that the guidelines eventually proposed by this study will be implemented there. This chapter consists of five main sections: section 4.1 is an introduction; section 4.2 provides a general background of the country; section 4.3 describes some of the socio-economic factors and challenges; section 4.4 describes the health status of the citizens and the general nature of the HS, and also discusses health policy development; and section 4.5 provides a summary of the key findings.

4.2. General background

> *"Libya is a country with unique values and a distinctive heritage. The country possesses key strengths including an enterprising workforce, rich endowment of natural resources, accumulated capital reserves, and an attractive geographical location linking Europe to Africa" (CERA, 2006:v).*

4.2.1. Geography and climate

Libya is an Arab country that lies on the north coast of Africa to the south of the Mediterranean Sea (see Figure 4-1). It is the 17th largest country in the world and Africa's fourth largest country, covering an area of 1,759,540 km^2 (El-Mehdawi, 1998; Al-Mansory, 1995), with a coastline of about 1,900 km along the southern Mediterranean Sea. The country is surrounded by Egypt and Sudan in the east and southeast, Chad and Niger in the south and southwest, and Algeria and Tunisia in the west and northwest. The three historic regions of the country are Tripolitania in the west, Cyrenaica in the east, and Fezzan in the south.

More than 90% of the country is desert or semi-desert, and there are limited natural fresh water resources. No permanent rivers exist, but normally dry riverbeds (wadis) flood during rain and remain so for a few days. Libya's climate ranges from Mediterranean in the northern coastal region, which is temperate with winter rainfall, to semi-arid inland and arid in the desert, with a dry and hot extreme desert interior with little or no rain. A hot, dry wind from the south *(gibli)*, which can rapidly raise the temperature in the north, usually blows for a day or so at a time during spring and autumn (Gebreel, 1982). Aridity is the most striking feature, resulting from the Saharan plateau. This aridity is an obvious constraint to the expansion of economic activities (El-Mehdawi 1998; UPA, 2006). The main cities and centres of population lie along the coast in the north of the country, where the main arable lands are located (GPC, 2005).

Figure 4-1: Map of Libya (https://www.maps.com)

4.2.2. People

The national census is the main source of statistics to determine population characteristics. Two estimated censuses, in 1933 and 1936, were conducted during the time of Italian colonisation. Since the independence of the state, six regular official censuses have been conducted, usually every ten years. The first was in 1954 and the latest was in 2006. Other sources such the World Population Prospects (2012) and the Population Reference Bureau (2012) have suggested that the estimated population in mid-2010 was about 6,041,000, with a growth rate of 0.8% during 2005-2010, as shown in Table 4-1.

Libya has a small population in a large land area. According to the Libyan census (GAI, 2008), the population is 5,657,692 (including 359,540 non-Libyans), of whom 2,934,452 are males (50.73%) and 2,723,240 are females (49.27%), with a sex ratio of 102.9. The population growth rate was 1.6% in 2006, according to the census in that year. Only about one third of the Libyan population (31.06%) is under the age of 15, down from 39.09% in the 1995 census (GAI, 2008). The population distribution in

Libya is very unequal; about 85% of the people live in less than 10% of the area, primarily within a narrow strip along the Mediterranean coast in the far north of the country, with a population density of 3.3 people per km^2. 86% of the population lives in urban areas. More than half the population lives in the two largest cities, Tripoli and Benghazi (GAI, 2008).

Table 4-1: Population Growth in Libya, 1933–2010

Year	Total Population	Growth Rate
1933[1]	655,000	—
1936[1]	733,000	2.3
1954[2]	1,089,000	1.9
1964[2]	1,564,000	3.3
1973[3]	2,249,237	4.3
1984[3]	3,642,576	4.5
1995[3]	4,799,065	2.5
2006[3]	5,657,692	1.6
2010[4-5*]	6,041,000	0.8

Source: ([1]) El-Mehdawi and Clarke, 1982; ([2]) Secretariat of Planning, 1995; ([3]) GAI, 2008; ([4]) Population Reference Bureau, 2012; ([5]) the World Population Prospects, 2012. ([*])Estimated.

The ethnic groups in Libya are primarily a mixture of Arabs and Berbers, which between them form 97% of the population, and small Tebou and Touareg tribal groups in southern Libya which are nomadic or semi-nomadic. Among foreign residents, the largest ethnic groups are citizens of other Arab countries and African countries, with some other ethnic groups including Europeans and Asians.

An examination of Table (4-1) shows that the Libyan population was growing slowly during the period prior to the 1954 census. This can be attributed to high death rates because of the social and economic ruin that befell Libya during the Italian colonisation period, and more particularly owing to the military engagements that took place in Libyan territory during World War II (WWII) and its aftermath. However, figures during the period from 1954 to 1984 indicate that there was a rapid population growth in Libya, with an annual growth rate of approximately 4%. This high growth rate is attributable to improvements in people's health status, an increasing birth rate, and the influx of Libyans immigrants who left the country during the period of Italian colonisation and WWII. The population increase was also due to the influx of foreign expatriates who came in greater numbers after the establishment of the oil industry. Major improvements in social services – especially in public health services, the practice of modern medicine, and immunisation campaigns spread quickly, particularly since the beginning of 1970s. Mortality rates dropped, which

resulted in greater life expectancy, while birth rates remained high; higher per-capita income also added to this growth (El-Kikhiya, 1995; El-Mehdawi 1998). These factors have influenced the population growth rate and the age structure of the population (UN, 2000).

However, the population growth rate has greatly decreased since 1984 (2.5% in 1995 and 1.6% in the 2006 census) (GAI, 2008). According to demographic projections, the population will continue to grow between 1.2% and 2.2% over the next few decades (UN, 2000). Some sources have estimated that the growth rate will reach its lowest level, 0.8%, in the mid-2010s (the Population Reference Bureau, 2012). However, new trends indicate that the population has started a new stage of growth. This is most likely a result of changes in the way people live and work, increased levels of female education and workforce participation (El-Kikhiya, 1995), delayed marriage for women – and consequently for men, as well and the diminished need or desire for families to have many children (Mirkin, 2010).

The PAPCHILD (1997) results showed that the total fertility of Libyan women has decreased: from 8.2 children per woman in 1976-1980, to 4.1 children per woman in 1991-1995. This dramatic decline in the fertility rate mainly occurred during the mid-1980s, though it continues today. As an example of the impact of the socio-economic factors on health and HSs, the researcher himself conducted a study on the determinants of fertility in Libya (El-Fallah, 1999) based on the Bongaarts and Potter (1983) Aggregate Fertility Model. Four variables are statistically significant ($p < 0.001$), explaining 57% of the decline in the fertility rate in Libya. These are: delayed age of marriage, age of the mother, the mother's education, and living in an urban area. The correlation coefficient matrices also showed a strong correlation between the dependent variable (number of children ever born) and eight independent variables. All these variables are statistically significant ($p <0.001$): mother's age, husband's age, age at marriage, mother's education, husband's education, doing paid work before marriage, using contraceptives, and living in an urban area (El-Fallah, 1999). Thus, all of these background variables – both cultural and socio-economic, in addition to political and economic instability, especially during the mid-1980s – worked through the proximate determinants (i.e. behavioural and biological) to reduce fertility. This decline in the fertility rate has influenced improvements in the health status and quality of life of mother and child, as well as contributing to a reduction in morbidity and mortality, and increased life expectancy at birth.

4.2.3. Historical background

There was more or less no unified organisational activity in Libya before the period of independence (Agnaia, 1996). For most of its history, Libya was subjected to different forms of foreign domination: the Phoenicians, Carthaginians, Greeks and Romans ruled all or parts of Libya. There are still Greeks and Romans impressive ruins of these ancient cultures at Cyrene, Apollonia, Leptis Magna, Sabratha, etc. The Arabs conquered the country in the seventh century AD. The Ottomans conquered Libya in

the mid-16th century. Libya remained part of their empire's long occupation (1551-1911), although at times was virtually autonomous, until Italy invaded Libyan territory in 1911 and, in the face of years of resistance, made Libya a colony, leaving the Libyan people to face a harsh colonial destiny. They resisted the invading force for more than twenty years (Department of Foreign Information, 1991; Global EDGE, 2012).

In November 1942 the Allied forces retook Cyrenaica, and by February 1943 they occupied and controlled the ex-Italian colony. The British established the British Military Administration of Libya in Cyrenaica and Tripolitania. The French established the Military Territory of Fezzan-Ghadames Characteristics. On 1st March 1949, Idris as-Senussi, the leader of the Senussi Muslim Sufi order, proclaimed Cyrenaica as an independent emirate called the Emirate of Cyrenaica (Minahan, 2002; Schulze, 2002; Selassie, 1974). On 21st November 1949, the UN General Assembly passed a resolution stating that Libya should become independent before 1st January 1952. On 24th December 1951, Libya declared its independence, with the country being called the United Kingdom of Libya; and Idris al-Senussi, the Emir of Cyrenaica, was offered the crown. In accordance with the constitution, the new country had a national federal government, with the three states of Cyrenaica, Tripolitania and Fezzan having autonomy. The kingdom also had two capital cities, Tripoli and Benghazi (Global EDGE, 2012).

On 1st September 1969, al-Gaddafi became the *de facto* leader of the country after leading a group of military officers against King Idris al-Senussi in a bloodless coup. The revolutionary command council, headed by al-Gaddafi, abolished the monarchy and the old constitution and proclaimed the new Libyan Republic (Global EDGE, 2012). He established a socialist dictatorship and gradually elaborated a new theory of the state (the *Jamahiriya*), proclaimed in 1977, in which all productive units and workplaces were to be directly governed by popular congresses.

In February 2011, nation-wide political violence erupted following the government's brutal suppression of popular protests against the al-Gaddafi regime. Opposition forces quickly seized control of Benghazi city, as well as almost all of eastern Libya (Cyrenaica) and some areas in the west, and formed the National Transitional Council (NTC). On the 17th March, Security Council resolution 1973 was passed adopting a "no-fly zone" over Libya and allowing for military intervention, with the aim to protect civilians, after a number of atrocities were committed by the government. A multinational coalition forces intervened on 19th March against attacks by the government's forces over Benghazi. Al-Gaddafi was ousted from power in the wake of the fall of Tripoli on 20th August. The fall of the last remaining cities, capture and killing al-Gaddafi in Sirte on 20th October 2011, marked the end of his regime.

On 23th October 2011, the NTC declared Libya liberated, and formed a transitional government. On 7th July 2012, the Supreme Election Commission organised the first-ever parliamentary election since al-Gaddafi's dictatorship, and Libyans elected 200

representatives to the General National Conference (GNC) – the parliament (Global EDGE, 2012). A few weeks later, the GNC was given the task of forming an interim government. It will also elect a constitutional assembly to draft a new constitution, which will be submitted to a referendum (WB, 2013).

In summary, many factors are likely to have influenced the population growth, trends in health, morbidity and mortality in Libya over the past years, including the environmental, social and economic ruin that befell Libya during the Italian colonisation period, the military engagements during WWII, and the aftermath of political instability (which will discussed further in the next section). For instance, upon its independence in 1951, Libya inherited an infrastructure destroyed by years of warfare, a countryside covered in mines, a suffering economy, a population that was more than 90% illiterate, and a HS with 400 per 1000 IMRs (Bassiouni, 2013). In addition, a Libyan born in 1960 could expect to live until the age of 47 years (UNICEF, 1997). Other factors will be discussed in the next section.

4.3. Socio-economic development and reforms

"Over the last few years, Libya has made a deliberate choice to develop its prosperity by reintegrating with the international community, while preserving its unique identity. This choice requires deep reflection and the analysis of national priorities so that Libya can leverage its opportunities to generate and spread prosperity among all Libyans" (CERA, 2006:v). Libya faces a number of political, economic, social, cultural, and global challenges. Thus, it is important to realise and understand how these challenges affect the HS and the country as a whole. These require the senior management of organisations, including those in the healthcare sector, to overcome the current situation to create a more effective and focused environment for change.

4.3.1. Education

Education was given no priority at all under the periods of occupation. At the time of independence in 1951, Libya was one of the poorest countries in the world, with few known natural resources and a population that was small, poor and illiterate. Since 1963, oil revenue has allowed the rapid development of education. Thus, education is relatively new, valued, and seen as opening doors to new opportunities and securing employment. Girls and women 60 years ago or so did not have equal opportunities, and this influenced education (Alhmali, 2007).

Education in Libya is free for all citizens and compulsory for all children from the ages of six to eighteen. It developed rapidly especially during1970s and 1980s (Yousif et al., 1996). In this period, the size of the school population doubled; the number of female students increased by 130%, compared with 80% for male. Compulsory education for the primary and middle school stages only started in 1975 and was later extended through secondary education (ages 18-19 typically). This was fully supported and funded at all levels by the government, which took responsibility for the curriculum as well as teacher provision and training (Khalifa, 2002).

The Libyan government encourages high-performing students to continue their studies abroad to extend their knowledge and to learn from developed countries such as the UK and USA (Clark, 2004). Libya's public expenditure on education is approximately 4% of gross domestic product (GDP), which is around the average for MENA countries. Reported adult literacy and educational enrolment rates are among the highest in the region, at 88.5% (males 93.7%, females 83.1%), with youth literacy reaching 100%, which is well above that in neighbouring countries. Unusually for the MENA region, female in the student population tend to have more schooling than their male peers, and the female literacy rate is considerably better than that of many MENA peers (MBendi, 2006; HIC, 2010).

Libya is a developing country and, in educational terms, has changed quite dramatically in the past 60 years or so. Attitudes to education and attitudes arising from school education will be typical of such a situation and will not reflect the kinds of patterns often seen in the developed world. Clearly there are problems with the quality of education. The need to build so many different educational institutions to educate a large numbers of students in a relatively short time brings its own problems (Alhmali, 2007). Despite much progress over the past four decades and good basic outcomes, the education system does not yet fulfil its goals, including providing the training and skills that are needed to develop the economy ahead. Poor-quality inputs and several serious structural challenges that adversely affecting the overall quality of the education system (Youssef, 2006) and its global competitiveness ranking (World Economic Forum, 2010). Education facilities and teaching methods are not benchmarked against any international standards or against the systems of other countries. Moreover, the linkages between research institutions and businesses that are commonly seen in developed world do not exist (UNESCO, 2005).

> *"Despite the lack of accurate information, it is clear that education in Libya has quality issues. These stem from two sources: problems with the quality of inputs, such as curricula, teachers and the educational infrastructure; and a number of structural issues. These include the lack of reliable and objective standards, no central body to provide overall planning and monitoring, inefficient allocation of public resources, and a lack of resources in specific areas" (CERA, 2006, 119-120).*

4.3.2. Economy

The main natural resources in Libya are crude oil and gas fields. Before the discovery of oil the Libyan economy was weak, but since that time Libya has made considerable progress in developing from a poor country into one whose physical and human infrastructures compare favourably with those of its neighbours (Jentleson and Whytock, 2006). The Libyan economy in the past four decades has been socialist-oriented and depends primarily upon revenues from oil, the backbone of the Libyan economy, alongside other petroleum resources such as natural gas. In 2010 the oil sector contributed about 56% of GDP, 97% of the country's exports of goods, and

80% of government revenue (GPC, 2010). These oil revenues and a small population give Libya one of the highest per-capita GDPs in Africa (9,529 US$ [World Economic Forum, 2010]), however, little of this income flows down to the society. Other sectors contribute only 40% of Libya's GDP, while employing 97% of formal HR. Public services, including education and healthcare, contribute only 9% to Libya's GDP, but employ 51% of formal HR (UNDP, 2005).

26.4% of females participate in economic activities; the unemployment rate in 2010 was 20.7% (21.6% male and 18.7% female) (GPC, 2010). The climatic conditions and poor soils severely limit agricultural products, and Libya imports around 75% of its food needs. The increase in oil prices over the past decades have led to an increase in export revenues and enhanced macro-economic balances but have done little to stimulate broad-based economic growth. In recent years measures have been taken to return parts of the economy such as retail to private ownership, in the form of partnerships and joint ownership. Libya is making only slow progress toward economic liberalisation and the modernising of economic infrastructure (WB, 2005).

The Libyan experience of the past four decades indicates the magnitude of investments implemented in the various sectors, which are making good progress in providing the infrastructure for the economy. However, during the last two decades a number of problems in areas such as unemployment, healthcare, housing and education have developed, which are usually related to the nature of economic performance under the control of the public sector (WB, 2005).

4.3.2.1. Government's role in the local economy

Libya has been described as a 'distributive' state in which its institutions have appeared not to extract wealth (through tax-gathering mechanisms) but to spend it (WB, 2009). Indeed, the primary activity of the Libyan authorities is to distribute budgets. A focus on distribution rather than wealth creation typically leads to policies that produce inefficiencies and subsidies that create market distortions (Youssef, 2006).

4.3.2.2. The private sector

The Libyan economy is dominated by state-owned enterprises (SOEs) which are often inefficiently run, inequitable and non-transparent in granting contracts. SOE managers are not encouraged to maximise efficiency, and government salaries are low and are not linked to performance. The private sector, including the LPHS, is stifled by excessive bureaucracy and an uncertain policy environment, and finds it difficult to access appropriately priced capital or basic banking services. This means that many genuine businesses remain unfunded and innovation is depressed. Such small businesses lacking scale and efficiencies, evasion exaggerated taxes and have low standards of quality, all of which hinder productivity (Youssef, 2006).

4.3.2.3. Misuse of economic resources

The state's role in the Libyan economy has unfortunately been synonymous with bureaucratic regulation, unproductive subsidies, and state ownership of important economic assets. The results have been an adverse development of social and economic changes, with most of the pressures and constraints because of poor management of the economy by unknowledgeable and uncommitted leadership. On occasion legislations have been changed overnight, and often do not seem clear or credible to prospective investors, or even to the local investors (Youssef, 2006; Hassin, 2009). The main weakness is the heavily reliance on oil and gas (75% of government revenues and 95% of export revenues) (National Oil Corporation, 2005). While 60% of government expenditure goes to pay the salaries of somewhat non-productive government HR, these salaries are very low for a state with such massive oil and gas reserves (GPC, 2005). Another weakness is poor management efficiency in some enterprises and the lack of highly trained and specialised HR. The main problem for Libya is that while it has the resources, senior management does not have the know-how or skills to manage them; bureaucracy and the abundance of laws constrain entrepreneurship (Youssef, 2006; Hassin, 2009). As highlighted by World Report (2004), the need for economic reform in Libya's public sector is both essential and timely.

4.3.2.4. US/UN sanctions

The American sanctions against Libya that began in the late 1980s inhibited the development of oil and gas reserves and limited production over the years. Access to oil field technologies and services was seriously limited because of sanctions and embargoes, particularly obvious in the absence of US companies in Libyan upstream markets (Youssef, 2006). The UN then imposed sanctions (1992-1999) on the country that resulted in the temporary freezing of assets abroad. These sanctions had unfortunate consequences on Libyans' lives in general; on development, educational and business projects in particular; and led to the country's isolation from the latest innovations in knowledge and technology. These sanctions were suspended in 1999, followed in by the lifting of UN sanctions in 2003 and US sanctions in 2004 (Youssef, 2006; Hassin, 2009). Libya estimates that the sanctions deprived its economy of $33 billion, while the World Bank has estimated the figure to be $18 billion, mostly as a result of under-investment in oil (Economist, 1999).

4.3.3. The political system

"Every nation tolerates a certain amount of corruption, [and] the level of this abuse varies wildly across the globe. In general, the least corrupt nations are almost always the most developed as well" (Vittal, 2001:20). In the developing world's experience, especially eastern Europe, Africa and South America, the political system plays a major role in any country's development or lack thereof (Sheridan, 1997). A sense of

vision supported by political commitment is necessary to set up the autonomy of the state and to invest it with the ability to guide the development agenda.

In Colonel Mu'ammar al-Gaddafi's era (1969-2011), political parties were banned. According to al-Gaddafi political theory, Libya's political structure relied on the concept of *Jamahiriya* (state of the masses) adopted in 1977. This were guided by political cadres (revolutionary committees), these revolutionary committees were unofficial organisations whose members tended to be devoted to al-Gaddafi and his teachings. They were first instituted in 1977 to fight bureaucracy, encourage democracy and protect the rights of the ordinary civilians. Instead they steadily grew more powerful, and their mistake was forcing the state and imposing their personal desires on the public, eliminating people who did not agree with them (Youssef, 2006).

The political climate of Libya at the end of the 1970s and in the 1980s placed numerous obstacles in the way of private sector development. The economic changes in 1978 requiring all enterprises to be run by workers' committees (communist system) made effective management almost impossible. A lack of political management often results from the fact that leading political actors lose their ability to learn and develop their managerial capability. Instead of solving their accumulated management problems they cover them up (Youssef, 2006), a situation which leads to a number of problems (Sayeh et al., 2005; Shembesh and Tulti, 2005; Youssef, 2006):

- Although the government may be develop a vision, there is unlikely to be a robust plan with adequate financial allocations to implement this. Good practices will rely on individual initiatives and there is unlikely to be committed political or managerial leadership.
- There is insufficient attention to guarantee that the right people with the appropriate skills are in positions to provide high-quality services.
- Public institutions are inefficient, often failing to deliver the services for which they were established for. Healthcare, education, civil service and public facilities organisations do not appear to provide the goods for which they are paid by the government. In the course of time they have become consider themselves as rulers and regulators instead of service providers who should be accountable to their clients.
- Governmental institutions are ineffective and inefficient when it comes to addressing new challenges thrust upon the society by changing environment new technology, new social climate and new expectations.
- In many cases, it is difficult to identify who is responsible for which decision. Whose fault is it? When responsibilities are spread it is hard to find out how members and officers could be correctly held to accountability.
- There is a lack of performance management: all government institutions are poorly managed and there are no national performance indicators in government institutions.

4.3.4. Libyan culture

The main religion in Libya is Islam. The Libyan people are predominantly Muslim, and most (97%) adhere to the Sunni branch of Islam. The official language is Arabic and the Libyan people are native Arabic-speakers. However, the English language is used extensively and is the teaching language in a number of university schools (e.g. linguistics, medical, dental). Other languages spoken include Italian and French, which are widely used in the major cities (Ajaj, 2012).

Morgan (1997) described culture as having shared meaning, shared understanding and shared sense-making. He argued that culture must be understood as an active, living phenomenon through which people create and recreate their worlds. In every Muslim country Islamic rules mean that Shariah Law operates as the dominant influence on the behaviour of individuals and groups, beliefs, social values and attitudes, state law, and economic policies. Culture and traditions are what differentiate a particular country from another (Ajaj, 2012). The influence of religion on most aspects of Libyan life is obvious, as the people practise their faith through their everyday actions. The Libyan culture is dominantly Arabic, sharing the same principles and values as other MENA countries (e.g. Tunisia, Egypt, Jordan, UAE, etc.) (Ajaj, 2012). With a common language and religion, Libya appears socially homogenous (Alhmali, 2007).

Like other developing country, Libyan organisations are often led by unqualified and/or incompetent managers whose main concern is to maintain in their positions at any price, which means the management culture is not favourable to serving the people's needs but to serving the political and managerial leadership at the top of the organisation and seeking their support or protection when needed. What distinguishes this self-serving management culture is its elitist mentality; it has separated itself from the culture of the people, thus, it is so often seen by the people as a corrupt entity that does not meet the expectations of its society (Youssef, 2006).

Quality initiatives (e.g. TQM) consist of values, tools and techniques, as defined by Hellsten and Klefsjö (2000). The values represent the culture of individuals and society, which is not easy to change, while the tools and techniques can be easily implemented with strong commitment and available resources. All the values recommended for the quality initiatives culture, such as trust, honesty, justice, integrity, equality, synergy and teamwork, are strongly emphasised in daily Muslim practices. This makes it easy for the senior management in any organisation in Islamic societies to encourage employees to practise such values in their daily activities, in order to improve the working environment as an important factor of the implementation of quality initiatives (Youssef, 2006). Unfortunately, most Muslims practise the worship part only, as tradition and heritage, and ignore the social and economic system which could solve their problems and help them to set a good example to others in practising an activity in their daily lives. These assumptions found support by Branine and Pollard (2010:712), whose study "reveals that a gap

exists between the theory of Islamic management and the practice of management in Arab countries. Management in Arab countries is informed and heavily influenced by non-Islamic traditional and national cultural values and norms of different countries and by Western management thinking rather than Islamic principles derived from the Holy *Quran* (words of God) and the *Hadith* (words of the Prophet Mohamed)".

In summary, the discovery of oil completely transformed the socio-economic status of the country, which led to modernisation and urban transformation. Between 1950 and 2000, rates of urbanisation in Libya have been higher than in other North African countries (from 20% to 88%), leading to the improvement of lifestyles and income levels (Elbendak, 2008). Most of the changes are reflected in the provision of services. Education and health services are provided free in the public sector, which has led to improvements in the health status of the Libyan people. However, conflict, political instability, sanctions and international isolation have had negative repercussions on the country's socio-economic status, infrastructure, and institutional capacity, including that of the HS.

4.4. Libyan health profile

This section describes the HS within the context of socio-economic development as discussed earlier. It is intended to provide a basis for understanding the Libyan HS within the context of the MENA countries. This section is divided into four subsections: health status and healthcare, health system development, emergencies and environmental factors, and other determinants of health.

4.4.1. Health status and healthcare

4.4.1.1. Health status indicators

Libya has made significant progress towards achieving the targets of the MDGs[1] regarding health status. Some MDG key indicators are shown in Table 4-2, while other health status indicators are shown in Table 4-3.

Table 4-2: Trends in Key Health Indicators, 1990-2010

Indicator	1990	1995	2000	2007	2010
Infant mortality rate (per 1000 live births)	27.0	24.4	21.0	16.7	11
Under five-mortality rate (per 1000 live births)	43.0	30.1	27.0	20.1	18
Maternal mortality ratio (per 100,000 live births)	77	77	40	27	23

Source: PAPCHILD (1997), PAPFAM (2008) and HIC (2010).

[1] UN, United Nations Millennium Development Goals website: http://www.un.org/millenniumgoals/bkgd.shtml (Accessed: 29 October 2013).

4.4.1.2. Communicable diseases (CD)

The Libyan population distributed among wide geographical area and influx of a large number of immigrants hinder existing services and are potential risks for the spread of CDs. The National Centre for Disease Control (NCDC) is responsible for the control and prevention of both communicable (CD) and non-communicable diseases (NCD). The NCDC has a number of national scientific committees that direct various preventive and control programmes in their respective areas of specialty (e.g. tuberculosis [TB][1], HIV, malaria).

Table 4-3: Health status indicators

Health indicators	Value	Year
Population with access to safe drinking water (%)	97.6	2010
Population with adequate excreta disposal facilities (%)	99	2010
Neonatal mortality rate (per 1000 live births)	10.8	2007
Newborns with birth weight at least 2.5 kg (%)	95	2010
Children with acceptable weight for age (%)	95	2010
Number of reported new cases of:		
Malaria	26	2010
Cholera	0	2010
Poliomyelitis	0	2010
Pulmonary tuberculosis	792	2010
Measles	62	2010
Diphtheria	0	2010
Tetanus	2	2010
Neonatal tetanus	0	2010
AIDS	321	2010
Hepatitis B	2437	2010
Hepatitis C	1437	2010
Meningococcal meningitis	14	2010

Source: PAPFAM (2008), NCDC report (2008) and HIC (2010).

4.4.1.2.1. Expanded programme of immunisation

The NCDC is responsible for immunisation, and network of 36 programmes implementing the Expanded Programme on Immunisation (EPI) at District Health Authorities (DHAs) level. The EPI has been successful in achieving a high rate (see

[1] Tubercle bacillus.

Table 5-4) of routine immunisation coverage (e.g. for DPT3, OPV3, HBV3, etc.). There is good awareness of the need for vaccination among the population at large. Polio[1] has been eradicated, and a surveillance programme for polio as well other CDs is in place (HIC, 2010). The success and achievements of the EPI in Libya have been recognised by the Arab League and in WHO regional meetings (WHO, 2010a).

4.4.1.2.2. HIV/AIDS prevention and control

There are potential public health risks posed by AIDS. Based on national surveys from 2004, the prevalence rate of AIDS is 0.13% of the population. There were 10,475 recorded cases of HIV/AIDS in 2010 (nationals and foreigners) (HIC, 2010). National guidelines have been formulated for the management of people living with HIV/AIDS (NCDC, 2007; HIC, 2008; WHO, 2010a).

4.4.1.2.3. Tuberculosis

Although Libya has a low incidence rate of tuberculosis, 60% of the cases occur between the ages of 15-56 years. The national tuberculosis programme started implementing the DOTS[2] treatment strategy in 1998, and achieved the regional targets of nationwide coverage of the strategy in 2000. The DOTS treatment success rate was 63.5% in 2007 (NCDC, 2007; WHO, 2010a).

4.4.1.3. Non-communicable diseases (NCDs)

The prevalence and incidence of NCDs have increased significantly during the past three decades. High incidences of cardiovascular diseases, diabetes, hypertension and cancer contribute significantly to morbidity and mortality and have put a significant pressure on healthcare services expenditure. The main causes of death are cardiovascular diseases (37%), cancer (13%), road traffic accidents (RTAs) (11%) and diabetes (5%) (WHO, 2010a).

4.4.1.3.1. Disability

According to official statistics, there are approximately 70,000 disabled people in Libya (HIC, 2010), though some sources estimate the number to be 160,000 to 200,000 before 2011 (EU, 2011). This includes those injured by RTAs and land mines.

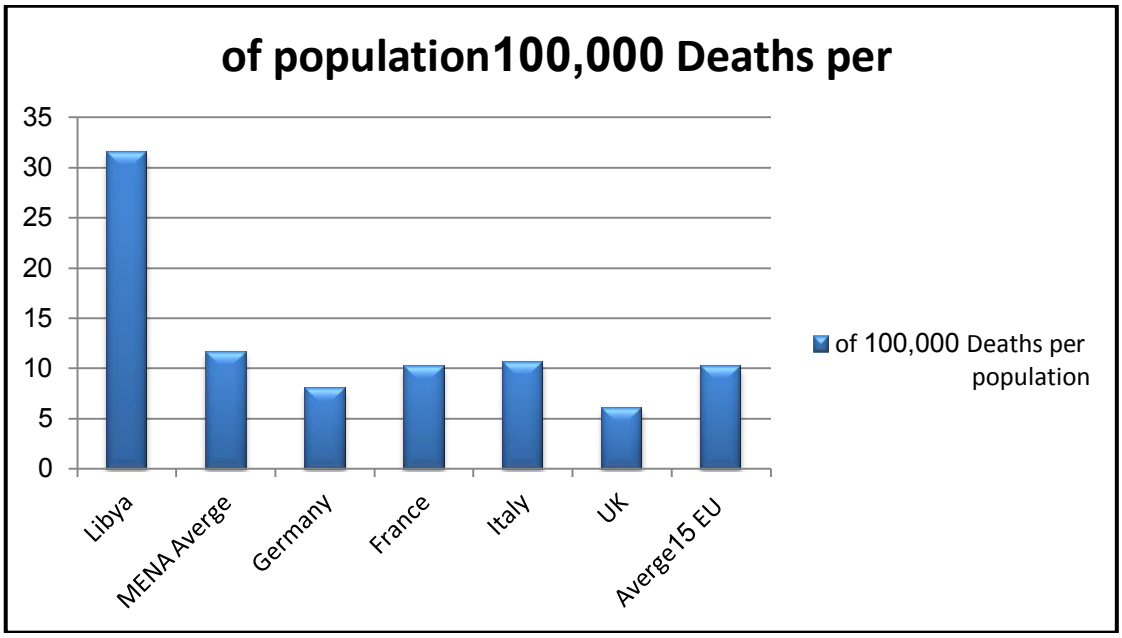
4.4.1.3.2. Road traffic accidents (RTAs)

High mortality and disability due to RTAs, which result in 6 deaths per day and even higher figures for disability (for every case of death, there are three cases of serious injuries), account for a significant burden of disease (HIC, 2010). RTAs account for 11% of all hospital deaths, and the third highest cause of hospital morbidity.

[1] Poliomyelitis.
[2] Directly observed treatment, short-course

Furthermore, RTAs have increased dramatically; the highest rate of RTAs is in the youth age group of 18 to 35. In 2009 there were 2,138 deaths (40.8 deaths per 100,000) on roads in Libya (WHO 2009a; Yahia and Ismail, 2013). In comparison, Libya's road-death rate is more than 3 times that of the European union and almost 3 times the MENA regional average (see Figure 4-2) (WHO, 2007b).

Figure 4-2: Road Fatalities – International Comparison



Source: Inspector General of Health (IGH) report, 2004; European Health for All Database; Global Road Safety Program, quoted on www.trafficegypt.com Note: Libya data is for 2004; Germany, France & Italy is for 2003; UK and EU is for 2002; and MENA is for 2000

4.4.1.3.3. Lifestyle-related health problems

The prevalence of risk factors for NCDs has increased, because of changing lifestyles such as lack of physical activity, unhealthy diet, smoking and the use of illicit substances, especially among the young. For instance, over 30% of the adult male smokes regularly (WHO, 2010a). The results of the Global School Health Survey in 2007 found that 15% of students (aged 13-15 years) used some form of tobacco product. Obesity is also emerging as a significant health problem. In addition, the survey highlighted inadequate programmes of health education in schools (HIC, 2007).

4.4.1.4. The health of women, children, adolescents and the elderly

4.4.1.4.1. Women's and children's health

The health indicators and levels of socio-economic factors including literacy among women are very good, however, women's, infants' and children's health still need strengthening, improving and further refining as an integrated part of PHC. Reproductive health in general has not been assessed, in consideration of the country's epidemiological profile. For instance, consanguineous marriage is common

in Libya, as in many other countries of the MENA region; in this regard health screening is needed for genetic and hereditary factors, which influence health and confidential counselling and testing before marriage should be enhanced. There is also a need for special programmes to address the health impacts of genetic and hereditary disorders (WHO, 2010a).

4.4.1.4.2. Adolescent health

Libya has a youthful population, and therefore adolescents are subjected to a variety of factors that affect their health. There are a number of concerns and health risks such as smoking among school students (HIC, 2007), the potential risk of HIV/AIDS, and the illicit drugs use, which require vigilance by health and other authorities (NCDC, 2008). There is a need for a well-developed and intersectoral adolescent health programme which is co-ordinated and integrated into the PHC system (WHO, 2010a).

4.4.1.4.3. Health of the elderly

Elderly people (over 65) form about 4.3% of the Libyan population (GAI, 2008), and life expectancy at birth was 72.3 years (males 70.2 and females 74.9) in 2009 (HIC, 2010). A health programme for the elderly is therefore needed within the PHC, in addition to family and community care.

4.4.1.5. Occupational health

Despite the occupational health has been specified as an important health priority in the National Strategy (GPC, 1994), there is no point of contact or coordination in the MOH. However, the Ministry of Labour (MOL) has an active occupational safety programmes. There are also academic courses in medical and public health faculties on industrial hygiene and occupational health, though there is no collaboration between the MOL, medical and public health schools and the MOH in this regard (WHO, 2010a).

4.4.2. Health system development

The present-day modern HS started functioning after the country's independence in 1951, with scarce resources. The process of socio-economic development planning in the country started in 1963 (MOPD, 1963). The health law no. 106 of 1973 guaranteed the right of all citizens to free of charge healthcare. The main focus of the HS was on individual patient healthcare until 1969, on community health facilities in the 1970s, and has been on health for all since 1980 (Abudejaja and Singh, 2000).

4.4.2.1. Organisation of the health system

Libya has a mixed system of public and private healthcare services. The MOH is responsible for financing, resource allocation, planning, regulation, evaluation and monitoring. It also inspecting and supervising the national organisations including

general and specialised hospitals, research and training institutions and the DHAs. All DHAs provide comprehensive healthcare including promotional, preventive, curative and rehabilitative services through PHC facilities and rural hospitals. In addition to DHAs, the army and the national oil companies provide healthcare services to their employees. The social security (welfare) sector provides various ranges of services as well, including healthcare and rehabilitation services to people with special needs, and people with disabilities. A growing LPHS is also emerging, although currently it has a limited role.

4.4.2.1.1. Key organisational changes in the public system

In 2000, the central body of the MOH was dismantled, in order to allow the decentralisation of DHAs. In 2003, the Inspector General of Health (IGH) was appointed at the national level to supervise the DHAs with no executive authority. Since March 2006, the administrative system of the country has moved towards centralisation and synchronisation at deferent levels. The MOH has been re-established and divided into 23 districts, each of which has a functional authority that is responsible for health services within that district.

4.4.2.1.2. The main responsibilities of the MOH

- Proposing national health policies and plans;
- Supervising and inspecting DHAs;
- Developing standards and regulations for both LNHS and LPHS providers;
- Supervising national health organisations including general and specialised hospitals;
- Co-ordination with deferent sectors.

However, the MOH's capacity to practicing the HSG functions at the national level needs upgrading. As well as, the abilities of DHAs needs to be developed. The quality of the HS is questionable in many areas, and consequently there is an urgent need for research in such areas as HS policy and planning, the capacities of institutions and individuals to carry out health programmes, and health management and leadership development. Health legislation and frameworks should also be reviewed and upgraded to facilitate joint work by health-related sectors and institutions (WHO, 2007b; WHO, 2010a).

4.4.2.2. National health system policies, strategy and planning

Socio-economic development in Libya was rapid between the 1960s-1980s. Therefore, the process of policy-making, planning and strategies directed towards the development of the human potential of people, with focus on health and education, has been carried out to cope with this rapid development, and a major transformation in these two sectors has been carried out (MOH, 1989).

4.4.2.2.1. National health policy and stated priorities

At the central level the MOH co-ordinating, supervising and evaluating the implementation of national health programmes and healthcare services and community health activities. The MOH is responsible for initiating, co-ordinating and consolidating of the national health policies and strategies, programmes and activities, as well as their assessment processes (Abudejaja and Singh, 2000).

The national health policies declared by the MOH provide a framework for the health strategies. In accordance with these, the health programmes are designed and implemented to provide comprehensive healthcare services to all citizens, according to public health law no. 106 of 1973. Other articles of the law stipulate for the supervision of public health, preventative health and other related issues. The national health policy is directed towards achieving a comprehensive and uniform distribution of healthcare services among the population (Abudejaja and Singh, 2000). The three-year plan (1973-75) and five-year plan (1976-1980) for economic and social development stressed that access to healthcare services was the right of every citizen, according to public health law (MOP, 1972; MOP, 1979).

4.4.2.2.2. The National health strategies

The national health strategy is an essential part of the overall socio-economic development policies. It was developed in the medium-term plan of 1981-85, which suggested the extension of healthcare services to all, upgrading and maintaining quality, giving priority to the integration of healthcare services, and achieving the nationalisation (Libyanisation[1]) of HRH (MOP, 1984; MOH, 1990; Abudejaja and Singh, 2000).

The target of the 1989 health strategy was "Health for All and By All" (MOH, 1989). In 1994, the health strategy was designated as "The National Strategy Providing Health for All and By All" (GPC, 1994). The strategy based on PHC within the goal of "Health for All by the Year 2000". Based on this strategy, the MOH is the main provider of PHC services in Libya. Other healthcare facilities including private providers are some of the channels through which healthcare services are provided (GPC, 1994; PAPCHILD, 1997).

Resolution no. 24 in 1994 was developed to restructure PHC within the redesigned national health strategy, which emphasised on the eight universal elements of PHC and the inclusion of another four national elements: occupational health, school health, mental health and social care and healthcare of the elderly. Furthermore, the resolution promised to incorporate health development with overall socio-economic development and to streamline the entry to healthcare through family practice (GPC, 1994; Abudejaja and Singh, 2000; WHO, 2007b).

[1] In common with many MENA countries, Libya has instituted an indigenisation or 'localisation programme' to replace expatriate HR with local nationals, especially in the 1970s and 1980s.

The Libyan HS is based on PHC; its aim is to achieve a level of health for all the people of the country, which will allow them to lead socially and economically productive lives. The national health strategy aims to achieve a high-quality and uniform distribution of healthcare services among the people. According to the MOH, basic healthcare services have been given a high priority by the creation of the department of PHC at the national level as well as at the DHAs level (PAPCHILD, 1997; Abudejaja and Singh, 2000; WHO, 2007b).

- **Basis of the Strategy** (PAPCHILD, 1997:4):

1. "Comprehensive [PHC] is guaranteed for all the people [in Libya].
2. Health resources are equally distributed and utilised.
3. Health development is an investment and part of the whole process of socio-economic development.
4. The [MOH] co-operates with the other related sectors in the effort to promote health.
5. The use of appropriate technology.
6. Community participation and involvement in providing health services.
7. Establishing links between people and PHC units using a family-based registration system and a referral system to provide preventive, curative and rehabilitative health services".

- **Objectives of the National Health strategy** (PAPCHILD, 1997:5-6):

1. "Strengthening [the] health administration by training the managerial staff, and improving the health information and documentation systems.
2. [Developing] the national [HRH], through programmes of continuous education, with the aim of nationalising all the workers in the health sector.
3. Fostering the concepts of [PHC] in medical schools, and involving local doctors from all specialties in the delivery of PHC services.
4. Maintaining the existing health facilities and improving the quality of care they provide by improving their diagnostic and therapeutic capabilities. The services and distribution of these facilities should be continuously re-evaluated.
5. Improving the methods of [procuring] medical supplies and updating its regulations, promoting [the] rational use of drugs, and promoting the local pharmaceutical industry.
6. Advocating co-operation with international, regional and Arab organisations to make maximum use of their capabilities in the implementation and evaluation of this strategy.
7. Increasing financial resources by creating new sources of funding, and promoting [the] rational use of the available resources by using quality control manuals for the different health activities and by introducing measures of auditing and continuous evaluation".

4.4.2.3. Health service

The Libyan government is the principle provider of healthcare services, which are free at the point of delivery to all citizens across the country through a chain of LNHS facilities. The MOH provides healthcare services and regulates the LPHS. The PHC services provided through PHC CD and NCD centres, units, and centres. More comprehensive healthcare services are provided through polyclinics (see Table 5-4). At the secondary level in the general and rural hospitals healthcare services are provided to those referred from the PHC. At the tertiary level, the specialised and teaching hospitals provide advanced healthcare services to those referred from the secondary level. However, the referral system needs development, as many PHC facilities operate on an open access basis. Table 4-4 shows some PHC indicators (GPC, 1994; PAPCHILD, 1997; HIC, 2010; WHO, 2010a).

Table 4-4: Indicators of PHC **Coverage, 2010**

Health indicator	Value
Population with access to local health services (urban and rural) (%)	100
Pregnant women attended by trained personnel (%)	93.1
Deliveries attended by trained personnel (%)	99.9
Infants attended by trained personnel (%)	99
Infants immunised against tuberculosis (%)	100
Infants fully immunised against DPT (%)	98.6
Infants fully immunised against poliomyelitis (%)	97.7
Infants immunised against measles (%)	96.6
Infants immunised against hepatitis B (%)	97.7
Pregnant women immunised against tetanus toxoid (%)	28.1

Source: HIC, 2010.

4.4.2.3.1. Primary healthcare structure

PHC is provided across the all districts, almost all PHC services are decentralised and run by DHAs and few run as polyclinics. There are 879 units and other PHC facilities each of them serving a population of 1000-5000; and 535 PHC centres, each of them serving a population of 10,000-26,000. There are also 37 polyclinics, each of them serving a population of 50,000 to 60,000 (HIC, 2010; WHO, 2010a, 2013a and 2013b).

However, the quality of PHC services is questionable in many areas, such as the management, the capacity of staff for quality of healthcare and patient safety, healthcare waste collection and disposal, hygiene standards, monitoring and control of behaviours and manners of PHC staff and PS, revitalisation of PHC regarding the quality of care, skills mix and competencies, management and the referral system (WHO, 2007b, 2010a, 2013a and 2013b).

Table 4-5: Public Health Facilities, 2012

Health facilities/ services	Value
LNHS specialised hospitals	26
LNHS central hospitals	18
LNHS general hospitals	21
LNHS rural hospitals	32
Total number of LNHS hospitals	97
Total beds in LNHS hospitals	20 689
Total beds in social security (welfare) facilities	1 060
Total beds in LPHS clinics	2088
Total beds all hospitals	23837
Beds per 10,000 population	37
Facilities per 10,000 population	2.6
PHC facilities	1 451
Polyclinics	37
Health centres	535
Health units	820
Other PHC facilities	59

Source: HIC, 2010.

Recent survey on the availability and accessibility of PHC services conducted by the MOH and WHO (HIC, 2012) shows that only one third of PHC facilities are fully functioning, while 44% are partially functioning, and around 23% of facilities are either non-functioning or under rehabilitation; 111 facilities were not included in the survey because of the closure. However, functioning and availability do not mean that the services are utilised (WHO, 2013b).

4.4.2.3.2. Hospital autonomy

Libya has 37 hospital beds per 10,000 population (the highest among the countries of the MENA region), which is much higher than Egypt (17) and Tunisia (21) and considered high by international standards (UK 34) (HIC, 2010; WHO, 2013b). The

distribution of healthcare provision is such that in each rural and urban area (see Table 4-5) there are several specialised general and rural hospitals that provide secondary and tertiary care, but the two main central hospitals are located in the two largest cities – Tripoli and Benghazi (Abudejaja and Singh, 2000). All hospitals are considered as independent institutions. In 2004 the resolution no. 9 of the Cabinet of Ministers (General People's Committee) gives LNHS hospitals the authority to have their own budgets and bank accounts, in addition, these hospitals have the authority to recruit their HRH according to regulations and to outsource some housekeeping, medical and laboratory services to LPHS contractors.

However, data over many years showing that most LNHS hospitals are operate inefficiently and the quality of hospital services is questionable in many areas; this can be attributed to oversupply of hospital beds, a very low occupancy rate (around 65% [HIC, 2010)]), inefficient use of the hospital resources available, poor organisation, lack of senior staff, poor working hours and commitments, unstable leadership, disorganised referral system, self-governing without stringent regulator and lack of communication with patients., poor hospital administration, disposal of expired medicines, medical waste management, staff skills, patient safety, monitoring of hospital infections, accreditation of health facilities, and quality improvement (WHO, 2007b, 2010a, 2013a and 2013b).

4.4.2.3.3. Libyan Private Health Service (LPHS)

The LPHS was banned during the 1980s (see section 4.3.3) but has been reinstituted in recent years (Benamer et al., 2009), and the government has decided to encourage its expansion. The total number of LPHS hospitals and polyclinics is 103, with a total of 2088 beds in addition to 415 outpatient clinics, 311 laboratories, 297 dental practice clinics and 1934 pharmacies. Most of these facilities are located in the main cities, Tripoli and Benghazi (HIC, 2010). The LPHS facilities are busy but no evidence of stringent regulations and the quality of care is not fully quantified. Some patients are covered by employer insurance but a sizeable number of patients paying OOP because of the lack of quality services at LNHS facilities (WHO, 2013b). However, the lack of health insurance programmes and uncertainty about the status of the investors limiting the role of the LPHS (WHO, 2007b).

4.4.2.4. Health system financing and expenditure

The government is the main provider of free healthcare services, which represent the expenditure on public health. The second source of finances is private sources (the LPHS is owned by private companies, societies, groups and individuals), which represents patient OOP payments. The costs of health services vary markedly across these sectors. Additionally, there are some exceptional sources of finances such as the health services that belong to the Libyan Red Crescent (LRC), which are only provided for some oil company personnel and their families on the basis of fixed annual payments.

In comparison with other MENA countries, Libya spends much less on healthcare: 3.5% of GDP (HIC, 2010), with a total per-capita expenditure of $484 (WB, 2012), which is relatively low, but a similar amount in absolute terms. When adjusted for purchasing power parity (PPP$) differences across countries, the MOH spends $713 per capita (WB, 2012). In addition, the MOH spends 60 million LYD (£31 million) annually funding TA for Libyans (HIC, 2004).

Table 4-6: Health Expenditure in some MENA Countries

Country	Health expenditure (2010)					
	Total % of GDP	Public % of total	OOP % of total	External resources % of total	per capita*	
					US$	PPP$
Egypt	4.7	37.4	61.2	0.6	123	289
Iran	5.6	40.1	57.8	0.0	317	836
Jordan	8.0	67.7	25.1	3.7	357	448
Lebanon	7.0	39.2	44.7	4.7	651	980
Libya	**3.5**	**68.8**	**31.2**	**0.6**	**484**	**713**
Syria	3.4	46.0	54.0	0.7	97	174
Tunisia	6.2	54.3	39.8	0.3	238	483
United Arab Emirates	3.7	74.4	18.8	0.0	1,450	1,544
Yemen	5.2	24.2	74.8	4.3	63	122
Middle East and North Africa countries	4.7	50.1	47.0	0.7	203	425
Upper-middle-income countries	6.1	54.3	33.4	0.2	382	594
World	10.5	62.8	17.7	0.2	949	1,023

Source: WB, World Development Indicators (2012) and HIC (2010); (*) Health expenditure per capita is total health expenditure divided by population in U.S. dollars and in international dollars converted using 2005 purchasing power parity (PPP$) rates from the World Bank's International Comparison Project.

Although the healthcare service is free of charge, it is estimated that the total expenditure on healthcare OOP was 12% (HIC, 2010); although some sources claim it was more than this (e.g. 23% [WHO, 2007b]; 20% [WHO, 2010a]; 31.2% [WB, 2012]). A national survey estimated that spending averages were LYD 263 (£137) per year per household (IGH, 2004). OOP expenditure paid for LPHS services or for TA.

Table 5-6 shows the health expenditure in some MENA regions in 2010. Libya spends less on health (3.5%) as a percentage of GDP than all other MENA countries except

Syria. The average health expenditure in the MENA regions, upper-middle-income countries and the world is 4.7%, 6.1% and 10.5% respectively. However, Libya spends more (68.8%) on public health than other MENA regions, upper-middle-income countries and the world (50.1%, 54.3% and 62.8% respectively). Finally, Libya's per-capita health expenditure is slightly more than that of other MENA regions and upper-middle-income countries, except the oil-producing countries (e.g. UAE) (WB, 2012).

4.4.2.5. Human resources (HR)

In the 1970s, the number of medical schools, health institutions and healthcare service facilities increased. The first medical school was established in Benghazi City in 1970, followed by another one in the capital Tripoli in 1973. The number of medical students increased significantly during 1980s and 1990s, as seven new medical schools were established in various regions of the country. The education system of these schools is mainly based on the traditional British curriculum and using English as the language of teaching (Benamer et al., 2009). In addition to these 9 medical schools, in the public sector there are 7 dental schools, 6 pharmacy schools and 1 public health school producing HRH. In addition, 14 nursing schools and 9 allied health sciences and technical institutions graduate health professionals (HIC, 2010). In 2010 there were 20 physicians, 6 dentists, 6 pharmacists and 71 nurses and midwives per 10,000 population (HIC, 2010).

However, there are an adequate numbers of HRH, but lack of balance (more medical than other health professionals). HRH production is not planned or organised based on health needs. There are no clear plans to match the proper needs with numbers and categories of HRH; there are also frequent changes in the curriculum, no accreditation system, and weak intersectoral collaboration. There is also no national human resource development (HRD) plan, policy or strategy. Other factors that hinder healthcare delivery are an absence of links between programmes and career development, and inadequate training in management (WHO, 2010a and 2013b; Benamer et al., 2009).

In addition, the expensive funding of Libyan physicians perusing specialisations abroad has been inefficient, as Libya has not benefitted from their skills. Faced with low wages and incentives , a significant number of physicians immigrated during the past four decades, to make their careers abroad, and the MOH has had to import specialist doctors to replace them (WHO, 2007a and 2013b). Furthermore, there are an inadequate numbers in all specialties, but in particular in a number of main areas such as anaesthesia, heart disease, family medicine and PHC. There is also an imbalance in the geographical distribution, as many HRH favouring urban areas and hospital practices; and absence of regular performance evaluation linking CPD activities to promotion, incentives and motivation; as well as periodic recertification examination are not in place (El-Fallah, 2000; Saleh, 2006; El Taguri et al., 2008; WHO, 2007b, 2010a, 2013a and 2013b).

In the 1950s, nursing education was established for nationals. In the 1970s, 1980s and 1990s a 3-year diploma course after secondary school was established in all districts (49 institutes, in addition to 31 nursing education divisions in hospitals [HIC, 1999]), to meet the increasing demands of the health sector and achieve the national development plan goal of nationalising the nursing staff (El-Fallah, 2000). However, this goal is yet to be achieved, since the standard of nursing care in Libya is inappropriate because of the poor-quality of nursing education. Thus, Libya remaining dependent on expatriate nurses staff for almost all quality and specialised nursing care and for midwifery (El-Fallah, 2000; WHO, 2007b and 2010a). Many difficulties remain in this area. Teaching staff are not well qualified, curriculums need review and modernise, management is weak, and attractions to the profession still low. Nevertheless, at the end of the 1990s the MOH decided close all nursing education institutes (the 3-year diploma courses after secondary school) and established a bachelor's degree in nursing at the university level (El-Fallah, 2000; WHO, 2007b and 2010a).

4.4.2.6. Health information system (HIS)

The establishment of the Health Information Centre (HIC) in the MOH to co-ordinating collecting and reporting on national health data has been a positive step towards the establishment of a national HIS (WHO, 2010a). However, all important HIS functions are almost absent in Libya; recent WHO study (2013a and 2013b) refers to weaknesses at many front of this important HS pillar. In particular the data capturing and collection at the point of delivery is not in line of modern methods of HIS. For instance, most of the healthcare facilities did not use computers as part of the service delivery; hand written notes are very weak; no accurate data were available; paper patients' files in clinic are very basic; while data is collected and analysed at national level, but the quality of analysis is very basic; absence of the population's health needs, both mental and physical with no expertise in these fields.

There are other challenges in the HIS: the maintenance and care of health records in all health organisations and facilities should be kept to the highest standards. Analytical skills should be also maintained to the highest level of expertise. Vital information needs improvement, and the collection of qualitative information such as PS, patient safety and causes of deaths. While assessing population health requires a scrutinised analysis utilising an evidence-based approach is an essential function which will providing critical data and evidence on which to planning health services and addressing health inequality; providing an opportunities to engaging with certain categories of the populations and enabling them to contributing to target services planning and resources allocation; and providing opportunities for cross-sectoral partnership working and developing innovative and effective interventions (WHO, 2010a, 2013a and 2013b).

To summarise, the Libyan HS is resource-rich, with at least three main strengths: government funding, abundant HRH, and country-wide health infrastructure. These

strengths are reflected in the improvement in the health of Libya's population over the past five decades, with eminent health improvements compared to other MENA countries. Unfortunately, this momentum was not sustained, and there has been deterioration in the provision of health services. The past three decades, at least, have seen damage to health and social infrastructures, looting, and the emigration or displacement of health professionals who have fled the country. Traditional government systems in Libya focus on centralised, bureaucratic delivery and services, are often monopolies, and are not sensitive to customer needs (Youssef, 2006). Libyan citizens perceive the HS as insufficient if not poor, and thus health tourism to neighbouring countries has flourished (El-Taguri, 2007; Benamer et al., 2009).

However, the fitness of the Libyan HS and the quality of its healthcare have not been fully assessed. This study will therefore undertake an assessment of Libya's "shattered" HS and the quality of its healthcare, with the intention of generating a reliable and evidence-based framework as the basis for the reform and/or rehabilitation of the country's national HS.

4.5. Summary

General background and socio-economic development

This part of the chapter presented a general picture of Libya's location, population and history, and highlighted some of the key socio-economic factors (educational, economic, political and cultural) of the Libyan society in which this study is based. These key factors can be expected to affect the HS and the quality of healthcare provision. Thus, socio-economic development would be a major determinant for improving health status and healthcare quality in Libya.

Health key findings summary:

Health status: figures demonstrate that Libya scoring very well on main measures. The improvement in the health status of the population is evident from the decline in mortality rates and the increase in life expectancy, as well as the decrease in the incidence of CD. The basic health status indicators for Libya are among the best in the MENA region. However, the burden of disease has shifted towards NCDs and injuries.

Libyan health system: There is a mixed HS of public and private healthcare. The MOH co-ordinates, supervises and evaluates the implementation of medical and healthcare activities. It is the main healthcare services provider; healthcare including preventive, curative and rehabilitation are delivered free of charge to all citizens. A small but growing LPHS is emerging, although it has a limited role. The HS operates on three levels: PHC, secondary and tertiary.

Health system policies and planning: The process of planned development started in the 1960s. In 1994, a national health strategy was adopted to attain the goal of "Health

for All and By All" as an integral part of the comprehensive socio-economic development policy. It continued to emphasise the eight universal elements of PHC with four national elements (occupational, mental and school health in addition to elderly social care and healthcare). However, most of the policy documents have not yet been translated fully into action; in addition, the views of patients are a neglected issue in HS policy development.

Health service delivery: Almost all levels of healthcare services are decentralised, although owing a large number of healthcare facilities, the referral system is disorganised and many PHC facilities operate on an open access basis. Secondary and tertiary healthcare is delivered through general hospitals in rural and urban areas and specialised hospitals.

Healthcare finance and expenditure: Compared with its MENA peers, Libya spends less on healthcare. Despite guaranteed free healthcare in the LNHS, Libyans are opting to buy healthcare from the LPHS and are travelling for TA.

Human resources: Medical education in Libya has expanded massively, with an ensuing decline in quality, and Libya is still lacking specialists in a number of key areas. The number of HRH varies considerably across districts, while the standard of nursing care is inappropriate because of the poor-quality nursing education. Thus, Libya remains dependent on foreign nurses and for midwifery.

The next chapter will define and describe the research methodology that was used for the present study.

Chapter 5: Methodology

5.1. Introduction

The design of any study begins with the choice of a topic and a research methodology. The researcher's next responsibility is observing, exploring, describing, explaining and interpreting the topic through an appropriate methodology (Marshall & Rossman, 1995). Hence, the main purpose of this chapter is to address the research methodology that has been adopted in conducting this study.

This chapter has two aims: to elaborate on the aims and objectives of the study, and to provide an account of the study's design, research methodologies, and rationale for the choice of methods: to elicit and evaluate different stakeholders' perspectives within the Libyan HS. It describes separately, and in detail, the methods employed to conduct the empirical work. It is divided into seven main sections, beginning with the introduction (Section 5.1). Section 5.2 describes the study's overall aim and intended outcome, section 5.3 discusses the philosophical approach, while section 5.4 discusses the rationale for the study methods and design choice. Section 5.5 describes the quantitative methods used for conducting a survey via a questionnaire of patients' views on the quality of healthcare in hospitals. Section 5.6 describes the qualitative method used for exploring the quality of healthcare and the HS and its governance at national level, i.e. the MOH. Each section provides a detailed account of the design and rationale for this study and the empirical work undertaken. It uses a concurrent mixed-methods strategy which combines qualitative and quantitative data (Creswell, 2003 and 2009). The Chapter covers the study setting and time, study population and sampling, the instruments used for data collection, the data collection procedures, and the pilot study and its outcomes. The methods of data processing, coding and analysis for both qualitative and quantitative phases are also described. The chapter concludes with describing the study's ethical considerations (Section 5.7).

5.2. The overall aim of the study, and intended outcomes

The overall aim and intended outcomes of this study are: to provide a foundation for the development of a framework and evidence base, based upon the perspectives of healthcare stakeholders; to inform policy-makers and healthcare providers in devising and developing policies and strategies to re-engineer/reform the HS at the national level; and to introduce and/or improve quality initiatives at the health facility level.

Data obtained from these key stakeholders may serve to highlight mismatches and misunderstandings between the perceptions of health professionals, officials and experts, and the actual perceptions of patients. Thus, this is an empirical investigation designed to address health management problems that compromise the efficiency and effectiveness of the HS's policies, strategies, plans, and interventions. The study is

intended to improve the HS's policies in practice, and to utilise what is learnt from the perceptions of different health stakeholder groups to enhance the HS and the quality of healthcare services in Libya.

The previous review of the literature identified a range of important points that need to be explored. The first point is the importance of HSs, including all institutions, facilities and resources devoted to health activities and trying to achieve the overall goals of the HS. The second is that there is a consensus among commentators that quality is better understood and assessed if patients' views are identified and addressed. Evidence has shown that patients are able to report and evaluate the care they receive (Lewis, 1994; Coulter and Elwyn, 2002; Bower, 2003). However, little is known about patients' role in the Libyan HS and how healthcare providers currently obtain and process patients' perceptions of it. Thus, studying and addressing users' views of service quality is increasingly recognised as fundamental to quality improvement. In fact, many authors share Wensing and Elwyn's (2003) view that quality improvement efforts in healthcare may be wasted if patients' views are not addressed. Although, at least in Western societies, research on patients' views regarding quality has intensified since the 1990s, and is increasingly seen as crucial to quality improvement initiatives (Wensing and Elwyn, 2002; Larsson et al. 2005; Bruster, 2005), this is a neglected research area in Libya.

The third point is that Libya has a number of distinct healthcare services serving the population. The LNHS is state-owned and operated by the MOH, and all of its health services are free of charge and accessible to all citizens. The LPHS runs a large and growing healthcare service network. In addition, the army and the national oil companies provide healthcare services to their members or employees. In addition, the social security (welfare) sector provides various ranges of services, including healthcare and rehabilitation services to people with special needs or disabilities. Research on the private sector, including patients' perceptions, is generally limited, and further research is needed (Basu, 2012). Confining the study to the LNHS alone would not be useful, because the findings might not be representative of the general population, since private sector users may differ from the general public in terms of socio-economic characteristics. Hence, a comparison between LNHS and LPHS patients' perceptions will be more helpful for the sake of generalisability, and also to gain a thorough understanding of differences and similarities between patients' perceptions of the quality of healthcare in both LNHS and LPHS settings.

Fourthly, analysis of the literature indicates that quality is a multidimensional concept and a pluralistic approach, perceived and evaluated differently by different stakeholders. Understanding each group's perspective will help to identify differences and similarities between their perceptions, and may help future policymakers to synthesise these perceptions to improve the HS and the quality of healthcare.

The fifth point is that to date no studies have been done on TA for Libyan patients and little is understood about why patients travel for TA and the basis upon which individuals choose private healthcare in Libya and/or abroad.

The above five points emerging from the literature will therefore be explored in this study through its primary and secondary objectives, as presented in Chapter One.

5.3. Philosophical approach

All approaches to research embody a conceptual framework or philosophical perspective (Sim and Wright, 2000), with the methods framed by the philosophical world-view of the researcher (Heywood and Stronach, 2005). This philosophical perspective both informs and influences the research study throughout, from the initial research questions through to the design of the methods of data collection and the analysis used to investigate them (Morgan, 2007). Using such a framework allows researchers to ground their studies in methodological literature that is read and recognised by others (Creswell, 2003). Although philosophical ideas can remain to some extent "hidden" (Slife and Williams, 1995), they will influence the research and therefore should be identified (Creswell, 2003).

The problem-situations were encountered in health sector reform practice in different contexts and capacities (Sambo, 2009). The researcher's experience reflects his own interest in the subject matter, and also has been critical in informing the design of this study. He is by nature a pragmatist and, as with some of his previous research, this study was a practitioner research project. The researcher is a university lecturer and has spent more than 20 years working and being involved in and around the health sector at the local and central levels. This experience has been enriched by additional work at regional and international levels; therefore, the philosophy of pragmatism which values practice-based research resonates strongly with him. With pragmatism there is a concern with "what works" (Patton, 1988), and this position is described by Patton (1988) as being one that implicitly chooses a paradigm and method according to what will work best to meet the practical demands of a particular study and situation, and bring about positive consequences within the researcher's value system (Tashakkori and Teddlie, 1998). The researcher has previously conducted and participated in several studies, each of which has been guided by pragmatic philosophy and has provided valuable insights into health management and development.

In response to criticism of inductive and deductive reasoning, pragmatism emerged as a theoretical perspective. According to Creswell (2003:11), pragmatism derives from the work of Peirce, James, Mead, Dewey (Cherryholmes, 1992). Recent writers include Rorty (1990), Murphy (1990), Patton (1990) and Cherryholmes (1992). There are several forms of pragmatism, but they all share the core assumption that knowledge is acquired out of actions, situations, and consequences rather than through antecedent conditions (Creswell, 2003; Johnstone, 2004).

The researcher's understanding of pragmatism was informed by his reading of mixed-methods researchers such as Creswell (2003) and Tashakkori and Teddlie (1998, 2003). Within mixed-methods research, instead of a focus on methods the research problem and purpose guide a study; therefore, the research approach is not committed to one system or reality (Creswell, 2003). In other words, pragmatism is a problem-centred approach which gives priority to the problem rather than the methods used (Creswell, 2003). Pragmatism tends to utilise a mixed-methods technique as a pluralistic approach to derive knowledge about the problem (Creswell, 2003; Michell, 2003; Johnstone, 2004).

Pragmatist researchers look at the "what" and "how" of research (Creswell, 2003); the research question is therefore considered to be key to the study, and an understanding of this question and the purposes of the study should guide the researcher in all other decisions about the research study (Newman et al., 2003). Pragmatism therefore values personal ideas about research and its practice, and Tashakkori and Teddlie (1998) suggest that the philosophy of pragmatism gives researchers "permission" to use the most appropriate methods and study areas of interest and to use the findings to bring about positive consequences within the researcher's value system. The researcher views his progression to using narrative inquiry to gain a greater depth of understanding of the Libyan HS, the quality of healthcare, and health stakeholders' experiences as a key phase of his development as a pragmatic researcher. As Tashakkori and Teddlie (1998) stated, researchers who have a pragmatic philosophy study topics that they believe are important to study, in a way that is congruent with their own value system.

Philosophical ideas need to be combined with research strategies and methods (Creswell, 2003). Thus, the researcher has combined his philosophy of pragmatism with a research strategy of narrative inquiry, using narrative interviews to explore health stakeholders' experiences. Research methods should always be selected to best-fit research questions (Lieblich et al., 1998); and as the purpose of the study was to gain an in-depth understanding of the factors that influence the Libyan HS and the quality of healthcare, asking the health stakeholders to share their views, observations and experiences was most appropriate. Listening to their views in their own words aligned with the purpose of the study and a pragmatic philosophy.

In summary, having discussed some of research strategies and their underlying theoretical perspectives, it is important to stress here that each approach has strengths and weaknesses. The researcher's decision to choose a particular method for a particular study will take into account a number of issues, including resources; but most importantly, he will also consider what he believes to be the best, most practical and ethical methods to achieve the aims and objectives of the research.

5.4. Rationale for the study methods and design choice

The mixed-methods approach is based on the assumption that collecting different types of data can provide a better understanding of the research problem (Creswell, 2003 and 2009). It has been suggested that this approach, rather than an individual qualitative or quantitative approach, results in more robust studies that better contribute to the existing knowledge on the research topic (Creswell & Plano Clark, 2007; Johnson & Onwuegbuzie, 2004). A mixed-methods approach addresses the need for balance between the benefits of both quantitative and qualitative methods. Viewing research from such a unified perspective allows individual research questions to dictate the methods used to best achieve the required results (Leech et al., 2010). The use of both quantitative and qualitative methods ensures a rigour and applicability that limiting the study to one methodological approach would fail to achieve (Kiessling & Harvey, 2005). In the case of this study, it was chosen in particular because it has been employed by different research groups and institutes who "broadly approve of combining qualitative and quantitative methods in public health research" (Creswell et al., 2004:8). Therefore, the use of mixed-methods research represents an attempt by the researcher to be more critical in terms of result evaluation and analysis; comparing and contrasting analyses from individual methods provides a triangulation in the study which seeks only to strengthen results (Kiessling & Harvey, 2005). The aim of such an approach is to enhance both the quality and validity of the research by reducing bias in the data source (Collis & Hussey, 2009), while enabling greater generalisation of any resulting conclusions and producing a depth of participant-generated knowledge applicable to broader audiences (Creswell & Plano Clark, 2007).

If multiple methods are designed and used for complementary purposes, then the individual methods could essentially be viewed as "mutual research partners" (Sale et al., 2002:50); and as such, separated methods carried out simultaneously or sequentially will offset the weaknesses of each method by pooling the stronger points in the analysis of both (Creswell, 2009; Bryman & Bell, 2007, Tashakkori & Teddlie, 1998). In this study the individual methods have been used in order to seek to answer the research question and address the study's objectives; and thus, it could be argued, build essentially two separate complementary studies around each method. This will be considered further in the evaluation of each method used. Moreover, solely considering the results from one viewpoint, be it from one participant type or the data from only one method, would be inconsistent with the relativist position (Easterby-Smith et al., 2008).

This study aims to use a pluralistic approach to elicit patients' views, as well as those of other health stakeholders. The form of "concurrent triangulation approach" (Creswell, 2009:213) adopted in this study is considered to be the most familiar mixed-methods approach of this kind. In which both qualitative and quantitative techniques are combined for data collection and will subsequently be compared and

analysed in order to provide a comprehensive analysis of the research problem. It is also acknowledged that, although the ideal would be for each method to have equal weighting in terms of analysis and contribution to results, the reality is that during the analysis stage greater favour will be given to one of the two data sets; in particular, the qualitative data may be regarded as richer in terms of its representation of reality than survey-based quantitative data, thus, adopting a "dominant-less dominant design" in the form of QUAL + quan (Tashakkori & Teddlie, 1998:15). In this sense it is the job of the researcher to act as the central figure of the work and construct the findings accordingly and in a manner consistent with the relativist research paradigm (Willig, 2008).

This corresponds closely with the core argument of this study, which stresses the importance of utilising a pluralistic approach in measuring quality in healthcare. Patients' views have traditionally been gathered using a survey – a method which is commonly criticised on a number of grounds, but particularly in relation to the risk of researchers imposing their own agenda by selecting for inclusion items which may not reflect patients' perspectives in the area under examination. Therefore, in this thesis the items included in the questionnaire emerged *inter alia* from prior research actions (i.e. focus groups conducted with healthcare stakeholders, including patients [see sub-section 5.5.4.1.2]) which offered thorough insight into the area under examination by identifying those issues which patients themselves felt were related to quality (Silverman, 1997 and 2000).

Moreover, the focus groups allowed patients, as informants, the opportunity to discuss their viewpoints and experiences. This further emphasises the suitability of using mixed-methods in this study, as it "lent itself to valuable opportunities for data triangulation and transformation and instrument design" (Borkan, 2004:4). The selection process of the study's methodology took account of the above issues as well as the study's objectives, which involve three groups of people: (i) patients, (ii) healthcare professionals (e.g. doctors and nurses), and (iii) healthcare experts and officials (i.e. policy-makers). The methods selected for this study are presented below.

As mentioned above, and for the exploratory purpose of this study, the research design for eliciting patients' perceptions utilised focus groups. The aim was to explore health stakeholders' views (including patients) with the intent of using data derived from this phase as a precursor to aid in the development of a cross-sectional self-administrated questionnaire survey using a larger sample from the study's population, so the study objectives could be achieved. The rationale for using this strategy is that a survey of patients' views about quality can best be developed only after a preliminary exploration of patients' views (Creswell, 2003 and 2009).

The healthcare stakeholders' perceptions were explored using qualitative semi-structured interviews conducted with three groups of people: patients, healthcare professionals, and healthcare experts and officials. In short, the design of this study involved two main stages:

- Quantitative: a cross-sectional self-administrated questionnaire survey of patients.
- Qualitative: semi-structured interviews with healthcare stakeholders (health experts and officials, health professionals and patients).

5.5. The quantitative method

One of the study's main objectives is to assess the patients' perspectives on the quality of healthcare in Libya. This section describes the methodology used in this study for the survey of patient's views of the quality of healthcare.

5.5.1. The study setting

The study was carried out in 18 LNHS and LPHS hospitals in Benghazi, the second city in Libya. The LNHS hospitals are the main referral tertiary hospitals and are also used for academic purposes, and so they are assumed to be providing high-quality healthcare. In addition, they share the same source of finance (the Ministry of Finance, or MOF) and are all technically supervised by the MOH. They therefore have similar constraints in terms of resource deficiencies, management styles, and organisational structures. The researcher restricted the study to the tertiary hospitals base on the assumption that if the tertiary hospitals do not have a high-quality management system in place, it is unlikely to be introduced into the primary and secondary care levels; anecdotal evidence shows that due to the poor quality of primary and secondary care, the bypassing rate from these levels to the tertiary level is high (43%-75%).

5.5.2. Study population

The study population consisted of all in-patients or their companions who were seeking medical care during the study period in all LNHS and LPHS hospitals located in Benghazi City. There were no specific exclusions for selecting from the study population; all in-patients or their companions, Libyan and non-Libyans, male and female, aged 18 years and above, were represented (the age of legal accountability is 18 years in Libya). The only exclusion criterion for selecting from the study population was the psychiatric hospital patients.

5.5.3. The study sample

The focus on Benghazi's hospitals was deemed appropriate, as Benghazi has an appreciable number of hospitals of varying quality that attend to a diverse set of patient needs. The sample size was based on convenience sampling and reports from related studies. Due to resource and time constraints, a representative sample of 600 individuals was targeted, who had spent at least 48 hours in a LNHS or LPHS hospital in Benghazi City.

Two separate lists of LNHS and LPHS hospitals in Benghazi were obtained from the MOH. All LNHS and LPHS hospitals located in Benghazi were chosen, as these

hospitals are able to handle patients with any type of health problem. To ensure representation, sample sizes of 410 and 190 were planned to be collected from LNHS and LPHS hospitals respectively.

Given that the study's population includes several categories, the study's sample was selected according to the Stratified non-random sample method, to represent the various groups of the study's population. The data was obtained from hospitals and from the HIC in the MOH. This centre also had an important role in facilitating the process of collecting data from the study sample in the hospitals through the circulated letter, and also by persuading them to provide the necessary assistance and co-operate with the researcher (see Appendix 5-3).

A consecutive sampling technique was employed. That is, the study's questionnaires were administered to in-patients in the selected hospitals' wards and sections; after the questionnaire was completed with the first patient, the next available patient was selected, and so on, until the required sample size was achieved in each selected hospital ward or section.

5.5.4. Study instrument

For the purpose of the quantitative part of the study, questionnaires were used for collecting data, as an appropriate tool for this part of the study. The questionnaire was specifically designed for this study focused on identifying the attitudes and opinions of in-patients or their companions on aspects related to their assessments of various quality aspects of the healthcare services provided to them in LNHS and LPHS hospitals in Benghazi city.

5.5.4.1. Questionnaire development

The questionnaire was developed for the purpose of this study. Various sources and methods were used to determine which items it should include. The preparation and design of the questionnaire went through several stages, which are described below.

5.5.4.1.1. <u>The literature search</u>

A literature search was undertaken, which aimed to analyse previous studies and tools that had been devised to evaluate PS and the quality of healthcare. The most important sources that the researcher benefited from were:

- Previous studies conducted in Arab countries that have similar social and cultural backgrounds and HSs, as well as studies conducted worldwide.
- Documents and publications related to the subject of study issued by the Libyan MOH and its affiliates, the WHO, and other organisations.
- The methodological procedures and the scientific basis for the preparation of the questionnaire relied on a number of specialised references in this area.
- Discussions, observations, and the guidance of the researcher's supervisors.

Through this process, the researcher identified 73 phrases and statements driving 13 dimensions, which in turn were found to drive perceptions of service quality. The dimensions were availability/access, tangibles, atmosphere, interpersonal quality, responsiveness, empathy, timeliness, management/process quality, support, technical quality/expertise, perceived quality of service, satisfaction with service, and behavioural intentions.

5.5.4.1.2. Focus groups

"Focus groups usually consist of one investigator and a number of participants in any one session. Although the views of any one participant cannot be probed to [the] same degree as in an interview, the discussions that are facilitated within the groups often result in useful data in a shorter space of time than that required by one-to-one interviews" (Adams and Cox, 2008:17). Focus groups let the researcher check for consistent understanding of terms and to identify the range of events or experiences about which people will be asked to report (Check & Schutt, 2012). By listening to and observing the focus group discussions, researchers can validate their assumptions about what level of vocabulary is appropriate and what people are going to be reporting (Nassar-McMillan & Borders, 2002). Additionally, focus groups can help in developing questions or concepts for questionnaires and interview guides (Hoppe et al 1995; Lankshear 1993).

According to Check & Schutt (2012:163), "The only good question is a pre-tested question". Schneider and Palmer (2002:33) argue that "badly-designed questionnaires based upon criteria inappropriately set by professionals may act as a form of censorship imposed on patients, rather than eliciting lay perceptions of care". Hence, focus groups which involve patients and other health stakeholders are extremely useful in studies of the present kind.

Two focus groups were conducted by the researcher (in May, 2009) and lasted for approximately 2 hours each: one with 8 patients, and the other with 6 health experts, officials and professionals. These focus groups were not a part of data collection process, but rather a part of the preparation and design of the questionnaire. This was part of the preliminary stage of the study, which acted as a precursor to inform the development of the patients' views questionnaire by exploring the focus groups' opinions about the quality of healthcare provided in Libyan hospitals. In addition, patients and other health stakeholders, as informants, were given the opportunity to discuss their viewpoints and experiences. Detailed discussions were conducted with these focus groups, with the aim of better understanding the relevant issues and recording expressions that could be included in the questionnaire.

5.5.4.1.3. The initial version of the questionnaire

The previous stage (i.e. focus groups) has presented important issues as seen and experienced by patients and other health stakeholders. It has sought to qualitatively examine the views of the focus groups participants regarding various quality aspects

of the healthcare services provided in LNHS and LPHS hospitals, in order to develop a conceptual understanding of what these issues mean to lay patients and to inform the development of the study's main quantitative tool to be distributed to a large number of patients to elicit their views on quality attributes.

Although these focus groups were not a part of the data collection process -but rather a part of the preparation and design of the questionnaire- they developed a thorough and consistent understanding of the terms and experiences of the study's main survey tool. This led to a robust analysis of patient attitudes, beliefs and views about various issues related to the healthcare provided at the hospitals, in order to enrich understanding of healthcare services as seen through their eyes and, in practical terms, to compare their views with those of key healthcare informants (health professionals, officials, policy-makers and experts).

After the previous two important stages some adjustment was made to the phrases, statements and dimensions identified in the early stage, and an initial version of the questionnaire was created which considered the methodological procedures in terms of simplicity of style, avoidance of ambiguity in the questions, and a logical sequence. It was also important that the questions measured what was required for the study. Additional phrases, statements and dimensions were developed and existing ones were revised as necessary. The researcher found support for 15 dimensions, and the structure of these dimensions comprised of 55 phrases and statements which reveal which specific in-patient service areas and quality attributes were of particular significance to informants, including: availability, accessibility, tangibles, patient safety, atmosphere, communication, manner, responsiveness, empathy, timeliness, quality of management and process, expertise, perceived quality of service, satisfaction with service, and behavioural intentions.

5.5.4.1.4. Questionnaire validity

Validity is the extent to which the research findings accurately represent what is really happening in the given situation. Validity in positivist research is very low, while in phenomenological research it is considered to be higher. The purpose of the latter is predominantly to capture the essence of the phenomena and extract data that is rich in content (Collis & Hussey, 2009).

Face and content validity were followed in order to examine the statements and tool questions. This process usually uses the opinions of experts and specialists in assessing the validity and sincerity of the content of the unit of measurement. The study's questionnaire was initially introduced in June, 2009 to a group of 15 experts from Garyounis University and Al-Arab Medical University[1], as well as to experts and specialists who were current or former officials in hospitals, health institutions

[1] These two universities had been united under the Garyounis University name. After the revolution in Libya (February, 2011), the university name reverted (as before September, 1969) to Benghazi University.

and agencies related to the health sector. These participants provided their opinions about the appropriateness of the items and how easy they were to understand, as well as evaluating the face and content validity of each item and the validity of the questionnaire as whole. It was considered that the consent/agreement of 80% or more of the arbitrators would be the criterion for the acceptance of each statement.

It was necessary to ensure that the statements of the questionnaire were easy to understand and reflected the actual issues whilst being close to what is meant in practice. As a result of the arbitration process, the questionnaire was redrafted to incorporate the views, suggestions, comments and advice given by the arbitrators, and this process was on the whole beneficial. The validity of the questionnaire was determined, and some statements were modified or re-phrased for the simplification and the clarification of their meaning. This researcher believes that the validity of the study tool has been achieved.

5.5.4.1.5. <u>The pilot study</u>

The pilot study is a small-scale preliminary study conducted in order to evaluate feasibility, time, cost, adverse events, and effect size (statistical variability) in an attempt to predict an appropriate sample size and improve upon the study design prior to the performance of a full-scale research project (Hulley, 2007). A pilot study is usually carried out on members of the relevant population, but not on those who will form part of the final sample (Haralambos and Holborn, 2000).

Prior to the actual collection of the data for the main study, the pilot study was conducted with a sample consisting of 20 individuals possessing the same characteristics as the main study's sample: they had spent at least 48 hours in LNHS or LPHS hospitals in Benghazi City from 04.07 .2009 to 07.07 .2009. The pilot study aimed to test and evaluate the feasibility of the questionnaire, as well as to explore the research environment and the willingness of the respondents to take part in the study. After measuring the time spent in answering the questionnaire, the respondents were questioned about the comprehensibility, length, clarity, wording and phrasing of each question, what they would delete or add, and any other general comments they wished to share. The results were discussed with the supervisors in order to identify items that had not produced useful information, and the questionnaire's content was modified accordingly.

After this phase, appropriate adjustments and minor changes were made, such as the re-phrasing of some statements that were not sufficiently clear, to make them easier for the respondents to understand. Other questions that had been demonstrated to be less important to the subject were deleted. Additionally, the order of certain items was changed in order to ensure that they appeared in a logical sequence. The consideration of all substantive comments and the results of the pilot study led to an amended questionnaire.

5.5.4.1.6. Questionnaire reliability

Reliability was also established during the data collection phase. According to Yin (2009), reliability means "demonstrating that the operations of study, such as data collection procedures, can be repeated with the same results" (Yin, 2009:40). Cavana et al. (2000) state that validity is concerned with whether or not the researcher measures the right concept, whereas reliability is concerned with stability and consistency in measurements. That is, if the same phenomenon is measured more than once with the same instrument, then the same results should be obtained (Mason, 2004).

The test-retest method was adopted in determining the reliability of the questionnaire with members of the relevant population, but not with those who were in the final sample. A purposeful sampling was obtained from in-patients who were believed to be in a stable state. They were asked to participate in the study and to be re-tested at 2 weeks. This sample included 20 individuals from 3 hospitals (14 from the LNHS and 6 from the LPHS); 10 male and 10 female, whose ages ranged from 20 through 65. The questionnaire was distributed to the sample and was re-administered to the same participants within 15 days. The Spearman correlation coefficient was used for the reliability coefficient of the questionnaire. The reliability coefficient was $r = 0.87$ and $p = 0.01$, which suggests that the study instrument has an acceptable degree of reliability.

5.5.4.2. Components of the questionnaire

After its validity and reliability were confirmed, the questionnaire was ready for application (see Appendix 1). The first page of a questionnaire is devoted to the cover letter. It includes the title of the study and its objective, as well as background information about the researcher and the name of his sponsoring university. It also sets out instructions and guidelines for how to answer the questions, together with a clear explanation regarding issues of confidentiality and absolute anonymity surrounding the questionnaires. This states that the information obtained will be kept totally confidential and used solely for the purposes of the current study. The questionnaire consisted of four sections, as follows:

- Section one consists of 8 questions that refer to the demographic, social, and economic characteristics of the respondents.
- Section two involves the characteristics of healthcare services. It consists of 10 questions about some health aspects of the respondents. These two sections were used as explanatory variables.
- Section three: The main part consists of 50 phrases and statements assessing the patient experience with the quality of health services provided at LNHS or LPHS hospitals. These address various aspects of 15 specific in-patient service areas, including: availability (4 items), accessibility (2 items), tangibles (4 items), patient safety (2 items), atmosphere (3 items), communication (4 items), manner (3 items),

responsiveness (3 items), empathy (4 items), timeliness (3 items), quality of management and process (3 items), expertise (4 items), perceived quality of service (4 items), satisfaction with service (4 items), and behavioural intentions (3 items). The quality items were rated on an 11-degree Likert scale, from 0 (completely disagree) to 10 (completely agree).

- Finally, an open-ended question asks for any comments or suggestions that the respondents wish to express about their stay in the hospital, which would enhance the meaning of the quantitative data.

5.5.5. Quantitative data collection process

5.5.5.1. Research team

In addition to the principal researcher, a volunteer team of 15 (4 male, 11 female) research assistants from the LRC was recruited and trained rigorously beforehand to collect consistent and trustworthy data. The reasons for selecting this proportion of females were:

- The large size of the sample;
- The team had had experience in areas of social and health services such as dealing with special needs groups, elderly people, and prisoners, as well as health education, first aid, etc.;
- Most of the team members were university graduates, with an average age of 25;
- The privacy of Libyan society's culture makes the use of male researchers in women's hospital wards difficult; and
- Hospitals disapproved of the use of male researchers to collect data from women's hospital wards such as those specialising in obstetrics and gynaecology, as well as the Children's hospital.

5.5.5.2. Team training

The training period was for two hours at the weekly meeting of the team in the LRC over three consecutive weeks. The training aimed to make the team aware of the study's subject and objectives, and to enhance their skills in conducting scientific interviews in order to achieve unbiased and meaningful data. Although some members of the research assistants team involved in this study had been previously involved in similar studies, it was essential to provide such training to improve the quality of data gathered and to minimise bias. The training programme employed different training techniques and consisted of several sessions such as the foundations of the interview (to gain the confidence of the interviewee), neutrality (i.e. not suggesting answers), giving the interviewee enough time to answer, and role-playing. In addition, the training covered the following areas: ethical considerations, tracking the administration of the questionnaires, sampling, inclusion and exclusion criteria, and helping patients with special needs and illiterate patients to complete questionnaires. On the final day of the training, the schedule of time and place was specified for conducting the pilot study.

5.5.5.3. Data collection

The time-span allocated for the questionnaires' administration was three days a week hospital by hospital, over a twelve week period because of the personal circumstances of the volunteers research assistants team, also for the researcher to be able to review the completed questionnaires, co-ordinating with the hospitals' management and make all the arrangements to ensure that the data collection process are going smoothly and without any obstacles. The research assistants were distributed among each hospital's wards, and in each ward there were two interviewers. The interviewers attended their respective hospitals from 10 am to 2 pm, which was the appropriate time for both the hospital staff (i.e. medical ward round) and patients (e.g. breakfast, lunch).

The questionnaires were administered by the research assistants on the specified hospital's wards, to all the patients who agreed to participate in the study. The mode of administration of the questionnaires was a face-to-face interview technique with the respondents, as many of them were less educated. The interviews were conducted with the patients as they were leaving the hospital or getting ready to leave, because the questionnaire is designed to measure patients' overall experience and views about the service generally, including the discharge procedures from the hospital. At the beginning of the interview, a study team member explained the purpose and aims of the study in detail and obtained informed consent. It was explained that the answers would be used for this study only and would be treated confidentially; also, that participating in the study would not affect the right of care of the patient in any way.

All interviews were carried out by the volunteers. The duration of the interviews ranged between 17-25 minutes. Every day the principal researcher - who attended all the time during the data collection process in each hospital - registers and keeps track of all the questionnaires, using a form prepared for this purpose. Also he met the team to discuss issues such as any problems which had arisen from the data collection process; to collect the completed questionnaires; to specify the time and place of the next day's data collection; and to give out blank questionnaires for the next day. These meetings helped to keep the work going smoothly, and any problems were solved as they arose from day to day. However, the process for administering the questionnaire raises a number of issues that are discussed in the limitations and constraints of the study (see section 9.5).

Data collection took place between August and October, 2009. The data was only collected from those respondents who had been admitted as in-patients. A total of 610 questionnaires were distributed to the LNHS and LPHS hospitals in Benghazi City participating in this study. 584 were completed and returned, 550 of which were useable and valid and 34 (5.57%) of which were missing a large amount of data. Thus, the overall response rate from the two sectors was 90.16%; the response rate from LNHS respondents was higher than that of LPHS respondents (93.90% and 86.84% respectively).

Although the high response rate achieved in this study may indicate the respondents' interest and desire to express their views and feelings, it should be noted that the methods used to identify the denominator (the percentage of questionnaires to be distributed to each hospital) might have omitted some in-patients, which could in turn have inflated the response rate. The respondents' interpretations should therefore be viewed with caution; this will be discussed further in section 9.5 (limitations and constraints) in chapter 9.

5.5.5.4. Data processing and analysis

All questionnaires were checked and coded by the principal researcher before they were entered into the computer. The SPSS programme, version 18 for Windows, was used for data entry and to conduct the analysis of the quantitative study. Firstly, simple descriptive statistics such as central tendency values (i.e. median, inter-quartile range [IQR]) were generated for continuous variables such as age, while frequency distributions, percentages, and cross-tabulations were generated for binary and categorical variables such as gender. In order to identify possible trends in the data, this stage also examined the grouping of continuous variables such as age and income into categorical variables (e.g. age groups from 35 to 39 years). For the sake of simplicity, and due to the nature of the descriptive analysis, standard statistical tests such as the Chi-square (χ^2) were used.

Secondly, the quality of healthcare services was assessed by asking the respondents to rate a set of quality aspects that related to the process of particular services provided, such as availability of services. For this purpose, quality of health services scoring scale ranges were used, on the basis of 0 (completely disagree) to 10 (completely agree). A simple quality score was calculated for each aspect of the in-patient service that was being evaluated. This score was calculated as a percentage of the maximum score that the particular aspect could achieve. In each case, the maximum score achievable was 10 × the number of respondents who provided valid responses. The actual score received was calculated as the sum of the number of respondents giving a particular rating × the value for the rating. The quality of healthcare score was thereby calculated as the actual score divided by the maximum score. For example, the quality score of the full sample for 'Hospital premises neat and clean' was: (45×10) + (94×9) + (68×8) + (72×7) + (47×6) + (44×5) + (53×4) + (21×3) + (25×2) + (17×1) + (64×0) divided by (550×10), which is 57.96 (see Appendix 3 for the distribution of responses for each quality indicator).

Following this, statistical significance tests were used as appropriate. The Mann-Whitney *U* and Kruskal-Wallis tests were used to compare groups, as the data was not normally distributed. A multivariate analysis using Stepwise Regression methods was performed to identify which of the quality dimensions were associated with satisfaction with services. This technique allowed the development of a model of quality components that had the greatest impact on satisfaction with hospital services,

as well as the amount of variation in the overall quality that could be explained by this model.

5.6. Qualitative method

An additional and complementary objective is to explore how different health stakeholder groups perceive the HS and the quality of healthcare, and what their views are regarding its priorities and merits, as the second primary objective of this study is *to analyse health stakeholders' perceptions of the HS and the quality of healthcare in Libya*. This section describes the methodology used in this study for the semi-structured interview that was used as a data collection method.

5.6.1. Overview

Qualitative research has been utilised in many different ways in healthcare services research. Qualitative methods have been used to either complement quantitative research, or independently in their own right (Pope and Mays, 2001; Denzin and Lincoln, 2003). The qualitative design of this study was influenced by the researcher's pragmatic philosophical orientation and is based on his assumption that a narrative style of inquiry would be the most appropriate to meet the aims of the study. The qualitative method was utilised to serve the research purposes; it is not directly linked to the quantitative research, but plays a specific role in piecing the picture together. Unlike quantitative methods, qualitative methods are powerful in yielding in-depth information about people's lives and experiences. Issues such as behaviour, emotion, feelings, social processes, cultural phenomena, and organisational functions are best explored using qualitative research (Strauss and Corbin, 1998). Pope and Mays (2001) confirm this, stating, "This type of 'stand-alone' qualitative research is increasingly being used in studies of health service organisations and policy. It has been used to considerable effect in evaluating organisational reform and changes to health service provision from the viewpoint of patients, health professionals, and managers" (Pope and Mays, 2001:6). Hence, qualitative interviews with healthcare stakeholders were deemed the most appropriate method to achieve the study's objectives.

5.6.2. Data collection method

An in-depth interview was used in this study as a data collection method, specifically to obtain more extensive data and to overcome the limitations inherent in other methods. The in-depth interview technique, using a semi-structured interview schedule (see appendix 2), provided an opportunity to explore issues in detail, in addition to uncovering ideas or experiences that were not anticipated at the outset. However, the validity and relevance of the data collected relied on the interviewer's skills and techniques. The interview schedule included a list of core open-ended questions relating to the research objectives and several sub-questions to help the interviewer probe for more detail and to clarify the meaning of the interviewee's responses. The interview schedule was based on the previous stage of quantitative

study, prior areas of questioning, emergent issues, and relevant concepts which were sought from the literature. A potential source of bias in the in-depth interview data is usually the personal characteristics of the interviewer; as they are an outsider, the answers given might not correspond with what the participants actually think or do. This is seen as a risk inherent in any research involving qualitative methods (Sofaer, 2002).

The interview instrument for the present study was developed with certain specific considerations in mind. The researcher incorporated a semi-structured interview technique in order to enable the answers of the large number (three) of interviewee categories to be easily compared, contrasted, and analysed in-depth, and to enable the researcher to expand the answers given in order to explore important issues in greater detail. Whilst the interview technique was semi-structured, it must be noted that all the questions were open-ended.

The qualitative data aimed to explain or clarify in detail both what emerged from the results of the quantitative data, and the topics indicated that have an impact in one way or another on the quality of health services provided in the city of Benghazi, the place of study.

The mixed-methods approach aims to avoid the shortcomings and deficiencies resulting from the use of one method to collect data. For example, there were some doubts and criticisms directed to the questionnaire as a method for data collection. It is possible that the data collected by the questionnaire may not reflect the whole reality of the studied phenomenon, and this was actually what the researcher felt when collecting and analysing quantitative data for this study through the questionnaire. Therefore, the interview was used for the collection of qualitative data in order to shed more light on the subject, and complement or confirm the picture outlined by the quantitative data.

5.6.2.1. Interview questions – rationale

This study aimed to investigate the abilities of the Libyan HS and its governance to develop, manage and provide healthcare services at an acceptable level of quality, and respond equally to the reasonable needs and expectations of the population, as well as to protect them from the financial costs of illness. These interview questions attempt to explore the real problems in the Libyan HS and their causes, which hinder the provision of an acceptable quality of healthcare. The general purpose of the exploration of these questions is to provide a foundation for the development of a framework, as well as to generate a reliable evidence-based that could form the basis of the reform and/or rehabilitation of the country's national HS and its governance. It is also hoped that the results of this study will inform policy-makers and healthcare providers in devising and developing quality policies and strategies for introducing and/or improving quality initiatives.

5.6.2.2. The interview questions – commentary

The interview questions were based on the previous stage of quantitative study, prior areas of questioning, emergent issues, and relevant concepts which were sought from the literature. They aimed to address some of the study's primary and secondary objectives (see Chapter One).

- The first question aimed to explore the healthcare stakeholders' perceptions regarding the assumption of low levels of PS with the quality of healthcare services provided by the Libyan HS in general.
- The second question investigated the referral system's organisation and mechanisms of operation in the LNHS, and its fitness to function in the HS.
- The third question aimed to identify the contributions of the LPHS and its role in the provision of healthcare services in Libya, as well as to investigate its success in bridging the gap in health services.
- In addition to the previous question, the fourth question aimed to identify the reasons why patients go to the LPHS for treatment, and pay OOP, while health services are available for free in the LNHS.
- The fifth question aimed to identify the actual reasons why Libyan patients travel for TA despite the existence of the LNHS, which is free, and LPHS, which is assumed to be less costly.
- The sixth question consists of two parts. The first part investigated the waiting times for patients in the out-patient departments (OPDs) of the LNHS, while the second part was designed to investigate the waiting times for patients who need a bed or a surgical intervention in the LNHS.
- The final question is open-ended. It asks for any comments or suggestions that the interviewees might wish to express, which were not addressed in the earlier questions. In addition, it gives the interviewees the opportunity to expand on any of their previous responses, adding points as they deem necessary.

5.6.3. The qualitative study setting

In order to facilitate and ensure understanding at all stages of the interview process, the interview questions were drafted in English for submission to this study's supervisors so as to establish their content for the purposes of this study; they were then translated into Arabic so as to be understood by the interviewees. After the completion of the interviews, the responses were transcribed verbatim and translated into English by the researcher.

The first step taken by the researcher involved obtaining an official letter from the MOH to the hospitals, which gave background information regarding the subject and aims of the research, with a view to encouraging the officials and the interviewees to assist the researcher. With this endorsement, the researcher was in a position to conduct the interviews with in-patients, professionals and officials in hospitals. The researcher then initiated the interviews in the following ways:

- The researcher had to visit the hospital or the organisation before obtaining an appointment to interview the appropriate respondents;
- Introduce himself and state the name of his sponsoring university;
- Present his identity card during the visit;
- Describe the purpose of the study;
- Stress that the name and position of the interviewee would not be revealed, and would not be mentioned in connection with the information used in the final analysis;
- Give a brief explanation of how the respondents had been selected for the interview; and
- Emphasise to the respondents that all the information would be handled confidentially and for research purposes only, and that no names would be mentioned or passed to any other organisation.

5.6.4. Sampling method and time

The field study was conducted in Libya, mainly in the city of Benghazi and in the MOH in the capital city of Tripoli, from April to June, 2010. The interviews were conducted with 40 health stakeholders who had been purposefully selected and interviewed (10 health experts and policy-makers from the Libyan HS [strategic level], 20 health professionals from LNHS and LPHS hospitals [operational level], and 10 patients from Benghazi LNHS and LPHS hospitals). It was assumed that these participants would be better at articulating their information and experiences about the quality of healthcare at national, regional, and hospital levels.

The participants were given a unique identifier, from 1 to 40, and were identified by their characteristics for easy referencing: experts and officials = E (expert), health professionals = P (professional) and patients = U (user). The inclusion criteria for selecting the key participants were as follows:

- *For the strategic level:*
  - Being in their position for an appropriate period of time;
  - Being in the top management at national or DHA level; and/or
  - Have previous experience and involvement in policy issues at national or DHA level.
- *For the operational level:*
  - Being in their position for an appropriate period of time;
  - Being a medical or health professional at a hospital; and/or
  - Begin in the middle management of hospital, or a higher position.
- *For the users' level:*
  - Being aged 18 or above;
  - Being a hospital in-patient for at least 48 hours; and/or
  - Have had previous experience as a hospital in-patient in Libya and/or abroad.

5.6.5. Qualitative data collection

The principal researcher conducted the in-depth face-to-face semi-structured interviews in Arabic with health stakeholders. The interviews took place in the interviewee's office or in the hospital, and were tape-recorded with the participant's permission, in order to give them the chance to speak freely without waiting for the researcher to write down their response. The interviews were guided using an interview schedule (see Appendix 2) to ensure they covered all the topics necessary to achieve the study's objectives.

The process of gradually leading interviewees through open-ended to more specific questions, and moving from general to specific issues, was a helpful technique for eliciting health stakeholders' views and obtaining important information. The researcher commenced all interviews by re-emphasising the issues of confidentiality, data protection, and freedom of participation. This helped to establish early rapport between the researcher and the interviewees. The researcher also handed a signed letter on MOH headed paper to each participant, assuring them that their identity and any data elicited in the course of the interview would remain confidential.

Despite whatever comments might be made concerning the contents and quality of the responses, it is here fully and gratefully acknowledged that the helpfulness of the respondents allowed the researcher to gain valuable information and insights.

5.6.6. Data processing and analysis

Qualitative data analysis is an iterative procedure (Creswell, 2003; Denzin and Lincoln, 2003). In this study, the researcher had the opportunity to become well-acquainted with his data, as he interviewed, transcribed verbatim (MacLean, et al., 2004), and translated all interviews himself. The textual data obtained from the in-depth interview was analysed manually using a five-stage framework approach (Ritchie & Spencer 1994; Pope et al., 2000; Ritchie & Lewis, 2003), which was guided by a constant comparative approach as described by Miles & Huberman (1984). Whilst such a constant comparative approach is often linked to grounded theory, its use in a more generic approach is widely accepted (see Fram, 2013). The framework approach was adopted, as it allows *a priori* issues and themes to be utilised within the framework process, as well as themes driven by the interviewees themselves.

Therefore, the researcher was guided by the framework approach, which actually combines inductive and deductive reasoning. The framework used arose from the data as well as from the research question, literature and topic guides (Malterud, 2001). In addition, the iterative analysis process with the interviewees helped to bring out the commonest opinions about the health system and quality of healthcare. The categories, concepts and themes emerged by reading the texts and listened to the tapes many times to ensure he was thoroughly familiar with the material, prior to identifying categories.

I. Familiarisation: As a first stage of carrying out the qualitative analysis, immersion in the raw data, listening repeatedly to the tapes, reading through transcripts, studying notes, getting a feel for the data and emerging themes. This allowed the researcher to become thoroughly familiar with the data set and helped to understand the context and any diversity within the data. The discussion coverage was checked and the atmosphere of the interviews assessed in terms of difficulty and ease of tackling any particular subject. Then, a brief transcription was done to identify any new recurring themes or ideas to feed the next interview. Thereafter; the tapes were transcribed. Finally, the final transcript underwent a detailed analysis by the researcher himself.

II. Identifying a thematic framework: The task here was to identify the recurrent concepts, ideas and themes, such as attitudes and views and then to label the data and classify such phenomena. It is argued that the data analysis should go together with the data collection to enable the researchers to refine their questions (Pope et al., 2000). Hence, throughout the data collection, a conceptual framework was outlined depending on the emergent themes of the study. The first versions were heavily rooted in priority issues related to the objectives of the study and the topic guidelines. They were developed to include all the different groups within one index which keeping sub-sections for rare themes or ideas. The end product created further classifications to cover the multi dimensional nature of the study problem.

III. Coding and Indexing: The next step was the process of juxtaposition where the conceptual framework was applied to all the textual data by a descriptive textual system based on the index heading through using a highlighting pen and in assigning labels or titles to relevant words or paragraphs. The data were incorporated from different interviews (all stakeholders groups), where each passage under each sub subject were annotated. During the ongoing research process, any issues and ideas raised were used to organise and modify the framework/index. All Arabic and English transcripts were coded together and incorporated in one framework and the coded parts were then translated.

IV. Thematic Charting: The charting was started at this stage through transfer of the relevant sections of the transcripts into the designed and detailed thematic index (Bryman & Burgess, 1994). The labelled data were sorted under this thematic chart with an annotating system where the useful and more relevant quotations in the transcripts were taken to support each key issue. By this process, a very broad and detailed thematic chart was obtained. At the second stage, a summary of the key issues was extracted and a new thematic chart developed in order to look for similarities and differences by the different stakeholders groups for each key subject. The charts were developed manually for the interviewees' groups, including the key issues of the study, where the rows represented the interviewees' groups and the columns represented the different key issues raised under main theme. Each chart had number of pages, and each page represented a certain study issue, which was summarised and synthesised under main views, practices and underlying causes by using the interviewees' words as much as possible. This process not only served to

reduce the amount of data to a more manageable level, but helped to begin the analysis process (Bryman & Burgess, 1994; Pope et al., 2000). This helped to identify clearly the range of views by the interviewees' groups and the possible associations among these subjects.

V. Mapping and interpretation: At this higher stage of analysis, the aim was to look for themes or concepts, trends, and patterns across the interviewees, and to distinguish between common and less common themes, while developing an initial interpretation. Sometimes, there was an inability to find interpretations and at other times there were too many possible interpretations for selection. This is a common problem in this type of study. Finding association among different dimensions of the phenomena under the study, sorting out the ranges of association across the different interviewees and focusing on unexpected events, while trying to provide an explanation was attempted by the researcher (Pope et al., 2000). These explanations were derived explicitly from the reasons and accounts given by the interviewees themselves or alternatively implicitly through inferring an underlying logic or 'common sense', drawing on patterns within the data itself or factors attributed to contexts from the researcher and by drawing on other empirical studies (Bryman & Burgess, 1994). Later on, a problem tree for each key objectives of the study was drawn up as a way of summarising the relationship of the different themes and ensuring the strength of the interpretations made.

The transcripts were coded and managed using Microsoft Word 2007. The framework that was used in analysing the qualitative study data was developed for the purpose of this study. The findings of the analysis are presented in the thesis using the interviewees' own voices and employing verbatim translation. The findings were grouped and presented under specific dimensions, with themes and sub-themes within each dimension. The dimensions, themes and sub-themes for analysis were derived primarily from the transcripts, prior identified issues, the interview schedule, and the study objectives. A list of coding indices was developed and applied to the whole data set. Most of these dimensions and themes were identified in many studies (e.g. Donabedian, 1966-2000; Øvretveit, 1992-2004; Dagger et al., 2007; WHO, 2000, 2007 and 2009b).

5.7. Ethical considerations

As Saunders et al. (2009) argue, ethics are an important issue when conducting research, and should be taken into consideration throughout the research design. The issue emerges from a research plan, in seeking access to organisations, and in relation to individuals collecting, analysing, and reporting the data. "Ethics refers to the appropriateness of a researcher's behaviour in relation to the rights of those who become the subject of his/her work, or are affected by it" (Saunders et al., 2009:130). Authors in ethical issues adopt several stances regarding the research ethics that emerging in connection with relationships between a researcher and a research

participant (Bryman, 2008). The basic ethics principles managing data collection that there is no harms should come to the participants because of their participation in a research (Oppenheim, 1992). Likewise, Denzin and Lincoln (2000) explained that because the objects of inquiry in interviews are human beings, researchers should take extreme caution to avoid any harm to them. Traditionally, ethical concerns have centred on issues of informed consent (receive consent from the subject after having carefully and honestly told them about the research) and protecting them from physical, emotional, or any other kind of harm. Neuman (2006:130) also unequivocally states, "Ethics begin and end with you, the researcher". He makes the observation that a researcher's personal moral code is the best defence against unethical behaviour. Oliver (2003) and Denscombe (2005) also emphasise that research participants should be fully informed about the research problem and all relevant issues of the research prior to their approval to participate, in order to provide valid information. Furthermore, they state that there is a clear appreciation that if people are not understanding the research project, they are not truly in a position to give their fully informed agreement.

The Ethics Committee of the Faculty of Health, Psychology and Social Care at Manchester Metropolitan University, and the Ethics Committee of the Libyan MOH, approved this study. Following their approval, the administration of the hospitals gave permission for the study to be conducted.

Informed consent was sought before the participants were interviewed. Prior to each interview, the participants were fully informed about the study's aim and objectives both verbally and in writing. Meetings were arranged with some of the participants for the purpose of presenting and discussing the researcher's request for access. The principle of the anonymity and confidentiality of the research participants was maintained by the researcher throughout the research process (Oliver, 2003; Babbie, 2004). The right of the participants to decline to respond to any question was emphasised, and there was no pressure on them for a response. They were informed that their participation was entirely voluntary, and any person who felt uncomfortable with being interviewed was free to withdraw from the interview or the study at any time without question.

The way the interviews were conducted was informed by the requirements and wishes of the interviewees. Accordingly, permission was obtained from them for the researcher to state their job titles and use the collected information in the present research and in other academic publications. Each respondent was informed at the beginning of the interview about the use of a recorder and/or the taking of notes during the interview. Additionally, in the interview the participant was not asked to participate in anything which intruded into their privacy. It was taken into account that the use of any data gathered might have harmful consequences for the disclosing participant. In general the respondents, particularly the healthcare officials and experts, were content that their answers might be associated with them.

5.8. Summary

This chapter has provided an account of this study's design, research methodologies, and rationale for utilising a concurrent mixed-methods strategy which combines qualitative and quantitative data. It has also presented a detailed account of how the empirical work was undertaken and covers the study setting and time, the study population and sampling, the instruments used for data collection, the data collection procedure, and data processing, including a description of the study's main phases. It has also described the development and administration of the quantitative methods for conducting the questionnaire of patients' views of the quality of healthcare in the study hospitals. The methodology of the qualitative interviews with healthcare stakeholders, used for exploring perceptions of the quality of healthcare in the HS and its governance at national level, was also explained. The chapter concluded with describing the data quality assurance measures and the study's ethical considerations.

The next chapter embarks upon the analysis of the quantitative data derived from questionnaire of patients' views of the quality of healthcare in the study hospitals.

Chapter 6: Results: Quantitative findings

6.1. Introduction

This chapter presents the findings from the quantitative data derived from the questionnaire that was disseminated to patients in all LNHS and LPHS hospitals in Benghazi City, which measured satisfaction with the quality of healthcare provided in those institutions. The aim of this chapter is to achieve the study's first primary objective: *To assess patients' perspectives on the quality of healthcare in Libya*, through addressing the study's first four secondary objectives:

1. *To identify the basis upon which individuals choose private healthcare in Libya and/or abroad;*
2. *To determine which aspects of quality of healthcare provision are most likely to influence satisfaction with healthcare and to account for any differences;*
3. *To assess the association between the characteristics of the respondents and their ratings of the quality dimensions of healthcare,* and
4. *To identify the key determinants of satisfaction with the quality of healthcare provided by LNHS and LPHS in Benghazi.*

This chapter presents a comparison of the quality of the healthcare provided by LNHS and LPHS hospitals, during which the above objectives will be addressed simultaneously.

6.2. Analysis strategy

The chapter consists of five different stages of data analysis, as described below.

- ***Respondents' socio-demographic characteristics***

The first stage presents a descriptive profile of the study respondents from both sectors, focusing on socio-demographic characteristics such as age and gender. A descriptive analysis, as explained in the methodology chapter (see section 5.5.5.4), is used in this section and the next.

- ***Respondents' experiences of healthcare services***

The second stage provides an overview of the respondents' experiences of healthcare services in both sectors. These include variables such as waiting times in LNHS and LPHS hospitals and travelling for TA. Standard statistical tests were used in this section, as mentioned above.

- ***Respondents' evaluations of quality of healthcare***

The third stage looks at different levels of satisfaction with the quality of in-patient healthcare in the LNHS and LPHS, as reported by the respondents. The following two topics were explored:

- Evaluations of the quality of hospital services

This involves a crude analysis of the final scores of the reported quality of in-patient healthcare in each individual hospital that participated in this study, in both sectors. It is important to identify hospitals that are above or below average (see section 5.5.5.4 in the methodology chapter).

- Evaluations of the quality dimensions of healthcare

This -also- involves a crude analysis of the final scores for each of the 15 quality dimensions as evaluated by LNHS and LPHS respondents, in order to identify those quality attributes that show a potential need for improvement. Aggregated results for all hospitals in each sector are important to give an indication of the quality of healthcare in each sector as a whole.

- ***Association between characteristics of services and quality satisfaction***

The fourth stage offers an evaluation of LNHS and LPHS respondents' scores for the 15 quality dimensions identified in the third stage. This stage aims to examine the overall satisfaction with LNHS and LPHS hospitals based on the respondents' independent variables, and compares the differences in the patient populations. The Mann-Whitney *U* test and the Kruskal-Wallis test were used to compare the groups (see the methodology chapter section 5.5.5.4).

At this stage, it is important to identify the variables used in this study (see figure 6-1). As shown in Figure 6-1, the main outcome variable for this study is satisfaction with the quality of healthcare. The independent variables comprise three groups: the type of healthcare (LNHS or LPHS); seven of the respondents' socio-demographic characteristics, which are commonly used in research that assesses patients' views; and the respondents' experiences of the services they have used (for example, travelling for TA).

- ***Key determinants of satisfaction***

Finally, the fifth stage presents a statistical analysis to identify key determinants of satisfaction with the quality of healthcare services. This is achieved through an approach involving the execution of a Stepwise Regression to identify which of the quality dimensions has a stronger association with satisfaction.

These five different stages of data analysis are presented in detail below.

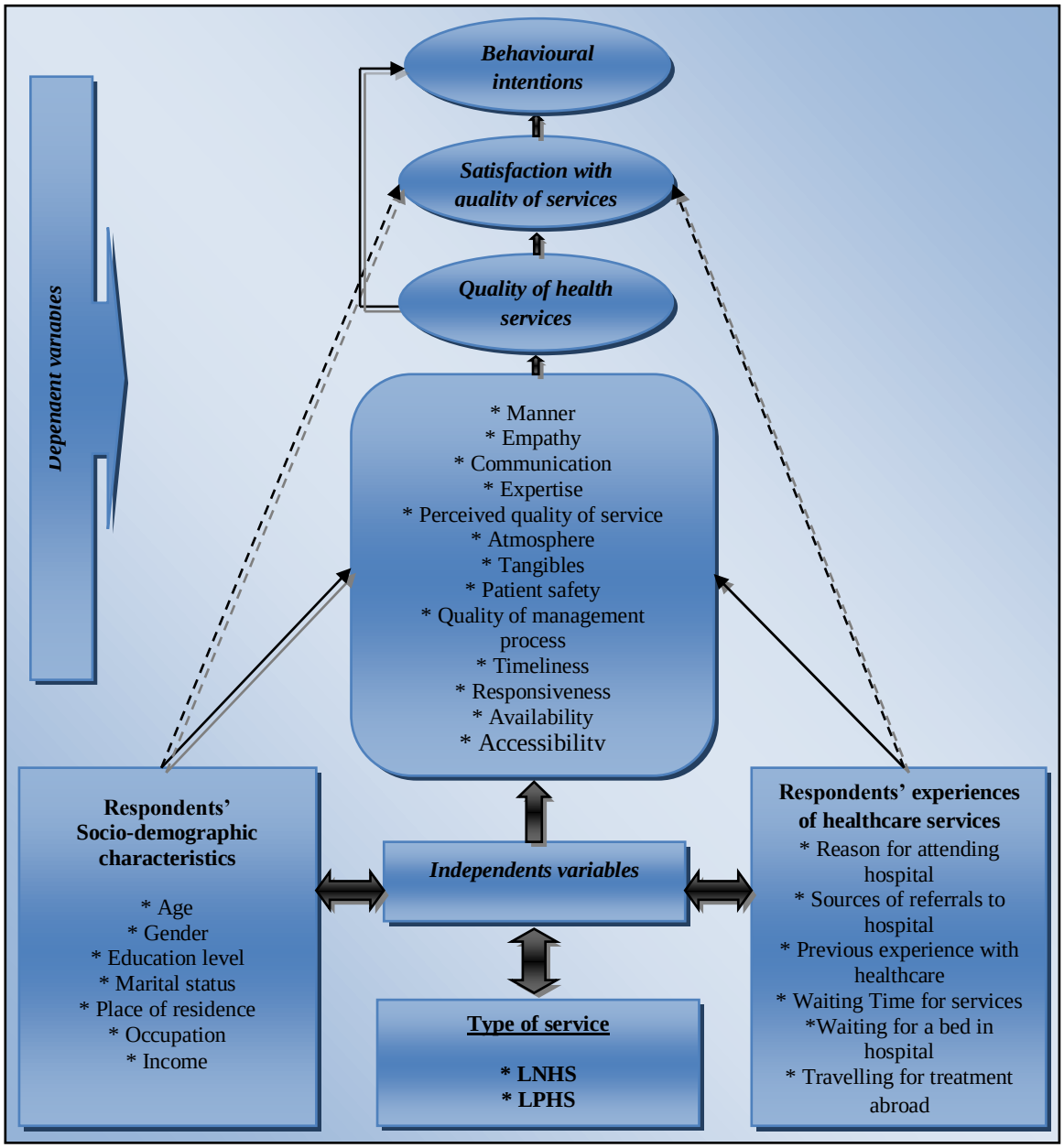


Figure 6-1: Schematic model of variables relationships

6.3. Respondents' socio-demographic characteristics

This section presents a descriptive profile of the respondents to the questionnaire from both LNHS and LPHS hospitals. It gives an overview of the characteristics of the respondents, such as the type and name of the hospital where they received healthcare, age, gender, marital status, place of residence, educational level, occupation, and average monthly family income.

Furthermore, since the study's first secondary objective is

- *To identify the basis upon which individuals choose private healthcare in Libya and/or abroad.*

This section addresses the first part of this objective by identifying which criteria are more likely to influence individuals' choice of LPHS hospital care in Libya, and to account for any differences.

Table 6-1: Hospital type and name

N	Hospital	Frequency (n=550)	%
LNHS hospitals sample		**385**	**70.0**
1	Al-Jalaa hospital	74	13.5
2	Al-Joumhouria hospital	81	14.7
3	7th of October hospital	56	10.2
4	Children hospital	39	7.1
5	Al- Naher hospital	30	5.5
6	Al- Kuaifia hospital	20	3.6
7	Benghazi Urology centre	20	3.6
8	Benghazi E.N.T centre	18	3.3
9	Benghazi Nephrology centre	21	3.8
10	Benghazi Cardiac centre	12	2.2
11	BIDIC[1]	14	2.5
LPHS hospitals sample		**165**	**30.0**
12	Al-Tariq private hospital	16	2.9
13	Al- Marwa private hospital	24	4.4
14	Al-Safua private hospital	16	2.9
15	Al- Haram private hospital	15	2.7
16	Al-Um Al-Hanoon private hospital	16	2.9
17	Other private hospitals	19	3.5
18	Ibn- Scina hospital (LRC)	59	10.7

6.3.1. Type and name of the hospital

Table 6-1 shows the distribution of the sample from two types of hospitals. The first type is LNHS hospitals, which are state-owned and operated by the MOH; and the

[1] Benghazi Infections Disease and Immunity Center (BIDIC).

second type is LPHS hospitals, which are owned by private companies, societies, individuals or group of individuals; the only exception is the *Ibn-Scina* hospital, which belongs to the LRC with two large Libyan oil companies; it is operated by the LRC, but the health services in this hospital are provided only for some oil company personnel and their families.

6.3.2. Age

Table 6-2 shows the values for the median and IQR of the ages of the respondents in years (from 18 to 95 years). The median value of the total respondents' ages were 39 year (IQR = 20); they were nearly equal in LNHS and LPHS respondents (38 and 39 years respectively), while the IQR in the LPHS respondents was the lowest (15).

Table 6-2: Median and IQR values of the respondents' ages

Type of Hospital	Median	IQR
LNHS	38	26
LPHS	39	15
Total	**39**	**20**

For statistical purposes, and to identify possible differences due to the respondents' ages, this variable was grouped into twelve categories. Table 6-3A shows that the distribution of the age groups between the two sectors follows a similar pattern, although the LPHS respondents' age group from 25 to 54 years were higher than those of the LNHS respondents. This could be due to the respondents' incomes, occupations and illnesses, as the younger (less than 25 years) and older (55 years or more) respondents were more common in the LNHS. Table 6-3A also shows that the most common respondent age groups were 30 to 34, 35 to 39, and 40 to 44 years (15.6%, 15.6%, and 13.3% respectively). A Chi-square test indicated that the variation among the age groups was statistically significant (χ^2 = 28.917), which provided strong evidence (p = 0.002) to suggest a significant difference between LNHS and LPHS respondents in terms of age.

Table 6-3A: Some characteristics of the respondents

respondents' characteristics	LNHS (n = 385)		Private (n = 165)		Total (n = 550)	
	Freq.	%	Freq.	%	Freq.	%
Age groups	$\chi^2 = 28.917$				p = 0.002	
Less than 20 years	31	8.1%	5	3.0%	36	6.5%
20 to 24 years	33	8.6%	10	6.1%	43	7.8%
25 to 29 years	34	8.8%	19	11.5%	53	9.6%
30 to 34 years	55	14.3%	31	18.8%	86	15.6%
35 to 39 years	46	11.9%	22	13.3%	68	15.6%
40 to 44 years	41	10.6%	32	19.4%	73	13.3%
45 to 49 years	30	7.8%	18	10.9%	48	8.7%
50 to 54 years	13	3.4%	8	4.8%	21	3.8%
55 to 59 years	25	6.5%	5	3.0%	30	5.5%
60 to 64 years	23	6.0%	7	4.2%	30	5.5%
65 to 69 years	23	6.0%	5	3.0%	28	5.1%
70 years or older	31	8.1%	3	1.8%	34	6.2%
Gender	$\chi^2 = 0.530$				p = 0.467	
Male	181	47.5%	72	43.6%	253	46.0%
Female	204	53.0%	93	56.3%	297	54.0%
Marital status	$\chi^2 = 8.867$				p = 0.031	
Single	111	28.8%	37	22.4%	148	26.9%
Married	236	61.3%	121	73.3%	357	64.9%
Divorced	14	3.6%	3	1.8%	17	3.1%
Widowed	24	6.2%	4	2.4%	28	5.1%
Place of residence	$\chi^2 = 28.060$				p < 0.001	
Urban	266	69.1%	149	90.3%	415	75.5%
Rural	119	30.9%	16	9.7%	135	24.5%

6.3.3. Gender

Table 6-3A shows that female respondents outnumbered males (54% and 46% respectively). Specialisation of the hospitals may have contributed to the much larger number of female respondents in the sample, as *Al-Joumhouria* (the largest LNHS hospital in Benghazi in terms of the number of beds) is essentially a women's hospital for gynaecology and obstetrics, with small sections for other specialties for all patients. Similarly, the *Al-Um Al-Hanoon* LPHS hospital specialises in gynaecology

and obstetrics; and in the case of the *Children's* hospital, all respondents who accompanied in-patient children were female. Table 6-3A also shows that there were more female respondents in LPHS hospitals (56.3%) than in LNHS hospitals (53.0%), which may be due to some women's choice to give birth in private hospitals. However, the Chi-square test indicated that the variation between LNHS and LPHS respondents in terms of gender was not statistically significant ($p = 0.467$).

6.3.4. Marital status

Table 6-3A also shows the distribution of respondents by marital status. It can be noted that married respondents outnumbered single respondents by a ratio of 2 to 1 in the LNHS and by 3 to 1 in the LPHS; about two-thirds of the total sample were married (64.9%). The married respondents were more common in the LPHS (73.3%) than the LNHS (61.3%). Single respondents made up 26.9% of the total sample and were more common in the LNHS (28.8%) than the LPHS (22.4%). There were more than twice as many divorced and widowed respondents in the LNHS (9.8%) as in the LPHS (4.2%), which may be due to respondents' incomes and occupations preventing them from accessing the LPHS because of fees. A Chi-square test ($\chi^2 = 8.867$, $p = 0.031$) showed a statistically significant difference between the two sectors in terms of marital status.

6.3.5. Place of residence

According to Table 6-3A, the respondents' distribution by place of residence shows that about three-quarters (75.5%) were from the city of Benghazi (urban areas) and about a quarter (24.5%) were from outside the city (rural areas). Furthermore, the distribution of the sample according to place of residence shows differences between the LNHS and the LPHS respondents. For instance, respondents from rural areas in the LNHS were nearly three times as numerous as those from the LPHS (30.9% and 9.4% respectively), which may be due to the respondents' incomes and their low expectations that directed them to the free services. A Chi-square test provides strong evidence ($\chi^2 = 28.060$, $p < 0.001$) that there was a significant difference between the two sectors in terms of the place of residence variable.

6.3.6. Educational level

Table 6-3B shows the distribution of respondents by educational level. From the Table it can be noted that more than half of the respondents in the LNHS (51.7%) had a secondary level of education (9 years of education) or less, including 13.2% who were illiterate. In contrast, only 20.5% of the LPHS respondents had a secondary level of education or less, including only 4.2% was illiterate. The percentages of respondents with at least high school or institute/college levels of education were relatively close in both sectors. In contrast, there are clear differences in the respondents with a university-level education or higher; LPHS respondents were more than twice as numerous as LNHS respondents (55.2% and 20.3% respectively), which

is compatible with other respondent characteristics such as age, income, and occupation. A Chi-square test provided strong evidence ($\chi^2 = 74.311$, $p < 0.001$) that there was a significant difference between LNHS and LPHS respondents with respect to the educational level variable.

Table 6-3B: Some characteristics of respondents

respondents' characteristics	LNHS (n = 385)		LPHS (n = 165)		Total (n = 550)	
	Freq.	**%**	**Freq.**	**%**	**Freq.**	**%**
Education level	**$\chi^2 = 74.31$**			**$p < 0.001$**		
Illiterate	51	13.2%	7	4.2%	58	10.5%
Elementary School	66	17.1%	8	4.8%	74	13.5%
Secondary School	82	21.3%	19	11.5%	101	18.4%
High School	59	15.3%	21	12.7%	80	14.5%
Institute / College	49	12.7%	19	11.5%	68	12.4%
University Education or higher	78	20.3%	91	55.2%	169	30.7%
Occupation	**$\chi^2 = 84.535$**			**$p < 0.001$**		
Housewife	114	29.6%	34	20.6%	148	26.9%
Retired	46	11.9%	9	5.5%	55	10.0%
Unemployed	27	7.0%	4	2.4%	31	5.6%
Student	39	10.1%	12	7.3%	51	9.3%
Assistant /Worker/ Labourer	22	5.7%	1	0.6%	23	4.2%
Self-employed	43	11.2%	5	3.0%	48	8.7%
Teacher	36	9.4%	18	10.9%	54	9.8%
Governmental employee	40	10.4%	54	32.7%	94	17.1%
Professional	18	4.7%	28	17.0%	46	8.4%
Average monthly income	**$\chi^2 = 114.157$**			**$p < 0.001$**		
Less than: 200 LYD*	95	24.7%	12	7.3%	107	19.5%
200 LYD to less than 300 LYD	134	34.8%	26	15.8%	160	29.1%
301LYD to less than 400 LYD	66	17.1%	33	20.0%	99	18.0%
401LYD to less than 500 LYD	52	13.5%	16	9.7%	68	12.4%
501 LYD to less than 600 LYD	17	4.4%	22	13.3%	39	7.1%
More than 600 LYD	21	5.5%	56	33.9%	77	14.0%

**Two LYD = (approximately) one UK pound at time of collecting the data.*

6.3.7. Occupation

Respondents were placed in 9 groups to reflect their distribution according to their occupations. The categories were: housewife, retired, unemployed, student, labourer, self-employed, teacher, government employee, and professional. As Table 6-3B illustrates, LNHS and LPHS respondents were unevenly distributed. The LNHS respondents outnumbered the LPHS respondents by nearly 2 to 1 and 3 to 1 in unpaid or low-wage job categories (housewife, retired, unemployed, student, and labourer). On the other hand, the LPHS respondents were nearly three times as numerous as LNHS respondents in government employee and professional occupations such as engineer or lawyer, which are certainly well-paid jobs. The Chi-square test provided strong evidence ($\chi^2 = 84.535$) to suggest statistical differences ($p < 0.001$) between LNHS and LPHS respondents in terms of the occupation variable.

6.3.8. Income

Finally, Table 6-3B shows that there were clear differences between the respondents from the two sectors regarding their average monthly family incomes. It can be noted that about three-quarters of the LNHS respondents (76.6%) have an income of less than 400 LYD. In contrast, the LPHS respondents outnumbered the LNHS respondents by nearly 5 to 1 (47.2% and 9.9% respectively) in the income category of more than 500 LYD per month. These findings are reinforced by Tables 6-3A and 6-3B, which show the socio-economic characteristics (i.e. educational level, occupation) of respondents from both sectors, and clearly indicate the patients' choices of the type of hospital they would attend. A Chi-square test provided strong evidence ($\chi^2 = 114.157$) that there was a significant difference ($p < 0.001$) between LNHS and LPHS respondents in terms of average monthly family income.

In summary, this section has described the socio-demographic characteristics of the respondents from both the LNHS and the LPHS. With some exceptions, the sample's socio-demographic characteristics were unevenly distributed across both sectors. Salient variations between the two sectors were the distribution of respondents' educational levels, occupations, and incomes. The LPHS respondents were more educated, and tended to have well-paid jobs and higher incomes than the LNHS respondents. Other socio-demographic variables were also found to differ between sectors.

It is likely that some of the socio-demographic characteristics that differed in the respondents from the two sectors (i.e. educational level, occupation, and income) had a major influence on the respondents' choice of hospital. Thus, these findings partly fulfil the study's first secondary objective, since it has ascertained which criteria are more likely to influence individuals' choice of LPHS hospital care in Libya. However, this aspect requires more investigation in order for the objective to be completely fulfilled.

6.4. Respondents' experiences of healthcare services

This section presents an overview of some respondents' experiences of healthcare services such as their reasons for attending hospital, sources of referrals to hospitals, the average waiting time in LNHS and LPHS hospitals, waiting times for a bed in hospital, and travelling for TA.

Furthermore, since the study's first secondary objective was:

- *To identify the basis upon which individuals choose private healthcare in Libya and/or abroad*

The responses of respondents from both sectors regarding their experiences of TA will be addressed in order to identify which criteria are more likely to influence an individual's choice to travel for TA, and to account for any differences.

6.4.1. Reasons for attending hospital

Figure 6-2 shows the reasons provided by respondents for attending hospital. It is evident that the distribution between the two sectors mainly follows the same pattern. About quarter of the respondents (23.3%) attended hospital for a medical examination, and the percentages for LNHS and LPHS respondents are compatible. Also, while more than quarter of respondents (28.7%) attended hospital as emergency cases, this percentage for LNHS respondents was slightly higher than that for LPHS respondents (29.4% and 27.3% respectively). These high percentages due to women's attended hospital as emergency cases to give birth and the high number of road accidents, which is one of the main causes of disability and mortality in Libya (see section 4.4.1.3 in Chapter 4). Those who attended hospital because of chronic disease accounted for 12.4% of the overall sample, though LNHS respondents were more than twice as likely as LPHS respondents to do so (15.1% and 6.1% respectively). This may due to the treatment for the chronic disease, which requires regular follow-up appointments and medicine; many patients cannot afford these in the LPHS, while they are provided for free in the LNHS. Finally, the percentage of respondents who attended hospital for a surgical operation was about third of the overall sample (35.6%). The percentage of LPHS respondents is clearly higher than that of LNHS respondents (42.4% and 32.5% respectively), which may be due to the accessibility, availability and quality of the service after surgery. A Chi-square test ($\chi^2 = 10.891$, $p = 0.012$) showed that there was a statistically significant difference between the two sectors in terms of reasons for attending hospital.

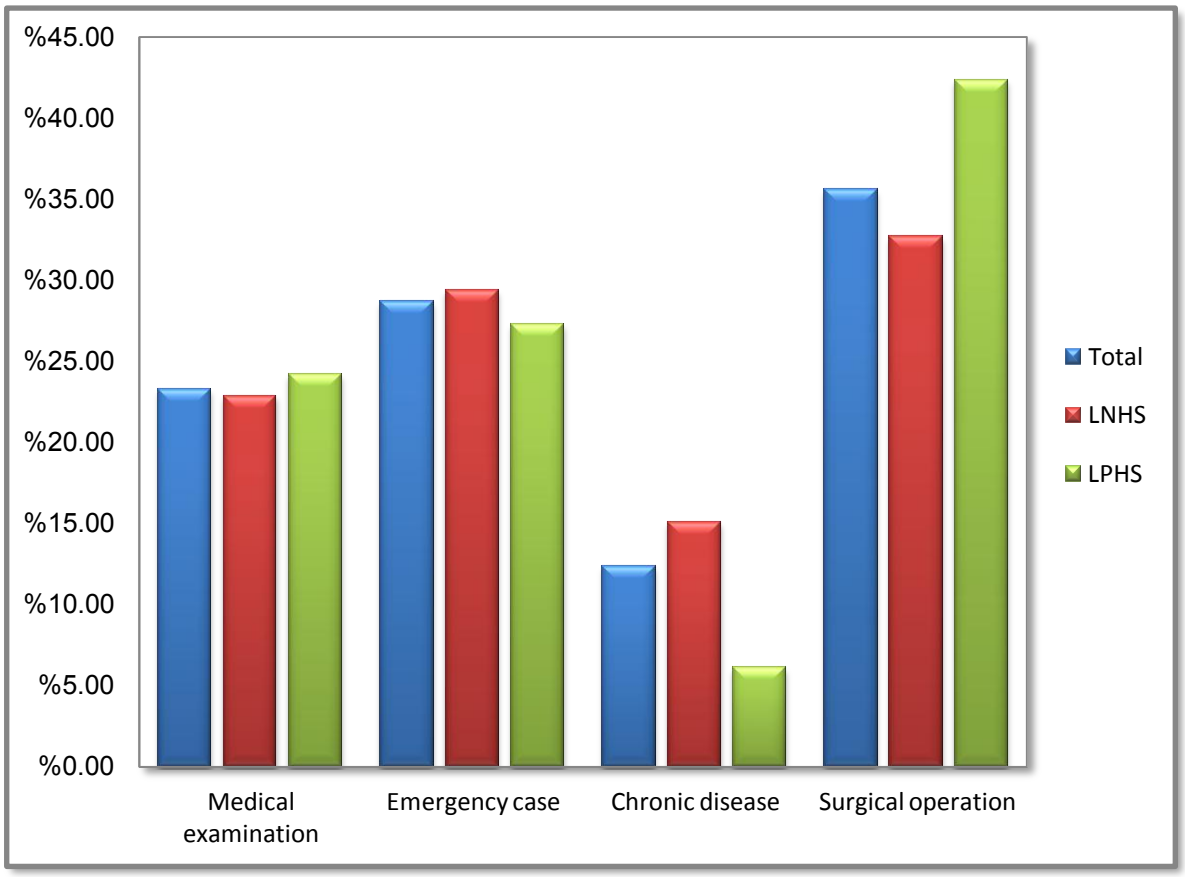


Figure 6-2: Reasons for attending hospital

6.4.2. Sources of referrals to hospitals

Figure 6-3 shows sources of referrals to hospitals, or ways that the respondents accessed hospital services. It is clear that the highest percentage of patients -about half of the total sample (44.5%)- attended due to a referral from the LNHS, while about fifth of the total sample (21.6%) attended because of a referral from the LPHS. 12.9% attended hospital because of a personal relationship with a member of the hospital staff (self-referral), and about fifth (20.9%) entered hospital through the emergency and accident department (E&A); this is compatible with the high number of emergency cases mentioned in the previous section. Furthermore, a Chi-square test revealed strong evidence (χ^2 = 80.494, $p < 0.001$) of a significant difference between the two sectors in terms of sources of referrals to hospitals.

A closer examination of Figure 6-3, in terms of sources of referrals to hospitals and distribution of the study's respondents between the LNHS and the LPHS, reveals that more than a quarter of LNHS respondents (28.1%) attended hospital by violating the official referral process in the LNHS, attending because of referral from the LPHS or because of a personal relationship with a member of the hospital staff. 15.8% of the LPHS respondents attended because of a referral from a LNHS hospital or clinic, which is also inappropriate.

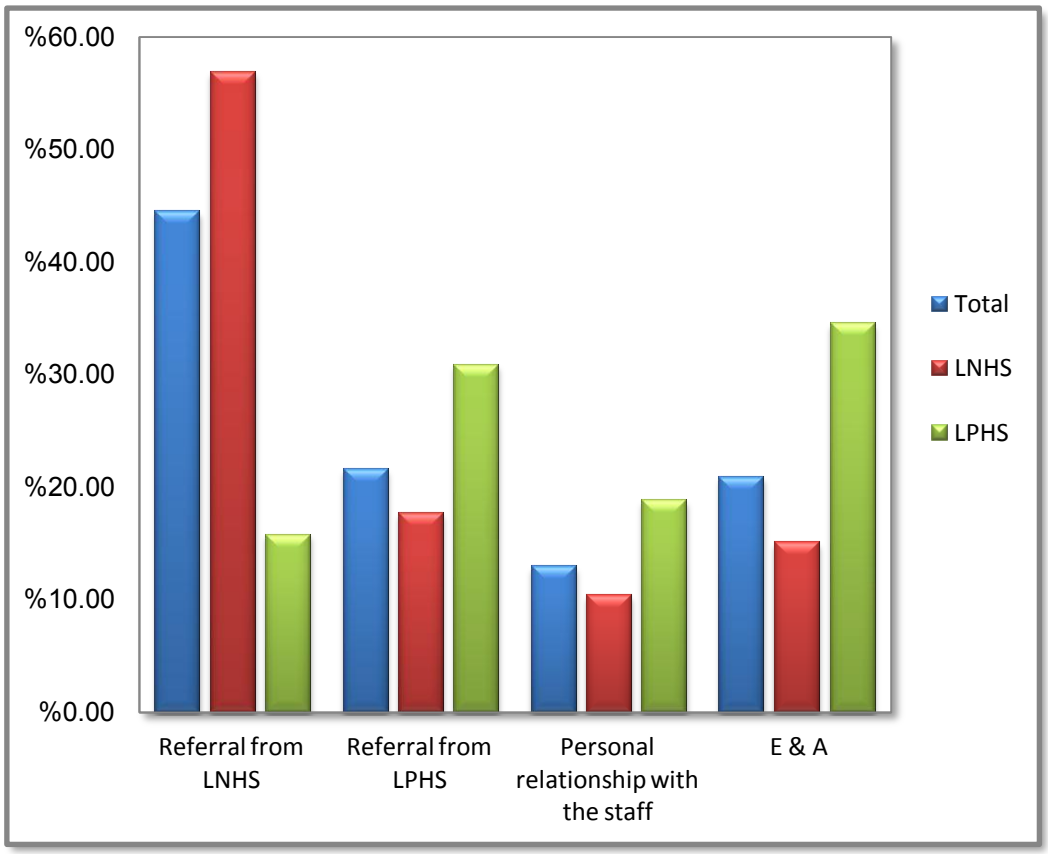


Figure 6-3: Sources of referrals to hospitals

These results may be due to one of the most considerable problems in the Libyan HS. Given the dearth of some medical specialties, and low wages in the LNHS, many HRH are working in the LNHS and the LPHS at the same time, and some of them have a private clinic or hospital. Therefore, patients sometimes go to a well-known doctor in the LPHS in order to be referred to LNHS hospitals. There are also some doctors in the LNHS who ask their patients to continue treatment with them in the LPHS. The health sector (like other sectors in Libya) also suffers from another problem, which is favouritism: patients will receive a better service if they have friends or relatives on the staff of a hospital. Therefore, these results imply that the patients are more likely to display negative attitudes towards HRH and express reduced satisfaction with services.

6.4.3. Previous experiences with health services

In the second part of the questionnaire, respondents were asked to identify how many times in the past 12 months they had had treatment in a hospital or clinic (LNHS or LPHS). As it can be seen from Figure 6-4, the proportions of LNHS and LPHS respondents are unevenly distributed. 78.4% of LNHS respondents had had treatment in hospital or a clinic in the past 12 months at least once, compared to 21.6% who had not had any treatment in the same period. In contrast, 93.9% of LPHS respondents had had treatment during the last 12 months, and only 6.1% had not had any treatment in the same period.

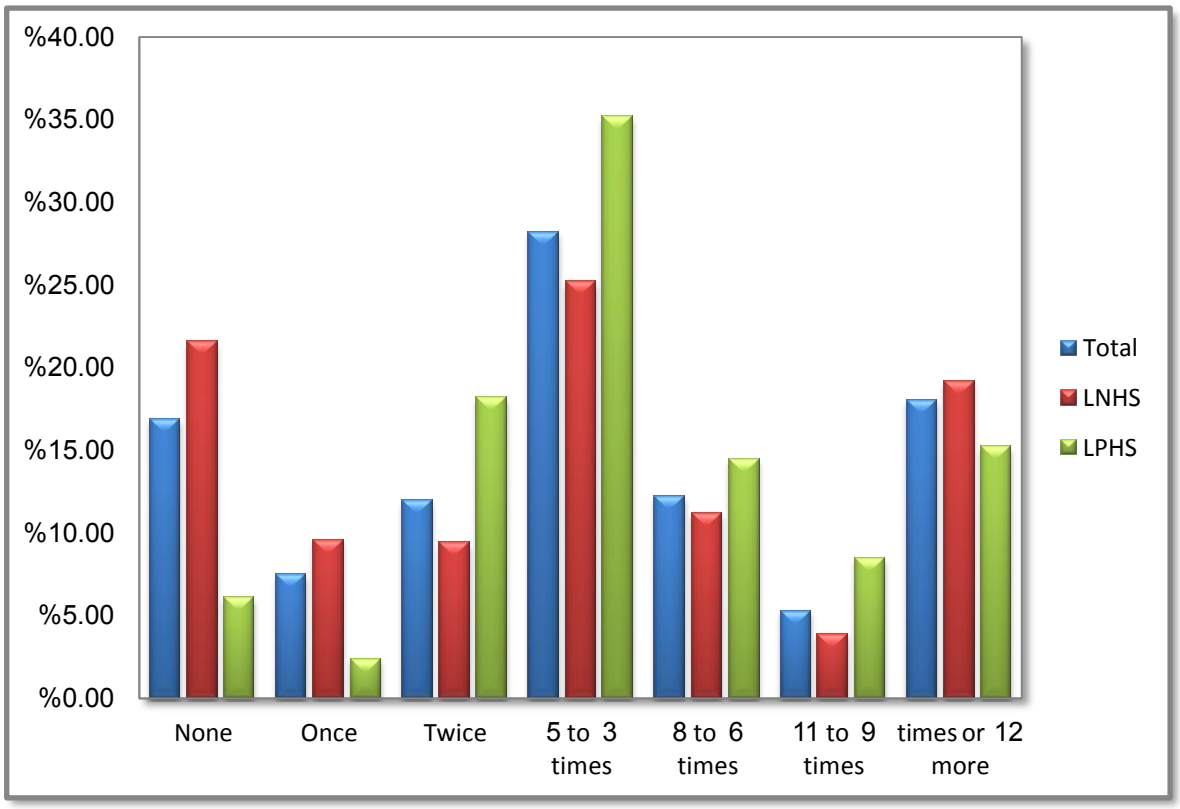


Figure 6-4: Previous experience with health services

A closer examination of Figure 6-4 reveals that LPHS respondents had made more visits to a hospital or clinic in the past 12 months than LNHS respondents. These results suggest that LPHS respondents are more likely to develop a longer-lasting relationship with their healthcare providers and hence their doctors. A Chi-square test provided strong evidence ($\chi^2 = 42.733$, $p < 0.001$) that there was a significant difference between the respondents from the two sectors in terms of the number of times they received treatment in the past 12 months.

6.4.4. Waiting times

The questionnaire included three questions about the respondents' experiences of waiting times. The first two questions asked the respondents to estimate the time that they usually spent waiting to receive healthcare services in both sectors; while the third question asked them about the amount of time they had waited to get a hospital bed.

6.4.4.1. Average waiting times in the LNHS

Table 6-4 illustrates the distribution of respondents according to their own estimations of the average amount of time they spent waiting for healthcare services in the LNHS. From the Table it can be noted that only about quarter of the total respondents (23.8%) had waited less than one hour. About third of the respondents (32.5%) reported that they had waited one hour, and just over a third indicated that they had waited 2 or 3 hours or more (15.3% and 20.5% respectively). The figures for LNHS

and LPHS respondents were unevenly distributed; LNHS respondents outnumbered LPHS respondents by nearly 3 to 1 in terms of having to wait less than one hour in the LNHS (29.6% and 10.3% respectively). The percentage of LPHS respondents who had spent one hour waiting in the LNHS was nearly doubles that of the LNHS respondents. A Chi-square test provides evidence (χ^2=37.307; p<0.001) of a significant difference between LNHS and LPHS respondents in terms of waiting times in the LNHS.

Table 6-4 Average waiting time in the LNHS and LPHS

The average waiting time	LNHS (n = 385)		LPHS (n = 165)		Total (n = 550)	
	Freq.	%	Freq.	%	Freq.	%
Waiting time in LNHS			**χ^2 = 37.307**		**p < 0.001**	
None	5	1.3%	1	0.6%	6	1.1%
15 minutes or less	42	10.9%	5	3.0%	47	8.5%
16 to 30 minutes	61	15.8%	10	6.1%	71	12.9%
31 to 45 minutes	6	1.6%	1	0.6%	7	1.3%
1 hour	101	26.2%	78	47.3%	179	32.5%
1¼ to 1½ hour	30	7.8%	13	7.9%	43	7.8%
2 hours	54	14.0%	30	18.2%	84	15.3%
3 hours or more	86	22.3%	27	16.4%	113	20.5%
Waiting time in the LPHS			**χ^2 = 17.955**		**p = 0.012**	
None	51	13.2%	31	18.8%	82	14.9%
15 minutes or less	64	16.6%	22	13.3%	86	15.6%
16 to 30 minutes	107	27.8%	29	17.6%	136	24.7%
31 to 45 minutes	11	2.9%	2	1.2%	13	2.4%
1 hour	80	20.8%	52	31.5%	132	24.0%
1¼ to 1½ hour	23	6.0%	6	3.6%	29	5.3%
2 hours	36	9.4%	20	12.1%	56	10.2%
3 hours or more	13	3.4%	3	1.8%	16	2.9%

The median waiting time of the respondents in the LNHS facilities (Table 6-5) was one hour (60.00 minutes; IQR = 60), the actual times ranging from 0 to 420 minutes (7 hours). The LNHS and LPHS respondents shared the same perceptions regarding the waiting times in the LNHS, but LPHS respondents had a lower IQR than the LNHS (60 and 90 respectively). These lengthy waiting times may be due to the fact that LNHS facilities serve a large population, and more people are likely to attend LNHS than LPHS facilities.

Table 6-5: Values of waiting time (minutes) in LNHS

Type of Hospital	Median	IQR
LNHS	60.00	90
LPHS	60.00	60
Total	**60.00**	**60**

6.4.4.2. Average waiting times in the LPHS

Table 6-4 shows the distribution of the respondents' own estimations of their average waiting times in the LPHS. The Table shows that more than half of the respondents (55.2%) were able to access services in 30 minutes or less, including those who waited for 15 minutes or less (30.5%). About a quarter of the respondents (24.0%) waited for one hour, while just 10.2% and 2.9% of the respondents indicated that they had had to wait for 2 hours and 3 hours or more, respectively. The data from the LNHS and LPHS respondents was unevenly distributed; interestingly, LNHS respondents outnumbered LPHS respondents in terms of shortest waiting time (less than one hour) in the LPHS (60.5% and 50.9% respectively). A Chi-square test revealed evidence (χ^2 = 17.955, p = 0.012) to suggest a statistical significant difference between LNHS and LPHS respondents in terms of waiting times in the LPHS.

The median of the respondents' waiting times in the LPHS (Table 6-6) was half an hour (30.00 minutes; IQR = 45), the actual times ranging from 0 to 300 minutes (5 hours); this is half the median value of the waiting times in the LNHS (see Table 6-5). Interestingly, LNHS respondents perceived waiting times in the LPHS to be lower than the LPHS respondents did, as their median value were lower (30.00 and 37.50 respectively), but with the same IQR (45).

Table 6-6 Central tendency values of waiting time (minutes) in LPHS

Type of Hospital	Median	IQR
LNHS	30.00	45
LPHS	37.50	45
Total	**30.00**	**45**

A closer examination of Table 6-4 clearly indicates that the respondents usually experienced lengthy waiting times to access healthcare services, in both sectors in general, and in the LNHS in particular. Furthermore, the median values of the respondents' waiting times (Tables 6-5 and 6-6) were higher in the LNHS and lower in the LPHS. The similar responses from the LNHS and LPHS respondents may imply that long waiting times reduced their satisfaction; also, their negative attitude might grow as the waiting time increases.

6.4.4.3. Waiting times for a bed in hospital

Table 6-7 illustrates the times that respondents spent waiting to get a hospital bed. It can be seen that the waiting period distribution for the two sectors follows a similar pattern, and the proportion of respondents from both sectors is more evenly distributed. The Table shows that the majority of respondents from both sectors (87.8%) indicated that they obtained their hospital bed on the same day; about two-third of the total respondents (66.9%) got a bed in less than one hour, and about fifth of them (20.9%) obtained a bed on the same day. These results may be due to the availability of a wide range of specialist hospitals with suitable numbers of beds in both the LNHS and the LPHS in Benghazi City, and/or due to many patients' choices to seek healthcare beyond the country's borders.

Table 6-7 Waiting times for hospital beds

Waiting time to get hospital's bed	LNHS (n = 385)		LPHS (n = 165)		Total (n = 550)	
	Freq.	%	Freq.	%	Freq.	%
Less than 1 hour	258	67.0%	110	66.7%	368	66.9%
Same day	80	20.8%	35	21.2%	115	20.9%
1 to 3 days	21	5.5%	10	6.1%	31	5.6%
4 to 7 days	10	2.6%	4	2.4%	14	2.5%
More than one week	16	4.2%	6	3.6%	22	4.0%
$\chi^2 = 0.179$			$p = 0.996$			

The results of a Chi-square test ($\chi^2 = 0.179$; $p = 0.996$) indicated no statistical difference between the respondents from the two sectors in this respect. This is in contrast with the lengthy waiting times for access to healthcare in both sectors. As the majority of respondents were able to obtain hospital beds instantaneously, this might contribute to their increased satisfaction.

6.4.5. Travelling for treatment abroad (TA)

The questionnaire included three questions about the respondents' experiences of travelling for TA. This section will particularly address the second part of the study's first secondary objective, which is to identify which criteria seem to influence individuals' choices of TA, and to account for any differences.

6.4.5.1. Previous experiences of Treatment Abroad (TA)

The first question asked respondents to simply answer 'Yes' or 'No' as to whether they had travelled for TA. Figure 6-5 illustrates the distribution of the respondents, and it can be seen that just under the half of the respondents (43.1%) indicated that they had previously travelled for TA. Interestingly, the distribution between LNHS and LPHS respondents was relatively close (42.1% and 45.5%

respectively). However, the Chi-square test result ($\chi^2 = 0.537$, $p = 0.464$) indicated no statistical difference between the respondents from the two sectors regarding their experiences of TA. These findings are reinforced by other findings (see Figures 6-6 and 6-7) which show the number of times respondents had travelled for TA and their reasons for doing so.

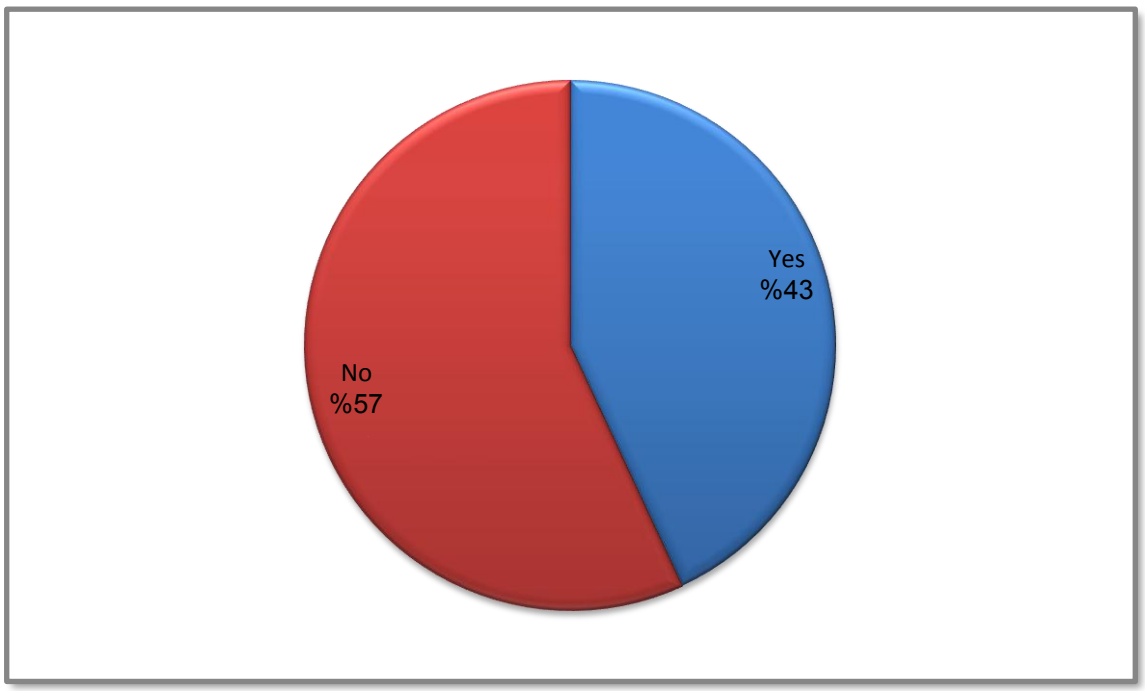


Figure 6-5 Travelling for treatment abroad (TA)

6.4.5.2. Number of times respondents have travelled for TA

The second part of the question asked the respondents who had already travelled for TA about the number of times they had done so. It can be seen from Figure 6-6 that just less than the half of the respondents (41.8%) had travelled once; about a fifth (22.4%) had travelled twice; while the number of respondents who had travelled 3 times or more was slightly higher than a third (35.8%). Figure 6-6 also shows that, generally, LNHS and LPHS respondents were unevenly distributed regarding the number of times they had travelled. A Chi-square test revealed no evidence ($\chi^2 = 8.748$, $p = 0.188$) to suggest any statistical difference between respondents from the two sectors in terms of the number of times they had travelled for TA.

Table 6-8 Number of times respondents have travelled for TA

Type of Hospital	Median	IQR
LNHS	2	2
LPHS	2	2
Total	**2**	**2**

Table 6-8 shows that the median number of times the respondents travelled for TA is 2 times (IQR = 2). The LNHS respondents' actual number of times they travelled ranging from 1 to 25. While the LPHS respondents' actual number of times they travelled ranging from 1 to only 6. Unexpectedly, LNHS respondents had travelled for TA more often than LPHS respondents had, even though they generally have lower incomes than LPHS respondents. OOP payments for TA can be very high in relation to income, which suggests that some patients are likely to experience a *'financial catastrophe'* and have to cut down on their own necessities.

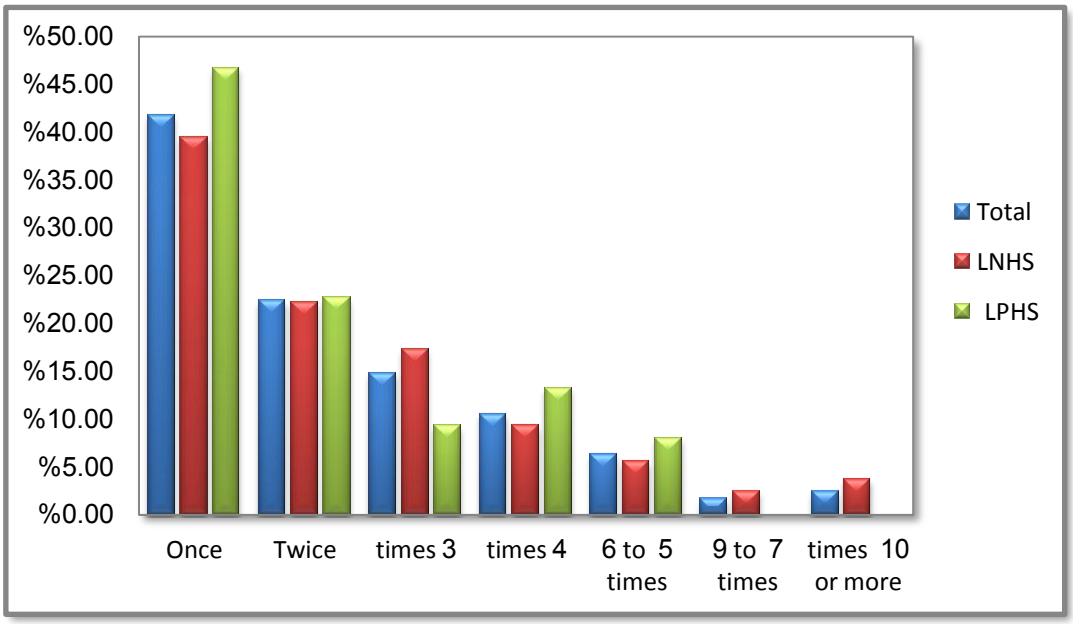


Figure 6-6 Number of times travelling for TA

6.4.5.3. Reasons for travelling for TA

The third part of the question asked respondents who had already travelled for TA about the reasons why they had done so. As can be seen from Figure 6-7, the proportion of respondents from both sectors was unevenly distributed. 46.9% of LNHS respondents had travelled for medical examinations and 9.9% for an emergency, compared to 37.3% and 2.7%, respectively, of LPHS respondents who had travelled for the same reasons. In contrast, 17.3% of LPHS respondents had travelled for chronic diseases, and 25.3% for a surgical operation, 17.3% had travelled for other medical reasons, compared to 16.7%, 17.3% and 9.3%, respectively, of LNHS respondents who had travelled for the same reasons.

A closer examination of Figure 6-7 reveals that LPHS respondents may have travelled more often for more rational reasons than LNHS respondents had, for example for chronic diseases and surgical operations which needed to be handled with more care in a trusted setting. As well as being from the upper income group, who may be using health services abroad for other medical reasons as needed. A Chi-square test provided some evidence ($\chi^2 = 9.108$, $p < 0.05$) to indicate a statistical difference between LNHS and LPHS respondents.

The results shown in the previous Table and Figures indicate a large number of patients who have travelled to receive TA, despite the availability of the same kind of healthcare in Libya, whether free of charge in LNHS or for a fee in the LPHS. This may be seen as an indication of a lack of confidence in the health services in both sectors. Therefore, these results suggest that the respondents are more likely to display negative attitudes towards healthcare providers and express reduced satisfaction with services.

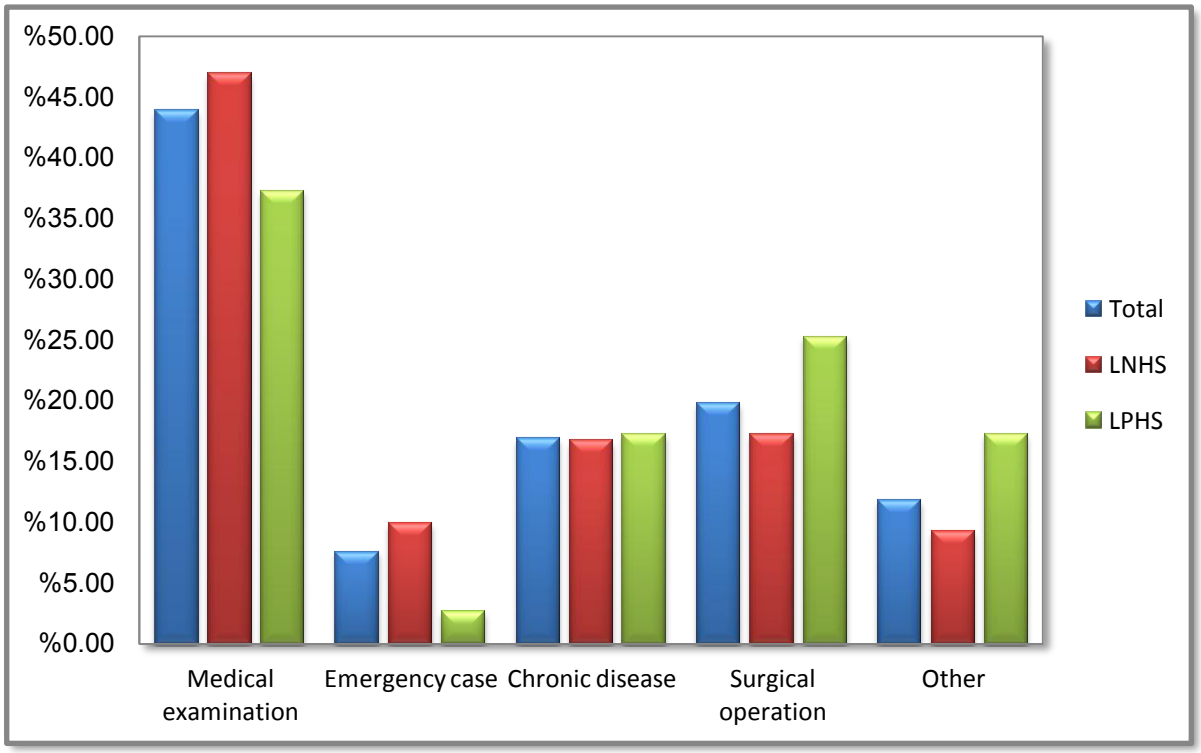


Figure 6-7 Reasons for travelling for TA

In summary, this section has presented five characteristics of the healthcare services that respondents have used. With some exceptions, these characteristics were unevenly distributed across both sectors. The salient variations between the respondents from the two sectors are the distribution according to waiting times for services, and travelling for TA. The respondents indicated that they experienced lengthy waiting times to access the healthcare they needed. These similar responses may imply that long waiting times will reduce PS with the services and contribute to a negative attitude, as mentioned above.

Furthermore, just under the half of the respondents (43.1%) indicated that they had travelled for TA. Interestingly, the distribution between two sectors was relatively close, despite the availability of the same kind of healthcare locally. This may suggest a lack of confidence in the healthcare services provided by both sectors in Libya. This section has partly fulfilled the study's first secondary objective, as it has examined the respondents' experiences of TA in both sectors to ascertain which criteria are more likely influence individuals' choices of TA; however, this aspect requires more investigation in order for the objective to be completely fulfilled.

Other characteristics of the respondents' experiences with healthcare services were found to differ between sectors. The Chi-square test results show that the differences between the respondents from the two sectors were statistically significant for some characteristics, while they were not statistically significant for others. This might be due to the fact that the proportion of respondents from the two sectors was more evenly distributed.

6.5. Respondents' evaluations of quality of healthcare

This section presents an analysis and a comparison of the quality of services across the two sectors, including respondents' evaluations of the quality of the service they received in hospitals and their evaluation of the quality dimensions of the healthcare services. This section will address the study's second secondary objective:

- *To determine which aspects of the quality of healthcare provision are most likely to influence satisfaction with healthcare and to account for any differences*.

The quality of healthcare services was assessed by asking the respondents to rate a set of quality aspects that related to the particular services provided, such as availability. For this purpose, quality scoring scale ranges were used and a simple quality score was calculated for each aspect of the in-patient service (see the methodology chapter section 5.4.5.4).

6.5.1. Evaluations of the quality of hospital services

Table 6-9 shows in-patients' perceptions of the quality of the healthcare in their hospital, with the scores displayed in high-to-low order. It is not surprising that, after all the melancholy reported about the quality of healthcare in Libya, the score for respondent satisfaction with the quality of healthcare provided was 50.16% for the full sample on an eleven-point scale; only slightly exceeding the scale midpoint of 50%. The satisfaction with quality of healthcare rating for LPHS hospitals came out higher than that of LNHS hospitals, at 52.82%, which just exceeds the scale midpoint. The LNHS hospitals scored 49.02%, which was is in the negative area of satisfaction.

However, the satisfaction rating for seven out of eleven LNHS hospitals came out higher than the scale midpoint. All seven of these hospitals are specialist hospitals. Only four LNHS hospitals scored less than the scale midpoint; two of them are the oldest and among the largest in Benghazi. The *Al-Joumhouria* hospital -the oldest and the largest in Benghazi- received the lowest score (33.95%). It is the only LNHS hospital for gynaecology and obstetrics, which serves the city of Benghazi's population and its suburb; usually women are discharged on the day they give birth due to overcrowding.

Table 6-9: Degree of satisfaction with hospital services in high-to-low order

Hospital name and type	Frequency	%	Scoring scale
LNHS hospitals sample			
Sub-total of LNHS hospitals	**385**	**70.0**	**49.02**
Al- Kuaifia hospital	20	3.6	71.97
BIDIC	14	2.5	71.30
Benghazi cardiac centre	12	2.2	63.23
Al- Naher hospital	30	5.5	61.77
Children hospital	39	7.1	61.24
Benghazi nephrology centre	21	3.8	57.60
Al-jalaa hospital	74	13.5	50.01
Benghazi E.N.T centre	18	3.3	46.84
Benghazi urology centre	20	3.6	45.97
7th of October hospital	56	10.2	35.88
Al-Joumhouria hospital	81	14.7	33.95
Private hospitals sample			
Sub-total of Private hospitals	**165**	**30.0**	**52.82**
Um Al-Hanoon private hospital	16	2.9	75.61
Al-Tariq private hospital	16	2.9	64.05
Al-Safua private hospital	16	2.9	57.39
Al- Marwa private hospital	24	4.4	49.19
Ibn- Scina hospital -LRC	59	10.7	48.87
Al- Haram private hospital	15	2.7	44.75
Other private hospitals	19	3.5	43.56
Total of the sample	**550**	**100.0**	**50.16**

It is surprising that only three LPHS hospitals scored higher than the score of satisfaction of the full sample (50.16%) and the score of satisfaction of the LPHS sample (52.82%); these three hospitals have good reputations, and among them is a specialist LPHS hospital for gynaecology and obstetrics, which received the highest score (score = 75.61%).

As a result, there may be positive biases in the evaluation of the LNHS specialist hospitals, which might not correct for other LNHS hospitals - particularly the oldest, the largest, and the general hospitals. Nevertheless, except for four hospitals, the IQRs for the LNHS hospitals are the highest.

6.5.2. Evaluations of the quality dimensions of healthcare

Table 6-10 shows the distribution of the respondents' ratings of quality dimensions in high-to-low order. The overall scores for quality dimensions varied considerably, depending on which dimension of in-patient healthcare was being assessed. It can be seen that the highest scores achieved - for the full sample - were under tangibles and atmosphere composites (54.43% and 54.21% respectively), but the scores were considerably higher in the LPHS (64.03% and 63.94% respectively) than the LNHS (50.32% and 50.04% respectively). The lowest score was given to the perceived quality of services (43.46%); the scores were relatively close for hospitals in both sectors (42.50% for LNHS and 45.70% for LPHS). Scores for empathy and timeliness were also low, but compatible in both sectors (48.85% for LNHS and 45.68% for LPHS).

Table 6-10: Scoring scale ranges for quality dimensions in high-to-low order

Order	The Questionnaire Quality's Dimensions	LNHS hospitals (n = 385)	LPHS hospitals (n = 165)	Full sample (n = 550)
1	Tangibles	50.32	64.03	54.43
2	Atmosphere	50.04	63.94	54.21
3	Behavioural intentions	52.55	53.31	52.78
4	Communication	51.88	53.68	52.42
5	Quality of management process	51.70	54.00	52.39
6	Availability	48.93	56.67	51.25
7	Expertise	52.08	48.92	51.14
8	Manner	51.07	49.09	50.48
9	Accessibility	47.18	56.21	49.89
10	Responsiveness	50.07	48.44	49.58
11	Service satisfaction	48.50	50.42	49.08
12	Empathy	48.49	49.68	48.85
13	Timeliness	46.13	44.63	45.68
14	Patient safety	40.67	55.97	45.26
15	Perceived quality of services	42.50	45.70	43.46
	Total	**49.02**	**52.82**	**50.16**

The similarity in the scores achieved for staff expertise, responsiveness and interpersonal quality composites (communication, manner and empathy) across the two sectors could be explained by the fact that medical staff in Libya, especially

doctors, offer their services to both sectors. The scores were, however, slightly higher in the LNHS hospitals, which may be due to the disappointment of respondents with LPHS hospitals; it is likely that they had expected the quality of healthcare in these institutions to be significantly higher than those in the LNHS. Essentially, patients are being cared for by the same medical staff in both LNHS and LPHS hospitals.

In addition to tangibles and atmosphere, the factors in the hospital environment related to patient safety (i.e. cleanliness, protection of patients from infection) were rated dramatically more inadequate in LNHS hospitals than in LPHS hospitals (40.67% and 55.97% respectively). Availability, accessibility and satisfaction with services were also perceived as being lower in LNHS hospitals (48.93%, 47.18% and 48.50% respectively), while the ratings were considerably higher in LPHS hospitals (56.67%, 56.21% and 50.42% respectively). This could be attributed to various aspects such as customers served and their income. As those choosing LPHS services are often from the higher income groups who might be using the best LPHS hospital services as needed. For instance, various LPHS services are close to patients, with easy access, and are deemed to be better in terms of the availability of services (e.g. well-known doctors, lab tests, etc.).

In summary, this section has analysed the data from the questionnaire about quality of healthcare across the two sectors. In the first level, present respondents' evaluations of the quality of hospital services in each individual hospital. The results show that the score of satisfaction for the full sample was generally low (50.16%). LPHS hospitals achieved higher score (52.82%), while LNHS hospitals scored below scale midpoint of 50% (at 49.02%). However, seven LNHS specialist hospitals (out of eleven) came out higher than the scale midpoint. Surprisingly, only three LPHS hospitals achieved higher scores than the satisfaction score of the full sample, while the rest were below the scale midpoint.

The second level presented respondents' evaluations of the quality dimensions of hospital services. The highest scores achieved were under tangibles and atmosphere composites, and these were considerably higher in LPHS than LNHS hospitals. The lowest score was given to perceived quality of services; also amongst the low scores were empathy and timeliness, and these scores were relatively close for both LNHS and LPHS hospitals. The similarity in the scores achieved for staff expertise, responsiveness and interpersonal quality composites (communication, manner and empathy) may be due to the fact that medical staff, especially doctors, offer their services to hospitals in both sectors. Patient safety, availability and accessibility of services, and satisfaction with services were also perceived as being lower in LNHS hospitals, while the scores for these quality dimensions were considerably higher for the LPHS hospitals.

Up to this point, this section has fulfilled the study's second secondary objective, as each aspect of the quality of healthcare provision has been assessed as perceived by

patients; LNHS respondents' scores for each dimension have also been compared with the scores from LPHS respondents to account for any differences.

6.6. Relationship between patient characteristics and satisfaction

The previous section presented respondents' evaluations of the quality of the services provided by both the LNHS and LPHS. Although the overall score for each quality dimension is of value, for further understanding it is equally important to examine the differences between the characteristics of the respondents and their overall satisfaction with the quality of in-patient services. Patient characteristics such as age, gender, and type of hospital attended are known to be closely associated with how patients view healthcare services. In addition, such characteristics are related both to the patient's experiences and how the patient interprets these experiences (Campbell, et al., 2001).

In order to address the study's third secondary objective,

- *To assess the association between the characteristics of the respondents and their ratings of the quality dimensions of healthcare,*

As well as to support the above propositions with evidence, each independent variable will be examined in the following sections in order to ascertain which ones are different from the other regarding their satisfaction with the quality dimensions of hospital services. The Mann-Whitney *U* and the Kruskal-Wallis tests were utilised (In this section the results are presented in an abbreviated form; full details of the results and the associated Tables can be found in Appendix 4).

6.6.1. Differences by type of hospital

The Mann-Whitney *U* test results showed differences between LNHS and LPHS respondents' mean rank of their satisfaction with the quality of services, with differences in favour of the LPHS respondents in 11 out of the 15 quality dimensions, but the overall satisfaction was not statistically significant ($U = 29501$, $p = 0.185$). However, the differences were statistically significant in only five of the quality dimensions ($p < 0.05$), while there were only four differences in favour of the LNHS respondents. These results clearly demonstrate that the biggest statistically significant differences consist of factors involving the delivery of services in the physical environment of the hospitals (patient safety, tangibles and atmosphere). This may underline the obvious focus and attention of the LPHS on providing an appropriate healthcare environment, which includes hygiene and the protection of patients from the risk of infection or contagion – in other words, a focus on aspects that seem to be missing in LNHS hospitals. This seems to be one of the most important dimensions that attract patients to the LPHS for treatment, while they decline the free services of the LNHS.

Statistically significant differences in favour of the LPHS respondents were also found in the quality dimensions of the accessibility and availability of services. These important dimensions seem to have contributed to patients' decisions to choose the LPHS instead of the LNHS. They might want to avoid congestion, or to obtain the services of a well-known doctor without waiting, or to get a referral. The widespread and abundant LPHS amenities might also play a role.

Surprisingly, these differences in interpersonal quality dimensions (manner, empathy and communication) and responsiveness were not statistically significant in favour of LPHS respondents. Furthermore, two differences in these dimensions were in favour of LNHS respondents, which may suggest that the way of dealing with patients is almost the same in both sectors, even though patients pay fees in the LPHS to get better service and attention. On the other hand, differences in the clinical aspects of the health service (perceived quality of services) and the capability of healthcare providers (expertise) were not statistically significant. This may be because many medical staff work in both LNHS and LPHS hospitals. The differences in waiting times (timeliness) were in favour of the LNHS respondents, but these were not statistically significant, which reinforces previous findings that indicate that patients usually experience lengthy waiting times to get access to healthcare in both sectors.

It can therefore be said that the accessibility and availability of services, and the physical environment in which they are delivered (involving patient safety, tangibles and atmosphere), play an important role in a patient's decision to choose the LPHS for treatment. Furthermore, as the clinical aspects (i.e. efficiency, experience) and interpersonal quality dimensions of the healthcare service providers did not constitute significant differences between the respondents from both sectors, this might suggest some of reasons that draw patients to receive TA; patients' concerns probably receive more attention than they would at home, especially when the results that have already been mentioned are taken into account (see section 6.4.5 in this Chapter).

6.6.2. Gender differences

The Mann-Whitney *U* test results indicate that there are differences between the mean rank of male and female respondents regarding their satisfaction with the quality of hospital services. The differences are in favour of the male respondents in 11 dimensions, in addition to overall satisfaction, but none of these differences were statistically significant, including the overall satisfaction ($U = 37107.5$, $p = 0.803$). There are differences in favour of the female respondents in only 4 dimensions, but none of these were statistically significant either. However, the female respondents tended to be less satisfied than the males, which could be due to the type of services provided for females only (i.e. obstetrics, gynaecology); in this case, these results are consistent with the results that were previously mentioned in Table 6.9 (see section

6.5 in this Chapter), which shows that the *Al-Joumhouria*[1] hospital received the worst score for satisfaction (3.39) out of all the LNHS and LPHS hospitals that participated in this study. Females comprised 70% of the respondents from this hospital.

6.6.3. Differences by place of residence

The Mann-Whitney *U* test results show that there are differences between the mean rank of rural and urban respondents regarding their satisfaction with the quality of hospital services. The differences are in favour of the respondents who come from rural areas in 14 dimensions, in addition to overall satisfaction; all of these differences were statistically significant ($p < 0.05$) including the overall satisfaction ($U = 20890$, $p = 0.001$). The only difference in favour of the urban respondents was in the accessibility dimension, although it was not statistically significant ($p = 0.348$). However, it seems to be a logical difference, as respondents from urban areas are physically closer to the service providers.

There may be a number of reasons for these differences. One possibility is the lack of healthcare services in rural areas, which means that patients are likely to be grateful when they can access them in the city. Another possibility entails other socio-demographic variables, as most of the respondents from rural areas had had less education than those from urban areas; they also tended to have low-paid jobs and lower income levels. In addition to place of residence, these results may intimate the existence of a kind of relationship between satisfaction with the quality of healthcare services and levels of education and income, as well as occupation.

6.6.4. Differences due to experiences of treatment abroad (TA)

The Mann-Whitney *U* test results showed differences in the mean rank for satisfaction. All dimensions of service quality, in addition to overall satisfaction, were in favour of respondents who had not previously had TA, but the overall satisfaction was not statistically significant ($U = 33846.5$, $p = 0.079$). However, there were differences in only five dimensions of service quality out of 15, though these were statistically significant ($p < 0.05$). It seems that those who had travelled for TA used their previous experience as a benchmark to compare and evaluate the health services provided in Libya. The Libyan healthcare services, in both the LNHS and LPHS, appear not to have done well in such comparisons, and so the respondents who had travelled for TA tended to be less satisfied with them than those who had not travelled.

1 The *Al-Joumhouria* hospital, which serves the population of Benghazi City and its suburbs, is the oldest and largest hospital in the city. It is essentially the only LNHS women's hospital for gynaecology and obstetrics, with small sections for other specialties for all patients. Women are usually discharged on the day they give birth because of overcrowding.

6.6.5. Differences by age

Age is an important variable in predicting the quality of healthcare as perceived by patients, as different age groups tend to view healthcare differently. A Kruskal-Wallis test was applied to compare the satisfaction dimensions of different age groups. There were some differences between the respondents' age groups, and their satisfaction with the quality of healthcare. However, these differences were statistically significant ($p < 0.05$) in only five service quality dimensions out of 15. Even so, the respondents varied in their overall satisfaction according to age group. A trend can be inferred from the results that the PS increased slightly as their age increased; the oldest groups were more satisfied than the younger groups, especially with the physical environment of services (atmosphere, tangibles and patient safety), interpersonal quality (manner and communication), and the efficiency and experience of health service providers (their expertise). However, this interpretation is not supported strongly enough by sufficient evidence to be generalised. This finding corresponds with other studies that have reported that older patients tend to be more satisfied with healthcare services than younger patients.

6.6.6. Differences by level of education

The study's results demonstrated that respondents with different educational levels expressed different levels of satisfaction with healthcare services. The highly educated respondents (university education or higher) achieved lower scores than the less educated respondents, suggesting that the former were less satisfied with the quality of healthcare. For 11 of the 15 quality dimensions, in addition to overall satisfaction, the corresponding p-values were higher than the cut-off 0.05 criterion, providing evidence to suggest that differences between educational groups were statistically significant. These findings correspond with other studies that have reported that highly educated patients tend to be less satisfied with healthcare services than less educated patients.

6.6.7. Differences by occupation

Nine broad categories were included under the occupation variable (see Table 6-3B). The Kruskal-Wallis test results provided no evidence that there was a difference in respondents' satisfaction according to their occupations ($\chi^2 = 7.06$, $p = 0.531$), except in the timeliness dimension ($\chi^2 = 18.59$, $p < 0.05$). Further examination revealed no clear trend in respondents' overall satisfaction. Nevertheless, this section shows that retired respondents were more satisfied overall than other categories of respondents; this may be linked to the age variable, since older respondents had shown higher satisfaction than younger respondents (see section 6.6.5 above).

6.6.8. Differences by marital status

Married and unmarried respondents varied in their satisfaction levels according to marital status. Married and widowed respondents were generally more satisfied with

healthcare services, although there were no statistically significant differences between groups ($\chi^2 = 1.28$, $p = 0.733$).

6.6.9. Differences by income

The Kruskal-Wallis test results provided no evidence that there was a difference in respondents' satisfaction according to their monthly family incomes ($\chi^2 = 7.40$, $p = 0.193$), except in just 4 out of the 15 quality dimensions [atmosphere ($p = 0.047$), timeliness ($p = 0.032$), accessibility ($p = 0.002$), and patient safety ($p = 0.026$)]. The differences were mainly in favour of the respondents from the upper income groups, who usually used the LPHS facilities. These results are clearly linked to the results from previous sections (e.g. see section 6.5 in this Chapter), since respondents from the upper strata had shown higher satisfaction than lower income group respondents, especially with regard to the three quality dimensions of atmosphere, accessibility, and patient safety.

6.6.10. Differences by waiting times for health services

The study's results showed strong evidence that there was a difference in the satisfaction according to the respondents' waiting times experienced in both sectors ($\chi^2 = 41.14$, $p < 0.001$in LNHS and $\chi^2 = 28.62$, $p < 0.001$ in LPHS). There were 8 categories of waiting time periods, ranging from none at all to 3 hours or more (see Table 6-5 above). The respondents who waited the longest achieved lower scores than respondents who waited the least. A clear trend can be inferred from the results of the respondents' reported levels of satisfaction, which suggests that the longer the patients waited the less satisfied they were with the quality of healthcare services. This interpretation is strongly supported by sufficient evidence to be generalisable, as the corresponding p-values were < 0.001 and < 0.01 in all dimensions of service quality, in addition to overall satisfaction, except for the accessibility dimension in the LPHS. This provides strong evidence that the differences between the waiting times experienced by the respondents were statistically significant.

The lengthy waiting times in the LNHS may be due to the fact that it serves a large population, and more people are likely to attend its facilities. This trend could also be explained by the assumption that respondents who waited for longer periods are frequent visitors, and therefore more likely to experience unsatisfactory events (e.g. favouritism, or being unhappy about staff interactions or medications). Furthermore, patients who choose to pay fees in the LPHS may have high expectations and more concerns about waiting times; thus, longer waiting times may disappoint them.

In summary, this section has further investigated the associations/differences between characteristics of the respondents and their overall satisfaction with the quality dimensions of hospital services. In order to assess the influence of some of the socio-demographic characteristics and services experience variables of the respondents – such as age, gender, and type of hospital visited on their overall satisfaction with the

quality of healthcare – two analytical procedures were undertaken. The Mann-Whitney *U* test and the Kruskal-Wallis test indicated that five variables had some association/ differences with overall satisfaction: type of hospital, place of residence, experience of TA, educational level, and waiting times for health services. The analysis revealed that the association/ differences between patient characteristics and satisfaction with the quality of services differed significantly in some quality dimensions. This section thus fulfils the study's third secondary objective.

6.7. Key determinants of satisfaction

The fifth section presents a statistical analysis to address the study's fourth secondary objective:

- *To identify the key determinants of satisfaction with the quality of healthcare provided by LNHS and LPHS in Benghazi.*

In order to determine the predictors of high-quality healthcare, as well as which aspects of hospital quality were more associated with respondents' satisfaction with services, a Stepwise Regression model was constructed which specified a cut-off point of 0.05 to be the significance level for removal from the model. All dimensions of healthcare quality were included in the model.

As the Regression model results indicate (Table 6-11), the model for the full sample is significant at $p < 0.001$ ($F = 738.944$). The R^2 value was 0.92, which means this model explained 92% of the variation in the dependent variable (satisfaction with services). Eight significant factors explained satisfaction with services, and 7 of these factors appear to be the most important to explain the high percentage of variation in satisfaction with services. The 'beta' values indicated that the variables with the greatest impact on satisfaction with services were the behavioural intention and perceived quality of services, followed by availability, responsiveness, atmosphere, expertise, and patient safety.

By splitting the data into the two hospital groups, it can be seen that all models - the two sectors and the total- were significant, as indicated by the R^2 values. These findings suggest that the standardised healthcare services are not what clients' desire; the wants and needs of each sector is different. In the case of LNHS hospitals, for instance, 8 significant variables explained satisfaction with services. In order of importance (indicated by the 'beta' values), these are: behavioural intention, perceived quality of services (these two dimensions had the strongest effect in both sectors), expertise, responsiveness, availability, atmosphere, management, and patient safety. The last two had the least effect on satisfaction with services in the LNHS. The R^2 value was 0.91, which means the model explained 91% of the variation in the dependent variable. There were also 8 significant variables that explained satisfaction with services in LPHS hospitals. These are, in order of importance: behavioural intention, perceived quality of services, manner, patient safety, responsiveness, atmosphere, tangibles and availability (the last three had the least effect on

satisfaction with services in the LPHS). The R^2 value was 0.95, which means the model explained 95% of the variation in the dependent variable.

Based on the study's sample, the behavioural intention, perceived quality of services, availability, and responsiveness had the greatest effect on satisfaction with services throughout the two groups of hospitals. Environment quality, which consists of a complex mix of environmental features such as tangibles (i.e. furniture) and intangibles (i.e. atmosphere), was also important in both LNHS and LPHS hospitals. Patient safety and atmosphere also have a strong influence on satisfaction with services in both types of hospitals.

The expertise of hospital staff is an important factor for ensuring satisfaction with services. Surprisingly, the expertise of the service providers explained satisfaction with LNHS services, but it was not a significant factor in the LPHS. This could be attributed to the likelihood that interpersonal quality (i.e. manner), environmental quality (i.e. patient safety, tangibles) and responsiveness draw patients to the LPHS, which probably pays more attention to patients' concerns than the LNHS. The relevance or importance of the expertise of the service providers therefore diminishes. In addition, this factor may be explained by the fact that medical staff offer their services to both sectors.

Interestingly, manner emerged as an important variable in the model, but only for the LPHS. In return for the fees incurred, patients using the LPHS expect the manner of the service providers to be exemplary. In addition, the management of services is important to LNHS patients but not to LPHS patients. For the latter, management might not be as important in explaining satisfaction with services as healthcare and interpersonal and environmental quality; when these are lacking in the LNHS, more patients will attend the LPHS.

Finally, accessibility, timeliness, communication, and empathy surprisingly had no significant effect on satisfaction with services in either sector. The apparent insignificance of timeliness and accessibility of healthcare services could be attributed to the fact that the respondents were due for discharge, or had been discharged from hospital, and so had already accessed the services. The other two interpersonal quality variables, communication and empathy, had no important effect in explaining satisfaction with services like other service quality dimensions. This could be attributed to the likelihood that other service quality dimensions such as staff expertise, patient safety, and responsiveness are more important, as they probably capture more of the patients' attention than the quality of the interactions with the service providers.

Table 6-11 Regression results: Service Satisfaction as dependent variable

	LNHS (n = 385)			LPHS (n = 165)			Full sample (n = 550)		
	Un-standardised Coefficients		Standardised Coefficients	Un-standardised Coefficients		Standardised Coefficients	Un-standardised Coefficients		Standardised Coefficients
	Beta	Std. Error	Beta	Beta	Std. Error	Beta	Beta	Std. Error	Beta
Constant	-0.461***	0.104		-0.997***	0.174		-0.556***	0.090	
Behavioural intentions	0.366***	0.036	0.357	0.639***	0.043	0.623	0.456***	0.029	0.444
Perceived quality of the services	0.277***	0.039	0.267	0.382***	0.059	0.350	0.268***	0.034	0.255
Availability	0.097**	0.035	0.085	0.123**	0.044	0.099	0.102***	0.029	0.088
Responsiveness	0.105**	0.037	0.100	0.210***	0.052	0.198	0.076**	0.029	0.072
Atmosphere	0.082**	0.029	0.081	0.141*	0.060	0.114	0.112***	0.023	0.107
Expertise	0.137***	0.036	0.132	-	-	-	0.084**	0.030	0.079
Patient Safety	0.062*	0.030	-0.059	-0.246***	0.055	-0.207	-0.078***	0.026	-0.075
Management	0.064*	0.032	0.064	-	-	-	0.059*	0.027	0.057
Manner	-	-	-	-0.251***	0.056	-0.243	-	-	-
Tangibles	-	-	-	0.138*	0.068	0.103	-	-	-
Model Summary	R = 0.956		R^2 = 0.914	R = 0.973		R^2 = 0.947	R = 0.957		R^2 = 0.916
	AR^2 = 0.912		dr = 8	AR^2 = 0.944		dr = 8	AR^2 = 0.915		dr = 8
	F = 501.521 p < 0.001			F = 346.988 p < 0.001			F = 738.944 p < 0.001		

*** p < 0.001; ** p < 0.01; * p < 0.05.

In summary, the fifth section has identified key determinants of satisfaction with the quality of healthcare services. This was achieved through an approach which involved executing a Stepwise Regression to identify which of the quality dimensions have a stronger association with satisfaction. The Regression model results for the full sample indicated that 8 significant factors explained 92% of the variation in satisfaction, while 7 of these had the greatest impact on satisfaction. LNHS respondents identified 8 significant variables which explained 91% of the variation in the dependent variable. In comparison, the LPHS respondents also identified 8 significant variables, which explained 95% of the variation in the dependent variable.

Based on the study's sample, the following factors had a strong effect on satisfaction with services across the two types of hospitals: the behavioural intention, perceived quality of services, availability, responsiveness, patient safety, and atmosphere. The expertise of the service providers and management explained satisfaction with LNHS hospitals but were not significant for the LPHS; while manner and tangibles emerged as important factors in the model, but only for the LPHS. Accessibility, timeliness, communication, and empathy had no significant effect on satisfaction with hospital services in either sector.

This section fulfils the study's fourth secondary objective, as it has identified the key determinants of satisfaction with the quality of healthcare provided by LNHS and LPHS hospitals in Benghazi.

6.8. Summary

This chapter has presented the quantitative data derived from the analysis of the study's questionnaire, with the aim of achieving the study's first primary objective through addressing the first four secondary objectives. The chapter was structured around five stages of analysis, which moved from descriptive to inferential analysis. This study examined 7 socio-demographic characteristics of the respondents. The findings suggest that the majority of the respondents can be described as being middle-aged, married, educated, urban residents. In addition, the study examined 5 characteristics of the respondents' experiences with healthcare services. The findings suggest that the majority of the respondents experienced lengthy waiting times to access healthcare. Furthermore, the results reflect the large number of respondents who have travelled for TA.

In terms of satisfaction with the quality of healthcare services, the results show that the score for the full sample was generally low (50.16%). The level of satisfaction with LPHS hospitals was slightly higher (52.82%), while LNHS hospitals scored 49.02%, which is below the scale midpoint of 50%.With regard to respondents' evaluations of the quality dimensions, the highest scores achieved were in the tangibles and atmosphere dimensions; the lowest score was given to the perceived quality of services. The analysis of the relationship between characteristics of the respondents and their satisfaction with the quality of services indicated that 5

variables had some association with overall satisfaction. The analysis revealed that the relationship differed significantly in some quality dimensions. The Regression model results for the full sample indicated that 8 significant factors explained 92% of the variation in satisfaction with services. Respondents from both LNHS and LPHS hospitals identified 8 significant variables each, which explained 91% and 95%, respectively, of the variation in the dependent variable.

Finally, despite the importance of these results, the analysis of the quantitative data showed some aspects that need more in-depth understanding and analysis. However, since this study used a concurrent mixed-method design, a schedule for semi-structured interview questions has been developed in order to gain a more in-depth understanding. The interviewees' perceptions could be analysed to determine whether they complement or confirm to the picture outlined by the quantitative data. In order to obtain this information, the qualitative study included various groups of healthcare stakeholders.

The next chapter will further investigate the HS and the quality of healthcare in Libya by addressing the qualitative data that emerged from of the semi-structured interviews.

Chapter 7: Results: Qualitative findings

7.1. Introduction

This chapter presents the study's qualitative findings derived from the analysis of face-to-face semi-structured interviews conducted with 40 healthcare stakeholders (patients, health professionals, policymakers and experts) in Benghazi. The results are shown in the form of thematic findings which were arrived at through an interview schedule (see Appendix 2) based on the previous stage of quantitative study, prior areas of questioning, emergent issues and relevant concepts from the literature. The details of the methods used and the process of the analysis are described in the methodology chapter (Chapter 5). The aims of this chapter are to further investigate and analyse the qualitative data for a more in-depth understanding and to clarify some of the quantitative study's findings, as well as to accomplish the remaining primary objectives of the study for this stage:

2. *To analyse health* stakeholders*' perceptions of the HS and quality of healthcare in Libya; and*
3. *To contribute to the development of knowledge about the HS and quality of healthcare in Libya.*

In addition, this chapter will address the remaining secondary objectives of the study:

5. *To describe the quality initiatives of the HS at national level and health facility level,*
6. *To determine the ways in which the HS is responsive and fair to the population's expectations,*
7. *To explore the extent of the efficiency and effectiveness of the HS in order to develop quality policy at national level, and*
8. *To assess the existence of quality components and/or implementations of any quality initiatives at health facility level.*

In order to facilitate the aims of this chapter, the findings were grouped and presented under specific dimensions, with themes and sub-themes within each dimension (see Figure 7-1) arising from the analysis of the interviews.

Before presenting the study's qualitative findings, the next section presents the characteristics of the study's participants.

7.2. Characteristics of the sample

The interviewees were 40 individuals from three categories:

- 10 experts and officials in the healthcare sector, including 5 healthcare experts and 5 current and former officials from the local level of the HS in Benghazi City, or the national level in the MOH. All members of this sample were male.

- 20 health professionals from Benghazi City, including 7 nurses, 6 doctors and 7 health technicians from different healthcare disciplines. This sample included 7 males and 13 females.
- 10 in-patients from both LNHS and LPHS hospitals in Benghazi City at the time of the interviews, including 5 males and 5 females.

The participants were each given a unique number from 1 to 40 and were identified by their status as experts and officials (E = expert), health professionals (P = professional), and patients (U = User), for easy referencing.

The following section presents the findings from the interviews.

7.3. The qualitative findings

The thematic analysis found support for the following five dimensions:

- Quality of healthcare provision,
- Adaptation and acceptability,
- HS and its governance,
- Financial and resource profiles of the HS, and
- External factors.

The qualitative findings grouped under these five core dimensions arose from the analysis of the interview transcripts. The structure of each of these dimensions was complex (see Figure 7-1), comprised of at least three themes, some with sub-themes; these have been grouped by dimension. The literature was consulted to support these findings. For each dimension, the presentation of the data follows a narrative approach that focuses on the importance of the story that the participants gave, with emphasis on the actual transcripts. Thus, in order to maintain the richness of the data, verbatim quotations in their original intact forms are used to illustrate the participants' opinions alongside the researcher interpretations and summaries of the participants' views.

In accordance with most of the results that emerged from the quantitative data analysis (the first phase of this study), the qualitative thematic analysis identified that there were multiple and overlapping factors involved in the participants' evaluations of the quality of healthcare. When the relationship between these factors was questioned during the analysis, it became clear that some factors had greater influence than others. The HSG appears to have the greatest influence on all other aspects. The majority of the interviewees -especially the experts and officials in the healthcare sector- felt that the fundamental imbalances in the HSG were responsible for this state of affairs. The impacts of other factors varied greatly according the interviewees' perceptions, which in their entirety have resulted in the current situation of the perceived poor quality of healthcare in Libya.

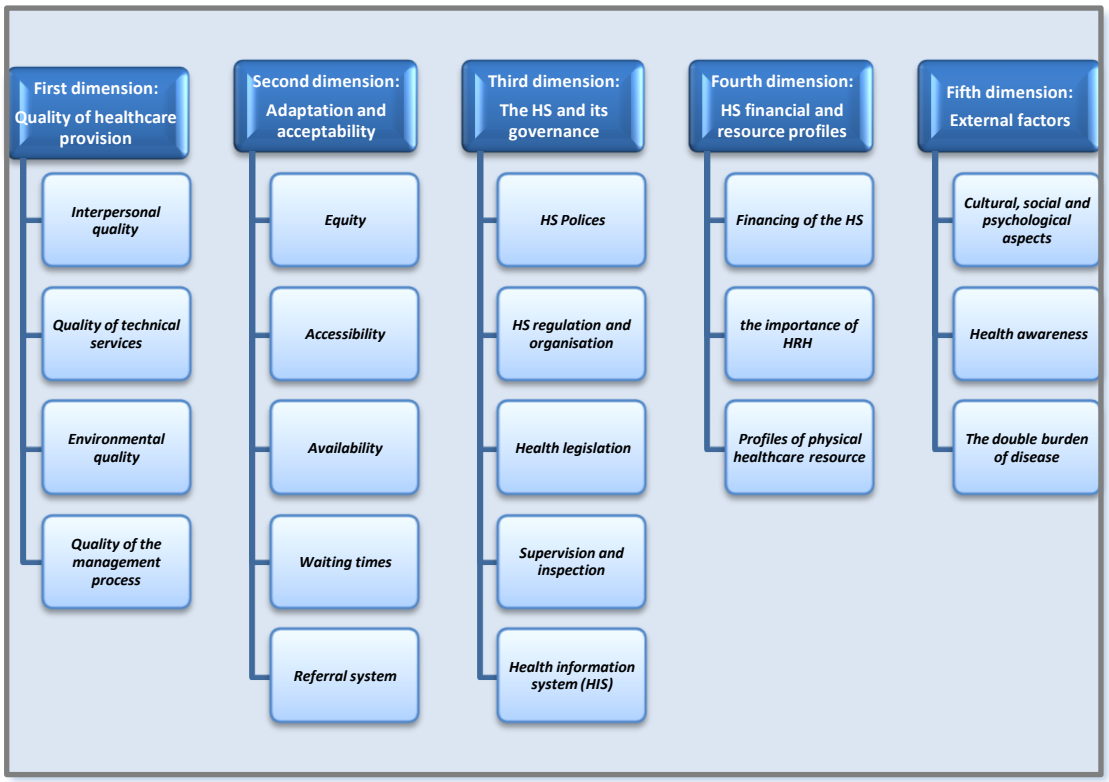


Figure 7-1: Qualitative findings framework

Horizontally across all dimensions, especially the first and the second, there was criticism of the quality of the healthcare services provided, especially in the LNHS. This is well supported by the quantitative results. Healthcare professionals such as nurses, doctors and health technicians were the most critical of several aspects of the services, even though they were service providers who should bear some responsibility for the state of the HS. During the interviews the researcher recognised the existence of a culture of blame amongst healthcare professionals; they are generally frustrated and disappointed, and they repeatedly blame others for this such as the HSG, hospital management, other healthcare professionals, and patients. This is an important point that should be considered before the analysis is presented, as it has a considerable impact on these professionals' perceptions of the HS, and it will be discussed in more detail later in this chapter.

7.3.1. Quality of healthcare provision

This section presents the first dimension, quality of healthcare provision, and analyses the qualitative data for a more in-depth understanding and to clarify some of the quantitative findings. Thus, it addresses the study's fifth and eighth secondary objectives:

- *To describe the quality initiatives of the HS at national level and health facility level, and*
- *To assess the existence of quality components and/or the implementation of any quality initiatives at health facility level.*

Evaluating the quality of healthcare provision is a complex process; occurs at several levels. The interviewees often made comments about services-levels characteristics, primary service aspects, and their overall perceptions of the quality of healthcare provision. The qualitative analysis found support for four core themes in relation to the quality of healthcare provision. These themes are: interpersonal quality, technical services quality, environmental quality and quality of management process. The development of these themes was based on the quality attributes identified in the quantitative findings, and the literature. The following part of this section discusses the four themes that were identified.

7.3.1.1. Interpersonal quality

Interpersonal quality refers to the behaviour of the personnel providing healthcare to patients, such as empathy, manner, and respect. Three core sub-themes were found to constitute interviewees' perceptions of interpersonal quality: manner, empathy and communication.

7.3.1.1.1. Manner

Manner refers to the attitude and behaviour of the service provider who interacts with a user during the provision of the service. Manner was an important focal point during the interviews, and the interviewees tended to criticise the way that doctors, nurses and HRH in general behaved with patients in the LNHS. This health technician made angry observations about the bad manners of HRH with patients in the LNHS:

"[I saw the] gloomy and sullen faces of receptionists, nurses and doctors. There was lack of respect for patients, as if the patients were requesting something from them personally, rather than their rights. They were not caring for sick patients at all…You find patients who look troubled; who are waiting, looking for someone to guide them where to go to get healthcare services…This is what I have noticed personally". (P-29)

The LPHS was also criticised by some interviewees for the negative attitudes and behaviours of staff toward patients, as they failed to take into account a patient's state of mind. This health expert described the poor attitude of HRH in both the LNHS and the LPHS:

"Lots of people complain about how they are treated by the staff in the LNHS. They say it is inhumane – patients are neglected; they have no rights; they are not allowed to say 'no', ask questions, discuss their concerns, or express their feelings…The same problems exist in the LPHS in the way staff deal with patients – you feel that you are not seen as a customer, but as a heavy burden, as if no one wants you. Although it is a private business, the staff are thinking the same way in the LNHS". (E-8)

Another doctor supported this argument as she stated her opinion about the manner of staff in the LPHS:

"The LPHS deals with patients in a way that suggests they just want their money. Their manner with patients in need of healthcare is poor". (P-18)

Some interviewees confirmed that they experience better attitudes and behaviour from healthcare staff when they travel for TA. This health technician highlighted some reasons related to manner that drive patients abroad for treatment:

"(Some reasons for TA)…touch the patient themselves…The good reception and the good manner of doctors and other staff raise the patient's morale and help them to overcome their illness". (P-29)

7.3.1.1.2. Empathy

Empathy refers to the service providers' sympathy, attentiveness and understanding while they provide personal care and mental support to patients and their families. Interviewee comments about empathy are grouped below under the codes of health services in the LNHS, health services in the LPHS, and TA.

- ***Health services in the LNHS***

The interviewees highlighted a number of observations about the LNHS regarding the lack of empathy from service providers, as well as their negligence, ill-treatment, lack of attention and full care for patients, and their complaints, which lead to the deterioration of a patient's state of mind and of their health. This nurse criticised the lack of empathy in the LNHS, which drove patients to the LPHS:

"Patients in the LNHS experience a lack of empathy, ill-treatment, delays in holding medical examinations and in receiving a diagnosis, postponement of surgical dates…They may not be able to bear these things, which forces them in the direction of the LPHS so that they get the necessary attention". (P-12)

Another nurse confirmed the lack of service providers' empathy in the LNHS based on her personal experience:

"[There was a] lack of empathy, care and attention to patients, in addition to ill-treatment and an absence of conscience in some nurses and doctors in the LNHS. They did not take into account the patient's state of mind." (P-16)

- **Health services in the LPHS**

Some interviewees drew attention to reasons related to empathy that drive patients to pay to use the LPHS, such as staff being attentive, understanding, sympathetic, and interested. The following comments are from professionals who compared the LNHS to the LPHS and listed reasons why the LPHS attracts patients:

"…When patients go to the LPHS they find a warm welcome, more interest, and empathy, because of the fees they have paid for this treatment…It is the antithesis of the LNHS". (P-16)

"[Patients receive] good treatment, as well as attention and care by doctors and nurses in the LPHS, more than in the LNHS…In addition they provide everything for the necessary procedures to take place without delay". (P-27)

- **Treatment abroad (TA)**

Some interviewees believed that patients find more empathy and interest when they travel for TA, as exemplified by the following comments from healthcare professionals who listed the advantages of treatment that patients received abroad, despite the high cost:

"…Patients get attention, sympathy and appropriate care, in addition to good treatment, when they go abroad". (P-16)

"[TA] patients will find everything as they want it. From the first day they feel better and satisfied with everything around them: good medical services, friendly and helpful medical staff, a warm welcome, and a prompt diagnosis of their health situation". (P-29)

7.3.1.1.3. Communication

Similarly to the previous two sub-themes (manner and empathy), the interviewees often mentioned the communication as a vital indicator of interpersonal quality, and this was unfortunately often lacking. For instance, one of the nurses described some of her observations about the crowding of patients and their companions in the LNHS, which creates a kind of confusion for staff:

"[There are] too many patients in the clinics...Everyone wants to go first. This is not fair to the doctor...They do not have the ability to see this number of patients, because a period of time is required to communicate with a patient before starting treatment". (P-13)

A health technician emphasised the shortage of staff, particularly doctors, which contributed to the crowded health facilities; this badly affected the communication exchange with patients:

"[There is a] lack of doctors in some specialties, in addition to the shortage of staff in general...The present number of doctors is unable to treat a large number of patients, as each patient requires a period of time to communicate with the doctor". (P-29)

Although the above situation appears to be beyond the capabilities of the service provider, other interviewees referred to the communication skills of the local service provider and compared this with TA. One patient interviewee compared the interactions and communication between doctors and patients in Libya and abroad:

"There is a very important psychological factor that doctors do not keep in mind here [in Libya]. Patients want them to listen to them, understand their conditions and be

humble in dealing with them. Unfortunately this is not the case among lots of doctors, especially the advisers. On the other hand, when we hear of any patients who have been treated abroad, they say the doctor welcomed them immediately, listened to them, checked X-rays and medicines with them, asked them how long? How? Where? Asked about their family, advised them, requested some medical tests and so on". (U-32)

This clearly demonstrates the interviewees' dissatisfaction with the interpersonal qualities (i.e. manner, empathy and communication) of the service provider, especially in the LNHS. These appear to be obvious indicators of the important role of interpersonal quality and its components in patient rights, which contributes to patients' co-operation while receiving healthcare. There is a noticeable relationship between these results and the quantitative findings in the previous chapter (see sections 6.5 and 6.7 in Chapter 6). This theme is also linked to the next theme of quality of technical services in general (e.g. loss of confidence and trust, perceived quality of services, satisfaction with services) and dimensions of adaptation and acceptability.

7.3.1.2. Quality of technical services

Quality of technical services refers to the clinical procedures carried out. It describes expertise, professionalism and a focus on outcomes. The interviewees evaluated the quality of technical services on the basis of expertise (i.e. service providers' competence) and outcomes achieved. Two main sub-themes underpinned interviewees' perceptions of the quality of technical services: expertise and outcome.

7.3.1.2.1. Expertise

Expertise reflects service providers' competence, qualifications and capacity to comply with the high standards of service delivery. Interviewee comments regarding expertise mainly came from professionals and patients. Like comments about other themes such as interpersonal quality or the sub-theme of outcome, these criticised LNHS healthcare providers and referred to the healthcare provided abroad as a benchmark.

- **Service providers' competence**

Some of the patient interviewees mentioned factors such as competence, professionalism and skills as indicators of expertise. They highlighted reasons for their concerns such as the lack of an accurate diagnosis, the inefficiency of some doctors, and incompetent nurses and other professionals. For instance, one of the interviewees focused on a lack of qualified medical professionals, which he believed had led to a decline in the quality of the medical services and a lack of patient confidence in doctors and the LNHS in general:

"[In the LNHS there is a] lack of qualified medical professionals who have experience which can be relied upon". (U-40)

Another in-patient interviewee believed that the LNHS was suffering from the poor performance of local nursing staff:

"In addition to a lack of highly skilled and professional doctors, there is another very important factor: the LNHS is suffering from poor nursing performance due to the layoff of the majority of foreign nursing staff. Libyan nursing staff have not improved their performance and there is a lack of seriousness, concern and patience in this field". (U-31)

Some healthcare professionals criticised the inefficiency of healthcare providers and their performance in the LNHS as a reason for the low quality of the service. Others compared the healthcare provided by the LNHS and LPHS, while some of them gave reasons for why patients go to the LPHS:

"The inefficiency of some doctors in some sections…leads to the failure to provide high quality services for patients". (P-22)

"Some, but not all, doctors in hospitals are inefficient. There are low levels of nursing staff and health technicians...poor diagnosis and treatment, and false diagnoses…in the LNHS. In the LPHS, however, quality healthcare is available and swift for patients, in addition to the efficiency of HRH in their dealings with patients". (P-25)

"The LPHS has the ability to provide qualified and experienced people in their field; there are good specialist doctors who constantly monitor their patients' situations… [They pay] attention to their patients, maintaining their health and comfort… unlike in the LNHS, where healthcare is very poor". (P-14)

- **Loss of confidence and trust**

The qualitative results that are presented in this section were mainly consistent with the results mentioned in previous sections. Most of the interviewees emphasised that patients are suffering from loss of confidence and trust in doctors in particular and in staff in general. One healthcare sector official believed that patients have lost confidence and trust in the LNHS because of the sector's recent history:

"[There is] shaken confidence among people as a result of the deterioration that occurred in the LNHS in the eighties, because of severe shortages of many medical supplies and services...There have been improvements in the LNHS since then, but there is a lack of confidence as a result of this background that still plays a major role in the formation of peoples' perceptions". (E-9)

One of the healthcare sector experts, a consultant doctor, has tried to explain from his point of view how the problem of patients' loss of confidence and trust began and how it evolved:

"The problem began with a lack of trust between the patient and the LNHS, and ended with a lack of trust between the patient and the doctor. I can almost call it a

state of enmity, which means that patients feel neglected by doctors. Any complications that can occur during treatment can be exaggerated and attributed to poor service and negligence. On the other hand, doctors treat patients with the same kind of hostility; they are very upset about patients resorting to travelling abroad. Regrettably, their treatment began to worsen as a result of this strained relationship. Doctors in the LNHS see patients as a burden, not as clients who require satisfaction". (E-7)

Other health professionals mentioned patients' lack of confidence in the LNHS and in doctors. Some of them offered explanations for the situation, and some believed that patients' loss of confidence and trust in the LNHS were what drove patients to the LPHS or abroad for treatment:

"[There is an] absence of patient confidence in doctors and their diagnosis or treatment; and with delays in treatment added to this, patients feel forced to travel abroad". (P-11)

"[There is a] lack of confidence in doctors in the LNHS, despite the fact that most doctors in the LPHS are already working in the LNHS". (P-29)

"Patients' lack of confidence in the LNHS and in staff in general...as well as a lack of consensus among doctors regarding a patient's diagnosis, forces the patient to avoid all that and travel abroad". (P-18)

Interestingly, one of the patients interviewed referred to a dilemma about loss of confidence and trust in LNHS services and staff which he, to some extent, attributed to people's culture:

"The most important of these reasons is what is circulating among people about the lack of quality services in the LNHS, whether this information is correct or not. But this has been exaggerated to the point where it has become a lack of confidence among people in the LNHS and its staff. The proof of this is that patients in the LPHS see the same doctors who work in the LNHS". (U-39)

7.3.1.2.2. Outcome

This theme refers to the outcome experienced during the series of the patient's interactions with healthcare services. Some of the interviewees' comments in this area are covered by the four codes of perceived quality of services, medical errors, satisfaction with services and different point of view.

7.3.1.2.2.1. Perceived quality of services

The interviewees made many comments regarding their perceptions of the poor quality of healthcare services in the LNHS in general. They believed that the healthcare is neither good nor easy to comprehend, and it has not reached the level that is supposed to be the standard in hospitals. Some interviewees believed that the

reason for the demand for LPHS healthcare is because of the poor quality of the services provided by the LNHS. Other interviewees emphasised that the high level of quality of healthcare provided abroad is what drives patients to travel to get the necessary treatment.

- **LNHS hospitals**

This patient listed a number of reasons why they thought the LNHS offers poor quality services:

"There has been a sharp decline in the level of service provided to patients because of a lack of equipment. There are many things missing…The main reason is poor management, because they are primarily responsible for the availability of the equipment...in addition to the lack of attention in LNHS...[and] neglect and delay in response". (U-38)

Some healthcare professionals (P-26 and P-19) mentioned the poor quality of healthcare in the LNHS, especially in hospitals, while a doctor (P-18) compared the low status of healthcare in Libya with neighbouring countries:

"…The hospitals did not reach the standard level of healthcare quality that is supposed to exist in hospitals. We cannot say all, because there are some hospitals at least in the medium level of healthcare quality, but in most hospitals services were poor". (P-26)

"With all due respect to some hospitals that perform a good and respectful service to patients, there are hospitals and polyclinics that provide the opposite, for many reasons". (P-19)

"...From my personal experience...what is happening to us in hospitals, even in LPHS ones, is that there are inadequate or low levels of quality of healthcare. The services are substandard compared with the advanced healthcare in countries in this area, and we are standing still, if not going backwards, rather than moving forwards". (P-18)

- **LPHS health sector**

There are large numbers of patients receiving healthcare in the LPHS, despite the same services being provided for free in the LNHS, which explains the presence of the numerous LPHS health facilities such as hospitals, clinics, and laboratories. LPHS users were thus an important part of the quantitative study, comprising about one third of the sample. Some interviewees believed that the LPHS makes a good contribution to providing quality healthcare; it can be easily accessed, is good at dealing with patients, and has modern equipment, in addition to reducing waiting times for healthcare services:

"Certainly the LPHS makes a good contribution to providing and raising the quality of healthcare in Libya. And because the patients pay from their own pockets, they receive good care and treatment, and do not suffer lengthy waiting times". (P-11)

"The LPHS provides what is missing regarding patient needs in the public sector… [There is] speed in obtaining appointments and accuracy in work; and patients receive excellent medical services". (P-14)

Other interviewees had different perceptions, however. One of the experts indicated that the LPHS lacks many services and resources, and its slow progress in improving its services does not match the level of the LNHS:

"The LPHS exists because of poor services in the LNHS; I do not think its inception was on the right basis. Its level of service is usually compared with the LNHS level as benchmarks, and the LPHS was not at the level that it should be. We found that it eliminates good medical documentation, lacks a referral system and equipment, and often there are no emergency services. Although their standards are evolving and improving slowly and more services are becoming available, especially specialist medical consultations – there is also some contribution to bringing in specialists from abroad – it does not yet reach level of the LNHS". (E-7)

In addition, the following two doctors emphasised the poor performance of the LPHS, believing that the LNHS still provides better services:

"The LPHS did not succeed in bridging the gap in healthcare, because of a lack of capabilities. Most of its facilities cannot provide the all necessary services to patients…As a consultant I believe that service provided by the LNHS is still better. The LPHS still essentially depends on the LNHS as its staff are already working in the LNHS". (P-18)

"All that glitters is not gold. Only a small part [of the LPHS] is positive, and many parts are negative. The LPHS works only as hostelry, where patients find comfort in eating and sleeping, but good medical services are found in the LNHS only". (P-22)

Two patients criticised the LPHS service, as it did not solve their healthcare problems, despite the high cost of the treatment:

"The lack of services and poor quality in the LNHS are forcing people towards the LPHS, but it does not fill the gap, as evidenced by the massive exodus of Libyans to receive basic healthcare abroad. [The LPHS] contributes little due to the high cost of treatment, which is beyond the reach of the majority of low-income families, in addition to the lack of efficiency and good standards in healthcare delivery". (U-36)

"The LPHS still does not solve the problem of healthcare, because it is not following the quality system. There is a lack of co-operation between the LNHS and LPHS and a lack of monitoring and inspection by the HSG, especially regarding prices. In

addition, some LPHS clinics still do not fulfil basic healthcare requirements such as a good HRH... [The LPHS] is just interested in hostelry services more than medical treatment". (U-39)

- **Treatment abroad**

The questionnaire results demonstrated that about half of the respondents (42.4%) had travelled for TA, and more than half of those had travelled more than once, even though the quantitative results showed that the majority of them were from low-income families (see sections 6.3.8 and 6.4.5 in Chapter 6). Most interviewees criticised both the LNHS and LPHS, highlighting some reasons that drive patients abroad for treatment, as exemplified by the following comments by a HS official (E-9) and a healthcare professional (P-29):

"The poor quality of medical services in the LNHS...made citizens lose confidence...The LPHS has tried to some extent to contribute in providing a service, but it could not gain the citizens' confidence. We notice that there are complaints from patients. The evidence is that patients travel abroad and do not rely on the LPHS in Libya...They found and experienced a significant difference in services and they were satisfied. It is true that they spent money, but the services were better". (E-9)

"The reasons for TA are the excellent medical services, which are provided with care via an ordered system, which patients experience themselves...Nurses have the highest levels of qualifications...They are ready 24 hours a day to thoroughly address any task". (P-29)

7.3.1.2.2.2. Medical errors

Most interviewees drew attention to the existence of frequent medical errors in diagnosis, treatment or surgical interventions, occurring in both LNHS and LPHS hospitals. They believed that these are one of the most important reasons for patients' loss of confidence, which has led patients to demanding TA. Interviewees' comments about medical errors were clearly linked to their perceptions that were mentioned previously under the expertise theme, as the service providers' incompetence was one of the main reasons for medical errors, and was closely related to patients' loss of confidence and trust and their perceptions of the poor quality of services.

Some of the interviewed health professionals criticised the HSG's lack of accountability for LNHS and LPHS negligence, as well as medical errors by its staff that harm patients:

"There is a great deal of negligence in the LNHS such as a lack of accountability for doctor errors that are sometimes serious and often kill the patient. There is also evidence of neglect in surgical operations, sterilisation and patient attention in all aspects...which certainly leads patients to travel abroad for treatment". (P-28)

"[There are] many errors in diagnosing and describing the appropriate treatment in medical prescriptions, which are often incorrect in the LNHS". (P-14)

"The health services provided by the LPHS are inadequate because of the numerous medical errors that occur, which have left the LNHS in a critical condition". (P-12)

Some doctors also confirmed the existence of these medical errors:

"Many medical errors that have occurred and still occur lead to harm to patients, and sometimes to death, which prompts patients to avoid all of this, prevent risks to themselves, and incur expenses to find successful TA". (P-18)

"I'm not defending Libyan doctors or other staff. There are some people who do not perform their duty to their best ability and make errors, though they are few. This is also one of reasons that patients travel for TA". (P-19)

Some HS officials confirmed the existence of a large number of these medical errors:

"These [errors] exist and we record large numbers of medical errors and complaints. There are complaints that have not been recorded. Any complaint, even if it does not entail a medical responsibility, indicates that a problem occurred and therefore led to a patient's dissatisfaction". (E-1)

Finally, some of the interviewed patients indicated the existence of such medical errors:

"[There has been a] loss of confidence in Libyan doctors because of their lack of interest in patients. They also do not follow up on patients' conditions, and can be inefficient and lacking in respect for their job. They also should take responsibility for medical errors that may occur. And we must not forget the lack of monitoring and inspection, or control of medical errors and medical responsibility, by the HSG". (U-32)

"The final destiny for everyone is the same – a sense that the quest for the patient ends with actively searching for a cure to their condition by travelling for TA. [The Libyan HS] might not be able to cure the patient locally because of medical errors or a lack of medical services, not to mention the time that patients spend with their condition staying the same or worsening". (U-33)

7.3.1.2.2.3. Satisfaction with services

Consistent with the previous results, the interviewees commented on patient dissatisfaction as an important aspect in the LNHS in general and in hospitals in particular. The interviewees' satisfaction with services was clearly related to comments previously mentioned, and dissatisfaction with services is what was expected.

One of the interviewed health technicians pointed out what she thought of PS with the LNHS from her own experience:

"Through direct observations, and asking many patients about their satisfaction with the quality of services provided to them in the LNHS, it is clear that the LNHS is unable to provide a satisfactory service in many cases". (P-25)

Another doctor explained that healthcare providers do not take PS into account:

"The healthcare relies on service provider's point of view, and do not take into account demands and expectations of patients". (P-20)

Another healthcare expert confirmed patient dissatisfaction with the healthcare provided to them:

"PS reflects the level of service. I think that patient dissatisfaction with the services provided is a real feeling which reflects the status of the healthcare system in Libya in general, and in Benghazi in particular". (E-8)

Additionally, some healthcare officials criticised the quality of healthcare and pointed to patient dissatisfaction:

"Despite the huge spending on the LNHS and the wide distribution of many quality health facilities and staff in various parts of Libya, the level of performance is poor, especially in individual services. This has led to patient dissatisfaction with the quality and efficiency of healthcare". (E-5)

"According to the health law, the state is obliged to provide full and free healthcare to citizens, from A to Z. The existence of the LPHS is an indication that the LNHS is not doing its job. In fact, the LPHS is not complementary to the role of LNHS, but is an alternative. When citizens move from the LNHS to the LPHS, it means that there is a degree of dissatisfaction with the LNHS; either they have not been able to access a LNHS service, or the service does not exist, or they do not like the level of service". (E-1)

7.3.1.2.2.4. Different point of view

Interestingly, some of the interviewees noted that in spite of the poor state of healthcare in Libya, including diagnostic capabilities and treatment, they do not support the travel of patients for TA, as most patients receive the same diagnosis that they had received in Libya:

"I support treatment inside Libya because most patients receive the same diagnosis abroad, the difference being that in Libya there are some shortages of efficient medical equipment". (P-14)

"[There is a] lack of confidence in Libyan doctors, despite the fact that patients receive the same diagnosis abroad that is given to them by Libyan doctors". (P-15)

"The problem is that patients compare the LNHS with the private services abroad, though the LNHS still provides better services". (P-18)

"Some believe that TA is more effective and gives better results, but in many cases a patient's diagnosis in Libya and abroad is the same". (P-24)

The results from the interviews clearly demonstrate the poor quality of, or dissatisfaction with, the quality of technical services (i.e. expertise and outcome), especially in the LNHS. The interviewees' comments in relation to the LNHS to some extent were similar to the results that were mentioned in the previous sections. In contrast, the comments of some health professionals with regard to the LPHS appear to be inconsistent with the other qualitative and quantitative results. This may be due to factors such as their negative reactions to situations in the LNHS, and the fact that some of them are already working in the LPHS. This may justify the decisions of some patients to avoid free LNHS services and go to the LPHS – even though the results from this research have not confirmed any superiority in the quality of its technical services – or to travel abroad for the necessary treatment. There was a noticeable interrelationship between PS with healthcare in general, and the dimensions of adaptation and acceptability, HS and its governance and financial and resource profiles.

7.3.1.3. Environmental quality

Environmental quality comprises a complex mix of the hygienic, safe and organised presentation (tangibility) of the physical facilities, staff, premises, bathrooms, equipment, beds, signs, and so forth of a healthcare facility, as well as intangibles such as the background characteristics of the service environment (atmosphere), which can influence patients' impressions and shape their perceptions of the service. Atmosphere, tangibles and patient safety were key sub-themes underlying interviewees' perceptions of environmental quality.

7.3.1.3.1. Atmosphere and tangibles

Analogous to the previous results, the interviewees readily discussed the atmosphere and tangibles at healthcare facilities, criticising the characteristics of the LNHS service environment while believing that the LPHS offers a more comfortable atmosphere for patients. They tended to be more concerned about tangible elements in the hospital environment, which led patients to choose or reject it for treatment accordingly:

"Most of the LNHS hospitals are lacking good, clean, organised physical facilities such as equipment, premises, toilets, wards and beds and written materials". (U-35)

"Hotel-quality services are not delivered to patients in the LNHS. When patients go to LNHS hospitals they find bad toilets, bad beds, and chaos. This injustice is part of the health service that citizens use...And when patients come to the LPHS, they find good

service, good rooms, clean toilets, and good beds, which give them a kind of psychological comfort". (E-9)

"Many citizens go to the LPHS because they are obliged to. They complain about the poor accommodation in the LNHS, particularly in the areas of hygiene and sanitation. This is something that is neglected in the LNHS...The LPHS has copied the same defects in the LNHS, however. For example, accommodation services in the LPHS start out with good standards, and then begin to deteriorate". (E-8)

"Reception and administration are relatively better in the LPHS. It provides amenities while patients are waiting such as an air conditioner, TV, and cafeteria. Some LPHS patients also ask for privacy". (P-25)

7.3.1.3.2. Patient safety

Some interviewees criticised the lack of interest in patient safety in the LNHS, while they believed that the LPHS was more concerned about safety, hygiene, cleanliness and order, which attracts patients. For instance, one of the doctors mentioned some factors related to patient safety in the LNHS that drive patients to the LPHS:

"...If we look in terms of cleanliness and sterilisation, we will find that the LPHS focuses on these things more than the LNHS, in addition to the congestion of the LNHS, and a lack of beds for patients at some times". (P-18)

Another doctor emphasised the patient congestion in the LNHS and some of its causes and consequences:

"[The] large numbers of companions with patients in emergency units increases the probability of inflammation and medical risks". (P-22)

One of the patients emphasised some points related to patient safety in the LNHS environment:

"...Poor hygiene in the LNHS, as well as the psychological discomfort of patients because of their fear of contagion, sometimes forces patients to use the LPHS, where these things are much better". (U-36)

The results have substantiated the interviewees' perceptions of the poor quality of the hospital environment (i.e. atmosphere, tangibles and patient safety), especially in the LNHS. This is a clear indication of the importance of environmental quality and its components' role for patients, as well as its impact on their choices. The interrelationship between these results and the themes of satisfaction with services and behavioural intentions of the service users is notable, as are the links to the dimensions of adaptation and acceptability, HS and its governance, and financial and resource profiles.

7.3.1.4. Quality of the management process

The interviewees evaluated this factor on the basis of operation processes that contribute to the quality of the healthcare service and the service providers' dedication. The interviewees' perceptions of the quality of the management process comprised two sub-themes: operation and dedication.

7.3.1.4.1. Operation

Operation involves the management process factors that facilitate core service production in the health service delivery unit. The interviewees' perceptions in this area were mainly centred around the codes of mismanagement and lack of order and co-ordination.

- **Mismanagement**

Interviewees frequently referred to operational service aspects, and many believed that the responsibility for the poor quality of healthcare is caused by mismanagement in LNHS hospitals in particular, and in the LNHS in general, including the failure of officials, hospital managers, heads of medical services and some professionals to do their jobs properly. They suggested some reasons for this situation such as the absence of quality of health programmes, monitoring, inspections, organisation, co-ordination, order and control over HRH and the general management process in the LNHS:

"[Some problems are] neglecting to follow the rules at work; a lack of proper monitoring, inspection and control over the progress of work; a lack of co-ordination between the administration and HRH; and hospital administration staff not having a medical background. These things affect medical performance, because in many cases staff do not understand medical needs, errors in medical supplies, et cetera". (P-18)

"The failures of officials and administrators in the performance of their duties, at the same time as a lack of control and punishments...are not putting an end to the existence of these errors or omissions which affect the patients". (P-19)

"The main reason [for the existence of the problem] is general mismanagement in the LNHS in all hospitals, sections and units, in addition to management process laxity and the absence of a sense of responsibility among employees". (P-28)

- **Lack of order and co-ordination**

The vast majority of the interviewees pointed out different problems with order, organisation and co-ordination processes in the LNHS, which eminently affect the quality of healthcare provision. They indicated reasons for the lack of order and co-ordination such as the inaccuracy of the appointments system; the numbers of patients in each discipline not being specified; a lack of precision in organising and co-ordinating patient entry dates to hospitals and the timing of their surgical procedures;

the presence of a large number of departments in one place without co-ordination; and a lack of co-ordination and control of the referral patients:

"I think the poor organisation and co-ordination is the main reason [for the poor quality of healthcare]. Giving appointments to large numbers of patients at the same time causes the clinics to be completely disorganised, which leads to this accumulation where patients are gathered in one place and access to services becomes very hard to get". (P-18)

"[There is a] lack of efficiency in the systems used by the LNHS. There is disorder in patient waiting lists for access a doctor, and congestion and pressure on one doctor who, for instance, works in a particular specialty, is available in one place only, and only devotes a day or two each week to the clinic; or there is only one OPD for this particular specialty". (P-25)

"The problem may be somewhat due to disorganisation...It is often the case that a surgeon is present one or two days per week in a LNHS hospital to conduct surgical operations…They therefore cannot perform a large number of surgical operations because of the limits to their working hours, and so surgery may be delayed in some cases…And this leads to the large number of patients waiting…so it should be organised". (P-19)

7.3.1.4.2. Dedication to the quality of healthcare

Dedication includes individual employees and teams at all levels. The long-term dedication of all employees is necessary for the implementation of the quality initiatives and to achieve the health objectives in hospitals and other healthcare facilities. Two codes comprised the interviewees' perceptions of dedication: staff dedication and timeliness dedication.

- **Staff dedication**

The interviewees frequently mentioned staff dedication. Some of them focused on the lack of staff dedication on a permanent basis, in addition to the waning interest of doctors in their patients which is shown, for example, by a lack of interest in their daily rounds routine.

Some healthcare professionals drew attention to the lack of staff dedication, and the absence of a sense of responsibility in LNHS staff towards patients, which affects work performance:

"LNHS staff are not doing their jobs in the right way and they do not have a sense of responsibility towards their job. In particular, some doctors are uninterested in the performance of their role in the LNHS because of a lack of dedication". (P-14)

"...The spirit of team work and dedication no longer exist in hospitals". (P-18)

"[There is] default and a lack of dedication of officials – including administrators, doctors, and nurses – in the performance of their duties. A sense of responsibility towards patients is also lacking, with no sense of their suffering, with an absence of conscience". (P-29)

Some healthcare experts and officials indicated a lack of important elements of health management, such as dedication. They also suggested what might cause this, as well as describing its impact on performance rates:

"…Administrative efficiency does not exist. There are no role models at work, no experience or dedication, and everyone sees their work as a job during working hours. No one monitors quantity and quality in the performance of the work, so there is a lack of incentives and encouragement. All of these issues have influenced staff, and performance rates have become technically low". (E-9)

Finally, some patients criticised the lack of staff dedication, especially some doctors' dedication to their jobs in the LNHS. One patient suggested possible reasons for this:

"The number of doctors who are available for patients is very small. Many times we find a large number of patients waiting, but the doctor does not attend. Doctors are giving most of their time to the LPHS, and there are no measures in place to deter them from this. Famous consultant doctors do not do their jobs in the LNHS correctly; they only go through the daily morning routine, or if attending they see only special cases, which amounts to favouritism". (U-37)

- **Timeliness dedication**

Timeliness dedication refers to the healthcare unit and its staff's dedication to the timeliness of healthcare delivery schedules, which includes proper appointments, waiting time lists and surgical operations, the ease of changing appointments, and proper work schedules, as well as structured visiting hours for relatives and friends. The vast majority of the interviewees frequently mentioned the inefficiency and inaccuracy of timeliness and a lack of timeliness dedication as one of the most important reasons for lengthy waiting times for patients in the LNHS, either in OPDs or to gain access to a bed or surgical intervention.

Some interviewees cited the poor organisation and management timing in the LNHS, as well as failures in monitoring and inspections, delays, absences, and the lack of punctuality of staff in general and doctors in particular, leading to a lack of dedication to working hours, as exemplified by these comments:

"There is a lack of dedication to working hours, which has resulted in a lack of control and mismanagement". (E-9)

"[There is a] lack of doctors who are dedicated to their working hours for one reason or another. There are no strict rules for reprimanding or holding doctors accountable for their delay or absence. Doctors' concerns have become material; their time is

divided between the LNHS and LPHS, and they do not have enough time for patients in the LNHS". (U-32)

"[There is] overcrowding and clear neglect of patients in the LNHS. Medical personnel are not dedicated to their schedules or working hours because of negligent administrators and doctors, and poor organisation and management in the LNHS". (P-13)

"Doctors and other medical personnel are not dedicated to their working hours; there are frequent absences and delays, which force patients to wait a long time. Some doctors also fail to do the job that is expected of them, in an attempt to force patients to go to the LPHS". (P-30)

Some of the interviewees criticised the inefficiency and inaccuracy of the appointments system that has resulted in confusion for both patients and healthcare institutions:

"Unfortunately, in general, there is no efficient appointments system in the LNHS or the LPHS...This has caused chaos. We still use a manual system". (E-9)

"Appointments are not scheduled in a timely manner, which forces patients to go to the LPHS in order get their needs met". (P-12)

The low degree of satisfaction with the quality of the management process (i.e. operation and dedication), especially in the LNHS, is linked with the poor quality of healthcare in Libya in general; and this is a clear indication of the importance of the role of a high-quality management process in facilitating the production and consumption of quality healthcare, even though it is not necessary for the delivery of core services. There is also a noticeable interrelationship between the quality of management process theme and PS with healthcare generally. These themes are also linked to the dimensions of adaptation and acceptability, HS and its governance, and financial and resource profiles.

In summary, this section has fulfilled the study's eighth secondary objective, as the views of each interviewee regarding the quality of healthcare provision in Libya have been assessed in order to identify the existence of quality components and/or the implementation of any quality initiatives at the health facility level. It has also described quality initiatives at the health facility level from the interviewees' perspectives, thereby partially achieving the study's fifth secondary objective, which is to describe the quality initiatives of the HS at national level and health facility level.

The qualitative results for the first dimension have clearly substantiated the interviewees' dissatisfaction with the quality of healthcare provision, especially in the LNHS. All of these results have pertained, in one way or another, to a very important pillar of the HS, which is adaptation and acceptability, since quality means the HS responds well to people's expectations, while fairness means the HS responds equally well to everyone who is treated. Thus, the interviewees' perspectives regarding the

adaptation and acceptability of the Libyan healthcare services will be the main focus of the next section.

7.3.2. Adaptation and acceptability

This section presents the second dimension of adaptation and acceptability and further analyses the qualitative data for a more in-depth understanding, as well as clarifying some previous qualitative and quantitative results. Thus, it will partly address the study's sixth secondary objective:

- *To determine the ways in which the HS is responsive and fair to the population's expectations.*

Adaptation and acceptability means the adaptation of healthcare services to patients and their families (i.e. location, staff, equipment, etc.). Such statements generally highlight the importance of adaptation and acceptability elements to healthcare needs, whether in the LNHS or the LPHS. The qualitative analysis found support for five core themes in relation to adaptation and acceptability: equity, accessibility, availability, waiting times and referral system.

7.3.2.1. Equity

In this regard, the previous chapter (the quantitative results) showed that 12.9% of respondents attend LNHS hospitals because of a personal relationship with a member of the hospital staff (see sub-section 6.4.2 in Chapter 6). The interviewees' comments regarding equity identified several negative aspects related to justice or fairness in responsiveness to patients' needs in the LNHS. The most important one of these aspects is favouritism or nepotism. The following comments from a health technician (P-28) and nurse (P-11) indicate the existence of such cases in LNHS OPDs, whether from officials or the staff, which adversely affect the quality of the services and breach the rules of the system:

"Nepotism and the favouritism of relatives are key factors that disrupt the workflow in these clinics. The officials give priority to patients who have a relative or friend who works in the LNHS clinic or hospital". (P-28)

"Some staff give priority to relatives or acquaintances without respect for other patients in the LNHS, which forces some patients to use the LPHS". (P-11)

As well as agreeing with this, other interviewees also believed that relations of kinship or friendship with one of the hospital officials or staff members caused quicker access to be given to healthcare services, especially in the case of hospital beds or surgical interventions, even when other patients are waiting for the same services. These nurses confirmed the existence of this problem from their personal experience:

"The reason patients wait a long time for a hospital bed is because of the admission of some cases that do not require admission, for many reasons...I hope favouritism will be abandoned". (P-12)

"I experienced this situation personally when I got the measles. I went to an LNHS hospital, but I could not get a bed because there was no favouritism for me, which compelled me to stay in the house for three days. I was severely dehydrated, which caused damage to my kidneys, and I am still suffering from it now, although I am a nurse". (P-13)

There was a consensus that favouritism is widespread in healthcare services, especially in the LNHS. This was previously mentioned and will be discussed in more detail later in this chapter.

7.3.2.2. Accessibility

Accessibility refers to patients' ability to obtain healthcare services when and where they need them. However, in addition to what has been mentioned in the previous sections regarding accessibility, most interviewees drew attention to accessibility to healthcare; their comments highlighted this as an important element of adaptation and acceptability of patients' needs. For example, some nurses criticised patients' experiences in the LNHS that drove them to the LPHS. One of them (P-12) criticised the fact that it was hard for LNHS patients to obtain healthcare, while another (P-11) mentioned the overcrowding in the LNHS that made accessibility difficult for patients:

"LNHS patients receive ill-treatment, delays in medical examinations and the diagnosis of their conditions, and postponements of surgical dates that they may not be able to bear. These things force them in the direction of the LPHS so that they can get the necessary attention, although treatment in the LNHS is better". (P-12)

"The main factors that drive patients to the LPHS are the accessibility of the service and the desire to avoid overcrowding in the LNHS to get to see a doctor". (P-11)

Some interviewees believed that the poor performance of the LNHS is what drives patients to avoid its free services and choose the LPHS. Most of them cited specific factors such as the ease of access to the healthcare service and to specialist and/or well-known doctors who are difficult to see in the LNHS. Some interviewees argued that the LPHS HRH provide for patients' needs more quickly than in the LNHS:

"There is quick access to and relative speed in the provision of a diagnosis and treatment in the LPHS. Also, patients are welcomed and receive more interest because of the fees they pay for this treatment, in addition to availability of specialist doctors who perform their work conscientiously – the reverse of the LNHS". (P-16)

"Patients receive a welcome and good treatment, as well as attention and care from doctors and nurses in the LPHS, more than in the LNHS. In addition, the LPHS

provides the necessary treatment or surgical procedure and everything needed to take place, without delay". (P-27)

"...There are those who want a doctor with a particular expertise. Patients can easily get an appointment with them in the LPHS, while it is difficult to get an appointment with the same doctor in the LNHS". (P-13)

Some interviewees mentioned reasons for the difficulties that patients have with obtaining quick access to hospitals, especially in emergency cases:

"The slow response to patients, especially in emergency cases, leads to a large number of patient deaths". (P-12)

"The rapid delivery of services to citizens does not exist, in any aspect. The ambulance system is...too slow…Even the ways the cases are handled are not correct. Road accidents cause a lot of disability and loss of life; when the patient reaches the hospital, they will be dead". (E-10)

7.3.2.3. Availability

Most of the interviewees frequently referred to shortages in the key elements that affect the provision of quality and efficient healthcare, which leads to poor adaptation and acceptability to the needs and expectations of the populations and individuals whom they serve. For instance, most interviewees criticised availability in the LNHS; some healthcare professionals (P-12 and P-30) criticised the LNHS's availability and poor healthcare, while another doctor (P-18) drew attention to the current situation of staff and a shortage of senior doctors at the LNHS hospital where she works:

"...The situation in the LNHS at the moment is bad. There is a lack of medical services, equipment to assist diagnosis, medicines, X-rays, and most of the necessary medical tests for diagnosis, in addition to a lack of specialist doctors and adequate nursing on a permanent basis". (P-12)

"…There is a lack of medical equipment such as MRI scanners, which are available in some LNHS hospitals in sealed rooms, while some cases are referred to the LPHS". (P-30)

"…The units used to have a SHO, registrar, senior registrar and consultant, but now some units only have a SHO, and there are no consultants visiting on a regular basis, which affects the quality of the service". (P-18)

Some interviewees said that the availability of everything the patient needs is what drives people to the LPHS for treatment:

"The lack of some essential services in the LNHS is forcing patients to have medical tests done in LPHS clinics and hospitals…where they find that all of their needs are met". (P-12)

"…Everything the patient needs from a healthcare service, such as X-rays, medical tests, medicines and other means of medical detection and treatment, can be found in the same place, in addition to the existence of some advanced medical equipment in the LPHS". (P-17)

Some interviewees mentioned a shortage of ambulances and necessary and qualified staff to perform the required work in LNHS health centres, as exemplified by the following comments from a patient (U-38) and a health expert (E-10):

"[There is a] lack of ambulances to transfer patients from one hospital to another, so patients go by themselves. Or if an ambulance is found, there is no trained medical team to use the ambulance's equipment". (U-38)

"...Ambulances are not well prepared, there are no trained staff, and even the way the cases are handled is not correct…which causes a lot of disability and loss of life". (E-10)

All of these issues would be expected to have a considerable negative impact on workload and waiting times, and make it difficult for LNHS staff and facilities to proceed with their activities without interruptions. This has been mentioned previously and will be discussed in more detail later.

7.3.2.4. Waiting times

The quantitative findings of this study have shown that patients tend to wait a long time to get access to healthcare services. For instance, the median waiting time in the LNHS was one hour (60 minutes), the actual times ranging from 0 to 420 minutes (7 hours). While the median waiting time in the LPHS was half an hour (30 minutes), the actual times ranging from 0 to 300 minutes (5 hours) (see section 6.4.4 in Chapter 6).

The interviewees' perceptions regarding waiting times were closely related to their perceptions of other themes, especially the quality of healthcare provision dimension. The vast majority of them pointed out various reasons for the lengthy waiting times, either in OPDs or to get access to a bed or a surgical intervention in the LNHS. These reasons can be categorised as mismanagement and lack of organisation, favouritism, lack of physical resources, lack of staff, and lack of staff dedication, while some interviewees believed that there is no problem in the LNHS with waiting times to get access to either a bed or a surgical intervention:

- **Mismanagement and lack of organisation**

In addition to what has been mentioned in the previous sections regarding management, some interviewees believed that poor and non-specialist management, and a lack of organisation and co-ordination in the LNHS, have a significantly adverse effect on waiting times, either in OPDs or for access to a bed or a surgical intervention. For instance, a doctor (P-18) and a health technician (P-25) criticised

poor management, organisation and co-ordination in the LNHS, where many disciplines operate in one place without co-ordination:

"I think that poor organisation and co-ordination are the main reasons [for the problem]. Appointments are given to a large number of patients at the same time and they are not correctly distributed among the clinics, which leads to congestion and patients being unable to access a good health service". (P-18)

"The systems used in OPDs are inefficient. The staff fail to ensure that every patient sees a doctor, and [keeping patient's order] There is congestion and pressure on one doctor, for instance in a particular specialty, who is available in one place only and devotes only a day or two per week to the clinic; or there is only one OPD". (P-25)

- **Favouritism**

In addition to what has been mentioned in the previous sections, especially regarding the equity theme (see section 7.3.2.1), some interviewees identified that one of the most important reasons for the lengthy waiting times in the LNHS is favouritism. They believed that relations of kinship or friendship with one of the officials or staff members give some patients priority or ease of access to the medical services, while other patients wait. Some interviewees' comments confirmed the existence of such cases and behaviour in the LNHS:

"...If a patient knows one of the hospital staff, they can get access to a bed or a surgical procedure easily, but in the absence of favouritism the patient will be waiting". (P-14)

- **Lack of physical resources**

Some interviewees mentioned a lack of essential physical resources in the LNHS such as health facilities, hospital beds, and equipment, which they believe creates crowding and congestion due to the presence of a very large number of patients and their companions in the LNHS. Most of these patients are from low-income families and they cannot afford to go to LPHS hospitals. These factors contribute to increased waiting times either in OPDs, or to get access to a bed or a surgical intervention:

"...[There are] too many patients in the clinics...Some patients have no patience and are not convinced that there are other patients suffering from more difficult conditions than theirs, so everyone wants to go first. There is injustice to the doctor, as sometimes there are about 60 cases in a period of 3 hours. The doctor does not have the ability to see all of these patients". (P-13)

"[The] lack of specialist hospitals, and sometimes the large numbers of companions with patients...results in confusion for doctors and staff. This, along with a lack of healthcare services in surrounding areas, leads patients to LNHS clinics which then experience congestion and chaos". (P-22)

"...The number of beds is not enough to accommodate the number of patients; especially since some hospitals cover the entire eastern region [of Libya]...Delayed surgery is usually associated with a patient being unable to obtain a bed". (P-24)

"... [There is a] lack of beds and places to accommodate all patients who need access or surgery. There is a shortage of medical equipment and some specific requirements for surgical procedures...For example, Al-Jalla is the only hospital in the eastern region of Libya. Imagine how much pressure and congestion that is, which may result in some surgeries being performed outside of LNHS hospitals". (P-30)

The consequences of the lack of physical resources were discussed by most of the interviewees in this and the previous dimension. Indeed, this influence has been so appreciable that it will be discussed in more detail later in the fourth dimension (see section 7.3.4.3).

- **Lack of Human Recourses for Health (HRH)**

Most of the interviewees drew attention to a shortage of HRH in the LNHS, which results in the postponement of some surgical operations and thus longer waiting times and a shortage of hospital beds. They argued that there is a shortage of doctors in general and specialist doctors in particular. Furthermore, they believed that there is a shortage of other healthcare professionals such as nurses and health technicians in the LNHS, as exemplified by these comments from a doctor (P-19) and a health technician (P-29):

"...There are some units complaining that there is a shortage of doctors. There are many reasons for this…for example the absence of a doctor or two, which leads to the existence of an insufficient number of doctors to cure a large number of patients". (P-19)

"... [There is a] lack of doctors in some specialties, in addition to the shortage of HRH in general (e.g. nurses, technicians)…which crowds the clinic with patients. The present number of doctors cannot treat them all…This is the reason for lengthy waiting times". (P-29)

- **Staff dedication**

Most of the interviewees confirmed that one of the most important reasons for lengthy waiting times in the LNHS is a lack of staff's dedication to their working hours (as mentioned previously under the quality of management process theme). Doctors and staff are delayed or absent, and lack punctuality in general, as exemplified by these comments from two health professionals:

"Staff do not respect their work schedules in health facilities. Alternate doctors are frequently absent or late for appointments, and they do not delegate their work to other staff if they are absent from work". (P-27)

"Doctors and other staff are not dedicated to their working hours in the LNHS, which forces patients to wait longer". (P-30)

Finally, although most of the interviewees criticised waiting times in the LNHS, some of them disagreed, as exemplified by these comments from two doctors (P-21 and P-22) and a health technician (P-26):

"I don't think that a waiting period is unexpected since the same thing is happening outside of Libya, and the simple cases must stay non-urgent". (P-21)

"The patient who needs to enter the hospital is able to do so, especially in cases of emergency. The 'cold cases' are admitted according to the hospital's capacity, and I believe that most cases are entered, if delayed, after no more than a week". (P-22)

"This is happening only in the hospitals with a limited number of beds, which cannot accommodate more patients and so accept emergency cases only, especially during the examination period of medical students. This is of course in the teaching hospitals only, except that I think each case that needs to enter the hospital or needs a surgical operation is able to do so". (P-26)

7.3.2.5. Referral system

Theoretically, the Libyan HS is based on PHC and a referral system, in accordance with the legislation of the organisation of this sector. There is also a department responsible for PHC at the MOH and DHA level. The Libyan HS consists of three levels of care: primary, secondary, and tertiary, as described in the country profile chapter (Chapter 4, section 4.4.2).

The quantitative results of this study showed that more than a quarter of respondents in the LNHS (28.1%) attended hospital in violation the official referral process in the LNHS; they did so because of a referral from the LPHS or because of a personal relationship with a member of the hospital staff (see sub-section 6.4.2 in Chapter 6). The vast majority of interviewees believed that the referral system is not working properly in the LNHS.[1] The reasons given by the interviewees for the defects in the referral system can be categorised as: organisation of the HS, PHC management, staff performance and dedication, and knowledge and health awareness.

- **Organisation of the HS**

In addition to what has been mentioned in the previous sections regarding organisation, all of the experts and officials in the HS believed that the referral system does not work correctly in the LNHS. Some of them confirmed some reasons for the defects in the referral system that had been cited by health professionals and patients.

[1] Surprisingly, when asked about the referral system, only half of the interviewed professionals (ten of the twenty) were aware of and understood how this system works. Numerous questions confirmed that the other half did not have sufficient knowledge of this mechanism in the healthcare system.

In addition, most of these experts and officials focused on more fundamental causes of these defects, such as the organisation of the HS:

"The main problem is…that PHC has a non-existent role and is not committed to citizens because they are not registered, so the system is open. As one of the World Bank's experts said, the LNHS is an 'open buffet'...because of the absence of so-called 'gate-keeping'...The existing referral system is based on so-called 'self-referral': patients refer themselves...This is a sign that the HS has abandoned its duties, leaving them to the patient...so the patient becomes the only one who makes the decision". (E-1)

"The referral system exists in the law, but there is a flaw in the mechanism of its application...The capabilities and facilities of the state need to be re-arranged in order for the HS to be run correctly. The irregular delivery of services in PHC centres has led to the reluctance of citizens to obtain PHC, so they go directly to the hospital instead. This of course leads to confusion in hospital and secondary services, and this is when problems occur. If the citizen usually finds a doctor at a PHC centre, there will be no problems…Lately, citizens have had doubts about healthcare services, and so they have moved from one place to another. This is due to the lack of a clear vision for the system". (E-2)

"The referral system is very weak. The reason, briefly, is that the components of the HS in Libya are suffering from a great imbalance in content and organisation – they are fragmented and ineffective. On top of this, the PHC components and the referral system suffer from severe weaknesses". (E-5)

"The referral system does not work correctly. The reasons for this are the lack of family doctors and medical registration (documentation, files, etc.)...In fact, there is no PHC level; it is not supported, and there are no facilities available...The staff and doctors in PHC earn less than their colleagues in hospitals, which is a big mistake that causes doctors to be reluctant to work in this discipline, as there are no incentives". (E-6)

"Unfortunately there is no effective referral system because there are no family doctors, and only irregular PHC services. A case is usually referred by the patient's choice in an unstructured way". (E-7)

"The referral system only exists in the presence of specific and clear structures in the HS; it should track where each citizen starts and how they move from level to level and from facility to facility...The citizen should not need to use personal or social means or favouritism to gain access to the system, as is the case now...The situation is left to each individual unit of service delivery in the LNHS that decides what it deems appropriate, and they are under no obligations; the situation is still completely random". (E-8)

- **PHC management**

In addition to what has been mentioned in the previous sections regarding management, some interviewees pointed out that the major reason for defects in the referral system is PHC mismanagement. They stressed that there are some administrative obstacles in the application of this system and a lack of co-ordination and control. There is also no clear vision in the running of the HS, and a chaotic overlap of the LNHS and LPHS:

"In my opinion the referral system is not working properly in PHC because it is not organised or co-ordinated in terms of referrals and receiving patients; there is no consistency in how procedures are conducted. This results in the referral of cases that should not have been referred". (P-17)

"I do not think that the referral system works properly because there is no particular system or method to the referral. Patients may come at any time and any place where you are a doctor. Sometimes they come to you at end of your working day and you are put in an awkward position, or sometimes you cannot perform the appropriate service for the patient". (P-19)

"The referral system is not working properly. The reasons for this are a lack of organisation and co-ordination between hospitals, and duplication of primary services provision on both sides (first and secondary levels)". (P-21)

- **Staff performance and dedication**

Some interviewees identified several issues related to staff performance and dedication which affect the referral system. They argued that there is a lack of respect and dedication of staff to their work, and they want to escape from their responsibilities to their patients (as mentioned under the previous dimension [sub-section 7.3.1.4.2] and the waiting times theme [section 7.3.2.4]). In addition, they mentioned problems associated with doctor performance, as exemplified by these comments from a nurse (P-12) and a patient (U-33):

"[There is a] lack of responsibility for referring patients in the LNHS. This is only getting rid of responsibility. When all the means are there to help the patient, but the case is difficult, maybe the closest thing to getting rid of responsibility is to refer the patient to another hospital". (P-12)

"Unfortunately the referral system does not work properly for two reasons, in my opinion. The first is the doctor's feeling of inferiority: if they say that the patient should be referred to a specialist, this is the 'psychological' reason. It may be a fundamental reason for the continued poor condition of the patient's health. The second reason is the patient's ignorance of the mechanisms of the referral system". (U-33)

- **Knowledge and health awareness**

Some interviewees drew attention to staff, as well as patients' lack of understanding of the referral system. One of the nurses mentioned such cases, which cause patients to bypass this level and go to hospitals directly, without a referral from PHC:

"Sometimes the referral is based on a patient's desire, or so-called self-referral, because their belief is that the LNHS is failing to provide for their healthcare requirements in the clinic next to them or in their region of residence". (P-12)

One of the patients believed that the referral system does not work properly. She pointed out several reasons for this, including the lack of patients' understanding of the system:

"It does not work properly at all, due to the culture of the society. Many patients do not understand the system. They don't trust the PHC, and they experience administrative obstacles. It's also important not to forget the impact of social relations in the violation such systems". (U-36)

A health technician claimed that the referral system is not working efficiently due to a lack of full knowledge and continuous staff development:

"Our staff do not have enough knowledge due to the lack of development of their abilities and expertise. The HSG is mainly responsible, because it does not organise training and development programmes in their work area". (P-28)

The importance of knowledge and health awareness was brought up by some interviewees. The lack of these factors is so significant that it negatively affects the provision and quality of the healthcare system. This subject will be discussed later in the fifth dimension (see section 7.3.5.2).

In summary, this section has partially fulfilled the study's sixth secondary objective, as it has determined the ways in which the Libyan HS is responsive and fair to the population's needs and expectations, as assessed from the interviewees' responses.

The qualitative results of the previous dimensions, as well as the quantitative findings, have clearly corroborated the interviewees' dissatisfaction with the quality of healthcare provision, HS adaptation and acceptability, and responsiveness to the population's needs and expectations. There was especially strong criticism of the HS and its governance from the health sector's officials and experts (i.e. under the referral system theme [see section 7.3.2.5]), in addition to other interviewees' categorised criticism of the total lack of management, organisation and leadership in the LNHS.

Since governance occupies a special place in a HS, as it involves the stewardship of all the functions and has direct and/or indirect impacts on all its outcomes, the interviewees' perspectives regarding HS and its governance will be the main focus of the next section.

7.3.3. The HS and its governance

This section examines the third dimension of the HS and its governance. It presents an analysis of the qualitative data for a more in-depth understanding and to clarify some of the previous qualitative and quantitative findings. It will address the first part of study's fifth secondary objective:

- *To describe the quality initiatives of the HS at national level and health facility level.*

The study's seventh secondary objective will also be addressed:

- *To explore the extent of the efficiency and effectiveness of the HS in order to develop quality policies at the national level.*

The interviewees, especially experts and officials, perceived that the HS and its governance are the key influence on almost all of the components, activities and outcomes of the HS. From the narratives of the interviewees, five themes emerged in relation to this dimension: HS polices, HS regulation and organisation, health legislation, supervision and inspection and HIS.

7.3.3.1. HS polices

HS polices in this study refers to any or all of the HS's vision, strategies and plans, priority-setting, commitment of leadership, and related activities. This theme includes three sub-themes: HS's vision, strategies and plans, setting priorities and leadership's commitment.

7.3.3.1.1. HS's vision, strategies and plans

Most of the interviewees provided a range of comments regarding the absence or inefficiency of clear vision, strategies and plans for the quality of healthcare and future of the healthcare sector. These perceptions were frequently repeated among the interviewees, especially the experts and officials. For instance, one of the officials emphasised the lack of planning and programmes to address either the present situation or future healthcare sector development:

"There is an absence of planning...in healthcare processes. Programmes to address problems and deficiencies in the medical services have not been implemented, nor are there any programmes or plans for the development of the healthcare sector". (E-4)

One of the interviewees mentioned the non-existence of properly prepared healthcare plans which reflect the state's vision for the healthcare sector, including both the LNHS and the LPHS:

"In general, there is no planning at MOH level. Examining the current situation, the future expectations and the predicted healthcare needs, then if there are any, they are just individual efforts. There are many and varied significant challenges, not only in

the LNHS but also in the LPHS. What does the state want from this sector? How does it want it to be?" (U-32)

Another interviewee confirmed the absence of plans that take into account population growth, in addition to the absence of emergency plans that respond to natural and man-made disasters:

"[There is a] lack of real plans to deal with population growth in Benghazi and a lack of emergency plans to deal with the individuals who may be exposed to natural...or man-made disasters...There are no scientific schemes or plans to deal with these challenges". (U-33)

One of the doctors criticised the traditional backward-management pattern that has failed to provide high-quality services based on customer needs, in addition to a lack of fact-based planning:

"Services quality based on the service provider point of view, which is usually traditional 'underdeveloped somewhat', and does not respect the patient's humanity, and entrenched culture of dominance…There is also a lack of planning for the future based on objectives and priorities derived from statistics of morbidity and the burden of disease". (P-20)

The interviewees criticised the lack of planning for both the LNHS and the LPHS. For example, an interviewee referred to the state's lack of obvious vision for LPHS future contributions, and the way in which it was established:

"Despite the proliferation of LPHS hospitals and clinics, there is no clear and honest vision for the future of the LPHS sector in the medical field so that it could promote or invest in this area as it does abroad. Basically, the LPHS was not established in a proper way; it arose to raise doctors' incomes, exploit their time, and absorb the growing numbers of patients". (U-31)

Another expert drew attention to the absence of a central planning body in the MOH. He had doubts about the existing policies and strategies, as well as the lack of long- or short- term plans:

"There is an absence of a central body able to deal with the planning, co-ordination, monitoring, inspection and evaluation of all health issues...The policies are neither clear nor objective. The strategies, if there are any, need to be developed to keep pace with development. The operational plans have not existed for a very long time; there are no five-year plans, or even annual health plans". (E-6)

Finally, a senior official from the MOH stated that an integrated medium-term plan had been completed, and he admitted that the HSG had followed the correct approaches to planning for the first time:

"Recently we set up an ambitious five-year development programme, which includes seven major health programmes...All of these programmes aim to address the bottlenecks, because for the first time we have followed the correct system in our planning. We have analysed the situation, identified problems, taken advantage of the existing data, got rid of increasing new construction and health facilities, and focused on the quality of healthcare, especially in the development of the HS". (E-1)

7.3.3.1.2. Setting priorities

Most of the experts and current and former officials interviewed believed that the prioritisation of high-cost therapeutic approaches and the neglect of preventive PHC has contributed to the waste of resources and the overall potential of the healthcare sector, which has not achieved the required outcomes. For instance, one official emphasised that the health outcomes that have been achieved in Libya are not commensurate with the size of spending and the potential of the healthcare sector's resources, due to the poor selection of healthcare priorities:

"When we analysed the health indicators that Libya has achieved, compared with global and Arabic indicators such as number of healthcare facilities and their horizontal spread, the number of HRH...and what had been spent on the healthcare sector, we concluded that Libya had dedicated large sums and resources to achieving outcomes that some other countries had achieved by spending less. The HS is also not making the best use of HRH or the available resources, and the most important reason for this is the failure to set healthcare priorities". (E-5)

Another healthcare expert highlighted the influence of healthcare experts and advisers in MOH decisions such as choosing priorities. They tend to focus on curative approaches and hospitals, rather than prevention and PHC:

"...One of the problems is that the Minister of Health is surrounded by a group of advisers – surgeons and specialist doctors – who advise and direct him towards the specialist hospitals rather than PHC". (E-6)

Some experts and current and former officials mentioned the poor selection of priorities. Although health legislation and policies focus on PHC, the HSG focuses on high-cost curative approaches and hospitals and neglects preventive and PHC:

"Libya was in the first group of countries that approved the principle of PHC after the Alma Ata conference (1978) and released its...national strategy (1995) to achieve health for all...But in spite of this goal and the adoption of the PHC concept and the development of healthcare to achieve it, the HSG is still following the traditional procedures that focus on spending on expensive hospitals which serve a limited number of people, rather than supporting the quality and efficiency of PHC". (E-5)

"PHC in the LNHS contain about 13 programmes, but only one programme works correctly, which is the immunisation programme. All the rest collapsed because of lack of support, priority and attention". (E-9)

"...I am not comfortable with the HS. It now focuses on curative approaches and hospitals and neglects the preventive aspect...For example, what did the HS do about kidney issues or rheumatic fever? It did not do anything. Does provide dialysis equipment solve the problem? No, it does not. The PHC level was ignored. Why have we got to this state? We are always dependent on the tertiary level and this is completely wrong". (E-10)

7.3.3.1.3. Commitment of leadership

Commitment begins from the very top of the HS and includes senior clinicians, managers, and the chief executive. The commitment of the leadership is expedient for applying quality programmes and achieving HS policies objectives, as the fate of these objectives and quality improvement is firstly in hands of leaders. Often, a lack of commitment hampers the capacity of the HSG to carry out its responsibilities, the old as well as the new.

Some of the experts and officials interviewed made several comments about the poor or absent commitment of the leadership to organising, prioritising and developing the HS and striving for the achievement of its objectives. Furthermore, the interviewees questioned the loyalty, dedication, and efficiency of these leaders, as well as the reasons for their selection. For instance, the following comments from two HS officials point out the lack of quality and commitment in the management of the HS, in addition to questioning the efficiency, loyalty and dedication of those leaders who had been selected, and the resulting negative impact on the quality of services:

"There is a lack of trained and committed management that have specific responsibilities and are monitored on an ongoing basis for development, not just replacement, in addition to the inappropriate choice of people for such positions…Most managers do not have sufficient knowledge of healthcare management...The way the officials are selected is not appropriate in terms of their efficiency, loyalty to the HS and their ability to conduct the work; choices are based on political loyalty rather than efficiency". (E-4)

"There has been a very large deterioration in the LNHS due to the presence of defects in the administrative system. We miss good managers at all levels who can run the service well and promote good standards of health, in addition to honest and committed managerial expertise that could lead the HS…These as a whole may be the cause of the poor quality of medical services". (E-9)

One expert doubted the competence and commitment of leaders who had been chosen because they gave priority to their personal vision rather than the HS's interests. They also lacked commitment to the efforts of their predecessors, as well as a clear vision and policies for the healthcare sector:

"There are drop-in managers and a lack of discipline in the HS. The management of health institutions is usually assigned to inappropriate people, even those who are not

stable, because of constant changes. The minister of health seeks to improve the service in his field, but responsibilities are circulated and exchanged, and everyone comes in trying to impose his personality and wanting to start again. Managers do not complete the work of their predecessors, but abolish it. Thus, there is no real commitment to the HS and its development, nor is there a full holistic view, vision, strategy, or clear action plan". (E-7)

Another expert supported this argument and confirmed the lack of continuity and commitment to the HS and its development. There is a lack of professional involvement in decision-making, and the process is always in a state of emergency:

"...Once a health strategy had been adopted, this work then stopped...There was no continuity and commitment to development. We do work hard for a specific period of time, but then this effort is forgotten; no one discusses it. This work requires commitment and sustained effort...The problem is that often the decisions related to these things are not shared by specialists, as the doctor who becomes Minister of Health or director is the one who decides, even if he has no detailed knowledge of the subject...Every official attempts to strive again and do what they think they can in the time they are given, to solve the problems. We always working in a state of emergency and have not seen continuity and commitment to the HS during the last twenty years in particular". (E-8)

Finally, one of the health sector officials underlined his dissatisfaction as a doctor with the services provided, because of the HS's lack of commitment to the citizens and the poor management:

"We are still blundering in providing our services to patients. We ourselves, as doctors, are dissatisfied with the level of services we provide to patients. For example, we ask patients to undergo tests and X-rays that are often impossible to carry out in the LNHS, so patients search for these in another place...All this means that we do not provide a good service to patients…Unfortunately, the HS does not consider the citizens in the right way. There is no real commitment to them, and this is a result of poor management". (E-9)

7.3.3.2. HS regulation and organisation

The regulation and organisation of the HS is a widely recognised responsibility of the MOH. This theme includes three sub-themes: HS organisation, integration of the provision of services, and centralisation versus decentralisation.

7.3.3.2.1. <u>HS organisation</u>

Many interviewees stressed the defects in the organisation of the HS, stating that the HS is difficult to understand, unstable, and subject to continued changes. Some of them also had doubts about its efficiency and the abilities of the people who had administered to them, which mainly affected the provision and quality of the healthcare. One of the MOH officials drew attention to continuing instability in the

HS and its negative impact on the LNHS's performance and the achievement of its goals:

"The HS is facing several types of problems. The most important problems are related to the functions it performs and the objectives it seeks to achieve. One of the reasons for these problems is that the HS is unstable and always subject to changes, cancellations and consolidation. This has happened time and time again, in the past and now". (E-1)

Some interviewees had doubts about the efficiency of the people who are in charge of the administration of the HS:

"[There is] constant and rapid change of administrative structures and officials, and a lack of qualified people to lead the HS either in the MOH or in Benghazi (DHA level). The HS does not take advantage of global institutions that specialise in health organisations and the management field. The HSG should look to international institutions with the competence and expertise to improve this situation". (U-33)

"The LNHS is facing many problems and difficulties due to the constant changes in the organisation of the HS, which is causing instability. People who are at the top of the HSG are mostly inefficient; they do not serve it as they should, and the state does not support the HS as one of the most important sectors in the country, so there is a need to reorganise the whole HS". (U-37)

Some experts and current and former officials focused on the imbalance in the organisation of the HS. The performance of its components is ineffective, and on top of these components are PHC and the referral system, which in turn impact on the service delivery mechanism and the quality of the healthcare service:

"...The components of the HS in Libya are suffering from a great imbalance in content and organisation; they are fragmented and ineffective. On top of these components are PHC and the referral system, which suffer from severe weaknesses...The citizens' freedom to choose a doctor...has provided an opportunity for patients to move from one clinic to another, from one doctor to another, and from one hospital to another...The disorganised freedom of choice has led to the loss of time and money and an increase in the daily number of patients per doctor in the LNHS. This means that doctors do not have enough time to investigate and diagnose, which affects the efficiency of the performance of the HS. So, lacking belief in the value of the LNHS, the citizens began to buy the time that they spent with a doctor in LPHS clinics in Libya or abroad". (E-5)

"...There is uncertainty about the HS and its levels of care specifically, because of the absence of proper regulation and organisation. Therefore the referral system does not work effectively, and may not exist at all in some health organisations, from basic health units to health centres, to polyclinics and then to the general hospitals...Everyone considers themselves to be at the tertiary level". (E-4)

Finally, one of the experts had doubts about the presence of real, specific and clear organisation in the HS which can identify the mechanisms of healthcare delivery and its levels, rights and duties. He believed that what currently exists is a random service:

"...Libya lacks any specific and clear organisation of its HS that integrates service levels and institutions. It should define the citizens' rights and the duties of the service providers, and outline how the service is delivered and how complaints are evaluated. These mechanisms are missing. We can say we do not have an organised HS, but a random service. For example, the citizen does not know where exactly to go when they get sick, to the clinic or to the hospital". (E-8)

7.3.3.2.2. Integration of the provision of services

Some of the experts and former officials interviewed made comments about the lack of integration between health organisations and other institutions that have some relationship with the HS. In addition, they criticised the lack of integration of the healthcare delivered in hospitals and PHC facilities, which affects the quality of the services provided in these institutions. For instance, one of the experts indicated the lack of integration among various health institutions, and in particular with the relevant institutions in the HS:

"Each of institutions in the HS has its own policy, strategy and plans, but they do not adequately co-ordinate between each other to provide integrated services or with relevant sectors in the HS". (E-6)

Some experts pointed out the existence of regulatory defects in the integration of healthcare provided in secondary and tertiary hospitals, which negatively affects adaptation and acceptability and the quality of healthcare provision:

"...There is a nonsensical problem, which is the lack of integration in LNHS hospitals containing all health disciplines...This usually results in the postponement of procedures. Many cases, especially accidents, require cardiology or urology or neurology specialists in the same team, because the problem overlaps the different departments; however, one of them maybe not available, which sometimes leads to delays...because hospital services are not integrated". (E-8)

"Our hospitals are tertiary-level hospitals. Although they are specialised, however, they offer all levels of care, from PHC to secondary to tertiary. Yet there is no comprehensive or integrated system to provide this service... Services are fragmented; they do not exist under one roof. No one can even take advantage of the doctor-on-call service from one hospital to another. In theory they can, but not in practice". (E-7)

Finally, an expert and former official criticised the poor organisation of healthcare and the lack of attention to the integration of PHC services:

"...The HS is poor. There is neither a referral system, nor PHC. Unfortunately each patient goes to the hospital and uses the specialised clinics' time...There is no interest in the integration of PHC services such as maternal services, infant and child services, health education, environmental health, et cetera, as all the basics of PHC as established by the Alma Ata conference have disintegrated in Libya". (E-10)

7.3.3.2.3. Centralisation versus decentralisation

Some HS officials made several comments concerning the experiments of centralisation and decentralisation experienced in the Libyan HS, and the negative impact of these structural changes on the organisation of the HS as well as its performance. For instance, one official identified the negative impact of the complete disbanding of the MOH at the central level, with its powers and mandates distributed to lower levels, in addition to the influence of other external conditions on the sector:

"...A long period of time passed without the MOH existing -about seven years, from 1999 to 2006. There was no central management of health in Libya…Along with the siege and embargo from 1992 to 1999,[1] all these factors affected the sector negatively…But after that things improved". (E-2)

Another HS official confirmed the above comments with respect to the ongoing changes in the HS due to the experiments with centralisation and decentralisation, citing them as one of the reasons for the poor quality of healthcare in Libya:

"The poor quality of healthcare in general is due to several factors... [Some of them] are the ongoing changes in the HS, and the senior administration in the MOH, which is sometimes responsible for the LNHS and sometimes not, because of the experiments with centralisation and decentralisation". (E-3)

Finally, one of the officials added some examples from the Libyan HS's centralisation and decentralisation experiences, ranging from severe control routines to the entire absence of control, and the negative impact of each action:

"...When the HS was centralised, for example, if you asked for spare parts that cost 10 LYD, the procedure passed through long lines of red tape in the HS. But when hospitals have independence, as is the situation now and they responsible for themselves, there is a misuse of funds and investments, as these are directed to purposes other than those that were originally intended. For example, they are used to buy private cars for directors and heads of departments in the hospital, while there is a shortage of medical supplies or medicine". (E-9)

[1] The siege and embargo mentioned here were due to resolution No. 731 passed by the United Nations Security Council in 1992 in response to the exploded Pan Am Flight 103 over Lockerbie, Scotland in 1988 (see section 5.3.2.5 in Chapter 5).

7.3.3.3. Health legislation

Many interviewees made comments concerning healthcare legislation in terms of its development, importance, purposes, and implementation mechanisms. For instance, one of health experts, a former minister, confirmed that the situation was better in the past, but health legislation has not kept up with progress and development, which creates room for disorganised individuals to interpret the legislation in their own way when performing their work:

"The current situation is a result of the responsibility that was lost with the disappearance of the HS. No one knows who is responsible for what…In the seventies, things were much better in terms of regulations, but rules and health legislation in Libya have not kept pace with the progress and development that have taken place in the society or in the world. The health law is about 40 years old and has not been modified, developed, or added to. This is illogical and impractical...As a consequence, new issues emerge that are not referred to in the law and its regulations, so people have bypassed it in personal and random ways -each one by themselves- and there is no consistency between individual interpretations". (E-8)

One of the interviewees stated that there is confusion and randomness in the issuance of health legislation, which negatively affects the performance of work:

"Health legislation governing the HS is issued in random ways. The legal system dealing with the health work is in a state of confusion. There are frequent changes to the legislation which lead to difficulty and confusion in the HS, and a lack of clarity in terms of reference, rights and duties. Also, healthcare facilities operate in various states of dependence or independence to the health sector or other sectors". (U-33)

The absence of regulations, rules and legislation that define terms of reference and the rights, duties and obligations of service providers has had a negative impact on the efficiency of PHC performance and the referral system:

"We do not have regulations or legislation that determine the rights, duties and powers of PHC doctors and make them bound to accept the cases referred to them. They are not held accountable to the service provider at any level if they do not fulfil their duties…What is going on now is that patients are referred in any way, not according to the referral system that should specify the correct procedure...It is up to those who provide the service to decide what to do as they deem appropriate. They do not have obligations...The situation is still completely random". (E-8)

One of the interviewees focused on the negative impact of the LPHS on the LNHS due to its use of LNHS resources, which is a consequence of the absence of legislation that regulates the relationship between them:

"The interference of the LPHS with the LNHS has had a very negative impact on the LNHS because of a lack of legislation, regulations or procedures that separate the

two sectors and determine the relationship between them. Without this, the LPHS will continue to use LNHS resources, and thus, will break it down". (U-32)

Finally, one interviewee discussed important legislation in the area of medical responsibility and the defects in its application mechanism that affect its primary purpose, which is to prevent the occurrence of medical errors. This could be implicated in the high rate of medical errors that were mentioned previously:

"...The law regarding medical responsibility needs to be audited and reviewed according to the circumstances, like any other legislation...The task cannot be assigned to an insurance company, because it will apply just part of it -the compensation. But the work required includes more than that; the problem must be prevented from occurring, or at least limited. This is supposed to be a preventative measure because loss of human life or safety cannot be compensated for, even when the error occurs in any HS anywhere in the world. But in a good HS any case must be documented and studied, so as to prevent its recurrence". (E-8)

7.3.3.4. Supervision and inspection

This theme includes comments from HS officials and experts about the lack of monitoring, inspection, control, supervision, evaluation of performance, and implementation mechanisms, whether in the LNHS or the LPHS. For instance, an HS official emphasised that there is a lack of monitoring, inspection and control mechanisms for fiscal spending, which in turn leads to further degradation and failure in the LNHS:

"Spending on healthcare is not enough, and this has contributed significantly to the poor quality of healthcare services in Libya. Even in the presence of enough spending, there is misuse of this expenditure as a result of absent monitoring and control mechanisms. This, and the lack of inspection and follow-up of these facilities and institutions, was the cause of the deterioration in the LNHS". (E-9)

This official added another comment about poor monitoring, inspection and control of imported medical supplies in the HS, and the poor quality of these supplies and equipment:

"There has been a problem with medical supply in recent years, in terms of quantity and quality...The equipment supplied to LNHS facilities has been either poor quality by all standards, or not the required equipment. For example, if you require blood pressure measuring devices, they work just one day, because the quality is very poor...There is also a significant shortage of medical test supplies. The reason for this, in my opinion, is lack of monitoring by the HSG, as well as inspection and follow-up. All these things contribute to the poor quality of service and affect citizens' confidence in the LNHS". (E-9)

One of the experts indicated defaults in supervision and inspection in the LPHS and the necessity to give the opportunity to the doctors' union to participate in monitoring, supervision and inspection:

"LPHS clinics are spreading like shops; the doctor just writes a prescription and takes the money. In fact I do not support the existence of the LPHS, but if there is insistence on its presence, it must be organised...and it should be under the supervision of the HSG…along with, of course, the participation of a strong doctors' union in monitoring, inspection, follow-up, and issuing legislation and regulations...We had a very well organised doctors' union established in the past, but unfortunately now it has an insubstantial role only". (E-10)

Another expert supported this argument and added another point related to the poor monitoring, supervision and inspection mechanisms of the LPHS by the HSG, with regard to bringing in medical experts and specialists from abroad:

"...Bringing medical experts and specialists from abroad to the LPHS has been a disorganised process that has led to confusion. Unfortunately it has turned into a business process, so that the medical experts or specialists come to Libya in order to sit with the patient alone and persuade them to have surgical procedures or treatment in their special clinics in their own countries. There is no censorship, restrictions, controls, monitoring or inspection of the profession exercised from outside the country. Also, without being channelled through training programmes, not all who come are at the qualified level that they should be". (E-7)

Finally, another comment from a HS official highlighted the absence of quality evaluation and control mechanisms, whether for the LNHS or the LPHS. He presented an example of the absence of regulation of the standards in medical laboratories:

"...The LPHS does not monitor, inspect or evaluate, and this is another problem. We should set standards for quality that are not completely present in the LNHS or the LPHS, where it is considered a random service. There is no regulation of the standards in medical laboratories. We are often exposed to this problem; for example, the results from the medical laboratory are different when a patient's tests are repeated in another laboratory. There is no supervision or monitoring, and no inspection to assess the quality of these medical laboratories, either in the LNHS or in the LPHS. It is true that the LPHS has participated in the provision of healthcare, but we cannot say it resulted in a good healthcare service, because there is no control of the quality of its output". (E-9)

7.3.3.5. Health information system

Governance is about vision, intelligence and influence. But without the full picture and the associated data, assessments of responsiveness, or of intermediate measures such as quality of healthcare provision, are impossible and a good HSG cannot be practised. This theme should therefore be a vital part of a HSG, as it deals with a very

important issue, which is how health information is collected and documented for the purposes of the HS. This theme includes two sub-themes, namely collecting health information and health documentation.

7.3.3.5.1. Collecting health information

Some interviewees claimed that the HSG was facing difficulties with collecting essential health information which is necessary for planning, evaluation and performance development, because of the infrastructure's weakness in collecting, analysing and documenting the information from various health institutions. In addition to a scarcity of specialists in this area, there is ignorance about the importance of the information and collection methods and techniques, because of an absence of relevant training programmes:

"...There is a scarcity of specialists to collect information in the LNHS...as well as ignorance and a lack of ICT skills. Many health professionals are unaware of the importance of collecting and using electronic data in healthcare, because most of them have not been trained in this area". (E-6)

Another health expert drew attention to the absence of a good standardised mechanism for the collection of health information. He referred to the existence of different forms, models and methods of data collection in the LNHS:

"We are suffering from problems in this area. We do not have a good standardised mechanism for the collection of health information that gives a clear picture of the patient's health status which can lead the process of planning and identifying resources...There are many requirements, but the MOH does not care about even global ones such as the ICD[1]...For example, the same illness might be described differently, even on a death certificate. The causes of death are still not documented correctly…There is no standard form of data collection. In many cases, each health facility has designed its own forms, in isolation from others". (E-8)

Finally, one of the interviewees mentioned the absence of a HS body specialised in conducting studies and surveys in various health and medical areas, which is required in the provision of quality healthcare services:

"There is no HS body specialised in collecting data, preparing reports, and conducting studies and surveys in various health and medical areas such as diseases, healthcare and its availability, HRH, the population's health status, and the extent of their needs for health facilities…For example, the population has grown in some areas while the number and capacity of healthcare units, as well as the quality of their performance, has remained the same". (U-33)

[1] International Classification of Diseases

7.3.3.5.2. Health documentation

Some interviewees criticised documentation processes and the use of information in the HS, which utilises more traditional, manual technology. Furthermore, the available information lacks the scientific basis used globally for documentation and classification, thereby reducing its value and importance. One of the health experts referred to the weakness of the HIS, which adversely affects planning and the evaluation of a patient's health status, in addition to wasting time and resources:

"A national HIS is weak or absent...We pay a high price for the lack of access to information, namely poorly defined basic health indicators that are related to the causes of morbidity and mortality, in addition to poor planning and decision-making, low productivity, and loss of time and resources". (E-6)

Another expert criticised the HIS and the documentation process, which lacks precision and order, making it difficult to get information when needed and reducing its value and importance:

"Records in hospitals are disorganised. We rarely find a complete file, and forms are not filled out completely. When needed for research in some cases, you cannot rely on a reference because of the lack of proper organisation. Often, people looking for information cannot access it...It is very important that the best mechanism to organise this information becomes available". (E-8)

Finally, another expert supported the argument of a lack of good medical documentation, and failure in the use of full mechanisation and electronic programmes in medical documentation in particular and the HS in general:

"[There is a] lack of good medical documentation. Also, there has been a severe failure to keep pace with what has been achieved in the rest of the world. It is not wrong to find full mechanisation in our hospitals, to be used especially in medical documentation, so that our hospitals become paperless -or at least so that they make more use of technology". (E-7)

In summary, this section has fulfilled the study's seventh secondary objective, as it has explored the extent of the efficiency and effectiveness of the HS, as viewed by the interviewees, in order to develop quality policies at the national level. It has also described the quality initiatives in the HS at national level from the interviewees' perspectives, thereby partially achieving the study's fifth secondary objective.

The results for the third dimension clearly demonstrate that the HS has misused its power and squandered its potential. It is poorly structured, inefficiently organised, and badly led, and has thus seriously compromised, directly or indirectly, almost all of its proper functions, components, activities, and outcomes. There is a very important pillar of the HS, namely its financial and resource profiles, which directly inherits the HS's problems. Since the LNHS is provided to all citizens free of charge, inadequacies and under-funding can lead to a decline in the quality of services and do

more harm than good, in addition to exposing individuals to the financial risks of illness via OOP payments when they demand services. One of the most important factors affecting the performance of the LNHS is the finance system of the HS, which mainly relies on government funding through the MOF, as the allocation to the MOH occurs through the government budgetary process. Thus, the next section embarks on analysing the interviewees' perspectives regarding the financial and resource profiles of the Libyan HS.

7.3.4. HS's financial and resource profiles

This section presents the fourth dimension, HS's financial and resource profiles. It further analyses the qualitative data for a more in-depth understanding, as well as clarifying some previous qualitative and quantitative results, especially from the dimension of HS and its governance. Furthermore, it will partially address the study's sixth secondary objective:

- *To determine the ways in which the HS is responsive and fair to the population's expectations.*

The interviewees perceived that the HS's financial and resource profiles are a key influence on the components, activities and outcomes of the HS. From the narratives of the interviewees, three themes emerged in relation to this dimension: financing of the HS, the importance of HRH and profiles of physical healthcare resources.

7.3.4.1. Financing of the HS

The most important issue in the financing of the HS is how fairly it is financed. Three sub-themes were found to constitute interviewees' perceptions of the financing of the HS: how financing affects efficiency, how financing affects equity, and health insurance.

7.3.4.1.1. <u>How financing affects efficiency</u>

When discussing financial subjects, some of the interviewees focused on the inadequate and inconsistent funding for the HS, and the inappropriate distribution of the financial allocations for activities and healthcare. In addition, they had concerns about the poor control of health spending, which impacts negatively on the quality of services:

"Due to the lack of a proper financing system, resources are inconsistently allocated - there is either too little or too much...There are also large fluctuations in budget allocations from year to year. Budgets are neither well prepared annually nor classified correctly. For example, spending for development programmes is restricted to construction, and there is no money to carry out activities to change people's behaviour and improve their health habits. There is no spending on health education programmes for the prevention and early detection of certain diseases". (E-1)

"There are constant fluctuations and instability in the supply of various medical necessities, and limited budgets for medical equipment in hospitals. The money allocated to the health sector is not received in a timely manner because these budgets are based on an unstable income, which is related to unstable oil prices. This sometimes leads to reduced spending on health, while the demand for healthcare services is constantly increasing". (E-5)

"The unstable and irregular healthcare funding resources -whether for the LNHS or the LPHS- and free healthcare in the absence of regular and appropriate funding, has been detrimental to the quality of services...Recently there has been heavy spending, but it was not directed or structured". (E-7)

7.3.4.1.2. <u>How financing affects equity</u>

Many interviewees touched on the cost factor, believing that patients must wait to access services in the LNHS because of excessive price rises in the LPHS, which most patients cannot afford. Others compared the cost of treatment in the LPHS and abroad, claiming that the cost of TA is on a par with the LPHS in Libya. Others stated that the cost of TA is higher. However, despite the better results that patients might obtain from the LPHS or TA, the cost factor remains a big concern:

"...The portion of the GDP that is spent on health is not much; it does not exceed 4% which is very low. Other countries spend at least 10% of their GDP. Unfortunately, the result is that the citizen is the victim, because they are forced to pay OOP to cover the costs of services". (E-1)

"The LPHS is a commercial sector for-profit organisation. Therefore it goes for certain profitable disciplines such as fast surgeries, or provides services to people from certain classes who can pay the fees...Now most of the contemporary diseases are chronic diseases, unsuitable for turning a profit. Many people with these diseases cannot afford to pay the fees, buy medicines or bear the expenses". (E-8)

"The LPHS provides for the needs of patients who have sufficient financial capabilities to bear the costs of treatment. The rest of the patients cannot afford such costs, and end up waiting for treatment in the LNHS as a result of the excessive rise in the prices of medical examinations, medical tests, X-rays, drugs, and other healthcare services. The LPHS is just looking for a quick profit". (P-12)

"Maybe the LPHS has contributed to the provision of healthcare for some categories of society, but it is well known for its high prices. It has increased the gap in the provision of healthcare services, because not every patient is able to afford such prices". (P-27)

"The reasons that have led patients to travel for TA are the same reasons that lead them to the LPHS, for those who are able to afford these options. The cost of TA is the same as the cost of going to the LPHS". (P-11)

"...Is it true that the cost is high [for TA], but the patient will find everything as they want. From the first day, they will feel better and be satisfied with everything around them". (P-29)

7.3.4.1.3. Health insurance

Some of the interviewees believed that the absence of health insurance is one factor that has led to the poor quality of healthcare in general. They said that the state cannot cover healthcare expenditure alone, and that patients should not have to pay for healthcare OOP:

"The problem is the absence of a health insurance system. We already have a proposal for a social solidarity scheme, as an alternative to the health insurance system. It is based on payment from everyone, as the state alone cannot cover all health expenditure". (E-6)

"One of the other issues that led to the poor quality of services in general, and citizens resorting to TA, is the lack of health insurance, because any HS in which the patient pays for healthcare OOP is a failed system". (E-7)

7.3.4.2. The importance of HRH

The interviewees frequently referred to a lack of HRH and financial and moral incentives in the LNHS, as well as the preparation of HRH and training and continuous education and development programmes. Four main sub-themes were found to constitute the interviewees' perceptions of the importance of HRH: preparing HRH, performance improvement, HRH shortages and financial and moral incentives.

7.3.4.2.1. Preparing HRH

Most experts and officials who were interviewed criticised the preparation and qualification of HRH They stressed the continued decline in the quality of graduates from health and medical educational institutions, which they believed is due to the lack of control of the health sector, as well as ignoring the MOH's opinion on the inputs and outputs of health and medical education. In addition, plans that could match the needs of various categories of HRH in the LNHS are absent:

"One of the reasons for the poor and varying quality of healthcare in general, whether in the LNHS or the LPHS, is the low quality of graduates from health and medical schools, due to the lack of control in the health sector or taking into account the MOH's opinion on the inputs and outputs of health and medical education". (E-3)

"There are no clear plans that address the needs of various categories of HRH in the LNHS, where there is a surplus of such staff. The use of resources is not directed and there is a poor distribution of HRH. There are weaknesses in the financial allocations to support the development of HRH, and there has been no identification of the best

incentives for HRH in the health area. Also, there is an imbalance between HRH in urban hospitals and those in services outside the cities". (E-*6)*

"Graduates are lacking a good education and proper qualifications. Medical education is suffering from major problems in the universities and medical colleges such as large numbers of students. Some important basic skills are being ignored, especially communication skills; health ethics; how to deal with patients, colleagues and the sector as a whole; and critical thinking skills. Recently qualified doctors in Libya lack many of these skills". (E-*7)*

"We do not have good nursing. We should start some high-quality nursing schools; we need many of them. While doctors make up a large proportion of HRH...unfortunately, specialised doctors have become more than family doctors or general practitioners; each person wants to be a specialist. Therefore, attention must be paid to medical education, and general practitioners and family doctors should make up the vast majority of HRH". (E-10)

7.3.4.2.2. Performance improvement

This sub-theme deals with the interviewees' comments on the efforts of the HS to establish skills improvement programmes for staff. This theme includes two areas: training and continuous education and development.

- **Training**

Most of the interviewees stressed that the HSG is not paying sufficient attention to training programmes, to overcome the performance deficiencies of HRH as well as to enhance their skills and efficiency and to keep pace with the rapid developments that take place in this vital sector. The few local training programmes organised by the HSG have lacked quality and efficiency in terms of methods and content. One of the health professionals interviewed pointed out a lack of training and qualification programmes for HRH which would help them to perform their work:

"HRH have not assimilated or understood many important things in their field, because they have not received basic necessary training courses, seminars, or qualifications...so they can provide what is best for patients in this noble field". (P-29)

Some interviewees confirmed the lack of effective and high-quality training courses or qualifications for HRH. Some of them claimed that the local training programmes organised by the HSG need to be reviewed in terms of their content and training methods, or in terms of the people who are conducting the training. The interviewees recommended the use of trainers who are capable and efficient, as well as the use of experts and professionals from abroad:

"There is a lack of effective and high-quality training programmes organised by the HSG for all HRH and the ones that exist need to be reconsidered in terms of methods and content". (E-5)

"...There are some local training programmes for HRH, but they are inefficient or low-quality in terms of the methods used or the content. In addition, there is a lack of qualified trainers or instructors, and the HSG is not hiring experts and specialists from abroad, so the benefits of these programmes are very limited". (P-16)

One of the health sector officials highlighted that the directors of some health units and facilities have not had the training that would give them an adequate understanding of work systems, and he gave an example of the loss of some training efforts as a result of job changes and administrative instability:

"The managers of health units or clinics, or even regional administrators, sometimes do not understand the meaning of PHC or the referral system, because they have not had enough training. There is also a lack of administrative stability...For example, about a month ago, the HSG had organised training courses for health officials about PHC programs, in collaboration with the WHO. Did you know that most of the administrators who attended that training course were replaced by new administrators?" (E-9)

- **Continuous education and development**

Many interviewees drew attention to weaknesses such as the poor performance of the LNHS and its HRH due to a lack of interest in continuous medical education (CME), continuous professional development (CPD) and professional development programmes (PDP) for HRH. One of the health professionals interviewed claimed that the LNHS is not working efficiently because HRH lack sufficient knowledge and experience in their work field as a consequence of the lack of continuous education and development of their abilities and knowledge. The HSG bears the responsibility for this failure:

"Our HRH have insufficient knowledge because of the lack of development of their abilities and expertise in their work area…The HSG is mainly responsible, because it does not organise training courses, PDP and CPD programmes for the staff". (P-28)

One of the health experts confirmed the weak performance due to the lack of training and continuous education and development programmes. He also cited the lack of assessment and evaluation programmes and the failure to link these with a person's career development in the LNHS:

"The weak performance of medical institutions and many of their staff is due to a lack of training, CME and CPD programmes which meet their requirements, as well as the absence of performance evaluation programmes. There is no link between continuous education and development programmes, and a person's career development". (E-6)

Another health expert referred to the failure in training and continuous education and development programmes, in addition to the failure to provide opportunities for scientific development through contact with experts and participation in scientific events abroad:

"The number of HRH who possess the necessary skills is dwindling. There is a lack of continuous training and efficiency-increasing programmes and CME and CPD programmes, as well as a lack of contact between Libyan staff and foreign experts. Staff are not given the opportunity to participate in conferences, seminars and workshops abroad on a regular basis". (E-7)

Finally, one of the interviewees linked low levels of medical education with the scarcity of opportunities to keep pace with the continuous education and development of medical skills inside and outside the country, which has resulted in a medical *'brain drain'*:

"…The HSG does not give opportunities for international co-operation in medical education fields, to keep pace with continuous scientific development in health and medical areas and create opportunities for continuous education and development, inside and outside the country. This has been one of the causes of the 'brain drain' of excellent HRH, in addition to low salaries and lack of respect and appreciation". (U-31)

7.3.4.2.3. <u>HRH shortages</u>

Most of the interviewees drew attention to the shortage of HRH in the LNHS, which has led to the postponement of surgical interventions, longer waiting times, and the shortage of hospital beds, and which consequently impacts negatively on the quality of services. The interviewees argued that there is a shortage of doctors in general and specialist doctors in particular, as well as other healthcare professionals such as nurses and technicians, in LNHS out-patient clinics.

However, the lack of HRH seems to have an enormous effect on the quality of healthcare provision. This has been mentioned previously in the first two dimensions, and in more detail in some sections (see 7.3.2.4 and 7.3.2.5 in the second dimension).

7.3.4.2.4. <u>Financial and moral incentives</u>

Most interviewees asserted that there is no motivation for HRH due to the absence of financial and moral incentives and a lack of encouragement and appreciation of their efficiency and performance. This causes staff members to feel frustrated and bored, which results in lower levels of performance and productivity:

"…There is little encouragement or appreciation of HRH, not even in the way of a merit certificate, and so they lack the financial and emotional motivation to give more". (P-11)

"There are highly qualified Libyan doctors, but no one encourages them. The lack of incentives leads to frustration and low morale". (P-13)

"There is no hope of improving healthcare standards without the family doctor and PHC...Unfortunately, PHC doctors and other staff in this area are getting less income than their colleagues in hospitals. This is a big mistake, as it leads to reluctance to pursue this discipline. There are no incentives for HRH in PHC, encouraging them to work". (E-6)

7.3.4.3. Profiles of physical healthcare resources

The interviewees frequently referred to imbalances in healthcare resources, and especially the problem of scarce and deteriorating physical resources in the LNHS. They believed that patients find high-quality healthcare either in the LPHS or abroad, because these systems can meet all of their requirements. Two main sub-themes underpinned the interviewees' perceptions of profiles of physical healthcare resources: production of physical resources and maintenance.

7.3.4.3.1. Production of physical resources

Most of the interviewees believed that there is shortage of medical and health facilities, as well as a lack of essential resources such as equipment, in the LNHS. They emphasised that there are not enough beds in some hospitals, in addition to a lack of tools and other equipment, medicine, and drugs such as anaesthetics. Other interviewees criticised the lack of modern medical equipment and devices for cures and diagnoses. They believed that these are reasons why patients are driven to the LPHS or TA.

- **LNHS physical resources**

One of the nurses interviewed described the shortage of health facilities and equipment, and the resulting harm to patients:

"...LNHS hospitals are suffering from the lack of modern medical equipment, whether diagnostic, therapeutic or surgical, which is necessary to serve the large number of patients. For example, in some cases the patient gets a remote appointment for a necessary MRI or CT SCAN diagnostic, but the patient dies before being diagnosed". (P-13)

Another nurse confirmed this shortage, and explained some of it is causes:

"...There is a shortage or lack in all hospitals of appropriate modern medical equipment to identify the patient's condition, such as CT and MRI scanners. When such equipment is available, there is often no doctor or technician present to operate it. These devices also break down constantly because of lack of maintenance or spare parts". (P-14)

Some health technicians echoed the nurse's comments:

"...There is a lack of modern medical equipment in Libya which can help medical personnel to make an accurate diagnosis and detect disease". (P-27)

"...There is a lack of medical equipment such as MRI scanners, which are available in some LNHS hospitals in sealed rooms, while patients are referred the LPHS". (P-30)

Another nurse claimed that patients go to the LPHS because of the poor quality of healthcare in the LNHS:

"What drives patients to the LPHS for treatment is the poor situation in the LNHS at the moment. There is a lack of medical equipment to assist in diagnosis, as well as a lack of medicines, X-rays, and most of all, necessary medical tests for diagnosis." (P-12)

- **LPHS physical resources**

One of the nurses interviewed made the following comments related to the accessibility of healthcare, and the resulting exodus of patients to the LPHS:

"The lack of some essential services in LNHS hospitals such as X-rays and most of the necessary medical tests for diagnosis, and other needs, forces patients to obtain medical tests outside the hospital in the LPHS". (P-12)

Another nurse stressed the success of the LPHS in bridging the gap in healthcare and summarised the reasons that drive patients to the LPHS:

"The LPHS provides everything the patients' need, especially modern equipment, while the LNHS does not…There is no shortage of anything, especially in the case of surgery…unlike the LNHS, where the quality of healthcare is poor...which forces patients to go to the LPHS". (P-14)

Another nurse confirmed her colleague's opinion in this aspect:

"The LPHS provides quality healthcare because it has everything that the patients require. Sophisticated equipment is available for patients, as well as medicine, and all the necessary medical tests that are not available in the LNHS". (P-17)

- **Health resources available abroad**

Some of the interviewees stated that one of the most important reasons for TA is the availability of the latest medical equipment, as well as specialist doctors, technicians and other HRH with an advanced level of experience and skills, in hospitals abroad. One of the health technicians commented:

"...The latest medical equipment is available abroad. There are specialists there to operate this equipment, in addition to the presence of specialist doctors and technicians with an advanced level of experience and skill". (P-27)

7.3.4.3.2. Maintenance

Some of the interviewees pointed out that the HSG has not given adequate attention to this important issue, which involves medical equipment, buildings and property. This has negatively affected the quality of the services:

"The medical equipment maintenance body that used to exist in the healthcare sector has been abolished. And strangely, the companies that supply the equipment are not responsible for its maintenance. For example, an equipment malfunction means the end of it...The people who are responsible for equipment maintenance services are engineers and technicians from outside the health sector. All of these factors affect the quality of the service". (E-9)

"There is also the recurring maintenance problem in most hospitals, without prior study of how to accommodate patients at another hospital during the maintenance of equipment". (U-39)

"The HS does not work correctly. Village hospitals that have been established outside of Benghazi do not serve the population properly...There are closures for very long periods because of maintenance, which has contributed to the decline in the quality of medical services in Libya. The citizens have lost confidence in hospitals and doctors…These are the standards at this time: no service, no confidence, and subjective and emotional evaluations rather than -scientific and logical ones". (E-9)

In summary, this section has partially fulfilled the study's sixth secondary objective, as it has determined the ways in which the HS is *responsive* and *fair* to the population's needs and expectations, as assessed from the interviews.

The interviewees perceived that the financial and resource profiles of the HS are a key influence on LNHS components, activities and outcomes. Their perceptions clearly demonstrate that this dimension has a huge direct and/or indirect influence on the components, activities and outcomes of the HS, which are under-funded. There are imbalances in the supply of health resources, both physical and human, including deteriorating facilities, abysmal performance and low working morale among HRH. All of these issues have fundamentally led to a decline in the quality of services, which can do more harm than good. In addition, patients must sometimes make OOP payments for healthcare, which can expose them to potentially catastrophic financial risk. The qualitative analysis also found that some external factors have had a major effect on the quality of healthcare provision. Although this dimension is beyond the objectives of this study, the interviewees frequently mentioned the impact of these external factors on the quality of healthcare provision and the HSG. They will therefore be discussed in the next section.

7.3.5. External factors

These factors appear to be related most closely to the interviewees' perceptions of the dimensions of quality of healthcare provision and adaptation and acceptability. The

qualitative analysis found support for three core themes in relation to external factors: cultural, social and psychological aspects, health awareness and the double burden of disease.

7.3.5.1. Cultural, social and psychological aspects

Some of the interviewees pointed out cultural, social and psychological aspects related to the demand for healthcare in the LPHS and abroad. Some of them believed that gaining access to these expensive forms of healthcare entails a kind of cultural and social boasting and bragging by some patients or their families. Others believed that going to the LPHS or travelling abroad for the required treatment is something done by the patient or his/her family as a result of cultural, social and psychological pressure on them, regardless of the availability of such treatment locally. These aspects therefore play an indirect role in influencing opinions about the quality of healthcare, including confidence in the services and staff and general satisfaction with the services. This showed in the interviewees' comments about previous dimensions especially that of quality of healthcare provision, where they made some comparisons between the LNHS and LPHS and also TA.

Some of the health professionals interviewed pointed out some cultural and social aspects related to the demand for healthcare in the LPHS:

"[Some patients go to the LPHS] because of cultural and social aspects, such as being able to boast and brag, or they are looking for psychological and social satisfaction so that the patient or their family are not blamed for the failings of the healthcare service". (P-22)

"Through direct contact, I can say in all sincerity that there are those who go for boasting or bragging, especially in the famous hospitals, and those who do not want to be in crowds and stand in queues, especially in hospitals with very large numbers of patients". (P-26)

One of the healthcare experts pointed out some cultural, social and psychological aspects related to the demand for healthcare abroad:

"There was a desire to go abroad to attract a kind of attention, in order to socially indicate that the patient's family is spending and taking care of them. It is a cultural, social and psychological aspect". (E-7)

Other health professionals supported this argument:

"…There are other reasons, which may be psychological or social. In many cases the patient could be completely cured in local hospitals, but in terms of social or psychological aspects, the family takes the patient abroad so the patient does not feel that their family is not concerned about them. They are not getting anything more than the treatment they received in Libya, but this still happens a lot" (P-19)

"In addition to the uncomfortable psychological feeling in Libyan hospitals, there is a kind of social embarrassment for some people if they do not travel abroad for treatment". (P-25)

Finally, this interviewee described the cultural, social and psychological impact and pressure on the patient and their family in light of his personal experience in the treatment of his own mother, who spent the last three years of her life moving between the LNHS and LPHS, and hospitals abroad:

"Nothing else remains but a psychological motivation…the frustration that has plagued the citizen because of the deterioration of LNHS and LPHS healthcare in Libya, which motivates them to search for something to offset the bitterness of failure in the treatment of themselves or a member of their family...in addition to the cultural and social pressure on the patients and their family to seek healing, even at the end of the world". (U-33)

7.3.5.2. Health awareness

Some of the interviewees drew attention to the lack of health awareness in Libyan society, which negatively affects the HS in general, and the provision and evaluation of healthcare in particular. In addition, some interviewees mentioned a lack of health awareness among some HRH themselves due to the HSG's large shortfalls in this important aspect, including not paying enough attention to prevention rather than treatment:

"...There is a lack of health awareness and a lack of familiarity with the importance of prevention rather than cure among the majority of people in society, including the educated ones and many of the medical and assistant staff. This is due to the HSG's lack of interest in health education programmes". (P-28)

"From my point of view, the citizen often lacks awareness of the disease they are suffering from, including the treatment options and their availability locally or abroad…We found that the patients who travelled abroad returned in the same state of health, or much worse, with the addition of serious complications". (E-4)

"The problem is not with the quality of healthcare; it is with the low level of health awareness amongst the patients themselves. This affects the quality of the healthcare that they receive, and it is hard to have confidence in patients' assessment of healthcare when they lack this awareness". (P-15)

7.3.5.3. Double burden of disease

Some of the interviewees believed that the double burden of disease in Libya (CD and NCD, and RTAs) is a considerable strain on the HS, and it has had a significant negative impact on the quality of healthcare:

"The HSG is facing several types of problems. There are problems with the system's basic functions, and there is a burden of external influences that put further pressure on the system such as the environment and people's behaviour...There is also the burden of CDs, NCDs, and RTAs*... NCDs and* RTAs *constitute the greatest burden, accounting for more than 97%, of health problems and deaths in Libya, while CDs constitute about 2%". (E-1)*

"Some CDs such as AIDS, hepatitis, and TB continue to pose a health problem. There are also NCDs such as heart disease, blood vessel diseases, diabetes, and cancer, which are becoming more widespread and are among the most common causes of death. RTAs also contribute to the high incidence of death and disability. All of this has a significant impact on the HS and the quality of healthcare provided to society". (E-6)

"One factor that affects the quality of healthcare provided in the LNHS is the large number of patients with chronic diseases such as diabetes and hypertension, which require patients to stay for a longer period in hospital. Also, the number of cases of other chronic diseases is growing, and there are large numbers of RTAs, fires, and various types of injuries". (P-29)

In summary, the interviewees mentioned some external factors that have put considerable strain on the HS, as they play a direct and/or indirect role that negatively affects the quality of local healthcare services in terms of confidence in the services and staff, and general satisfaction with the services. This places a considerable strain on the HS, and it has had a significant impact on the decline of the quality of healthcare provided to society.

7.4. Summary

The qualitative findings pointed to broad areas of obstacles and problems which affect the provision of high-quality and efficient healthcare, while the people's choices about health services were influenced by the HS's responsiveness. The findings demonstrated various constraints in equity, accessibility, availability, waiting times and the referral system, which all lead to poor responsiveness to patients' needs. They also showed that the HS has misused its power and squandered its potential, as it is poorly structured, inefficiently organised and badly led. Broad areas of difficulties emerged such as polices, regulation and organisation, legislation, supervision and inspection, and the HIS, as well as various constraints regarding the HS's financing and human and physical resources. Furthermore, cultural aspects and health awareness play both direct and indirect roles that negatively affect the quality of the provision of healthcare.

Next chapter will discuss the interpretations of the study's findings and make comparisons within the context of the existing knowledge gained from the literature.

Chapter 8: Discussion

8.1. Introduction

The WHO defines health as a "state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 1946:100). This concept is complex, pluralist and dynamic because the health status of an individual, community or nation as a whole is influenced by interrelated determinants of different natures, which interact in the flow of events in a permanent process of change. HSs consist of multiple elements including values, principles, policies, structures, processes and negotiations among people, aiming to improve the performance of health functions and other relevant health actions, and to achieve better health outcomes and responses to people's health needs with efficiency, justice and equality (WHO, 2000). However, some of the intractable problems of HSs, especially in developing countries, still pose a challenge to the available resources, knowledge and technologies; this may be related to current inefficient and ineffective strategies, including adapting quality initiatives, which require change in more systemic and creative ways in order to improve the performance of HSs and ultimately the health status of people.

This study's main objectives have been to assess patients' perspectives on the quality of healthcare at hospital level in Libya, as well as to explore how different health service stakeholder groups perceive the HS and the quality of healthcare, and their views regarding its priorities and merits. The study's main objectives were derived from three related concepts. First, quality is a multidimensional concept, and a pluralistic approach synthesising the views of different interest groups is necessary for improving and maintaining a high standard of quality of care. Second, HSs include all institutions, facilities and resources that are devoted to producing health activities and trying to achieve the HS's overall goals. Third, due to the lack of scientific research in the study's area, Libya, the present study provides the first substantial body of knowledge based upon empirical data to provide a foundation for developing a framework and evidence base that health policy-makers and providers could utilise for successful HS reforms. It is also hoped that it will enable them to devise and develop policies and strategies to introduce and/or improve the quality of healthcare initiatives, and to improve healthcare in ways which address people's needs and expectations. Accordingly, the study set out to explore and assess the HS and quality of healthcare provided by the LNHS and the LPHS, from the perspectives of health professionals, officials and experts, as well as patients.

8.2. Brief restatement of the research problem

A comprehensive study of the Libyan HS and satisfaction with the quality of services has many policy implications regarding the identification of patients' needs and wants, the development of standards, the design of services and processes, the

establishment of HRH and patient roles and duties in service setting, the enhancement of training and development programmes, the management of demand and capacity, the delivery of quality services, and the response to the needs of the people and the community. To these ends, assessing the HS and measuring satisfaction with the quality of services is very important, given that the HS attempts to achieve the three overall aims mentioned by the WHO: good health (Quality of Healthcare), responsiveness to the expectations of the population, and fairness of financial contributions (WHO, 2000). The overall aim and outcomes of this study can be expressed in a research question: To what extent does the Libyan HS develop, manage and provide healthcare services at an acceptable level of quality, and respond equally well to the reasonable needs and expectations of the population, as well as protect them against the financial costs of illness?

8.3. The main findings of the research

This study developed three primary objectives and eight secondary objectives to address its overall aim and outcomes, as main targets for this thesis. This section is divided into two sub-sections. The first part presents the main findings regarding the patients' perceptions of the quality of hospital care, and the second part presents the principal findings regarding the healthcare stakeholders' perceptions of the HS and the quality of healthcare. Section 8.5 will discuss the interpretations of the principal findings and make comparisons within the context of the existing knowledge gained from the literature.

8.3.1. Patients' perceptions of quality of hospital care

The current study has attempted to explore and bring together patients' perceptions of the quality of hospital care in settings in both sectors. A questionnaire was designed specifically for this study to assess the quality of care provided in LNHS and LPHS hospitals. The questionnaire was administered to in-patients in LNHS (n=385) and LPHS (n=165) hospitals. (See Chapter 5: Methodology.)

The findings suggest that the LNHS and LPHS respondents differed to a statistically significant degree in some socio-demographic and service characteristics. The findings suggest that the majority of the respondents experienced lengthening waiting times to access healthcare. Furthermore, the results reflect the large number of respondents who have travelled for TA (43.1%). The analysis of the respondents' evaluations of the quality of the services in hospitals revealed noticeable variations between performances in both sectors. The score for PS with the quality of hospital services for the full sample was generally low (50.16%); the LPHS hospital scores were higher (52.82%), while LNHS hospitals scored 49.02%, which was below the scale midpoint of 50%. The findings indicate that the overall score of quality for all dimensions (15) varied, although it was considerably higher for LPHS hospitals. The analysis revealed that the association between respondents' characteristics and their satisfaction with the quality of services differed significantly in some quality

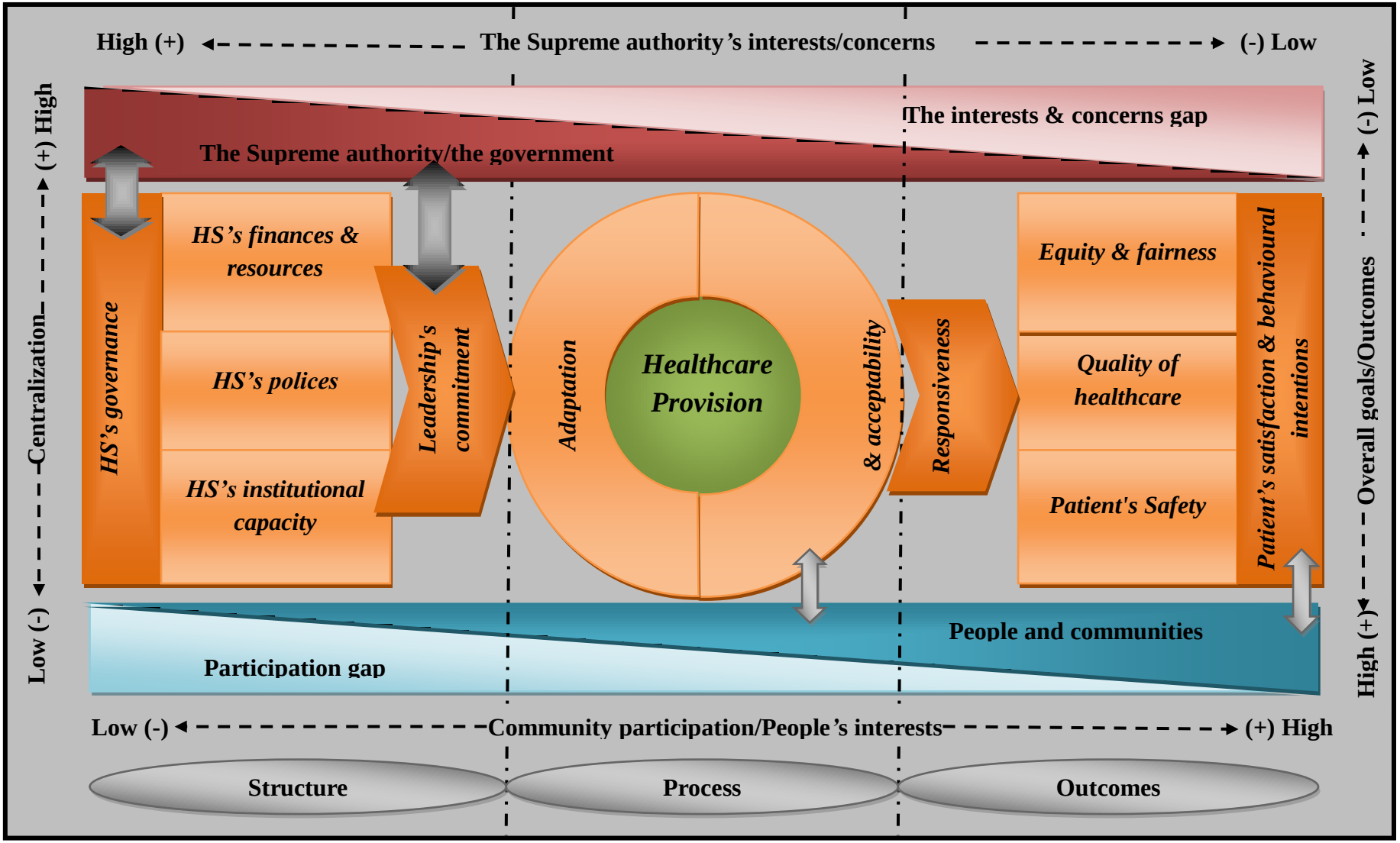
dimensions, which suggests that the service itself had more influence on PS than the characteristics that the patients themselves possessed. PS with services was found to be strongly associated with the quality dimensions. The Regression model was highly significant and explained 92% of the variation in satisfaction. Behavioural intention, perceived quality of the service, availability, responsiveness, patient safety and atmosphere all had strong effects on satisfaction with services across the two types of hospitals (see Chapter 6).

8.3.2. Health stakeholders' perceptions of HS and quality of healthcare

The qualitative findings were derived from the analysis of the face-to-face semi-structured interviews conducted with 40 health stakeholders (20 professionals, 10 patients, and 10 health experts and policy-makers). These findings were grouped and presented in five dimensions, with themes and sub-themes within each dimension. The data collected was richly informative and helped to shed light on the current mechanisms and broad attitudes of health stakeholders towards the HS and the quality of healthcare.

The findings from the first dimension, quality of healthcare provision, pointed to broad areas which can be seen as obstacles and problems in the Libyan health sector, for example interpersonal, technical, environmental and the quality of the management process, which affect the provision of high-quality and efficient healthcare. In the second dimension, the findings clearly demonstrated the interviewees' dissatisfaction with the HS's adaptation and acceptability of healthcare; they referred to various deficiencies and constraints in equity, accessibility, availability, waiting times and the referral system, which all lead to poor responsiveness to patients' health needs. The findings from the third dimension, HS and its governance, showed that the HS has misused its power at the national level and squandered its potential, as it is poorly structured, inefficiently organised and badly led. The interviewees referred to broad areas of difficulties such as the HS's polices, HS's regulation and organisation, health legislation, supervision and inspection, and the HIS. They were also dissatisfied with the fourth dimension, HS's financial and resource profiles, referring to various constraints regarding the HS's financing, the HRH, and physical resources, which affect the provision of high-quality and efficient healthcare. Finally, the interviewees discussed external factors such as cultural, social and psychological aspects, health awareness and the double burden of disease that have put considerable strain on the HS, as they play direct and/or indirect roles that negatively affect the quality of the provision of healthcare.

Figure 8-1 the study's finding framework



The two sets of findings were generally compatible with each other. However, the qualitative findings were like a *snowball*, growing in depth and detail as each interview was analysed, while the questionnaire was aimed at patients only. Thus the interviews, conducted with a relatively large number of people from various specialties and backgrounds, produced a large number of topics and issues that shed light on different aspects related to the HS such as technical (medical or health), organisational, administrative, social, and financial.

Despite the importance of the quantitative and qualitative findings (see Chapters 6 and 7) that emerged from this comprehensive study, the like of which has never before been conducted in Libya, the discussion will focus only on the key findings which the researcher believes are the most important, and which require further highlighting and discussion.

8.4. The framework of the study's findings

8.4.1. Overview

Given the various complex issues that adversely affect the HS's performance and outcomes, the researcher believes that there is a need for more convenient and powerful approaches and related methods. The current state of HS thinking, evaluating, and exploring the HS in Libya – and in other developing countries – raise obvious concerns about both broad and in-depth understanding for more successful reforms of the HS. There seem to be structural, administrative, social, and personal gaps which need to be addressed to accommodate the different individual HRH backgrounds and perceptions; educate and empower communities and individuals; enlighten and inform the decision-making process; and identify, select and implement innovative reforms.

The Libyan HS, and that of most of the developing countries, has been developed based on a positivist paradigm that places emphasis on what can be observed and measured, and tends to ignore what is not measurable in a scientific and objective manner. Accordingly, healthcare needs are determined through epidemiological and demographic data and directed by norms that do not take into account considerations of equity, fairness, goodness, or people's views and their aspirations. This affects the decision-making process that should be based on all of these concerns. The current health research methodologies, both in Libya and in most of the developing countries, do not address in detail the systemic nature and complexity of health, particularly its social dimension. Therefore, there is a need to further explore other innovations and models of research on HSs based on systems thinking approaches and relevant methodologies. This study has thus contributed to current ways of HS thinking, and HSS, in addition to providing insights into the use of different models and methodologies that can be used in the health sector field, by creating a framework to evaluate the Libyan HS (see Figure 8-1).

8.4.2. The design of the framework of the study's findings

Figure 8-1 shows the design of the framework of the study's findings. This dynamic framework diagnoses, explains and gives a comprehensive view of the HS which incorporates its main components, structure, activities, consequences, and outcomes, as well as internal and external environmental factors, and the elements exercising pressure on the HS. The framework also contributes to the identification of the HS's choices, trends, outcomes, and responsiveness to the health needs of individuals and communities. While it shares some similarities with existing frameworks (e.g. WHO HS frameworks [WHO, 2000 and 2007c]), the researcher claims that it is better than most of the currently existing HS frameworks that were presented in the literature review (see Chapter 2). This is because it is not based on relationships of *linear* logic between its components, like most of the existing frameworks, but on HS thinking in terms of the dynamic interrelationships between the various components and with the surrounding environment, which affect it in direct or indirect ways. This framework, which was based on the findings of this study, reflects, illustrates, diagnoses and interprets the current situation of the Libyan HS. Due to the convergence and similarity of HSs and their components, this framework could be widely utilised especially in the developing countries, including Arab countries.

Before discussing and interpreting the study's findings, the following section describes and explains this framework, its components, and the way it works.

8.4.3. The components and mechanism of the framework of the finding

Using Donabedian's famous model of quality assessment (1980 and 1988), the framework is divided vertically into three sections – *structure, process* and *outcomes* – which are the main stages of the healthcare process.

- ***First phase (Structure)***

This stage consists of the key elements preceding the provision of health services: the HSG that is responsible for the entire HS, which follows the HSG indicator of *Centralisation* in two directions (high and low). Under the supervision of the HSG are the HS's financial and resource dimension and other components such as the HS's policies and its institutional capacity. Leadership commitment is also a key part of the HSG. These components are the most influential in Libya's HS, although the HSG includes many elements (as shown in Chapter 7).

- ***Second phase (Process)***

Adaptation and acceptance of services have been placed in the middle of the framework, and healthcare provision is located in the centre because the MOH is the main focus, as the HS is usually identified with healthcare provision only; this includes many details that can be reviewed in the findings in Chapter 7.

- ***Third phase (Outcomes)***

This final phase is concerned with the HS's responsiveness to the health needs and desires of individuals and communities in terms of fairness, equity, quality of healthcare, and patient safety. These factors ultimately result in PS and behavioural intentions. The HS's *Outcomes* is associated with the indicator of the *Overall goals and Outcomes* in two directions (high/low).

- ***The supreme authority***

Outside of these three phases, and the HS's components, is the *supreme authority*. It is located at the top of the framework because of its powerful control over the whole of the HS and its direct impact upon it. It is followed by an indicator that determines the extent and direction of the *supreme authority's interests/concerns* (high/low).

- ***People and communities***

At the bottom of the framework, *people and communities* is followed by an indicator that also determines the extent of *People's interests* and the current direction of this factor, as well as the extent of *community participation* in the HS (high/low).

- ***The arrows***

Since this framework is pluralist and dynamic, there are complex interrelationships between all of its components and operations. The arrows within this framework indicate the interactions, interrelationships, mutual influences (direct or indirect), and so forth. The thick dark arrows indicate strong direct influences, while the thick light arrows indicate strong indirect influences.

The next section will discuss the interpretation of the study's main findings, by testing how they fit into the framework as well as how they agree – or disagree – with and build upon the existing literature.

8.5. Interpretation of the findings in relation to the framework

The framework is strongly supported by the data collected in Libya. Figure 8-1 shows the main components of the HS and the interrelationships among them, which are demonstrated by the study's findings. This Figure reflects and outlines the Libyan HS at the time the data was collected for this study. The findings will be discussed in this section according to their importance, influence and status in the framework, differently from the way they were presented in the findings chapters (6 and 7).

8.5.1. The supreme authority

The *supreme authority* in Libya (before February, 2011) consisted of the legislative authority, which is the General People's Congress [1](Parliament); the executive

[1] This is the official name in Libya before February 2011.

authority, which is the General People's Committee (GPC)[1] (Cabinet of Ministers); and the Supreme Commander of the Armed Forces[2].

The qualitative findings showed that the *supreme authority* bears the major responsibility for the deterioration of the Libyan HS, as a result of many random decisions and resolutions, and the placing of many restrictions on the HS. The *supreme authority* often flounders and does not provide clear guidance for the development and growth of the HS. Many interviewees (e.g. E-1) stressed the defects in the HS: they said the system is confusing, unstable, and subject to continuous changes from the *supreme authority*, which mainly affects the provision of healthcare as well as its quality, performance, and the achievement of its goals. Some interviewees referred to the negative impact of the *supreme authority's* experiments with centralisation and decentralisation, as well as its other actions on the HS. For instance, one interviewee (E-2) identified the negative impact of the abolition of the MOH, which delegated its powers and mandates to lower levels of DHA, in addition to the influence of other external conditions on the health sector:

> *"...A long period of time passed without the MOH existing – about seven years, from 1999 to 2006, there was no central management of health in Libya…As well as the siege and embargo in the past from 1993 to 1999,[3] all these things affected the sector negatively."*

In this context, many Libyan studies (e.g. Al-Mogirbe, 1993; Imneina, 2002) have shown that the political system in Libya was characterised by the instability of its institutions and governance structure, which impacted negatively on the effectiveness and efficiency of public policies – including HS policies. Where these changes and modifications touched various executive and administrative levels in these institutions, they led to the absence of a clear vision for the policies and weaknesses in performance and implementation, as well as failures in achieving goals.

Additionally, the people who were often chosen to lead the HS were committed to the *supreme authority*, but not to the HS. They were people who possessed loyalty and trust, but no expertise or specialism. Some health officials and experts (e.g. E-8 and E-9) stated that the HS in 1970s and early 1980s was better than it is now, and these comments could be construed as indirect criticism of the governmental and administrative systems in Libya, which changed in the late 1970s to the People's Congress and the People's Committees.[4] This regime is what brought in many non-specialist leaders who were loyal to the *supreme authority*.

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1 This is the official name in Libya before February 2011.

2 Colonel Muammar Gaddafi, who was the actual ruler of the country and held control of all the authorities in his hands, according to what he called the 'revolutionary legitimacy'.

3 The siege and embargo mentioned here were due to resolution No. 731 passed by the United Nations Security Council in 1992 in response to the exploded Pan Am Flight 103 over Lockerbie, Scotland in 1988.

4 This political regime was based on Colonel Muammar Gaddafi's Green Book.

In the top left corner of the framework is the convergence of high centralisation (left hand-side) and high *supreme authority interest* (at the top). This shows that the *supreme authority* is focused on formal structure, organisation, administrative procedures, and regulation. The interest is gradually lost as the third phase *(Outcomes)* of the overall goals and outcomes of the HS are approached, which is referred to as the *gap of interest*. This means that insufficient attention is paid to people's interests and concerns, such as their desire for a good healthcare service, or the participation of *people and communities* in decision-making. It is also pertinent to note that the *supreme authority* is often more concerned about the cost of healthcare rather than its quality. For instance, it does not measure PS or study their opinions, needs or desires; nor does it obtain feedback, which could be helpful when policies, strategies and plans are reviewed.

In this regard, some interviewees (e.g. E-1) criticised the *supreme authority's* role in the HS, which is to deal with healthcare issues as a burden and a binding legal duty to provide healthcare services, rather than an aim or moral obligation towards the people and communities. For instance, with respect to the LPHS, one of them said (E-7):

> *"There is no respectable country that solves basic healthcare problems through private healthcare services."*

He referred to the *supreme authority's* failures and shortfalls in providing healthcare services, in addition to its attempts to create other resources by increasing LNHS staff (i.e. doctors) income from work done in the LPHS.

8.5.2. The first phase *(the structure)*

The study's findings, especially the qualitative, demonstrated that the decline in the quality of healthcare in Libya is due to multiple and overlapping factors. When examining the relationship between these factors, it became clear that some have had a greater impact than others. In this case it is the HSG which, having the greatest influence on all other aspects is ultimately responsible for the poor quality of healthcare in Libya today. The majority of the interviewees, especially the health experts and officials, felt that the fundamental imbalances in the HSG are responsible for this existing situation, while the impacts of other factors vary greatly according to the interviewees' perceptions.

8.5.2.1. HS and its governance

Governance (also known as stewardship) is the oversight and guidance of the whole HS; it holds great promise if sufficiently developed and effectively performed. It is defined as "a function of governments responsible for the welfare of populations and concerned about the trust and legitimacy with which its activities are viewed by the general public" (Saltman and Ferroussier-Davis, 2000:735). It is also "the process of creating an organizational vision and mission – what it will be and what it will do – in addition to defining the goals and objectives that should be met to achieve the vision

and mission; of articulating the organization, its owners and the policies that derive from these values – policies concerning the options that its members should have in order to achieve the desired outcomes; and adopting the management necessary for achieving those results and a performance evaluation of the managers and the organization as a whole" (Sinclair et al, 2005:65-66).

Governance consists of the fundamental elements that are responsible for the entire health sector. The HSG occupies the main position in the HS's structure, which precedes the provision of healthcare. The HSG is represented by the Minister of Health and other senior officials in the MOH, and it is affected by the *supreme authority* as well as external factors (e.g. the burden of disease, social pressures, and culture). In addition, it is affected by the financial resources controlled and allocated by the MOF.

The interviewees' narratives clearly showed that the HSG has misused its authority and wasted its potential; it is badly structured, inefficiently organised, and ineffectively led. Thus, it has seriously compromised, directly and/or indirectly, almost all of the HS's functions, components, activities, and outcomes. Broadly speaking, the findings revealed that the situation of the HSG, and HS's finances and resources, is questionable in terms of HS polices, HS regulation and organisation, health legislation, supervision and inspection and HIS, as well as HS financing, HRH, and physical health resources. However, despite the importance of the qualitative findings related to the HSG and finances and resources (see Chapter 7, sections 7.3.3 and 7.3.4), the discussion will focus only on some key findings which the researcher believes are mainly responsible for the poor situation of the HS.

8.5.2.2. HS's financing and resources

The HS's financial and resource profiles were presented in the findings in a separate dimension (see Chapter 7, section 7.3.4). This area is associated with, and influences directly and indirectly, all of the HS's components. It directly affects the HSG, the provision of healthcare, and adaptation and acceptability in terms of financial allocations, HRH and equipment, etc. It is also directly affected by the *supreme authority* and HSG, while it has direct and indirect relationships with external factors such as patients' OOP spending on health and the burden of disease, both of which require an increase in funding and resources. Financing and resources, which are a very important pillar of the HS, share a large part of the responsibility – along with the *supreme authority* and the HSG – for all of the fundamental problems mentioned previously.

8.5.2.2.1. HS's financing

Libya is a well-resourced country and the per capita income is one of the highest in Africa. Capitalising on this is essential, and funding universal comprehensive healthcare services should be one of the best means to distribute the national wealth

and secure wellbeing, in addition to strengthening social determinants of health like education and housing (WHO, 2013b).

However, the quantitative findings identified various financing problems and constraints in the HS such as a lack of funding, instability, irregularity (either too little or too much), continuous fluctuations in financial allocations from year to year (e.g. lack of various medical supplies; money not being injected into the HS's allocations in a timely manner), and the inappropriate distribution of financial allocations for activities and healthcare. Although some interviewees stated that in the recent period there had been heavy spending, they were concerned that the money had not been directed or structured properly because of the HS's poor control over spending.

In comparison with other MENA countries, Libya spends much less on health (3.5% of GDP/total expenditure per capita of £334 [HIC, 2010]), though it is a similar amount in absolute terms; the governmental budgetary allocation to healthcare services increasing year on year, but the real increase is very small. When adjusted for purchasing power differences across countries, the MOH spends only £147 per person per annum. In addition, the MOH spends 60 million LYD (£31 million) annually in funding TA for Libyans (HIC, 2004). Obviously, the HS's finances rely mainly on government funding, as its allocations occur through the government budgetary process; therefore, one of the important factors affecting the performance of the LNHS is the control of financial allocations from outside the HS (i.e. from the MOF and the *supreme authority*). The MOF is responsible for its spending through its comptrollers in the health sector and its institutions.

Financial allocations in modern HSs are based on health needs, people/public engagement, geography, etc. (WHO, 2013b). However, the findings pointed out several problems related to the HSG's poor financial control over healthcare spending on one hand, and the current system of resource allocation driven by the MOF and based on historical expenditure adjusted to projected expansion. For instance, some interviewees (e.g. E-1) criticised the spending for development programmes which are restricted to construction (e.g. building), while the second section of the budget, general expenses such as operating and steering expenses, is strongly controlled by the MOF's comptrollers. Some important issues and activities are therefore neglected, such as initiatives to improve people's health-related culture, behaviour, and habits (e.g. health education), or spending on the prevention and early detection of certain diseases. This inappropriate control from outside, which is constrained by financial regulations, affects the ability and flexibility of the HS.

All of these problems and constraints have clearly had a negative impact on the efficiency and quality of services. In addition, because the demand for healthcare services is continually increasing, the inadequate funding does more harm than good by affecting equity and fairness, exposing patients and their families to the financial risks of illness such as catastrophic spending. These are discussed in further in detail in equity and fairness (see 8.5.4.3. in the *Outcomes* section).

8.5.2.2.2. HS's human and physical resources

The findings clearly demonstrated that the HS's human and physical resources have a huge direct and/or indirect negative influence on the HS's components, activities, and outcomes, as well as on PS. There are imbalances in healthcare resources, which include deteriorating facilities and physical resources, and poor performance and low morale among HRH. Consequently, all of these factors have fundamentally led to the decline in the quality of services.

8.5.2.2.2.1. *Human Resources for Health (HRH)*

At the core of each HS, the HRH is essential, as its primary roles are to protect and improve communities' health. It functions as a gatekeeper and navigator for the effective -or wasteful- application of all resources and supplies. These challenges are highlighted in the spectrum of needs to which the HRH is expected to respond. However, the HRH's problems in the Libyan context seem to be more complicated than they at first appear. They are like an iceberg, in that only a small part is clearly visible. The HRH has become part of the problem of the health services, rather than a solution. Currently, there is no HRH governance structure in the MOH to act as a comprehensive structure for all HRH functions scattered among various structures inside and outside the MOH. The existing structures are mainly concerned with in-service training, with weak planning and procedures. The HR function is very complex, and the findings of the present study have revealed very serious weaknesses in many areas which should be addressed immediately. Many of these were also identified by the WHO (WHO, 2007b, 2010a, 2013a and 2013b).

Discussing these weaknesses from the perspective of WHO frameworks (e.g. Fülop, 1976; WHO, 2006b) can help to clarify them in a comprehensive way. The health stakeholders' perceptions were in agreement in some areas, and disagreed in others, in relation to the HRH across both sectors. According to the Working lifespan framework (WHO, 2006b), the qualitative findings suggested the following:

- ***Entry*** *(preparing HRH, planning, education, recruitment):*

At present, there is neither an explicit policy on HRD at national level nor a national office in charge of HRD at policy, planning, monitoring and evaluation level. Regarding the preparation and planning of HRH, the findings criticised aspects of medical and health education such as large numbers of students, the low quality of graduates and their ignorance of important skills and potentials, and frequent changes in the curriculum. There are no clear plans based on need, to meet the requirements for HRH numbers and categories, and medical schools produce more medical than other health professionals. The HR governance is very weak and fragmented, and the findings highlighted the lack of proper co-ordination between multiple sources dealing with HRH preparation, which is a major source of confusion. Although there is some co-operation between the MOH and faculties such as medicine, other programmes such as nursing preparation (which may belong to other ministries such

as Higher Education [HE]) are weak and fragmented and without any proper co-ordination, both in terms of quantity and quality of output.

- ***Workforce*** *(enhancing worker performance, supervision, compensation, support of systems, lifelong learning):*

Human Resource Management (HRM) is essential to enhancing productivity, accessibility, utilisation, quality and safety; but key functions require development. The findings showed that HRM suffers from serious weaknesses in many areas. HRH are not given sufficient opportunities for training or to attend continuous development programmes in order to develop their abilities and knowledge in their field. The findings showed that the HSG does not pay enough attention to these needs, which has resulted in a lack of effective and high-quality training, no review of the efficiency of local training, and failures in CME, CPD and PDP programmes. There is also an absence of systematic performance appraisal linking CPD activities to promotion, incentives and motivation. The inappropriate distribution of HRH across the country was also highlighted, especially in rural areas, as well as the shortage of staff in the LNHS in all specialties. There is a shortage of doctors in general and specialist doctors family medicine and PHC in particular, as well as nursing staff, which has had an enormous negative impact on quality of care, including the postponement of surgical interventions and increased waiting times. HRH do not receive sufficient income or appropriate incentives such as encouragement, and financial and moral incentives, to help them perform their duties. This causes them to feel frustrated and bored, which leads to low levels of performance and productivity. In addition, job descriptions do not exist, or they are unclear, and annual appraisals are inadequate or non-existent. Hence there is doubt about the loyalty of HRH and their commitment to their jobs, especially when there is a lack of monitoring, supervision, inspection, and regulations that describe their rights and duties.

The findings of the two previous components of the Working lifespan framework, Entry and Workforce, were found to be in line with the literature and previous studies conducted in Libya, as well the reported failures of HRH preparation and management (i.e. Imneina, 2002; WHO, 2006b; 2007b; 2010a; 2013a 2013b), including a study conducted by the researcher (El-Fallah, 2000). These highlighted the lack of co-ordination and integration in HRH development processes in respect to planning, preparing and management of the HRH (according to the integrated development of health services and HRH framework [Fülop, 1976]), which create several quantitative and qualitative HRH problems.[1]

1 The most important findings of this study are summarised below (El-Fallah, 2000):
- In order to pursue the Libyanising objective (to replace non-Libyan nurses and allied health professionals with Libyan ones, as outlined in the 1980-1985 national plan), the health education institutions graduated large numbers of nurses and allied health professionals, but they concentrated on quantity rather than quality, which resulted in incompetent and unqualified graduates.

The literature (e.g. WHO, 2008a) clearly shows that increasing the number of health professionals in PHC and family medicine will strengthen the HS, improve accessibility and utilisation, improve quality and enhance safety, and above all increase public and PS. On the other hand, to create an enabling environment, HRM ideally consists of a package of practices and strategies that balance financial and non-financial incentives with control measures and regulation, and maintain public-oriented values and ethics (Marchal et al., 2010). The wide array of health organisations, each with different incentive structures, leads to big differences in staff availability, skill mix and capacities across the HS and between rural and urban areas. It is one of the functions of governance to regulate incentives, so as to reduce imbalances and tensions (Unger et al., 2008; Kalk, 2011; Meessen et al., 2011b).

- ***Exit*** *(managing attrition, migration, career choice, health and safety, retirement):*

Consequently, large numbers of highly skilled health professionals have left the LNHS via internal migration to urban areas, the LPHS or abroad, as well as through early retirement. This exodus has caused shortages of HRH, which have compromised the HS, overwhelmed training capacity, threatened the stability of HRH, and harmed the delivery and quality of healthcare.

Consistent with the literature, some Libyan officials recently argued in a media debate that about 5,000 physicians are scattered worldwide. However, some of the literature does not support this belief, estimating that around 1,250-1,500 doctors are practising outside Libya, 63% of them in the UK (Benamer, 2012; Benamer et al. 2009). Moreover, Arah (2007) calculated the migration density of doctors (the number of migrating doctors per 1,000 of population), and Libya was among the top five African countries. Future research is clearly needed in this area.

The final component of the Working lifespan framework (workforce performance, availability, competence, responsiveness, productivity) will be discussed further in the second *(process)* and the third *(outcomes)* phases. However, the functions of the HRH are very complex, and the findings identified very serious weaknesses in many areas which should be addressed by the HSG.

- Libya cannot replace the non-Libyan health professionals, at least in some fields (e.g. nursing and physiotherapy), since they have constituted 20% of the total number of nurses and allied health professionals since 1985.
- There are few moral and financial incentives, as well as inadequate training and preparation. All of these factors prevent Libyan nurses and allied health professionals form performing their jobs efficiently.
- The findings revealed an increased rate of loss (42%) among graduates from intermediate health education institutions.
- The findings revealed that many Libyan nurses and allied health professionals were abandoning their jobs for social, financial and administrative reasons.

8.5.2.2.2.2. HS's physical resources

The qualitative findings identified shortages of a range of essential physical resources in the LNHS: health facilities, general equipment, modern and developed facilities with contemporary technology, and even equipment in A&E departments. Additionally, crowding and congestion occur in the LNHS as a result of the presence of large numbers of patients and their companions; most of these patients are from low-income families and cannot afford to go to LPHS hospitals. These factors make it difficult for LNHS facilities and staff to proceed in their activities without interruptions, which leads to a poor response to patients' needs and expectations; and this in turn negatively affects the provision of high-quality and efficient healthcare. The lack of physical resources was brought up by most of the interviewees, and indeed the influence of this factor has been appreciable.

The qualitative findings also criticised the HSG for not paying enough attention to the maintenance of the HS's physical resources such as equipment and buildings, which has negatively affected the quality of services provided. There was no agreement between the interviewees regarding whether or not the LPHS has succeeded in bridging the existing gap by providing what is missing in the LNHS, and their perceptions were varied. Those who denied the success of the LPHS cited TA as proof.

Consistently, the participants in the quantitative study perceived the availability of physical health resources as low in LNHS hospitals (48.93%), and considerably higher in LPHS hospitals (56.67%), which may be due to different factors such as the fact that those opting for LPHS hospitals are generally much better off, and they may be using the best services whenever needed. For example, many LPHS hospitals are close to where patients live, with easy access, and are deemed to be better in terms of the availability of physical resources such as health facilities, equipment, lab tests, etc. Future studies should include a wider set of hospitals across the country to determine whether the obtained service evaluations are corroborated.

Recent research on the availability and accessibility of PHC services conducted by the MOH and WHO (HIC, 2012) shows that only one third of PHC facilities are fully functioning, while 44% are partially functioning, and around 23% of facilities are either non-functioning or under rehabilitation; 111 facilities were not included in the survey because of the closure. However, functioning and availability do not mean that the services are utilised. The study's findings show that facilities are suffering from several problems: the services delivery function is not appropriate and far below what is expected, and the quality of care and patient safety is questionable.

Similarly, the findings from previous studies have shown that patient dissatisfaction with the availability of essential services is a common theme in studies of quality in developing countries (Gilson et al., 1994; Bassett et al., 1997; Dagnew and Zakus,

1997; Baltussen et al., 2002; Gadallah et al., 2003; Hanson et al., 2005; Mashego and Peltzer, 2005). Thus, one could argue that these and other studies support the concept of the multi-dimensionality of PS and the quality of services (Ware et al., 1983; Sitzia and Wood, 1997), and add weight to the argument that the availability of essential services such as human or physical resources is the main quality issue in the HSs of developing countries and should be seen as a priority in any health quality improvements.

8.5.2.3. HS's institutional capacity

The "institutional capacity represents a broader 'enabling environment' which forms the basis upon which individuals and organisations interact" (Willems and Baumert, 2003:11). The institutional capacity of the HS refers in this study to a range of themes and sub-themes presented in the qualitative findings, such as: HS's organisation and regulations, integration of services, centralisation and decentralisation, health legislation, supervision and inspection, and HIS (see Chapter 7, section 7.3.3).

This study's findings revealed that the Libyan HS is suffering from severe weakness in its institutional capacity. Its components are suffering from a great imbalance in content and organisation; they are fragmented and ineffective, and undergo continuous changes and modifications. This has had a negative impact on the services and outcomes of the HS as a whole. These processes, for instance the experiments with centralisation and decentralisation in the HS, have not been based on scientific studies, evidence, or real needs. Thus, it is likely that a lack of progress with implementing the HS's polices and/or translating these policies into action is due to this weakness of the HS's institutional capacity to enforce their implementation: there is a lack of organisation, supervision, and inspection. Health legislation and regulations, including legal frameworks, are outdated; regulatory control of professionals and providers is weak; and most of the providers, especially the LPHS, are operating and expanding without any proper control within the national HS. The findings also show weaknesses with HIS: in particular the data capturing, collection and analysis are not in line with modern methods. For instance, no accurate data was available, the quality of analysis is very basic, and the population's Health Needs Assessment (HNA) was absent. These findings are consistent with what has been indicated by previous studies in Libya (e.g. Al-Mogirbe, 1993; Imneina, 2002; El-Hudiri, 2010), which revealed many institutional capacity problems in the Libyan HS.

This study's findings suggest that in order to develop an effective HS polices environment at national level, the HSG needs to be strengthened through the development of what is called organisational readiness: "change" experts assert that greater organisational readiness leads to more successful change implementation. In contrast, when organisational readiness is low or non-existent, health policy-makers, providers, and staff will resist initiating change, put less effort into implementation, and persevere less in the face of challenges (Weiner, 2009).

Organisational readiness requires at least three steps prior to initiating a quality improvement strategy. According to many experts, these steps include strengthening and enhancing the 'strategic leadership' (i.e. HSG), 'vision perspective', and 'positive environment' (e.g. good managerial-clinical relationships) in order to develop the quality culture (Penland, 1997). The HS that is unclear about its future directions and has a negative environmental culture should first proceed with educational and developmental activities that ensure the spread of positive and committed strategic leadership, and recognise explicitly the importance of vision and mission formulation and positive quality culture environment-building.

8.5.2.4. HS's policies

This refers to "a set of decisions or commitments to pursue courses of action aimed at achieving defined goals for improving health, stating or inferring the values that underpin these decisions; the health policy may or may not specify the source of funding that can be applied to the action, the planning and management arrangements to be adopted for implementation of the policy, and the relevant institutions to be involved" (WHO, 2011a:9). However, the HS's polices in this study refers to any or all of the HS's vision, strategies and plans, setting priorities and leadership commitment and related activities.

The study's findings showed a range of difficulties and problems related to the HS's policies. Some of these findings referred to the absence of policies, such as a lack of vision, strategies and plans. Other findings suggested other problems, the most important being the negative impact of leadership commitment on the HS's policies (see section 8.5.2.4.2). In addition, despite the expressed support for health quality initiatives in some HS policies, the study findings revealed incompatibilities between rhetoric and reality, since involving health quality initiatives in HS policies is not high on the HSG's agenda. In the review process of current HS policies, the findings suggested that there is no systematic approach currently operating for health quality initiatives, either in the LNHS or the LPHS. The existing approaches to tapping into health quality initiatives are likely to be individual initiatives or tokenistic policies. It is clear from the findings that the quality concept is still premature in Libya's HS, and that policy-makers and senior management are only giving it lip service. However, the HS's policies will not be improved if no priority is given to them at national level by the HSG. Action is required to develop HS polices that are directed toward the improvement of services at all levels of the HS.

Evidence has shown that one of the requirements for the institutionalisation of quality policies is enhancing the 'internal enabling polices environment elements' which include policies, leadership commitment, core values and resources (Silimperi et al., 2002). Thus, there is a need for a quality policies environment that recognises explicitly the importance of quality policies for achieving organisational or HS goals and that provides support, direction and enforcement for quality implementation.

Quality experts argue that the presence of a national health quality plan in developing countries is essential, as having a plan can indicate the way forward and highlight issues for action, provided that the plan is appropriate to the special circumstances and culture of a particular country (Øvretveit, 2004). In this regard, the findings from this study suggested that the imbalance or lack of coherence in the HS's policies could be due to the lack of development plans at the national level. According to Libya's profile (see Chapter 4), the last five-year national development plan was in the mid-1980s[1], and since then each sector has been developing its plans individually. (Critiquing these plans is not the subject of this study.) Some health officials and experts commented that from that time forward, many situations in the HS began to clearly and continuously deteriorate – a process which has continued almost to this day. They believed that one of the main factors that negatively affect the HS, and thus people's confidence and trust, is the provision of necessary human and physical resources as well as the provision of healthcare.

It has been mentioned that the HS has developed the first national health strategy (Abudejaja and Singh, 2000) (see Chapter 4) and has recently established quality departments at national and hospital levels. However, the interviewees had doubts about the practicality and feasibility of putting this strategy into practice. For instance, one of the health experts (E-6) had reservations about the existing policies, strategies and plans:

> *"...The policies are neither clear nor objective. The strategies, if there are any, need to be developed to keep pace with development. The operational plans have not existed for a very long time; there are no five-year plans or even annual plans."*

Another expert (E-8) confirmed the lack of continuity and real commitment, and described the situation as a state of emergency:

> *"...Once a health strategy had been adopted, this work then stopped...There was no continuity and commitment to development. We do work hard for a specific period of time, but then this effort is forgotten; no one discusses it...Every official attempts to strive again...We are always working in a state of emergency...during the last twenty years in particular."*

[1] Medium-term national plans continued to be produced until the mid-1980s. The improvements in the Libyan HS were noticeable, especially in physical construction and health indicators such as the ratio of doctors and nurses to the population, life expectancy at birth, child and infant mortality, and the eradication of some diseases. These advances were achieved along with comprehensive health development led by the MOP, and each ministry participated in the development plans. Therefore the MOH was obliged to implement the policies or plans. In this holistic view, planning was associated with finance and all other aspects, and all the activities of one sector were linked to other sectors. For instance, improvements in education, the environment, housing, and essential utilities led to an improvement in aspects of health (see Chapter 5).

This was in line with the literature, as having or declaring policies is not enough to ensure their full implementation or to effectively achieve their intended goals (Palfrey, 2000).

8.5.2.4.1. Comprehensive vs. problem-oriented approach

The Libyan HS literature shows that the HS has achieved considerable success with some national programmes by using a problem-oriented approach, such as TB prevention and immunisation (see country profile, Chapter 4). Records show that immunisation has achieved its targets, as nearly 100%[1] of infants have been immunised. Furthermore, Libya has totally eradicated some childhood infectious diseases, such as polio (HIC, 2010). In this regard, Libya is currently among the best of the MENA countries (WHO, 2007b and 2010a). Such programmes have contributed, along with other factors, to a reduction in the IMR to only 11 per 1,000 live births (HIC, 2010), while it was 160 per 1,000 live births in 1960 (Elfituri, 2000).

Some of the health experts and officials interviewed confirmed these positive aspects of the HS:

> *"...We should be fair: the health (not medical) services, such as immunisation, are excellent in Libya. These are the best health indicators in the region – even better than in the neighbouring countries where some Libyans go for treatment." (E-6)*

Brown et al. (2001) distinguished two kinds of quality approaches: a comprehensive approach and a specific problem-oriented approach. The former requires political support, a wide-ranging HIS, leadership commitment, and financial and HRH resources. Such an approach is therefore considered inappropriate for developing countries. In contrast, a problem-oriented approach focuses on virtual and small-scale activities which lead to gradual quality improvement. These findings suggest that such an approach can be implemented in the Libyan HS, as well as in other developing countries, where the focus can be on particular high-priority problems. Over time, this approach can be expanded to resemble to the comprehensive approach.

8.5.2.4.2. Leadership commitment

"Probably the most complex challenge in [HSs] is to nurture persons who can develop the strategic vision, technical knowledge, political skills, and ethical orientation to lead the complex processes of policy formulation and implementation. Without leaders, even the best designed systems will fail" (Frenk, 2010a:2).

Leadership commitment starts from the top and includes senior clinicians, managers (Kock, 1992), and the executive director (Saddique, 1995). It is necessary and expedient for the implementation and the quality of all processes and activities

[1] TB (100%), DPT (98.6%), polio (97.7%), measles (96.6%), hepatitis (97.7%). Source: Health Information Centre (2010), Annual statistical health report, Libyan Ministry of Health, Tripoli, Libya.

(Preston et al., 1995). The fate of quality development is first of all in the hands of the leaders (Borden et al, 1994). The more focused managers and staff are in the pursuit of obvious authorisation, the more likely that wider policy goals will be achieved without the need to resort to strict hierarchical structures to control (Pressman and Wildavsky, 1984).

The findings imply that leadership commitment is a fundamental factor, without which it would be hard to achieve the HS's policies, plans, and programmes such as quality. However, the findings also revealed a clear lack of leadership commitment. This most likely has had a negative impact on the HS in terms of policy, priority-setting, structure, organisation, regulation, monitoring, supervision, healthcare delivery, and outcomes.

The authority of the HS leaders is derived from the *supreme authority*, which chooses and supports them in order to ensure their loyalty. The findings of this study suggest that these leaders are more interested in acting to satisfy the *supreme authority* and to apply his vision or orientations (which are unclear), as well as their own personal approaches and interests, than in working in favour of the HS to achieve its goals. Each leader has imposed his personality and his specialisation on the HS, and so made it his top priority and identified the interventions that he has considered appropriate, while neglecting to continue or complete his predecessors' work. This was evident in the qualitative findings, as many interviewees complained that the health ministers operate or develop the HS according to their interests or their specialties (most of them are specialist doctors or surgeons), while neglecting other important specialties such as PHC. Thus, it is likely that most of their decisions have not been based on expert advice, people's opinions, or PS.

Several studies in industry and healthcare settings have consistently proved that leadership is the most important element in achieving a high-quality product and service (Penland, 1997; Habib et al., 1997; Ennis and Harrington, 1999; Manaf, 2005). In addition, promoting professional ethics and commitment to quality health services are critical elements for sustaining quality management (Brown, 1995). Deming, in his 14 points for quality management, stressed the importance of having vision and commitment; he suggested that without leadership commitment, quality cannot be achieved (Deming, 1986). Evidence had indicated that securing leadership commitment is a main contributing element in the success of quality programmes in developing countries (Bouchet et al., 2002; Legros et al., 2002; Manaf, 2005). Al-Assaf (2002) stated that leadership commitment should occur eventually in the healthcare field, but it should not be the catalyst for decisions regarding the implementation of quality, as the leaders are constantly changed.

8.5.3. The second phase *(Process)*

The deterioration in the provision of healthcare services is not new and Libyans have been suffering from this for some years. While data shows that the services are available and accessible, utilisation is poor, with a high level of inefficiencies. Many

problems, obstacles and constraints were demonstrated and discussed in the first phase *(structure)*, which related to the *supreme authority*, the officials who have been *parachuted* into the HS, and the HSG. The latter remains the main issue, with its problems and obstacles related to the HS's policies, institutional capacity, leadership commitment, financial allocations, HRH and physical resources, legislation, and so on. This combination of difficulties sparked off the second phase *(process)* of the framework, which affects the adaptation and acceptability of health services and the provision of healthcare. The magnitude of these damaging factors is extremely significant: the exodus of patients to TA is a clear indication of both poor quality and safety, and decreased capacity to meet the population's healthcare needs. The study's findings demonstrated that there are many significant problems and defects in these services, which are the core of the *process* that produces the health services and is expected to achieve the desired HS's goals.

Supporting the premise that quality is multidimensional, the present study substantiated the assertion that quality initiatives are prioritised differently by health stakeholders. For example, health experts, officials and professionals regarded the availability of sufficient staff to ensure patients' access to services as an important aspect of quality, while the patients were more concerned about the quality than the quantity of the staff – specifically their competence, expertise, and ability to provide the correct treatment. The sophisticated knowledge of the health experts, officials and some professionals, have informed quality dimensions and prioritisation. This lack of concordance between patients and health provider preferences is well illustrated by Cleary and his colleagues (Cleary et al., 1991). The literature about patient views of quality initiatives shows that quality from the patient's perspective typically includes a range of issues related to availability, accessibility, technical and interpersonal quality concerns (e.g. Schneider and Palmer, 2002; Coulter et al., 2002a; Coulter et al., 2002b; Wensing and Elwyn, 2002; Bower, 2003). Although the literature in Libya has revealed some consistency with what is already known about patients' perspectives on quality initiatives, the interviewees in this study spontaneously emphasised some aspects they regarded as imperative for the provision of high-quality healthcare, such as cultural and social aspects, management quality aspects, environmental quality aspects, health awareness, and health education.

Acceptability means the adaptation of healthcare to patients and their families and involves factors such as location, staff, and equipment. The following six features of acceptability were mentioned by Donabedian (1990b) and other scholars: accessibility, amenities of care, interpersonal relations, patient preferences regarding the effectiveness of care, patient preferences regarding cost, and continuity of care. The adaptation and acceptability of care are important quality aspects related to the organisation of healthcare. They appear in the middle of the framework and are affected and linked directly with the provision of healthcare (i.e. equity, accessibility, availability, waiting times and referral system). In addition, they are linked with and mainly influenced by the HSG (e.g. regulation, supervision, etc.) and finances and

resources (e.g. financial allocations, HRH, equipment, etc.). Finally, they have direct and indirect relationships with the external factors such as people's choices for services affected by the adaptation of healthcare.

The provision of healthcare is located at the core of the HS process and its components, and a HS is usually identified with this element only. It is therefore positioned at the heart of the framework and is linked with, and directly affected by, all other components of the HS process: adaptation and acceptability, the HSG, and finances and resources. It is also affected directly and indirectly by external factors such as cultural, social and psychological aspects; people's health awareness; and the burden of disease.

The qualitative and quantitative findings clearly corroborated the general dissatisfaction with the provision of healthcare and adaptation and acceptability. There are various broad areas of obstacles, constraints and deficiencies in the Libyan HS which have led to the failure to provide a high-quality health service, as well as a poor response to the population's health needs and expectations; these can be categorised as follows: mismanagement and lack of organisation, favouritism, lack of physical resources, lack of medical staff, and lack of staff dedication.

8.5.3.1. Health policy at the level of health institutions

The findings referred to the absence of health policies and plans at the level of the institutions, such as hospitals. No policies, plans or programmes are followed at this level, which means that everyone acts in accordance with their own individual decisions. There is also an absence of monitoring, supervision, and inspection of the HRH, their performance, and outcomes. The absence of regulations and health legislation at this level heavily affects this aspect, which is obviously the HSG's responsibility. Likewise, and consistent with the quantitative findings, the overall qualitative findings showed clearly that quality policy initiatives such as the use of standards and protocols have not yet been introduced into Libyan health facilities in either sector. These findings resonate with the situation at national level (HSG), as it is clear that no national HS polices are being followed.

It has been emphasised that the implementation of quality policies and improvements in healthcare essentially involves strategic decisions that should be taken at national level (HSG). Success relies heavily on leadership commitment from senior management in addition to other levels of co-operation, proper understanding, and the effectiveness of the implementation process, which show the domino effect across the entire organisation (Whittaker, 1999; Nwabueze, 2001). The results suggest that the lack of national HS polices might be one of the reasons for the failure of health facilities to develop their quality policy initiatives. In the literature, research has shown that the existence of national HS polices or general legalisation and regulations for quality initiatives has influenced health facilities to develop their quality initiatives (Sluijs and Wagner, 2003), especially if they have specific obligations or financial

stimulation, rather than just a general framework for legislation and/or regulations (Wagner et al., 2006).

Thus, there is a need to develop health legislation, regulations and organisations that require health facilities to introduce quality policy initiatives into their process of delivering health services as a means of monitoring, supervising, inspecting, assessing and improving the quality performance of health services.

8.5.3.2. Structure and organisation of healthcare institutions

The findings showed considerable criticism of the structure and organisation of the HS's institutions and facilities such as hospitals and medical centres. The components of the HS are suffering from a great imbalance in content and organisation, and are fragmented and ineffective; this has resulted in many of the problems with which the health institutions and facilities have been plagued. For instance, the findings revealed that the referral system does not work properly in the LNHS due to various organisational deficiencies. PHC and the referral system are suffering from severe weaknesses and flaws in their mechanisms and applications, which are causing patients to bypass the PHC level and go to hospitals directly, without referral – thus adding to the chaos and exacerbating most of the existing problems in LNHS hospitals.

These findings are consistent with the findings of another study that was carried out in LNHS hospitals in Benghazi (El-Hudiri, 2010) during the same period as the current study. El-Hudiri criticised the poor attention and lack of clarity in LNHS hospitals, which he said are suffering from problems such as a lack of clear vision, mission, and objectives, which reflects negatively on the entire organisational process. LNHS hospitals are characterised by the existence of a number of symptoms of poor organisational structures (mal-organisation) and are not compatible with the scientific basis (El-Hudiri, 2010).

8.5.3.3. Quality of healthcare management

The findings clearly demonstrated the low satisfaction with the quality of the management process and linked this with the poor quality of healthcare in general. It is a clear indication of the importance of the role and impact of this factor in facilitating the production and consumption of high-quality healthcare, although it is not necessary to the delivery of core services.

In the quantitative study, the respondents ranked the quality of management and process composites (i.e. error-free records, registration and discharge procedures, etc.) as the fifth most important dimension (52.4%). Although it just exceeded the scale midpoint, it was slightly higher in LPHS hospitals (54%) than in LNHS hospitals (51.7%). In addition, the management of services was one out of eight factors that explained satisfaction with services in LNHS hospitals, but it was not as significant for patients in the LPHS.

The qualitative findings presented very strong criticism of the management of health institutions such as hospitals. The poor and non-specialist management of the LNHS is responsible for the failure to achieve the HS's goals, the poor quality of services, the failure to manage and supervise HRH, and the failure to adequately source and control resources. Health officials lack dedication in performing their duties on a permanent basis; there is a lack of adherence to working hours. This has resulted in lengthy waiting times, and has eminently affected the quality of healthcare provided by the LNHS. Westaway et al. (2003) criticised poor management and the poor demeanour and performance of professionals in the healthcare services of developing countries, which all have a negative impact on PS.

8.5.4. The third phase (Outcomes)

All of these deficiencies and problems have resulted in poor healthcare services, including negligence and a large number of medical errors, in addition to many other negative aspects that were demonstrated in the findings in Chapters 6 and 7. Consequently, these have contributed to a lack of confidence in the HS and the HRH. Essentially, they are continuations of the failures in the first phase of the HS framework *(structure)* and second phase *(process)*.

8.5.4.1. HS's responsiveness

Responsiveness entails reacting effectively to the needs and demands of the population and its different groups. The content of the minimum package of activities should be informed both by the burden of disease and by the perceived needs of the population. It is a function of HSG to weigh the technical arguments, perceived needs, existing values and principles, and to decide which trade-offs to make, taking into account the infrastructure, level of development and capacity of implementation (van Olmen et al., 2012a).

Due to all of the defects and shortcomings mentioned above, the HS's responsiveness is weak, inappropriate, and does not satisfy people's needs, expectations, or aspirations. The findings also revealed that quality is not driven by organised programmes, but by individual interpretations, due to the existence of individual efforts and personal interests. In addition, the findings suggested that HRH, who are generally oppressed and dissatisfied, have turned this dissatisfaction into inappropriate behaviour towards patients. People then complain about this behaviour, especially that of nurses in the LNHS. This has resulted in the failure to achieve one of the main goals of the HS, which is responsiveness to people's needs and expectations, not only in regard to health services, but also to the "non-health matters [that] reflect the importance of respecting people's dignity, autonomy and the confidentiality of information." (WHO, 2000:21)

In this regard, this study's findings suggest that health professionals do not pay enough attention to patients' psychological and emotional needs or concerns such as courtesy and attention, or taking time to provide background details to their physical

concerns. The importance of responsiveness to people's non-health matters, as revealed in the qualitative findings, was reinforced by the quantitative findings in which the communication dimension (i.e. the staff appropriately discussing and explaining) was ranked by respondents as the third and seventh (out of fifteen) most important quality dimensions in the LNHS and LPHS respectively. In contrast, the empathy dimension (i.e. the staff are concerned, understand patient needs, give individual attention, etc.) was ranked as the eleventh and tenth most important quality dimension in the LNHS and LPHS respectively. The study's findings are to some extent consistent with other studies that have identified psychological and emotional aspects of care as important to quality (Wensing et al., 1994; Wensing and Richard, 1998; Grol et al., 1999; Grol et al., 2000), and some questionnaires have included it, such as the EUROPEP[1] instrument (Wensing et al., 2006).

A recent study in Libya showed that the average consultation time is 6 minutes (Weissbecker and Fitzgerald, 2011); although some authors have doubts about the actual consultation time figures in developing countries. One study claimed that such figures are inflated and consultation times are in fact around 1-2 minutes (e.g. Sobae, cited in Algman, 1999). In contrast, in some European countries the average consultation times are: Switzerland, 15.6 minutes; the UK, 9.4 minutes; and Germany, 7.6 minutes (BBC, 2002). Studies from the MENA region have shown a strong statistical association between the utilisation of healthcare services and length of consultation (e.g. Qatari and Haran, 1999). Libyan patients want to convey their psychological and emotional needs and concerns to their service providers, but they lack sufficient time to do so. Therefore, the psychological and emotional aspect of care was viewed as an important aspect of quality by patients in this study. The impact of short consultations at Libyan healthcare facilities on patients' satisfaction and attitude has not been fully recognised by decision-makers and health professionals. At present, the constraints of technical quality and resources (i.e. HRH and physical resources) prevent any increase in the time given to patients.

8.5.4.2. Perception of quality of healthcare

Understanding the healthcare aspects that patients perceive as priorities is important for various reasons, not least because the way patients prioritise these aspects is likely to shape and influence their views, and thus their evaluation of care and satisfaction (Wensing et al., 1998). Yet, it appears that there is no consensus in the literature regarding a 'firm' list of aspects on which patients place the most emphasis. There is a wide variation in the literature in this regard, including in the measure of quality of services, and one implication of this is the capacity of a study to be comparable to other studies (Wensing et al., 1998).

Health-seeking behaviour is diversified based upon pragmatic and eclectic decisions which are not only influenced by physical, financial and socio-cultural factors, but

[1] European Task Force on Patient Evaluations of General Practice.

also by the accessibility, scope of services and the reputation of, and trust in, a provider or facility. This also involves self-referral and discontinuation of treatment. Mutual trust between healthcare providers and the population and patients is a determinant as well as a consequence of the quality of care (Berlan et al., 2011). The trust of patients is influenced by the perceived fairness, behaviour and respect of individual providers, but likewise by the institutional set-up of care and by people experiences with public services in general (Gilson et al., 2005).

8.5.4.2.1. Quality of hospital services

Libya has 37 hospital beds per 10,000 population, which is much higher than Egypt (17) and Tunisia (21) and considered high by international standards (UK 34) (HIC, 2010; WHO, 2013b). However, the study's findings clearly show that LNHS hospitals are semi-self-governing, without a stringent regulator, and lacking adequate communication with patients; thus, most are run inefficiently and are of questionable service quality, with a low bed occupancy rate (around 65% [HIC, 2010]).

Many studies, including those conducted in developing countries, have supported the issue of PS with the quality of care as being multi-dimensional. In this respect, the current study's findings are in line with those of previous studies. A Stepwise-Regression analysis was used in this study to identify the key determinants of satisfaction with the quality of hospital services; the analysis produced eight clinical and non-clinical quality dimensions accounting for 92% of the variation of the full sample (91% in LNHS and 95% in LPHS hospitals). These dimensions were labelled as behavioural intentions (to recommend the hospital to others; to follow medical advice), perceived quality of service (excellent and superior services), availability (of doctors, nurses, equipment), responsiveness (nurses respond when needed; fair and equitable system), atmosphere (temperature, smells, lighting, etc.), expertise (competence, skills, etc.) and patient safety (protecting patients from infection). In addition, manner (excellent behaviour, positive interactions) and tangibles (neat and clean premises, comfortable beds, etc.) emerged as important in the model, but only for the LPHS patients (see Table 6-11/ Chapter 6).

These are similar to – and even better than – the percentages explaining the variance which have been reported in some previous studies in developing countries (58% reported by Nacem and Mohammed, 2003; 68% reported by Yildlz and Erdogmus, 2004; 67% reported by Mostafa, 2005). The technical services, doctor and nursing care, and physical environment aspects of services all have important roles in explaining the variations and these results are in consensus with most previous findings (Guirguis et al., 1992; Hall et al., 1993; Yildlz and Erdogmus, 2004).

The perceived quality of services and PS reflect not only patient experiences, but also their expectations and values (Thompson and Sunol, 1995; Sitzia and Wood, 1997). This sheds light on important quality dimensions of services from patients' perspectives. The p-value coefficients for the perceived quality of service, availability,

responsiveness and (in the LPHS) manner, were all significant for satisfaction with services, but responsiveness was not as significant as perceived quality of service and availability, and manner was only significant for LPHS patients. This suggests that the perceived quality of service and organisational structure (i.e. availability) aspects of hospital care are more important to patients than interpersonal quality aspects. Also, the higher coefficient for perceived quality of service and availability suggests that these dimensions are more important to patients than the interpersonal quality aspects reflected in responsiveness and manner. Whilst this is in consensus with some of the previous studies, other studies have reported that interpersonal quality aspects such as communication, courtesy and respect are the most powerful predictors of PS (Westaway et al., 1998; Mendoza Aldana et al., 2001).

8.5.4.2.2. Technical quality vs. interpersonal quality

There appear to be two broad areas that cover most of the aspects of services measured in the literature; according to Bower (2003), these are access to services (e.g. accessibility) and effectiveness of care, which is divided further into two main components: technical quality (clinical) and the interpersonal quality of healthcare. This study's findings show that Libyan patients are no different from other patients, since the study's tools covered the two broad areas identified by Bower that are high priorities for the quality of healthcare.

Regarding the effectiveness of care, the findings demonstrated that patients are more concerned about the quality of technical services than the interpersonal quality aspects of services, as the score for the former was lower than that for the latter. For instance, perceived quality of service received the lowest scores and was the main quality concern of the respondents. In addition, the findings revealed that eight significant dimensions appear to be most important, and explain the high percentage of variation in the satisfaction, among them two technical services quality dimensions (perceived quality of service and providers' expertise) in LNHS and LPHS hospitals; but interpersonal quality was not included in these.

These findings are consistent with much of the literature on the quality of healthcare in developing countries (Gadallah et al., 2003; Rao et al., 2006). They also match the findings from previous studies which have reported on health providers' failure in meeting patient expectations (Joos et al., 1993; Williams et al., 1995; Zemencuk et al., 1999; Peck et al., 2004). The situation appears to be more obvious in developing countries. For example, Andaleeb (2001) argued that providers in developing countries largely ignore patients' views on healthcare.

One explanation of the difference between technical and interpersonal quality aspects is that patients might be more capable of articulating their desires about the latter. For instance, they are more competent when asking for an explanation or information about their problems, rather than when asking about the technical aspects of care (e.g. physical examination, laboratory tests, medicine, etc.). Williams (1994) stated in his

review of such results that this kind of 'taken for granted' behaviour may be either due to the lack of expectations or a reflection of a passive role adopted in relation to the health providers. Another explanation may be that the service providers, especially doctors, have time restrictions that may prevent them from sparing time to explain the technical services aspects to their patients, or they may feel that the services a patient might wish are not necessary from a professional point of view (Rao et al., 2000).

In this study, the fact that interpersonal quality was favoured more than technical quality could be due to the patients evaluating various aspects of healthcare based on their expectations and previous difficult experiences. As a result, those aspects of care that seemed more important to patients, such as technical quality aspects, received lower scores compared to interpersonal quality aspects. Jung et al. (2002) pointed out that the aspects which received lower quality scores may actually be the most important from the patients' point of view and are therefore prime candidates for any quality improvement interventions.

In addition, Westaway et al. (2003) stated that technical quality aspects and the availability of health services in developing countries have the greatest impact on PS, while mismanagement and workers' behaviour and performance have all been criticised. The relatively greater satisfaction with interpersonal quality aspects shown in this study is similar to findings from previous studies that have been conducted in other developing countries (Abd Al Kareem et al., 1996, Mendoza Aldana et al., 2001).

In contrast, there are differences between developing and developed countries which can be attributed to the differences in the priorities of patients regarding the quality of health services. The results from developed countries show that satisfaction with interpersonal quality aspects is often less than satisfaction with technical quality aspects. This divergence is interesting and merits further research and analysis. One prediction is that it is due to the differences in the cultures and the organisational structures of the HSs. A more sociological expectation is that it reflects the changing power relationships between patients and service providers: patients in developed countries tend to see themselves (and tend to be seen) as 'customers' of the 'service providers' rather than as passive recipients of what the service providers think they need.

The findings of this study provide additional evidence for Donabedian's identified differences between the interpersonal and technical aspects of the health services process in quality assessment (Donabedian, 1988). Therefore, the interpretation suggests that it is important to increase awareness among the health service providers of patients' views during consultation. Understanding these views is paramount if patients are to be educated about the undesirability of undergoing treatment or tests that are not clinically required. This leads to the broader issue of setting standards for what patients should be entitled to expect while receiving healthcare. This is, of

course, now a great concern in several HSs undergoing reforms, in developed and developing countries.

8.5.4.3. Equity, fairness and justice

Equity refers to "The quality of being fair or equal; equality of status in respect to some identifiable and controllable quality of importance such as health, access to services or exposure to risk. Equity in health implies that ideally everyone should have a fair opportunity to attain their full health potential and more pragmatically, that no one should be disadvantaged from achieving this potential." (WHO, 1998a:34) In this regard, the findings revealed broad areas that can be seen as obstacles and problems in the Libyan HS, such as favouritism in facilitating healthcare and unfairness in financial contributions.

8.5.4.3.1. Favouritism /Nepotism

The mismanagement of healthcare facilities, as well as the lack of monitoring, proper supervision and inspection, have caused some HRH to behave inappropriately. The findings identified several negative aspects related to equity, justice and fairness in the LNHS in response to patients' needs, the most important of these being the ubiquity of favouritism or nepotism, whether from officials or the staff. Relations of kinship or friendship with one of the officials or staff give priority access and facilitate the provision of healthcare, while other patients are kept waiting. This adversely affects the quality of services, which has led to increased waiting times and caused people to suffer to obtain healthcare, hospital beds, medical tests, etc. These issues reflect the inability of the HS to respond to people's health needs equally and fairly, which is an important goal of the HS. There was a consensus that favouritism is widespread in health services, especially in the LNHS.

8.5.4.3.2. Catastrophic spending

All of the problems and constraints mentioned previously (i.e. in HS's finances and resources) impact negatively on the efficiency and quality of services. This is also the case with inadequate funding, which detracts from the equity and fairness of the system because patients sometimes end up bearing additional OOP costs for things such as medicine, X-rays, and laboratory tests in the LPHS. Despite the free healthcare available in the LNHS, Libyans are opting to purchase healthcare either in Libya or abroad in order to receive a high-quality service which is often unavailable in the LNHS due to nepotism/favouritism, negligence, indifference, and other factors. The government contribution to the total health expenditure is 88% and the OOP is 12% (HIC, 2010), though some sources have claimed it is more than this (e.g. 23% [WHO, 2007b], 20% [WHO, 2010a]). In addition, a household survey estimated the spending averages as LYD 263 (£137) per year per household (IGH, 2004).

Certainly, the OOP contribution is escalating, mainly due to the disruption of healthcare services. Payments are made in two main areas. One is the LPHS, and the

findings of this study have criticised its charges, as it is market-driven and without any regulatory mechanism from the HSG to determine appropriate fees. Secondly, for more serious procedures, Libyans spend OOP on travel for TA. A figure for the total amount of money spent is unavailable and difficult to estimate, but with the average cost of state-funded trips at LYD 15,000 (£7,833) in 2004, it represents a considerable expense to the average Libyan (WHO, 2007b); El Taguri (2007) claimed that TA costs range between $100-200 million (£66.2-132.4m) annually. As there is no LPHS insurance in Libya, fees for these services are its main source of revenue, which exposes Libyan patients and their families to the financial risks of illness, such as catastrophic spending. In addition, some kinds of health insurance provided for some governmental and non-government company employees are creating inequality and increasing the percentage of OOP for the rest of the population.

The study's findings show that expenditure on health (i.e. OOP) is on the increase and must be above the published figures. The current "out-of-control" LPHS is risky and will have negative impacts on the cost and quality of service provision. Thus, further work is needed on imposing tough regulations on the LPHS. This may include a national tariff for services, and it could commission some of the LPHS, which includes diagnostic facilities (WHO, 2013b).

Financial protection indicates to the financial consequences of disease, and in practice signals arrangements in order to get access to healthcare of decent quality and for ensuring income and financial support in case of illness. The ability of a country's HS to provide financial protection to its population is a vital factor in creating trust in the HS (van Olmen et al., 2012a). Social protection goes further and addresses the vulnerability of people who have fallen ill, through services for relief from deprivation, thus tackling more structural causes of inequity and power imbalances (Michielsen et al., 2010).

8.5.4.4. Patient safety

Patient safety focuses on the reduction of the probability of medical risk such as inflammation, or any safety issues involving patients, visitors, and employees. Practically all health services carry some risk, so there must be a "net benefit" to the overall treatment (Lohr and Harris-Wehling, 1991:6).

The quality and safety of the healthcare services were the major concerns; loss of confidence in the healthcare services – the LNHS as well as the LPHS – has driven the Libyan people to vote with their feet, choosing TA. The quantitative findings showed that patient safety is a composite of various factors such as cleanliness and protecting patients from infection. Patient safety was rated dramatically lower in LNHS hospitals than in LPHS hospitals (40.67 and 55.97 respectively). This evidence also had a relatively strong effect on explaining the variation in satisfaction with services across both types of hospitals. In addition, the qualitative findings support the quantitative regarding patient safety where it pertains to the environmental quality in

healthcare facilities, because current healthcare institutions, especially in the LNHS, are lacking essential facilities. There are problems with intangibles such as an unpleasant atmosphere, poor accommodation services and hygiene, and a lack of patient safety leading to the risk of inflammation. Some interviewees believed that the LPHS is more concerned about the environmental quality of healthcare facilities than the LNHS.

Previous studies have also shown that cleanliness is one of the important determinants of healthcare quality and is an influential factor on PS (Hall and Dornan, 1988b; Fottler and Ford, 2000; Goupy et al., 1991; Carey and Seibert, 1993; Tengilimoglu et al., 1999; Oz et al., 2001; Westaway et al., 2003), and it could also be an important determinant of patients' healthcare-seeking behaviour (Ginsburg et al., 1997).

8.5.4.5. Patient satisfaction (PS)

Consequently, all of these issues have had an adverse effect on PS. The findings show that Libyan patients are generally not satisfied with the quality of hospital services in either the LNHS or the LPHS (50.2%; 49.0% for the LNHS and 52.8% with the LPHS)[1]. However, these findings are inconsistent with other studies conducted in different settings in Libya (e.g. Mohapatra and Al Shekteria, 2009; Abdul Salam et al., 2010a and 2010b), though no previous research comparing the two sectors appears to have been carried out in the country. Surprisingly, one of the studies (Mohapatra and Al Shekteria, 2009) that was conducted in Benghazi at the same as this study, and at one of the same hospitals, found high in-PS (75% /n=300), while the current study found that the hospital (*7th of October*) received the second-worst degree of satisfaction among all hospitals in Benghazi (35.88%). The researcher believes that these differences were mainly due to the tools used in these studies (questionnaires), as he had had such previous experience himself, using a similar questionnaire to that of Mohapatra and Al Shekteria, which resulted in similar high satisfaction scores.[2] Thus, the researcher believes that the current study's questionnaire achieved the more accurate results. This is another contribution from this study, as it can be used extensively worldwide, including in Libya, Arab, and other developing countries (see the Methodology Chapter, 5).

The two hospitals with the lowest scores in PS are the oldest and among the largest in Benghazi (*Al-Joumhouria* and *7th of October*). This can possibly be explained by the fact that *Al-Joumhouria* hospital is the only LNHS hospital for gynaecology and obstetrics which serves the city of Benghazi's population and its suburbs. Women are usually discharged on the day that they give birth, because the hospital is so

[1] On an eleven-point scale (from 0 to 10).

[2] The quality of healthcare and PS as expressed by hospital in-patients and out-patients in Benghazi was studied by the Faculty of Public Health at 6 LNHS hospitals covering 200 beneficiaries. The study found that both categories of patient were eminently satisfied (in-patients 77% and out-patients 72%). Source: Al-Obaidi A.; Maddi, R.; Al-Bargati, R.; and El-Fallah, M., 2005: 'Satisfaction with the quality of healthcare provided in hospitals and specialist centres from patients' perspectives'. Unpublished study, Benghazi: Faculty of Public Health, Al Arab Medical University, Libya.

overcrowded. Furthermore, Libya has a high birth rate – like most other developing countries – and culture and traditions are of profound importance when children are born to Libyan families. They usually give this special occasion particular interest, with mixed emotions such as anxiety and anticipation; thus, some negative experiences might be magnified under these circumstances. However, these results are in agreement with other similar studies in MENA countries. For instance, Attal (2003) reported that women were not satisfied with the quality of birth care in public and private hospitals in Yemen. This low degree of satisfaction with Libyan hospitals is also consistent with the results of other similar studies in developing countries (Bernhart et al., 1999; Lim and Tang, 2000; Jabnoun and Chaker, 2003; Chahal et al., 2004; Bahrampour, 2005), which have revealed low levels of satisfaction with the quality of public hospitals.

8.5.4.6. Behavioural intentions

Evidence for the significant influence of PS on behavioural intentions comes from a wide range of service industries, and it has been empirically validated in healthcare services (Woodside & Shinn, 1988; Woodside et al., 1989; Bitner, 1990; Anderson & Sullivan, 1993; Storbacka et al., 1994; Reichheld, 1996; Choi et al., 2004; Qin, 2009). Several other studies also support the direct link between service quality and behavioural intentions; a high-quality service is believed to be linked to favourable behavioural intentions, while a low-quality service leads to unfavourable behavioural intentions (Olorunniwo & Hsu, 2006; Qin, 2009).

This study's findings have shown that patients were generally dissatisfied with the quality of healthcare, yet their behavioural intentions received the highest score in the questionnaire, which is contrary to what has been suggested by several other studies. The findings suggested that PS did not impact negatively on behavioural intentions; nor was a direct link found between the quality of healthcare and behavioural intentions. The latter might be affected by satisfaction, but does not change it, as behavioural intentions cannot follow satisfaction if it moving into the negative territory. This may be because patients are looking for healthcare, making efforts to obtain it, or purchasing it OOP. Therefore, whether or not patients are satisfied with the quality of healthcare, the ways it is delivered, staff behaviour, and so on, they are still obliged to follow the treatment and medical advice and guidance, as the ultimate goal for patients is to restore and/or maintain their health (Choi et al., 2004). This is an important point that emerged from the study's findings which deserves to be examined in other studies.

8.5.5. Community participation and people's interests

"The population is not an external beneficiary of the system; it is an essential part of it. This is because, when it comes to health, persons play five different roles: (i) as patients, with specific needs requiring care; (ii) as consumers, with expectations about the way in which they will be treated; (iii) as taxpayers and therefore as the ultimate source of financing (iv) as citizens who may demand access to care as a right; and

most importantly, (v) as co-producers of health through care seeking, compliance with prescriptions, and behaviours that may promote or harm one's own health or the health of others" (Frenk, 2010a:1-2). There has been increasing interest in people as producers of health and healthcare, with particular attention on the activities of individuals and the collective action of groups in the community such as patient organisations and informal caregivers (van Olmen et al., 2012a). Rifkin (2003:168-172) "traces the progression of the concept of [community] participation to the present term of empowerment and the links among empowerment, equity, and health outcomes... Based on the concept of development as freedom... [And] expanding choices for people enable them to improve their future development". Empowerment is to a large degree recognised as an important HS goal, because it contributes to strengthening organisational capacities, challenging power inequities and achieving outcomes on several levels in various areas (Gilson et al., 2007).

At the bottom of the framework (8-1) are *people and communities*, and the indicator associated with them determines the extent of their interest and its current direction, as well as the extent of community participation in the HS. The findings indicated that the interests of the community and the people and their interactions with the HS gradually decrease whenever the indicator moves towards the HS's *structure* (left-hand side of the framework). This indicates high centralisation, as the concentration of power is in the hands of government institutions (HSG, the *supreme authority*); this is referred to as the *participation gap*. When this is at an extreme, the community and the people do not participate in activities such as decision-making and setting health priorities. The findings also showed that the culture prevailing within health facilities and organisations does not support a patient-centred approach to care, and ignores the issue of PS. A doctor (P-20) interviewed for the qualitative study indicated this situation:

> *"The healthcare service relies on the service provider's point of view, at best; it does not take into account the demands and expectations of patients."*

A possible explanation for this is that the adopted medical model gives low priority to the role of patients in healthcare. Doctors trained under this model are likely to adopt a paternal approach, and their patients may become dependent on the model and not want it changed (Macdonald, 1994).

The other side of the framework (the bottom right-hand corner) shows the convergence of high people's and community interests (bottom of the framework) with high HS goals and outcomes (right-hand side of the framework). This corner is the centre of the people's interests, concentration and goals. These tend to be the aspects of healthcare about which people are the most concerned; for example, whether the service is fair, good, and safe. Therefore, all of the previous results which have negatively affected the quality of healthcare services (e.g. the lack of sufficient interest from the *supreme authority* to achieve the HS's goals, patient dissatisfaction with the provided healthcare services, and other factors such as social/cultural) can

justify many patients' decisions to go to the LPHS or to search for high-quality healthcare beyond the country's borders, to restore and/or maintain their health.

8.5.6. External factors

The findings also demonstrated that certain external factors have also directly and indirectly had an impact on the entire HS and health process components, especially the provision of healthcare and adaptation and acceptability. Some of the external factors that emerged are cultural, social and psychological aspects; health awareness; the burden of disease; and environmental elements.

8.5.6.1. Cultural, social and psychological aspects

A salient theme which emerged from the analysis of the interviews was the profound importance of cultural, social and psychological aspects to Libyan patients. Although this issue is not directly related to healthcare services, it was viewed by the patients who were interviewed as an important aspect. These findings were further reinforced by the perceptions of other interviewees, as most of them recognised that this was one of the most important aspects that affect the quality of healthcare in Libya. The researcher, as a Libyan citizen, was not surprised by these findings, being aware of the power of cultural and social factors and their pervasive influence in virtually all parts of people's lives. They certainly have an effect on the healthcare provision and the goals of the HS (at the bottom of the framework). The most important of these aspects were people's culture, their health awareness in general, and cultural and social aspects of society (e.g. habits, values and traditions). The quantitative findings stated that travelling for TA is quite common, as 43% of respondents (n=550) had done so. The qualitative findings illustrated that some of the reasons why people travel for TA are not associated with real medical needs, but include social boasting or bragging, or the patient's family wanting to give attention and sympathy.

This situation highlights the strong influence of cultural and social factors, which can have a negative impact on the doctor-patient relationship and indeed the entire HS, and which in turn leads to loss of confidence in the system.

8.5.6.2. Double burden of disease

The findings did not show obvious concerns about the double burden of disease as an external factor that affects the HS. This may be because the CDs and NCDs in Libya do not significantly differ from the rest of the world; Libyans suffer from NCDs such as diabetes and heart disease, while CDs are rare. The qualitative findings and the Libya profile in Chapter 4 do highlight a different and significant problem: RTAs, which are one of the main causes of death in the country. These have many causes, but they are not within the remit of this study. However, the findings suggested that the HS does not respond to them properly, as it does not provide enough A&E centres

or hospital departments to deal with such large numbers of critical cases.[1] There are also not enough ambulances to transport the injured after accidents, which means that they are transferred instead by people who often do not know what they are doing, and this can result in death or disability. It is worth mentioning the obvious neglect of the HS's role in this area, which currently remains a challenge in the health sector and urgently needs to be studied and remedied.

However, evidence from the literature shows that the levels of ill health and associated risk factors in the population are very high. The MOH's annual reports (e.g. HIC, 2010) clearly show the high prevalence of risks to health in all age groups above 25 (e.g. smoking, food, etc.). The population is heading towards a high level of NCD prevalence if immediate public health measures are not taken based on the right policies, good investments, and public health protective legislation and regulations.

8.6. Implications of the study's findings

The study's findings have significant implications for both the Libyan HS and the quality of healthcare. This study aimed to add to a scientific body of knowledge, based upon the perceptions of health service stakeholders, in order to provide a foundation for the development of a framework and evidence base that can assist the understanding of the reform process and the re-engineering of the Libyan HS, as well as to inform policy-makers and health providers in developing HS policies and strategies for improving the quality of health service initiatives in healthcare facilities. The study's findings gain further strength from the fact that the quality of healthcare is increasingly seen as a remedy for the convoluted dilemmas challenging various HSs worldwide.

8.6.1. Implications of the study's findings for healthcare quality

The literature review explored the evaluation and improvement of the quality of healthcare as perceived by various health stakeholder groups (patients, health professionals, officials, decision-makers and experts). The next section discusses the implications of this study's findings for the quality of healthcare.

8.6.1.1. Quality is a multi-dimensional concept

The study's findings emphasised that quality is a complex, diverse and multi-dimensional concept; and different people express different perceptions of what constitutes quality. Thus, a pluralistic approach to evaluation is essential. Understanding various stakeholders' perceptions of quality, particularly those of patients, is important in order to identify which aspects of the quality of healthcare are most valued by patients and should be prioritised to enhance the quality of services. The differing perspectives of patients and health experts, officials and professionals

[1] For example, before the revolution (15 February 2011) there was only one hospital *(Al-Jalaa Hospital)* that received A&E cases. It is located in the middle of a residential area and is not easy to access, especially during periods of congestion.

regarding quality initiatives identified in this study support the importance of eliciting patients' perceptions of the quality of healthcare and for maintaining improvements in quality initiatives. This is a practical and easy approach to assess, evaluate and improve the quality of services, especially for HSs with limited resources, such as those in developing countries, which cannot afford other resource-intensive methods. This approach can help health providers to monitor and evaluate health quality performance. Therefore, patients' views of the quality of hospital services could help in developing plans for quality improvement that could make a difference to the quality of health services as a whole.

It is recommended that health providers in developing countries use patients' views as an efficient method for monitoring, assessing and improving the quality of services, since this is not as resources-intensive as other approaches.

8.6.1.2. Influence of different interest groups

Although there has been a lack of scientific research in Libya on the HSG, the HS's polices and the HS's organisation, anecdotal evidence from newspaper analysis, media reports, internet pages, and social websites suggests that the MOH is facing growing pressure from interest groups, academics, NGOs and the government to introduce radical reforms such as privatising part of the LNHS and introducing a health insurance system. However, as Alford (cited in Hunter, 2004), swinging between various healthcare reforms is not only the cause of *reform fatigue*, but such a situation is also more likely to be a *dynamic without change*. Thus, what matters is not what the reforms are capable of achieving, but how different interest groups react to such reforms. A good example of this is the clear rejection of the WHO's comprehensive PHC programmes, which proved how powerful interest groups such as doctors are able to shift the focus from the comprehensive promotion of care to clinically selective types of healthcare through which the medical profession can exercise and maintain power and social influence. Hence, PHC programmes, as essentially preventive services, are beginning to be seen as an unsuccessful concept (Hall and Taylor, 2003) or as just an extension to hospitals. Also, evidence from this study suggests that patient and community participation in the HS's policies and/or quality initiatives does not exist in Libya.

This study found that analysing the perceptions of different interests groups can enhance the understanding of how the Libyan HS's policies and quality initiatives operate. This indicates the powerful position held by the medical profession and HS advisors in the HS's policies and quality initiatives processes, as well as the marginal role that Libyan patients have in influencing the healthcare process in general.

8.6.1.3. Methodological techniques

This study's findings have provided convincing evidence of the importance of analysing the perceptions of various interests groups regarding the improvement of

the quality of healthcare services and developing standards of healthcare. However, the questionnaire, as a prominent tool in assessing patients' perceptions, has been under scrutiny for a long time because of its empirical and theoretical defects (e.g. Linder-Pelz, 1982; Pascoe, 1983; Carr-Hill, 1992; Williams, 1994; Coulter et al., 2002a; Bower, 2003). Robust methodological techniques have been developed to more precisely and accurately measure patients' perceptions. The qualitative approach of these techniques, such as the use of focus groups, suggests that a questionnaire would be a broadly appropriate tool for study in the Libyan context. The questionnaire has been specifically designed for this study to assess the quality of healthcare provided to in-patients in LNHS and LPHS hospitals, using (for the first time in Libya) a scale graded from 11 degrees (numbers) according to the Likert scale, starting from 0 (completely disagree) to 10 (completely agree) (see the Methodology, Chapter 5).

This study used the questionnaire as a framework to examine patients' perceptions of healthcare in Libya. The findings have shown that this tool was more applicable, accurate and precise than those that have been used in other studies in Libya. This questionnaire can therefore be widely used in Libya, as well as in other developing countries, including MENA countries, with a similar HS.

8.6.2. Implications for the HS and its governance

The literature review explains that HSs are an important but confused field, with unclear boundaries, overlaps and multiple interpretations of terms, and therefore requiring conceptual clarification. The next section discusses the implications of this study's findings for HSs as perceived by various health stakeholder groups (patients, health professionals, officials, decision-makers and experts).

8.6.2.1. Health systems as complex dynamic systems

The existing literature explains that HSs have been affected by socio-economic factors but have mainly been guided by evidence about the kind of problems facing healthcare services and organisations, and the main factors that influence health. The current functionalist approaches to HSs, such as the WHO HS frameworks (see Chapter 2, section 2.7), view health organisations as structures with a hierarchy and various levels of recursion, and which use HRH, technologies and funding to improve the health of people and communities. According to this approach, health sector reforms emphasise the analysis of the health infrastructure and alternative arrangements for efficiency and the achievement of predefined objectives.

Obviously, HSs are extremely complex because they involve a significant number of important variables and interactions; therefore they cannot be understood on the basis of a single functionalist model. The range of issues that can affect HSs shows that the use of a single approach is not enough, unless to reform only one element of the system. The components of an HS, and its attributes and properties, are related to each other, so that when one undergoes change, it affects the entire system. It is hard to

find the most determinant and practical structure and process responsible for its viability and technical performance.

Sengupta and Abdelhamid (1993) argued that one reason for poor decision-making in complex systems is that managers often focus on "detail complexity", reducing the value of data used, simplifying mental cause–effect maps and limiting their activities to a number of fixed alternatives when adapting decisions, rather than focusing on "dynamic complexity" characterised by networks of relationships, feedback loops and non-linearity. This reductionist linear approach fails to offer an accurate representation of the realty and ignores possible wider effects of the decisions. This "bounded rationality" (Simon, 1982) is further reinforced in situations of dynamic complexity due to the limits on the cognitive skills and information-processing capability of the human mind (Atun and Menabde, 2008), which often ignores feedback structure, non-linearity in the system, and the time delay between action and consequence. These lead to "misperception of feedback", thus even if information are available, the consequence of interaction cannot correctly and rapidly be deduced (Diehl and Sterman, 1995; Atun and Menabde, 2008).

8.6.2.2. HS's policies

The study's findings suggest that the development of the HS's policies at national and health facility levels is bound to require coherence, interrelationships and interdependency. Thus, in order to introduce quality initiatives to healthcare facilities, it would be useful for the HS's polices to be associated with this goal, and for the suggested model (see Figure 9-1 in Chapter 9) to facilitate this process; otherwise, any HS polices regarding quality initiatives at national level will not filter down to the health facility level. There is still a need for more research in these areas to determine the mechanisms that connect the development of national HS polices with the introduction of quality initiatives at facility level.

8.6.2.3. The roles of different actors in the HS

Despite its promising benefits for healthcare services, especially in developing countries, the quality of healthcare initiatives continues to generate uncertainty on the part of both health professionals and patients. The study's findings have demonstrated that patients have priorities with regard to the HS and the quality of healthcare initiatives. However, health professionals and administrators, scientists, politicians, decision-makers, and citizens view the issue of healthcare from different perspectives because of their different values, cultural backgrounds, and experiences. Different actors, whose intentions, motivations and actions play an important role in the formation of the HS's infrastructure and its performance, tend to have different opinions about what they want to be achieved in health organisations and society as a whole.

Thus, the key factors for success in the process of health sector reform are building a consensus among various social actors, teamwork within health institutions, and

leadership. The suggested model (see Figure 9-1 in Chapter 9) has a more comprehensive approach to health, which includes physical, mental and social dimensions; it can support practical interests, as well as facilitate interactions and motivate mutual understanding among different health stakeholders and actors. Policy-makers should therefore take patients' perceptions into account in the decision-making process. Furthermore, their perceptions should not just be used to implement and evaluate healthcare services, but should also be taken into consideration when developing standards and goals for quality of healthcare initiatives. In addition, because involving patients in their healthcare is recognised as important, determining the level of such involvement should be a matter of priority (Harrison et al., 2002b).

8.6.2.4. Satisfaction with services and the consumerism concept

Satisfaction with services was shown also to be associated with many different aspects of healthcare, rather than with the characteristics of individual patients. The reform of healthcare services should normally involve a review of the management of healthcare facilities and its boundaries of authority. Additionally, if the concept of consumerism is to be encouraged, bureaucratic policies should be reconsidered, as consumerism is a market-oriented concept and its success is likely to be limited in the context of bureaucratic management. There was a consensus among health stakeholders as to the importance of treating patients as consumers and listening to what they have to say. However, legislation and regulations do not exist that can identify appropriate mechanisms for cementing the importance of patients' perceptions in the Libyan HS. Although the health stakeholders showed an understanding of patients' perceptions, and how these could enhance health services, their perceptions were mainly based on their working experience and knowledge of what constituted the patient's role generally, instead of involving government regulations or guidelines to implement such an approach.

Some health stakeholders argued that patients are lacking health awareness, and suggested that further health education should be offered to remedy the problem to enable both HRH and patients to share a common understanding of healthcare. The suggested model (see Figure 9-1 in Chapter 9) has considered most of these obstacles, as it takes satisfaction with services and health education into account in the HS's processes.

8.6.2.5. Community participation

Community participation – in Libya and in many other countries – is a serious issue that needs to be addressed more critically. It has been advised that there should be more community involvement in the HS, which could include a dialogue with the HSG for the purpose of developing the HS's policies, as well as health development programmes, a reform agenda, and practical changes. There should also be a focus on relevant social practices, power relationships, intersectoral co-operation, decision-

making informed by evidence, and respect for values such as equity, fairness, and human rights.

Strong community participation with other actors in the HS, especially when setting priorities, is important (van Olmen et al., 2012a). Empowerment means the transformation of power relations that is likely to elicit resistance (van Olmen et al. 2010a). In 1983, Ulrich (Midgley, 2003) assumed that systems boundaries could only be established through dialogue, which should involve the MOH, HRH, civil society, and other health stakeholders. The suggested model (see Figure 9-1 in Chapter 9) certainly could improve consensus-building between different actors in health sector reform regarding issues of context, agenda, and process, and could support the interests of the people as main participants in the HS, by freeing HRH and people from restrictions imposed by power relationships and encouraging the greatest development of their potential.

8.6.2.6. Cultural and organisational barriers

It is commonly recognised that the successful implementation of a HS's reforms and quality initiative programmes requires several important steps, and the most important of these is overcoming cultural, traditional and organisational barriers. Øvretveit (2002) found that this is an issue in many Arabic countries. Similarly, Dawson and Heyman (1997) argue that cultural and regulatory barriers must be taken into more serious consideration in order to ensure a successful and meaningful quality evaluation. The study's findings are of profound importance when the cultural and social aspects of Libyan patients are considered. That this situation highlights the strong impact of cultural and social issues on the quality of healthcare, the staff-patient relationship, and indeed the entire HS is indisputable; and deficiencies in these areas have resulted in a gradual loss of confidence in healthcare services. The suggested model (see Figure 9-1 in Chapter 9) takes cultural and social aspects into consideration in order to ensure that the HS's goals are achieved, through health education and improved consensus-building between the HS and people and communities.

Chapter 9: Summary, recommendations and conclusions

This chapter consists of seven main sections: section 9.1 is the introduction; section 9.2 presents the contributions of the current study to knowledge about HSs, by presenting and describing a dynamic HS model based on the study's findings; and section 9.3 describes the application of the study's HS model in different settings. Section 9.4 features the conclusions drawn from the findings of the study, which are summarised and presented together with proposed recommendations for achieving a more effective HS and improving the quality of healthcare in Libya. Section 9.5 presents the overall conclusion of the study. Section 9.6 describes the study's limitations and constraints; and finally, section 9.7 suggested ideas for future research.

9.1. Introduction

Libya is another developing country that has been encouraged the use of WHO models and frameworks. However, the findings of this study suggest that the current functionalist HS approaches (e.g. the WHO's HSs models and frameworks [WHO, 2000 and 2007c]) are not particularly applicable to the Libyan situation. The system idea does not appear to be well addressed, and there is a lack of comprehensiveness in ongoing attempts to map the HS's reality; these are mostly limited to holders of political power, and so they fail to capture and respond to the perceptions and views of HRH and the people.

The researcher certainly advocates the use of the system idea and system thinking approaches and related methodologies because of their comprehensive and holistic learning and administrative capacities to deal with various problem situations. They also expand the overall relevant elements from political, economic, social, cultural and environmental perspectives which, despite being outside the scope of the MOH, influence its conduct and performance as a system.

9.2. How the current study can contribute to knowledge about HSs

9.2.1. New model for a new era in Libya

To accomplish the study's remaining third primary objective – namely, *'to contribute to the development of knowledge about the HS and the quality of healthcare in Libya'* – it will be necessary to develop and/or rebuild/reform Libya's shattered HS. This will be a demanding task, as the current situation in the country is extremely challenging. This study has contributed a dynamic model based on the study's findings (Figure 9-1) which gives a comprehensive view of a HS, incorporating its main components, structure, activities, consequences, and outcomes as well as the HS's internal and external environmental factors, and the elements exercising pressure on the HS and contributing to its choices, trends, outcomes, and responsiveness to the health needs of individuals and communities. This model is both similar to, and different from, other existing models and frameworks (e.g. WHO, 2000 and 2007c; van Olmen et al.,

2012c). The researcher claims that this model is more feasible and efficient – for the Libyan context at least – than most of the currently existing HS models and frameworks that are discussed in the literature review (see Chapter 2). This is mainly because (a) it based on this study's findings; (b) it is also based on the system idea and system thinking approaches and related methodologies, (c) with dynamic interlinking relationships between the various components on the one hand, and with the surrounding environment on the other, which affect the HS in direct or indirect ways; and (d) it is not based on the *linear* logical relationships between its components, like most of the other existing models. In addition, due to the convergence and similarities between HSs and their components, this model can be widely utilised – especially in developing countries, including MENA countries.

9.2.2. General description of the model

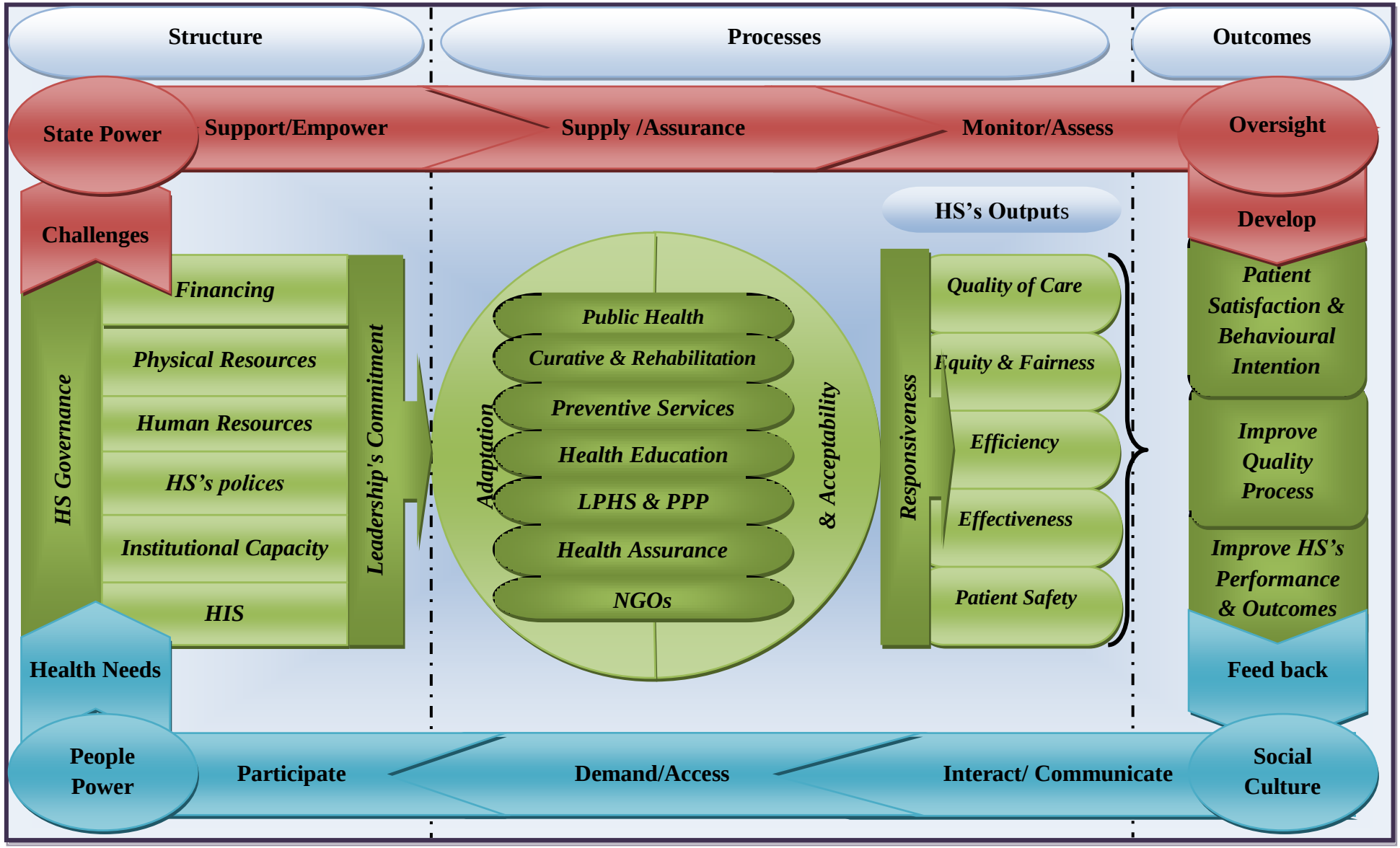
This model is a broad view of the HS as a social enterprise, which aims to expand the advantages of the available recourses, knowledge and technology in ways which will contributing effectively in people and communities health status through emphasis on preventive and curative strategies. It is the foundation and basis for healthcare services practice.

The model represents a series of related and interrelated activities that are best carried out in a continuous and cyclical pattern. It combines together the purposes and functions of the HS concerning the *Structure* (capacity/input), *Processes*, *Outputs*, and *Outcomes* of the HS. It is linked with government and political decision-makers, as well as with people and communities. The model is dynamic adapting to the new challenges on its agenda, and it is the compound of activities and efforts, which are undertaken by individuals and institutions that committed to achieving its goals. Foremost, it is a collective effort to identifying and addressing the reality that lead to the health status of the population and the quality of *Outcomes*. To understand this broad view of the HS, Box 9-1 presents general descriptions for the main components used in this Health System Development Model.

9.2.3. The model's process and mechanism

These resources and relationships are organised and *structured* to implement the HS's essential functions through many *Processes* (essential HS practices or HS *Outputs*). These *Processes* include many interventions that result from assessing health needs and planning effective preventive and curative strategies. The intention of the *Outputs* or interventions are to achieve the desired results (quality of healthcare, equity and fairness, efficiency, effectiveness, patient safety) which, with the HS, might well be characterised as quality of health and life *Outcomes*. They may also improve the population's satisfaction and the HS's performance (see Figure 9-1).

Figure 9-1: Health System Development Model



Box 9-1: Descriptions of the terms used in this model

• ***Structure (Capacity/Input):***
The required resources and relationships to implement the essential functions and services of the HS; which include financing and HR, physical, and other resources; knowledge and technology; information; institutional capacity, leadership, and proper relationships among the HS's elements.

• ***Processes (Practices and Outputs):***
These collective processes or practices which are essential and adequate to make sure that the essential functions and basic services of the HS are being implemented effectively. They include the key processes or practices that determine and address health issues, and interventions, procedures and actions aimed to prevent, protect, promote, and improve quality of health and life through preventive and curative strategies.

• ***Outcomes (Results):***
Health status indicators, quality of health, risk reduction, and life enhancement. HS, might well be characterised as quality of health and life Outcomes. Outcomes are long-term HS aims that determine optimum, measurable future levels of health status; the prevalence of risk factors; maximum acceptable levels of illness, injury, disability; as well as population satisfaction and improved HS performance and outcomes.

• ***State power:***
The state (e.g. government) must be the central force that takes on the primary responsibility for health. The 'core functions' of the government should include: (a) support, empowerment and provision, (b) policy development and leadership, (c) assessment, monitoring, and evaluation, and (d) assurance, guarantees and organisation.

• ***People power:***
The public (people and communities) must be involved in the formulation of a HS's policies, setting health goals and priorities, and identifying and addressing health problems and needs. The role of the public should include: (a) providing feedback on the HS's *Structure, Processes, Outputs and Outcomes*, (b) interaction/ intention, (c) demanding healthcare services, and (d) participating in the HSG.

The core functions of the government *(state power)* at all levels should include:

(a) Supporting, empowering, and providing funds and technical assistance to strengthen the HS, and especially to achieve an adequate minimum capacity, as well as the national established health objectives and priorities;

(b) Policy development and leadership: the responsibility to develop, promote and lead comprehensive HS policies on the basis of a positive appreciation of the democratic political process;

(c) Assessment, monitoring, and evaluating: regularly collecting, analysing, and providing clear information on the health problems, health needs and health of the community; and

(d) Assuring, guaranteeing and organising efforts to develop and maintain essential high-quality health services which are available and accessible. The government must assure its citizens that the services necessary to achieve agreed-upon goals are

provided, either privately or publicly, by requiring such action through regulation, delegating power to other levels and holding them accountable, and solving health-related problems.

The public (people and communities) must be involved in collaboration with the state (i.e. government) leaders in formulating the HS's policies, setting health goals and priorities, and identifying and addressing local and national health problems and needs. The role of people and communities *(People power)* should include: (a) providing feedback on the HS's *Structure, Processes, Outputs and Outcomes*, (b) interaction with the HS and its intended *Outputs and Outcomes* that provide a positive behaviour intention, (c) demanding healthcare services, and (d) participating in the HSG.

9.3. Applying the study's HS model

This model has been used in the Libyan context to analyse this study's findings in order to seek to answer the research question and address the study's objectives (see the discussion Chapter 8). The model allows the organisation of the study's findings that emerged from two sets of data, quantitative and qualitative, and facilitates the identification of problems at different levels. The study's HS model is quite explicit when it is applied at the national or regional levels, but it can be used in more specific ways. It can be loaded with certain values, principles and perspectives so that it becomes normative, and it can be focused on various levels in the HS or on particular programmes or problems. Some parts of this section are based on the application of the model in the Libyan context (see Chapter 8), and some parts are adapted from different sources in the literature review (e.g. van Olmen et al., 2012b and 2012c; WHO, 2013a and 2013b).

9.3.1. A normative perspective

In several places, such as the discussion chapter and in the conclusions and recommendations (see section 9.5), the importance, advantages and perspectives of the model have been made explicit. The generic version of the model can be used and 'loaded' with different areas of importance, advantages, and views on how a HS should emerge. In such way, the model becomes normative.

9.3.2. Applying the model at different levels of a HS

When assessing a HS, different levels can be considered: the participation and interactions of people and communities with the HS, the organisation of an individual health facility, or a local or regional health structures network, up to the national level. This section presents an endeavour to apply the model at different levels to achieve a more effective HS and a higher quality of healthcare. When and where possible, it discusses examples of identified challenges and explains the technical implementations of the model.

The study's HS model does not aim to be stationary definite. Instead, it is flexible and can be adapted to the purpose of any particular analysis or planning exercise. In addition to what has been demonstrated in the discussion chapter and in the conclusions and recommendations (see section 9.5), the following sub-sections provide some explicit values, principles, perspectives and general guidance in relation to the study's HSs model that can be applied at the national level, local or regional level and health facility level.

- ***Governance and stewardship***

For a HS model to operate according to governance principles, the following factors are required: leadership commitment, defined responsibility, and regulation, including immediate measures to protect and stabilise the HS and its operations. HSs tend to be more stable when the principles under which they are operating are clear and well understood. The public and professionals, including decision-makers, must be aware of these principles; for example that services are free, delivered in equitable ways and to the highest quality, and that the public should be fully engaged. Ensuring that the people and communities are engaged in the HS's policy development is a key function for the HS. The healthcare services exist for the people and communities, and thus their involvement is essential to ensure that the HS's goals are achievable. Communication strategies are essential to ensure both transparency and that complete information is shared with the public. They can be employed positively to publicise actions, inform and engage people, and ensure that the HS's leadership is more visible to the public, for example via radio and television.

- ***Leadership and leadership commitment***

To establish an organisation better able to respond to the challenges facing the HS, the government should strengthen the HS's leadership capacity and commitment. Thus, the current and future HS leadership should be trained to embed strategic thinking, works and operations in the HS. Their commitment should be sustained and channelled in the right direction. Also, all senior leadership posts should be subjected to clear job descriptions, and transparent and open competition in selection. These can develop strong leadership within the HS and all health organisations.

- ***HS's policies, strategies and plans***

In order to develop a population-wide approach including the HS's policies to promote and protect the population's health and prevent diseases, all stakeholders should operate within the approach of this frame. The MOH should have the facilities to generate evidence for all HS policies, setting national, regional and local priorities for health and healthcare based on the Health Needs Assessment (HNA) rather than demands, which will lead to better service planning. Specific national health goals/targets are strategic and operational targets that all health organisations should agree to meet.

- ***Financing and resource allocation***

The MOH should build various financial scenarios based on the population's HNA, demographic changes and epidemiological transitions to ensure that the needs are met. These scenarios will address the settings of service provisions and the competencies required. Service agreements regarding contracting (e.g. Public-Private Partnership [PPP]) with service providers will improve the efficiency and quality of both public and private service providers, all for the benefit of providing better services at all levels.

- ***Human Resources for Health (HRH)***

HRH is a key building block for any HS; all HSs are HR-intensive, and hence these valuable resources require proper and effective management and strong and steady leadership. Senior managers need to be trained to fulfil this function. Stronger collaboration between the MOH and the Higher Education (HE) sector is needed. The MOH needs to develop HR policies and strategies, in particular the establishment of a HR governance structure and independent regulatory bodies for all health professionals, and good HRH planning and leadership. The HRM will secure future staffing and HRH results.

- ***Health legislation, regulation and monitoring***

The HS influences the lives of almost all of the people in a country. Up-to-date health legislation and regulation are therefore essential to ensure the smooth operation of the HS to protect lives and ensure the quality and safety of the service. Evidence and experience from highly performing HSs show that national standards will enhance quality and safety, reduce unacceptable variations, and maximise efficiency.

- ***Health information system (HIS)***

The health records in health organisations and facilities should be kept to the highest standards. Analytical skills should be also maintained to the highest level of expertise. The HNA is a key tool for providing evidence about the population on which to base priorities and planning services that will improve health and address inequalities, provide the opportunities to deal with certain categories of the populations, and allow them to contribute to target service planning and resource allocations. As well as it provides the opportunities for cross-sectoral partnership that works to develop creative and effective interventions. The HNA requires careful analysis using an evidence-based approach to ensure that services are shaped in line with needs.

- ***Healthcare service provision***

Public health is an essential function and responsibility for any modern HS. Maintenance, improvement, and the promotion and protection of the population's health are the best routes for achieving the HS's goals of high quality and safe, person-centred care. In addition, PHC, as the first line of contact with the HS, should

be of the highest quality. Evidence from across the world, including the WHR 2008 (WHO, 2008a), shows that PHC saves lives and reduces the burden of disease, including unnecessary referrals to hospital care. The evidence also shows that the high-quality PHC services that are able to respond to and address the health needs of the entire population in a holistic way are those which are fully integrated and run by the government through well-trained HRH, via direct employment or contractual arrangements. There is also extensive evidence to support the ways that hospital services should be managed, supplied and delivered. The key elements are leadership and fully integrated approaches with strong PHCs that are performing well, to ensure the smooth delivery of healthcare services and person-centred care.

- ***Support for development and capacity-building***

Each country has its own challenges, and HSs that perform well are the results of policies based on knowledge and evidence from local research. High-quality research is essential to fulfil the national strategy for research and to provide the HS's leadership with the answers it needs to address challenging and emerging health and healthcare problems. This is not only essential in generating knowledge and evidence, but also key for quality and safe service delivery. Other essential factors are links and collaboration with regional and international health organisations, NGOs and experts, in order to build a strong relationship and ensure continuing technical assistance and capacity building. This will help the HS to achieve its goals.

9.3.3. Outlining participants and partnerships and their influences

Another complex dimension of HSs is the fact that they consist of social and cultural factors (people and communities and their institutions). Actions by one participant often trigger for many reactions by other participants, which lead to subsequent reactions, and so on. This increases the relatively unpredictable processes in a HS. Analysing a HS therefore requires to be complemented together with an analysing its stakeholders. Also, the model can help during the outlining stage. All significant stakeholders can be categorised following the various functions at the various levels in a HS. Then, the actions and reactions to specific matters of interest (HS policies or other events occurred or planned) by stakeholders the authorities concerned can prospectively, retrospectively or in real time, be studied in greater details. Below are the main stakeholders in most HSs:

- At the national level, the government participant is the health authority (i.e. MOH), including all its departments and organisations.
- At the local level are the DHAs, public healthcare services (e.g. hospitals, health centres, clinics), and DCPs.
- Not-for-profit participants in the HS (i.e. patient and professional associations, pressure groups, NGOs).
- For-profit participants include private healthcare providers, drugs companies, and health insurers companies.

- At the local partnership level, many of the remits are not within the responsibilities of the MOH. Participants from other sectors that have an important influence on the HS's policies, strategies, and HS outcomes include education, food, water supply and sanitation, and environmental and social services.
- External partnerships include the regional and international health organisations, health-related international institutions, NGOs, and experts.

9.4. Summary and recommendations

The study has identified concrete proposals for action to achieve the development of the HS and quality of healthcare. The researcher believes that these recommendations -if fully implemented- will produce substantial and verifiable results. They will take the HS closer to achieving its goals and lay the foundation for robust and quality healthcare services. The researcher hope that HS's leadership will take up these recommendations and commit to implementing them as an ambitious, but feasible, agenda that needs to be launched during this new era in Libya.

However, immediate actions required as priorities to develop policies at both national and institutional levels, which will shape the future directions of the HS in Libya and fill the gaps between policy development level and implementation level, and then other recommendations and procedures following on from that, as presented in the following sections.

9.4.1. Patients' perceptions of the quality of hospital care

The first primary objective: *To assess patients' perspective on the quality of healthcare in Libya.*

The quality of healthcare was assessed by exploring in-patients' perceptions of their experiences whilst in hospital. Their perception of the overall quality of hospital care was that it is poor, and they believed that many aspects of healthcare need to be improved; for example the quality of technical and interpersonal aspects, the availability of HRH and services, and waiting times. The main dimensions which affect the overall quality ratings of healthcare are the technical, organisational and environmental aspects of healthcare, such as the perceived quality of services, patient safety, timeliness, responsiveness, and availability of HRH and services. Patients are more concerned about the quality of technical services than the interpersonal quality aspects of services, specifically including the perceived quality of the service and the providers' expertise. The main quality determinant dimensions of healthcare are aspects of services that need to be improved, such as the perceived quality of services, patient safety, timeliness, availability, responsiveness, and interpersonal quality (i.e. empathy and manner). Based on these conclusions and the findings discussed in previous chapters, it is believed that the following recommendations would improve the quality of healthcare:

- There is a need to establish an urgent quality improvement initiative to tackle patient concerns in this area, and to improve the efficiency and effectiveness of healthcare. Improving the technical and organisational aspects of hospital care should be the first priority in any quality improvement initiative, and setting standards for non-clinical hospital services is recommended.
- Customer service training, communication skills workshops, CPD and CME programmes need to be introduced in hospitals as instrumental tools for improving professionals' skills in patient communication, assessing patients' perceptions, and as a means for identifying and setting priorities for quality improvement activities.
- There is a need to establish a national quality system linked with a quality system at hospital level, otherwise there will be a gap between any quality policy at national level and quality performance at facility level. For instance, one possible option for monitoring and assessing quality is conducting a national PS survey as part of a national quality policy. Furthermore, each hospital should adopt this quality policy for measuring service quality performance.
- Standards and indicators should be introduced regarding what patients are entitled to expect from healthcare facilities and what professionals should do to improve both the patients' perceptions and the professionals' quality performance. This might be done, for instance, by the development of a patient rights charter.
- Hospital management could use the measurement of patients' perceptions of the quality of healthcare as a practical quality initiative tool for monitoring and assessing the quality of services and identifying quality improvement opportunities. This measurement should also be used as a quality indicator of hospital performance, with relevant feedback given to the hospital staff. This technique might motivate hospital staff to recognise their shortcomings and motivate them to improve their performance.
- Standards and guidelines should be introduced for improving doctors' competency in the thoroughness of their examinations and their diagnostic skills, in addition to training nurses and other staff in the importance of interpersonal aspects of care.
- Professionals' awareness should be heightened in regard to the importance of patients' perceptions of the quality of healthcare services during consultation times, and how to manage patients' perceptions when there is unnecessary treatment needed from the professional's point of view.
- The development of quality policies should be given priority, and quality improvement initiatives should be implemented. Additionally, hospital administrative and professional staff should be informed of the potential benefits of introducing quality initiatives into hospital management.
- Good quality hospital care should include improvements in both clinical and non-clinical aspects. This requires the development of quality standards covering clinical and managerial aspects of care. However, introducing these standards into practice should be gradual and based on a planned and systematic approach that aims to monitor, assess, and taking action to improve quality performance.

9.4.2. Healthcare stakeholders' perceptions of the HS and the quality of healthcare

The second primary objective: *To analyse health stakeholders' perceptions of the HS and the quality of healthcare in Libya.*

The HS and the quality of healthcare in Libya were assessed by exploring the perceptions of healthcare stakeholders. An in-depth semi-structured interview was used for this purpose. The study's HS model can be used to strengthen the HS's structure, processes, outputs, and outcomes. The conclusions are summarised and presented together with proposed recommendations in each on the following areas:

9.4.2.1. HS and its governance

The study found major flaws in the HSG, which should be addressed immediately. The current HS structure was subjected to a very long period of instability; it is weak and fragmented. The lack of clear principles for the HS creates confusion among policy-makers, the HS's leadership, professionals, and the public. The policy environment for developing a coherent quality policy at national level is not promising. The evidence shows the absence of a clear strategic vision for quality improvement and the absence of a serious leadership commitment to quality improvement activities. In addition, the MOH's institutional capacity for translating health policy documents into practice is weak. Quality initiatives in LNHS hospitals are missing, as evidenced by the absence of indicators of quality system components. Hence, quality policy development needs a national policy environment with a leadership that believes in the importance of quality in the HS's performance and that provides political support, guidance, and enforcement for introducing quality initiatives in healthcare facilities.

9.4.2.1.1. Leadership and commitment:

The MOH has been abolished many times in the past, having been ignored and annexed to other authorities. Recommendations based on evidence from this study's findings in this area are listed below.

- The political commitment of the leadership is necessary for the success of HS quality policy initiatives. This commitment should be translated into action by allocating resources for quality activities, thereby spreading the quality culture and then institutionalising quality initiatives activities.
- The national policy environment should be strengthened in order to create organisational readiness for change and spread the quality culture among the policy-makers to develop a leadership that has a strategic perspective on quality improvement.
- The government should strengthen the HS leadership's capacity and commitment, HSG, and policies. Additionally, the leadership at national level should be exposed to an intensive quality training programme to persuade policy-makers and health-

planners of the potential benefits of quality initiatives in improving the efficiency and effectiveness of healthcare services.

9.4.2.1.2. HS's policies, strategies and plans

The study found inappropriate levels of weakness in the capacity and capability of the leadership to articulate policy development for the HS, as it is imbued with ambiguous un-measurable goals. It has missed opportunities to translate these policies into service delivery, health, and healthcare. In addition, the findings imply that there has been a lack of commitment for many years to preparing leaders and strengthening the role of the HS. Unfortunately, the study found an explicit lack of HS policies designed to engage the people and communities in planning and managing healthcare services, as well as in engaging them in their own health. Recommendations based on evidence from study's findings in this area are listed below:

- The people and communities should be engaged in HS policy development, and the planning and management of healthcare services, as well as in their own health; these are key functions for the HS, to ensure that the HS's goals are achievable.
- The HS should develop effective communication strategies to inform and engage people and transparently articulate how the HS is developing and meeting the population's needs.
- HS policies should be based on the best evidence available, and the MOH should have the facilities to generate evidence for all HS policies.
- The process of policy development should be linked with establishing national quality initiatives which would be responsible for monitoring and assessing quality performance. Also, a documented quality policy at national level is an essential requirement to guide the introduction of quality initiatives to LNHS hospitals.

9.4.2.1.3. Health legislation, regulations and monitoring

The study's findings show that the existing public health and healthcare legislation and regulations are outdated and not fit for the purposes of a modern HS. Regulatory control of professionals and providers is weak, and most of the providers, especially the LPHS, are operating and expanding without any proper control within the national HS. Based on the study's findings, immediate steps and actions are needed, as outlined below:

- There is a need to produce new modern health legislation and regulations, and to strengthen, renew and develop what is already in existence so that it is suitable for the modern era. This will help to protect the health of the population and enforce the introduction of quality initiatives to the HS, in addition to imposing regulations on the LPHS.
- The MOH should develop national standards for quality and safety for all services, covering all aspects of health and healthcare (e.g. responsiveness, quality and safe services, food and drink standards, clean and safe environment, etc.).

9.4.2.2. Financing and human resources

9.4.2.2.1. Financing and resource allocation

Financing for the HS is limited, and the process of resource allocation is unclear and not fit for purpose. OOP contributions are escalating, mainly due to the disruption of healthcare services, the expansion of the unregulated LPHS, and the ever-expanding option of TA. The study's findings are reflected below, along with recommendations for improvements in key areas:

- The current MOF system of projection does not reflect the population's health needs. The financial system should be changed radically, both in terms of revenue-setting and resource allocation, based on the population's HNA, the engagement of the people, demographic changes, and epidemiological transition, to ensure that these needs are met.
- The government should continue to provide universal healthcare services funded from the national wealth, and to build public confidence in the services provided by improving quality, safety and patient-cantered care. OOP contributions should be decreased to a minimum, and any health insurance schemes should be carefully considered and take into account minimal public contributions.

9.4.2.2.2. Human Resources for Health (HRH)

All functions of HRH are scattered among various structures inside and outside the MOH. The existing structures are mainly concerned with in-service training, and are troubled by weak planning and procedures. The functions of HR are very complex, and the study's findings show serious weaknesses in many areas, which should be addressed immediately. Recommendations for how this can be done are outlined below:

- The MOH has a major role in assessing the needs of HRH and accurately projecting the numbers of HRH required; influencing the process of change; reviewing, developing, and modernising the medical schools and their curricula; and operating an effective HS that achieves its goals.
- The MOH should strengthen the role of HRM by developing comprehensive explicit HR policies, strategies and operational plans; monitoring and setting standards for competencies, CPD and CME; and developing a HR strategy for retention and loss.
- Salaries and building incentives for HRH are key health service priorities which should be reviewed. Incentives should be used to address priorities for health, and geographical and specialty redistribution, in order to improve productivity.
- Extra training capacity needs to be built into the system, as it is important to learn how to run modern health services and develop leadership and specialist capacity. This will provide exposure to HSs that perform well, which will assist the HS to achieve its goals.

9.4.2.3. Provision of healthcare services

The deterioration in the provision of healthcare services is not new; Libyans have been suffering from this for some years. The study's findings show that health services are available and accessible, but utilisation is poor. Weak healthcare facility infrastructures; poor chains of supply; shortages and inadequate equipment; poor HRH recruitment, performance, interaction and dedication; and weak leadership and commitment have all had a direct impact on the quality and safety of healthcare provision. The public's confidence in the healthcare service is at its lowest in Libya. The exodus of patients to neighbouring countries is a clear indication of poor quality and safety and decreased capacity to meet the population's healthcare needs. The following recommendations address the weaknesses in this main pillar of the HS:

- A key function of the MOH is to shift the focus of the HS from a disease to health model, which requires major investment in public health and PHC. The MOH should develop a new structure and building capacity for public health functions both at national and DHA level, with appropriate and clearly defined functions and well-trained HRH. Its functions are to improve the health of the population through collaborative works with a fully engaged public and the organisations serving them.
- It could be useful to establish a national independent organisation for accreditation. This organisation should assess hospitals independently against standards that have been internationally accepted, and adapted and modified according the local conditions and requirements.
- An effective appointment system should be introduced. Attempts could be made to reduce overcrowding by introducing practical measures such as the provision of phone consultations, and involving other healthcare professionals in the health process by allowing practice nurses to see patients with less serious illnesses.
- More research should be conducted on the quality of healthcare services and patients' views. Questionnaire-based research is essential, and efforts should be made to reflect upon and implement the findings.
- Modern ambulance services using digital technology are essential and can save lives. They can reduce the high incidence of mortality and disability due to RTAs, and reduce the burden on hospital services.

9.4.2.4. Cultural and social aspects, participation and health awareness

Because of the importance of cultural and social aspects, the participation of people and communities, the doctor-patient relationship, consultation times, the appointment system, health awareness, and patient education found in this study, the following recommendations could enhance the quality of healthcare services in Libya:

- It is widely accepted that the first step towards quality improvement is to listen to patients. However, mere listening is clearly of little use unless patients' views can be incorporated into quality evaluation on a basis of parity with those of healthcare

professionals and managers. The questionnaire developed for this study was based on patients' own views about quality, and designed to provide a sensitive measurement tool of patient perspectives. Further implementation and adoption of this tool within the healthcare services would provide an important aid for managers and policy-makers in assessing the quality of healthcare services. This will enable them to embark upon an ongoing threefold improvement strategy.

- Given that it may be a number of years before the concept and meaning of community participation in healthcare is crystallised or feasible in Libya, the short- and medium-term priority would seem to be an improvement in the representation of advocatory patient groups. The usefulness of such groups could be enhanced by increasing the power and authority allocated to them. Intensive training for members of these groups in health policy process issues and patient involvement/ rights and duties in healthcare would develop their role. Managers may need training in how to achieve this, and incentives to do so.
- Patient health education campaigns should be prioritised, particularly in order to increase awareness of the importance of the role of patients in healthcare. The media should become more involved in these campaigns in order to emphasise the preventive and curative roles of healthcare services.

9.5. The overall conclusions

With reference to the overall aim and intended outcome of this study (see section 1.2 in Chapter 1), the Libyan HS has been explored, the quality of healthcare has been assessed, and the patients' perspectives on the quality of both LNHS and LPHS hospital care have been identified.

Based on the study's findings, the overall conclusion is that the modern approaches and advances of the technical side of the HS have not been matched by developments in HSG and managerial processes; beneath the surface there lies a less developed HS of paternalism and bureaucracy. This unique situation produces a number of questions which require answers in order for Libya to evolve into the role of a twenty-first century country that the government and population desire.

The study's findings show that multiple complex factors have contributed to the deterioration of the Libyan HS. It had been seriously compromised in almost all of its functions, components, activities and outcomes, some of which do more harm than good. This chaos diverts a large percentage of the population away from the LNHS, with people voting with their feet and choosing either the LPHS or TA, at a significant cost and burden on the family's and HS's budgets for some. Some of the challenges facing the HS are historic, yet most of them are common, and present in many MENA countries.

It seems that having clear, high-quality national HS policies (vision, strategies and plans) and leadership commitment is a prerequisite for guiding and encouraging the

LNHS and LPHS to introduce quality improvement initiatives and improve patient perceptions and satisfaction. It is vital that in order to improve aspects of the HS and the quality of healthcare services in Libya, a top-down approach must be balanced with an increase in the scope, participation and authority of patients and communities, and greater emphasis must be placed on the views of health stakeholders.

9.6. Limitations and constraints

No study is free of flaws, and so researchers strive to be cautious and take appropriate steps to minimise the impact of sometimes inevitable limitations and constraints. In any study, the researcher will encounter difficulties and barriers at some time during the research process. For instance, this study was conducted by a single researcher with limited time and resources, and involved travelling between two countries (the UK and Libya). Libya maintains a segregated culture in most aspects of life, which made it difficult for the researcher to gain access to female healthcare. In addition, the quantitative phase of this study focused on more than 18 hospitals operating in the LNHS and the LPHS, which necessitated extensive pre-arrangements before access was granted. The above factors may have, to a greater or lesser extent, affected the quality of this study and resulted in bias which influenced the potential to generalise from the findings. Listed below are the main observed study limitations and constraints.

- ***Qualitative interviews***

The purposive sampling of health stakeholders (health officials and experts, health professionals and patients) was limited, and hence the views of interviewees in this study may not reflect those of other health stakeholders.

To achieve a more balanced comparison of the views of health stakeholders (i.e. health professionals, service managers, policy-makers and experts) with patients' views, it would have been appropriate to survey the former rather than rely solely on interviews to elicit their opinions. Due to constraints of time and resources, qualitative interviews with health stakeholders as a stand-alone strategy was considered sufficient, especially in consideration of the exploratory nature of this research.

- ***Generalisability***

The quantitative study was confined to Benghazi City, the second largest city in Libya, and assessed patients' views on the quality of healthcare in all LNHS and LPHS hospitals and specialised medical centres. Hence, caution should be taken in extrapolating this data to other hospitals outside Benghazi and even to other healthcare facilities within Benghazi but outside these two sectors (i.e. social security sector) and/or other than tertiary level hospitals.

- ***Response rate***

The quantitative data was collected during face-to-face interviews, yet there was a possibility that the responses might have been influenced by the interview setting or the interaction between the research assistant and the respondents. All research assistants were carefully trained in establishing a good rapport with the respondents, and emphasis was placed on the confidentiality of the data in order to reduce the possible influence of bias. Some patients refused to participate; common reasons they gave were that they were in a hurry, or not in a stable state. It is not known what bias this may have had on the overall results, but the number of refusals was small (n=7) and it was anticipated that any bias would be equally small.

This study achieved a 90.16 % response rate[1]. However, this figure should be viewed with caution. First, it is difficult to assess exactly what the response rate was for the questionnaire, because the researcher did not know how many patients were being treated at the hospitals during the time frame of the study. Although the researcher knew what proportion of patients given a questionnaire returned it, he did not know how many patients were not given a questionnaire. It could be argued that response rates will differ from one society to another. For instance, studies conducted in Arab societies have shown a higher response rate compared to those conducted in Western societies; some studies have apparently achieved a 100% response rate (Margolis et al., 2003; Al-Shuaibi, 2002). It is not clear, however, what the real reasons are for such differences between countries. It has been suggested that the mass consumer and public opinion surveys carried out in the West (Algaman, 1999; Fulcher and Scott 1999) have made people less motivated when approached to participate in a study survey.

- ***Timing***

The quantitative study was limited to the period from August to October 2009, and there was no evidence that the patients attending hospital during this period were unrepresentative of the general patient mix in the hospitals. Therefore, the researcher could be reasonably confident that the data gathered would reflect the general patients' perceptions of the quality of hospital care all over the country, as well as year-round levels of satisfaction.

[1] The response rate was increased using several techniques, including: (a) close supervision of distributed questionnaires (b) direct contact with patients, enabling the researcher to develop feedback from participants (c) a LRC female team involved in the questionnaire administration because of the privacy of Libyan culture that makes the use of a male researcher in female hospital sections difficult (d) obtaining a letter from the MOH, which crucially facilitated access and elicited the needed support (e) the cover letter attached to the questionnaires, which emphasised the confidentiality of the data. Although this issue was very marginal and did not affect the study in any way, it does nevertheless illustrate the importance of being aware of cultural issues and how a researcher must be alert and sensitive to these.

- ***Sampling***

The quantitative study tool (questionnaire) was distributed by a female LRC team to respondents using a consecutive patient sampling technique. Although this type of sampling has been used in many published papers (e.g. Bower and Roland, 2003), such a sampling technique may attract bias, as there is the possibility for a potential respondent to be skipped or denied the opportunity to participate in the study, due to the research assistant's judgement or her 'difficult' or 'unpleasant' prior experiences.

- ***The study's tool:***

The study used a questionnaire instrument which captured a 'snapshot' of patients' views on the quality of healthcare at the time of the research. Patients' views may not always remain constant, however. Sufficient time was not available to organise a direct observation technique for assessing the quality of hospital care.

9.7. Ideas for Future Research

The following are suggested ideas for future research:

- To examine patient satisfaction a few days/months following patient discharge from the hospital.
- To evaluate the quality of healthcare in other Libyan cities apart from Benghazi City and healthcare sectors not included in the present thesis.
- To examine the quality of healthcare using observation techniques such as participant observation.
- The quantitative phase of this study has dealt only with patients' perceptions, and it would be interesting to explore the views of the other health stakeholders (i.e. health professionals, service managers, policy-makers and experts) via a survey and compare these perspectives.
- It would be useful to carry out a study to discover which factors are likely to hinder or facilitate the introduction of quality initiatives at the PHC and tertiary levels.
- In order to successfully implement a dynamic HS along the lines suggested in these conclusions and recommendations, it would be useful to carry out a study on the likely barriers to the involvement and participation of people and communities in the HS, and what motives are present in the HSG and the government that might prevent this general involvement and participation.

References

References

1. Abd al Kareem, A., Aday, L.A. and Walker G.M. (1996). 'Patient satisfaction in Government health facilities in the State of Qatar'. *Journal of Community Health*, 21, pp.349-358.
2. Abdelmotleb, F.A., (2008). *Development of a total quality management framework for Libyan health care organisations*, PhD. Sheffield Hallam University.
3. Abdul Salam, A. Al-Shekteria, A.A., Abd Alhadi, H., Ahmed, M. and Mohammed, A. (2010b). 'Patient satisfaction with quality of primary health care in Benghazi, Libya'. *Lib J Med.* 5: 4873. Available online at: http://www.libyanjournalofmedicine.net/index.php/ljm/article/view/4873/pdf_51.
4. Abdul Salam, A. Al-Shekteria, A.A., Abd Alhadi, H., Ahmed, M. and Mohammed, A. (2010a). 'An Examination of Primary Health Care quality in Benghazi, Libya'. *Middle East J Fam Med.* 9(6) pp.39-48. Available online at: http://www.mejfm.com/July2011/qualityLibya.htm.
5. Abudejaja, A.H. and Singh, R. (2000). 'Health for all in the Libyan Arab Jamahiriya', *Eastern Mediterranean Health Journal*, 6(4) pp.826-831.
6. Adams, Anne and Cox, Anna L. (2008). 'Questionnaires, in-depth interviews and focus groups'. *In* Cairns, Paul and Cox, Anna L. (eds.) *Research Methods for Human Computer Interaction*. Cambridge: Cambridge University Press, pp. 17–34.
7. Agnaia, A.A. (1996). 'Assessment of management training needs and selection for training: the case of Libyan Companies', *International Journal of Manpower*, 17(3) pp.31-51.
8. Aiead, Aiead Heilal, (2013). *The Reality of Crises Management in Public Hospitals, Benghazi City*, Master dissertation, Department of Health Administration, Faculty of Public Health, University of Benghazi. Benghazi, Libya (in Arabic).
9. Ajaj, Shaban Al-Furgani (2012). *Improving Patient Confidentiality Systems in Libya Using UK Experience*, PhD. Faculty of Business, University of Gloucestershire.
10. Alasad, J. and Ahmad, M. (2003). 'Patients' satisfaction with nursing care in Jordan'. *International Journal for Quality in Health Care*, 16(6), pp.279-285.
11. Al-Assaf, A.F. (2002). 'Introductory in healthcare: An international perspective'. *Journal for Healthcare Quality*, 21, pp.5-15.
12. Al-Assaf, A.F. and Sheikh, M. (2004). *Quality improvement in primary health care: a practical guide*. Cairo, Egypt: Eastern Mediterranean, WHO Regional Publications.
13. Alborz, A., Wilkin, D., and Smith, K. (2002). 'Are primary care groups and trusts consulting local communities?' *Health and Social Care in the Community*, 10(1) pp.20-28.

14. Algaman, Abrahim Hamad (1999). *TQM implementation in a health care setting: a case study of a Saudi Arabia National Guard primary care setting*, PhD. Manchester Metropolitan University.
15. Al-Gbail, I., (1999). *Reality and future of health planning*. Tripoli: Libyan, Human Development Studies Series, No, 5 (in Arabic).
16. Alhmali, Rajab Jumma (2007). *Student Attitudes in the Context of the Curriculum in Libyan Education in Middle and High Schools*, PhD. University of Glasgow.
17. Al-Mandhari, A. (2002). *A comparison of methods for quality assessment of primary health care services: evidence from the Adh Dhahira region in the sultanate of Oman* PhD. Liverpool School of Tropical Medicine, University of Liverpool.
18. Al-Mansory, A.M. (1995). *The Geography of Libya*. Tripoli Libya: Dar Al-maref (in Arabic).
19. Al-Mogirbe, M.Z. (1993). 'Structural changes and their impact on the development and implementation of public policies in Libya'. *Garyounis scientific journal*, 6(1&2) pp.209-223 (in Arabic).
20. Al-Obaidi, A.M., Maddi, R.H. Al-Bargati, R.J. and El-Fallah, M., (2005). *Satisfaction with quality of healthcare provided in hospitals and specialised centres from patients' perspectives*. Unpublished study. Benghazi, Libya: Faculty of Public Health, Al Arab Medical University (in Arabic).
21. Al-Omar, B.A. (2000). 'Patients' expectations, satisfaction and future behaviour in hospitals in Riyadh city'. *Saudi Medical Journal*: 21, p.655.
22. Al-Shahrani, N.M. (1999). *Expectations and Perceptions of Patient Satisfaction in a Saudi Arabian Hospital*, PhD. University of Wales Swansea.
23. Al-Shuaibi, Ali Mohammed (2002). *Fisheries and integrated environmental management: a case study of Saudi Arabia With special reference to the Saudi/Kuwait offshore neutral zone*, PhD. Cardiff University.
24. Alwan, Kassim and Abubaker, Fatheya (2008). 'Measuring and Evaluating Health Services Quality in Libyan Hospitals'. *Aledari journal*, 30(112) pp.77-119 (in Arabic).
25. Andaleeb, S.S. (2001). 'Service quality perceptions and patient satisfaction: a study of hospitals in a developing country'. *Social Science and Medicine*, 52, pp.1359-1370.
26. Anderson, E. and Sullivan, M.W. (1993). 'The antecedents and consequences of consumer satisfaction for firms'. *Marketing Science*, 12 (2), pp.125-143.
27. Arah, O.A. (2007). 'The metrics and correlates of physician migration from Africa'. *BMC Public Health*; 7: pp.83-89.
28. Asubonteng, P., McCleary K. and Munchus G. (1996). 'Total evaluation of quality in the US Health Care Industry: an old wine in anew bottle'. *International Journal of Health Care Quality Assurance*, 9(3) pp.11-19.
29. Atkinson, S. and Haran, D. (2005). 'Individual and district scale determinants of users' satisfaction with primary health care in developing countries', *Social Science & Medicine*, 60(3) pp.501-513.

30. Attal, B. (2003). *quality assessment of birth care in the public and private hospitals in the city of Sana'a, Yemen*, PhD. Liverpool School of Tropical Medicine, University of Liverpool.
31. Attree, Moira (1996). 'Towards a conceptual model of "Quality Care"', *International Journal of Nursing Studies*, 33(1) pp.13-28.
32. Atun, R., de Jongh, T., Secci, F., Ohiri, K. and Adeyi, O. (2009). 'Integration of targeted health interventions into health systems: a conceptual framework for analysis'. *Health Policy and Planning*, 25, pp.104-111.
33. Atun, R. and Menabde, N. (2008). 'Health systems and systems thinking', *In* Coker, R., Atun, R. and McKee, M. (eds.) *Health Systems and the Challenge of Communicable Diseases: Experiences from Europe and Latin America*. Open University Press for the European Observatory on Health Systems and Policies, Maidenhead, pp. 121-140.
34. Atun, R.A., McKee, M., Drobniewski, F. and Coker, R. (2005a). 'Analysis of how health system context influences HIV control: case studies from the Russian Federation', *Bulletin of the World Health Organization*, 83(10) pp.730-738.
35. Atun, R.A., Menabde, N., Saluvere, K., Jesse M. and Habicht J. (2006). 'Introducing a complex health innovation – primary health care reforms in Estonia (multimethods evaluation)', *Health Policy*, 79(1) pp.79–91.
36. Atun, R.A., Samyshkin, Y.A., Drobniewski, F., Skuratova, N.M. Gusarova, G. Kuznetsov, S.I., Fedorin, I.M. and Coker, R.J. (2005b). 'Barriers to sustainable tuberculosis control in the Russian Federation health system', *Bulletin of the World Health Organization*, 83(3) pp.217-223.
37. Babakus, E. and Mangold, W. G. (1992). 'Adapting the SERVQUAL scale to hospital services: An empirical investigation'. *Health Services Research*, 26, 767.
38. Babbie, E. (2004). *The Practice of Social Research, Belmont*, CA: Wadsworth/Thomson Learning.
39. Bahrampour, A.F.Z. (2005). 'Patient satisfaction and related factors in Kerman hospitals'. *East Mediterr Health J*, 11.
40. Balananova, D., McKee, M., and Mills, A. (2011). *Good Health at Low Cost. 25 years on. What makes a successful health system?* London: London School of Tropical Medicine and Hygiene.
41. Baltussen, R.M., Yé, Y., Haddad, S., and Sauerborn, R.S. (2002). 'Perceived quality of care of primary health care services in Burkina Faso', *Health Policy and Planning*, 17(1) pp.42-48.
42. Bandesha, G. and Litva, A. (2005). 'Perceptions of community participation and health gain in a community project for the South Asian population: a qualitative study', *Journal of Public Health*, 27(3) pp.241-245.
43. Bassett, M.T., Bulmakers, L. and Sanders, D.M. (1997). 'Professionalism, patient satisfaction and quality of healthcare: Experience during Zimbabwe's

structural adjustment programme'. *Social Science and Medicine*, 45, pp.1845-1852.

44. Bassiouni, M. Cherif (editor) (2013). *Libya: From Repression to Revolution: A Record of Armed Conflict and International Law violations 2011-2013*, (International cremenal law serious: volume 5), Netherlands: Martinus Nijhoff publishers.
45. Basu, S., Andrews, J., Kishore, S., Panjabi, R., Stuckler, D. (2012) 'Comparative Performance of Private and Public Healthcare Systems in Low- and Middle-Income Countries: A Systematic Review'. *PLoS Med* 9(6): e1001244. doi:10.1371/journal.pmed.1001244
46. Batchelor, C., Owens, D.J., Read, M., and Bloor, M. (1994). 'Patient Satisfaction Studies: Methodology, Management and Consumer Evaluation', *International Journal of Health Care Quality Assurance*, 7(7) pp.22-30.
47. BBC (2002). *GPs demand more time with patients* [Online] [Accessed on: 06.03.2013] http://news.bbc.co.uk/1/hi/health/2225316.stm.
48. BBC (2004). *Cyberchondriacs* [Online] [Accessed on: 19.4.2013] http://news.bbc.co.uk/1/hi/technology/3736653.stm.
49. Beattie, P.F., Pinto, M.B., Nelson, M.K. and Nelson, R. (2002). 'Patient satisfaction with outpatient physical therapy: instrument validation'. *Phys Ther*, 82, pp.557-565.
50. Beckford, John. (2002). *Quality*, 2nd ed. London: Routledge.
51. Ben Said, Khaled (1993). *The principles of Planning in Health Organisations*, Riyadh: Obekan for Printing & Publishing (in Arabic).
52. Ben Said, Khaled (1997). *Total Quality Management Applications in the Health Sector*, Riyadh: Obeikan Printing and Publishing (in Arabic).
53. Benamer, H., Bredan, A., Bakoush, O. (2009). 'The Libyan doctors' brain drain: an exploratory study'. *BMC Research Notes*, 2:242. Available online at: http://www.biomedcentral.com/1756-0500/2/242.
54. Benamer, Hani T.S. (2012). 'The numbers of Libyan doctors in diaspora: Myths and facts'. *Libyan J Med*, 7: pp.1-2.
55. Bennett, S., Agyepong, I.A., Sheikh, K., Hanson, K., Ssengooba, F., Gilson, L. (2011). 'Building the field of Health Policy and Systems Research: an agenda for action'. *PLoS Med*, 8: e1001081. doi:10.1371/journal.pmed.1001081.
56. Berlan, D. and Shiffman, J. (2011). 'Holding health providers in developing countries accountable to consumers: a synthesis of relevant scholarship'. *Health Policy Plan*, 27: pp.271-280.
57. Bernhart, M.H., Wiadnyana, I.G., Wihardjo, H. and Pohan, I. (1999). 'Patient satisfaction in developing countries'. *Soc Sci Med*, 48, pp.989-96.
58. Birch, K., Field, S., and Scrivens, E. (2000). *Quality in general practice*. Abingdon: Radcliffe Medical Press.
59. Bitner, M.J. (1990). 'Evaluating service encounters' effects of physical surroundings and employee responses'. *J Mark*; 54: pp.69–82.
60. Blum, H.L. (1974). *Planning for health: Development and Application of Social Change Theory*. 1st ed. New York: Human Sciences Press.

61. Blum, Henrik L., (1981). *Planning for Health: Generics for the Eighties*. 2nd ed. New York: Human Sciences Press.
62. Blumenthal, David. (1996). 'Quality of Care- What is It?' *The New England Journal of Medicine*, 335(12) pp.891-894.
63. Bongaarts, J. and Potters, R.G., (1983). *Fertility, biology and behavior: an analysis of the proximate determinants*. New York: Academic Press.
64. Borden, A.N., Burke, S., Hoskins, E., and Yan, J. (1994). *Regional Quality Management Program*, Riyadh, Saudi Arabia: Ministry of Health.
65. Borkan, J.M. (2004). 'Mixed Methods Studies: A Foundation for Primary Care Research', *Annals of Family Medicine*, 2(1) pp.4-6.
66. Bouchet, B., Francisco, M. and Øvretveit, J. (2002). 'The Zambia quality assurance program: successes and challenges'. *Int J Qual Health Care*, 14(Suppl 1) pp.89-95.
67. Bower, P. and Roland, M.O. (2003). 'Bias in patient assessments of general practice: general practice assessment survey scores in surgery and postal responders', *The British Journal of General Practice*, 53(487) pp.126-128.
68. Bower, P., Roland, M., Campbell, J., and Mead, N. (2003). 'Setting standards based on patients' views on access and continuity: secondary analysis of data from the general practice assessment survey', *BMJ*, 326(7383):258.
69. Bower, Peter (2003). 'Measuring patients' assessments of primary care quality: the use of self-report questionnaires', *Expert Review of Pharmacoeconomics & Outcomes Research*, 3(5) pp.551-560.
70. Bowers, M.R., Swan, J.E. and Koehler, W.F. (1994). 'What attributes determine quality and satisfaction with health care delivery?' *Health Care Management Review*, 19: 49.
71. Bowling, A. (2002). *Research methods in health: investigating health and health services*. Buckingham, Philadelphia: Open University Press.
72. Branine, M. and Pollard, D. (2010). 'Human resource management with Islamic management principles: A dialectic for a reverse diffusion in management'. *Personnel Review*, 39(6) pp.712-727.
73. Brody, H. (1991). 'Qualitative Research in Primary Care'. *In*: Norton, PG, Stewart, M., Tudiver, F., Bass, M.J., and Dunn, E.V. (eds.) *Primary Care Research, Traditional and Innovative Approaches*, Vol. 1, Newbury Park, Calif: Sage Publications, pp.125-137.
74. Brook, R.H., McGlynn, E.A., and Cleary, P.D. (1996). 'Measuring Quality of Care- Part Two of Six', *The New England Journal of Medicine*, 335(13) pp.966-970.
75. Brown L., Franco L., Rafeh N., and Hatzell T. (2001). *Quality Assurance of Health Care in Developing Countries*. Bethesda, USA: Quality Assurance Project.
76. Brown, I. (1994). 'Community and participation for general practice: Perceptions of general practitioners and community nurses', *Social Science & Medicine*, 39(3) pp.335-344.

77. Brown, L.D. (1995). 'Lessons Learned in Institutionalization of Quality Assurance Programs: an International Perspective'. *Int J Qual Health Care*, 7, pp.419-425.
78. Bruster, S. (2005). 'Seeking the Views of Consumers Using Quantitative Measures: Patients' Experience Surveys'. *In*: Burr, Jennifer and Nicolson, Paula (eds.) *Researching health care consumers: critical approaches*, Palgrave Macmillan, Basingstoke, pp.55-70.
79. Bryman, A. and Bell, E. (2007). *Business research methods*. 2nd ed. Oxford: Oxford University Press.
80. Bryman, A. and Burgess, R. (eds.) (1994). *Analyzing Qualitative Data*. London: Routledge.
81. Bryman, A. (2008). *Social research methods*. 3ed ed.: Oxford University press Inc.
82. Buck C. and McWhinney I. (1980). 'The Assessment of Quality'. *In*: Fry John. (ed.), *Primary Care*. London: Heinemann.
83. Calnan, M. (1988). 'Towards a conceptual framework of lay evaluation of health care', *Social Science & Medicine*, 27(9) pp.927-933.
84. Calnan, M. and Ferlie, E. (2003). 'Analysing process in healthcare: the methodological and theoretical challenges', *Policy and Politics*, 31(2) pp.185-193.
85. Calnan, M. and Gabe, J. (2001). 'From consumerism to partnership? Britain's National Health Service at the turn of the century', *International Journal of Health Services*, 31(1) pp.119-131.
86. Campbell, S.M., Roland, M.O., and Buetow, S.A. (2000). 'Defining quality of care', *Social Science & Medicine*, 51(11) pp.1611-1625.
87. Carey, R.G. and Seibert, J.H. (1993). 'A patient survey system to measure quality improvement: questionnaire reliability and validity'. *Med Care*, 31: pp.834-45.
88. Carr-Hill, R.A. (1992). 'The measurement of patient satisfaction', *J Public Health Med*, 14(3) pp.236-249.
89. Cassels, A. (1995). 'Health sector reform: key issues in less developed countries'. *Journal of International Development*, 7(3) pp.329-347.
90. Castle, N.G., Brown, J., Hepner, K.A. and Hays, R.D. (2005). 'Review of the literature on survey instruments used to collect data on hospital patients' perceptions of care'. *Health Services Research*, 40: 1996.
91. Cavana, R., Delahaye, B. and Sekaran, U. (2000). *Applied Business Research: Qualitative and Quantitative Methods*, London: John Wiley & Sons Ltd.
92. CERA (2006). *National Economic Strategy: An Assessment of the competitiveness of the Libyan Arab Jamahiriya*, Tripoli, Libya: Cambridge Energy Research Associates (CERA), The General Planning Council of Libya.
93. Chahal, H., Sharma, R.D. and Gupta, M. (2004). 'Patient Satisfaction in Public Outpatient Health Care services'. *Journal of Health management*, 6, pp.23-45.
94. Check, J.W., and Schutt, R.K. (2012). *Research methods in education*, Thousand Oaks, Calif: Sage Publications.
95. Checkland, P. (1981). *Systems thinking, systems practice*. Chichester: Wiley.

96. CHI. (2004). *Sharing the learning on patient and public involvement from the CHI's work*. Commission for Health Improvement. Available online at: http://www.wales.nhs.uk/sites3/Documents/420/SharingtheLearningonPPIfromCHIswork.pdf.
97. Choi, K.S., Lee, H., Kim, C. and Lee, S. (2005). 'The service quality dimensions and patient satisfaction relationships in South Korea: Comparisons across gender, age and types of service'. *Journal of Services Marketing*, 19:140.
98. CAHPS (2008). *Health plan Survey and Reporting Kit 2008*. The Consumer Assessment of Healthcare Providers and Systems (CAHPS) [Online] [Accessed on: 30.01.2009] https://www.cahps.ahrq.gov/content/products/pdf/102_Children_with_Chronic_Conditions_Set.pdf.
99. Clark, N. (2004). 'Practical Information: Education in Libya'. *World Education News & Reviews*, 17(4) [Online] [Accessed on: 24.10.2010] http://www.wes.org/ewenr/04july/Practical.htm.
100. Cleary, P.D., Edgman-Levitan, S., McMullen, W. and Delbanco, T.L. (1992). 'The relationship between reported problems and patient summary evaluations of hospital care'. *Quality Review Bulletin*, 18: 53.
101. Cleary, P.D., Edgman-Levitan, S., Roberts, M., Moloney, T.W., McMullen, W., Walker, J.D. and Delbanco, T.L. (1991). 'Patients evaluate their hospital care: a national survey'. *Health Aff*, 10, pp.254-267.
102. Cleary, Paul D. (1999). 'The increasing importance of patient surveys: Now that sound methods exist, patient surveys can facilitate improvement', *BMJ*, 319(7212) pp.720-721.
103. Cohen, G., Forbes, J., and Garraway, M. (1996). 'Can different patient satisfaction survey methods yield consistent results? Comparison of three surveys', *BMJ*, 313(7061) pp.841-844.
104. Collis, J. and Hussey, R. (2009). *Business Research: A practical guide for undergraduate and postgraduate students*, 3rd ed, New York: Palgrave Macmillan.
105. Concato, M.M.M.J. and Feinstein, M.D. (1997). 'Asking Patients What They Like: Overlooked Attributes of Patient Satisfaction with Primary Care', *The American Journal of Medicine*, 102(4) pp.399-406.
106. Coulter, A. and Elwyn, G. (2002). 'What do patients want from high-quality general practice and how do we involve them in improvement?", *British Journal of General Practice*, 52(11) pp.22-25.
107. Coulter, A. and Magee, H. (2003). *The European patient of the future Maidenhead*: Open University Press.
108. Coulter, A., Fitzpatrick, R., and Davis, Lucy-Jane (2002a). *Patient and Public Perspectives on Health Care Performance*, Report prepared for the Commission for Health Improvement.
109. Coulter, A., John Fry, T.F., and Nuffield, T. (2002b). *The autonomous patient: ending paternalism in medical care*. London: TSOC.

110. Crawford, M.J., Rutter, D., Manley, C., Weaver, T., Bhui, K., Fulop, N., and Tyrer, P. (2002). 'Systematic review of involving patients in the planning and development of health care', *BMJ*, 325(7375), 1263.
111. Cresswell, John W. (2003). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 2nd ed. London: SAGE Publications Ltd.
112. Cresswell, John W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 3rd ed. London. SAGE Publications Ltd.
113. Creswell, J.W., and Plano Clark, V.L. (2007). *Designing and Conducting Mixed Methods Research*. Thousand Oaks, CA: SAGE.
114. Creswell, J.W., Fetters, M.D., and Ivankova, N.V. (2004). 'Designing a Mixed Methods Study in Primary Care', *Annals of Family Medicine*, 2(1) pp.7-12.
115. Crosby, Philip (1979). *Quality is Free: The Art of Making Quality Certain*. New York: McGraw-Hill Book Company.
116. Croskerry P., Chisholm C., Vinen J., and Perina D. (2002). 'Quality and Education'. *Academic Emergency Medicine*, 9(11) pp.1108-1115.
117. Crow, R., Gage, H., Hampson, S., Hart, J., Kimber, A., Storey, L. and Thomas, H. (2002). 'The measurement of satisfaction with healthcare: implications for practice from a systematic review of the literature'. *Health Technology Assessment* (Winchester, England), 6(32) pp.1-244.
118. CSDH (2008). *Closing the gap in a generation: health equity through action on the social determinants of health*. Final Report of the Commission on Social Determinants of Health. Geneva, World Health Organization.
119. Dagger, T.S, Sweeney, J.C. and Johnson, L.W. (2007). 'A Hierarchical Model of Health Service Quality Scale Development and Investigation of an Integrated Model'. *Journal of Service Research*, 10(2) pp.123-142.
120. Dagnew, M. and Zakus, D. (1997). 'Community perception on OPD performance of a teaching hospital in Gondar town'. *Ethiop Med J*, 35, pp.153-160.
121. Dawson, P. and Heyman, B. (1997). 'Evaluating community health services: Conflict and controversy'. *Health & Social Care in the Community*, 5(4) pp.255-260.
122. De Geyndt, Willy (1995). *Managing the Quality of Health Care in Developing Countries*, Washington DC: The World Bank, Technical Paper No.258.
123. de Savigny D. and Adam T. (eds.) (2009). *Systems thinking for health systems strengthening. Alliance for Health Policy and Systems Research*, Geneva: World Health Organisation.
124. Deming, W. Edwards (1982). *Out of the Crisis*. Cambridge University Press.
125. Deming, W. Edwards (1986). *Out of the Crisis*. Cambridge, MA: MIT Press.
126. Denscombe, Martyn (2005). 'Research Ethics and the Governance of Research Projects: the Potential of Internet Home Pages', *Sociological Research Online*, 10 (3). Available online at: http://www.socresonline.org.uk/10/3/denscombe.html.
127. Denzin, N.K. and Lincoln, Y.S. (2003). *Collecting and Interpreting Qualitative Materials*. London: SAGE Publications, Inc.

128. Denzin, N.K., and Lincoln, Y.S. (2000). *The handbook of qualitative research*, 2nd ed.: Sage publications, Inc.
129. Department of Foreign Information, (1991). *Al Jamahiriya Horizons and Prospects*, 2nd ed, Tripoli, Libya.
130. Dever, A.G. (1984). *Epidemiology in Health Services Management. Gaithersburg*, Maryland, USA, Aspen Publishers Inc.
131. Diehl, E. and Sterman, J.D. (1995). 'Effects of feedback complexity on dynamic decision making', *Organizational Behavior and Human Decision Processes*, 62(2) pp.198–215.
132. Donabedian A. (1985). 'Twenty years of research on the quality of medical care: 1964-1984'. *Evaluation and the Health Professions*, 8(3) pp.243-265.
133. Donabedian, A. (1966). 'Evaluating the Quality of Medical Care', *Milbank Memorial Fund Quarterly* 44(3) pp.166–206.
134. Donabedian, A. (1980). *Explorations in Quality Assessment and Monitoring: The Definition of Quality and Approaches to Its Assessment. Vol.1*. Ann Arbor, MI: Health Administration Press.
135. Donabedian, A. (1982). *Explorations in Quality Assessment and Monitoring: The Definition of Quality and Approaches to Its Assessment. Vol. II. The Criteria and Standards of Quality*. Ann Arbor, MI: Health Administration Press.
136. Donabedian, A. (1985). *Explorations in Quality Assessment and Monitoring: The Definition of Quality and Approaches to Its Assessment. Vol. III. The Methods and Findings of Quality Assessment Measurement and Monitoring*. Ann Arbor, MI: Health Administration Press.
137. Donabedian, A. (1986). 'Criteria and Standards for Quality Assessment and Monitoring'. *Quality Review Bulletin*, 12(3) pp.99-108.
138. Donabedian, A. (1987). 'Some basic issues in evaluating the quality of health care', *NLN Publications*, 21-2194, pp.3-28.
139. Donabedian, A. (1988). 'The quality of care. How can it be assessed?'. *JAMA: The Journal of the American Medical Association*, 260(12) pp.1743-1748.
140. Donabedian, A. (1990a). 'The Quality of Care: How Can it be Assessed?' *In* Graham, N.O. (ed.) *Quality Assurance in Hospitals: Strategies for Assessment and Implementation*, 2nd ed, Rockville: Aspen Publishers Inc, pp.14-28.
141. Donabedian, A. (1990b). 'The Seven Pillars of Quality', *Arch Pathol Lab Med*. 114(11) pp.1115-1118.
142. Donabedian, A. (1990c). 'Section 1: Perspectives on Quality and Value, Quality and Cost: Choices and Responsibilities', *Journal of Occupational Medicine*, 32(12) pp.1167-1176.
143. Donabedian, A. (1992). 'Defining and Measuring the Quality of Health Care'. *In* Wenzel, R. P. (ed.) *Assessing Quality Health Care: Perspectives for Clinicians*, Baltimore: William & Wilkins, pp.41-64.
144. Donabedian, A. (1992). The Lichfield Lecture. 'Quality assurance in health care: consumers' role', *Quality in Health Care*, 1(4) pp.247–251.
145. Donabedian, A. (1995). 'The quality of care. How can it be assessed?' *In* Graham, Nancy O. (ed.) *Quality in Health Care: Theory, Application, and Evolution, Gaithersburg*, Maryland: Aspen Publishers, Inc., pp.32-46.
146. Donabedian, A. (1996). 'The Effectiveness of Quality Assurance'. *Int. J. Qual. Health Care*, 8(4) pp.401-407.

147. Donabedian, A. (2003). *An Introduction to Quality Assurance in Health Care*. New York, NY: Oxford University Press.
148. Donabedian, A. (2005). Evaluating the Quality of Medical Care. *Milbank Quarterly*, 83(4) pp.691-729, (Reprinted from the *Milbank Memorial Fund Quarterly*, 44(3, Pt.2) pp.166-203, 1966).
149. Donaldson, L.J. (2000). 'Quality in Health Care: The UK Policy Perspective'. *In* Margaret E Mahoney Symposium (eds.) *Quality of Health: Current Issues and Future Directions - A Trans-Atlantic Perspective*. Commonwealth Fund and Nuffield Trust 1999, London: The Nuffield Trust.
150. Doyle V. and Haran, D. (2001). 'Health Reforms and Quality of Care: Lessons Learnt from Ghana and Central America'. *In* H.T.O. Davies, M. Tavakoli and M. Malek (Eds.) *Quality in Care: Strategic Issues in Health Care Management*. Aldershot, UK: Ashgate Publishing Ltd.
151. Dufrene, R.L. (2000). 'An evaluation of a patient satisfaction survey: validity and reliability', *Evaluation and Program Planning*, 23(3) pp.293-300.
152. Easterby-Smith, M. Graca, M. Antonacopoulou, E. Ferdinand, J. (2008) 'Absorptive capacity: A process perspective'. *Management Learning*, 39(5) pp.483-501.
153. Economist (1999). 'Sanction effect on Libyan economy', *The Economist*, 13th March, p.56.
154. Egdahl, R.H. and Gertman, P.M. (1976). *Quality Assurance in Healthcare*. Germantown, Maryland: Aspen Publication.
155. El Taguri, A. Elkhammas E.A., Bakoush O., Ashammaki N., Baccoush M., Betilmal I. (2008). 'Libyan National Health Services: the need to move to management-by-objectives'. *Libyan Med J.*, 3(1) pp.113-121.
156. Elbendak, Omar Emhamed (2008). *Urban Transformation and Social Change in a Libyan City: An Anthropological Study of Tripoli*, PhD. Faculty of Social Sciences, National University of Ireland, Maynooth.
157. El-Fallah, Mohamed M.B. (1999). 'The Determinants of Fertility in Libya.' Paper presented at: *The Arab Conference for Maternal and Child Health*. The Arab League, Cairo, Egypt 7-10 June.
158. El-Fallah, Mohamed M.B. (2000). *Evaluation of Development Plans in Libya in the field of Preparing and Employing Nurses and Allied Health Professionals*, Master dissertation, Garyounis University, Benghazi, Libya (in Arabic).
159. Elfituri, Abdulbaset A., (2000). *Role of Health Education in Promoting Health in Libya: Evaluation of the Existing Situation and Assessment of Future Needs*, PhD. Department of Health Studies, Brunel University
160. El-Hudiri, Anis E.S. (2010). *Compatibility extent of the existing managerial organizations in Libyan hospitals with the scientific organizing basics: Field study in the public hospitals operating in Benghazi city*, Master dissertation, Department of Business Administration, Faculty of Economics, University of Benghazi, Benghazi, Libya (in Arabic).

161. El-Kikhiya M.M. (1995). 'Population'. *In* Abolghemh H. and Algzerey S. (eds.) *Al-Jamahiriya: A Geographical Study*; Surt, Libya: Al-Jamahirya Publishing House, pp.333–393 (in Arabic).
162. Ellis, R. and Whittington, D. (1993). *Quality Assurance in Health Care: a Handbook*. London: Edward Arnold.
163. El-Mehdawi M. and Clarke J.I. (1982). 'Population Redistribution in Libya'. *In* Clarke J. I. and Kosinski L. A. (eds.), *Redistribution of Population in Africa*. London: Heinemann, pp.68-73.
164. El-Mehdawi, Mohamed al-Mabrouk (1998). *Human geography of Libya*, 3rd ed., Benghazi, Garyounis University, (in Arabic).
165. El-Taguri, A. (2007). 'Medical Tourism and the Libyan National Health Services', *Libyan Journal of Medicine*, 2, pp.109-110.
166. Ennis, K. and Harrington, D. (1999). 'Quality management in Irish health care'. *Int J Health Care Qual Assur Inc Leadersh Health Serv.*, 12(6-7) pp.232-243.
167. EU (European Union) (2011). *Programme of support to the strengthening of rehabilitation services for people with disabilities in Libya*. Available online at: http://ec.europa.eu/europeaid/documents/aap/2010/af_aap-spe_2010_lby_p4.pdf
168. Evans, R.G. (1981). 'Incomplete Vertical Integration: The Distinctive Structure of the Health-Care Industry'. *In* Van der Gaag J. and Perlman M. (eds.), *Health, Economics, and Health Economics*. Amsterdam: North-Holland Publishing Company, pp.329-354.
169. Fitzpatrick, R. (1991a). 'Surveys of patients' satisfaction: I-Important general considerations', *BMJ* (Clinical Research Ed.), 302(6781) pp.887-889.
170. Fitzpatrick, R. (1991b). 'Surveys of patient satisfaction: II-Designing a questionnaire and conducting a survey', *BMJ* (Clinical Research Ed.), 302(6785) pp.1129-1132.
171. Florin, D. and Dixon, J. (2004). 'Public involvement in health care', *BMJ*, 328(7432) pp.159-161.
172. Forrester, J.W. (1961). *Industrial dynamics*. Cambridge, MA: The MIT press.
173. Fottler, M.D., Ford R.C., Roberts V. and Ford E.W. (2000). 'Creating a healing environment: the importance of the service setting in the new consumer-oriented healthcare system'. *Journal of Healthcare Management*, 45(2) pp.91-106.
174. Fram, S.M. (2013). 'The Constant Comparative Analysis Method Outside of Grounded Theory'. *The Qualitative Report*, 18(1), pp.1-25.
175. Freedman, L. (2005). 'Achieving the MDGs: Health systems as core social institutions'. *Development*, 48(1) pp.19-24
176. Frenk, J. (1995). 'Comprehensive policy analysis for health system reform'. *Health Policy*, 32(1-3) pp.257-277.
177. Frenk, J. (1994). 'Dimensions of health system reform'. *Health Policy*, 27(1) pp.19-34.
178. Frenk, J. (2004). *Fair financing and universal social protection: the structural reform of the Mexican health system*. Mexico: Ministry of Health.

179. Frenk, J. (2010a). 'The Global Health System: Strengthening National Health Systems as the Next Step for Global Progress'. *PLoS Med*, 7(1): e1000089. doi:10.1371/journal.pmed.1000089
180. Frenk, J. (2010b). 'The World Health Report 2000: expanding the horizon of health system performance'. *Health Policy Plan*, 25(5) pp.343–345.
181. Froberg, D.G. and Kane, R.L. (1989). 'Methodology for measuring health-state preferences-I: Measurement strategies'. *Journal of Clinical Epidemiology*, 42(4) pp.345-354.
182. Fulcher, J. and Scott, J. (1999). *Sociology*, Oxford University Press, Oxford.
183. Fülop, T. (1976). 'New approaches to a permanent problem: the integrated development of health services and health manpower'. *WHO Chronicle*: 30, pp.433-434.
184. Gadallah, M., Zaki, B., Rady, M., Anwer, W. and Sallam, I. (2003). 'Patient satisfaction with primary health care services in two districts in Lower and Upper Egypt'. *East Mediterr Health J*, 9, pp.422-30.
185. GIA (2004). *Libyan Human Development Report*, Tripoli, Libya: the General Information Authority.
186. GAI (2008). *The final results of the General Census of the Population 2006*, Tripoli, Libya: the General Information Authority.
187. Gebreel, Ashour Omar, (1982). *The Sero-Epidemiology of Endemic Diseases in Libya*, PhD. University of Liverpool.
188. Gilson, L. (2003). 'Trust and the development of health care as a social institution'. *Social Science & Medicine*, 56(7) pp.1453-1468.
189. Gilson, L., Alilio, M. and Heggenhougen, K. (1994). 'Community satisfaction with primary health care services: an evaluation undertaken in the Morogoro region of Tanzania'. *Soc Sci Med*, 39, pp.767-80.
190. Gilson, L., Hanson, K., Sheikh, K., Agyepong, I. A., Ssengooba, F., and Bennett, S. (2011). 'Building the Field of Health Policy and Systems Research: Social Science Matters'. *PLoS Med*, 8(8): e1001079. doi:10.1371/journal.pmed.1001079
191. Gilson, L., Loewenson, R., Doherty, J., and Francis, V. (2007). *Challenging Inequity through Health Systems*. Final Report Knowledge Network on Health Systems. WHO Commission on the Social Determinants of Health.
192. Gilson, L., Palmer, N., and Schneider, H. (2005). 'Trust and health worker performance: exploring a conceptual framework using South African evidence'. *Social Science & Medicine*, 61(7) pp.1418-1429.
193. Ginsburg, K.R., Menapace, A.S. and Slap, G.B. (1997). 'Factors affecting the decision to seek health care: the voice of adolescents. *Paediatrics*, 100, pp.922-930.
194. Global EDGE (via Michigan State University) (2013). *Libya: History* [Online] [Accessed on: 28.10. 2013] http://globaledge.msu.edu/countries/libya/history/.
195. Glynn, J. and Perkins, D. (1995). *Managing Health Care, Challenges for the 90s*. New York: WB Saunders Company Ltd.

196. Goupy F, Ruhlmann O, Paris O, Thélot B. (1991). 'Results of a comparative study of in-patient satisfaction in eight hospitals in the Paris region'. *Qual Assur Health Care*, 3(4) pp.309-315.
197. GPC (2005). *Annual Congress report*, Tripoli, Libya, the General Public Committee.
198. GPC (1994). *The National Strategy for Health for All and By All*. Decree No. 24/1994, Sert, Libya, General Public Committee (in Arabic).
199. GPC (2010). *General Public Committee Annual Congress report*, Tripoli, Libya.
200. Graff L., Stevens C., Spaite D. and Foody J. (2002). 'Measuring and Improving Quality in Emergency Medicine'. *Academic Emergency Medicine*, 9(11) pp.1091-1107.
201. Graham, N.O. (1995). *Quality in Health Care Theory, Application, and Evolution*. Gaithersburg, Maryland: Aspen Publishers, Inc.
202. Greenhalgh, T. and Eversley, J. (1999). *Quality in General Practice: Towards a Holistic Approach*. London: King's Fund Publishing.
203. Grol, R. (2001). 'Improving the Quality of Medical Care: Building Bridges Among Professional Pride, Payer Profit, and Patient Satisfaction', *JAMA: The Journal of the American Medical Association*, 286(20) pp.2578-2585.
204. Grol, R., Wensing, M., Mainz, J., Ferreira, P., Hearnshaw, H., Hjortdahl, P., Olesen, F., Ribacke, M., Spenser, T., and Szecsenyi, J. (1999). 'Patients' priorities with respect to general practice care: an international comparison', *Family Practice*, 16(1) pp.4-11.
205. Grol, R., Wensing, M., Mainz, J., Jung, H.P., Ferreira, P., Hearnshaw, H., Hjortdahl, P., Olesen, F., Reis, S., Ribacke, M., and Szecsenyi, J. (2000). 'Patients in Europe evaluate general practice care: an international comparison', *British Journal of General Practice*, 50, pp.882-887.
206. Guirguis, W.W., Mokhtar, S.A., Al-Torkey, M.M. and Khalaf, A.A. (1992). 'Patient satisfaction with hospital services: determinants and level in a hospital in Kuwait'. *J Egypt Public Health Assoc*, 67, pp.87-108.
207. Habib, J., Massoud, M.R., Aboulafia, M. and Greenberg, D. (1997). 'Quality management for health care in the Middle East and North Africa: professional cooperation as part of the peace process'. *The Joint Commission Journal on Quality Improvement*, 23, p.65.
208. Haddad, S., Fournier, P., Machouf, N., and Yatara, F. (1998). 'What does quality mean to lay people? Community perceptions of primary health care services in Guinea', *Social Science & Medicine*, 47(3) pp.381-394.
209. Haddad, S., Potvin, L., Roberge, D., Pineault, R., and Remondin, M. (2000). 'Patient perception of quality following a visit to a doctor in a primary care unit', *Family Practice*, 17(1) pp.21-29.
210. Hafner T. and Shiffman J. (2012). 'The emergence of global attention to health systems strengthening'. *Health Policy and Planning*, 28(1) pp.41-50.

211. Hall, J.A. and Dornan, M.C. (1988a). 'Meta-analysis of satisfaction with medical care: description of research domain and analysis of overall satisfaction levels'. *Social Science & Medicine*, 27(6) pp.637-644.
212. Hall, J.A. and Dornan, M.C. (1988b). 'What patients like about their medical care and how often they are asked: A meta-analysis of the satisfaction literature'. *Social Science and Medicine*, 27, p.935.
213. Hall, J.J. and Taylor, R. (2003). 'Health for all beyond 2000: the demise of the Alma- Ata Declaration and primary health care in developing countries', *The Medical Journal of Australia*, 178(1) pp.17-20.
214. Hall, Julie E. (2004). 'Pluralistic evaluation: a situational approach to service evaluation', *Journal of Nursing Management*, 12(1) pp.22-27.
215. Hall, M.C., Elliott, K.M. and Stiles, G.W. (1993). 'Hospital patient satisfaction: correlates, dimensionality, and determinants'. *J Hosp Mark*, 7, pp.77-90.
216. Hanson, K., McPake, B., Nakamba, P. and Archard, L. (2005). 'Preferences for hospital quality in Zambia: results from a discrete choice experiment'. *Health Econ.*, 14, pp.687-701.
217. Haralambos, M. and Holborn, M. (2000). *Sociology: Themes and Perspectives*. Hammersmith, London: HarperCollins Publishers.
218. Haran, D., Iqbal, M. and Dovlo, D. (1993). *Patient perception of the quality of care in hospital outpatient departments: a quality assurance project in Eastern region, Ghana. Quality and its applications*. University of Newcastle upon Tyne.
219. Harrison, S., Dowswell, G. and Milewa, T. (2002a). 'Guest editorial: public and user "involvement" in the UK National Health Service', *Health and Social Care in the Community*, 10(2) pp.63-66.
220. Harrison, S., Milewa, T. and Dowswell, G. (2002b). *Patient and public involvement in NHS primary care organisations: final report of a Department of Health research study*. Manchester: Department of Applied Social Science, University of Manchester.
221. Harteloh, P.P.M. and Verheggen, F.W.S.M. (1994). 'Quality assurance in health care: From a traditional towards a modern approach', *Health Policy*, 27(3) pp.261-270.
222. Hasin, M.A.A., Seeluangsawat, R., and Shareef, M.A. (2001). 'Statistical measures of customer satisfaction for health care quality assurance: a case study', *International Journal of Health Care Quality Assurance*, 14(1) pp.6-13.
223. Hassin, Elsharif I. M. (2009). *Total Quality Management in Libya: A Study of its Use in the Electrical Power Generation Industry*, PhD. School of the Built and Natural Environment, Glasgow Caledonian University.
224. Hellsten, U. and Klefsjö, B. (2000). 'TQM as a management system consisting of values, techniques and tools' *The TQM Magazine*, 12(4) pp.238-244.
225. Heyman, B. (1995). 'Utilitarian, historical and methodological issues.' *In* Heyman, B. (ed.) *Researching User Perspectives on Community Healthcare*. London: Chapman & Hall, pp.157–174.

226. Heywood, D. and Stronach, I., (2005). 'Philosophy and Hermeneutics'. *In* Somekh, B. and Lewin, C. (eds.) *Research Methods in the Social Sciences*. SAGE Publications.
227. HIC (1999). *The annual statistical report of the health sector 1998*, Health Information Centre, Libyan Ministry of Health, Sirte, Libya.
228. HIC (2004). *The annual statistical report of the health sector 2004*, Health Information Centre, Libyan Ministry of Health, Tripoli, Libya.
229. HIC (2007). *Results of the Global School Health Survey*, the Health Information Centre, Libyan Ministry of Health, in collaboration with the World Health Organization (WHO), Tripoli, Libya.
230. HIC (2008). *The annual statistical report of the health sector 2008*, Health Information Centre, Libyan Ministry of Health, Tripoli, Libya.
231. HIC (2009). *The annual statistical report of the health sector 2009*, Health Information Centre, Libyan Ministry of Health, Tripoli, Libya.
232. HIC (2010). *The annual statistical report of the health sector 2010*, Health Information Centre, Libyan Ministry of Health, Tripoli, Libya.
233. HIC (2012). *Post Conflict Health Facility Assessment*, the Health Information Centre, Libyan Ministry of Health, in collaboration with the World Health Organization (WHO), Tripoli, Libya.
234. Hill, R.G. and Chung, M.C. (1995). 'Quality assurance and the myth of rationality', *International Journal of Health Care Qualihj Assurance*, 8(1) pp.18-22.
235. History World Net (2007). *History of Libya* [Online] [Accessed on: 24.10.2010] http://www.historyworld.net/wrldhis/plaintexthistories.asp?historyid=aa83.
236. HMN (Health Metrics Network), (2008). *Framework and standards for country health information systems*. 2nd ed. Geneva, World Health Organization.
237. Hoppe, M.J., Wells, E.A., Morrison, D.M., Gilmore, M.R., Wilsdon, A. (1995). 'Using focus groups to discuss sensitive topics with children', *Evaluation Review*, 19(1) pp.102-14.
238. Hsiao, William C. (1992). 'Comparing Health Care Systems: What Lessons Nations Can Learn From One Another'. *Journal of Health Politics, Policy, and Law*, 17(4) pp.613-636.
239. Hsiao, William C. (2003). *What is a Health System? Why Should We Care?* Cambridge, Massachussetts: Harvard School of Public Health.
240. Hulley, Stephen B. (2007). *Designing Clinical Research*. Philadelphia: Lippincott Williams & Wilkins.
241. Hunter, D. (2004). 'A structural perspective on health care reform', *Journal of Health Services Research & Policy*, 9(1) pp.51-53.
242. Huycke, L. and All, A.C. (2000). 'Quality in health care and ethical principles', *Journal of Advanced Nursing*, 32(3) pp.562-571.
243. IGH (2004). *Annual Statistical Report*, the Office of the Inspector General for Health, Libya.

244. Imneina, Abier Ibrahim, (2002). 'The impact of the instability of the administrative divisions of the Libyan political system on the performance and follow up the implementation of health policies from 1977 to 2000'. *Dirasat in Economics*, Benghazi, Libya, 21(1-2) pp.76-106 (in Arabic).
245. Jabnoun, N. and Al-Rasasi, A.J. (2005). 'Transformational leadership and service quality in UAE hospitals'. *Managing Service Quality*, 15, pp.70-81.
246. Jabnoun, N. and Chaker, M. (2003). 'Comparing the quality of private and public hospitals'. *Managing Service quality*, 13, pp.290-299.
247. Janovsky, K. and Cassels, A. (1996). 'Health Policy and Systems research: issues, methods, priorities'. *In Health policy and systems development: an agenda for research*. Janovsky K. (ed.) Geneva: World Health Organization. Available online at:http://apps.who.int/iris/handle/10665/62987?locale=en#sthash.ec4lcePu.dpuf
248. Jenkinson, C., Coulter, A., Bruster, S., Richards, N. and Chandola, T. (2002). 'Patients' experiences and satisfaction with health care: results of a questionnaire study of specific aspects of care'. *Qual Saf Health Care*, 11, pp.335-339.
249. Jentleson and Whytock, C.A. (2006). 'Who "Won" Libya? The Force-Diplomacy Debate and Its Implications for Theory and Policy'. *International Security*, 30(3) pp.47-86.
250. Joffe, G. (2005). 'Libya's Saharan Destiny', *The Journal of North Africa Studies*, 10(3 and 4) pp.605-617.
251. Johnson, R.B., and Onwuegbuzie, A.J. (2004). 'Mixed Methods Research: A Research Paradigm Whose Time Has Come'. *Educational Researcher*, 33(7) pp.14-26.
252. Johnstone, P.L. (2004). 'Mixed Methods, Mixed Methodology Health Services Research in Practice', *Qualitative Health Research*, 14(2) p.259-271.
253. Joos, S.K., Hickam, D.H. and Borders, L.M. (1993). 'Patients' desires and satisfaction in general medicine clinics'. *Public Health Rep*, 108, pp.751-9.
254. Jung, H.P., Wensing, M., Olesen, F. and Grol, R. (2002). 'Comparison of patients' and general practitioners' evaluations of general practice care'. *Qual Saf Health Care*, 11, pp.315-9.
255. Juran, Joseph M. (1989). *Juran on Leadership for Quality: An Executive Handbook*, New York: The Free Press,
256. Kaldenberg D. and Regrut B. (1999). *Do satisfied patients depend on satisfied employees? Or do satisfied employees depend on satisfied patients?* The Satisfaction Report newsletter. Volume 3. South Bend, Ind: Press, Ganey Associates Inc.
257. Kalk, A. (2011). 'The costs of performance-based financing'. *Bull. World Health Organ*, 89(5) p.319.
258. Kaufmann D, Kraay A, Zoido-Lobaton P. (1999). *Governance Matter'*. Washington: World Bank Policy Research Department Working Paper No. 2196.

259. Khalifa, Said, M.G. (2002). *The use of computers in the teaching of mathematics in Libyan primary schools*, PhD. University of Sunderland.
260. Kiessling, T. Harvey, M. (2005). 'Strategic global human resource management research in the twenty-first century: an endorsement of the mixed-method research methodology'. *International Journal of Human Resource Management*. 16(1) pp.22-45.
261. Kleczkowski, B., Roemer M. and Van der Werff A. (1984). *National health systems and their reorientation towards health for all: Guidelines for policy-making*. Public Health Papers, No. 77, 3-120. Geneva, Switzerland: World Health Organization. Available online at: http://whqlibdoc.who.int/php/WHO_PHP_77.pdf.
262. Kock, H.C.H (1992). *Implementing and Sustaining Total Quality Management in Health Care*, 2nd Ed. London: Longman Group UK Limited.
263. Kui-Son Choi, Woo-Hyun Chob, Sunhee Leec, Hanjoon Leed, Chankon Kime, (2004). 'The relationships among quality, value, satisfaction and behavioural intention in health care provider choice: A South Korean study'. *Journal of Business Research*, 57, pp.913-921.
264. Laffel G. and Blumenthal D. (1993). 'The Case for Using Industrial Quality Management Science in Health Care Organizations'. *In* AL-Assaf A. F. and Schmele, J. A. (eds.) *The Textbook of Total Quality in Healthcare*. Florida: St. Lucie, CRC Press, pp. 40-50.
265. Lambo, E. and Sambo, L.G. (2003). 'Health Sector Reform in Sub-Saharan Africa: a synthesis of Country Experiences'. *East African Medical Journal*, 80(6) pp.1-20.
266. Lankshear A.J. (1993). 'The use of focus groups in a study of attitudes to student nurse assessment', *Journal of Advanced Nursing* 18: pp.1986-1989.
267. Larsson, B.W. and Larsson, G. (1999). 'Patients' views on quality of care: do they merely reflect their sense of coherence?' *Journal of Advanced Nursing*, 30(1) pp.33-39.
268. Larsson, B.W. and Larsson, G. (2002). 'Development of a short form of the Quality from the Patient's Perspective (QPP) questionnaire', *Journal of Clinical Nursing*, 11(5) pp.681-687.
269. Larsson, B.W., Larsson, G., and Starrin, B. (1999). 'Patients' views on quality of care: a comparison of men and women', *Journal of Nursing management*, 7(3) pp.133-139.
270. Larsson, B.W., Larsson, G., Chantereau, M., and Stael von Holesein, K. (2005). 'International comparisons of patients' views on quality of care', *International Journal of Health Care Quality Assurance*, 18(1) pp.62-73.
271. Leap, L. (1994). 'Error in medicine'. *Journal of the American Medical Association*, 272, pp.1851-57.
272. Leech, N.L. Dellinger, A.B. Brannagan, K.B. Hideyuki, T. (2010). 'Evaluating mixed research studies: A mixed methods approach'. *Journal of Mixed Methods Research*. 1(1) pp.17-31.

273. Legros, S., Massoud, R. and Urroz, O. (2002). 'The Chilean legacies in health care quality'. *Int J Qual Health Care*, 14, pp.83-88.
274. Lewis, J.R. (1994). 'Patient Views on Quality Care in General Practice: Literature Review', *Social Science & Medicine*, 39(5) pp.655-670.
275. Lewis, J.R. and Williamson, V. (1995). 'Examining patient perceptions of quality care in general practice: comparison of quantitative and qualitative methods', *The British Journal of General Practice: the Journal of the Royal College of General Practitioners*, 45(394) pp. 249-253.
276. Lieblich, Amia, Tuval-Mashiach, Rivka, and Zilber, Tamar. (1998). *Narrative Research: Reading, Analysis, and Interpretation*. Thousand Oaks, California: Sage Publications.
277. Lim, P.C. and Tang, N.K. (2000). 'A study of patients' expectations and satisfaction in Singapore hospitals'. *Int J Health Care Qual Assur Inc Leadersh Health Serv.*, 13(6-7) pp.290-299.
278. Linder-Pelz, S. (1982). 'Towards A Theory of Patient Satisfaction', *Social Science & Medicine*, 16, pp.577-582.
279. Linsk, Joseph A. (1990). 'The Quality of Health Care: The Practical Clinical View'. *Int J Qual Health Care*, 2(3-4) pp.219-255.
280. Lloyd, R.C. (2004). *Quality Health Care: A Guide to Developing and Using Indicators*. London: Jones and Bartlett Publishers International.
281. Lohr, K.N., Harris-Wehling, J. (1991). 'Medicare: A strategy for quality assurance, I: A recapitulation of the study and a definition of quality of care'. *QRB. Quality Review Bulletin*, 17(1) pp.6-9.
282. Macdonald, J.J. (1994). *Primary Health Care, Medicine in its place*. London: Earthscan Publications Ltd.
283. MacLean, L.M., Meyer, M., and Estable, A. (2004). 'Improving Accuracy of Transcripts in Qualitative Research'. *Qualitative Health Research*, 14(1) pp.113-123.
284. Malterud, K. (2001). 'The art and science of clinical knowledge: evidence beyond measures and numbers'. *Lancet*, 358(9279) pp.397-400.
285. Manaf, N.H.A. (2005). 'Quality management in Malaysian public health care'. *International Journal of Health Care Quality Assurance*, 18, pp.204-16.
286. Marchal, Bruno and Kegels, Guy (2003). 'Health workforce imbalances in times of globalization: brain drain or professional mobility?' *The International Journal of Health Planning & Management*. 18(S1) pp.S89–S101.
287. Marchal, B., Dedzo, M., and Kegels, G. (2010). 'A realist evaluation of the management of a well-performing regional hospital in Ghana'. *Bmc Health Services Research*, 10, p.24.
288. Margolis, S.A., Al-Marzouqi, S.U., Revel, T.O., and Reed, R.L. (2003). 'Patient satisfaction with primary health care services in the United Arab Emirates', *International Journal for Quality in Health Care*, 15(3) pp.241-249.
289. Marshall, C. and Rossman, G.B. (1995). *Designing Qualitative Research*. 2nd ed. New York: Sage, Thousand Oaks.

290. Marshall, M. and Campbell, S.M. (2002). 'Introduction to quality assessment in general practice'. *In* Marshall M., Campbell S.M., Hacker J. and Roland M.O. (eds.) *Quality indicators for general practice: a practical guide to clinical quality indicators for primary care health professionals and managers*. London: Royal Society of Medicine Press Ltd., 1-6.
291. Mashego, T.A. and Peltzer, K. (2005). 'Community perception of quality of (primary) health care services in a rural area of Limpopo Province, South Africa: a qualitative study'. *Curationis*, 28(2) pp.13-21.
292. Mason, J. (2004). *Qualitative Researching*. 2nd ed. SAGE Publications.
293. Mawajdeh, S.M., Daabseh, K.A., Nasir, M.J. and Al-Qutob, R.J. (2001). 'Patient expectation and satisfaction in different hospitals in Irbid, Jordan'. *Saudi Med J*, 22, pp.625-9.
294. Maxwell, R. (1984). 'Quality Assessment in Health', *British Medical Journal*, 288, pp.1470-1475.
295. MBendi Information Services (2006). *Education and Training in Libya*. [Online] [Accessed on 20 October 2013] http://www.mbendi.com/indy/psrv/trai/af/lb/index.htm.
296. McIver, Shirley (1993). *Obtaining the views of users of primary and community health care services*. London: King's Fund Centre.
297. McPake, B, Matthews Z, Channon A, Hadi Y, Chattoe-Brown A. (2009). *Health Systems Typology*. Southampton: HLSP.
298. McWhinney, I.R. (1991). 'Primary Care Research in the Next Twenty Years'. *In* Norton, P.G., Stewart, M., Tudiver, F., Bass, M.J., and Dunn, E.V., (eds.) *Primary Care Research, Traditional and Innovative Approaches, Vol. 1*. Newbury Park, Calif: Sage Publications. pp.1-12.
299. Meakin, R. and Weinman, J. (2002). 'The 'Medical Interview Satisfaction Scale' (MISS-21) adapted for British general practice', *Family Practice*, 19(3) pp.257- 263.
300. Meessen, B., Bigdeli, M., Chheng, K., Decoster, K., Ir, P., Men, C., and Van Damme W. (2011a). 'Composition of pluralistic health systems: how much can we learn from household surveys? An exploration in Cambodia'. *Health Policy Plan.*, 26(Suppl 1), pp.i30-i44.
301. Meessen, B., Soucat, A., and Sekabaraga, C. (2011b). 'Performance-based financing: just a donor fad or a catalyst towards comprehensive health-care reform?' *Bull. World Health Organ*, 89(2) pp.153-156.
302. Mendoza Aldana, J., Piechulek, H. and Al-Sabir, A. (2001). 'Client satisfaction and quality of health care in rural Bangladesh'. *Bulletin of the World Health Organization*, 79, p.512.
303. Meriam Webster's deluxe dictionary (2013). [Online] [Accessed on 13.06.2013] http://www.merriam-bster.com/dictionary/stewardship?show=0&t=1371149344
304. Meriam Webster's deluxe dictionary (1998) Pleasantville, New York/Montreal, Reader's Digest.
305. Michel, W., Hans Peter Jung, Jan, M., Frede, O., and Richard, G. (1998). 'A Systematic Review of the Literature on Patient Priorities for General Practice

Care. Part 1: Description of the Research Domain', *Social Science & Medicine*, 47(10) pp.1573-1588.

306. Michell, J. (2003). 'Pragmatism, Positivism and the Quantitative Imperative', *Theory Psychology*, 13(1) pp.45-52.
307. Michielsen, J., Meulemans, H., Soors, W., Ndiaye, P., Devadasan, N., De Herdt, T., Verbist, G., and Criel, B. (2010). 'Social protection in health: the need for a transformative dimension'. *Tropical Medicine & International Health*, 15(6) pp.654-658.
308. Midgley, G. (2003). 'Systems Thinking: An Introduction and Overview'. *In* Midgley, G. (ed.) *Systems Thinking, Volume I: General Systems Theory, Cybernetics and Complexity.* London, SAGE.
309. Miles, M.B. and Huberman, A.M. (1984). *Qualitative Data Analysis: A Sourcebook of New Methods*. California; SAGE publications Inc.
310. Mills A. (2011). 'Health policy and systems research: defining the terrain; identifying the methods'. *Health Policy and Planning*, 27(1) pp.1–7.
311. Minahan, James (2002). *Encyclopaedia of the Stateless Nations: S-Z*. Greenwood Publishing Group. p.1659.
312. Mirkin. B. (2010). *Population Levels, Trends and Policies in the Arab Region: Challenges and Opportunities*. Arab Human Development Report, United Nations Development Programme (UNDP).
313. MOH (1989). *Report on 20 years of Revolution*, Tripoli, Libya, Ministry of Health (in Arabic).
314. MOH (1990). *Development of health services*, 2nd ed., Tripoli, Libya, Ministry of Health (Arabic).
315. Mohapatra S. and Al-Shekteria A. (2009). 'In-Patient Perception of and satisfaction with Health Care Services Quality in 7th October Hospital, Benghazi, Libya', *The Egyptian Journal of Community Medicine*, 27(2) pp.67-73.
316. Monaghan S., Huws D., and Navarro M., (2003). *The Case for a New UK Health of the People Act*. London: the Nuffield Trust.
317. MOP (1972). *Three-year plan for economic and social development (73-1975)*. Tripoli, Libya, Ministry of Planning (in Arabic).
318. MOP (1979). *Economic and social transformation plan (1976-1980)*. Tripoli, Libya, Ministry of Planning (in Arabic).
319. MOP (1984). *Economic and social transformation plan (81-1985), P.1*. Tripoli, Libya, Ministry of Planning (in Arabic).
320. MOPD (1963). *Five-Year Economic and Social Development Plan, 1963-1968*. Kingdom of Libya, Ministry of Planning and Development (in Arabic).
321. Morgan, David L. (2007). 'Paradigms Lost and Pragmatism Regained: Methodological Implications of Combining Qualitative and Quantitative Methods'. *Journal of Mixed Methods Research*, 1, pp.48-76.
322. Morgan, G. (1997). *Imaginization: New Mindsets for Seeing, Organizing and Managing*. (New management edition). San Francisco, CA: Berrett-Koehler Publishers.

323. Mossialos, Elias. (1997). 'Citizens' Views on Health Care Systems in the 15 Member States of the European Union'. *Health Economics*, 6(2) pp.109–116.
324. Mostafa, M.M. (2005). 'An empirical study of patients' expectations and satisfactions in Egyptian hospitals'. *International Journal of Health Care quality Assurance*, 18, p.516.
325. Moullin, Max (2002). *Delivering Excellence in Health and Social Care: Quality, Excellence and Performance Measurement*. Buckingham: Open University Press.
326. M'Pherson, P.K. (1974). 'A Perspective on Systems Science and Systems Philosophy'. *Futures*, 6, pp.219-239.
327. Murphy, E., Dingwall, R., Greatbatch, D., Parker, S., and Watson, P. (1998). 'Qualitative research methods in health technology assessment: a review of the literature', *Health Technology Assessment*, 2(16).pp.iii-ix, 1-274.
328. Murray C.J.L., Frenk J. (1999). *A WHO framework for health system performance assessment*. Geneva, World Health Organization, Global Programme on Evidence for Health Policy (GPE Discussion Paper No. 6). Available online at: http://apps.who.int/iris/handle/10665/66267.
329. Murray C.J.L., Kreuser J. and Whang W. (1994). 'Cost-effectiveness analysis and policy choices: investing in health systems'. *Bulletin of the World Health Organization*, 72(4) pp.663–674.
330. Murray, C. and Frenk, J. (2000). 'A framework for assessing the performance of health systems'. *Bulletin of the World Health Organization*, 78(6) pp.717-731.
331. Nacem, J. and Mohammed, C. (2003). 'Comparing the quality of private and public hospitals'. *Managing Service quality*, 13, pp.290-299.
332. Narasimhan, V., Brown, H., Pablos-Mendez, A., Adams, O., Dussault, G., Elzinga, G., Nordstrom, A., Habte, D., Jacobs, M., Solimano, G., Sewankambo, N., Wibulpolprasert, S., Evans, T., and Chen, L. (2004). 'Responding to the global human resources crisis'. *The Lancet*, 363(9419) pp.1469-1472.
333. Nassar-McMillan, S.C., and Borders, L.D. (2002). Use of focus groups in survey item development. *The Qualitative Report*, 7(1). Available online at: http://www.nova.edu/ssss/QR/QR7-1/nassar.html.
334. National Cancer Institute, (2007). *Greater Than the Sum: Systems Thinking in Tobacco Control*. Best, A., Clark, P.I., Leischow, S.J. and Trochim, W. (eds.) Tobacco Control. Monograph 18, Bethesda, MD., U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute.
335. National Oil Corporation (2005). *Annual Report 2004-2005*, Tripoli, Libya.
336. Navarro, V. (2000). 'Assessment of the World Health Report 2000'. *Lancet*, 356(1598) pp.1601.
337. NCDC (2007). *National Centre for Infectious Diseases Control report*. Tripoli, Libya.
338. NCDC (2008). *National Centre for Infectious Diseases Control report*. Tripoli, Libya.
339. Neuberger, R.J. (1998). 'Primary care: core values. Patients' priorities'. *BMJ*, 317, pp.260–262

340. Neuman, W.L. (2003). *Social Research Methods: Qualitative and Quantitative Approaches*. 5th ed. Boston: Allyn and Bacon.
341. Neuman, W.L. (2006). *Social Research Methods: Qualitative and Quantitative Approaches*. 6th ed. Boston: Pearson Education Inc.
342. Newman, I., Ridenour, C.S., Newman, C., and DeMarco, G.M.P., Jr. (2003). 'A typology of research purposes and its relationship to mixed methods'. *In* Tashakkori A. and Teddlie C. (eds.), *Handbook of mixed methods in social and behavioral research*. California: Thousand Oaks, Sage Publications, pp.167–188.
343. Newsome, P.R.H. and Wright, G.H. (1999). 'A review of patient satisfaction: I. Concepts of satisfaction'. *British Dental Journal*, 186, p.161.
344. Nicholas, D.D., Heiby, J.R., and Hatzell, T.A. (1991). 'The Quality Assurance Project: introducing quality improvement to primary health care in less developed countries', *Quality Assurance In Health Care*: The International Society For Quality Assurance In Health Care/ISQA, 3(3) pp.147-165.
345. Nishtar, S. (2010). The mixed health systems syndrome. Bull. World Health Organ., 88, (1) 74-75.
346. Nwabueze, U. (2001). 'The implementation of TQM for the NHS manager'. *Total Quality Management*, 12, pp.657-75.
347. Oliver. P. (2003). *The Student's Guide to Research Ethics*. Maidenhead: Open University Press.
348. Olorunniwo, F., and Hsu, M.K. (2006). 'A typology analysis of service quality, Custoer satisfaction and behavioral intentions in mass services'. *Managing Service Quality*, 16(2) pp.106-123.
349. Oppenheim, A.N. (1992). *Questionnaire design, interviewing and attitude measurement*. London: continuum.
350. Orme, C.N., Parsons R.J. and McBride, G.Z. (1992). 'Customer information and the quality improvement process: developing a customer information system'. *Hospital and Health service Administration*, 37(2) pp.197-212.
351. Øvretveit, J. (1992). *Health services quality: an introduction to quality methods for health services*. Blackwell Scientific Publications.
352. Øvretveit, J. (1998). *Evaluating Health Interventions, an introduction to evaluation of health treatments, services, policies and organizational interventions*. Buckingham: Open University Press.
353. Øvretveit, J. (2002). 'Improving the quality of health services in developing countries: lessons for the West', *Quality and Safely in Health Care*, 11(4) pp.301-302.
354. Øvretveit, J. (2003). *What are the best strategies for ensuring quality in hospitals*. Copenhagen: WHO Regional office for Europe (Health Evidence Network report).
355. Øvretveit, J. (2004). 'Formulating a health quality improvement strategy for a developing country', *Int J Health Care Qual Assur*, 17(7) pp.368-376.

356. Oz, M.C., Zikria, J., Mutrie, C., Slater, J.P., Scott, C., Lehman, S., Connolly, M.W., Asher, D.T., Ting, W. and Namerow, P.B. (2001). 'Patient evaluation of the hotel function of hospitals'. *Heart Surgery Forum*, 4(2) pp.166-71.
357. Paina, L. and Peters, D.H. (2012). 'Understanding pathways for scaling up health services through the lens of complex adaptive systems'. *Health Policy and Planning*, 27, pp.365–373. Available online at: http://heapol.oxfordjournals.org/content/27/5/365.full.pdf
358. Pajak, Francis R. (1992). 'Quality Development: A Regional Approach'. *International Journal of Health Care Quality Assurance*, 5(2) pp.7-11.
359. Palfrey, C. (2000). *Key concepts in health care policy and planning: An introductory text*. London: Macmillan press Ltd.
360. PAPCHILD (1997). *Arab Libyan Maternal and Child Health Survey*. Pan Arab Project for Child Health Development, MOH (Libya), the League of Arab States (Cairo- Egypt).
361. PAPFAM (2008). *Libyan family health survey*. Pan-Arab Project for Family Health, National Centre for Infectious Diseases Control (Libya) and The league of Arab States (Cairo- Egypt).
362. Parasuraman, A., Zeithaml, V. and Berry, L. (1988). 'SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality'. *Journal of Retailing*, 64(1) pp. 12-37.
363. Parasuraman, A., Zeithaml, V.A., and Berry, L.L. (1994). 'Alternative scales for measuring service quality: A comparative assessment based on psychometric and diagnostic criteria'. *Journal of Retailing*, 70(3) pp.201-230.
364. Paris, V., Devaux M. and Wei L. (2010). *Health Systems Institutional Characteristics: A Survey of 29 OECD Countries*. 50th ed. Paris: Organization for Economic Co-opeartion and Development. OECD Health Working Papers.
365. Pascoe, G.C. (1983). 'Patient satisfaction in primary health care: A literature review and analysis'. *Evaluation and Program Planning*, 6(3-4) pp.185-210.
366. Pascoe, Gregory C. and Attkisson, C. Clifford (1983). 'The Evaluation Ranking Scale: A new methodology for assessing satisfaction'. *Evaluation and Program Planning*, 6(3-4) pp.335-347.
367. Patton, M.Q. (1988). 'Paradigms and pragmatism'. *In* Fetterman, D.M. (ed.), *Qualitative approaches to evaluation in education: the silent scientific revolution*. New York: Praeger, pp.116-137.
368. Peck, B.M., Ubel, P.A., Roter, D.L., Goold, S.D., Asch, D.A., Jeffreys, A.S., Grambow, S.C. and Tulsky, J.A. (2004). 'Do unmet expectations for specific tests, referrals, and new medications reduce patients' satisfaction?' *J Gen Intern Med*, 19, pp.1080-7.
369. Penelope, M.M.M. (1999). 'Public involvement in health care priority setting: an overview of methods for eliciting values'. *Health Expectations*, 2(4) pp.222-234.
370. Penland, T. (1997). 'A model to create "organizational readiness" for the successful implementation of quality management systems'. *Int J Qual Health Care*, 9, pp.69-72.

371. Perez, D., Lefevre, P., Romero, M.I., Sanchez, L., De Vos, P., and Van der Stuyft, P. (2009). 'Augmenting frameworks for appraising the practices of community-based health interventions'. *Health Policy and Planning*, 24(5) pp.335-341.
372. Peters, D. (1993). 'A New look for Quality in Home Care'. *In* AL-Assaf A., and Schmele J. (eds.) *The Textbook of Total Quality in Healthcare*. Florida: St. Lucie Press.
373. Peters, D., El-Saharty S., Siadat B., Janovsky K. and Vujicic M. (2010). *Improving Health Service Delivery in Developing Countries*. Washington, World Bank.
374. Pickard, Susan and Smith, Keri (2001). 'A "Third Way" for lay involvement: what evidence so far'. *Health Expectations*, 4(3) pp.170-179.
375. Pope, C. and Mays, N. (2000). *Qualitative research in health care*. London: BMJ Publishing Group.
376. Pope, C. and Mays, N. (2001). *Qualitative Research in Health Care*. 2nd ed. London: BMJ Books.
377. Pope, C., Ziebland, S. and Mays, N. (2000). 'Qualitative research in health care. Analysing qualitative data'. *BMJ*, 320(7227), pp.114-116.
378. Population Reference Bureau (2012). *World Population Data Sheet*, US. [Online] http://www.prb.org/pdf12/2012-population-data-sheet_eng.pdf.
379. Poulton, B.C. (1999). 'User involvement in identifying health needs and shaping and evaluating services: is it being realised?', *Journal of Advanced Nursing*, 30(6) pp.1289-1296.
380. Pressman, J. and Wildavsky, A. (1984). *Implementation*. 3rd ed. Berkeley, California: University of California Press.
381. Preston, A.P., Saunders, I.W., O'Sullivan, D., Garrigan, E., and Rice, J. (1995). 'Effective Hospital Leadership for Quality: Theory and Practice', *Australian Health Revieir*, 18(3) pp.91-110.
382. Pritchard, P. (1981). *Patient participation in general practice*. London: Royal College of General Practitioners.
383. Qatari, G.A. and Haran, D. (1999). 'Determinants of users' satisfaction with primary health care settings and services in Saudi Arabia', *International Journal for quality in Health Care*, 11(6) pp.523-531.
384. Qin, Hong. (2009). *Links among perceived service quality, patient satisfaction and behavioural intentions in the urgent care industry: Empirical evidence from college students*. PhD. University of North Texas.
385. Racine, J.F. (1995). 'A Double Take on the History of Quality in Health Care'. *In* Graham, Nancy O. (ed.) *Quality in Health Care: Theory Application, and Evolution*. Gaithersburg, Maryland: Aspen Publishers, Inc., pp.15-31.
386. Rantz M., Mehr D., Popejoy L., Zwygart-Stauffacher M., Hicks L., Grando V., Conn V., Porter R., Scott T. and Mass M. (1998). 'Nursing home care quality: a multidimensional theoretical model'. *Journal of Nursing Care Quality* 12(3) pp.30-46.
387. Rao, J.K., Weinberger, M, and Kroenke, K. (2000). 'Visit-specific expectations and patient-centred outcomes: a literature review'. *Arch Family medicine*, 9(10) pp.1148-1155.

388. Rao, K.D., Peters, D.H. and Bandeen-Roche, K. (2006). 'Towards patient-centred health services in India -A scale to measure patient perceptions of quality'. *International Journal for Quality in Health Care*, 18(6) pp.414-421.
389. Reeder, L.G. (1972). 'The Patient-Client as a Consumer: Some Observations on the Changing Professional-Client Relationship', *Journal of Health and Social Behavior*, 13(12) pp.406-412.
390. Reerink, I.H. and Sauerborn, R. (1996). 'Quality of primary health care in developing countries: Recent experiences and future directions'. *International Journal for Quality in Health Care*, 8, p.131.
391. Reich, M. (2002). 'Reshaping the state from above, from within, from below: implications for public health'. *Social Science & Medicine*, 54(11) pp.1669-1675.
392. Reichheld, F. (1996). *The loyalty effects: the hidden force behind growth, profit, and lasting value*. Boston: Harvard Business School Press.
393. Rhode, J.E. (1983). 'Health for all in China: Principles and relevance for other countries'. *In* Morley, D., Rhode, J.E., Williams, G. (eds.) *Practicing Health for All*. Oxford, England: Oxford University Press.
394. Richards, T. (1999). 'Patients' priorities', *BMJ*, 318(7179), p.277.
395. Richardson, G.P. (1995). 'Loop polarity, loop dominance and the concept of dominant polarity', *System Dynamics Review*, 11(1) pp.67–88.
396. Rifkin, S. (2003). 'A framework linking community empowerment and health equity: it is a matter of CHOICE'. *J. Health Popul Nutr*, 21(3) pp.168-180.
397. Riley, J. (2008). *Low income, social growth, and good health*. Berkeley: University of California Press.
398. Ritchie, J. and Lewis, J. (eds.) (2003). *Qualitative research practice: A guide for social science students and researchers*. Sage: Thousand Oaks.
399. Ritchie, J. and Spencer, L. (1994). 'Qualitative data analysis for applied policy research'. *In* Bryman, A. and Burgess, R. (eds.) *Analysing Qualitative Data*. London: Routledge.
400. Roberts I. (1993). 'Quality Management in Health Care Environments'. *International Journal of Health Care Quality Assurance*, 6(2) pp.25-35.
401. Roemer, M.I. and Montoya-aguilar, C. (1988). *Quality assessment and assurance in Primary health care*. Geneva, Switzerland: World Health Organization.
402. Rosenthal, G.E. and Shannon, S.E. (1997). 'The use of patient perceptions in the evaluation of health-care delivery systems'. *Medical Care*, 35(11) pp.NS58-68.
403. Rowe, Rosemary and Shepherd, Michael (2002). 'Public Participation in the New NHS: No Closer to Citizen Control?' *Social Policy & Administration*, 36(3) pp.275-290.
404. Ruiz, U. (2004). 'Quality management in health care: a 20-year journey', *International Journal of Health Care Quality Assurance; Incorporating Leadership in Health Services*, 17(6) pp.323-333.
405. Runciman, W.B. (2002). 'Qualitative versus quantitative research-balancing cost, yield and feasibility', *Quality and Safely in Health Care*, 11(2) pp.146-147.

406. Ryan, M., Scott, D.A., Reeves, C., Bate, A., van Teijlingen, E.R., Russell, E.M., Napper, M., and Robb, C.M. (2001). 'Eliciting public preferences for healthcare: a systematic review of techniques', *Health Technology Assessment* 5(5) pp.1-186.
407. Saddique, A. (1995). *Continuous Quality Improvement CQI Application in Health Services*. Riyadh: King Saud University.
408. Sale, J.E.M. Lohfeld, L.H. Brazil, K. (2002). 'Revisiting the quantitative-qualitative debate: Implications for mixed-methods research'. *Quality & Quantity*. 36(1) pp.43-53.
409. Saleh, M.I. (2006). 'The impact of current health policies on health services'. Paper presented at: *The 1st Health Administration Department conference about Health Administration: Concepts and Practicing*. Garyounis University, Faculty of Public health. Benghazi, Libya 26-27 March 2006(in Arabic).
410. Saltman R.B. and Ferroussier-Davis O., (2000). 'The concept of stewardship in health policy', *Bulletin of the World Health Organization*, 78(6) pp.732-739.
411. Sambo, L.G., (2009). *Health systems thinking: the need for a more critical approach*, PhD. the University of Hull.
412. Sarvimaki, A. and Benko, S.S. (2001). 'Values and evaluation in health care', *Journal of Nursing Management*, 9(3) pp.129-137.
413. Satia, J. and Dohlie, M.B. (1999). 'Achieving Total Quality Management in Public Health Systems'. *Journal of Health Management*, 1, pp.301-322.
414. Saunders, M., Lewis. P. and Thornhill, A. (2009). *Research methods for business students*. 6th ed. Harlow: Pearson.
415. Sayeh, F.S., Dani, S. and Swain, E. (2005). 'TQM management culture within Libya organizations'. *The National Conference on Total Quality Management in Libya*. The Society for Quality Management, Tripoli, Libya.
416. Schneider, H. and Palmer, N. (2002). 'Getting to the truth? Researching user views of primary health care', *Health Policy and Planning*, 17(1) pp.32-41.
417. Schulze, Reinhard (2002). *A modern history of the Islamic world*. London- New York: I.B.Tauris Publishers.
418. MOP (1999). *General Census of Population 1995: preliminary results*. Ministry of Planning, the Bureau of Statistics and Census, Tripoli, Libya.
419. Selassie, Bereket H. (1974). *The executive in African governments*. London: Heinemann.
420. Senge, P.M. (1990). *The fifth discipline: the art and practice of the learning organization*. New York: Doubleday.
421. Sengupta, K. and Abdelhamid, T.K. (1993). 'Alternative conceptions of feedback in dynamic decision environments: an experimental investigation'. *Management Science*, 39(4) pp.411-428.
422. Shakarishvili G, Atun R, Berman P, Hsiao W, Burgess C. and Lansang M. (2010). Converging Health Systems Frameworks: Towards A Concepts-to-Actions Roadmap for Health Systems Strengthening in Low and Middle Income Countries. *Global Health Governance*, 3(2) pp.1-17.
423. Shaw C.D. and Kalo, 1. (2002). *A background for national quality policies in health systems*. Copenhagen, WHO.

424. Shaw, C.D. (1993). 'Quality assurance in the United Kingdom'. *Quality assurance in health care*, 59, pp.107-118.
425. Sheikh, K., Gilson, L., Agyepong, I., Hanson, K., Ssengooba, F., and Bennett, S. (2011). 'Building the field of health policy and systems research: framing the questions'. *PLoS Medicine*, 8(8) pp.1-6.
426. Shelton, P.J. (2000). *Measuring and improving patient satisfaction*. Gaithersburg, Md.: Aspen Publishers.
427. Shembesh, A. and Tuld, N. (2005). *Workshop on Business Implications for the Private Sector in Africa of the WTO Agreement on TBT*. Nairobi.
428. Sheridan, G. (1997). *Tigers: Leaders of the new Asia-Pacific*. Sydney, Australia: Allen & Unwin Pty. Ltd.
429. Silimperi, D.R., Franco, L.M., Van Zanten , T.V. and Macaulay, C. (2002). 'A framework for institutionalizing quality assurance'. *Int J Qual Health Care*, 14, pp.67-73.
430. Silverman, D. (1997). *Qualitative Research, Theory, Method and Practice*. London: SAGE Publications Ltd.
431. Silverman, D. (2000). *Doing Qualitative Research: A practical Handbook*. London: SAGE Publications Ltd.
432. Sim, J. and Wright, C. (2000). *Research in Health Care: Concepts, Designs and Methods*. Cheltenham: Nelson Thornes.
433. Simon, H.A. (1982). *Models of Bounded Rationality: Behavioral Economics and Business Organization, vol.2*. Cambridge: MA: MIT Press.
434. Sinclair D., Rochon M. and Leatt P. (2005). *Riding the third rail: the story of Ontario's Health Services Restructuring Commission, 1996–2000*. Montreal; Institute for Research on Public Policy.
435. Sitzia J. and Wood N. (1997). 'Patient satisfaction: A review of issues and concepts'. *Social Science and Medicine*, 45(12) pp.1829-1843.
436. Sixma, H.J., Kerssens, J.J., Campen, C.V., and Peters, L. (1998). 'Quality of care from the patients' perspective: from theoretical concept to a new measuring instrument'. *Health Expectations*, 1(2) pp.82-95.
437. Slee V.N., Slee D.A., Schmidt H.J. (1996). *Health Care Terms*. St. Paul, MN: Tringa Press.
438. Slife, Brent and Williams, Richard (1995). *What's Behind the Research? Discovering Hidden Assumptions in the Behavioral Sciences*. London: Sage.
439. Sluijs, E.M. and Wagner, C. (2003). 'Progress in the implementation of Quality Management in Dutch health care: 1995-2000'. *International Journal for Quality in Health Care*, 15, p.223.
440. Sofaer, S. and Firminger, K. (2005). 'Patient perceptions of the quality of health services'. *Annul Rev Public Health*, 26, pp.513-59.
441. Sofaer, S. (1999). 'Qualitative methods: What are they and why use them?' *Health Services Research*, 34, p.1101.
442. Sofaer, S. (2002). 'Qualitative research methods'. *International Journal for Quality in Health Care*, 14, p.329.

443. Stanlszewska, S. and Henderson, L. (2004). 'Patients' evaluations of their health care: the expression of negative evaluation and the role of adaptive strategies'. *Patient Education and Counselling*, 55(2) pp.185-192.
444. Steel, M. (2001). *Oxford Word power dictionary*. Oxford: Oxford University Press.
445. Sterman, J.D. (1989a). 'Misperceptions of Feedback in Dynamic Decision Making, *Organizational Behavior and Human Decision Processes*, 43(3) pp.301-335.
446. Sterman, J.D. (1989b). 'Modeling Managerial Behavior: Misperceptions of Feedback in a Dynamic Decision Making Experiment'. *Management Science*, 35(3) pp.321-339.
447. Sterman, J.D. (1994). 'Learning in and about Complex Systems'. *System Dynamics Review*, 10(2–3) pp.291-330.
448. Sterman, J.D. (2001). 'System Dynamics Modeling: Tools for Learning in a Complex World.' *California Management Review*, 43(4) pp.8-25
449. Stevenson, K., Sinfield, P., Ion, V., and Merry, M. (2004). 'Involving patients to improve service quality in primary care'. *International Journal of Health Care Quality Assurance Incorporating Leadership in Health Services*, 17(4-5) pp.275- 282.
450. Storbacka, K., Strandvik, T., and Grönroos, C. (1994). 'Managing customer relationships for profit: The dynamics of relationship quality'. *International Journal of Service Industry Management*, 5(5) pp.21-38.
451. Strauss, A.L. and Corbin, J. (1998). *Basics of Qualitative Research, Techniques and Procedures for Developing Grounded Theory*. 2nd ed. London: SAGE Publications, Inc..
452. Tangcharoensathien V., Bennett S., Khongswatt S., Supacutikul A. and Mills A. (1999). 'Patient satisfaction in Bangkok: the impact of hospital ownership and patient payment status'. *International Journal for Quality in Health Care*, 11(4) pp.309–317.
453. Tashakkori, A. and Teddlie, C. (1998). *Mixed Methodology: Combining Qualitative and Quantitative Approaches*. (Applied Social Research Methods, No.46). Thousand Oaks, California: Sage Publications.
454. Tashakkori, A. and Teddlie, C. (2003). *Handbook of mixed methods in social and behavioral research*. Thousand Oaks, California: Sage Publications.
455. Tengilimoglu, D., Kisa, A. and Dziegielewski, S.F. (2001). 'Measurement of patient satisfaction in a public hospital in Ankara. *Health Services Management Research*, 14, pp.27-35.
456. Tengilimoglu, D., Kisa, A. and Dziegielewski, S.F. (1999). 'Consumer opinions with ancillary hospital services: improving service delivery in Turkish hospitals'. *J Med Systt*, 23(5) pp.363-75.
457. The General Secretariat (1995). *The National Strategy Providing Health for All and By All*, Sert, Libya (in Arabic).
458. The Health Insurance System Law No.20/2010 (2010). The General Public Congress, Sert, Libya (in Arabic).

459. The Health Law No. 106/1973 (1974). *The Official Journal*, Tripoli-Libya, (18.2.1974), 12(6) p.190 (in Arabic).
460. Thompson, A.G. and Sunol, R. (1995). 'Expectations as determinants of patient satisfaction: concepts, theory and evidence'. *Int J Qual Health Care*, 7, pp.127-41.
461. Toon, P.D. (1994). *What is good general practice? A philosophical study of the concept of high quality medical care*. London: Royal College of General Practitioners.
462. Travis P., Bennett S., Haines A., Pang T., Bhutta Z., Hyder A.A., Pielemeier N.R., Mills A., Evans T. (2004). 'Overcoming health-systems constraints to achieve the Millennium Development Goals'. *Lancet*, 364(9437) pp.900–906.
463. Tritter, J.Q. and Calnan, M. (2002). 'Cancer as a chronic illness? Reconsidering categorization and exploring experience', *European Journal of Cancer Care*, 11(3) pp.161-165.
464. UN (2000). *World population aging: 1950-2050*. New York: United Nations. [Online] http://www.un.org/esa/population/publications/worldageing19502050/ [Accessed on 28 October 2013].
465. UN, United Nations Millennium Development Goals website [Online] [Accessed on: 29 October 2013] http://www.un.org/millenniumgoals/bkgd.shtml.
466. UNDP (2005). *Programme on Governance in the Arab Region*, United Nations Development Programme (UNDPPOGAR): Libya Judiciary.
467. UNESCO (2005). *Global Education Digest, 2005, Comparing Education Statistics across the World*. Montreal, UNESCO Institute for Statistics.
468. Unger, J. and Criel, B. (1995). 'Principles of Health Infrastructure Planning in Less-Developed-Countries'. *International Journal of Health Planning and Management*, 10(2) pp.113-128.
469. Unger, J., De Paepe, P., and Green, A. (2003a). 'A code of best practice for disease control programmes to avoid damaging health care services in developing countries'. *International Journal of Health Planning and Management*, 18, pp.S27-S39.
470. Unger, J., De Paepe, P., Buitron, R., and Soors, W. (2008). 'Costa Rica: Achievements of a heterodox health policy'. *American Journal of Public Health*, 98(4) pp.636-643.
471. Unger, J., Marchal, B., and Green, A. (2003b). 'Quality standards for health care delivery and management in publicly oriented health services'. *International Journal of Health Planning and Management*, 18, pp.S79-S88.
472. UNICEF (1997a). *Situation of Women and Children in Libyan*, Tripoli, UNICEF.
473. UNICEF (1997b). *The State of the World's Children*, New York, Oxford University Press.
474. United Nations Statistics Division. 'Demographic Yearbook, 3. Population by sex, rate of population increase, surface area and density'. [Online] [Accessed

on: 24 October 2010] http://unstats.un.org/unsd/demographic/products/dyb/DYB2003/Table03.pdf.

475. UPA (2006). *The National Policy of Spatial Planning 2006-2030: Balanced and Sustainable Development*, the Urban Planning Authority, Tripoli, Libya, UN published (in Arabic).
476. Van Campen, C., Sixma, H., Friele, R.D., Kerssens, J.J. and Peters, L. (1995). 'Quality of care and patient satisfaction: a review of measuring instruments'. *Medical Care Research and Review*, 52(1) pp.109-133.
477. Van Damme W, Kober K, Kegels G (2008). 'Scaling-up antiretroviral treatment in Southern African countries with human resource shortage: How will health systems adapt?' *Soc Sci Med*, 66(10) pp.2108-2121.
478. van Olmen J., Criel B., Bhojani U., Marchal B., van Belle S., Chenge M.F., Hoerée T., Pirard M., Van Damme W., Kegels G. (2012a). 'The Health System Dynamics Framework: The introduction of an analytical model for health system analysis and its application to two case-studies'. *Health, Culture and Society*, 2(1) pp.1-12. Available online at: http://hcs.pitt.edu
479. van Olmen J., Criel B., Van Damme W., Marchal B., van Belle S., van Dormael M., Hoeree T., Pirard M., Kegels G., (2012b). *Analysing health systems dynamics: A framework*. 28th 2nd ed. [Studies in Health Services Organisation & Policy]. Series editors: Kegels G., De Brouwere V., Criel B. Antwerp, Belgium.
480. van Olmen J., Marchal B., Van Damme W., Kegels G. and Hill P. S., (2012c). 'Health systems frameworks in their political context: framing divergent agendas'. *BMC Public Health*, 12:774. Available online at: http://www.biomedcentral.com/1471-2458/12/774
481. van Olmen, J., Criel, B., Devadasan, N., Pariyo, G., De Vos, P., Van Damme, W., Van Dormael, M., Marchal, B., and Kegels, G. (2010a). 'Primary Health Care in the 21st century: primary care providers and people's empowerment'. *Tropical Medicine & International Health*, 15(4) pp.386-390
482. van Olmen, J., Criel, B., Van Damme, W., Marchal, B., Van Belle, S., Van Dormael, M., Hoeree, T., Pirard, M., and Kegels, G. (2010b). *Analysing Health Systems to Make Them Stronger*. [27]. Antwerpen, ITG Press. Studies in Health Services Organization & Policy. Van Lerberghe, W., Kegels, G., and De Brouwere, V.
483. Vittal, N. (2001). 'Corruption and the State'. *Harvard International Review*, 23(3) pp.20-25.
484. Vuori, H. (1991). 'Patient Satisfaction- Does it matter?' *Quality Assurance in Health Care*, 3(3-4) pp.183-189.
485. Wagner, C., Gulácsi, L., Takacs, E. and Outinen, M. (2006). 'The implementation of quality management systems in hospitals: a comparison between three countries'. *BMC Health Services Research*: 6:50.
486. Ware, J.E. Jr, Davies-Avery A, Stewart A.L. (1978). 'The measurement and meaning of patient satisfaction'. *Health Med Care Serv. Rev*. 1(1):1, pp.3-15.

487. Ware, JE Jr, Snyder MK, Wright WR and Davies AR. (1983). 'Defining and measuring patient satisfaction with medical care'. *Evaluation and Program Planning*, 6(3-4) pp.247-63.
488. WB (2005). *Socialist People's Libyan Arab Jamahiriya: Country Economic Report: 2004*, Washington, D. C., World Bank.
489. WB (2009). *Socialist People's Libyan Arab Jamahiriya: A Public Expenditure Review*, Report No.:45019-LY, Vol.II: Main Report, September 30, 2009, Washington D. C., World Bank.
490. WB (2012). *World Development Indicators 2012*, Washington, World Bank.
491. WB (2013). *The Political Economy of the Transition in Libya*, Working Paper, Washington, World Bank.
492. Webster's New World College Dictionary (2010). Cleveland, Ohio: Wiley Publishing.
493. Weiner, Bryan J. (2009). 'A theory of organizational readiness for change'. *Implementation Science*, 4, p.67. Available online at: http://www.implementationscience.com/content/4/1/67.
494. Weissbecker, I. and Fitzgerald, C. (2011). *IMC Libya Mental Health and psychosocial Support Assessment Report*, November, 2011. International Medical Corps (IMC). Available online at: http://internationalmedicalcorps.org/document.doc?id=239.
495. Wensing M. (co-ordinator) (2006). *EUROPEP 2006 Revised Europep instrument and user manual*. WOK centre for quality of care research, UMC St Radboud. Available online at: http://www.topaseurope.eu/files/Europep%202006rapport_0.pdf.
496. Wensing, M. and Elwyn, G. (2002). 'Research on patients' views in the evaluation and improvement of quality of care', *Quality and Safety in Health Care*, 11(2) pp.153-157.
497. Wensing, M. and Elwyn, G. (2003). 'Improving the quality of health care: Methods for incorporating patients' views in health care', *BMJ*, 326(7394) pp.877-879.
498. Wensing, M. and Richard, G. (1998). 'What can patients do to improve health care?', *Health Expectations*, 1(1) pp.37-49.
499. Wensing, M., Grol, R., and Smits, A. (1994). 'Quality judgements by patients on general practice care: A literature analysis', *Social Science& Medicine*, 38(1) pp.45-53.
500. Wensing, M., Jung, H.P., Mainz, J., Olesen, F., and Grol, R. (1998). 'A systematic review of the literature on patient priorities for general practice care. Part 1: Description of the research domain', *Social Science & Medicine*, 47(10) pp.1573- 1588.
501. Wenzel, Richard P. (ed.). (1992). *Assessing Quality Health Care: Perspectives for Clinicians*. Baltimore: Williams and Wilkins.
502. Westaway M.S., Rheeder P., Van Zyl D.G., and Seager J.R. (2003). 'Interpersonal and organizational dimensions of patient satisfaction: the

moderating effects of health status'. *International Journal for Quality in Health Care*, 15(4) pp.337-344.

503. Westaway, M.S., Viljoen, E. and Chabalala, H.P. (1998). 'Satisfaction with family planning services. Interpersonal and organisational dimensions'. *Curationis*, 21(4) pp.3-7.
504. Whittaker, Maxine (1999). 'Towards Strategic Quality Management of Health Care'. *Journal of Health Management*, 1(2) pp.215-248.
505. Whittaker, S., Burns, D., Doyle, V. and Lynam, P.F. (1998). 'Country reports. Introducing quality assurance to health service delivery –some approaches from South Africa, Ghana and Kenya'. *International Journal for Quality in Health Care*, Cape Town, South Africa, 10, pp.263-267.
506. WHO (1946). Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948. Available online at: http://www.who.int/about/definition/en/print.html/.
507. WHO (1973). *Organisational Study on Methods of Promoting the Development of Basic Health Services* (EB51/WP/1, 16 January 1973). Official records of the World Health Organisation, No. 206. Part I, Annex 11, pp.103-115.
508. WHO (1978). *Primary Health Care, report of the International Conference on Primary Health Care*, Alma-Ata, 6-12 September 1978, Geneva, World Health Organization.
509. WHO (1983). *Primary Health Care: The Chinese experience*. Geneva: World Health Organisation.
510. WHO (1985). *The principle of quality assurance Report on working group meeting*. Copenhagen: World Health Organisation.
511. WHO (1998a). *A glossary of technical terms on the economics and finance of health services*, Roberts, J.L. (ed.), Copenhagen: Regional Office for Europe, World Health Organization.
512. WHO (1998b). *Resolution WHA51.7: Health-for-all policy for the twenty-first century*. In: Fifty-first World Health Assembly. Geneva, 11–16 May 1998. Resolutions and decisions, annexes. Geneva, World Health Organization, (WHA51/1998/REC/1; available online at: http://www.who.int/governance/en.
513. WHO (1999). *The World Health Report 1999: Making a Difference*. Geneva: World Health Organisation
514. WHO (2000). *The World health report 2000: Health systems: improving performance*. Geneva: World Health Organization.
515. WHO (2003). *Quality and accreditation in health care services: a global review*. Geneva: World Health Organization.
516. WHO (2005). *Preparing a Health Care Workforce for the 21st Century: The Challenge of Chronic Conditions*. Geneva: World Health Organization.
517. WHO (2006a). *Quality of care: a process for making strategic choices in health systems* Geneva: World Health Organization.

518. WHO (2006b). *The World health report 2006: working together for health*. Geneva: World Health Organization.
519. WHO (2007a). *Country Cooperation Strategy for WHO and the Libyan Arab Jamahiriya 2005–2009*. Cairo, Egypt: Regional Office for the Eastern Mediterranean.
520. WHO (2007b). *Health Systems Profile- Libya, Health Systems Observatory*: World Health Organization, Cairo, Egypt: Eastern Mediterranean Regional.
521. WHO (2007c). *Everybody's Business. Strengthening Health Systems to Improve Health Outcomes. WHO's Framework for Action*. Geneva: World Health Organization.
522. WHO (2008a) *The World Health Report 2008: Primary Health Care - Now more than ever*. Geneva, World Health Organisation.
523. WHO (2008b). *Toolkit on monitoring health systems strengthening*. World Health Organization. 17-3-2009b.
524. WHO (2008c). *Closing the gap in a generation: Health equity through action on the social determinants of health*. Executive summary, Geneva: World Health Organization.
525. WHO (2009a). *Global Status Report on Road Safety: Time for Action*. Geneva: World Health Organization.
526. WHO (2009b). *Systems Thinking for Health Systems Strengthening*. Geneva: World Health Organization.
527. WHO (2010a). *Country Cooperation Strategy for WHO and Libya 2010–2015*, Cairo, Egypt: Regional Office for the Eastern Mediterranean.
528. WHO (2010b). *World Health Report 2010. Health systems financing: the path to universal coverage*. Geneva: World Health Organization.
529. WHO (2011a). *Health Systems Strengthening Glossary*. Available online at: http://www.who.int/healthsystems/Glossary_January2011.pdf.
530. WHO (2011b). *World Health Statistic*, World Health Organisation. Available online at: http://www.who.int/whosis/whostat/EN_WHS2011_Full.pdf.
531. WHO (2013a). *Libya: Post Conflict Health Systems Assessment, Part:1*. WHO Collaborating Centre and Imperial College London, Cairo, Egypt: Regional Office for the Eastern Mediterranean.
532. WHO (2013b). *Libya: System & Operation Diagnostic Tool, Technical Report, Part:2*. WHO Collaborating Centre and Imperial College London. Cairo, Egypt: Regional Office for the Eastern Mediterranean.
533. WHO and ISQHC (2000). *Quality Improvement Strategies in Health Care for Middle and Low-Income Countries*: Report of the 4th World Health Organisation & International Society for Quality in Health Care- Review Meeting: Dublin, Ireland, 11-12 September 2000.
534. Wilkinson, R. (1990). *Quality Assurance in Managed Care Organisations*. Chicago: Joint Commission for the Accreditation of Health Care Organisations.
535. Willems S. and Baumert K., (2003). *Institutional capacity and climate actions*, Organisation for Economic Co-operation and Development (OECD),

International Energy Agency, Paris, France. Available online at: http://www.oecd.org/env/cc/.

536. Williams S. and Calnan M. (1991). 'Convergence and divergence: assessing criteria of consumer satisfaction across general practice, dental and hospital care settings'. *Social Science and Medicine*, 33, pp.707-716.
537. Williams, B. (1994). 'Patient Satisfaction: A Valid Concept?' *Social Science & Medicine*, 38(4) pp.509-516.
538. Williams, B., Coyle, J., and Healy, D. (1998). 'The meaning of patient satisfaction: An explanation of high reported levels', *Social Science & Medicine*, 47(9) pp.1351-1359.
539. Williams, S., Weinman, J., Dale, J. and Newman, S. (1995). 'Patient expectations: what do primary care patients want from the GP and how far does meeting expectations affect patient satisfaction?' *Fam Pract*, 12(2) pp.193-201.
540. Willig, C. (2008). *Introducing qualitative research in psychology*. 2nd ed. Oxford: Oxford University Press.
541. Woodside A.G., Frey L.L., Daly R.T. (1989). 'Linking service quality, customer satisfaction, and behavioral intention'. *J Health Care Mark*, 9(4) pp.5-17.
542. Woodside A.G. and Shinn R. (1988). 'Consumer awareness and preference toward competing hospital services'. *J Health Care Mark* 8(1) pp.39-47.
543. World Economic Forum (2010). *The Global Competitiveness Report 2010–2011*, Klaus (ed.), Geneva Switzerland, Schwab.
544. World Population Prospects. (2012). UN, Department of Economic and Social affairs. Available online at: http://esa.un.org/wpp/unpp/p2k0data.asp.
545. World Report (2004). *Libya, Back in business*. [Online] [Accessed on: 19 February 2014] http://www.worldreport-ind.com/libya/index.htm .
546. Yahia, Hussin A.M. and Ismail, Amiruddin (2013). 'An Analysis of Traffic Accidents in Libya, and Some Mitigation Strategies', *Australian Journal of Basic and Applied Sciences*, 7(4) pp.285-290.
547. Yildiz, Z. and Erdogmus, S. (2004). 'Measuring patient satisfaction of the quality of health care: A study of hospitals in Turkey'. *Journal of Medical Systems*, 28, pp.581-589.
548. Yin, R.K. (2009) .*Case Study Research: Design and Methods*. 4th ed. California: Sage Publication Ltd.
549. Yousif, H.M., Goujon, A., and Lutz, W. (1996). *Future population and education trends in the countries of North Africa*. Laxenburg, Austria: International Institute for Applied Systems Analysis (Research Report RR-96-11).
550. Youssef, Soltan, (2006). *Total Quality Management Framework for Libyan Process and Manufacturing Industries*, PhD. School of Applied Sciences, Cranfield University.
551. Zanten, T.V.V. (1996). 'Report on a Consultative Meeting held in St. Johns, Newfoundland, in May 1995, in Conjunction with the 12th ISQua World Congress'. *International Journal for Quality in Health Care*, 8, pp.89-91.

552. Zemencuk, J.K., Hayward, R.A., Skarupski, K.A. and Katz, S.J. (1999). ‘Patients’ desires and expectations for medical care: a challenge to improving patient satisfaction’. *Am J Med Qual*, 14(1) pp.21-7.
553. Zineldin, M. (2006). ‘The quality of health care and patient satisfaction: an exploratory investigation of the 5Qs model at some Egyptian and Jordanian medical clinics’. *Int J Health Care Qual Assur Inc Leadersh Health Sery*, 19(1) pp.60-92.

Appendices

Appendix 1

English version of the questionnaire

Dear respondent:

I am a PhD research student in the Faculty of Health, Psychology and Social Care at Manchester Metropolitan University, in the UK, working in the field of quality of healthcare. I would like to request your valuable assistance in filling out the attached questionnaire, which is a part of my research.

The main aims of the research are to study the quality of health services in Benghazi hospitals, and to identify and explore issues around patient satisfaction. This will guide the development of a framework for high-quality health services, which will have positive implications for the future development of these services in Libya.

The observations, opinions and suggestions of the beneficiaries of health services are the basis and starting point for developing and improving services. The attached questionnaire is designed to assess the quality of health services provided in hospitals and specialised health centres in Benghazi City.

Would you kindly take some time to answer each of these questions? Please tick the responses which best match your perceptions as an in-patient in this hospital, or as a family member or friend of a patient here.

Please note that:

- Answers will be used for the purposes of this research only;
- Your name is not required, and the answers will be treated confidentially;
- You are free not to participate in answering the questionnaire;
- You have the right to withdraw from the study at any point up to the writing of the report; and
- Not participating in the questionnaire will not affect your right to access the health services you need.

Thank you in advance for your co-operation and your answers to these questions.

May I ask God to give you a speedy recovery, and good health.

The researcher:

Mohamed M. El-Fallah
Phone No.: ...……..
Email address: ...……..

Firstly: Personal Information:

1. Name and type of hospital or medical centre:
.....
.....

2. Date of birth:
.....

3. Gender:
☐ Male
☐ Female

4. Level of education:
.....

5. Occupation:
.....

6. Place of residence:
☐ Benghazi
☐ Outside Benghazi
.....

7. Marital status:
☐ Single
☐ Married
☐ Divorced
☐ Widowed

8. Average monthly income of your family:
☐ Less than: 200 LYD per month
☐ 200 LYD to less than 300 LYD per month
☐ 301 LYD to less than 400 LYD per month
☐ 401 LYD to less than 500 LYD per month
☐ 501 LYD to less than 600 LYD per month
☐ More than 600 LYD per month

Secondly: Personal Health Information:

1. Have you ever been to this or another hospital as a patient before?
☐ Yes
☐ No

2. If you answered Yes to the previous question, what kind of hospital was it?
☐ Public
☐ Private
☐ Both public and private
☐ Other.....
.....

3. Reason for coming to this hospital:
☐ Medical examination
☐ Emergency case
☐ Chronic Disease
☐ Operation
☐ Other.....
.....

4. How did you gain access to this hospital as an in-patient?
☐ A referral from public hospital or clinic
☐ A referral from private hospital or clinic
☐ Personal relationship with the staff
☐ E & A
☐ Other.....
.....

5. In the last 12 months, how many times have you gone for treatment to a hospital or clinic, public or private?
.....

6. What is the average time you usually spent waiting for your turn in a hospital or clinic, public or private?
☐ Public hospital or clinic: .....(hours/ minutes)
☐ Private hospital or clinic: .....(hours/ minutes)

7. After the admission decision, how much time did you wait to get to the hospital and get your room or bed?

.....

.....

8. Have you ever travelled for treatment abroad?

☐ Yes
☐ No

- If your answered Yes to the previous question, please answer the following questions:

9. How many times have you travelled for treatment abroad?

.....

.....

10. What was your reason for travelling abroad?

☐ Medical examination
☐ Emergency case
☐ Chronic Disease
☐ Operation
☐ Other.....

.....

.....

Thirdly: What is the degree of your acceptance of the following:

Please circle the number that you think best matches your perception of all the following statements from 0 to 10, where 0 means strongly disagree with the statement, and 10 means strongly agree with the statement.

Quality of services:	***Strongly disagree***	←									***Strongly agree***
The hospital is in a good location which is easy to access	0	1	2	3	4	5	6	7	8	9	10
Hospital premises are neat and clean	0	1	2	3	4	5	6	7	8	9	10
The hospital car park is well organised and has enough spaces	0	1	2	3	4	5	6	7	8	9	10
The atmosphere in the hospital is pleasing	0	1	2	3	4	5	6	7	8	9	10
Temperature and hospital smells are pleasant	0	1	2	3	4	5	6	7	8	9	10
The hospital has excellent modern equipment for diagnosing	0	1	2	3	4	5	6	7	8	9	10
Hospital rooms have comfortable beds and furniture	0	1	2	3	4	5	6	7	8	9	10
The lighting, colour and design of the hospital are patient-friendly	0	1	2	3	4	5	6	7	8	9	10
Toilets and bathrooms in the hospital are clean	0	1	2	3	4	5	6	7	8	9	10
Staff in the hospital are clean and neat in appearance	0	1	2	3	4	5	6	7	8	9	10
The hospital has an adequate number of doctors	0	1	2	3	4	5	6	7	8	9	10
The hospital has an adequate number of nurses	0	1	2	3	4	5	6	7	8	9	10

Quality of services:	***Strongly disagree***										***Strongly agree***
The staff at the hospital are concerned about my well-being	0	1	2	3	4	5	6	7	8	9	10
The staff at the hospital explain things in a way that I can understand	0	1	2	3	4	5	6	7	8	9	10
The hospital's staff treat me as an individual and not just a number	0	1	2	3	4	5	6	7	8	9	10
I find it easy to discuss things with the staff at the hospital	0	1	2	3	4	5	6	7	8	9	10
I feel the staff at the hospital understand my needs	0	1	2	3	4	5	6	7	8	9	10
The doctors appropriately discussed my previous condition	0	1	2	3	4	5	6	7	8	9	10
Doctors explain the purpose of examinations, procedures and tests	0	1	2	3	4	5	6	7	8	9	10
Doctors are willing to answer my questions	0	1	2	3	4	5	6	7	8	9	10
The doctors did as much as could be expected to help me get well	0	1	2	3	4	5	6	7	8	9	10
Nurses are willing to respond when needed	0	1	2	3	4	5	6	7	8	9	10
Nurses give individual attention to patients	0	1	2	3	4	5	6	7	8	9	10
The behaviour of the staff is excellent	0	1	2	3	4	5	6	7	8	9	10
I feel good about the interactions I have with the staff in the hospital	0	1	2	3	4	5	6	7	8	9	10
Patients spend an appropriate amount of time waiting in the hospital	0	1	2	3	4	5	6	7	8	9	10
The hospital runs a fair and equitable system that provides treatment for patients without favouritism	0	1	2	3	4	5	6	7	8	9	10
The hospital keeps waiting times to a minimum	0	1	2	3	4	5	6	7	8	9	10
Generally, appointments at the hospital run on time	0	1	2	3	4	5	6	7	8	9	10
The hospital insists on error-free records	0	1	2	3	4	5	6	7	8	9	10
The administration system at the hospital is excellent	0	1	2	3	4	5	6	7	8	9	10
The registration and discharge procedures at the hospital are efficient	0	1	2	3	4	5	6	7	8	9	10
Food provided to patients at the hospital is excellent	0	1	2	3	4	5	6	7	8	9	10
I believe my future health will improve as	0	1	2	3	4	5	6	7	8	9	10

Quality of services:	***Strongly disagree***	←									***Strongly agree***
a result of attending this hospital											
The staff at the hospital carry out their tasks competently	0	1	2	3	4	5	6	7	8	9	10
I believe the staff at the hospital are highly skilled at their jobs	0	1	2	3	4	5	6	7	8	9	10
Doctors provide correct treatment the first time	0	1	2	3	4	5	6	7	8	9	10
Doctors are competent in diagnosing the problem	0	1	2	3	4	5	6	7	8	9	10
The hospital provides patients with health education services beyond medical treatment	0	1	2	3	4	5	6	7	8	9	10
The hospital has fully equipped ambulances to take patients when needed	0	1	2	3	4	5	6	7	8	9	10
The hospital makes an excellent effort to ensure patients are protected from infection	0	1	2	3	4	5	6	7	8	9	10
I am impressed with the care provided at the hospital	0	1	2	3	4	5	6	7	8	9	10
The overall quality of the service provided by the hospital is excellent	0	1	2	3	4	5	6	7	8	9	10
I would highly recommend the hospital to my family, friends and other patients	0	1	2	3	4	5	6	7	8	9	10
I feel good about coming to this hospital for my treatment rather than somewhere else	0	1	2	3	4	5	6	7	8	9	10
I intend to continue having treatment, or any follow-up care I need, at this hospital	0	1	2	3	4	5	6	7	8	9	10
I intend to follow the medical advice given to me at the hospital	0	1	2	3	4	5	6	7	8	9	10
I believe the hospital offers a service that is superior in every way	0	1	2	3	4	5	6	7	8	9	10
Overall I am satisfied with the hospital and the service it provides	0	1	2	3	4	5	6	7	8	9	10
I feel satisfied that the results of my treatment are the best that can be achieved	0	1	2	3	4	5	6	7	8	9	10

*** Any other comments about services received from clinic / hospital:**

……
……
……
……
……

Thank you very much for your participation in this study.

Appendix 2

Interview Schedule

Verbal consent

I am ……. doing a PhD at Manchester Metropolitan University. The PhD topic is about the health system and the quality of healthcare in Libya, and the aim of the study is to develop a framework of quality initiatives to improve these. You have been selected as a key informant at……level. An understanding of your level of knowledge and experience of the health system and healthcare service is very important to me.

I would like to assure you that the information gathered will be handled confidentially and for the purpose of this research only. Participation is voluntary and informants will remain anonymous.

If you have any questions or queries, you can contact me in the following ways:

Researcher's Name:

Contact numbers:

Email:

Thank you in advance for your co-operation.

Interviewee's group: ..... **Interview** No: ( )

Location: ..... **Date and Time:** .....

Information about interviewee:

Gender: ☐ Male ☐ Female

Age group: (please tick a number as appropriate)

☐ 20-30 ☐ 31-40 ☐ 41-50

☐ 51-60 ☐ 61+

Interviewee's position: .....

Qualifications: .....

Description of role – major features, responsibilities etc.: .....

.....

The interview questions

1. The results of the quantitative study (the questionnaire) show a low level of patient satisfaction with the quality of healthcare services provided by hospitals in the city of Benghazi in general, and public hospitals in particular. Do you agree with this assessment? Why or why not?

2. Do you think the referral system works correctly in the health sector? Why or why not?

3. What do you think about the contribution of the private sector to providing health services? Does the private sector manage to bridge the gap in health services?

4. What drives people to the private sector to receive treatment, even though health services are available for free in the public sector?

5. In your opinion, what are the actual reasons that lead Libyan patients to travel for treatment abroad despite the existence of the public sector, which is free, and the private sector, which is assumed to be less costly?

6. What are the reasons for the waiting times for patients in the out-patient departments in the public sector?

7. What are the reasons for the waiting times for patients who need a bed or a surgical intervention in the public hospitals?

8. The final question is open-ended. It asks for any comments or suggestions that the interviewees might wish to express, which were not addressed in the earlier questions. In addition, it gives the interviewees the opportunity to expand on any of their previous responses, adding points as they deem necessary.

Appendix 3

The patients' responses on each quality statement

Quality of services:	Full sample (n = 550)		LNHS hospitals (n = 385)		LPHS hospitals (n = 165)	
	Sum.	Score	Sum.	Score	Sum.	Score
The hospital is in a good location which is easy to access	2939	53.44	1948	50.60	991	60.10
Hospital premises are neat and clean	3188	57.96	2054	53.35	1134	68.70
The hospital car park is well organised and has enough spaces	2549	46.34	1685	43.77	864	52.40
The atmosphere in the hospital is pleasing	2772	50.40	1776	46.13	996	60.40
Temperature and hospital smells are pleasant	3098	56.33	2028	52.67	1070	64.80
The hospital has excellent modern equipment for diagnosing	2753	50.05	1766	45.87	987	59.80
Hospital rooms have comfortable beds and furniture	2756	50.11	1713	44.49	1043	63.21
The lighting, colour and design of the hospital are patient-friendly	3075	55.91	1976	51.32	1099	66.60
Toilets and bathrooms in the hospital are clean	2461	44.74	1389	36.10	1072	65.00
Staff in the hospital are clean and neat in appearance	3278	59.60	2216	57.60	1062	64.40
The hospital has an adequate number of doctors	3095	56.27	2145	55.70	950	57.60
The hospital has an adequate number of nurses	3084	56.07	2082	54.10	1002	60.70
The staff at the hospital are concerned about my well-being	2942	53.49	2013	52.30	929	56.30
The staff at the hospital explain things in a way that I can understand	2800	50.91	1930	50.10	870	52.70
The hospital's staff treat me as an individual and not just a number	2759	50.16	1944	50.50	815	49.40
I find it easy to discuss things with the staff at the hospital	2618	47.60	1826	47.40	792	48.00
I feel the staff at the hospital understand my needs	2572	46.76	1786	46.40	786	47.60
The doctors appropriately	3117	56.67	2168	56.30	949	57.50

Quality of services:	Full sample (n = 550)		LNHS hospitals (n = 385)		LPHS hospitals (n = 165)	
	Sum.	Score	Sum.	Score	Sum.	Score
discussed my previous condition						
Doctors explain the purpose of examinations, procedures and tests	2998	54.51	2066	53.70	932	56.50
Doctors are willing to answer my questions	2826	51.38	2009	52.20	817	49.50
The doctors did as much as could be expected to help me get well	3188	57.96	2285	59.40	903	54.70
Nurses are willing to respond when needed	2673	48.60	1882	48.90	791	47.90
Nurses give individual attention to patients	2474	44.98	1725	44.80	749	45.40
The behaviour of the staff is excellent	2748	49.96	1939	50.40	809	49.00
I feel good about the interactions I have with the staff in the hospital	2755	50.09	1951	5070	804	4870
Patients spend an appropriate amount of time waiting in the hospital	2536	46.11	1800	46.80	736	44.60
The hospital runs a fair and equitable system that provides treatment for patients without favouritism	2320	42.18	1616	42.00	704	42.70
The hospital keeps waiting times to a minimum	2466	44.84	1720	44.70	746	45.20
Generally, appointments at the hospital run on time	2535	46.09	1808	47.00	727	44.10
The hospital insists on error-free records	2727	49.58	1906	49.50	821	49.80
The administration system at the hospital is excellent	2781	50.56	1939	50.40	842	51.00
The registration and discharge procedures at the hospital are efficient	3136	57.02	2126	55.20	1010	61.20
Food provided to patients at the hospital is excellent	2561	46.56	1561	40.50	1000	60.60
I believe my future health will improve as a result of attending this hospital	2755	50.01	1900	49.40	855	51.80
The staff at the hospital carry out their tasks competently	2867	52.13	2026	52.60	841	51.00
I believe the staff at the hospital are	2689	48.89	1906	49.50	783	47.50

Quality of services:	Full sample (n = 550)		LNHS hospitals (n = 385)		LPHS hospitals (n = 165)	
	Sum.	Score	Sum.	Score	Sum.	Score
highly skilled at their jobs						
Doctors provide correct treatment the first time	2675	48.64	1901	49.40	774	46.90
Doctors are competent in diagnosing the problem	3019	54.89	2188	56.80	831	50.40
The hospital provides patients with health education services beyond medical treatment	1790	32.54	1215	31.60	575	34.80
The hospital has fully equipped ambulances to take patients when needed	2535	46.09	1747	45.40	788	47.80
The hospital makes an excellent effort to ensure patients are protected from infection	2518	45.78	1743	45.30	775	47.00
I am impressed with the care provided at the hospital	2462	44.76	1669	43.40	793	48.10
The overall quality of the service provided by the hospital is excellent	2616	47.56	1780	46.20	836	50.70
I would highly recommend the hospital to my family, friends and other patients	2444	44.44	1667	43.30	777	47.10
I feel good about coming to this hospital for my treatment rather than somewhere else	2475	45.00	1662	43.20	813	49.30
I intend to continue having treatment, or any follow-up care I need, at this hospital	2705	49.18	1850	48.10	855	51.80
I intend to follow the medical advice given to me at the hospital	3560	64.72	2553	66.30	1007	61.00
I believe the hospital offers a service that is superior in every way	2693	48.96	1881	48.90	812	49.20
Overall I am satisfied with the hospital and the service it provides	2692	48.94	1871	48.60	821	49.80
I feel satisfied that the results of my treatment are the best that can be achieved	2875	52.27	2036	52.90	839	50.80
Total	**137950**	**50.16**	**94373**	**49.02**	**43577**	**52.82**

Appendix 4

The Mann-Whitney *U* and the Kruskal-Wallis tests results (from Chapter 6)

Differences by type of hospital (LNHS and Private sector)

Quality's dimensions	LNHS (n=385) Mean rank	Private sector (n=165) Mean rank	Mann-Whitney *U*	p-value
Patient's Safety	250.59	333.63	22170.5	<0.001
Tangibles	251.61	331.24	22566	<0.001
Atmosphere	253.35	327.19	23234	<0.001
Accessibility	259.59	312.63	25636.5	<0.001
Availability	261.96	307.10	26549	0.002
Expertise	282.17	259.94	29194.5	0.132
Perceived Service Quality	269.82	288.75	29575.5	0.200
Manner	279.50	266.16	30221	0.366
Responsiveness	279.16	266.96	30353	0.409
Services' Satisfaction	272.43	282.66	30581.5	0.489
Timeliness	278.08	269.47	30768	0.560
Management and Process Quality	273.51	280.14	30997.5	0.654
Empathy	274.41	278.04	31344	0.806
Communication	274.82	277.08	31501	0.878
Behavioural Intentions	274.92	276.85	31539.5	0.896
Overall Satisfaction	**269.63**	**289.21**	**29501**	**0.185**

Differences by Gender

Quality's dimensions	Male (n=253) Mean rank	Female (n=297) Mean rank	Mann-Whitney *U*	p-value
Atmosphere	285.91	266.63	34936	0.155
Patient's Safety	285.07	267.35	35150	0.192
Accessibility	267.98	281.91	35667.5	0.304
Expertise	269.00	281.04	35925	0.375
Manner	281.25	270.60	36116.5	0.433
Timeliness	281.09	270.74	36156.5	0.446
Empathy	279.77	271.86	36490	0.560
Tangibles	279.01	272.51	36683	0.633
Responsiveness	278.75	272.74	36749.5	0.658
Management and Process Quality	278.31	273.11	36859.5	0.701
Services' Satisfaction	273.60	277.11	37091	0.796
Behavioural Intentions	276.49	274.66	37320.5	0.893
Communication	274.97	275.95	37436.5	0.942
Availability	275.86	275.20	37480	0.961
Perceived Service Quality	275.84	275.21	37484.5	0.963
Overall Satisfaction	**277.33**	**273.94**	**37107.5**	**0.803**

Differences by Place of Residence

Quality's dimensions	Urban (n=415) Mean rank	Rural (n=135) Mean rank	Mann-Whitney *U*	p-value
Management and Process Quality	255.56	336.81	19735.5	<0.001
Expertise	256.27	334.61	20032	<0.001
Timeliness	257.06	332.20	20358	<0.001
Perceived Service Quality	257.35	331.30	20479.5	<0.001
Services' Satisfaction	258.07	329.08	20779	<0.001
Responsiveness	258.22	328.63	20840	<0.001
Communication	259.39	325.01	21328.5	<0.001
Manner	259.69	324.10	21452	<0.001
Behavioural Intentions	260.07	322.94	21608.5	<0.001
Availability	260.59	321.33	21826	<0.001
Empathy	260.87	320.47	21941	<0.001
Patient's Safety	263.45	312.53	23013.5	0.002
Tangibles	265.84	305.20	24002.5	0.012
Atmosphere	266.87	302.03	24431.5	0.025
Accessibility	279.12	264.39	26512	0.348
Overall Satisfaction	**258.34**	**328.26**	**20890**	<0.001

Differences due to experience of Treatment Abroad

Quality's dimensions	Yes (n=237) Mean rank	No (n=313) Mean rank	Mann-Whitney *U*	p-value
Expertise	254.41	291.47	32092.5	0.007
Tangibles	257.90	288.83	32918.5	0.024
Services' Satisfaction	258.30	288.52	33014	0.027
Management and Process Quality	258.74	288.19	33117.5	0.031
Availability	260.16	287.12	33455	0.049
Atmosphere	260.94	286.53	33639.5	0.061
Perceived services' quality	262.76	285.14	34072	0.102
Accessibility	264.67	283.70	34524.5	0.163
Behavioural Intentions	265.03	283.43	34609	0.178
Timeliness	265.04	283.42	34612.5	0.179
Communication	266.44	282.36	34943.5	0.244
Responsiveness	267.60	281.48	35218.5	0.310
Manner	272.33	277.90	36339.5	0.684
Patient's Safety	272.72	277.60	36432	0.721
Empathy	273.14	277.29	36531.5	0.762
Overall Satisfaction	**261.81**	**285.86**	**33846.5**	**0.079**

Association between patients' characteristics and quality's Satisfaction (Kruskal-Wallis test)

Kruskal-Wallis test	Total Quality	Availability	Tangibles	Atmosphere	Responsiveness	Empathy	Timeliness	Expertise	Perceived Service Quality	Service Satisfaction	Behavioural Intentions	Accessibility	Patient's Safety	Communication	Manner	Management
Age (dr=67)																
χ^2	84.15	62.07	91.33	97.12	77.61	79.55	75.29	94.67	79.83	73.72	80.39	77.77	86.31	87.45	90.84	85.62
p-value	0.077	0.648	0.026	0.009	0.177	0.140	0.228	0.015	0.135	0.268	0.126	0.173	0.056	0.047	0.028	0.062
Level of Education (dr=6)																
χ^2	14.31	12.75	8.53	7.80	15.19	16.53	16.35	14.47	13.37	14.76	15.76	11.41	6.30	16.63	20.92	12.61
p-value	0.026	0.047	0.202	0.253	0.019	0.011	0.012	0.025	0.037	0.022	0.015	0.076	0.390	0.011	0.002	0.050
Occupation (dr=8)																
χ^2	7.06	6.13	1.72	5.01	13.08	8.59	18.59	8.11	8.18	5.86	7.96	11.90	5.97	7.99	12.78	9.04
p-value	0.531	0.633	0.989	0.757	0.109	0.378	0.017	0.423	0.416	0.663	0.437	0.156	0.651	0.435	0.120	0.339
Marital Status (dr=3)																
χ^2	1.28	2.74	0.51	2.80	0.97	1.79	0.27	1.36	1.382	2.40	1.60	3.83	4.65	0.97	0.44	0.43
p-value	0.733	0.434	0.916	0.424	0.809	0.617	0.966	0.716	0.710	0.494	0.659	0.280	0.200	0.809	0.932	0.935
Average monthly Income of the family (dr=5)																
χ^2	7.40	7.26	8.44	11.25	7.26	7.44	12.19	9.20	7.88	6.43	6.32	18.80	12.69	6.61	6.70	3.73
p-value	0.193	0.202	0.134	0.047	0.202	0.190	0.032	0.101	0.163	0.266	0.277	0.002	0.026	0.251	0.244	0.589
The average witting time in LNHS (dr=7)																
χ^2	41.14	38.38	26.97	29.63	37.92	41.90	38.54	39.36	38.35	37.18	29.64	20.82	31.37	42.06	41.46	23.64
p-value	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.001
The average witting time in the private sector (dr=7)																
χ^2	28.62	26.88	22.37	21.21	26.55	23.73	39.58	21.53	31.23	28.50	20.71	7.74	24.50	26.46	25.34	20.72
p-value	0.000	0.000	0.002	0.003	0.000	0.001	0.000	0.003	0.000	0.000	0.004	0.356	0.001	0.001	0.001	0.004

Appendix 5

Arabic versions of the study instruments and documents

Appendix 5-1: Arabic version of the questionnaire

أخي الفاضل/ أختي الفاضلة:

السلام عليكم ورحمة الله وبركاته..... وبعد

نأمل مساعدتكم القيمة في الإجابة عن فقرات الاستبيان المرفق الذي يشكل جزءاً من دراسة التخصص الدقيق (الدكتوراه) في مجال جودة الخدمات الصحية التي يقوم بها الباحث بكلية الصحة بجامعة مانشستر مترو بوليتان بالمملكة المتحدة.

الهدف الرئيسي من الدراسة هو إقتراح طريقة أو أسلوب عمل لتطبيق الجودة لتطوير مستوى الخدمات الصحية المقدمة في ليبيا، وهى دراسة علمية متخصصة لها أبعاد وإنعكاسات إيجابية إن شاء الله على تطوير مستوى الخدمات الصحية في ليبيا، وضمان الإلتزام بإستمرارية هذا التطوير حسب الطريقة التي سيتم إقتراحها من خلال هذه الدراسة.

وكون ملاحظات وآراء ومقترحات المستفيدين من الخدمات الصحية هي الأساس ونقطة الانطلاق لتطوير وتحسين هذه الخدمات، **فإن الاستبيان المرفق وضع أساساً لتقييم جودة وفاعلية الخدمات الصحية المقدمة في المستشفيات والمرافق الصحية بمدينة بنغازى.**

عليه أرجو منكم منح هذا الاستبيان بعضاً من وقتكم للإجابة عن أسئلته من واقع ترددكم على هذا المرفق الصحي كمرضى أو مرافقين لمرضى، باختيار الإجابة التي ترونها مناسبة والتي تتفق مع تقييمكم للخدمات الصحية من واقع ملاحظاتكم ومشاهداتكم. ***علماً بأن:***

- ***الإجابات ستستخدم لأغراض البحث العلمي فقط.***
- ***الاسم غير مطلوب، والإجابات ستعامل بسرية تامة.***
- ***لكم كامل الحرية في عدم المشاركة في الإجابة عن الاستبيان.***
- ***عدم المشاركة في تعبئة الاستبيان لن يؤثر على حقكم في الحصول على الخدمات الصحية التي تحتاجون إليها.***

أشكركم سلفاً على حسن تعاونكم وإجابتكم عن هذه الأسئلة

وأسأل الله لكم الشفاء العاجل، وأن يمتعكم بالصحة والعافية

الباحث:

محمد الفلاح

* رقم الهاتف في ليبيا: .....

* عنوان البريد الإلكتروني:.....

أولاً: البيانات الأولية:

1. اسم المستشفى أو المركز الطبي:

.....

2. تاريخ الميلاد: .....

3. الجنس:

□ ذكر

□ أنثى

4. المستوى الدراسي: .....

5. المهنة أو الوظيفة: .....

(في حالة التقاعد: يرجى ذكر المهنة قبل التقاعد):

.....

6. مكان الإقامة الحالي:

□ داخل المدينة

□ خارج المدينة (يرجى ذكر المكان):.....

7. الحالة الاجتماعية:

□ أعزب

□ متزوج

□ مطلق

□ أرمل

8. متوسط الدخل الشهري للأسرة:

□ أقل من 200 دينار شهرياً

□ من 200 إلى 300 دينار شهرياً

□ من 301 إلى 400 دينار شهرياً

□ من 401 إلى 500 دينار شهرياً

□ من 501 إلى 600 دينار شهرياً

□ أكثر من 600 دينار شهرياً

ثانياً: البيانات الصحية:

1. هل سبق لك الدخول إلى هذا المستشفى أو مستشفى آخر؟

□ نعم

□ لا

2. إذا كانت إجابتك عن السؤال السابق (نعم)، فما هو نوع ذلك المستشفى؟

□ مستشفى أو مركز طبي عام

□ مستشفى أو مركز طبي خاص

□ إجابة أخرى (يرجى ذكرها): .....

.....

3. سبب الحضور إلى المستشفى:

□ كشف طبي

□ حالة طارئة

□ مرض مزمن

□ عملية جراحية

□ إجابة أخرى (يرجى ذكرها): .....

.....

4. طريقة الحضور إلى هذا المستشفى:

□ إحالة من عيادة أو مستشفى عام

□ إحالة من عيادة أو مستشفى خاص

□ علاقة شخصية مع أحد الأطباء أو العاملين

□ إجابة أخرى (يرجى ذكرها):.....

.....

5. كم مرة ذهبت فيها لتلقى العلاج في عيادة أو مستشفى خلال ال 12 شهر الماضية؟ .....

6. ما هو معدل الوقت الذي تقضيه عادةً في انتظار دورك في العيادات أو المستشفيات العامة والخاصة؟

- عيادات أو مستشفيات عامة: ..... دقيقة/ ساعة

- عيادات أو مستشفيات خاصة: ..... دقيقة/ ساعة

7. بعد أن تقرر دخولك إلى المستشفى ما هي الفترة التي قضيتها في الانتظار لكي تستطيع دخول المستشفى والحصول على سرير ؟

.....

8. هل سبق لك السفر للعلاج في الخارج؟

☐ نعم

☐ لا

- إذا كانت الإجابة عن السؤال السابق (نعم)، الرجاء الإجابة عما يلي:

9. كم مرة سبق لك السفر للعلاج في الخارج؟

.....

10. ما هو سبب سفرك للعلاج في الخارج؟

☐ كشف طبي

☐ حالة طارئة

☐ مرض مزمن

☐ عملية جراحية

☐ إجابة أخرى (يرجى ذكرها):

.....

ثالثاً: ما هي درجة موافقتك على الأتي:

الرجاء وضع دائرة على الرقم الذي تعتقد بأنه يناسب درجة موافقتك عن كل عبارة من العبارات التالية من (1) إلى (10)، علماً بأن رقم **(1)** يعنى عدم الموافقة الشديدة على العبارة **(لا أوافق بشدة)**، ورقم **(10)** تعنى الموافقة الشديدة **(أوافق بشدة)**.

جودة الخدمات	***لا أوافق بشدة***										***أوافق بشدة***
موقع المستشفى ملائم من حيث سهولة الوصول إليه	0	1	2	3	4	5	6	7	8	9	10
مبنى المستشفى نظيف ومنظم	0	1	2	3	4	5	6	7	8	9	10
مواقف السيارات كافية ومنظمة	0	1	2	3	4	5	6	7	8	9	10
جو المستشفى ممتعاً ويشعر المريض بالراحة	0	1	2	3	4	5	6	7	8	9	10
حرارة المستشفى ورائحتها ممتازة	0	1	2	3	4	5	6	7	8	9	10
توجد بالمستشفى أجهزة حديثة وممتازة للكشف على المرضى	0	1	2	3	4	5	6	7	8	9	10
غرف المستشفى مزودة بأثاث وأسرة مناسبة	0	1	2	3	4	5	6	7	8	9	10
لون وتصميم وإضاءة المستشفى مريح ومناسب للمرضى	0	1	2	3	4	5	6	7	8	9	10
المراحيض والحمامات في المستشفى نظيفة	0	1	2	3	4	5	6	7	8	9	10
العاملون في المستشفى منظمون ومظهرهم نظيف	0	1	2	3	4	5	6	7	8	9	10
المستشفى بها عدد كاف من الأطباء	0	1	2	3	4	5	6	7	8	9	10

جودة الخدمات	لا أوافق بشدة										أوافق بشدة
المستشفى بها عدد كاف من الممرضات	0	1	2	3	4	5	6	7	8	9	10
العاملون في المستشفى مهتمون بحالتي الصحية	0	1	2	3	4	5	6	7	8	9	10
العاملون في المستشفى يشرحون لي بالطريقة التي استطيع فهمها	0	1	2	3	4	5	6	7	8	9	10
العاملون في المستشفى يتعاملون معي على أساس أنني شخص وليس مجرد رقم	0	1	2	3	4	5	6	7	8	9	10
من السهل على مناقشة ما يهمني مع العاملين في المستشفى	0	1	2	3	4	5	6	7	8	9	10
أشعر بأن العاملين في المستشفى يتفهمون احتياجاتي	0	1	2	3	4	5	6	7	8	9	10
ناقش الطبيب حالتي السابقة بشكل مناسب	0	1	2	3	4	5	6	7	8	9	10
الأطباء يشرحون سبب الكشف والإجراءات والتحاليل التي يقومون بها	0	1	2	3	4	5	6	7	8	9	10
الأطباء في المستشفى سعداء بالإجابة عن أسئلتي	0	1	2	3	4	5	6	7	8	9	10
الأطباء قاموا بكل ما هو متوقع منهم لمساعدتي على التحسن	0	1	2	3	4	5	6	7	8	9	10
الممرضات في المستشفى سعيدات للاستجابة عند الحاجة	0	1	2	3	4	5	6	7	8	9	10
تهتم الممرضات بالمرضى اهتماماً شخصياً	0	1	2	3	4	5	6	7	8	9	10
سلوك العاملون في المستشفى مع المرضى ممتاز	0	1	2	3	4	5	6	7	8	9	10
أشعر بارتياح للعلاقة والتعامل مع العاملين في المستشفى	0	1	2	3	4	5	6	7	8	9	10
الوقت الذي يقضيه المريض في انتظار دورة مناسب	0	1	2	3	4	5	6	7	8	9	10
يتم الإلتزام بالدور في الحصول على الخدمات الصحية في المستشفى بدون واسطة	0	1	2	3	4	5	6	7	8	9	10
المستشفى تقلل فترة الانتظار إلى الحد الأدنى	0	1	2	3	4	5	6	7	8	9	10
بشكل عام المواعيد في المستشفى مضبوطة في الوقت تماماً	0	1	2	3	4	5	6	7	8	9	10
المستشفى تحرص على خلو سجلاتها وملفات المرضى من الأخطاء	0	1	2	3	4	5	6	7	8	9	10
النظام الإداري في المستشفى ممتاز	0	1	2	3	4	5	6	7	8	9	10
إجراءات التسجيل والخروج في المستشفى دقيقة ومنظمة	0	1	2	3	4	5	6	7	8	9	10
الوجبات الغذائية التي تقدم للمرضى في هذا المستشفى ممتازة	0	1	2	3	4	5	6	7	8	9	10
أعتقد بأن حالتي الصحية سوف تتحسن مستقبلا كنتيجة لحضوري لهذا المستشفى	0	1	2	3	4	5	6	7	8	9	10
العاملون بالمستشفى يؤدون أعمالهم بكفاءة	0	1	2	3	4	5	6	7	8	9	10

جودة الخدمات	لا أوافق بشدة										أوافق بشدة
أعتقد بأن العاملين في المستشفى لديهم مهارات عاليةً تؤهلهم لأداء أعمالهم بكفاءة	0	1	2	3	4	5	6	7	8	9	10
الأطباء يقدمون العلاج الصحيح من المرة الأولى	0	1	2	3	4	5	6	7	8	9	10
الأطباء أكفاء وقادرين على تشخيص المرض	0	1	2	3	4	5	6	7	8	9	10
المستشفى يزود المرضى ببرامج التثقيف الصحي بالإضافة إلى العلاج الطبي	0	1	2	3	4	5	6	7	8	9	10
تتوفر بالمستشفى سيارات إسعاف مجهزة لنقل المرضى	0	1	2	3	4	5	6	7	8	9	10
يقوم المستشفى بوسائل متعددة لضمان عدم نقل العدوى للمرضى	0	1	2	3	4	5	6	7	8	9	10
أنا معجب بمستوى الخدمات المقدمة في هذا المستشفى	0	1	2	3	4	5	6	7	8	9	10
جودة الخدمات الصحية في هذا المستشفى ممتازة بشكل عام	0	1	2	3	4	5	6	7	8	9	10
سوف أنصح أقاربي وأصدقائي والمرضى الآخرين باختيار هذا المستشفى	0	1	2	3	4	5	6	7	8	9	10
أنا سعيد لإختيارى هذا المستشفى للعلاج بدلا من مكان آخر	0	1	2	3	4	5	6	7	8	9	10
أنا أنوى العودة إلى هذا المستشفى إذا كان لدى مراجعة أو إذا احتجت للعلاج مرة أخرى	0	1	2	3	4	5	6	7	8	9	10
أنا أنوى إتباع النصائح والإرشادات الطبية التي أعطيت لي	0	1	2	3	4	5	6	7	8	9	10
أنا أعتقد بأن هذا المستشفى يقدم الخدمات الأفضل في كل المجالات	0	1	2	3	4	5	6	7	8	9	10
بشكل عام أنا راضٍ عن المستشفى والخدمات التي يقدمها	0	1	2	3	4	5	6	7	8	9	10
أشعر برضا لان نتيجة علاجي هي أفضل ما يمكن الحصول عليه	0	1	2	3	4	5	6	7	8	9	10

أية ملاحظات أخرى ترى إضافتها: (يمكنك استخدام صفحات الإستبيان من الخلف في حالة الحاجة إليها)

.....

.....

.....

.....

انتهى الاستبيان،أشكركم وأتمنى لكم الشفاء العاجل..

Appendix 5-2: Arabic version of the Interview Schedule

استمارة اسئلة المقابلة مع ذوي العلاقة بمجال الخدمات الصحية

موافقة شفهية

أنا .....، آمل مساعدتكم القيمة في الإجابة عن أسئلة هذه المقابلة التي تشكل جزءاً من دراسة الدكتوراه في مجال النظام الصحي وجودة الخدمات الصحية التي يقوم بها الباحث بكلية الصحة بجامعة مانشستر مترو بوليتان بالمملكة المتحدة.

الهدف من الدراسة هو تطوير اطار مفاهيمي للنظام الصحي لضمان جودة الخدمات الصحية المقدمة في ليبيا، وهى دراسة علمية متخصصة لها أبعاد وإنعكاسات إيجابية إن شاء الله، وسوف تساعد المسؤولين ومتخذي القرار في قطاع الصحة في وضع وتنفيذ السياسات والاستراتيجيات الملائمة التي تتميز بالفاعلية والكفاءة والاستمرارية.

لقد تم اختيارك كأحد المقابلين باعتبارك .....، فهم ومعرفة رأيك، تجربتك وخبرتك بالنظام الصحي وخدمات الرعاية الصحية مهم جدا بالنسبة لي.

وأود أن أؤكد لكم أن المعلومات التي تجمع سيتم التعامل معها بسرية تامة ولأغراض هذا البحث فقط. وأن المشاركة طوعية وسيظل مقدم المعلومات غير معروف للآخرين.

إذا كان لديك أي أسئلة أو استفسارات، يمكنك الاتصال بي من خلال الطرق التالية:

اسم الباحث:

أرقام الهواتف :

البريد الإلكتروني :

شكراً لكم مقدماً لتعاونكم ومشاركتكم القيمة في هذه الدراسة

الفئة:..... **مقابلة رقم:** ( )

المكان: ..... **التاريخ والوقت:** .....

المعلومات الأولية عن المستجيب:

الجنس: □ **ذكر** □ **انثى**

الفئة العمرية (يرجى وضع علامة على الفئة المناسبة):

□ من 20 إلى 30 عام □ من 31 إلى 40 عام □ من 41 إلى 50 عام

□ من 51 إلى 60 عام □ 61 عام أو أكثر

العمل الحالي: .....

المؤهل / المؤهلات العلمية: .....

وصف للدور الحالي/أهم الأعمال/ المسؤوليات السابقة:.....

.....

أسئلة المقابلة

1. رضا المرضى عن جودة الخدمات الصحية:

- بينت نتائج الدراسة الكمية (الاستبيان) إنخفاض مستوى رضا المرضى عن جودة الخدمات الصحية المقدمة لهم بمستشفيات مدينة بنغازي بشكل عام، وفي المستشفيات العامة بشكل خاص. هل تتفقون مع هذا التقييم؟ ولماذا؟

2. نظام الإحالة:

- هل ترى بأن نظام الإحالة يعمل بشكل صحيح في قطاع الصحة؟ وما هي في رأيك أسباب ذلك؟

3. القطاع الخاص:

- ما رأيك في إسهام القطاع الخاص في تقديم الخدمات الصحية؟ وهل نجح في سد الفجوة في الخدمات الصحية؟

- ما الذي يدفع المواطنين إلى الاتجاه للقطاع الخاص لتلقي العلاج، رغم أن الخدمات الصحية متوفرة مجانا في القطاع العام ؟

4. العلاج في الخارج:

- في رأيك، ما هي الأسباب التي أدت إلى سفر المرضى الليبيين للعلاج في الخارج، على الرغم من وجود القطاع العام المجاني، والقطاع الخاص، الذي يفترض أن يكون أقل تكلفة؟

5. انتظار المرضى: **ما هي - في رأيك – أسباب:**

- انتظار المرضى في العيادات الخارجية في مستشفيات القطاع العام؟

- انتظار المرضى الذين يحتاجون إلى سرير أو إجراء عملية جراحية في مستشفيات القطاع العام؟

6. التعليقات أو الاقتراحات الإضافية:

السؤال الأخير، سؤال مفتوح، يسأل عن أي تعليقات أو اقتراحات، التي قد يرغب المستجيبين للتعبير عنها، والتي لم يتم تتناولها في الأسئلة السابقة. بالإضافة إلى إنه يعطي الفرصة للمستجيبين للتوسع في أي من اجاباتهم السابقة، بإضافة ما قد يرونه ضرورياً.

Appendix 5-3

The Health Information Centre ([HIC] in the MOH) circulated letter to provide the necessary assistance and co-operate with the researcher.

لاديمقراطية بدون
مؤتمرات شعبية

الجماهيرية العربية الليبية الشعبية الاشتراكية العظمى
اللجنة الشعبية العامة للصحة والبيئة
مركز المعلومات والتوثيق

التاريخ 7/8/14 و.ر 137
الموافق 7/8/14 م 200

الرقم الإشاري 09/179

الأخوة / مدراء المستشفيات والمراكز الطبية بشعبية بنغازي .

بعد التحية

نأمل تعاونكم بشأن تمكين الأخ / محمد محمد الفلاح ، من إتمام الدراسة التي يتولى القيام بها كجزء من متطلبات دراسته لدرجة الدكتوراه بجامعة مانشستر مترو بوليتان ببريطانيا ، مع العلم بأن الدراسة تتطلب إجابة المنتفعين بالخدمات الصحية على أسئلة الإستبيان المعد من الباحث بالخصوص .

عليه نأمل تعاونكم مع الباحث في إتمام الدراسة المذكورة

شكرين لكم حسن تعاونكم

والسلام عليكم ورحمة الله وبركاته

محمد إبراهيم صالح
مدير عام مركز المعلومات والتوثيق

/ أمين اللجنة الشعبية العامة للصحة والبيئة .
/ الكاتب العام .
/ الملف الدوري العام .
م/ محمد / ناجية

الهاتف : Tel : 00218 21 481 0674 البريد المصور : Fax: 00218 21 481 0669 الموقع : Web site : www.health.gov.ly البريد الألكتروني : E.mail :malomat@ health.gov.ly