An Assessment of Quality Management Systems and Practices in General Hospitals in Kingdom of Saudi Arabia (KSA): Towards Initiating a Holistic Framework

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An Assessment of Quality Management Systems and Practices in General Hospitals in Kingdom of Saudi Arabia (KSA): Towards Initiating a Holistic Framework

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Table of (Contents
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List of Figures
List of Tables viii
List of Abbreviationsxii
Abstract
Dedication
Declaration
Acknowledgements
Chapter One: Introduction
1.1. Overview
1.2. Statement of the problem6
1.3. Problem background8
1.4. Characteristics of the healthcare system and general hospitals in KSA9
1.5. The effort to develop QMS in Saudi's healthcare system
1.6. Research aim, objectives, and questions15
1.6.1 Research aim
1.6.2. Research questions
1.6.3. Research objectives
1.7. Personal motivations driving this research15
1.8. Contributions to knowledge16
1.9. Importance of the research18
1.10. Gap in the knowledge18
1.11. Structure of the thesis
1.12 Chapter summary
Chapter Two: Literature Review
2.1. Introduction
2.2. Chronological development of the concept of quality and the shift in focus
2.3. Complexity of the concept of quality management systems and practices
2.4. Measuring quality of services in the healthcare industry

2.4.1. Correlation between TQM and QMS to manage quality of healthcare services	36
2.4.2. Quality of service models and assessment of QMS in general hospitals	40
2.5. The dilemma of successful implementation of QMS and its practices in general	
hospitals	53
2.6. Challenges faced by general hospitals to perform better QMS practices	59
2.7. Requirements for successful implementation of QMS in general hospitals	62
2.7.1. Role of patients in enhancing QMS and its practices in general hospitals	66
2.7.2. Role of nurses in implementing QMS in general hospitals	67
2.8. Quality management systems and practices in the Saudi context	69
2.8.1. Challenges of and barriers to implementation of QMS in Saudi general hospitals	70
2.8.2. Overview of CBAHI in KSA general hospitals	76
2.9. Chapter summary	
Chapter Three: Methodology	
3.1. Introduction	79
3.2. Research models	79
3.3. First Layer: Philosophical stance	83
3.3.1. Pragmatism	
3.4. Second Layer: Paradigms	85
3.5. Third Layer: Research approach	86
3.6. Fourth layer: Research design	88
3.6.1. Mixed Method	
3.7. Fifth layer: Time horizon	89
3.8. Sixth Layer: Ethical considerations	90
3.9. Seventh Layer: Risk Management for research project	92
3.10. Eighth layer: Data collection and analysis	92
3.10.1 Survey criteria	93
3.10.2. Use of semi-structured interviews	94
3.10.3. Use of pilot study as a method of validity	95
3.10.4. Interview data collection: Interview guide	97
3.10.5. Use of questionnaire in this research	98
3.10.6. Analysing quantitative data	100
3.10.7. Internal reliability: Cronbach's alpha	101
3.10.8. Computing main variables and data for nurses	102
3.10.9. Computing main variables and data for patients	103

3.10.10. Analysing qualitative data: Using thematic analysis	
3.11. Ninth Layer: Data presentation	
3.12. Quality of the research	107
3.12.1. Credibility	
3.12.2. The dilemma of quality in the research	
3.12.3. Improving the quality of the research	
3.13. Chapter summary	
Chapter Four: Results of the Quantitative Analysis	111
4.1. Introduction	
4.2. Nurses' survey	
4.2.1. Demographic details	
4.2.2. Descriptive statistics: Nurses' perceptions and experiences in in Saudi general hospitals	
4.2.3. Inferential statistics of nurses' perceptions (QMS): Demographic differences	
4.3. Patients' survey	
4.3.1. Demographic characteristics	
4.3.2. Descriptive statistics of patient satisfaction	
4.3.3. Inferential statistics of patient questionnaires: Demographic differences	
4.4. Chapter Summary	
Chapter Five: Qualitative Findings	145
5.1. Introduction	
5.2. Global theme 1: Role of hospital management in assuring quality of care services	147
5.2.1. Organising theme 1: Building an organisational culture that supports quality improvement	
5.3. Global theme 2: Impact of governmental agency in controlling the quality of	
healthcare services	
5.3.1. Organising theme 1: Role of CBAHI in controlling quality in general hospitals	
5.4. Global theme 3: Building a culture of patient safety	
5.4.1. Organising theme 1: Challenges and barriers to building a patient safety culture	
5.4.2. Organising theme 2: Requirements to embed a culture of quality and patient safety	
5.5. Chapter summary	
Chapter Six: Discussion	173
6.1. Introduction	
6.2. Question One: What are the perceptions of patients, nurses, and heads of	
department regarding the implementation of QMS and its practices in KSA general	
hospitals?	

6.2.1. Developing equality and quality policy	174
6.2.2. CBAHI's role and involvement in assessing and improving QMS practices	176
6.2.3. Nurses' and middle managers' engagement in QMS implementation	178
6.3. Question Two: What challenges are identified as hindrances to the successful	
implementation of QMS in KSA general hospitals?	181
6.3.1. Lack of understanding of the concept of quality	
6.3.2. Power relations within hospital organisational culture	
6.3.3. Style of management	
6.3.4. Lack of up-to-date training	
6.3.5. Lack of reward and recognition system	
6.4. Question Three: What changes do general hospital management teams need to	
consider supporting the successful implementation of QMS and its practices?	
6.4.1. Change the culture from blaming to learning	187
6.3.2. Use of technological tools to support change and QMS implementation	190
6.3.3. Centralising patient safety	191
6.5. Proposition of the QMS strategic framework	192
6.5.1. QMS strategic framework	192
6.6. Limitations of the research	196
	100
6.7. Chapter summary	
6.7. Chapter summary Chapter Seven: Summary, Conclusions and Recommendations	
	199
Chapter Seven: Summary, Conclusions and Recommendations	<i>199</i> 199
Chapter Seven: Summary, Conclusions and Recommendations	<i>199</i> 199
Chapter Seven: Summary, Conclusions and Recommendations 7.1. Introduction 7.2. Review of the research objectives	199 199 199
Chapter Seven: Summary, Conclusions and Recommendations 7.1. Introduction 7.2. Review of the research objectives 7.3. Recommendations for decision makers in MoH and directorship in general	<i>199</i> 199 199
 Chapter Seven: Summary, Conclusions and Recommendations	
 Chapter Seven: Summary, Conclusions and Recommendations. 7.1. Introduction	
 Chapter Seven: Summary, Conclusions and Recommendations. 7.1. Introduction 7.2. Review of the research objectives	
 Chapter Seven: Summary, Conclusions and Recommendations. 7.1. Introduction	
 Chapter Seven: Summary, Conclusions and Recommendations. 7.1. Introduction	
 Chapter Seven: Summary, Conclusions and Recommendations	
Chapter Seven: Summary, Conclusions and Recommendations. 7.1. Introduction 7.2. Review of the research objectives 7.3. Recommendations for decision makers in MoH and directorship in general hospitals 7.3.1. Recommendations for policymakers 7.3.2. Recommendations for the level of practices 7.3.3. Suggestions for further research 7.4.1. Strengths and contributions of the research 7.4.2. Contributions to the knowledge	
Chapter Seven: Summary, Conclusions and Recommendations. 7.1. Introduction 7.2. Review of the research objectives 7.3. Recommendations for decision makers in MoH and directorship in general hospitals 7.3.1. Recommendations for policymakers 7.3.2. Recommendations for the level of practices 7.3.3. Suggestions for further research 7.4. Strengths and contributions of the research 7.4.1. Strengths 7.4.2. Contributions to the knowledge 7.5. Researcher's reflection on the findings and the research	

Appendix 1: MMU Ethical Approval	
Appendix 2: Permission from the Saudi authorities	
Appendix 3: English and Arabic versions of consent forms: Questionnaires and	
interviews	
Appendix 4: Nurses' questionnaire in Arabic and English	
Appendix 5: Patients' questionnaire	
Any further comments:	
Appendix 6: Interview protocol	
Appendix 7: Evidence of SPSS analysis	
Appendix 8: Testing the distribution of results for main variables of nurses' and	
patients' surveys	
Appendix 9: Searching for codes	
Appendix 10: Searching for themes	

List of Figures

Figure 1 .Saudi healthcare system (Adapted from Almalki et al., 2011, modified by the researcher)
Figure 2. Thesis Structure
Figure 3.Chronological development of the concept of quality and the shift in the focus
Figure 4: Combination between the EFQM model and ISO 9001. Adapted from Yang (2003) 37
Figure 5.TQM conceptual framework Adapted from Hafeez et al. (2006)
Figure 6.Retail Service Quality Scale (RSQS) Model Adapted from Dabholkar et al. (1996) 43
Figure 7.Ten major practices of quality management systems
Figure 8. The ten principles of QMS in general hospitals, as amended by the researcher
Figure 9.Discourse cloud of challenges that prevent or hinder the delivery of effective, high quality care Adapted from Hignett et al. (2018)
Figure 10.Swiss Cheese model of challenges faced by healthcare sector Adapted from Hignett et al. (2018)
Figure 11:Management hierarchies in service industries Adapted from Hignett et al. (2003) 64
Figure 12.CBAHI's chronological development
Figure 13. The Research Onion Source: Saunders et al. (2017)
Figure 14.Research Onion: Modified by the researcher Adapted from Saunders et al. (2017) 81
Figure 15.The nested model
Figure 16. Nurses' distribution by age 113
Figure 17. Nurses' sample distribution by education level
Figure 18. Nurses' mean perceptions overall
Figure 19. Patients' distribution according to age

Figure 20. Patients' distribution according to gender	128
Figure 21. Patients' distribution according to nationality	128
Figure 22. Patients' distribution according to city of residence	129
Figure 23. Patients' overall satisfaction with services provided in Saudi general hospitals	143
Figure 24. The Set of Qualitative Themes	146
Figure 25. Quality Management Strategic Framework	194

List of Tables

Table 1.Chronological snapshots of key tipping points of notable quality contributors (Sheingold
& Hahn, 2014) (see page 13)
Table 2.Five SERVQUAL dimensions (Finn & Lamb, 1991; Parasuraman et al., 1988)
Table 3:Selected frameworks identified in the literature relating to QMS practices 68
Table 4.Internal reliability of nurses' and patients' questionnaires and underlying dimensions 102
Table 5. Six steps of thematic analysis (adapted from Braun & Clarke, 2006) 104
Table 6. Demographic distribution of hospitals involved in the survey 112
Table 7.Nurse participants' distribution by gender
Table 8.Sample distribution of nurses' position 114
Table 9. Percentages of average scores of nurses' perceptions of the quality of healthcare policies and management practices 116
Table 10.Nurses' perceptions expressed as percentage frequencies and average scores 118
Table 11.Nurses' perceptions expressed by means and percentages on extensive specific assets 119
Table 12. Nurse participants' perceptions expressed by means and percentages of reward and recognition systems. 120
Table 13. Descriptive statistics of QMPs across hospitals
Table 14. Descriptive statistics (mean and standard deviation) in perceptions of QMPs based on education level
Table 15. Descriptive statistics of results in QMPs across level of experience in nursing 124
Table 16. Participants' satisfaction levels regarding 'knowledge and providing information' provided in Saudi general hospitals
Table 17. Patients' satisfaction with clinical skills in Saudi general hospitals 131
Table 18. Patients' responses, in percentages, to their level of satisfaction with care provision in Saudi general hospitals

Table 19. Patients' responses, in percentage, regarding their rating of communication between
staff and patients in Saudi general hospitals
Table 20.Patients' responses, in percentages, to their satisfaction with decision making process in
Saudi general hospitals
Table 21. Patients' responses, in percentages, regarding their satisfaction with family involvement
in Saudi general hospitals
Table 22. Patients' responses, in percentages, regarding their satisfaction with professional
behaviour in Saudi general hospitals 137
Table 23. Patients' responses, in percentages, regarding their satisfaction with the global rating 138
Table 24. Descriptive statistics of results across age groups 139
Table 25. Results of t-test to see whether patients' responses differ according to gender
Table 26.Results of t-test to see whether patients' responses differ according to nationality 141
Table 27. Results of t-test to see whether patients' responses differ according to residency location

In the name of Allah The Compassionate The Merciful { ربم اوزىمنيى ان المكر يعمَتِكَ التي انعَمِتَ عَلَى وعَلَى وَالدِي وَان اعمَل حَالِدا تَرَ حَالُهُ وَاحْلِع لِي فِنِي خُرِيتِي إنِي تُبِتَ إليكَ وَإِنِي مِنِ المُسْلِمِين}

"My Lord, grant me that I should be grateful for Your favour which You hath bestowed on me and on my parents, and that I should do good such as You are pleased with and do good to me in respect of my offspring, surely I turn to You,

and I am of those who submit."

(The Holy Quran, 46: 15)

"There was the Door to which I found no Key; There was the Veil through which I might not see: Some little talk a while of Me and Thee There was — and then no more of Thee and Me."

— Omar Khayyam

(18 May 1048 – 4 December 1131) who was a Persian mathematician,

astronomer and poet

List of Abbreviations

Abbreviation	Meaning
AHRQ	The Agency for Healthcare Research and Quality
ANOVA	Analysis of Variance
СВАНІ	The Central Board of Accreditations for Health Care Institutions
EFQM	European Foundation for Quality
GCC	Gulf Cooperation Council
GDP	Gross domestic product
GDQA	The General Directorate of Quality Assurance
HoD	Heads of Department
IOM	International Organisation for Migration
ISO	International Organisation for Standardisation
ISQua	International Society for Quality in Health Care
IV	Independent variable
JCI	Joint Commission International
MBNQA	Malcolm Baldrige National Quality Award
МоН	Ministry of Health

NPCS	National Pharmacist Competency System
NHS	National Health Service
OECD	Organization for Economic Cooperation and Development
OVR	Ocerens Version Reporting
РНС	Primary Health Centre
QM	Quality Management
QMS	Quality Management Systems
SGH	Saudi General Hospital
SPSS	Statistical Package for the Social Sciences
ТQМ	Total Quality Management
WHO	World Health Organisation

Abstract

There have been a few attempts to address different understandings of quality management systems in healthcare organisations. Nevertheless, there are still misconceptions about how the matter of quality management systems can be linked to practice to ensure the establishment of a holistic quality system. In general hospitals, although the quality related practices are universally rooted on the international standardisations such as ISO 9000 and ISO 9001, it is still problematic that standardisations generated by quality control agencies especially in economically developing countries such as Saudi Arabia did not appear to allow better practices to control the service quality in general hospitals.

This research is following the pragmatism philosophy. It aims to: assesses and examines the perspectives and opinions of key stakeholders – namely nurses, patients, and middle managers (heads of department) – with the goal of initiating a framework to improve the practices of quality management systems in general hospitals in KSA. The research went into two phases: at the first phase: 252 questionnaires were distributed to nurses, and 237 questionnaires were distributed to patients. While, in the second phase, seven semi-structured interviews were conducted with heads of department in one of the general hospitals under investigation.

The findings of the patients' questionnaire demonstrated that patients were satisfied with the information provided to them and the level of communication. However, they showed a lack of satisfaction in relation to staff clinical skills, family involvement, as well as the current level of caring. Conversely, the findings from the nurses' questionnaire showed that nurses claimed to understand the healthcare policy and that their hospitals achieved the required level of QM. Nevertheless, they complained about a lack of education, training, culture of learning and a poor recognition and reward system.

the findings from the interviews agreed to a limited extent with and support the questionnaires with three different sets of themes (global, organising, and basic themes), which represent the role of hospital middle management in quality assurance and the important influence of different organisational cultural aspects such as

structure, policy, and management style on shaping the role and responsibilities of the management in establishing a culture of quality. In addition, the findings of the interviews helped illuminate the role CBAHI has played in supporting hospitals' mission to set a QMS that responds to patients' needs. The outcome of the interviews revealed that although CBAHI is promoted in general hospitals' QMS related practices such as patient record systems, CBAHI has so far failed to establish a culture of quality where quality practices can be secured.

The implications of approaching the aim are varied: firstly, better understanding to the future steps the decision and policy makers should take to improve the clarity of the concept of QMS. In addition, for the successful implementation of QMS, the hospital management requires assuring that quality of care for patients is secured. Second, the research has implications on training and education of the nurses. The outcomes of the patients' questionnaire suggest that staff did not meet patients' expectations regarding not only the level of care, but also the level of clinical skills (practice). In fact, on some occasions in the questionnaire, several nurses demonstrated a lack of understanding of CBAHI standardizations. This suggests that the research should have implications on the development of CBAHI and its standardisation

This research is undertaken principally due to a paucity of research that examines quality management systems and practices in the Saudi's general hospital context. This, paired with significant changes within the health context in Saudi Arabia, meant that an opportunity existed to develop the practices of quality management through examining the perspectives of different stakeholders. Understanding the practices of quality management systems and the barriers as well as the challenges that hinder their implementation and use in general hospitals will help set guidelines to improve the practices of quality management system in the future of general hospitals in Saudi

This research has contributed to the knowledge theoretically through addressing the issues and perceptions of different stakeholders, especially in Saudi Arabia, as the King intends to pursue his Vision 2030 where quality and equality is at the core, which will have a considerable impact on the development of quality management system practices in Saudi. In addition, it proposes new additions to the research Onion model utilised to master this research which is considered as another angle of contribution to the theory of research in nursing. Into practice, the findings of this research and the

initiated framework are hoped to lead to better engagement and communication with the stakeholders at different levels – from top management to end users – to enhance the practices of QMS in general hospitals. As the findings illuminated different challenges including a lack of professional training, and a lack of understanding of both the culture of quality and culture of patient safety. The framework, thus, suggests a new net of collaborations and involvement of accreditation agencies such as CBAHI and MoH to build a holistic quality culture where everyone in the hospital should be engaged in developing the policy of quality and equality that support the implementation of QMS and its practices. The implication of such collaboration should lead to bettering the commitment of the nurses and middle managers to standardisations developed by CBAHI.

Keywords: quality, management system, patient culture, culture of learning, pragmatism, Saudi, general hospitals.



قيل قديما أن العرفان من شيم الكرام وأن من لا يشكر الناس لا يشكر الله. في هذه العجالة من الكلمات:

سيكون شكري الأول والأخير لله عز وجل لرحمته ونعمه التي لا تعد ولا تحصى. اللهم لك الحمد كما يليق بجلال وجهك وعظيم سلطانك.

الشكر الذي يليه لمن رباني وكانت لهما أيادي بيضاء علي أبي وأمي. أبي الغالي مزعل محمد العنزي الرحمة لروحك الطاهرة غفر الله لك وأسكنك فسيح الجنان. أمي الغالية مزلوهة أحمد العنزي أدامك الله وأطال في عمرك وغفر لك لصبرك و دعاءك وجهدك.

شكر وتقدير خاص للبروفيسور محمد حجازي على وقفته ودعمه اللامحدود.

عائلتي من أهلي وزوجي وأبنائي الشكر الجزيل لكم والعرفان لصبركم وجهدكم. أثابكم الله عني خير الثواب.

أصدقائي وأخواني وأحبتي في الوطن وبريطانيا محبتي لكم جميعا وشكري وعرفني لكل موقف خير، كلمة طيبة ودعاء.

بارك الله بكم جميعا.

Dedication

This thesis is dedicated to the soul of my father MUZIL MOHMAD ALANAZI, who taught me the real meaning of life. May Allah grant him a place in Jannah.

Ameen

Declaration

I declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

BASIM ALANAZI

7

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Chapter One: Introduction

1.1. Overview

Quality management systems (QMS) is a concept that encompasses the complexities of healthcare organisations' activities and practices. This is because the concept of quality grows to become an organisational concept rather than just a principle of nursing practice. The idea of quality in healthcare, according to the literature, started with the concerns of nurse Florence Nightingale to control the sources of risk that threaten patients' lives (Goetz et al., 2015). However, after decades of development, healthcare systems across the world have become overly complicated systems involving many stakeholders and layers of challenges that can pose risks to the sustainability of the services, and the stability of the healthcare organisations themselves.

Indeed, the World Health Organization (WHO), which plays a role in addressing the issues related to the control of quality and patient safety, studying the factors that shape these practices, has shown that these issues become even more complicated. The WHO has become a part of this complexity, as local health systems across the world – including the Kingdom of Saudi Arabia (KSA) – are requested to comply to specific standards, such as the ISO 9001 system quality standards, to maintain the quality of their practices. However, what about the daily practices of frontline staff such as nurses? How could healthcare systems such as general hospitals, which are high demand services, ensure that the simplest practice of nurses is controlled to assure not only the patients' safety, but also to control the small gaps in the practices that may lead to serious damage to the whole system? In this context, Cacace et al. (2011) explained that centralising patient safety seems to be the best response to persisting quality, and hospitals – especially in public sector – have found themselves under pressure to report their approach to ensure quality of practice is controlled.

Healthcare systems that are created to serve the requirements and the needs of patients have become further involved in complicated organisational decisions to assure not only the quality, but the safety and the sustainability of the entire healthcare industry. Hence, managing quality now involves many systems and sub-systems covering everything down to the single daily practices of one stakeholder, for example a nurse dressing a wound. Over the past few decades, healthcare organisations worldwide have realised that centralising patient safety in the core of the hospital services is vital to enhance the quality of the services and patients' satisfaction (Goetz et al., 2015).

In this chapter, the focus of the researcher is to establish an understanding of the background of the problem, followed by an explanation of the problem in its context (for instance, general hospitals in KSA). This will be followed by presentation of the research questions, aim, and objectives. Following this, the context of the study will be explained.

1.2. Statement of the problem

During the last couple of decades national and international competitors threatened the sustainability of the general hospitals in Saudi which have been forced to make a move to improve the quality of their services (Goetz et al., 2015). The matter of improving the quality of services in healthcare organisations is not limited to developing countries but has become a worldwide concern for general hospital (Wardhani et al., 2009).

This pressure is driven by the change of the patients' position from being clients to becoming key stakeholders who have an influence on shaping the culture of the hospital, as well as its daily practices and activities (Berland et al., 2012). From the perspective of Stone et al. (2008), the new culture of patient centrality has brought various opportunities, but at the same time it has presented challenges (Stone et al., 2008): opportunities, because there are possibilities to deliver high quality care to patients, utilising high levels of knowledge in the field and technical, diagnostic, and therapeutic advances (Rigby & Litt, 2000; Runciman et al., 2006); and challenges, due to the fact that managers and other relevant stakeholders are required to gain the new skills necessary to create and sustain an appealing and successful relationship between the health sector and the patient community (Stone et al., 2008).

Building this relationship between the patient community and healthcare organisations starts with the quality of the services (Berland et al., 2012). However, the argument could be made that the concept of quality can mean different things to different stakeholders, and the patient's perspective should not be the only concern when the meaning of quality is debated. This is an important point, and for this reason one of the concerns of this research is to develop the meaning of quality beyond the patient's central understanding.

Regardless of this argument, generally speaking the concept of quality in healthcare could refer to doing the right thing, or offering the right service, to the right people – any stakeholder – at the right time to save lives (AHRQ, 2008). However, this should not happen randomly; rather, it should take place across complex systems that need constructive management that encompasses the composition, capacity, training, and distribution of the healthcare workforce; the level of economic growth in a country; patient relief; organisational culture; and various other factors that make

quality more than a simple concept rather than involving management systems and different practices.

The abovementioned argument is echoed in the definition of ISO 9000 (2000, pp.25-27) in which QMS is defined as a complex system of interrelated or interacting elements that are responsible for directing and controlling the quality of the organisation's services (such as general hospitals). The system should be able to support the creation and the establishment of policy and objectives. If the implementation of QMS does not lead to establishing polices (as is the case in KSA), could we still say that QMS is implemented? In addition, how has QMS been accepted in the healthcare sector, which is a services sector, when QMS as a concept was generated mainly from manufacturing? Tuomi (2010) advised that healthcare organisations should only use the discourses of the healthcare industry and integrate the QMS into other management systems, which should be conditioned by the suitability of the implementations to the end users such as patients and staff. The paucity of agreement on these discourses seem to influence the level of QMS practices and the validity of their standardisation such as, ISO 9000.

Although establishing QMS in the healthcare sector is not limited to hospitals, the literature suggests that QMS in the healthcare community is often a hospital-based specific standard of quality maintenance, based on universal standards (Bogers et al., 2005). Its purpose is overall patient safety and minimisation of clinical risks. This regulatory compliance is necessary to improve patient health, safety, cost savings and risk management (Basu, 2012). Poksinska (2010) explained that universal standards such as ISO 9000 offer certification that is primarily sought by healthcare organisations due to external reasons - namely, to meet patient requirements and improve the services provided to them, rather than internal reasons. The current literature suggests that the use of ISO could help improve the practices of hospitals towards patient safety. For example, research carried out at the Red Cross hospital in the Netherlands demonstrated that implementing ISO 9000 standards led to improvements in patient focus, improved quality of care services, and improved patient safety (van den Heuvel et al., 2006; Magd, 2010). However, Wardhani et al. (2009) offered a different opinion and explain that hospitals in developing countries are still unable to effectively apply QMS because the idea was originally generated by the manufacturing industry. This opinion is further echoed in the comments from Al-Najjar and Jawad (2011), who agrees and adds that in developing countries, including the KSA, public sector hospitals are struggling to implement QMS practices successfully because the definition of quality management, approaches, and practices are not clearly explained.

1.3. Problem background

Providing quality care services is one of the main clauses of human rights articles (see Mann JM,1997). The Human Rights Charter 1948 and the WHO have shown their commitment towards the provision of adequate standards of living to all people. Hence, the provision of adequate and easy access to health facilities to control death rates due to illness and disease should not be luxury that only rich people can enjoy (Dură, 2015). Indeed, the claim that the health status of individuals is unique to their historical, political, and social circumstances should not influence their right to access effective healthcare services that place patient safety at the heart of hospitals' attention, regardless of any other consideration such as budget (Munechika et al., 2014; Zarei et al., 2019). Upon this argument, the quality of the health system is linked to the equality of the accessibility and benefit - effectiveness – of the services to respond to the needs of different services-users.

Henceforth, quality is not only about services, but also about the level of care. This brings to light the new concept of quality of care. Campbell et al. (2000) defined quality of care as the ability of the patient to access effective care with the aim of maximising health benefits in relation to need; this could be critically challenged if accessibility and effectiveness, which are important attributes of the Six Sigma steps for quality improvement in hospitals, have not been met (see section

2.4.2.1). More critically, the issue of what is meant by 'access', how effectiveness can be measured, and what prevents a patient from accessing effective healthcare are all important questions that should be answered. It is even more worrying that since the appearance of the concept of quality in hospitals, a shift seems to have occurred in the meaning of quality. When Florence Nightingale introduced "quality "to healthcare. At the time, the concept "quality "meant mainly focusing controlling the causes of death. Now, although healthcare organisations – mainly those funded by the government – verbally centralise the patient, the main concern is how to control the cost (Munechika et al., 2014; Zarei, et al., 2019). In this research, the concept of quality is not only limited to care within the services; rather, it is a holistic organisational concept that influences daily practices as well as management's mentality in leading healthcare to merely the service provided by the hospitals, but rather views it as a culture of practice within the health organisational context where all resources are matter.

It is no secret that over the past decade, the need and desire for healthcare institutions to operate more efficiently has been driven largely by financial concerns. With decreasing reimbursements and the rising cost of labour and supplies, healthcare organisations have been driven to look within to find savings. Hence, in relation to quality, healthcare organisations, mainly hospitals, are requested to reshape the concept of quality – not only to meet the expectations of the patients, but also to address the complications associated with practices within the hospital. Prior to the 1960s, the introduction of healthcare systems mainly focused on curative illnesses in developed countries. These attempts were not considered in developing countries with colonised structures, thus resulting in a myriad of illnesses with sustained impact on the economic social, physical, and psychological levels of the individual and broader society. In Saudi Arabia, although the country has not been directly colonised, the political and economic forces upon the Saudi government had a negative influence on the growth of the healthcare system (Sheikh et al., 2019). Regarding this and in relation to quality, Cammett and Diwan (2017) explained that the consequence of colonialism on the growth and development of quality in healthcare services relates to the dearth of budgets given for health education, which led to less progression in human development and a decline in the quality of services, especially those offered to vulnerable and poorer patients who could not afford to purchase medical care services.

1.4. Characteristics of the healthcare system and general hospitals in KSA

The healthcare system in the KSA consists of three healthcare service providers: the MoH, private healthcare providers (Figure.1), and other public government funded providers. There are 268 hospitals (38,970 beds) without clear distinction between public and general, covering 60.2% of the total health services in KSA, while private healthcare providers cover only 22.1% of the total health service needs, especially in cities and large towns, with a total of 136 hospitals (14,310 beds). There are other government agencies – specialist hospitals – and providers offering their services to a specific population, including government employees and their dependants. In addition, there are certain individuals (see Figure 1.1) who can receive public hospitals are for nonSaudi residents and patients with insurance. There are 39 hospitals with a total of 11,497 beds to cover the needs of this population. The services provided by these hospitals cover 17.7% of the total health services (Saudi MoH, 2018).

Saudi Arabia has witnessed a noticeable change in its healthcare sector, developing healthcare systems and infrastructure over the second half of the last century (Mufti, 2000). Accordingly, by 2000 the Saudi healthcare system was ranked 26th among 191 healthcare systems in the world (WHO, 2000).

In 2012, the government budgetary spending for health was 6.8% of the gross domestic product (MoH, 2012). This expenditure increased by nearly 10% in 2018 to reach a total of \$39.2 billion (MoH, 2018). Additionally, the public constitution seeks to provide healthcare services to its citizens and expatriate community free of charge (Almalki et al., 2011).

The MoH's three tiers' institutions comprise of primary care centres, general hospitals, and specialist hospitals. General hospitals in KSA are not expected to provide all types of treatment, as specialist hospitals are available for those with special treatment needs; they are termed 'general' because they are open to the public, and anyone can access services. In comparison, a general hospital in the UK, according to Cambridge Dictionary's (2020), definition, is "a large hospital that deals with all types of sick people", which suggests that all medical services are provided, and all types of illnesses are allocated under one umbrella, which is not the case in KSA. Reflecting on the researchers' experiences as a Saudi, it is suggested that there is a mix between the concept of public and general hospital that can be accessed by all people to treat different types of illnesses. Indeed, it is important to state this definition, as the understanding of QMS and its practices is linked to the complications of a system that integrates many subsystems to achieve the holistic purpose of general hospitals.



Figure 1 .Saudi healthcare system (Adapted from Almalki et al., 2011, modified by the researcher)

Even though Saudi healthcare quality assurance initiatives adopted practices and standards from the JCI and have received adequate financial outlay over the years (Mufti, 2000), the MoH has shown dismal performance thus far in terms of healthcare quality. Various factors have surfaced, including the onus of institutions to create their own best practice quality frameworks (Alkabba et al., 2012), rural-urban inequity in resource allocation (Al-Borie & Damanhouri, 2013), and lack of a proper health management information system and data standards (Alkraiji, 2013). Indeed, recent suggestions from Saudi healthcare decision makers claimed that privatising public hospitals could lead to more improvement of healthcare services. Nevertheless, this opinion can be challenged by another view – that, private hospitals are more likely to concentrate on main cities, targeting the wealthy population. Indeed, being a for-profit hospital would affect poorer cities where the quality and accessibility of the services will be in question (Hazazi & Chandramohan, 2017). In other words, the way that private hospitals perceive quality assurance is based upon a 'profit mentality' - viewing patients as customers and keeping them satisfied with the services. Conversely, quality assurance in general or publicly funded hospitals is based on the morality and accountability of the hospitals to provide the best possible services to the public. Between both mentalities, the concept of QMS would struggle to fulfil its purpose, especially when general hospitals are in high demand with limited resources.

In a comparison between both types of hospitals, namely government funded hospitals and private hospitals, Al-Hanawi et al. (2018) declared that the public healthcare sector serves more than 60% of the total population of the KSA. Public sector healthcare providers are funded by the Saudi government through the MoH. During the last ten years the government increased the funding provided by more than 7% to improve the quality of services. However, although the funding has increased, the patient demand for public healthcare services is higher than the resources, which will increase the pressure on the services and may subsequently impact on quality as a result. Private hospitals are funded by their owners and the quality of the services vary. In terms of the quality of services, Al-Hanawi et al. (2018) suggested that the differences between public and private hospitals in KSA in relation to quality relate to waiting times; the availability of appointments in the public healthcare sector is poorer than in private hospitals due to high demand. There is significantly more pressure and demand for public services than private. As explained earlier, these two matters were assessed as a part of measuring the effectiveness and accessibility of the services (See Chapters Three and Five).

Additionally, in terms of the attitudes of staff, there is an increased sense of favouritism in the public sector over the private sector. For example, if a person has connections or knows someone

at the hospital, they are more likely to obtain access faster and with better quality services compared to a person who has no connections. Al-Otaibi et al. (2010) argued that nepotism, which is commonly referred to in the Saudi context as *Wasta*, is a major problem in the KSA that reduces both quality and patient satisfaction in the public health sector (Al-Otaibi et al., 2010). This kind of behaviour is more common in the public sector than in the private sector and this is one of the organisational culture problems that should be looked at when the matter of quality is addressed. In terms of management, public and general hospital directorship and management is appointed by the MoH, but this is not the case in the private sector.

The abovementioned discussion highlights several differences between public and private hospitals. The limitations of this research (see Section 6.6) are that the findings reflect the organisational culture and management perspectives of general hospitals, which is major services of the public health sector.

1.5. The effort to develop QMS in Saudi's healthcare system.

KSA falls into the category of developing countries and has an unjustifiable number of fatality rates in the public sector, despite the availability of government resources and a healthy economic status (Albejaidi, 2010). The healthcare system in KSA, therefore, could be classified as a national healthcare system where the government provides different healthcare services through several government agencies including public, general, primary care, and homecare services. In the year 2000, the Makkah Regional Quality Programme (MRQP) was implemented with the hope of improving the healthcare services provided to residents of Makkah. The Ministry of Health (MoH) worked on setting up quality standards to serve all public and private hospitals. To complete the quality standards, the MoH had to review all the quality health programmes implemented in Canadian hospitals. Three years later, the first publication of health standards was revealed and implemented across all Makkah hospitals to enhance the healthcare systems throughout the area. In 2005, the Saudi government established CBAHI and recommended approval of the Council of Health Services. Upon the successes of the MRQP, CBAHI was created by a group of experts from different sectors with an aim to be responsible for recognising both public and private health service provisions. CBAHI was established in part because of the success of the MRQP. The result was the collaborative efforts of teams from the MoH, National Guard healthcare services, armed forces healthcare services, Saudi Aramco, the private sector, King Faisal Specialist Hospital and Research Centre, the Saudi Commission for Health Specialties, Security Forces healthcare services, and Civil Defence. The MoH implemented the quality standards in hospitals, and in 2006 the CBAHI standard manual was finally approved.

Despite the significant efforts CBAHI provided over the years, several studies highlight a lack of continuity in the quality of the practices, and there is no evidence that CBAHI has had an effect on the quality outcomes of these hospitals (Almasabi & Thoms, 2013). The importance of this research comes from the fact that one of its major objectives is to evaluate how CBAHI has addressed the matter of quality when it comes to daily practice, and whether it failed or succeeded in meeting its purpose.

Quality management practices adopted by the Saudi public sector refer to efforts made to improve and standardise care, by adopting international standards on quality healthcare (Alolayyan et al., 2013). Some of these include prudent fiscal policies, capacity building to reflect projected population increases, adherence to professionalism in dealing with patients' information, and respecting their rights (Walston et al., 2008).

The new Vision 2030 announced by King Salman focuses on developing the quality of healthcare services and gives priority to healthcare staff and managers to improve the culture of patient safety, alongside the quality of the services (Alolayyan et al., 2013). Recent research (Ferrer et al., 2018) suggests that KSA hospitals are suffering from a lack of a clear communication policy and issues responding to feedback after errors. Hospital management teams are requested to work with other stakeholders to establish a culture of quality for patient safety to find its way for further and constant enhancement. Although the Saudi government is taking positive steps towards improving healthcare systems, general hospitals still face challenges establishing high QMS (Sweis et al., 2013).

This research comes to light with a mission to identify not only the challenges that general hospitals are facing, but also what it means to have a quality service and to understand the experiences of the relevant stakeholders of QMS implemented by these hospitals and may help to determine the level of quality of healthcare provided. This may help to suggest an appropriate QMS framework to improve the current practices in the hospitals. Developing a framework for QM systems may help to assess and monitor the quality of healthcare provided in general hospitals in KSA.

1.6. Research aim, objectives, and questions

1.6.1 Research aim

The aim of this research is to:

• Assess and understand current quality management systems and their practices in general hospitals in the Kingdom of Saudi Arabia (KSA).

1.6.2. Research questions

The overarching questions of this research are as follows:

- 1. What are the perceptions of patients, nurses, and heads of department regarding the implementation of QMS and its practices in KSA general hospitals?
- 2. What challenges are identified as hindrances to the successful implementation of QMS in KSA general hospitals?
- 3. What changes do general hospital management teams need to consider supporting the successful implementation of QMS and its practices?

1.6.3. Research objectives

The overarching objectives are:

- 1. To explore the meaning of the concept of QMS, and its practices, in general hospitals in KSA.
- 2. To identify the possible elements needed for implementing quality healthcare provision in general hospitals in KSA from the perspectives of healthcare providers (middle-level managers, heads of department, nurses) and patients.
- 3. To explore the role CBAHI plays in accrediting quality practices in general hospitals and the possible challenges and barriers that hinder the application of QMS.
- 4. To develop a framework for QM systems in general hospitals in KSA based on a practical and detailed understanding of the current situation and experiences of key stakeholders.

1.7. Personal motivations driving this research

The journey to understand how quality should be practiced in general hospitals to ensure that patients are free from harm began when the researcher – who has been a nurse – saw one of his nurse colleagues dressing a patient's wound. The nurse was following the wrong practices when dressing the wound. When the researcher questioned these practices, his colleague responded with ignorance. During his years of study, the researcher had never come across the term 'quality', and in practice nurses were not aware of the importance and meaning of quality. In fact, quality assurance procedures have not been followed precisely, which to some extent impacts on the health of the patients and the general quality of the care in the hospital. The researcher started to

explore the Arabic written literature on how quality assurance in nursing practice could be secured. The answers from the literature did not satisfy the researcher; he went back into the field and asked his colleagues about their thoughts on the issue, but the majority of responses lacked clarity and sometimes were indifferent or even ignorant ('who cares?').

To the researcher, the issue of quality has been very much related to the accountability and trustworthiness of the services, as people's lives are in the hands of the professionals. With this understanding, the researcher headed to Australia to study his master's in health service management with hope of finding an answer. The researcher was lucky that he was able to access the English written literature to develop a better understanding. However, the course itself did not target the matter of quality; rather, the focus was on healthcare services. In addition, the researcher did not have the chance to investigate the concept of quality in the context of the KSA. As soon as the researcher finished his master's, he went back to Saudi Arabia and started to hear complaints from the patients about the quality of the services provided by general hospitals - one person described them as a "slaughterhouse" because so many people were losing their lives in the hospitals. Other people felt fearful of visiting the hospital in case they lost their life and preferred to visit traditional professionals for folk medicine. On the other hand, as a practitioner inside the hospital, the researcher heard different perspectives from some of his colleagues who did not see any weaknesses in the practices and felt that the quality of care was secure. The researcher had no evidence to support either of these perspectives, thereby this research was shown to be necessary in situations where both patients and practitioners were confused about the meaning and practice of quality.

1.8. Contributions to knowledge

This research is pioneering in its approach to address the focus: it is the first study in the Saudi general hospital context that addresses the layers of complexity in the concept and practice of QMS. There are many studies that perceive QMS as an organisational concept where management should be in control of its practices. However, this research suggests that patients, nurses, and middle managers may have different perceptions when it comes to the level of practice. For that, the researcher used the pragmatic approach to address not only the existence of QMS, but also the epistemological knowledge constructed in the culture of the hospital and influence on practice. From another but related perspective, using this approach has revealed the complexity of the interconnecting challenges among different key stakeholders. Those challenges underpin the practices of QMS in the context of general hospitals in KSA. At the same time, it has allowed the emergence of the requirements that, if adopted, would alert decision makers in the MoH to the

vital importance of adopting a more holistic approach when devising policies or interventions aimed at improving QMS.

The framework initiated in this research is one of the main contributions of the research to the field of quality management practice in general hospitals. The components of this framework will not only build upon the findings of the research, but also upon the arguments sought from the literature and the possible implications of the findings in the wider context of Saudi general hospitals. The researcher needs to put the framework in the hands of the stakeholders who contributed to its components.

The findings of this research revealed the need for further empowerment of leadership practices among the staff. The benefits and significance of leadership in healthcare organisations, namely in hospitals, has been the concern of a few research studies that focused on the relationship between leadership and QMS (Idris et al., 2008; Sfantou et al., 2017). In fact, a famous aspect of strategic QMS is the empowerment of leadership. This claim can be also be held by the Malcolm Baldrige National Quality Awards (MBNQA) where Standards for Performance Excellence are some of the most used quality standards for QM. Empowered leadership is one of the main categories in MBNQA. The criteria address the role that empowerment of leadership plays to achieve quality performance in healthcare organisations. This category emphasises the role that senior managers and decision makers can play to guide the health organisation and encourage superior performance. Although this matter has not been in the concern of this research as it needs a separated PhD research to investigate it, the findings from the interviews highlighted the need to empower the leadership in general hospital. In Chapter Seven further research has been suggested to conduct future research to examine the correlation between empowering leadership in general hospital and the successful implementation of QMS.

Finally, this research aims to make valuable and innovative contributions to the field in several respects. Firstly, it offers useful country-specific research for researchers interested in understanding the possible links between QMS practices and the healthcare environment. Secondly, the QM framework could also be of interest to public health researchers and policymakers in other Arab countries currently undergoing reforming stages, provided they have the same or similar health system. During the study, those motivations were accompanied with a more detailed and specific one: to advocate for proper QM training and support for nurses and managers as well as heads. As a practical outcome, the researcher believes this is one important

thing that must now be a priority for him, within the resources currently available for Saudi general hospitals.

1.9. Importance of the research

As explained earlier in Sections 1.2. and 1.3, several research studies have been conducted in different contextual and cultural settings around the world to examine the concept and practices of QMS, but a dearth of research has focused on examining the challenges and barriers that hinder the establishment of QMS and its practices in general hospitals, and in the Saudi context in particular. Furthermore, this research brings the voices of different internal stakeholders (nurses, heads of department) alongside the voices of external stakeholders (patients) together in one documented research. This is important because it supports the current perception that patients should have a share in shaping the culture of QM in hospitals and that their opinions should be valued alongside those of the decision makers.

Accordingly, this research is timely because the Saudi healthcare system is heading towards dramatic changes in terms of improving quality. Additionally, as a result of the new Vision 2030, further opportunities are sparking on the horizon for the public sector in terms of quality improvement. Struggling to make the required improvements means a potential to lose out to competition with the private sector; indeed, considering the patients who would not be able to afford to access private hospitals should be additional motivation to improve the quality of public services. This research opens the doors for general hospitals to compete with private sector hospitals to facilitate quality care services and protect the equality of accessing quality services.

1.10. Gap in the knowledge

Over recent years, the growing population of the KSA has brought many challenges into the country's general hospitals, and the question has arisen of how to keep service quality up to the expectations of the general public when the systems involved in managing and interacting with many other external parties, such as the government, have become very complicated. It has been agreed by ISO 9000:2000 that QMS is a complex system of interrelated or interacting elements that are responsible for directing and controlling the quality of an organisation's services, such as general hospitals (p.25-27). In addition, QMS as a health-related organisational concept has been found to be defined differently by different stakeholders in different contexts. Hence, there is no single definition that would work in one context that can be adopted by another in practice. For example, if the implementation of QMS in the United Kingdom (UK) is approved to be able to meet the purposes of general hospitals in the UK, that does not necessarily imply that the same
concept and practices could be applied in the KSA and give the same results. This is not only due to the complexity of the systems where QMS is implemented, but also due to the variety of challenges faced in organisations where QMS is practiced. Thus, what could be applied in one context would not be valid for another. Tuomi (2010) advised that healthcare organisations should only be using the discourse of the healthcare industry, and integration of the QMS to other management systems should be conditioned by the suitability of the implementations to the end users such as patients and staff. The lack of agreement on the discourse seems to have an influence on the level of the practices and the validity of the standardisations of QMS including ISO 9000. This statement has been further addressed in this research to illuminate the importance and the gap in the current literature and the need of this research.

Indeed, the above-mentioned argument brings into light the layers of further complications – which is a gap that will be addressed in this research – in relation to different aspects of organisational culture in general hospitals, including their structure, management style, spirit of leadership practices, the roles of the patients, nurses, middle managers and their powers in shaping the existence of QMS through interactions and practice. Models such as Six Sigma and its main components such as accessibility, effectiveness and financial affordability are all debated and explained through the lens of QMS and its practices in KSA general hospitals which have not been studied before.

1.11. Structure of the thesis

The thesis is comprised of seven chapters, with each chapter serving a specific purpose.

Chapter One offers the main outline of this study, namely the background and statement of the problem, followed by the context of the study, research aim, questions and objectives. The chapter illustrates the characteristics of the healthcare system in KSA and then provides a brief explanation of the personal motivation that drove this research.

Chapter Two is the literature review chapter. The chapter presents the main issues introduced in the literature and focuses on understanding firstly where the concept of quality and quality systems came to the healthcare sector from, and secondly which issues are raised in the literature in relation to QMS in healthcare and available frameworks.

Chapter Three is the methodology chapter that offers the theoretical and empirical philosophical choices the researcher used to meet the aims of this research and to respond to the research questions. Upon the pragmatic philosophy, the researcher collected both qualitative and quantitative data by distributing two different questionnaires, one to nurses and another to patients, in addition to conducting seven semi-structured interviews with middle managers from one general hospital.

Chapter Four discusses the finding that most of the nurses were convinced that they were familiar with the quality policy in their hospitals and were aware of the role management plays in improving quality. Nurses suggested that there is some sort of difference between one hospital and another in terms of management, and they suggested that hospitals are not similar in their performance; some run their systems more efficiently in terms of training, reward and recognition systems and following standards compared to others. In relation to the patients' findings, although some demonstrated limited satisfaction with the level of staff communication, there was greater concern about the quality of clinical skills. Patients suggested the re-establishment of policy and rules that support the provision of effective care for all patients. In addition, the implementation of a reward and motivation system that encourages all healthcare providers to perform effectively to enhance performance must be incorporated into management tasks.

Chapter Five presents the qualitative findings of the semi-structured interviews with middle managers (heads of department). The findings of the interviews reveal three main sets of themes. The themes emerged from the semi-structured interviews and the qualitative questions in the questionnaires.

Chapter Six is the discussion, which focuses on how the concept of quality was conceived in the healthcare literature and the critical barriers and challenges that reduced the ability of hospital staff to perform the required practices to ensure that service quality is secured.

Chapter Seven is the conclusion, where all the findings are summarised and associated with the objectives of the research to give answers to the research questions. The contribution of this research and the theoretical framework developed from the findings are presented. In this chapter, the researcher explains the limitations and gives suggestions for further research studies Figure (2.).



Figure 2. Thesis Structure

1.12 Chapter summary

In conclusion, general hospitals in KSA are under pressure to develop the practices of QMS, which seem to be critical as more reports and studies confirm that the level of quality in the services is low. Increasing the budget did not seem the only appropriate solution, and further challenges are embedded in the general hospitals as organisations that impact of the practice of QMS. In the next chapter, the relevant international literature, with a focus on Saudi Arabia in particular, will be reviewed. The chapter will provide a comprehensive review of the main concepts relating to the study, namely introducing the concept of quality into the healthcare sector in general, paying the most attention to the Saudi general hospital context. Connectively, the implementation of quality management systems and associated practices in a healthcare context will be explained, highlighting the challenges and the barriers that hinder the betterment of QMS practices in general hospitals in KSA.

Chapter Two: Literature Review

2.1. Introduction

In Chapter One, the aim of this research was identified as exploring the perceptions and the existence of the concept of QMS and its practices in the context of Saudi general hospitals. The chapter distinguished between QMS as a complex organisational concept and the practices of QMS as a component of the daily practices of different practitioners - nurses and middle managers in this research - in order to serve the complicated purpose of general hospitals as healthcare organisations at the level of government and individuals. The chapter begins by addressing the chronological development of the concept of quality and different shifts the concept has experienced. Following this, the complexity of the concept of QMS and its practices within the healthcare context highlighted. The following sections elaborate on healthcare organisational matters and the involvement of different stakeholders in implementing QMS and its related practices. Further accounts are given to explain the challenges that prevent general hospitals from successfully implementing QMS. Following this, a specific section is created to address the assessment tools and frameworks introduced in the literature to help assess and evaluate the implementation of QMS in healthcare organisations, namely general hospitals. The section before the conclusion chapter was designed to explain the context of the KSA and the issues related to controlling quality in healthcare organisations in the country.

2.2. Chronological development of the concept of quality and the shift in focus

The development of the concept of quality has experienced different shifts (see figure 2.1). The desire to improve quality in the healthcare sector can be accredited to the sense of quality expressed by the nurse Florence Nightingale. The focus of Nightingale and her team was on improving the sanitary conditions of the hospital and there was no evidence that other priorities such as financial expenses seemed to concern them. Hence, it seemed that her focus was on the safety and health of the patients. In that sense, Nightingale's understanding of quality controlled the practices of other nurses who sanitised the wards and bathed and clothed patients. She also resolved the critical challenge of providing decent food and clean water, ventilating the wards and improving medical supplies to patients. Clearly, the practices of quality from the perspective of Nightingale were controlled by the efficiency of the services to meet the patients' priorities, such as hygiene and to reduce the death rate.

Florence Nightingale made three historical contributions, namely: i) the idea of quality measurement in all health facilities, which has become the criteria upon which current

international benchmarks for excellence are formulated; ii) the need for accurate data collection and documentation; and iii) the value of generating buy-in from others to support healthcare quality intervention. Her legacy left long a memory that stirs the sense of quality measurement in the modern healthcare system. She and other prominent individuals who made remarkable achievements could not have envisioned how their sense of quality would have revolutionised quality assessment in the future. Using her statistical skills, Nightingale successfully created a remarkable morbidity and mortality graphical display, depicting what happened to the British troops in the Crimea. She named this graph 'Coxcomb' and it attracted the attention of the international community, resulting in extensive modernisation of hospitals in Crimea, which ultimately improved the quality of healthcare they delivered (Hensel, 2006).

Nightingale helped organise accessible hospitals for British troops. However, there is no evidence that Nightingale offered a definition of the concept of quality in hospitals. Donabedian (1988) approached this gap by defining quality in healthcare as "the application of medical science and technology in a manner that maximises its benefit to health without correspondingly increasing the risk" (p.5). According to his definition, the concept of quality consists of technical elements where technology systems and facilities could be involved – the accessibility and the productivity of healthcare services provided to patient to assure that healthcare organisations gain interpersonal skills, where professionals should ensure quality. This happens by addressing patients' needs and organising their preferences, and through facilities such as the physical environment such as beds and hygiene and organisation atmospheres, namely culture and leadership (Sfantou et al., 2017).

Later in 1993, Øvretveit provided another perspective to the meaning of quality: "Provision of care that exceeds patient expectations and achieves the highest possible clinical outcomes with the resources available" (1992, p.4). In this definition, Øvretveit (1993) suggested implementing the matter of quality through a system to achieve the required improvements to healthcare quality, identifying three main dimensions: practitioners, patients, and management quality. Practitioners' quality reflects their views of whether professionally assessed patient needs have been addressed using appropriate approaches and procedures. Patient quality, however, is assessed by the efficiency – in other words, whether the services provided by the practitioners are directly beneficial or not, or the patients feel they get what they want from the services. The perspective of management towards quality involves ensuring that services in healthcare organisations are delivered to meet the resource plans and under the allocated budget.

According to Al-Sawai (2013) and Sfantou et al. (2017), management and leadership of general hospitals is a critical matter that influences the effectiveness of quality and integration of care. Hence, speaking about the concept of quality would necessarily involve general hospital managers, including middle managers. Therefore, in this research it seemed vital to include the perspectives of different stakeholders, including middle managers who are in a central position in the management structure.

Schuster et al. (1988) suggested that healthcare service quality could be described as a good service when patients are provided "with appropriate services in a technically competent manner, with good communication, shared decision making and cultural sensitivity" (p.518). In fact, this statement could be critical because how and how could the word "good" can be assessed or defined. Indeed, the phrase 'competent manner' reflects that staff should be adhering to the professional standardisations accepted by the funding body such as the government in general hospitals). In addition, the word 'appropriate' also implies that the services provided should be fully suited to the needs of the patient.

Hence, unnecessary services are sources of waste or risk. This may bring back into light the definition of quality mentioned in Section 2.2, when AHRQ (2008: para. 1) defined quality as doing the right thing at the right time for the right patient. Therefore, too much care such as providing unnecessary tests, too little care, for instance not providing a specific diagnostic test, or the wrong care such as prescribing the wrong medication, would threaten the level of quality of the services. In other words, the excellence of the quality should not be subjective because there are practices and procedures that management and staff should consider utilising to achieve quality. There is a need to accept that the excellence aspects are more likely to change over time (excellence implies offering services on time). For management, achieving excellence should always strive for "zero defects" and "perfect" services (Mosadeghrad, 2013). This statement is echoed in the definition of quality provided by the National Health Service (NHS) in the UK, which states that quality is "the appropriateness and effectiveness of the clinical care delivered to patients and the manner to which it is delivered" (Kanji & Moura, 2003).

The To Err is Human report (Kohn et al., 2000) opened the door for more discussion around human medical errors and their consequences on the quality of services, but not by pointing fingers at caring healthcare professionals who make honest mistakes (Kohn et al., 2000). Additionally, it was obvious that the report did not intend to place blame on the professionals who made the mistakes; rather, the concern was about the organisational environment in which the

professionals were operating. In this research and reflecting on the researcher's experience as a nurse, the focus of his colleagues was on meeting the target given to them, ignoring the smaller examples of misplaced practice that may lead to erroneous outcomes. The to Err is Human report can only apply if the organisation sets a culture that encourages sharing of errors to learn from mistakes (see section 2.4.8.1).

The universal Declaration of Human Rights 1948 charter marked the commitment of governmental agencies to commit to the provision of quality health for all human beings. This era marked the onset of equality for all human beings to have an accepted standard of living with adequate resources for better health and wellbeing (Dură, 2015). The wave of interest in the matter of quality also hit the literature, where a variety of related terms such as quality assurance, quality improvement, continuous quality improvement, totally quality management, and quality care have been synonymously, and on some occasions, randomly used (Awadalla, 2015; Donabedian & Bashshur, 2003). But the confusion did not seem to be limited to the random use of the term, which is synonymous but also in disagreement with researchers as to the definitions of quality. Harteloh (2003) argues that among different researchers interested in defining quality and quality management in healthcare, there is no agreement on what the concept of quality means. This statement is also emphasised by Al Khamisi et al. (2018), who highlight how differently the concept of quality can be understood and how difficult it is to accept one standard to evaluate the quality of the services in healthcare organisations. Upon this argument, it seems a challenge to even accept that the universal standards suggested by universal accreditations bodies such as the WHO could be applied in different contexts.

In compliance with this regulatory healthcare structure, member countries including countries that ratified the 1948 convention developed strategies to deliver quality health services to their citizens. The initial response focused on curative medicine. Hospitals were located in major cities, often not within the reach of the commoners, especially those who lived in rural areas. This approach of siting health facilities in cities was common across the world, particularly in developing countries such as Egypt, Syria and Saudi Arabia that were under the reign of colonial masters (Longuenesse et al., 2012), and general hospitals in the KSA were based upon the same approach. During the 1960s and beyond, countries that regained freedom and became independent from the reign of their colonial masters continued the same pattern of the health system that was bequeathed to them. Thus, the healthcare systems of developing countries were largely shaped by the legacy of colonialism, colonial infrastructure as well as poverty, inequality, and conflict in the post-world war. The Saudi Arabia health system followed the same pattern. This is because in

the colonial era, nearly all the states of the Middle East were occupied by French and British powers, during which the Western European states medicalised the region.



Figure 3.Chronological development of the concept of quality and the shift in the focus

In order to improve and provide considerable quality healthcare service, the fragile new governments in these regions, including the Saudi government, embarked on massive infrastructural development that included construction of teaching hospitals, medical and nursing colleges and specialist healthcare centres, mostly in urban centres (Hall & Taylor, 2003), since few members in the community had limited access to these health services.

In Arabic written literature, the matter of quality in healthcare was linked to one woman from that period who has been identified as a practising nurse long before Florence Nightingale and had her influence on the quality of healthcare: her name was Rufaida Al-Asalmiya, who was a practising nurse during the Prophet of Islam era (El-Haddad, 2006; Mansour et al., 2016). Indeed, the stories of Rufaida's hard work to improve the quality of the nursing services have been handed down verbally from one generation of Saudi nurses to another and continues to be savoured by many modern Saudi nurses (Kasule, 2003). Rufaidah's main concern was to make sure that soldiers who were wounded during the battles were safe, and during peacetime she was committed to providing nursing services to civilian patients. Rufaidah opened her tent hospitals close to the Prophet (ElHaddad, 2006), and she was able to work close to her father who was a doctor, and taught her necessary nursing skills (Mebrouk, 2008). This concept of quality again centralised patient safety, but such thinking did not come from an organisational angle – rather, from the personal values of the nurse who felt responsible for saving soldiers' lives.

To conclude, the following Table (1.) offers a summary of the tipping points of notable quality contributors of quality in healthcare.

Table 1.Chronological snapshots of key tipping points of notable quality contributors (Sheingold &
Hahn, 2014) (see page 13)

Period	Key tipping point	Key individual	Country
1854	Quality improvement documentation	Nightingale	England
1861	Sanitary commission	Barton	USA
1862, 1918	Improvisation & innovation	-	
1879	Sterilisation	Chamberland	France
1895,1956, 1960	Technology	Rontgen, Safar, Laerdal	Germany, USA France, Norway
1910	Education	Flexner	USA
1881–1955	Pharmaceuticals	Pasteur, von Behring, Kitasato, Descombey, Salk, Kendrick, Eldering, Pittman, Fleming	France, Germany, Japan, USA, England
1883–1945	Healthcare financing	Bismark, Beveridge, Kaiser	Germany, England, USA

From the above Table (1.) it is noticeable that the early development of the concept of quality has started by the efforts of individuals in different countries starting in the UK. Then cooperation among countries and individuals begun in late 1890s when technology became on the spot to drive the development of the quality. The involvement of health sector appeared to be more obvious as more contributions and countries engaged in the development. However, from the table, there is not sense of disagreement around the meanings of quality. Rather, it shows more that the needs of each era and context suggested a shift in the focus. Arguably, there is a still level of agreement that QMS and the matter of controlling the quality of general hospitals are difficult to define and measure. The difference perhaps comes not only from the context but from the

characteristics of components that make the meaning of QMS, such as the intangibility of services, that make it difficult to define and assess quality.

In addition, the complex nature of the services, organisations and stakeholders involved in the layered systems of general hospitals with different interests and perspectives add to the difficulty of making sense of what QMS is and what we are expected to measure. Hence, when we think about defining quality in healthcare, we should think about a multi-dimensional definition that encompasses various healthcare stakeholder needs and expectations. In this study, the researcher is open to more comprehensive perspectives and understandings of quality, considering more quality features that may have been ignored or less emphasised by other research studies. Upon this conclusion, the current researcher recognises that QMS includes complex systems and networks of different stakeholders including practitioners, patients, and administration teams – including management. The stakeholders practise assuring of the six characteristics of high-quality care identified by the Institute of Medicine (IoM) which are (1) safe, (2) effective, (3) reliable, (4) patient-centred, (5) efficient, and (6) equitable. In the following sub-sections, the researcher will address how quality is measured or assessed from the perspective of business or manufacturing, and then more attention will be paid to the healthcare context – namely, general hospitals.

2.3. Complexity of the concept of quality management systems and practices

The concept of QMS is complex and is not easily explained. This is because the concept consists of three complicated terms: quality, management, and systems. In fact, the complexity of the term is layered not only by the lack of agreement on one definition or understanding, but also by the fact that the practices related to QMS in healthcare have still not yet been conceptually and practically defined (Allen-Duck et al., 2017). Noticeably, the complexity of QMS has been highlighted by ISO as one of the pioneering agencies that defines QMS (See section 2.2). Hence, when it comes to defining or understanding QMS we should expect, or at least accept, that the concept would need further investigation to become clear.

Indeed, suggesting that QMS is a term that has been taken from manufacturing should not be accepted because in the definition of quality the meanings of system and management are embedded. This is one of the current definitions of quality that is offered by Allen-Duck et al. (2017). The definition suggests that quality in healthcare refers to controlling and managing all sources of harm – both physical and environmental – that may have an influence on patients' health and lead to adverse outcomes; it is a system of control. This understanding suggests that

quality is not a single entity, but rather is a complicated system that centralises the patient because, as Allen-Duck et al. (2017) explain, it is all about keeping the patient free from harm. This echoes an earlier suggestion from Gopal et al. (2003), who argue that in the public sector the matter of centralising patients' needs is also connected to other aspects including the available resources (human, financial, and skills). Hence, an established healthcare system should be implemented to serve different needs, priorities, and upon specific criteria. When we speak about the matter of QMS, we should not disregard the fact that there is more than one meaning for quality.

Thinking of the word 'quality' recalls immediately a service or product that meets the expectation of the customer in terms of value and excellence. This understanding could be linguistically connected to the definition provided by the Merriam-Webster Dictionary (2020), which defines quality as "the degree of excellence; superiority of kind; and a distinguishing attribute". According to Glare (1983), the word 'quality' is rooted in the Latin word *qualis*, meaning "what kind of' (Mosadeghrad, 2013). In the literature it has been argued that the concept of quality could be defined in different contexts in different ways. This may explain why the literature offers different definitions of the concept (Awadalla, 2015; Donabedian & Bashshur, 2003; Ovretveit, 2004). Tuomi (2015) advised that although the concept of quality is a manufacturing concept, healthcare organisations should use the discourses of the healthcare industry and integrate the concept into other management systems. Nevertheless, in the healthcare sector the problematic element of the development of the term is related to the nature of integrability of the product and services, and the methods or measures that should be used to assess the level or degree of excellence, which is the core meaning of quality.

This brings to light the argument led by Alswat et al. (2017) who suggest that the matter of quality is assured by errors being prevented – controlled – and this would not be acquired without a net of managers, administrators and staff who know how to gain the benefits from centralising the patients to improve not only the quality, but also patient outcomes and to work as one system.

The abovementioned argument could be seen differently from the management perspective when the financial consequences of achieving quality arise as an extra pressure on management (Agency for Healthcare Research and Quality, 2009). Arguably, the immediate implication will be prioritising decision-making towards resource management. This relates to the point of view and focus that hospital management should take when the matter of quality is discussed: should the focus be on managing resources, saving lives, or both? Hence, when hospital management are challenged by lack of funding, how can quality be controlled and assured? In turn, this perspective may reveal conflict between management and quality, because in the public sector controlling resources is a priority. The concept of quality, when management is involved, would include further aspects that highlight to a large extent adherence to the regulations of the funding bodies such as the government for public and general hospitals) in regards to making a specific assessment or adopting specific tools in order to be accredited as a quality healthcare organisation (AHRQ, 2016). Adding management to the term of quality seemed to help shift quality in healthcare from being only a concept that concerns the health of the patient, to becoming more of an institutional concept that needs strategies and plans.

Adding the word 'system' to the term quality would indicate that achieving quality in healthcare requires more complicated actions rather than just "doing the right things, for the right patient, at the right time, in the right way to achieve the best possible results" (AHRQ, 2008, para. 1). Of course, doing things right in a healthcare organisation requires management that understands and addresses the right practices to achieve quality. This understanding echoes with the WHO's (2006) definition of quality in healthcare as it is the process of making strategic choices in health systems. This suggests that achieving quality in healthcare would not be complete without having management that is able to introduce a strategic vision that is set systemically in healthcare organisations to ensure the desired health outcomes. In other words, the International Organisation for Migration's (IOM) (2013) perspective of quality is declared as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge" (McKnight, 2019, p.48). Arguably, the questions that should be asked are what are the desired health outcomes, and how should they be achieved? In the late 1980s, rising expenses of healthcare organisations led to the emergence of managerial and systems views on healthcare quality in both nursing and medicine (Allen-Duck et al., 2017). This should lead us to question whether the desired health outcomes are those that meet the management's, patients', or practitioners' perspectives, which is still a question that is on hold.

Prior to this, the nurse Florence Nightingale and later Donabedian (1988) viewed quality from the health practitioners' perspective. Noticeably, while Florence Nightingale was concerned with the wellbeing of the patients, management's concern will always be about costs and assuring budgets are not exceeded (Gauld & Horsburgh, 2015). Indeed, each perspective is important, and those perspectives could overlap, but it is important not to oversimplify the concept and to accept that one single definition of QMS could be accepted – taking into consideration the fact that the

complications of practicing QMS would increase according to political, cultural and contextual complications (Tošić et al., 2018). Tošić et al. (2018) insisted that thinking about the matter of quality in healthcare should go beyond only ensuring that patient outcomes are positive, but also to embed quality of care that helps healthcare organisations achieve competitive advantage. Therefore, the complexity of the concept should not be seen as separated from the pressures general and public hospitals increasingly experience to become more customer (patient)-oriented, control costs, improve resource efficiency and effectiveness, and publicly show the results of their improvements.

Despite the continuing efforts to define QMS, the literature on quality suggests that quality of healthcare services has not been clearly determined and this is because, as Filipović et al. (2017) explained, unlike other sectors, the healthcare industry consists of complex systems that connect and interact with different stakeholders including patients, practitioners, suppliers of medical and non-medical equipment, priorities and resources, and accreditation bodies. Considering the complications of the concept and uncertainties of the meanings of QMS, this research contributes to the current body of research to reveal and clarify the meanings of QMS and its practices as they appear in Saudi general hospitals. Although Tošić et al. (2018) are of the opinion that the current concepts, principles, and standards of QMS can be applied in the healthcare sector, the current researcher believes that there is still a need to establish further understanding of what an effective and trustworthy quality management system in healthcare looks like in general and in the KSA context in particular. Establishing such understanding is vital to create a core value for general hospitals where the concept of quality as an organisational matter can be embedded.

To sum up, although the current literature provides general hospitals with various rhetoric about the variety of opinion on how to implement QMS, the challenge is to understand the meanings of QMS in general hospitals and how those meanings influence or shape the daily practices of the nurses. The main argument of developing QMS is built upon ensuring that patients are safe, and the healthcare services are accessible and available to all at the right time – but what about the costs, and what are the expected health outcomes? It is understandable, given the complexity of healthcare services, that the methods that should be used to assess quality seem to be a challenging matter, especially if the management of the hospital and the staff have not created an atmosphere of sharing and the financial resources have not be secured. In such cases, controlling the quality of care and implementing QMS would not be straightforward or easy. For healthcare organisations, namely general hospitals, to be able to understand how quality can be managed and what systems should be allocated, there is a need to analyse the meanings of quality in healthcare and what the concept of QMS would represent.

From studies examining the implementation of QMS (Al-Borie & Damanhouri, 2013; Almalki et al., 2011), it seems that the researchers examined the concept of QMS without discussing what the concept of quality would represent in a Saudi general hospital context and how the practices of different stakeholders – namely patients, nurses, and middle managers (heads of department) – were linked to the holistic implementation of QMS and its practices.

The experiences that the researcher explained in Chapter One raised a concern about the uncertainty of what the concept of quality means and how QMS would be practiced. This linked to his experience reviewing the Arabic written literature, where the majority of the studies conducted in Arabic limited the assessment of QMS in healthcare organisations, especially in public services, to inspections and standardisations (Khalidi, 2017) without giving thought first to the root of the concept and how it was applied in practice. The research conducted in English and then translated into Arabic adopted the concept of QMS as it was introduced in English literature, which seemed to influence the clarity of the term and what the practice of QMS would involve. It has been explained earlier that even the nurses who graduated from the healthcare department were struggling to make sense of what quality in healthcare would involve, and how management can cooperate with other stakeholders to establish an environment where the patient is centralised. As the literature was reviewed, it became noticeable that most QMS studies concern developed countries, and there is little evidence from developing countries like Saudi Arabia (Wardhani et al., 2009). There is agreement that Saudi hospitals are leading in the Arab region, and evidence to suggest that other health systems can learn from the KSA, if this is the case, then the KSA must lead by example. There are few studies conducted in the Saudi context, but even in those that do deal with the KSA, there is a mix between QMS and other concepts such as theory of mind (ToM) and quality management (QM), which leads to more confusion rather than clarification.

Considering the aforementioned argument and with the recent research studies from the Saudi context in mind (Almalki et al., 2011; Alatawi et al., 2020), there is a need for emphasis of the struggles of general healthcare providers in the KSA to maintain high quality services and an urgent need to study the current status of the QMS practices in Saudi general hospitals. Studying the practice should allow the researcher to identify the challenges that could hinder or prevent the implementation of QMS as well as the requirement to promote more controlled QMS practices.

2.4. Measuring quality of services in the healthcare industry

The position taken in this research is based upon the opinion that quality – in relation to healthcare – is a multifactorial and multi-dimensional concept that has been described in different ways (Lohr & Schroeder, 1990). In addition, it has been argued that measuring quality in hospitals should always focus on implementing the suitable (fit for purpose) management systems to ensure the full remit of employees through the creation of participation opportunities, in addition to contributing and developing conditions for joint commitment. Fundamentally, the tactic demands everyone around or within the health sector concentrate on the goal of making continuous improvements aimed at quality enhancement (Qureshi et al., 2013). Such efforts should be capable of delivering quality of care that attempts to attain the satisfaction of patient groups. Quality measurement in hospitals should be an essential prerequisite to improving service quality and achieving efficient resource utilisation (both tangible and intangible resources) within the healthcare industry (Al-Borie & Sheikh Damanhouri, 2013; Alanazi et al., 2017). To control and manage service quality in general hospitals, managers tend to utilise philosophies from business literature to fulfil their needs, such as total quality management (TQM).

In this research, the interest in studying QMS rather than service quality is related to the researchers' understanding the QMS is more comprehensive and complicated rather than services quality. This suggests that service quality is included in QMS implementation. The evidence to such assumption is provided in different research studies focused on service quality such as Ahmed and Samreen (2011) and Alrubaiee (2011) who linked service quality with patient satisfaction. Another study associated service quality and word of mouth (Chaniotakis and Lymperopoulus, 2009) and a third study connected service quality with job satisfaction (Kim and Han, 2012). All these matters are seen part of the requirements to implement successful QMS.

2.4.1. Correlation between TQM and QMS to manage quality of healthcare services

According to different research studies such as Yang (2003) and Richard et al. (2009), it was noticeable that there was some confusion between the use of TQM and QMS. Some of the studies concerning QMS in hospitals suggested considering the issues of TQM when QMS practices are discussed. Yang (2003) suggests that although TQM and QMS are parallel, TQM is a more effective approach to enhance operations in organisations. Nevertheless, looking at the principles of QMS, TQM and ISO 9000, the main principles are identifiable such as

customer focus, leadership, engagement of people, the approaches of the processes, and system approach to management Figure (4).



Figure 4: Combination between the EFQM model and ISO 9001. Adapted from Yang (2003)

As can be seen from Figure (4.) the processes used in the TQM model and ISO 9001 can differ. EFQM demonstrates how enablers (which are mainly organisational aspects) could lead to different results (some related to the internal performance and some related to the external, including customers), while ISO 9000 focuses on the requirements that lead to customer satisfaction. Although hospitals can benefit from using one of these models and frameworks, it can also be useful for enhancing quality, as implementing QMS needs a more holistic strategic vision that tackles the deeper layers of healthcare organisations. Kunkel and Westerling (2007) explained that implementing QMS should not be as holistically approached as it could be limited to separate departments instead of the organisation.

In KSA, there is no evidence that QMS has been implemented holistically or at the departmental level. Thus, the potential to start the implementation at the departmental level and then widen it to become more holistic is one of the options that should be considered by general hospital management. However, as Sánchez et al. (2004) suggested, this should start with staff training that allows them to develop a clear understanding of how to implement QMS. Meanwhile, Richard et al. (2009) suggest that technological tools can be enablers of better practice in QMS, but they advise that if the structure of the organisation does not support

the use of technology or the structure was built upon a traditional mentality or style, then implementing QMS would be a challenge.

In this research, the focus is on understanding the perceptions that exist in general hospitals when the concept QMS is mentioned, as well as what the related practices are in the daily exercise of quality. Hence, if KSA general hospitals have applied TQM as an alternative to QMS, then this research will be able to help distinguish between implementing QMS as a system and the use of TQM as a tool to achieve quality. This opinion echoes Hafeez et al. (2006), who defined TQM as management being willing to achieve quality in terms of all functions of the enterprise: "This includes interaction between all the components of the organisation as well as the components themselves" (p.1511).

According to this definition, TQM is seen as a key tool to ensure that health organisations continuously aim to exceed customer expectations on both a short and long-term basis. Hence, time planning is vital to the decisive implementation and adoption of TQM, particularly in the health sector (Psomas & Fotopoulos, 2009). For that, Oakland (1989) defined TQM as "an approach for improving the competitiveness, effectiveness, and flexibility of an organisation". Hafeez et al. (2006) suggested a conceptual framework for TQM Figure (5.).



Figure 5.TQM conceptual framework Adapted from Hafeez et al. (2006)

In the analysis of the framework, Hafeez et al. (2006) distinguish between two types of performance: one financial and one non-financial. This may be because the companies they examined seem to focus on the satisfaction of their customers. However, there is sufficient evidence from the study itself to suggest that the company management did not pay much attention to other stakeholders, especially their employees and the surrounding community. Hence, without giving enough consideration to employees and other stakeholders – mainly patients – hospitals cannot adopt the spirit of TQM which is known to be one of the main keys to developing successful QMS. Patients are important, not only because they feed back to the hospitals with their opinions about the quality of the services, but also because they shape the strategic vision of the future services of the hospitals and can help general hospitals market their services more successfully to achieve sustainability.

To sum up, for implementing QMS, it has been suggested that it requires managers in health organisations to have a fundamental understanding of the principles of TQM and the possible methods to implement both approaches because "they complement each other" (Magd & Curry,

2003, pp.252-253). Indeed, using TQM as a tool could be a strategic quality planning process alongside other regular practice of QMS (Qureshi et al., 2013).

There is no doubt that TQM and QMS are connected regarding the application of the first and supporting the practice of the second but mixing between both concepts would lead to more confusion, especially in healthcare organisations where the ideas of QM have not been fully explained yet. Hence, it is suggested that management in healthcare organisations specify the glossary of the terms used when QM is involved. Nevertheless, the challenge with the implementation of QMS was not limited to the confusion in the use of different terms, as further challenges were identified by the literature (see Section 2.6).

In addition, the fundamental principle of quality is to do it right first time, and to satisfy patients' needs every time, by involving everyone in the hospital leadership; this will also help improve health outcomes and control expenses. Although TQM is a philosophy of management that aims to achieve the best use of all available resources (human and financial), the opportunities for general hospitals to achieve better competitive advantages through the successful implementation of QMS occur because TQM is one of the more complicated systems involved in the practices of QMS.

2.4.2. Quality of service models and assessment of QMS in general hospitals

In Section 2.3, the researcher explained that measuring the quality of care in the healthcare sector is a difficult process due to the complexity of the services, stakeholders, and systems involved. Lovelock and Wirtz (2011) argued that in the healthcare sector, services, not products, are what should be provided, which makes the process of measurement even more critical. This is because products are tangible and measurable whereas services are intangible. However, researchers such as Lovelock and Wirtz (2011) and Yarimoglu (2014) have reached the opinion that in order to measure services, healthcare organisations should be looking at the extent to which the provided services meet the needs and expectations of the patients. If we agree that the implemented systems help the hospital to fulfil the expectations of the patients and adhere to the meanings of quality as seen by different stakeholders, where excellence, expectations, and conformance of the services to requirements are upheld.

In the literature on assessment of service quality, different scholars and professional bodies suggest different models and frameworks to assess quality in care from the perspective of service assessment. Some of these models, such as SERVQUAL, were borrowed from the business sector (Yarimoglu, 2014). Parasuraman et al. (1991) developed a model to identify and measure the gaps between patients' expectations and the perceptions of the healthcare service received. While prior to the SERVQUAL model, Parasuraman and other scholars suggested different models such as those posited by Crosby and Garvin, those models have not been acknowledged in the quality literature in healthcare models. The five SERVQUAL dimensions are summarised in Table (2.)

Table 2.Five SERVQUAL dimensions (Finn & Lamb, 1991; Parasuraman et al., 1988)

Dimensions	Items		
Tangibles: physical facilities, equipment,	1. should have up-to-date equipment.		
and appearance of personnal	2. physical facilities should be visually appealing.		
	3. employees should be well dressed and appear neat.		
	4. appearance of physical facilities should be in keeping with the type of services		
Reliability:	5. should do things by the time they promise		
to perform the promised service	6. when customers have problems, they should be sympathetic and reassuring		
dependably and accurately	7. should be dependable		
	8. should provide their services at the time they promise		
	9. should keep accurate records		
Responsiveness:	10. should not be expected to tell customers when services will be performed*		
To help customers and provide prompt	11. not realistic for customers to expect prompt service*		
service	12. employees do not always have to be willing to help customers*		
	13. is OK if they are too busy to respond to requests promptly*		
Assurances:	14. customers should be able to trust employees		
Courtesy knowledge, ability of employees	15. customers should feel safe in their transactions with these stores' employees		
to inspire trust and confidence	16. the employees should be polite		
	17. employees should get adequate support to do their jobs well		
Empathy. caring, individualized attention	18. company should not be expected to give customers individual attention*		
the firm provides its customers	19. employees cannot be expected to give customers personal attention*		
	20. unrealistic to expect employees to know what the needs of their customers are		
	21. unrealistic for them to have customers' best interests at heart*		
	22. should not be expected to have operating hours convenient to all customers*		

As can be seen from the Table (2.) the tangibility of the services was assessed by the availability of the equipment or facilities. However, is the availability enough to assure the quality, or is it a matter of accessibility and usability? To answer that, an important dimension of tangibility in general hospitals should be the accessibility of the available facilities at the right time for the right patient. However, the approachability of the staff is another important matter that should be considered. Therefore, if we accept that tangibility is an important component of the SERVQUAL model, how can this element be altered to the core purpose and

the spirit of healthcare services? The answer to this could be to alter the core of the services that meet the expectations and the needs of the patient. General hospitals are expected to give equal opportunities to all patients to access healthcare services. Hence, the equipment or facilities should be available and measurable.

In addition, staff should be trained to meet the needs of patients without hesitating under the high demand for services. Hence, in general hospitals the assessment of quality should be a mixture of product and services (tangible elements and intangible elements). This recalls the Retail Service Quality Scale (RSQS) model developed by Dabholkar et al. (1996). The model is established upon empirical findings and was designed on a multilevel basis, including five dimensions, six subdimensions, and 28 items where 'NA' means that the element is not available in the SERVQUAL model Figure (6.). Given the fact that up until the completion of the current research there is no model or framework that could be used to assess or evaluate either quality or the implementation of QMS and its practices, then this research is not only pioneering but also timely to respond to the need to develop policy and general hospitals' atmosphere as organisations that are able to sustain and grow.

Dimensions	Subdimensions	Items	SERVQUAL Dimensions
1. Physical aspects	1. Appearance	1-3,4	Tangibles, NA
	2. Convenience	5-6	NA
2. Reliability	3. Promises	7-8	Reliabity
	4. Doing it right	9,10,11	Reliability, NA, Reliabity
3. Personal interaction	5. inspiring	12-14	Assurance
	confidence	15-17,18,19,20	Responsiveness, Empathy,
	6. Courteousness		Assurance, NA
4. Problem solving		21,22,23	NA, Reliability NA
5. Policy		24-25,26,27-28	NA, Empathy, NA

Figure 6.Retail Service Quality Scale (RSQS) Model Adapted from Dabholkar et al. (1996)

It is noticeable that the RSQS model has a number of dimensions and details that are not available in the SERVQUAL model. The new dimensions emphasise the social context of healthcare services and the practitioners' engagement with the services. This appears in the model's components that combine the perceptions of products and services. The scale encompasses 28 items divided among five dimensions: physical aspects, reliability, personal interaction, problem solving, and policy. RSQS seems to be a developed version of SERVQUAL. However, as the literature was searched, SERVQUAL seemed to be more common among researchers who intended to measure the quality of services in healthcare organisations, although in other services-based industries such as retail. Carrillat et al. (2007) found in a sample of service quality research concerning non-English countries that all of the studies in the sample used a modified version of SERVQUAL. Yaghi (2010) suggests that the RSQS model could be useful to assess quality because it is more context specific to the service product industry, such as hospitals and retail (Ladhari, 2008).

Additionally, although different research studies used manufacturing-based models, more recently the emphasis has been on developing sector specific service quality scales or models rather than using a generic scale for measuring service quality across all industries and countries (Akbaba, 2006; Caro & Garcia, 2007). This shift is understandable because it seems critical to generalise the service quality dimensions among all types of industry. In addition, there is a wide range of services, which means the way services are provided and the context in which they are delivered should be different from one service to another (Chowdhary & Prakash, 2007). This also suggests the need for an industry-specific model for general hospitals that serves the purpose of the hospitals and fits with their needs. In the following subsection, the focus will be on highlighting the dimensions that appear to relate more to the healthcare context, namely general hospitals.

2.4.2.1 Six Sigma and measuring quality in general hospitals

Arkoudas (2017) explained that the Six Sigma model became a common tool of measurement for quality in hospitals due to the nature of the model, as it is more accurate and systematic compared to TQM. This view is held by scholars such as Biswas and Chowdhury (2016), Swink and Jacobs (2012), and Desai (2012) who argue that Six Sigma was designed with the aim of making ongoing quality improvements to ensure that business processes are fully optimised and simultaneously sustain operational excellence by using powerful statistical methods (Kanji et al., 2003). On the other hand, TQM is likely to utilise techniques or tools that could be used to confirm whether the current processes in the hospital are operating as expected and allow the application of improvements to achieve specific predetermined tasks. Desai(2012) add that hospitals that used Six Sigma seemed to achieve better patient satisfaction results and build loyalties. Although other quality models such as TQM allow the measurement of statistics and collect the required data to assess and improve quality, TQM only targets simpler operational issues, while Six Sigma seems to be a patient-focused, data driven and robust methodology to improve processes and reduce costs (Arkoudas, 2017). General hospitals today are required to sustain their services in an environment that is highly competitive. The healthcare industry has become more quality-driven and cost-conscious. According to the Institute of Medicine (IoM), medical treatment should be both safe and effective; however, as explained in Section 2.2, as the concept of quality has different meanings according to the stakeholder's position, the same can be applied to other aspects of Six Sigma, such as effectiveness. For example, for a hospital, cleanliness is a measure of service effectiveness (Antony et al., 2017).

According to the IoM, there are six sigma of quality care:

- **Safe**: able to provide services that are free from injury and has a culture that controls and prevents medical errors.
- **Effectiveness:** although the institute agrees that 'effective' implies provision of services designed based on scientific evidence, it is critical to agree that the effectiveness of services can be limited to specific meanings (see section 2.4.2.1.1).
- **Patient-centred:** expectedly, this aspect should be at the core of the Six Sigma as it has been agreed that quality of care is all about the patient. Hence, placing the patient at the centre of the services in healthcare means the healthcare organisation should be responsive and respectful of the patient's needs.
- **Efficient**: in order for the service to be efficient, time should not be wasted.
- **Timely:** the patient and the healthcare professional need to be on time, and hospital appointments must be kept avoiding any delay.
- **Equitable**: quality is about allowing all patients, regardless of their characteristics and backgrounds, to access services.

Those are the components of the Six Sigma model, which is accepted as one of the most commonly used QM models in the healthcare sector (Arkoudas, 2017). In the following subsection, the use of the Six Sigma model will be evaluated in its use to improve the quality of care in general hospitals. In light of the definition of quality in healthcare, which suggests that quality is "doing the right things" – services or treatment – "for the right patient, at the

right time" – accessible, efficient and timely – "in the right way to achieve the best possible results" – placing the patient at the centre and giving them equal opportunity to access services (AHRQ, 2008: para. 1), the researcher suggests that for the services to be timely and equitable, this is a matter of accessibility and without such accessibility, quality of the services cannot be claimed. For that, both 'timely' and 'equitable' are integrated under one umbrella called 'accessibility'. In addition, the researcher chose to integrate 'effectiveness' and 'efficiency' because medical services are effective when they are provided on time (in the light of the meaning of quality). Addressing the effectiveness of the services would reflect efficiency and accessibility when the matters are discussed in the quality context. Hence, instead of Six Sigma, four constated dimensions – safety, patient centredness, accessibility, and effectiveness – were taken to the fieldwork to be examined in the context of Saudi general hospitals.

As the researcher was a practising nurse in the KSA, he was able to notice that even when the matter of quality was mentioned in the general hospital context, there was no evidence that the Six Sigma model was considered. From the researcher's experience, there is a concern that patient expectations have not been clearly understood and that there is an inability to satisfy customer requirements in real time. Indeed, the importance of having a policy that considers the six aspects of the model could be imperative to initiate a systemic and controlled measurement of the quality of the services in general hospitals. Understanding that QMS is a complicated set of systems implemented to keep hospitals up to date with patient expectations requires general hospitals to first establish accessibility and effectiveness, with consideration of the complications involved in each aspect.

2.4.2.1.1. Impact of accessibility and effectiveness on implementation of QMS in general hospitals

When the matter of accessibility is discussed, the first idea that comes to mind is the ability to use the services. A similar definition of accessibility was provided by the IoM which defined access as the appropriate use of personal health services to achieve the utmost health outcomes (Berwick, 2002). This approach included the notion of right service or appropriate health outcomes. Access is one of such ways and denotes: i) the potential to utilise a service if required, and ii) gaining access or initiation into the process (Campbell et al., 2000). Here, access means – in terms of service – the availability of sufficient services of healthcare. The numbers of doctors, laboratory investigations and hospital beds traditionally measure this

aspect. The second dimension is the actual utilisation of a healthcare service or the 'degree of fit for purpose' between the patient and the service.

According to the abovementioned definition, accessibility is availability when needed. In the general hospital context, availability could also be connected to financial affordability, which is the individual's ability to access services without financial hardship. In KSA general hospitals, services are made available to all Saudi citizens free of charge, so there is no cost involved in the services. But in order to make healthcare services available with no cost to the public, there are costs from the government, and a lack of ability to handle such costs will influence the accessibility of these services by patients. Hence, accessibility will always involve both the cost of healthcare services as well as the indirect costs, such as fares to and from appointments and time taken off work. Affordability is impacted by the wider healthcare financing in a given setting as well as household income (Evans & Etienne, 2010; Gulliford et al., 2002). The streaming part of accessibility deals with people's willingness to seek services. This aspect may be low when patients perceive healthcare to be ineffective or when social and cultural factors (language, age, sex, ethnicity, or religion, etc.) discourage individual patients from seeking services (Gulliford et al., 2002; Naylor et al., 2016).

Improving accessibility to general hospitals in the context of the KSA has been critical, despite considerable efforts by the Saudi Ministry of Health in funding and provision of free healthcare services. A 2013 survey of Saudi nationals found that approximately 22.9% of the population aged fifteen years and above accessed public health providers in the past two years (El Bocheraoui et al., 2015a), although distance and healthcare settings played roles in health seeking behaviour (Buzza et al., 2011; Ward et al., 2015).

Among the various challenges putting pressure on the general hospitals in the KSA, there is a growing public demand for services and an increase in spending, but at the same time the public sector is failing to adequately meet the public need for access to services. This statement is supported by Al Shehri (2008), who was president of the Saudi Society for Medical Education. He warned of a serious shortage of medical employees such as physicians, nurses and technicians. Afet (2009) used the MoH's report to evidence that more than 480,000 people across KSA were unable to use healthcare services, mainly due to the difficult terrain of mountains and desert, meaning that about 2% of the population of 24 million could not be reached. Al Shehri (2008) found that the waiting list for orthodontic

treatment generally ranged from two to four years and the problem was still ongoing up until this research was conducted.

The question that could be asked at this stage is, what is the best access to services that can be given to patients to enhance the quality of the healthcare system according to the patient's outcome? We could begin to answer this question by stating Hibbard's (2015) opinion, who explains that in today's world, patients who have better knowledge and are engaged in a positive health environment are more likely to have better quality health outcomes. Health outcomes are not limited to improving the health of the patients only but could also be a part of improving quality. On this basis, access could be evaluated using relevant indicators of health status. This can imply that organisational barriers to access may result in delays in treatment, thus resulting in dissatisfaction among patients, and poor health outcomes — bearing in mind that 'health outcomes' is not a concept that could be limited to the patient, but rather to the healthcare organisation in general. Hence, it is pertinent to note that evaluation of quality of care using health outcomes rather than availability or utilisation of services may alter the conclusions.

With respect to the abovementioned argument about affordability, as Trapero-Bertran (2015) explained, the future expectation of patients is that paying more for services would not always mean that patients would access more. At the same time, paying more for services would not necessarily mean that services are better quality, as the government may have failed to provide reasonable deals to hospitals to provide the same services at cheaper rates. However, it would suggest that improving services would require better resource management to take control over the waste channels and at the same time, if resources are limited, then a more strict equality policy should be in place to ensure that misplaced practices do not prevent patients from accessing general hospital services equally.

In general hospitals in the KSA, recent research studies suggest that favouritism, long waiting lists, and lack of an effective booking system all reduce patients' satisfaction not only due to the limited understanding of accessibility, but also to the failure of hospital systems to assure that all channels of access to services are well implemented. Until recent years, healthcare providers did not integrate the concept of effectiveness into their daily practice; however, this should be changed because the risk of losing control over the quality of services is high, bearing in mind the great deal of pressure on public healthcare systems to control spending. The connection between quality and accessing healthcare services is related to a significant

extent with the level of acceptability, affordability, and ability to accommodate patients equally.

Conversely, when a service delivers a favourable outcome regarding excellent health status, the need for health services and utilisation is minimised (Oliver & Mossialos, 2004). In fact, the key issue is to obtain greater value for hospitals' money, although this is not easy. This consists of promoting accountable healthcare systems, but also new incentives that encourage providers, patients, and all agents in the system to make efficient decisions that lead to lower opportunity costs in terms of health outcomes.

Although a service may be available, factors relating to personal, financial, and organisational barriers may hinder timely access to it. In the KSA, Al-Otaibi et al. (2010) argued that one of the main challenges facing the public healthcare sector in the Kingdom is related to the long waiting lists for patients who cannot access the services as needed. Al-Otaibi et al. (2010) link this challenge to the culture of management, where nepotism (*Wasta*) is a serious issue as not all patients have equal opportunities to access the services. Afet (2009) found that the management of public hospitals failed to give adequate access to patients with chronic illnesses whose needs have not been met.

A limited number of patients were visiting primary health centres for treatment and the number of referrals to general hospitals was found to be low, which may indicate that in many cases patients were denied the appropriate access to specialist hospitals, and there was also limited access to health education. Such challenges have an influence on the level of patient satisfaction and has driven patients away from public healthcare providers. In this research, the researcher considers the patient as a key stakeholder to assess the existence of QMS that impacts the outcome of the services, not only from the perspective of satisfaction, but from the perspective of the quality of the whole system. As mentioned in sections 2.2. and 2.3, the matter of QMS is more than tools such as TQM to ensure that quality is addressed in the services; rather, QMS is understood in this research as a complicated organisational-healthcare concept that is reflected in the daily practices of the nurses who are on the frontline when patients access the services.

The original idea of universal health coverage (access) is that all individuals obtain the health service they require without experiencing the financial difficulty inherent in out of pocket payments (Evans & Etienne, 2010). It entails coverage with quality health services (health promotion for prevention, treatment, rehabilitation, and palliation), including a form of

financial risk protection. A striking feature is universality – that is, coverage should be for everyone, regardless of condition. Although many countries are yet to achieve universal health coverage (Evans & Etienne, 2010), countries can take measures in this direction. Improving access to healthcare is one of these steps. According to Gulliford and colleagues (2002), access to healthcare means having "the timely use of personal health services to achieve the best health outcomes". Broadly, access is obtaining the health services needed as well as benefiting from financial risk protection (Evans & Etienne, 2010). Accomplishing fair access to care entails three distinct steps: gaining entry into the healthcare system (physical accessibility), accessing the site of care where actual patient care services take place (financial affordability), and accessing the provider who has the requisite skills with whom patients can build a relationship based on mutual communication and trust (Gulliford et al., 2002).

Physical accessibility is attained when services are readily available to people in the community and the services are of controlled quality. The healthcare must, of course, be located close to individuals in the community who need them. Additionally, services including appointment time and all aspects of service organisation and delivery must be available to people at convenient times (Lagu et al., 2014; Naylor et al., 2016).

2.4.2.1.1.1. Barriers to accessing services in KSA general hospitals

Service utilisation is a measure of access to healthcare. Individuals who have healthcare needs may have access to care yet encounter challenges in utilising services. Put differently, the potential to access a service may not be utilised even though the service is available

(Papanikolaou & Zygaris, 2012). Experts' opinions indicate that the evidence of access manifests in the utilisation of a service, not merely availability of a service (Kleinman & Dougherty, 2013). Among the barriers are personal barriers such as the inability of individuals to recognise their need for care, and their decision to seek medical care. Thus, the likelihood of consuming care rests on the scale between patients' perception of their needs and their attitudes, norms and experiences with healthcare. This means that patients' expectations may not always align with healthcare provision.

An illustration of this is seen in the non-uptake of preventive care or delays in patients presenting with serious conditions needing urgent care. Financial challenges can affect individual patients' utilisation of services – including in the KSA, despite free healthcare at the point of use. Additional costs relating to time lost from work or in travelling to and from

the health facility might deter patients from accessing, depending on the individual. For some patients, access may not be negotiated whereas others may view cost as a considerable challenge. The effect depends on the degree of the cost and individual willingness to pay (Prinja et al., 2012). Other important barriers to access are organisational barriers. These include long waiting times and long waiting lists, which may be indications of failure to design facilities around the needs of patients. Restructuring of the way clinical care is delivered, such as the substitution of waiting lists for booking systems, might alleviate organisational barriers to access.

In the Saudi context, one study reported individual characteristics (age and education) as barriers to access of care (El Bcheraoui et al., 2015a). Other studies, however, ascribed in descending order: geographical (distance to and types of healthcare settings, transport and rural-urban inequalities), cultural (race, ethnicity and religion), organisational (long waiting list and delays) and finance (Buzza et al., 2011; Kronfol, 2012) as the main factors. These factors have a direct impact on the degree of service delivery.

Empirical evidence shows that access to health services in the KSA varied for different reasons and depending on care sought. Of the cases with an apparent healthcare need, 27.7% of the population do not seek care, with this being more frequent in acute (32.8%) than in chronic episodes (12.7%) (Al-Ahmadi & Roland, 2005b). Access to prenatal care was adjudged to be 67-95% (El-Gilany & Aref, 2000), vaccination programmes 83-94% (Al Teheawy & Foda, 1992), and screening and treatment of epidemic diseases \geq 50% (AlMazrou, 2002). Access to interventions focusing on chronic illnesses was found to be slightly low \leq 50% (El Bcheraoui et al., 2015a). For instance, only a small proportion of known hypertensive patients could access treatment from primary healthcare. Poor referral services, low health education and low availability of specialists hindered service utilisation. Patients were relatively dissatisfied with various levels of access to healthcare such as opening hours, waiting times, and physical environment (Mohamed et al., 2015).

2.4.2.1.1.2. Effectiveness and accessibility

Access is a fragment of the overall healthcare consumption. The goal of healthcare is to promote or preserve health. Service effectiveness refers to the degree to which care delivers the desired outcome or goal. There are two dimensions of effectiveness: interpersonal care and clinical care (Gulliford et al., 2002).

Reviewing the broader public management reform literature, an argument was put forth by Farrell (2004) that healthcare worldwide is experiencing pressure to reconcile three competing objectives: fairness and equality, high quality, and low cost to assure the effectiveness of the services. Clearly, these objectives imply both social and economic factors including the provision of high-quality care and accessible services to the population, while at the same time reducing healthcare costs. Farrell et al. (2014) suggested that even healthcare systems in developing countries are struggling to provide what can be called effective healthcare services in response to the demands of their populations. With increasing healthcare expenditure, there is little chance for equity of accessibility to the services and the quality, and the effectiveness of the services can therefore be affected (Farrell et al., 2014). In KSA general hospitals, the implication of such challenges can be critical because the ethos of the general hospital is to be equally open to all. But is equality of accessibility enough to meet the purpose of general hospitals, or is quality another important angle that must be considered? It is perhaps important to remember that accessing services with low quality could cause more harm to patients' health and to the image of the general hospital than limiting accessibility (see section 2.4.2.1.1).

In KSA general hospitals, although the Vision 2030 seeks to bring both equality and quality to service accessibility, there is still doubt as to who could access what and when.

Indeed, the argument could also be forwarded that changes in the universal healthcare environment drove new cultures into public healthcare providers and that the culture of healthcare organisations has changed to become more patient-centred. In fact, the organisational culture of healthcare was seen over a 20-year period to have influenced the effectiveness and the performance of organisations, especially in terms of long-term effectiveness. In the literature, there are a few examples where organisations such as general hospitals in the KSA have failed in their change and improvement efforts because of their inability to bring about a culture change to meet the changing needs of their customers (Robinson et al., 2009).

In the KSA, studies focusing on quality-of-care show that maternal healthcare (Ali & Mahmoud, 1993), vaccination (Al-Teheawy & Foda, 1992), and control of endemic diseases (Al-Ahmadi & Roland, 2005b) deliver high quality care. A preventive intervention focusing on schistosomiasis reduced the prevalence rate of schistosomiasis which dropped from 13% to 0.17% between 1983 and 1989 (Al-Ahmadi & Roland, 2005b). Conversely, over

prescription and wastages were found among physicians, probably due to inadequate training and the fact that services are free at the point of purchase. Management of chronic diseases scored low owing to poor professional skills, such that cases were either misdiagnosed or mismanaged (Al-Otaibi et al., 2010).

In summary, the first contact with healthcare in the general hospital is only effective when care is physically accessible at the time of need, accepted by the users and does not result in any form of financial hardship. This should be comprehensive enough to cover a range of services appropriate to the common health problems within the given community. Thus, universal access engenders universal health coverage of health services. In this research, the matters of effectiveness and accessibility will be examined as they are part of the issue of quality as an umbrella organisational concept in KSA general hospitals. The rationale behind this decision is not only linked to the Six Sigma model, of which accessibility and effectiveness are two major components. It is also related to the fact that the complications involved in QMS as a concept are wholly centralised on activating all accessible channels to allow patients to utilise the healthcare services effectively, but at the same time serve the message or the spirit of general hospitals' services. The researcher adopts the position that quality as a concept cannot be practised in general hospitals in isolation from the other organisational concepts such as access and effectiveness, because QMS are found in the first place to serve the purpose of the general hospitals in creating a safe place for patients to receive healthcare.

2.5. The dilemma of successful implementation of QMS and its practices in general hospitals

The dilemma about which QMS practices a hospital can apply to assure that QMS is successfully implemented is not isolated from the dilemma explained earlier around the understanding of the concept of QMS in general hospitals. It was previously noted that the confusion around the concept of QMS could be traced back to its root, as it was lent from manufacturing and this was problematic due to misconceptions and a lack of understanding (Al-Najjar & Jawad, 2011). In addition, the practices of QMS could be misunderstood or misplaced due to the same reasons (Tošić et al., 2018).

The WHO took a fundamental position in mandating all healthcare sectors around the world to monitor the effectiveness and the quality of healthcare services at various levels (WHO, 2010). Nevertheless, the paucity of agreement on the measurement tools seemed to influence the level of

practices and the validity of the standardisations of quality practices such as ISO 9000 (Antony et al., 2017).

In addition, ISO 9000:2000 defined QMS as a complex system of interrelated or interacting elements that are responsible for directing and controlling the quality of the organisation's services, which seemed to be accepted in different contexts (Tuomi, 2010). Then, accepting that there are specific standards that could apply to all contexts could not be easily accepted or generalised. Arguably, if we accept that healthcare organisations accept universal standardisations, the practices to address the standards of each context should be generalised from the context itself and should be supported to evolve over time to create sustainable sources of competitive advantage. Further to this, more questions should be asked such as which practices should healthcare organisations – namely general hospitals – apply to ensure that QMS has been implemented successfully? Would the adoption of ISO (in its different versions) ensure that QMS is implemented effectively?

In order to address the principles that the practices of QMS should include (health services – quality management systems), 10 major areas of practice for quality management systems in healthcare are listed. These are summarised in Figure (7.).



Figure 7.Ten major practices of quality management systems

Adapted from Tošić et al. (2018)
As can be seen from Figure (7.) customer focus is the first principle to be considered when practising QMS. In KSA general hospitals, it may be better to change 'customer' into 'patient' as this is how it is termed. Ensuring that the patients' needs, and expectations are met is at the heart of the practices of QMS. Professor Deming (in Kolesar, 1994) asserted that "the person who helped the success of the Japanese revolution of quality" once noted that "everything starts and ends with the customer – patient". The second principle is the stakeholder's involvement. It has been explained that the complexity of the healthcare system comes from the complexity of the stakeholders involved in the system. Ensuring that QMS is successfully implemented requires assurance from management that, different stakeholders are involved in addressing matters related to quality. Hence, it is not only about identifying the needs and expectations of the patients, but also other parties including practitioners such as nurses.

Leadership is an important principle addressed by ISO9001 in regard to the practices of QMS. According to Sfantou et al. (2017), the engaged leadership of healthcare professionals is an important matter for strengthening quality and integration of care. However, this principle could be critical in healthcare because the patient is centralised. In the literature, it has been suggested that professionals could be in charge alongside their area of expertise in the healthcare system as stewards. Professionals get a first-hand view of how well the system functions in their everyday work. Practitioners in such a system will be in a position to change and improve the system in partnership with each other, the patients, and the management, with a focus on improving care quality and safety (Gauld & Horsburgh, 2015).

From this perspective, however, Tošić et al. (2018) asserted that it is not only practitioners who should contribute to improving healthcare service quality practices; rather, there should be equal contribution from patients, practitioners and managers – doctors in the field of their professional practice and managers in the field of quality and safety of all services provided by the healthcare organisation. It is a sense of self-governance where every stakeholder plays the role of leader from their own position. For that, instead of leadership, the researcher suggests the use of selfgovernance to describe the attitudes of leadership among all practitioners and management when the practices of QMS in general hospitals are addressed. In fact, going back to the roots of quality in healthcare, the role of Florence Nightingale in developing the practice of quality is fundamental to emphasise the role nurses should play in leadership. On this matter, Sfantou et al. (2017) agreed that empowering leadership could also be linked to patient outcomes by promoting greater nursing expertise through increased staff stability and reduced turnover.

The fourth principle is people and care vision. This principle suggests that hospital staff create the core values of the healthcare organisation. The power of the healthcare organisation is in the manpower – the workforce that ensures that the quality of the practices allows the hospital to achieve competitive advantage over the majority of contemporary healthcare organisations. The following section addresses how the failure of healthcare employees to create a value of quality that is centralised around the patient would lead to a significant failure in the implementation of QMS. In their paper on barriers to effective quality healthcare, Hignett et al. (2018) demonstrated that the lack of a culture of patient safety centralised around the quality of services has led to many hospitals in the UK experiencing serious problems in meeting the expectations of patients and other stakeholders. The questions that could be asked, then, are how many holes are there in general hospitals' healthcare systems with regards to the implementation of QMS, and how have the daily practices of nurses and middle managers contributed to the struggle to maintain the requirements of the implementation? The researcher designed the questionnaire and interview questions to capture information to help answer these questions.

The fifth principle is process orientation. ISO 9001 identified this principle as being the core of the model because it is responsible for controlling holistic monitoring, evaluation, and the assessment process. Scholars including Tošić et al. (2018) agreed that in order to provide quality healthcare services, hospitals need multidisciplinary processes that unify different functions, clinical specialist activities and different providers of healthcare services. The orientation of the process requires identifying the role of each party involved in the process. In addition, there is a need to introduce well designed reward and evaluation systems. Such orientation is important because it will help to monitor and control the quality of the complicated systems involved in the QMS (Asiri et al., 2017). In KSA general hospitals, there is still a lack of understanding of how the process orientation is implemented to ensure that the requirements of QMS are addressed. There are several methods of evaluation and monitoring, such as patient satisfaction questionnaires. However, the question that should be asked is whether we are looking at satisfaction or outcomes when addressing QMS. Clearly, in Saudi general hospitals, there is no way to distinguish – according to the researcher's best knowledge – between the measurements to measure satisfaction and those to assess QMS and the outcomes of its practices. One of the targets of this research, then, is to address what should be involved when QMS and its practices are assessed.

The sixth principle identified by ISO 9001 is guidance through information. This principle represents the importance of using and protecting information generated and exchanged by

professionals working in general hospitals (Tošić et al., 2018). With this in mind, the practice of QMS should involve implementing useful information systems and technologies to control the flow and the use of information. It is the core responsibility of the management in the general hospital to ensure that the right technology has been used to control the necessary operations and functions.

The seventh principle is partnerships for quality across healthcare services. This principle suggests that a general hospital or any other healthcare organisation needs to cooperate with other organisations, such as accreditation agencies and other hospitals. This is important to provide patients with complete healthcare and to cover all potential healthcare problems with appropriate specialist medical knowledge (Tošić et al., 2018). In the Saudi context, the MoH presented CBAHI as an accreditation agency in 2005 in public and general hospitals for quality assurance with a clear indication that quality matters. But since that time, research studies and reports have emphasised the fact that the quality of staff skills is a critical challenge that hospital management until now have been unable to overcome.

The eighth principle is demand-oriented care, which refers to the nature of the healthcare services where people are serving people. Hence, the involvement of the patient is not about telling the doctors or nurses their needs, but rather for the professionals to address the needs and then for the hospital to provide the necessary services (Blythe et al., 2001). This principle seems noticeably relevant to the leadership principle where nurses' limited participation in clinical decision making could be ineffective and harmful to patient safety (Asiri et al., 2016). Hence, involving nurses in clinical decision making is a principle that links to quality and the implementation of QMS.

In the nineth principle, mutually beneficial supplier relationship focuses on the services provided by third- party such as technical support, information and communication services, business consulting, recruitment services, sanitation, catering, and training (Tošić et al., 2018). Such services are seen to have a significant effect on the quality of health care institutions and its outcomes (Radović et al, 2012). Upon this principle, the complications of the stakeholders' network should be considered when QMS is implemented in general hospitals. The challenges that might influence on the communication with a specific stakeholder -suppliers – for example should be highlighted and acknowledged as QMS is introduced to healthcare organisations including general hospitals.

The last principle is continual improvement or, as it is also known, training and development. ISO 9001 (2015) confirms that "the organisation shall continually improve the suitability, adequacy and effectiveness of the quality management system" (p.5). All general hospitals in the KSA must also focus on this principle as it encourages learning from errors, and trains for the development and continual improvement of the general hospitals. In light of Tošić et al. (2018), the researcher developed the model of ten principles, as seen in Figure (8.).



Figure 8. The ten principles of QMS in general hospitals, as amended by the researcher

As can be seen from Figure (8.) the researcher has introduced some amendments to the principles such as Principle 1, where the focus shifts from the customer to the patient to correspond better with the purposes of the healthcare sector. In addition, Principle 8 has been defined and specified to patient safety. To sum up, general hospital quality management systems increasingly face unique demands for care depending on the settings. The practices of QMS have evolved into an indispensable part of the healthcare industry, owing to improvements in the markets and the economy. These advancements are driven by phenomena such as globalisation, market deregulation, technology advancement, and stiff competition. These conditions necessitate performance measurement aimed at stimulating actions that result in achieving strategies. Such care requires proactive rather than reactive strategies; comprehensive and continuous rather than episodic strategies; and of course, evidence-based strategies that are founded on lasting patient provider relationships rather than incidental provider-led care. ISO 9001 proposes a model of 10

principles to address the possible core practices general hospitals should consider when the implementation of QMS in concerned.

Nevertheless, it is critical to generalise those principles to be applied in each context. The importance of this research comes from its aim to address how general hospitals in the KSA understand the concept of QMS and what its practices involve. By doing this, the researcher will be contributing to the global agenda of developing the concept of QMS and its practices. In the following section, the researcher will debate the challenges that may hinder general hospitals from implementing QMS and its practice successfully.

2.6. Challenges faced by general hospitals to perform better QMS practices

Regardless of the confusion and ambiguity encircling the concept of QMS and the use of various terms used synonymously to refer to QM, there are further challenges to be considered. The literature identifies a glossary of barriers or challenges which are known to have negative influences on the application of QMS. One of the most recent research conducted by Hignett et al. (2018) reported 760 challenges in which NHS staff in the UK reported to be preventing or hindering the quality of healthcare. Indeed, some of these challenges have been reported over the last 25 years in different aspects of organisational culture, including the high level of bureaucracy in the organisational structure Figure (9.).



Figure 9.Discourse cloud of challenges that prevent or hinder the delivery of effective, high quality care Adapted from Hignett et al. (2018)

As can be seen from Figure (9.) there are different discourses that represent the challenges that may hinder or prevent hospitals and healthcare organisations from achieving high quality care. The questions that could be asked include whether the abovementioned challenges could be

applied to the general hospital context in KSA, and if so, are there any other challenges that specifically relate to the Saudi general hospital context? Noticeably, systems such as reporting tools, care providers' systems, lack of standardisation, and management systems and culture including hierarchies and a paucity of a clear vision that is able to lead the hospital to sustainability are recognised as the most common challenges that seem to be repeated when the matter of quality in hospitals is searched for (Hignett et al., 2018). In the last few years (more specifically since 2006), the Saudi government has made a few attempts to bring more values of the culture of quality into the public healthcare context (Al-Borie & Damanhouri, 2013). This claim is held by the impressive Vision 2030, which is rooted in improving both the culture of quality and patient safety. Nevertheless, regardless of the positive steps taken by the government towards improving awareness of the need to establish a culture of quality, recent research suggests that Saudi general and public hospitals are struggling to meet the universal standards and establish this culture of quality (Sweis et al., 2013). As explained in Chapter One, this research aims to contribute to the current research by addressing the concept of quality and how it has been understood by the key stakeholders in the Saudi general hospital context. Goetz et al. (2015) suggested that starting an initiative to create a culture of quality would not succeed without a clear definition of the concept of quality, and the possible approaches and tools to implement it. Importantly, it is an objective of this research to address the challenges that prevent healthcare organisations from establishing QMS successfully.

Conversely, Tuomi (2010) explained that the implementation of QMS is relatively new to healthcare organisations internationally. For example, in Europe, the application of QMS was limited until late 1990s. In addition, in some countries such as Finland, due to a lack of opportunities for competition, hospital management, especially in the public sector, was not motivated to document the growth of interest in implementing QMS. In fact, being a manufacturing concept more than a healthcare concept increased the ambiguity around what should be controlled and considered when QMS is applied – in other words, what hospitals should be considering when implementing QMS. Someone could argue that the international frameworks and standards (as explained in Table (2.) – see section 2.4.2) offer guidelines which help direct the practices. That may be accepted to some extent, but if we argue with Oakland (1999) that QMS is an assembly of components including organisational structure, resources for implementation, processes and procedures, then accepting that the current standards will do the job in supporting the application of QMS would be questioned. This is especially true when we link to Schien's (2016) ideas about the role played by organisational structure in bonding all the relationships among different parts and systems operating in the organisation.

In general hospitals, management needs to look at the structure of the organisation first before making the decision to implement QMS. In fact, Hignett et al. (2018) explained that the organisational structure of a healthcare organisation is a challenge to the successful implementation of QMS, because QMS is derived from different organisational environments where the structure and the culture were different. According to Leape (2005), organisational culture has been considered by many research studies as the "ultimate challenge". Carayon and (2010) Wood explained that organisational culture has been repeatedly identified by researchers due to the complexity of the dynamic system and the structure of the healthcare systems. Hignett et al. (2018) added that the structure of a healthcare organisation is more complicated than those of defence or manufacturing organisations due to the number of professionals and management lines involved in the system. Regarding those challenges, Hignett et al. (2018) suggested that there are more "holes in the cheese" – a metaphor to reflect that number of challenges to the delivery of QMS Figure (10.).



Figure 10.Swiss Cheese model of challenges faced by healthcare sector Adapted from Hignett et al. (2018)

It is noticeable from Figure (10.) that the main challenges are resources, communication, risk management, pressure at work, and organisational culture. In this research, quality is seen as an organisational aspect that should not be isolated as a main value from the culture of the general hospital as an organisation. Indeed, the matter of quality should be communicated among different key stakeholders to ensure that quality is not forced, but rather emerges naturally in the hospital as part of its growth and development, therefore quality assurance will the responsibility of all.

In the UK, there have been attempts from the NHS over the last 30 years to change the culture of the organisation to ensure better adoption by staff of the norms and values of a quality and safety culture. However, evidence of these practices suggest that the changes were superficial, as healthcare organisations and hospitals struggled to manifest and deeply embed the values, beliefs and power needed to sustain the change.

Tuomi (2010) listed the issues that should be considered by public healthcare organisations to enhance the potential implementation of QMS, as follows:

- 1. Start the implementation departmentally at first, and then go with a more holistic vision.
- 2. Consider the combinations of different models of TQM, EFQM and ISO 9000 components as each one complements the others.
- 3. Complete the necessary training that meets the needs of the staff.
- 4. Establish guidelines to address the practical steps for the practices.
- 5. Seek the required support from governing bodies, for example government.
- 6. Make the best use of the available technologies and information systems.
- 7. Ensure the culture change is promoted through the involvement of all employees.
- 8. Pursue the culture of learning and reduce blame.
- 9. Consider the patient's requirements.

Upon the argument provided earlier in sections 2.5 and 2.6, although there are different challenges hindering or preventing the implementation of QMS in healthcare organisations, the real challenge is in the organisational culture. Organisational culture has been recognised by very recent research studies as the "ultimate challenge" (Rooij & Fine, 2018). The literature on power offers some solutions for redistributing the power among different levels to ensure that staff give the matter of quality serious attention and that they are ready to transfer it from being a goal of the health organisation to becoming a core value.

2.7. Requirements for successful implementation of QMS in general hospitals

Beyond the struggle to agree on one concept of QMS, managers of general hospitals are expected to look for opportunities to adopt QMS in their organisations. Policy development is acknowledged as a fundamental step to ensure that QMS is implemented in general hospitals successfully (Chan et al., 2018). According to Aziane et al. (2015), for the QMS to be implemented in a hospital, management must commit to the quality policy in writing and ensure that the goals remain relevant through management provision. In a recent report titled 'Delivering quality health services: A global imperative for universal health coverage' published by the World Bank (2018), it is stated clearly that for countries including the KSA to achieve systematic improvement in their health systems' performance, ministries of health must work on the development, refinement, and execution of a national quality policy and strategy. This statement is a clear indication that having a holistic national quality policy is what governments in different countries, including the KSA, should be looking at. In fact, in the Vision 2030, the Saudi government seems to comply with this view as the MoH, through the government, announced the National Quality and Equality Policy.

According to Cookson et al. (2018), healthcare organisations are associated with introducing the concept of equity as both terms are important key issues to be considered when policy agendas are set (Goetz et al., 2015). The connection between quality and equity is explained by Doran et al. (2008), who argue that hospitals focus on quality as a way to improve safety and enhance costeffectiveness, while improving equity aims to reduce the gap in performance between healthcare providers. Hence, regarding the practices of QMS in general hospitals in the KSA, the MoH has set a general health policy that supports both quality and equality.

However, when viewing the practice in daily life, it is easy to see that general hospitals are not equally supported. For example, while general hospitals in Jeddah receive sufficient supplies and financial support, general hospitals in villages receive less support. It is possible to argue that the population pressure in large cities is bigger and therefore more financial support is needed to achieve quality and equality. This could be a fair statement to make, however the reality is that the KSA should be looking for a better approach to make a fairer financial support balance to ensure that all general hospitals in the country have equal opportunities to set equality/quality as an organisational principle in their agendas. Cookson et al. (2018) agreed that changes in the socioeconomic environment and the determination to provide equal and quality services have driven healthcare organisations to focus their policies on developing equity and quality. However, at the same time, healthcare organisations should avoid claiming that quality and equity are practised, because until now hospitals managers have struggled to overcome the challenges related to the nature of the population that their organisations aim to serve. This is because quality targets tend to be more difficult to achieve for socially disadvantaged populations.

It was noticeable that the official report provided by the Institute of Medicine announced that the goal of the 21st century's new health system is to cross the chasm towards a different understanding of the approach to serving the patient, and a new management style that best serves the purposes of the general hospital. Reducing adverse errors, optimising efficiency, and improving patient satisfaction is especially important to provide quality healthcare services. But more important is to introduce new management and a suitable culture into the healthcare organisation to establish quality of care as a culture in which patient safety is at the heart of the practice (Bell et al., 2016). However, the critical element is what is the style of management that could be chosen to serve this purpose?

An answer to the above question is suggested by Xie and Carayon (2015), who argue that management in healthcare organisations found themselves forced to change the way in which their organisations are managed due to changes in the global environment, where more technology has been introduced into hospitals which led to a need for changes in the style and mentality of management teams. In fact, this argument could be linked to Hignett et al.'s (2018) opinion, who explain that unlike the education sector, the defence sector can have more than one profession and one management line; the healthcare sector involves more than one profession and more than one management line Figure (11.). The difference between both sectors suggests that the style of management and decision making should be amended to respond to the differences.



Figure 11:Management hierarchies in service industries Adapted from Hignett et al. (2003)

The hierarchy management in education and defence are noticeably contrasted with health Figure (11) which seems more complicated because more professions are involved in health, but not in education and defence. Conversely, Kohn et al. (2000) argued that the concern of the health

system started in the late 1990s and early 2000s to focus on reducing medical errors and enhancing patient safety. This is because of the awareness that it is quality and not satisfaction that keeps the hospital sustainable for more for progression. Importantly, the argument of Kohn et al. (2000) started as early as 2000, and the current literature suggests that despite some considerable practices (Xie & Carayon, 2015), there has not been much progression in terms of embedding the culture of quality. In fact,

Kanji (1997) suggests that the use of his benchmarking tool for quality is necessary for top managers to establish what he called a 'quality culture' within an organisation by taking an active leadership role involving all employees, as explained earlier in the principle of quality. In KSA general hospitals, there is no evidence yet to show how leadership within the hospitals can be practised to help establish a holistic organisational culture where quality is central. This research can open the door, however, to debating the role of leadership in supporting a culture of quality as an organisational exercise to serve QMS. This statement seems valid not only in developing countries such as the KSA (Ferrer et al., 2018), but also in more developed countries such as the UK (Hignett et al., 2018).

There is a claim that Saudi general healthcare providers are following policies that lead to better quality practices. However, more current research studies suggested differently. For example, Awadalla (2015) asserted that Saudi public and general hospitals are experiencing different cultural and contextual challenges that hinder them from bettering the quality of their services. It was explained earlier in sections 2.2 and 2.3 that QMS is a complicated system of processes and procedures that are exercised within health organisations by stakeholders from within the hospitals. The atmosphere in which all these complicated actions and practices are happening is shaped by the holistic organisational culture and further microculture, such as the personal culture of each department in the hospitals. These layers of culture and microculture generate and hide different types of cultural and contextual challenges that can be embedded in the holistic organisational culture on the middle management's power to practise their role in transforming the quality level of the entire hospital (Currie & Procter, 2005).

Arguably, a lack of middle management commitment could be one of the most critical barriers that could lead to less quality QMS practices in the KSA. In this context, Hamidi and Zamanparvar (2008) demonstrated that the resistance of middle management to the changes needed in healthcare organisations hinder the TQM implementation. Hamidi and Zamanparvar's (2008) opinion is understandable, especially if we accept the view that organisational leadership is

one of the enablers for the successful practice of QMS in the healthcare sector. Thus, hospital management – to improve the quality – should behave as role models in order to demonstrate how quality can be integrated into the hospital as a whole to achieve their strategic goals. In turn, such understanding can help to promote more quality values and techniques into workplace practices and environment (Wardhani et al., 2009).

The importance of middle managers in enhancing the practice of QMS in general hospitals drove the researcher to consider them as candidates for participation in the research. This claim is also supported by the experience of the researcher as a nurse working for over five years in the Saudi healthcare system. In fact, one of the motivations that drove this research is related to the researcher's concerns about the quality of services in general hospitals and the contradiction between the views of the staff, who claim that the hospital services are of high quality, and the views of the patients, who are not satisfied with the level of quality.

2.7.1. Role of patients in enhancing QMS and its practices in general hospitals

The role that patients could play in implementing QMS is identified through the assessment of their level of satisfaction (Prakash, 2010). Indeed, the matter of patient safety has also been allied with the QMS of general hospitals. The emphasis of a report published in 2000 (To Err is Human: Kohn et al.) is on enhancing the culture of patient-centeredness in public healthcare organisations, including general hospitals (Kohn et al., 2000). The new idea of patient-centred culture seems to introduce a different role of the patient in terms of controlling quality as a buyer of the services. This new concept has also been accepted by public healthcare providers and has put extra pressure on hospital management to deliver more quality services. There is an argument that general hospitals are opening new departments for human resources to help control quality and to link quality and patient satisfaction (Poulos et al., 2008).

The report 'Patient empowerment: For better quality, more sustainable health services globally' (APPG, 2015) stresses that empowering patients and engaging them in making decisions regarding the quality of services, especially in the public healthcare sector, is fundamental. The report claims that the UK is in the lead in terms of supporting the concept of patient leadership. But this opinion is challenged by the outcomes of different hospitals in the UK that demonstrate neglect of the patients' perspectives (WHO, 2012). Yet, a failure to acknowledge the role patients can play in leading general hospital QMS towards better practices seems to not just be a uniquely British hospital challenge, with general hospitals in other countries such as

KSA willing to establish more "patient-centred" quality services (National Advisory Group on the Safety of Patients in England, 2013). Hence, in this research, the opinions of not only nurses but also patients will be sought as a means of emphasising the role that patients could play in developing the practice of QMS in general hospitals in the KSA.

2.7.2. Role of nurses in implementing QMS in general hospitals

As explained earlier, concern about quality in nursing was first addressed by Florence Nightingale. Nightingale, among the first to earn credit for developing a theoretical approach to quality improvement, addressed compromises to nursing and health quality by identifying and working to eliminate factors that hinder reparative processes (Nightingale, 1860). Nearly 160 years later, Nightingale's ideas continue to influence our healthcare landscape. Hallmark publications 'To Err Is Human' (IoM, 1999) and 'Crossing the Quality Chasm' (IoM, 2001) present quality concerns similarly noted by Nightingale. The idea of QMS has been introduced to Arab Gulf hospitals, namely general hospitals in Saudi Arabia. In the following section, the researcher will address a few attempts to create a comprehensive QMS framework to meet the needs of hospitals and healthcare providers.

Stakeholders in the healthcare industry hope that performance indicators will generate meaningful data to improve and steer health systems. In this regard, and in recognition that conceptual frameworks are pivotal steps towards performance indicator development, the purpose of this section is therefore to explain the fundamental concepts of international and national management frameworks for attaining quality -controlled health systems and to review some of the international frameworks.

To sum up this section, an exploration of the health management system of selected countries has been provided and a summary of this is that the World Health Organization (WHO), as well as the Organization for Economic Co-operation and Development (OECD), formulated standards for international comparisons. Additionally, there have been many attempts in the literature to create other frameworks for managing, measuring, and monitoring the performance of healthcare systems (Arah et al., 2003). Table (3.) represents some selected frameworks identified in the literature related to QMS.

Title of framework	Author	Components
Healthcare Governance Conceptual Framework	Brown, Dickinson, and Kelaher (2018)	The framework includes three main elements: inputs (individual level, board level, organisational level and external level), mediators (taskwork, teamwork, affective emergent states and cognitive emergent states), and outcomes (individual level, team level, organisational level)
Integrated Quality and Patient Safety Framework	Capital District Health Authority (2013)	The core values of the framework are built upon the values of capital district which are: citizen stakeholder engagement and accountability, innovating health and learning, transformational leadership, and sustainability.
Model for Developing a Quality System in a Hospital	Tuomi (2010)	The model proposes following different steps to implement the social and healthcare quality services, and also address the important steps needed to develop a quality system.
Conceptual Framework for Hospitals Quality Management	Eggli and Halfon (2003)	The framework consists of a 30-item matrix covering all the common elements of QM where resources are subdivided into human and other; for example financial. Three priorities should be examined to assure the validity, compatibility with the current verified models (ISO 9001, International Organisation for Standardisation, 2000), Joint Commission International Accreditation Standards for Hospitals, Joint Commission International, 2000, French Hospital Accreditations System, 1999 EFQM model, 1999 and total quality management doctrine falsifiability and flexibility.

Table 3:Selected frameworks identified in the literature relating to QMS practices

As can be seen from Table (3.) there are a few frameworks which have been designed to help healthcare organisations develop their practices in regard to QMS. Noticeably, the healthcare governance conceptual framework is the most recent framework. It was suggested by Brown

and Kelaher (2018) and includes components extracted from the theoretical examination of the governance literature in order to map complex factors that influence governance of healthcare quality. Prior to this, a conceptual framework for hospital quality management was established by Eggli and Halfon (2003) and this seemed more comprehensive than the newest framework. Eggli and Halfon (2003) give further details regarding the activities and the standards that they based the framework on when designing it. The Tuomi (2010) model offers some of the practical steps but there is ambiguity on how to follow up those steps. Additionally, in an earlier section (2.4), the EFQM was presented after it was combined with ISO 9000 to explain the possibility of its use to develop QMS in hospitals. The EFQM framework is excluded from Table 2.2 because it is known as the TQM framework more than a QMS framework. In the following section, the researcher will offer a more in-depth debate about the implementation of QMS in Saudi Arabia and the current status of the practices to ensure quality.

2.8. Quality management systems and practices in the Saudi context

It has been explained in Chapter One, the characteristic of the Saudi healthcare system where general hospitals is part of the healthcare providers' network. The development of QMS and its practices in the KSA was not far from the development of the concept in the Arab region. QM in developing countries, as with the Middle East, seemed to receive extremely limited attention, so there is little pragmatic research to analyse that would highlight the region (Al-Khalifa & Aspinwall, 2000). Until the 1990s, the focus on any formal quality management movement was proposed when a novel Quality Conference of Persian Gulf International was held in Bahrain (Dedhia, 2001). Later, new studies, starting from 1994 onwards, began to develop in respect to quality management (Al-Ahmadi & Roland, 2005b; Goetsch & Davis, 2014). These researchers attempted to evaluate and reduce the challenges that organisations in the Middle East face, which have enhanced the level of national empirical study.

Public finance and turbulent foreign exchange have heightened the unfavourable economic trends in different parts of the world, particularly in developing countries, thus resulting in budget cuts in the health sector. Following this, policymakers are adopting the recommendations of World Bank experts and introducing user fees. Lessons learned from the economic analysis of the demand for healthcare in these countries indicate that without visible and immediate improvements in the quality of care, the application of user fees will result in a drop of service consumption (Mariko, 2003). Likewise, in the KSA, the escalating cost of health has led to renewed pressure from the public who demand improved quality of health (Al-Ahmadi & Roland, 2005b). Poor quality in KSA general hospitals stems from a lack of competent, motivated staff; lack of availability or poor quality of medicines; poor compliance to evidence-based clinical interventions and practices; and poor documentation and use of information (Almutairi & Moussa, 2014).

2.8.1. Challenges of and barriers to implementation of QMS in Saudi general hospitals

The Saudi government is accountable for improving the quality of services in general hospitals and the provision of public health facilities. All health facilities and service quality management, from tertiary care hospitals to primary healthcare centres, are under the monitoring and control of the Ministry of Health (Dhafar et al., 2015). According to the WHO, the Saudi healthcare system is ranked 26th among 190 of the world's healthcare systems (Al-Omari et al., 2015). Ranking highly may suggest that general hospitals in the KSA have been able to implement QMS and establish the related practices that seemed to improve health outcomes in the country. However, there is no empirical evidence that may support such an assumption.

The current evidence, according to the literature, suggests that from 1998 to date, considerable federal investments were dedicated to improving the general hospital delivery system in the KSA. The Saudi government, through the MoH being the main financier of healthcare in Saudi Arabia, accounts for over 75% of the country's health funding. In 2015, budgetary allocation to health increased by 48%, totalling SR160bn (\$42.64bn), accounting for 19% of national budgetary spending – a significant rise from previous years. Similarly, the number of general hospitals increased from 2094 in 2010 to 2281 in 2014, with 18% of the centres located in Riyadh. Equally, the number of healthcare workers comprising doctors, nurses, laboratory technologists, pharmacists, and other allied health personnel rose from 34,241 in 2010 to 37,456 (9.4%) in 2014 (Salloum et al., 2014).

Many research studies have reported the struggles that general hospitals and other public services face in the KSA. For example, according to Dhafer et al. (2015), the cancellation rate in Makkah region hospitals reached 7.6% and the three most common causes of cancellations were patient related issues, facility related issues, and inappropriate work-up. Importantly, the matter of cancellation has been shown to have a link to the level of excellence in quality management and patient care (Kumar et al., 2012). In the following subsection, the researcher summarises the struggles and challenges that seem to prevent or hinder the Saudi government from taking better control over the quality of the general hospital services.

2.8.1.1. Lack of a well-qualified local health workforce

Ensuring that there are enough staff to provide services for patients on time and in the right way seems to be a critical dimension of managing the quality in general hospitals in the KSA. It has been suggested that most primary healthcare organisations in the KSA are under-staffed, and healthcare professionals including doctors and nurses are mostly foreign nationals who cannot communicate effectively in the local dialects (Al-Ahmadi & Roland, 2005b). According to the Ministry of Economy and Planning (MOEAP, 2007), the total labour force in Saudi Arabia during 2007 was 8.7 million, of which 53.9% were foreigners. This percentage is still high, although since 1992 the Royal Monarchy in the KSA forced 'Saudisation' to increase the number of Saudis in the workforce and to restrict employment of foreign workers (AlMahmoud, 2007). But, according to a report from the MoH (2012), there was an increase in the number of Saudis entering the nursing workforce, as in just one decade the percentage of Saudis in the healthcare professional workforce increased from 22.3% in 2008 to 50% in 2012. Almasabi (2013) argued that the healthcare sector in Saudi, including general hospitals, is mainly under the care and control of the MoH which supplies the sector with most of the workforce.

The argument that foreign labour makes establishing an effective communication setting with patients difficult is understandable. However, problems with poor communication skills and lack of cultural competencies is not only limited to foreign professionals. Hanawi et al. (2018) added that for the MoH in the KSA to completely fulfil the mission of Vision 2030, many skilled Saudi health professionals should be recruited within different public healthcare providers including general hospitals. As a Saudi health professional, the researcher knows that in 2005 the MoH sought highly qualified professionals from different countries around the world to ensure that the mission of the government to improve quality was led by skilled professionals. Clearly, those professionals played an important role in improving the quality of the public healthcare sector, but it seems that there was a gap in transferring their skills to the next generation who suffered from a lack of skills and inadequate education (Albejaidi, 2010). Al-Omari et al. (2015) suggested that in order to improve the quality of manpower, the government could form a professional organisation to establish professional standards throughout the Kingdom. In addition, certification and training must be improved in order to align healthcare professionals with the latest technologies and approaches, and this must include cultural sensitivities (Alsulame et al., 2016).

The successful implementation of QMS in general hospitals in the KSA could be revolutionary in terms of the way staff think, value, or act within the sector. Hence, the managers of this industry are expected to take responsibility to motivate their staff towards desirable actions and behaviours that will help attain quality consciousness (González & Guillén, 2002).

From another perspective, the struggle with qualified staff could be partially due to the demands of deficit reduction, but it also stems from other established factors such as the influence of an ageing population, technological developments in medicine, and rising public expectations. Whilst the KSA, like many other countries, continues to struggle with cost containment, it has become even more imperative to channel resources prudently in a way that improves quality of healthcare service delivery and limit the occurrence of unintended consequences. Some of the techniques for doing so, among other elements, include gaining insight to consumers' needs and focusing on value and outcomes.

As a way to improve the services and enhance the connection between general hospitals to meet patient demand, the King Faisal Specialist Hospital and Research Centre (KFSH&RC) established its own telemedicine network connecting 12 MoH hospitals. This initiative was seen as a starting block to create an e-health system (Alsulame et al., 2016). Implementing ehealth systems could be a considerable pathway to connect hospitals and for the staff to share their experiences and learn from their errors. With this in mind, when it comes to implementing QMS in general hospitals, the use of technology could help create better linkages between hospitals to share the best practices. In this regard, Alsulame et al. (2016) suggested further studies are needed to examine the current initiatives in Saudi hospitals and provide a more holistic understanding of the possible implications of implementing e-health on staff development and successful implementation of QMS and its practices. This type of study is important to avoid overestimation of the potential benefits.

2.8.1.2 Growth of the population

As the major provider and financier of the general health sector in the KSA, the MoH has the duty to offer general and specialised services through the healthcare institutions spread across the different regions of the country. Most of the general hospitals are overseen by the health directories, which are located in each of the twenty regions (AlYami & Watson, 2014), although a few are under the management of the Ministry of Interior. With the number of general hospitals growing, from nearly 201 in 2012 to around 282 hospitals in 2020, the system has been under intense stress due to the absence of commensurate investments in QM,

even though the country has made some reasonable accomplishments in the healthcare sector. Data from the WHO showed that Saudi Arabia invested only 4% of its GDP in 2010 in healthcare, whereas most high-income nations spent over 12.4% on average (Fuchs, 2013).

The pressure on general hospitals has continued to establish better quality and services, taking into consideration the changes in demographic formation in Saudi Arabia. With an estimated population of almost 30 million residents with an annual growth rate of 2.7%, the KSA healthcare sector serves a rapidly growing population and there is parallel increase in demand on the general hospitals (Al-Omari et al., 2015). In addition, United Nations (UN) projects show that by the end of 2025, the nation's population will have reached 35.5million, an additional 28.4 million people than currently (Gostin, 2013). In addition, the shift in disease configuration with non-infectious diseases is rising to disproportionate levels and posing new challenges to the healthcare system. In collaboration with the Gulf Cooperation Council (GCC), the KSA is adopting privately driven health coverage as a key step to mitigating this problem. The success of this sector will depend on the quality of service based on consumers' expectations, and these must rally around QM practice that is spread across all levels of the national healthcare system.

2.8.1.3. The issue of accessibility

The matter of accessing services seems to be one of the most common struggles recorded by the researchers concerned with publicly funded hospitals. Whereas most Saudi communities have health centres (over 90%), some (16%) reported difficulty accessing first contact care and a few others (13%) reported challenges utilising routine services (Salloum et al., 2014). Nearly two-thirds of Saudis are satisfied with access to care in the community including general hospitals, and about half of the population are satisfied with the timeliness of service delivery. Overall, three-quarters of Saudis would not use a general hospital as their first point of healthcare given the current situation.

Over time, Saudis have increasingly become worried about the standard of healthcare available (Al-Ahmadi & Roland, 2005b). Access and quality of care are now viewed as intertwined and equally important. When confronted with various measures to sustain their healthcare system, Saudis proposed reforms to general hospitals (Salloum et al., 2014). In this context, health service delivery systems need to adapt and respond to these demands and predict future trends. The global health and development priorities are unambiguous in the call for doing so. The association between population health and service delivery is made clear in the 2030 Agenda

for Sustainable Development goals, whereby health issues occupied the centre stage of the discussion (Yamey et al., 2014). Goal 3, target 3.8 of the agenda clearly defines the need to achieve universal health coverage, where making progress requires access to quality and essential health services which are safe and acceptable to all people and communities (Lee et al., 2016).

Findings, however, suggest that a strong general hospital improves health and minimises inequalities in health across various population groups (Leiyu, 1997), and probably contributes more to the wellbeing of society than specialised health services. For instance, a wellfunctioning general hospital system is needed to address the challenges of an ageing population and to meet the health needs of an increasing population of people who suffer chronic diseases, functional disability, and complex comorbidity. However, there are growing concerns regarding access to and quality of general hospitals the world over, including the KSA (Rodney & Hill, 2014).

The government has encouraged the adoption of technology to improve staff and patient accessibility and communication. However, findings from El Mahalli (2015) suggested that the use of technology did not help improve communication between patients and staff, with the study suggesting that there was no use of communication tools with patients such as emails, facsimile and short messages, and patients was not able to access their records. In addition, physicians were not able to access charts while outside of the hospital. Nevertheless, the KSA is making more effort to give patients more access to the hospitals' services. For example, Alomi (2016) explained that the Saudi government has established a new National Pharmacist Competency System (NPCS) to improve the accessibility to pharmaceutical care delivered to patients. The government hopes that the new system will help prevent drug misadventures and improve patient quality. Supporting the implementation of such a system will contribute to the general implementation of QMS among general hospitals (Alomi, 2016).

2.8.1.4. Lack of learning culture

Working in a highly intensive environment leads to the occurrence of more errors, particularly when there is pressure on staff who are working long hours (Olds & Clarke, 2010). In such an environment, staff need support more than punishment or blame. The lack of a culture of learning and the domination of a culture of blame is what makes effective application of QMS a challenge. Making some adjustments and focusing on identifying the risks and managing them could be more effective in terms of developing the quality of the services, while focusing

on the behaviour of the staff seems to be less productive. In an environment where pressure is high, staff need to be trained to develop a new skill of resilience where leadership, communication, and sharing skills are enhanced (Hignett et al., 2018).

2.8.1.5 Need to restructure the power relation

Giving staff the power not only to be resilient to the pressure of change and the nature of the work environment, but also to lead the healthcare organisation into better performance and provision of higher quality services is another issue to be considered when QMS practices are examined. On this issue, Hashjin et al. (2014) asserted that giving the staff more power to lead can happen when the source of the power in the organisation releases part of the power from the top to the rest at the bottom. Hashjin et al. (2014) suggested starting the process by extending the power of decision making in regard to quality of senior management from the top management. In the Saudi healthcare environment, the MoH – at the top of the management structure – holds the main power to develop the policy and to make decisions (Al-Yousuf et al., 2002). Accordingly, the Minister of Health, who is at the top of the hierarchy, supervises 20 regional directorates of general health affairs in different districts in the Kingdom. Each regional director has been given the power to manage different hospitals in his region. The role of the regional directors is limited to the implementation of the policy, but not making it. The power of the Minister of Health is legitimised by the hierarchy of the whole political system of the country, just as Foucault (1972) explains when he discusses the power relationship in organisations.

Accordingly, a 'meta-image' of the MoH was established through the rules of formation, an accepted and legitimised way of thinking about a particular (MoH) function. This order drives conforming patterns of behaviour among employees through agent subjectification, forming a quasi-order of 'rules', the messy patterns (Streatfield, 2001) that Bourdieu (1991) called the 'normative logic' of the field. It has been presented in Figure 1.1 in Chapter One section 1.4. the nature of the hierarchical system in MoH where the power of top management was given to the MoH over both public and private healthcare providers. Almalki et al. (2011) explained that one of the main challenges facing the MoH in the KSA is changing the power of management from more centralised to decentralise the system of healthcare to all hospitals' directorship. Decentralising the system means giving more power to lead and to develop their policies.

In the literature on power, there is considerable research focusing on the role in which the changing of the structure of power given to employees can alter their behaviour towards the

change. Foucault (1991) explained that people's resistance to change reduces when they feel that less pressure or power has been imposed on them.

All these financial and human resources investments have largely warranted evaluation. Yet despite these investments, there has never been any specific action to develop a performance measurement or evaluation framework to understand the quality of general hospital service delivery. Improve the understanding of quality management in healthcare offers the promise of enabling hospitals to reach levels of quality and safety that are comparable to those of the best high reliability. This can afford the stakeholders the opportunity to consider alternative courses of action for the attainment of best results.

2.8.2. Overview of CBAHI in KSA general hospitals

Since 1970, the Saudi government has focused special attention on the matter of quality and adopting the systems that allow for quality control (Al-Awa et al., 2012). Even though one of the earliest steps the Saudi government took was the implementation of TQM in general hospitals to improve decision making, the current evidence from the literature suggests that implementing successful TQM is still a significant challenge. Noticeably, the KSA was one of the pioneering countries in the Middle East that established accreditation agencies to control the quality of the systems in healthcare (Almasabi, 2013); the aim of the CBAHI programme established in 2006 was to oversee and provide provision to all public and private healthcare providers including general hospitals.

The principal function (on paper) of CBAHI is to set healthcare quality and patient safety standards against which all healthcare facilities are evaluated for evidence of compliance (CBAHI, 2018). However, the evidence shows that there are 487 hospitals in Saudi Arabia (MoH n=282, other governmental hospitals n=47, and private hospitals n=158). From 282, only 26 hospitals have been accredited by CBAHI so far, and many are still under the process of accreditation. This raises the question as to whether, after 15 years of establishment, the CBAHI programme has been able to meet its aim. The answer to that can be found in the research of Alkhenizan (2010), who argues that CBAHI standards are still poor, and they need significant changes to meet ISQua principles.

Also, CBAHI is encouraged to publish the new and modified accreditation programmes. Greenfield et al. (2013) explained that CBAHI faces a real challenge regarding the reliability of the assessment and the questionnaires used to collect information about the quality of services. The reality is that CBAHI has grown Figure (12.) and this cannot be ignored; however, according to the most recent statistics (2019), from a total of 487 hospitals, only 273 hospitals and healthcare providers have undergone the CBAHI accreditation process and while 212 hospitals have been accredited (78%), only 26 of these are general hospitals. In addition, 50 providers have been denied accreditation. From these results, it can be seen that although the government applies considerable pressure on general hospitals to comply and undergo the process of accreditation, the contributions and responses from hospitals are still poor. Almasabi (2013) referred this to a lack of financial support and qualified staff, and the question therefore is: is CBAHI able to reflect this as matter of implementing QMS in general hospitals in the KSA? The answer to this question is still on hold and should be further investigated in future research (7.3.3).



Figure 12.CBAHI's chronological development

To sum up, with taking the above argument into account, it is quite reasonable to look at the general hospitals in the KSA to address the progress CBAHI has made and its impact on hospitals' practices to ensure that QMS is successfully implemented. It is important to examine to what extent CBAHI has been able to help general hospitals improve their quality, considering that the healthcare inspectorates were criticised for not being in control of healthcare quality and lacking both the knowledge and the instruments to do so.

2.9. Chapter summary

The theoretical perspective is offered in this chapter upon the review of secondary data sources – mainly books, academic peer reviewed articles, and professional reports. It was noticeable that the Arabic written literature focused on referring the responsibility of ensuring service quality in hospitals to the management and directors, ignoring the role that other key stakeholders could play in maintaining QMS (Kwafati, 2018). Upon this result, the practices of QMS in Saudi hospitals seems to be influenced by the English generated standards, which present non-Saudi understandings to the issue of quality (Al Khamisi et al., 2018). Nurses, patients, middle managers (head of department or ward) are key stakeholders in general hospitals. With this in mind, it seems important for this research to target all three stakeholders to create more comprehensive perspectives with the hope of identifying challenges and potential resources to improve service delivery, and hopefully to suggest a framework that assists with the successful improvement of quality culture. Researchers and scholars seem to agree that the development and implementation of quality management systems in healthcare organisations represent a revolutionary change for hospitals. Hence, the implementation of QMS and its practices in general hospitals will affect the structure, core, internal and external systems, ownership, and customer (management/customer) relationships, and the complicated systems and segments of the hospital.

It is now time to move towards tackling the issues highlighted in this chapter by empirically investigating them. To this end, the aim of Chapter Three is to present the methodological stance of the researcher and the philosophical paradigm the researcher has selected to respond to this research inquiry. Indeed, taking into consideration the recommendation of Al Fraihi et al. (2016), that the patients' perspectives and expectations for service quality cannot be collected by the use of one instrument alone, means that this research will be conducted using both qualitative and quantitative methods in order to understand the complexity of service quality.

Chapter Three: Methodology

3.1. Introduction

In the previous chapter, the debates in the literature surrounding QMS and its practices were addressed and analysed to identify the gap. In this chapter, the focus is on searching the methodology literature to find the most appropriate methods to complete the research. Crotty (1998) explained that in order to complete a rational and coherent research project, a researcher must critically review the methodology literature to ensure the aims of the research, the gap in the literature, and methods of data collection and data analysis are all captured under one umbrella to answer the research inquiry.

The aim of this chapter is to search for the most relevant options available in terms of research models, research philosophy, data collection methods and data analysis techniques to select the best to approach for the question, objectives, and aim of the research. Following the debate about the adoption of onion model, the chapter is structured in nine layers to explain the philosophical stance of the researcher, the design and the approach of the research, the data collection methods and the data analysis. Responding to the need and to the follow of the research, the researcher has added three extra layers the research ethical consideration, risk management of research project and the data personation. Each of these layers were explained and reasoned. Ultimately, the researcher discussed the matter that are related to the quality of the research and the dilemma to assure the quality of the PhD project.

3.2. Research models

It has been argued in the literature that for research to be academic, it should be systemically organised to ensure that data is collected in an academic manner (Smith, 2018). Upon this argument, different research models have been suggested in the literature to help researchers respond systematically to their research inquiries, such as Crotty's research model (Crotty, 1998) and the research onion (Saunders et al., 2003).

In his model, Crotty (1998) suggested that research should be separated into four main layers to cover epistemology, theoretical perspective, methodology, and methods. Nevertheless, he offers no further details to the possibilities and the process available for each one.

More comprehensively, Saunders et al. (2003) offered the onion model, which is recognised as one of the most systematic models available for researchers to provide a clear and organised pathway to

empirically investigate the research inquiries. The model was first produced in 2003 and the last update and amendments to add further details was published in 2017 Figure (13.).



Figure 13. The Research Onion Source: Saunders et al. (2017)

As can be seen from Figure (13.) the first layer involves the establishment of research philosophy. This makes an appropriate starting point for the selection of the correct research approach. Following this step is the adoption of the research strategy in the third layer, and the fourth layer provides the time horizon for the study. In the fifth layer, the methods are placed, which involves the plan for sampling and data analysis and interpretation. Looking at the model, it can be noted that the Saunders et al. (2017) excluded three fundamental layers: namely, ethical considerations, risk management research project and data presenting Figure (14.). For this, the researcher modified the model by adding these two new elements which seemed essential to complete this academic research.



Figure 14.Research Onion: Modified by the researcher Adapted from Saunders et al. (2017)

As it can be seen from Figure (14.) three new layers were added and thought to be important to address the needed layers a researcher needs to consider while completing the research. On the other hand, the nested model Figure (15.) was developed by Kaglioglou et al. (1998) based upon their experiences with research in building an environment school at Salford University. The authors claim that the model will be able to guide junior researchers and offers them the required structure containing the philosophies, approaches, and techniques needed for producing a complete piece of research (Kaglioglou et al., 1998).



Figure 15.The nested model

Close examination of both models reveals similarities as well as contrasting features. Both the nested model and research onion contain the research approach layers, but they differ on a theoretical basis. While the research approach in the nested research model relates to research strategies in the research onion, the onion model is entirely different. In the current research, which focuses on one of the more complicated healthcare organisational phenomena, it was fundamental to select a research model that is easy to follow. Accordingly, being a first-time researcher meant adopting a model that offers enough detail to avoid any ambiguity and misconceptions during the processes of the research.

3.3. First Layer: Philosophical stance

The first layer of the onion model is research philosophy; it is a set of shared values, assumptions and practices used to carry out a relevant research project (Saunders et al., 2007). The beliefs created by a research philosophy give the justification for how the research will be undertaken (Flick, 2011). It provides guidance on how to conduct research and select the most suitable research techniques and methods to achieve the research goals.

3.3.1. Pragmatism

Pragmatism is a philosophical stance that focuses on the consequences of research; it emphasises the research problem rather than methods, uses pluralistic methods to comprehend the issue, and is oriented toward 'what works' and 'real-world' practice. Thus, it has a novelty in opening the door to various methods, world views, assumptions, and forms of data collection and analysis (Creswell & Creswell, 2018). Indeed, pragmatism was chosen for its nomination as one of the best worldviews in mixed method. Creswell and Plano Clark (2011) attributed the preference of pragmatism to its flexibility in moving between the qualitative and quantitative phases of the research. In this research, collecting opinions and perspectives that are culturally and socially constructed is only one angle of the research where middle managers were requested to express their perspectives towards the implementation of QMS and its practices as it was culturally constructed. Yet, since there is another angle of research in which inquiry requires collecting data that are obtained through examining the exitance of QMS from the perspectives of nurses and patients. Hence pragmatism seemed the suitable to fit the inquiry for collecting mixed data. Creswell and Plano Clark (2018) outlined four stances based on which researcher rationalizes the paradigm applied to mixed methods. They included utilizing the best paradigm; applying multiple paradigm; using the worldview related to the research design; or applying worldview from within the scholarly community

Similarly, Tashakkori and Teddlie (2003) considered the suitability of pragmatism for qualitative and quantitative methods. Morgan (2014), as well, emphasised the complexity of decision making in mixed-method design, through which he justified the appropriateness of pragmatism: pragmatism allows for ongoing decision-making. In explaining the relationship between theory and research and data collection and analysis, deductive and inductive reasoning is the necessary path. However, this would not be reasonable without stating the research's position in terms of its objectivism and subjectivism

3.3.1.1 Objectivism

Objectivism posits the belief that certain things, particularly moral truths, occur independently of human knowledge or perceptions of them; that is, social units occur in a reality outside of and independent of social actors (Bryman, 2012). Additionally, objectivism is described as ontological position which proclaims that, social phenomena and their meanings have an existence that is unconnected with social predictors (Ratner, 2002). Objectivism incorporates subjectivity and objectivity because it claims that objective knowledge necessitates active, refined subjective processes (perception, logical reasoning, synthetic reasoning, rational deduction, and the distinction of principles from appearances). Equally, subjective processes can enhance objective understanding of the world (Gergen, 2001). In this research, taking both ontological and epistemological positions is required to ontologically assess the existence of the QMS through the lens of the nurses and patients, and epistemologically examine the practices through the lens of the middle managers. In addition, the present investigation is structured using different positions of philosophy, as certain points relate to a positivist stance – the objective use of scientific method - while different aspects are associated to the interpretivist approach – the social aspect that opposes the positivism of natural science. Furthermore, practical results are the focus of pragmatism, which stem from the belief of researchers that, various ways exist to explain phenomena and complete research. Specifically, QMS practices in different general hospitals in the KSA were tested in the current research.

3.3.1.2. Subjectivism

Subjectivism is often viewed as the *sine qua non* (prerequisite) of qualitative methodology. However, this is incorrect. Qualitative methodology has an objectivist element as well. Objectivism assumes that the researcher's subjectivity can enable them to precisely understand the world as it exists in itself. Of course, subjectivity can prejudice the researcher and preclude objectively comprehending a subject's psychological representativeness. However, this is unavoidable. In fact, one of the advantages of recognising subjectivity is to consider whether it enables or hinders objective comprehension. Distorting values can then be replaced by values that improve objectivity. Hence, the most effective form of subjectivism is when it is combined with interpretivism (Saunders et al., 2012). In general, the key focus of this study is on idealism, which is reality as perceived by individual thought (Sexton, 2003).

In the current study, the researcher utilises two forms of ontology: first, by engaging the heads of the departments in the interview, thus utilising their perspective and stories regarding the evaluation process; and second, through the observation of the statistical realities about confirming qualitative themes by the use of questionnaires, thus objective reality was ascertained using measurements of factors through the utilisation of the 5 Likert scale. Accordingly, it was feasible to determine the correct epistemology to function through these two forms of ontology.

Of late, there has been demand for management researchers to adopt research philosophies that allow the taking of more than one stance. The understanding is that a combination of research philosophies can aid mutual purposes. This is because the relative strengths of adopting more than one philosophy enable management and organisational researchers to resolve important questions at different stages of a research inquiry, thus augmenting and enriching current knowledge by 'filling in the gaps' that studies adopting a singular approach are unable to (Pansiri, 2005). The present research adopted a pragmatist philosophy, as it is most suitable for studies that relate to different approaches. Additionally, the core research objectives are a core viewpoint for choosing an approach (Kelemen & Rumens, 2008); while pragmatism can also be employed through various theoretical prepositions (Saunders et al., 2012).

Indeed, in this research, the researcher assumes that the data are objective facts that already exist in the world, and the role of the researcher is to find out these data and determine the theories implied; this is supported by Charmaz (2006). Accordingly, in this research people (patients, nurses and managers) were seen as the primary sources of collecting data. This is also in agreement with Lincoln and Guba (1985), who argue that to achieve subjectivism, human perspectives should be investigated in a way that reveals more constructed realities. Hence, in this research, participants for the semi-structured interviews were selected from the same context where the phenomenon is socially constructed and practised. Thus, realities that will emerge will reflect the interaction between QMS and its practices and the participants.

3.4. Second Layer: Paradigms

In this section, both research approach and paradigms are discussed. For the research paradigm Goddard and Melville (2004) suggested that different research paradigms could be used to conduct research. Two prominent dimensions namely positivism and interpretivism, with different standpoints on research are the most common paradigms. Positivism is concerned with a scientific quantitative method of understanding cause-effect relation, such as an experimental study.

Positivists prefer to understand the subject under study by identifying the essential laws through observable reality (Saunders et al., 2007). On the other hand, interpretivism involves humanistic

qualitative approaches, using methods such as interviews or observations for gathering relevant data. The positivist posits that the world is external and there is only a single objective reality to any research situation, irrespective of the researcher's philosophical background. Thus, it is mandatory to remain consistent and apply a logical approach to research (Carson et al., 2001). The interpretivist argues that reality is dependent on other factors for meaning, which indicates that its imprecation is complicated about the fixed reality (Neuman, 2006). Although a researcher may prefer a research approach due to his or her underlying philosophical standpoint, no approach is superior to the other (Podsakoff et al., 2012). The philosophical aspect only contributes to providing justification for any given method. Therefore, what is the philosophy of this research and why? This question is answered in the following sections.

When making paradigm decisions for this study, thoughts were initially on the most suitable philosophical stances to be employed. Two paradigm stances, the positivist and the interpretivist, are generally used in public health research – as is the case in this study – and these reflect the ideologies behind the quantitative and qualitative methods, respectively. The advancement of knowledge and its precise landscape are the key focus ideas of research paradigm, which involves vital perceptions regarding the views of the researcher and how the world and reality are measured (Saunders et al., 2012). Consequently, the viewpoint of the research and how it is linked to the worldview and the perspective of the researcher (considering assumptions and knowledge through encountered realities) are factors that determine the question of the research and its understanding, including the design of the research (Saunders et al., 2012). There are a variety of theoretical approaches, which include ontology (relating to reality perception through objective and subjective views), epistemology (which operates through a more pragmatic, realistic, interpretivist and positive formation) Consequently, all of the abovementioned philosophies are used for individual goals, while the precise selection is reliant upon the aim and objective of the research (Saunders et al., 2012)

3.5. Third Layer: Research approach

The third layer of the onion is the research approach consisting of three broad methods of reasoning, namely the deductive, inductive, and abductive approaches, with each one functioning with contrasting philosophical dimensions. It is important to classify the research based on whether it is inductive, deductive, or abductive. The deductive approach is referred to as a testing theory. With this approach, the researcher formulates a hypothesis with a research design to confirm it. A deductive approach formulates the hypothesis from existing theory (Silverman, 2013). This is suitably used when a study is investigating whether the observed phenomenon

corresponds with an expectation from earlier research. The deductive approach aligns with the positivist principle, which was premised on the formulation of hypotheses followed by statistical testing of results to measure the acceptable level of significance (Snieder & Larner, 2009).

It has been argued that positivism is believed to function well with deduction, whereas the inductive approach is more effective when combined with the interpretivist approach (Saunders et al., 2012). However, it is theorised that for an abductive approach, both deductive and inductive methods work well when combined. The inductive approach focuses on the generation of new theory emerging from the data. The researcher, therefore, sees and follows it, through data analysis, to open a new window of theory. The study starts with an open-minded approach to data collection and no preconceived outcome. It does not begin with the creation of a research hypothesis; instead, it involves the formulation of research questions, aims, and objectives that are required to be achieved during the research process. This is used in studying phenomena that have never been investigated. The new theory is inferred from the results after analysis. Glaser and Strauss (2001) performed a classic example of inductive research, which is frequently cited as grounded theory. Although either deductive or inductive approaches could be applied in qualitative or quantitative studies, a deductive approach is commonly associated with quantitative research while inductive is more common in qualitative studies.

Accordingly, another an important consideration in choosing a deductive approach is the availability of sufficient literature on the research topic, which forms the theoretical framework for the study (Creswell, 2003). Since this study has conducted a thorough literature review and established existing gaps on the subject matter, it corroborates the appropriateness of a deductive approach for the current study. Accordingly, both qualitative and quantitative approaches were used to accomplish the overall objective of the study. The quantitative approach-based survey has helped develop a deeper understanding of the issues under investigation by engaging the main stakeholders. The nurses', managers', and patients' experiences in the KSA general hospitals were evaluated. They were considered to be the major stakeholders of the system in this study. Professional behaviour, family involvement, decision-making, clinical skills, treatment facilities, patient satisfaction, training and skills support, policy framework, and educational areas from a nursing staff perspective were the evaluated challenges. The identified issues are provided in the discussion section. Conversely, the qualitative aspect has focused on gathering in-depth information from another set of stakeholders through interviews. Managers in hospitals and departmental heads in selected hospitals were the stakeholders. Efficiency, accessibility, and patient-centredness were considered challenging areas of evaluation. The discussion section describes all of the existing and emerging challenges observed. Hence, the overall approach was multitailed due to the nature of problems established from the reviewed evidence-based studies.

In this study, the researcher has followed an inductive approach which starts with dealing with specific issues before moving on to broader generalisations and theories (Saunders et al., 2012). Hence, the inductive approach is based on data collection in regard to precise phenomena in order to garner sufficient comprehension of an issue, and then the data analysis, which develops the theory's formulation (Saunders et al., 2016). Consequently, the inductive approach can informally be described as a 'bottom up' approach. This means that inductive reasoning normally begins with specific observations and measures to detect patterns and regularities, to formulation of some tentative hypotheses that can be explored, and finally ending up with the development of general conclusions or theories (Seshia, 2015).

The induction approach does not need to incorporate an intricately structured methodology because only a minimal data collection sample is required (Saunders et al., 2016). The current study collected data via the process of interviews, which helped detail different individuals' perspectives in regard to the possibility of QMS providing high quality care, as well as demonstrating the conceptual framework including factors that help to present the implementation strategy's process and effect between ground level and the government.

3.6. Fourth layer: Research design

3.6.1. Mixed Method

Creswell (2014) and Saunders et al. (2016) argued that the use of mixed methods allows the incorporation of different philosophical assumptions in addition to methods of inquiry. This can be accepted because the design was built upon the use of both quantitative and qualitative approaches in one study to provide a better understanding of the research problem. However, is it about the combination of different assumptions, or because it allows the findings of the research from different angles to be cooperated to draw a clearer image? The answer to this could be altered according to the purpose of taking each assumption separately and then looking at the benefits that the combination of both assumptions would bring to the research. Recent developments to the mixed methods design involve different techniques that allow achieving particular benefit from the combination of approaches and developing justifications for conducting various forms of mixed methods studies.

In general, a mixed methods approach has the advantage of using quantitative and qualitative approaches, thus providing corroborative evidence from each study regarding the studied phenomenon – in this research, QMS and its practices. Usually, the exploration study is performed in advance to provide clues for the study. This is not possible in a single approach, therefore in this research the quantitative and qualitative approaches were combined to help link different parts together as a whole. With this technique, elucidations for both numbers and words are provided in relation to new findings (Creswell, 2014). This design was selected for the current research because it seems to allow a greater level of understanding into how the practice of QMS works in Saudi general hospitals. Thus, a mixed methods approach can help obtain a clearer understanding of a specific phenomenon, as the combination of quantitative and qualitative methods creates bilateral support that helps advance beyond any weaknesses (Creswell, 2014). Furthermore, in mixed methods research, the statistical results are computed with different statistical inferences relating to how patients' and health workers' practical experiences are affected in the government hospitals as individuals. The statistical analysis was shown to produce the most beneficial results in relation to the patients' and nurses' perspectives. Furthermore, there are two distinct levels of design involved in the mixed methods approach: the basic design and the advanced design. Three forms of these designs were included in the basic format: the convergent, explanatory sequential, and exploratory sequential. However, there are three forms in the advanced format: the intervention; social justice; and multistage evaluation. Based on the nature of the present research and its specific research question, the exploratory sequential form was seen as being the most suitable. This method investigated and measured potential evidence to answer the main research questions, and thus, this specific research strategy was adopted.

3.7. Fifth layer: Time horizon

This is the second to innermost layer of the onion. The time horizon describes the time dedicated to undertaking the research. A study may be cross-sectional or longitudinal (Saunders et al., 2016). A cross-sectional study means that the researcher undertook a study to investigate a phenomenon and gathered the information in different contexts at the same time. Data is collected over a short period and is analysed to take a snapshot of the situation. This is mostly employed when there are constraints of time and resources (Saunders et al., 2007). A longitudinal study is a study where information on variables is collected over a long time period. During this period, variables are collected from the same group several times to track the course of the problem. The current research was carried out based on a cross-sectional approach to satisfy the aim of the study, with consideration of the financial resources and time required to complete the research.

Indeed, cross-sectional research allows the systematic identification of the steps the researcher needs to follow for the study to be completed on time.

3.8. Sixth Layer: Ethical considerations

Completing an academic research project is critical because it elicits a set of ethical considerations that revolve around gaining the required permissions and the rights of the participants during and after the data is collected, and the manner in which the researcher goes about collecting the data.

Regarding ethical approval (see Appendix 1), it is a fundamental requirement of well-conducted research that every researcher completes an ethical approval form prior to the start of the research journey; this must address the aims and objectives of the research, as well as the type of data that will be needed and the participants who will be involved in the study. In this research, in order to comply with the requirements of Manchester Metropolitan University, Accordingly, no data were collected before the form was approved by the academic board (see Appendix 1).

With regard to the confidentiality of the participants and protection of the collected data, data collected either through the questionnaire or the semi-structured interviews were stored in private and with password-protected box that no one except the researcher was able to access. This aspect of confidentiality is fundamental in any research which entails protecting participants from harm. The researcher did not request any private or sensitive information from the participants when they completed their consent forms. For instance, the participants were not asked to give their names or contact information. All these steps were taken to secure the anonymity and privacy of participants, thus maintaining confidentiality. During the analysis of the data and in order to protect the participants' identities, the researcher used pseudonyms to refer to the participants instead of using their actual names, and all consent forms were translated into the mother language of the participants – Arabic – to make sure that they fully understood the purpose of the research (see Chapters Four and Five).

Additionally, in order to assure the quality of the interview questions, experts' opinions were sought from both within the university (supervisors) and from the Saudi Ministry of Health. Academic supervisors who are known experts in the field of quantitative and qualitative studies provided guidance for the study. In addition, through the MoH, experts specialising in QMS and patient-centred care who possess at least four years' cognate experience in the field were utilised. These professionals are conversant with the local requirements and challenges within the Saudi health sector. Both the academic supervisors and the local experts agreed that the interview guide (see section 3.10.4) employed in this study was properly structured to elicit the desired outcome.
Prior to the stage of data collection, the researcher designed a consent form and this form was sent in Arabic to the participants (see Appendix 3) and a copy of the form was attached to every questionnaire. The consent form, as explained in the literature, is necessary as it is related to a legal requirement. According to Field and Behrman (2004), there are three variables to be addressed in the consent form which are: information, capacity, and voluntariness.

With regard to information, the consent form needs to include enough information about the aim of the research, why data will be collected, and what the rights of the participants are. For that, it is the researcher's duty to make sure that the research participants receive accurate and sufficient information about their involvement and that they have enough awareness of the possible implications of their participation. In this research and prior to the beginning of the interview, the researcher ensured that the participants understood and signed the consent form. It was the researcher's responsibility to make sure, before the recording started, that the participant knew what the study was about and how the data will be used and presented. The researcher read the form loudly and in clear language and asked the participants if they understood and were happy to proceed with the interview. This practice had a positive impact on the participants who felt protected and that communication with the researcher was clear.

In terms of the matter of capacity, this involved the participants' ability to acquire, retain and evaluate information and make decisions to keep the information or dismiss it. In this study, at the end of the questionnaire and the interviews the researcher asked participants whether they would like to provide their email address to be contacted later with the findings. Also, at the end of each interview, the participants were asked whether they would like to re-answer any of the questions or withdraw from the interview.

The final variable of informed consent is voluntariness. This involves the participant's ability to take part in the research free of any expenses and that he or she made the choice to participate without being placed under any duress, deceit or fraud (Field & Behrman, 2004). Additionally, it is the researcher's responsibility is to ensure that the participants understand the purpose of the study; thus, the researcher should outline the methods, the demands of the study, and if there would be any risk as a result of their involvement (Best & Kahn, 2006; Jones & Kottler, 2006). Upon these opinions, at the beginning of the study the researcher made certain that the aim and objectives of the research were truthfully explained, and that participation will be free from any financial consequences. In order to give the participant enough time to digest and understand the

form, the researcher sent the form to the participants via email prior to the interview and read the content of the form again before the interview started.

Before performing the data collection, the researcher made sure that the time he booked for the interview was convenient, and the venue was easy to access and gave both the researcher and the interviewee convenient space to complete the interview and speak freely. Although it is critical to attempt to make sure that the participant will share everything that is on their mind, it is the researcher's responsibility to take all steps necessary to enhance confidentiality and the participant's level of engagement to gain deeper and wider perspectives.

As soon as the ethical form was completed, the researcher had to seek all the necessary permissions (see Appendix 2) from the healthcare authorities in the KSA. For that, the researcher had first to approach the Saudi embassy to complete a permission form which was sent to the Ministry of Health to be approved. Furthermore, approval needed to be obtained from the targeted hospitals to distribute the questionnaires and later to conduct the interviews.

3.9. Seventh Layer: Risk Management for research project

Completing a PhD project is not a straightforward process as it involved many risks that need management. To that, Winston (2006) argued that for research projects the decision to carry out a project is a risk. The risk come fist from choosing unreachable aim and objectives. In order to control such risk full cooperation between the researcher and the supervision team is required. In addition, the researcher should be aware to the training needed and how to improve the weaknesses in the skills. Clearly, from Saunders et al. (2012) did not address risk management for research project which has been often left to the researcher or chief investigator as opposed to an experienced project management practitioner (Winston 2006). In this thesis, the researcher found it useful to make such amended so future researcher especially who conduct a research for the first time will be benefiting from it.

3.10. Eighth layer: Data collection and analysis

The use of multiple qualitative and quantitative data methods would foster efficient elucidation of all questions, issues and contexts raised in this study. The qualitative and quantitative data techniques allow the explanation of an individual's point of view, and the observation of realistic life experience surrounding the phenomena. Moreover, from this approach the researcher would be able to gather rich evidence from documents and gain valuable data from a large population of

participants (Stake, 2005). Thus, the collection of data in this study requires both qualitative and quantitative approaches.

As a form of gathering data, the qualitative approach involves collection of non-numeric data. This is analysed and interpreted to gain deep understandings of a phenomenon of interest. A scientist has suggested that a qualitative design requires the researcher to become the research instrument (Janesick, 2001). This implies that the researcher must improve on the skills required for observations and face-to-face interviews. Quantitative data is a collection of numerical data aimed at explaining, predicting, and elucidating phenomena of interest (Gay et al., 2005).

In the case of quantitative study, the researcher relies solely on questionnaires to gather data, thus the interaction between the investigator and research participants is superficial (Denzin & Lincoln, 2008).

3.10.1 Survey criteria

In order to address the aim and objectives of this research outlined in Chapter One, the researcher adopted a mixed methods stance. For the nurses' questionnaire, questions were incorporated about government policy structure, training and skills support, reward and recognition system, and extensive specific assets While, questions for patients were focus on asking about knowledge of staff and their ability to provide information, practitioners' clinical, safety and hygiene skills, quality of care, communication, effectiveness of making the decision, professional behaviour, family involvement and global caring. The closed-ended question was added in the questionnaire with the rating scale from 'strongly agree', 'agree', 'neutral',

'disagree' to 'strongly disagree'. The survey questionnaire included eight domains of patient satisfaction including knowledge and providing information, clinical skills, caring, communication, decision-making, family involvement, professional behaviour, and global rating. Statistical tools were then used to quantify the significance of the group response, to prove causal relationships and to define the nature of challenges. A qualitative stance was taken to collect perspectives from heads of departments in order to deeply examine the practices of QMS in the current healthcare management system. In the following section, further information is provided about the tools used to collect the data to respond to the research inquiry of this research.

Twelve hospitals participated in this survey. Two population groups, the patient population, and the nurse population, were involved. Each group received the questionnaire which contained closed-ended questions that had been prepared based on gaps identified from the literature review. The questionnaires were hand delivered to the respondents. The response rate for the nurses' questionnaire was 237/360, $\geq 66\%$, while the patients' questionnaire was $252/360 \geq 70\%$. Thirty nurses' questionnaires were delivered to the twelve participating hospitals, totalling 360 questionnaires for the nurses. In addition, the patients' survey was similarly distributed with 360 questionnaires, and thirty each in the participating hospitals.

3.10.2. Use of semi-structured interviews

Regarding the collection of qualitative data, the purpose behind collecting such data stemmed from the quest to reveal participants' perspectives regarding a phenomenon, to gain knowledge about their perspectives in the social world (Fossey et al., 2002). Hence, an important measurement tool for this study was the semi-structured interview, which helped to mix the data as a crucial source of data gathering. A semi-structured interview involves predetermined questions that are linked to different themes of interest through which the study participants give their perspective.

In this study, semi-structured interviews were carried out meeting with middle managers/heads of department as it was construed that a deeper and richer vein of information was needed from healthcare providers. This is because the study in great part focuses on QMS and quality processes within the PHC. Due to time constraints preventing the researcher from travelling around the country, he chose to conduct the interviews in one MoH hospital, King Khalid General Hospital. There were seven managing heads, namely:

- 1. Head of Quality Department.
- 2. Head of Management Training, Research and Education.
- 3. Head of Patient Safety.
- 4. Head of Infection Control
- 5. Head of Surgery
- 6. Head of Emergency Department
- 7. Assistant Director of Medical Services

These managers were selected as they are either responsible for quality, audit and training, or in a patient-facing department. It is hoped that the selection will offer a wide scope of opinions from heads of different departments. In addition, 15 managers were selected as it is expected that there will be some who will not be able to attend.

In Chapter Two, section 2.4.2.1 the researcher explained that the WHO's six dimensions of quality in healthcare were used, along with the four aspects which were prioritised for identifying and verifying the contrasting views of nurses and patients compared to middle managers. Equally, interviews are commonly used for cross-cultural studies, as this approach can highlight valid perceptions and thoughts, as well as help understand the topics under investigation (Denzin & Lincoln, 2008). Therefore, data from this study would help unearth concepts that demonstrate the unpredictable relations or theories concerning quality of care in Saudi general hospitals. Additionally, this research intends to explore the perceptions of nurses, which can be determined from interviews.

Accordingly, the internal validity of the research findings is improved with the mixed methods approach (Denzin & Lincoln, 2011). Certainly, using interviews has the potential to improve understanding of participants' experiences (Chiang-Hanisko et al., 2016). Consequently, the current study used multiple data collection methods in the semi-structured interview process to strengthen its findings. Various researchers opine that a combination of interviews and a survey would produce more constructive and valid results (Creswell & Creswell, 2018). As such, the information garnered from a survey questionnaire is used to corroborate the findings with an interview, which is an important aspect of the current study (Polit & Beck, 2006).

3.10.3. Use of pilot study as a method of validity

The benefit of using a pilot study in research is suggested by many social science researchers including Gill and Johnson (2002), who explained that a pilot study is a useful experience for junior researchers to identify any weakness in either the instrument or the processes of data collection. Creswell (2003) added that the main aim of conducting a pilot study is not only to test to instrument, but also to test the researchers' data collection skills. Relatively, as a PhD researcher it is an academic requirement to complete ethical approval before conducting the actual data collection methods (see Section 3.8). Completing a pilot study usually takes place as soon as the ethical approval is sought. This process is found to be followed by many PhD researchers.

In this research, two different data instruments (questionnaire and semi-structured interviews) have been used. The Arabic version of the questionnaire and then the interviews were piloted as soon as the ethical form was approved. Indeed, for the purpose of piloting, the researcher asked 10 individuals of the same group of participants to meet to discuss the questionnaires and

the interview questions. Five of the invited people attended voluntarily to give their opinions about the:

- 1. The structure of the questionnaire.
- 2. The clarity of the questions.
- 3. Whether the questions cover all the areas that need to be covered.
- 4. The individuals were given the chance to discuss any modifications that were thought to be needed to improve the quality of the questionnaire.

The individuals were provided with a hard copy of the questionnaire and each question was discussed separately until all of the questions had been checked and completed. The changes suggested by the individuals were applied and then the questionnaire was distributed.

For the semi-structured interview and prior to the actual interviews with the heads of department, two pilot interviews were conducted. The purpose of using pilot study for the interview is similar to the purpose of using a pilot study for the questionnaire, but additional benefit could be added as completing a pilot interview helped the researcher identify the weaknesses in his interviewing skills and also identify any possible barriers related to the context or interviewing the participants. In this study, the researcher used the pilot study as a method of training to improve his interviewing and communication skills. Piloting the interview was a useful experience to learn how to time the interviews and not to go beyond the focus of the research. Indeed, it was a chance to test the recording instruments and address any possible weaknesses or problems, to be ready with alternatives in case of failure. For example, the researcher had two instruments alongside the one he was using in the case of emergency.

The matter of translation reverse was important to the researcher, who had to be careful to ensure that he did not influence the translation through his own expectations. For that, a group of native English speakers who are fluent in both Arabic and English was employed in reverse translation (panel back-translation). This consisted of different translators who were able to perform the forward translation procedure. Later, a professional translator was engaged to check the accuracy of the questionnaire translations in cross-reference, as he was fluent in both English and Arabic. The fact that the researcher used thematic analysis made the process of translation easier, as while it is difficult to explain all translations at the word level (Mundays, 1998) given that there would be few English words that could substitute for certain Arabic ones, the overall concepts generally do not require such a detailed level of translation.

3.10.4. Interview data collection: Interview guide

According to Chenail (2011), the use of interviews was necessary to describe and make meaning from the information available on QMS in the practical life of middle managers. The key point of interviewing the middle managers was to understand the perceptions of the managers in terms of QMS. The interviews were an effective way to obtain the story behind the middle managers' experiences with, understanding, and practising of QMS and its practices in Saudi general hospitals. This is essentially useful as a follow-up to certain respondents' questionnaires.

As explained in the previous section, the process of interview data collection began by obtaining informed consent from participants, specifying an appropriate location and suitable time, and agreeing on the duration of the interview. From the outset, it was decided that the interview setting, and time needed to be suitable for all; most of the participants preferred their workplace in the hospital during their hours of work. However, due to the segregation rules in Saudi Arabia it is not possible to interact with the opposite sex in public places; for example, coffee shops (Magala, 2012). Hence, the interviews took place in the locations according to the preference of the interviewees. The interviews were first arranged over the phone and then a consent form was sent to each participant to consider prior to the interviews. In addition, to take appropriate precautions to minimise disruption of services, permission was obtained from participants' respective heads of department (HoD) to allow participants to attend the interview.

The time needed for each interview varied but it took between 30-40 minutes. At the beginning of the interviews, the researcher confirmed that the interviewees were truly the designated participants using their socio-demographics, which included names, area of work, and, for example, whether they were a head of department in hospitals or a head nurse. The interview followed the typical guidance of interviewing to evade bias (Creswell, 2016).

The strengths of using the semi-structured interviews are varied. For example, using the interviews in semi-structured format allowed the researcher to recite every question with the same importance, phrasing, and tone, to avoid impractical alteration of the participants' responses. In addition, questions were reworded or omitted (but still giving the same meaning) when required by the interviewees (Neuman, 2006). Furthermore, respondents' answers were not influenced by a reaction of the researcher (Bryman, 2008). During the interview, the researcher emphasised themes that appeared to be pertinent to the participants

and then related each question for comparative answers to the corresponding notes. The mixture of note taking, and tape recording was a useful technique to augment and enable analysis of the material (Fossey et al., 2002). The recorded audio of the interview gave the researcher additional opportunity to focus on some of the micro-detail. After each interview session, the duration was noted, and the participant was duly thanked. The data gathered from the interview sessions was saved on a personal laptop and secured with reliable, secure passwords.

Limitations of the interviews were related to the responses and reactions of some of the participants. For example, during the interviews, the researcher felt that a couple of the heads of department were 'self-censoring', as he sensed that they did not feel comfortable sharing certain ideas with him. This claim is supported by the number of words in the transcript that demonstrated hesitation, unfinished sentences, euphemistic expressions, gestures, or tones of voice that leave others (the researcher) to draw their own conclusions. Therefore, the researcher, with his insider knowledge of Saudi society, tried to understand what the speaker might be attempting to imply and interpreted this accordingly when allocating labels to categories in the analysis.

3.10.5. Use of questionnaire in this research

In this study, for an individual to be regarded as consenting to participation, the questionnaire would have been completed and returned, as detailed on the information sheet. The information sheet clearly stated that the participant is at liberty to make enquiries about the study and can withdraw from the research process without providing any reason. The researcher retained the original signed consent form (Appendix 3).

It is possible to use both open- and closed-ended questions, using a Likert scale to represent people's attitudes to a topic. However, the current study utilised closed-ended questions only. In its final form, the Likert scale is a three, five, seven, or nine-point scale that is used to let research participants express how much they agree or disagree with a specific statement (Brace, 2013). The Likert scale was designed to convey simple responses, since the questions were not asked to analyse any degree of complexity in attitude or measured beliefs from participants, but to focus on general meanings from the same statements, thus covering specific issues more precisely.

In general, the Likert scale is essential for the present study, particularly in identifying the quality measurement and issues that replicate services provided in Saudi General hospitals.

Certainly, the Likert scale presents greater reliability, as participants will provide a greater percentage of useful answers (Sullivan & Artino, 2013).

Three kinds of Likert scale exist; therefore, adopting one over the others for a study requires careful consideration. Accordingly, the questionnaire for the present research excluded the three, seven, and nine-point scales with preference given to the five-point alternative. This is because the latter would create a more reliable level of respondent views compared to the former. The three-point scale is not adequate in discriminating among agreement levels (Pearse, 2011). In the present research, the researcher followed the reference to set a clearly definable midpoint in the Likert scale, focusing on using a point set as 'moderately important' instead of the number.

For designing the patients' questionnaire (Appendix 5), the researcher used the questionnaire available in KSA general hospitals to assess patient satisfaction. Indeed, although the purpose of this research is not to measure patient satisfaction, this method has been used by KSA general hospitals to ensure that quality assessment measurement is taking place. Hence, the decision to use this questionnaire was made upon the desire to evaluate the effectiveness of the current measurement placed in KSA general hospitals to assess the quality of the practices. In addition, the questionnaire is perceived to be valid in assessing QMS. The conclusion of this research is that although the questionnaire was helpful in terms of collecting opinions from patients about their satisfaction of services provided by the general hospitals, the questionnaire needs to be redesigned to better address the issues related directly to QMS from the literature and the Six Sigma components (see Sections 2.4.2.1.).

For designing the nurses' questionnaires (Appendix 4), the researcher followed the threads in the literature regarding the main issues in addressing QMS and its practices from the perspective of the nurses. The questionnaire for that, addressed issues related to policy, reward and recognition systems, training, and available resources. The questionnaire was designed based upon the analysis of the English language literature and the discourses and language used to communicate the issues related to QMS and its practices. However, the real struggle was in transferring the ideas articulated in English into Arabic without altering the meaning and with providing meanings that make sense to the respondents. The challenge became greater because the format and nature of the questionnaire does not allow the researcher to include explanations or clarification while answering the questions. The abovementioned struggles should not put into question the validity of the questionnaires; however, they do invite future researchers and general hospital managers to think differently about measuring and assessing QMS and its practices.

3.10.6. Analysing quantitative data

The purpose of using quantitative analysis in this study was to test the nurses' and patients' experiences in KSA's general hospitals. The results in this section will, therefore, be presented in two parts: namely nurses' survey and patients' survey. The nurses' survey consisted of two main sections (Appendix 4); the first section enquires about demographic characteristics of the sample population of the study, while section two includes questions concerning four dimensions that aim to evaluate the nurses' experiences in relation to the quality of services and management practices in KSA general hospitals, underpinned by policy developments, training, skills support, assets, and resources. By starting with the nurses' questionnaire, this chapter will describe demographic details and nurses' experiences, while examining the impact of characteristics (hospital, gender, age, education, and years of work in the healthcare sector) on these experiences. The aim of this section is to offer an in-depth analysis of nurses' perceptions about the practices of healthcare quality management in place in Saudi general hospitals.

Similarly, the patients' questionnaire generated demographic information including age, gender, nationality, and residency. The patient questionnaire further enquired about their satisfaction about services received, which was assessed and examined by answering the two research questions. The questionnaire looked at satisfaction with eight dimensions: knowledge and providing information; clinical skills; caring; communication; decision making; family involvement; professional behaviour; and global rating. All scales will be described and explained along with the impacts and differences across demographic groups. Demographic variables and their impact on the dimensions will also be evaluated.

Each questionnaire provides descriptive analysis, for example frequency, %, mean, standard deviation and inferential statistics (including independent samples t-test and ANOVA) to examine the impact of demographic variables on each dimension/scale. The patients' questionnaire will be assessed following similar statistical tests. It should be noted that the descriptive statistics provide the researcher with the knowledge needed to achieve the research aims and answer the questions such as examining nurses' perceptions and experiences of service quality in these hospitals, and to check patients' experience of and satisfaction with services received in these hospitals. Inferential statistics are used to expand on knowledge and provide deeper knowledge of how demographic

variables and background details could influence participants' (nurses, patients) experiences and perceptions.

Each questionnaire was analysed separately to reflect descriptive statistics and inferential statistics (see Appendix 7 for evidence of the analysis). Descriptive statistics were sought to describe the trends and the distribution of results for both samples, such as . frequency (%) of participants who agreed or strongly agreed with a statement. Along with frequency, the mean (average, ranges between 1-5) and standard deviation (deviation from the mean) as well as the rank (order of the item based on agreement) were all calculated to describe the distribution of the results. In addition to descriptive statistics, SPSS allowed the researcher to measure for group differences including gender, age group, education level. based on average answers for each of the scales such as items with each of the scales was averaged such as. average for policy development, training and skills support, reward, and recognition. The two main inferential tests that were used were independent samples t-test and analysis of variance (ANOVA). The independent samples t-test allows the researcher to measure differences between two independent groups such as comparing males to females, while the ANOVA allows the researcher to measure the differences between three groups or more such as groups based on education level). Inferential tests like these allow the researcher to generalise the outcomes; these tests used probability to determine significance of outcomes. If the significance level (probability) is below or equal 0.05 ($p \le 5\%$) the results are considered significant - i.e. the independent variable including gender, education) has a significant impact on the dependent variable such as policy development. Non-significant results (p > 0.05) explain that there are no group differences, i.e. there is a chance of more than 5% that the results are down to chance and not down to the independent variable (Field, 2013).

3.10.7. Internal reliability: Cronbach's alpha

Cronbach's alpha measures for internal consistency between items within a dimension. It looks at how closely related a set of items are. It reflects the reliability of a given scale. A 'high' alpha level value indicates that items share consistency and similarity, i.e. they measure for the same/similar phenomenon and the scale is reliable. The value ranges between 0 and 1. Reliability above $\alpha = 0.67$ is considered sufficient. For nurses, Cronbach's alpha was conducted for the four dimensions reflecting perceptions, while alpha was measured for patients' satisfaction for eight dimensions. Overall, for the nurses all dimensions were deemed reliable, as all achieved a reliability of alpha (α) above 0.68. Hence, it can be concluded that both the survey and underlying dimensions are considered reliable Table (4.)

	Number of Items	Cronbach's a
Nurses' perceptions		
olicy development	8	0.722
raining and skills upport	5	0.851
xtensive specific	5	0.680
eward and cognition system	7	0.877
atients' satisfaction		
nowledge and oviding information	5	0.92
linical skills	6	0.94
aring	8	0.94
ommunication	3	0.88
ecision making	3	0.91
mily involvement	4	0.93
ofessional behaviour	6	0.96
lobal rating	2	0.93

Table 4.Internal reliability of nurses' and patients' questionnaires and underlying dimensions

3.10.8. Computing main variables and data for nurses

For the purpose of inferential statistics (quantitative chapter), each of the four dimensions were averaged based on the number of items within. All items measure the corresponding dimension and due to the similarities in scores (high reliability/consistency) this allows the researcher to look at one overall variable (dimension) rather than examining each of the items separately. This created an overall average/mean score for policy development, for training and skills support, for extensive specific assets and finally for reward and recognition systems. Higher mean scores here indicate higher agreement with these dimensions scores, ranging from 1-5. Using descriptive statistics, each of these dimensions were tested for normality and it was judged that they comply with normal distribution - i.e. most scores are scattered around the mean with few extreme scores. This was evidenced by normal scores kurtosis (if data is heavy tailed with outliers) and skewness (symmetry or lack of it in data) scores (-/+2), the data (main variables)

did not show up normal skewedness or weakness of data. The results being normally distributed leads us to assume that it can be assumed parametric. The parametric tests to be used here are independent samples t-test and analysis of variance (ANOVA). The t-test enables testing of whether differences between two independent groups is significant, while the ANOVA examines whether differences between three independent groups or more is significant.

To test whether there are statistically significant differences between nurses' perceptions about quality management practices, an ANOVA test was run to find out whether nurses have different perceptions according to their background, such as. hospitals, age, education level and years of service (see methodology chapter for more details). An independent samples t-test was run to find out whether males and females differ in their perceptions of the quality management practices available in Saudi general hospitals. These tests rely on the significance level (alpha) reflecting the chances of rejecting the null hypotheses (no effect of an independent variable on a dependent variable) given that the null hypothesis was true. The probability lever (p value) reflects the probability of rejecting the null hypotheses when it is in fact true. This probability is reflected at threshold of 5%. A p value equal to 0.04 indicates that there is a 4% chance of rejecting the null hypothesis is in fact true.

When examining impact of demographic variables, it will be assumed that they all have a significant effect on perceptions and satisfaction among nurses and patients, respectively. Hence, if the probability level is less than 5% (p<0.05), this indicates that the IVs (demographic variables) have contributed significantly to the scores, i.e. there is a significant difference between groups and there is a less than 5% chance of rejecting the null hypothesis when it is in fact true (Field, 2013).

3.10.9. Computing main variables and data for patients

Patients' questionnaire included eight dimensions or domains reflecting patient's satisfaction, knowledge and providing information, clinical skills, caring, communication, decision-making, family involvement, professional behaviour and finally, global rating. Each of these domains was averaged based on items within, the mean score ranged between 1-5. After creating a mean for each dimension, they were all tested for normality, and it was evident that they all follow normal distribution; patients had normally spread scores around the mean (also evident by kurtosis and skewness tests). As a result, the data was assumed parametric, which leads to the use of parametric tests to examine demographic influences on the satisfaction level of across

dimensions (see Appendix 8) to find more information about the testing and distribution of results for the main variables of nurses' and patients' surveys.

3.10.10. Analysing qualitative data: Using thematic analysis

To analyse the qualitative data collected from the interviews and open-ended questions, thematic analysis was utilised. Indeed, although there are different methods and techniques that can be used to analyse qualitative data, such as document analysis and grounded theory coding, thematic analysis has been selected for the current study. The rationale for this choice is linked to the nature of the method, as it enables data reduction as all data will be codified and then analysed in a strategic way. Hence, the data will be divided into segments to be categorised, summarised, and reconstructed in a way that captures important concepts within the dataset (Ayres et al., 2003, p.867). Additionally, although other approaches such as content analysis could offer similar outcomes, thematic analysis is unique in terms of its steps that are systematic and easy to follow. As a new researcher to qualitative research, the researcher was looking for an approach that assures the best possible outcomes with fewer obstacles and less ambiguity in the process. Hence, by following the six steps of thematic analysis, the researcher was able to find his way.

Braun and Clarke (2006) explained that to complete thematic analysis a researcher needs to follow six steps, which are summarised in Table (5.).

	Phases	Actions needed
1	Ensure the familiarity of the data	Listen to recorded data and read the transcripts available in both languages: Arabic and English
2	Perform initial coding	Identify important ideas introduced by the data and systemically search for the coding. Use colour coding
3	Identify the potential for subthemes	Look at the codes to search for potential sub-themes, and then list them underneath each other
4	Evaluate the identified themes and subthemes	Review all the previous steps from 1 to 3
5	Express and give a final name to each of them	As all themes and codes were reviewed, the researcher needs to ensure that the names used are relevant and reflect all data

Table 5. Six steps of thematic analysis	s (adapted from Braun & Clarke, 2006)
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6	Finish the report	This	impo	rtant	last step	ensu	ires that	the r	esearcher
		still	has	the	chance	to	make	any	required
		amer	ndmer	ts to	the theme	es as	needed		

In this study, the researcher applied the thematic analysis systematically and all six steps were followed. The analysis of the data began immediately as the data was transferred from audio into text. Reading more PhD research studies where a researcher conducts thematic analysis was very useful, as was consulting academic peers who completed their PhD research and used thematic analysis as this gave the researcher a chance to develop the themes towards the fifth step. The translation of the data occurred after the transcript was completed. In the sub-sections, the researcher offers a detailed explanation of each step.

3.10.10.1. Step one: Ensure the familiarity of the data

From reviewing several research studies in which thematic analysis was conducted, the researcher noticed that the engagement of the researcher in each study was different, especially in terms of familiarising themselves with the data. For example, in this study, the researcher had three sources of interview data which were: the original Arabic record, the Arabic transcript, and the translated work into English. For the researcher, it was particularly useful to visit all of the three sources and to keep listening to the recording to the extent that the data became part of the researcher's memory. Frankly, listing to the Arabic recording was not as challenging as looking at the English transcript. But at the same time, as the researcher needed to translate from Arabic into English, it was another chance to become even more familiar with the data and to recognise any potentially important codes. Additionally, as soon as the audio recordings were transcribed into Arabic, the researcher performed line by line reading of the documents. As soon as this step was completed, the next step was started.

3.10.10.2. Step two: Perform initial coding

Once the researcher felt confident that the first step had been fully completed and the data, he collected became familiar to him, the second step began with re-reading of the transcript line by line, searching for codes. Codes to the researcher meant searching for "the most basic segment, or element, of the raw data or information that can be assessed in a meaningful way" (Boyatzis, 1998, cited in Braun & Clarke, 2006, p.18) and then assigning names to the segments. The codes are used in a later step to create the sub-themes and themes. At this step, the researcher was searching for the codes that seemed relevant to the topic under investigation. Carrying out a wide literature review was useful because it enriched the researcher's knowledge with the terminologies

that are related to the topic or to the research aim and objectives, and these were then used to help build the glossary themes. The challenge at this stage was to avoid highlighting some codes and ignoring others. To avoid this possible bias, the researcher coded the transcript twice during two different periods of time to see whether the same codes emerged each time. The second coding was better because the researcher had become more familiar with the data and no codes were ignored – some codes were created for ideas even if they looked contradictory to the literature. This practice agrees with Braun and Clarke (2006) who explain that decisions about coding are down to the researcher. During this step, the researcher was able to produce a significant number of codes (Appendix 9); a large number of codes were initially generated, and this process was completed by using a different colour for each code.

3.10.10.3. Step three: Identify the potential for sub-themes

To perform this step, the researcher adopted Boyatzis's (1998, cited in Braun & Clarke, 2006) definition of theme as "a pattern in the information that at minimum describes and organises the possible observations, and at maximum interprets aspects of the phenomenon" (p.161). Thus, to illustrate this with a concrete example, analysis of the transcript of the original interviews identified a number of comments that referred to the role of management in assuring the quality (see Appendix 9). When grouped together, they pointed to a possible underlying theme about various issues and factors related to the role of management. The line number associated with the relevant theme, alongside the coding of the interview, was mentioned underneath each theme to simplify the follow-up step, when themes and sub-themes are reviewed for the final version of the themes (see Appendix 10).

3.10.10.4. Step four: Evaluate the identified themes and subthemes

Once the researcher reaches the stage of naming the final themes, it is then the time to be particularly precise in giving the names. For a theme to be named as a theme, the researcher has to look at enough data to support the creation of the theme, especially when the data are very diverse. The researcher is also requested to look at any themes that may collapse into each other such as, two apparently separate themes might form one theme). In this study, the researcher looked at the themes that emerged during the third step and reviewed the codes that emerged in the second step, to ensure that there were no other possibilities for the themes to be broken down into further separate themes (Braun & Clarke, 2006, p.91).

3.10.10.5. Step five: Express and give the final name for each theme

Identifying the essence of each of the themes and giving a final name to them was the hardest step. This is the penultimate step before completing the final report. Braun and Clarke (2006) advise that a researcher needs to think again about the themes that emerged and look at the objectives of the research to see whether the themes represent the findings and answer the questions. This step is critical because the researcher needs to identify the core of each theme and clearly define each of their names. In this research, it was useful for the researcher to have second thoughts about the name of each theme, and then have a rethink of each name individually. Following this doubting stage, the researcher made a large diagram to map all the themes together and then link them before completing the final step and finalising the report.

3.10.10.6. Step six: Finishing the report

At this stage, the researcher brought together all the findings with the themes and interpreted the data in relation to the themes, which now had become more articulated and clearer. Linking the themes to the studied topic and finding answers to the questions, and then associating the answers with the evidence from the collected data, is the heart of this step which required considerable time and effort

3.11. Ninth Layer: Data presentation

The last stage of completing a research project is to produce the report or usually a thesis and sometimes the finding could be used to run a workshop or internal academic seminars. The presentation of the PhD project involves specific skills in academic writing. It could be challenging for many first-time researchers to bring all the research pieces together to make a coherent and solid report or dissertation. It is useful, however, to include this stage in the Onion as researcher will be aware that writing up a PhD thesis require not only advanced research skills but also a critical mind and writing skills. Indeed, in a researcher when mixed method is selected as a design and pragmatism as a philosophical stance, a researcher should be aware that the presentation of the data will be in two different formats of qualitative and quantitative chapters. Completing both chapters requires different skills in which a researcher should be trained on especially if he or she did not experience mixed research before.

3.12. Quality of the research

Peers, readers, and sponsors typically appraise any kind of empirical studies, regardless of its approach (Nowell et al., 2017). As both qualitative and quantitative studies increasingly gain

recognition and value, it is imperative that they are conducted in a rigorous and methodical manner to arrive at meaningful and useful conclusions. To be accepted as reliable, researchers including junior researchers such as PhD students must demonstrate that data collection and analysis have been conducted in an exact, reliable, and exhaustive manner through recording, systematising, and disclosing the methods of analysis with sufficient features to enable the reader to determine whether the process is credible. Studies show that researchers, including graduate students, often omit a detailed description of how analysis was conducted (Tuckett, 2005), though many have contended that investigators need to be clear about what they have done and why they did it, as well as a description of analysis methods (Braun & Clarke, 2006). If readers are confused about how researchers analysed their data or the assumptions that informed their analysis, evaluating the trustworthiness of the research process becomes difficult and the outcome of the findings may not be acceptable. Hence, researchers generally adopt some trustworthiness criteria that have been agreed on in the literature regarding a particular research approach, including qualitative, quantitative, and mixed methods studies. Respective research approaches use different evaluation criteria to ensure the rigour of the inquiry, since different philosophical and methodology assumptions guide each approach.

3.12.1. Credibility

Research credibility explains the 'fit' between respondents' views and the appropriateness of the researcher's representation of them (Tobin & Begley, 2004). Experts have recommended a number of measures to address credibility, which involve the following: prolonged engagement, persistent observation, data collection triangulation, and researcher triangulation (Bowen, 2008; Peters et al., 1997). Other measures include peer debriefing to provide an external check on the research process to improve credibility, in addition to referential adequacy as a means of confirming preliminary findings and interpretations against the raw data. Credibility can also be operationalised through the process of member checking to test the findings and interpretations with the participant. Throughout the study period, the researcher engaged in self-reflection regarding his own role, exploration of negative cases in the analyses, and worked closely with data to ensure a level of continuing trustworthiness. In addition, memos were used to document and crosscheck information and to assist in reflection on the research process as well as the researcher's role in collecting data and conducting the research.

3.12.2. The dilemma of quality in the research

In this research, the researcher adopted mixed methods to combine the data and avoid the potential bias of one method by collecting data using an alternative method as well. This study employed more than one method where the interaction of the data is limited to one method. The use of differing data collection methods and the adoption of a mixed methods approach helps to verify the data and the findings before being presented (Klenke, 2008).

Nevertheless, collecting qualitative data is more likely to involve different sources of bias. First, the validity of the opinions and perspectives collected from the participants; the researcher was concerned about whether the participants were telling the whole story or whether they hid some of the answers. There was also a risk that the participants were giving the researcher answers they felt he wanted to hear, rather than reflecting fully on their practices. To ensure that deep perspectives were collected, the researcher adopted the semi-structured interview style which helped him ask more prop questions, which were needed to help clarify the answers or to give more details.

In this research, interviews were deemed to be important, but could be plagued by obstacles relating to a lack of willingness to share opinions openly. It is acknowledged by Creswell (2013) that one of the downfalls of interviews as a data collection method is that the quality of the data depends to a large extent on the participant's honesty and willingness to participate. When conducting the interviews in this study, the researcher intended to use purposely selected participants. This means only those who are willing to share their opinions were invited to take part in the research. This type of selection may raise another concern, as it could be argued that the sample may not be completely representative of the whole population (Lund Research, 2012). But this limitation could only be a concern if the interview was the only data collection method.. Additionally, the participants of this research were willing to share their opinions freely. The researcher made sure that the participants for the questionnaires were diverse in terms of age, gender, and experience (O'Leary, 2014). As any negative attitudes of the researcher during collection of the data would hinder the participants from expressing their opinions openly, it was important when gathering the responses to the questionnaire to ensure that the participants were able to freely answer the questions and provide their actual opinion, as there was no right or wrong answer.

3.12.3. Improving the quality of the research

In research, validity and reliability are important issues because these determine the degree of quality of the process and conclusions inferred from the study. Validity is an indicator of the level of accuracy of the study's conclusions (Polit & Beck, 2006). It simply shows test measures for response perfectly. There are four commonly used tests to measure the quality of any given empirical social research study, namely construct validity, internal validity, external validity, and reliability.

Construct validity relates to the level of correctness of the measure undertaken for the studied concept. To increase the construct validity of this study, experts were involved in drafting the questionnaires, multiple sources of information were used, and principal respondents were used to review the information. Internal validity measures the extent to which the effects observed in the study are a true reflection of reality, free from the effects of confounding factors. According to Polit and Beck (2006), external validity is described as the possibility of generalising the findings in relation to settings, population, and time (Hayashi et al., 2019).

3.13. Chapter summary

This chapter discussed and justified the methodological approaches the researcher adopted to respond to the research questions and to meet the research objective. The chapter started by addressing the onion model, which was used to master this research, and then offered justifications for the philosophical decisions made by the researcher. The chapter also explained why the researcher chose to carry out mixed methods research. It has also justified the use of multiple instruments to collect the data, and in an effort to ensure academic rigour, a full account of the process of analysis was provided – as were detailed accounts of how the data were collected via semi-structured interviews and surveys. The chapter explained the issues related to the quality and credibility of the research, as well as the matter of translation. The findings of the study are presented in the following two chapters: Chapter Four, which offers the quantitative findings, and Chapter Five, which provides the qualitative themes.

Chapter Four: Results of the Quantitative Analysis

4.1. Introduction

This chapter reports the results generated from the quantitative (questionnaire) data generated from nurses and patients in several KSA hospitals. This chapter provides numerical descriptive and inferential statistics that aim to explore firstly, *nurses' perceptions* and experiences of service quality in these hospitals based on four dimensions, and secondly *patient satisfaction* with services received in these hospitals based on eight dimensions.

4.2. Nurses' survey

Before analysing nurses' perceptions about healthcare quality, it is fundamental to explain that the eight dimensions of the questionnaire were identified from the literature as being the most critical issues that should be assessed when the matter of QMS and its practices are investigated. Indeed, it is explained in the 'Limitations' section (6.6) that this choice might limit the validity of the data, as there are further issues to be considered. However, this should open the doors for further studies to investigate the same matter of QMS and its practices, but with consideration of other dimensions (see Section 7.3.3).

Accordingly, the following subsection will provide some essential background and demographic details to contextualise the study. Nurses' perceptions will be examined based on five dimensions: *Policy development, Training and skills support, Extensive specific assets,* and finally *Reward and recognition system.*

4.2.1. Demographic details

The nurses' survey was conducted among 360 nurses across 12 hospitals in the centre, north, and south of KSA. A total of 237 completed responses were received. Table (6.) below shows the demographic distribution of the hospitals and the number of returned questionnaires from each hospital.

Location in KSA	Number of participating	Percentage (%)
	nurses	
Centre	67	28.3
East	30	12.7
North	98	41.3
South	42	17.7
Total	237	100.0

 Table 6. Demographic distribution of hospitals involved in the survey

The results showed that 27% of the respondents worked in hospitals in the centre of KSA, 41% were located in the north, 18% in the south, and 5% in the east, which is considered to be a fair representation of general hospitals from different regions of KSA. Furthermore, the respondents were asked about their gender, age, role, and level of education and their years of experience in the selected general hospitals. This section presents the analysis of the respondents' profile. By examining gender, it was observed that 86.1% of the respondents were female nurses and only 13.9% of the respondents were male attendants Table (7.). The gender distribution of the targeted sample is considered a true reflection of gender distribution within the general hospitals in KSA.

Table 7.Nurse participants' distribution by gender

Gender	Number of participants	Percentage (%)		
Male	33	13.9		
Female	204	86.1		
Total	237	100.0		

Figure (16.) shows the age distribution of the respondents. The results show that 59.9% of the respondents were less than 30 years of age, while 30.4% of the participants were between 30-40 years old, and 8.0% of the participants were over 40 years old. Only 1.7% of the responses were missing such as participants did not provide an answer or skipped the question).



Figure 16. Nurses' distribution by age

These results show that the dominant age group of the respondents are those who are younger than 40 years old. When analysing the nurses' position, Table (8.) below shows the sample distribution of the nurses' position with a broad spectrum of specialties within the targeted hospitals. The majority (about 61.2%) of the population made up of staff nurses, 15.6% were technician nurses, 3.8% nursing supervisors, 3.4% were heads of department and clinical instructors, while emergency nurses and nursing specialists comprised 2.5% each. Other positions reflected a small percentage of the sample population. The broad distribution of the nurses' position would help to obtain a broad range of opinions.

Table 8.Sample	distribution of	f nurses'	position
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Nursing staff position	Number of nurses	Percentage
Staff nurse	145	61.2
Nurse technician	37	15.6
Nursing supervisor	9	3.8
Head of department	8	3.4
Clinical instructor	8	3.4
Emergency nurse	6	2.5
Nursing specialist	6	2.5
Health assistant	5	2.1
Clinical nurse	4	1.7
Duality staff	3	1.3
Charge nurse	2	0.8
General nurse	1	0.4
Nurse educator	1	0.4
General report	1	0.4
Nursing HR supervisor	1	0.4

Figure (17.) below shows the level of education of respondents. The majority of the nurses (54.9%) were educated up to diploma level, 41.4% were bachelor's degree holders, while a small minority (3.8%) were postgraduate degree holders.



Figure 17. Nurses' sample distribution by education level

It is interesting to see that the majority of respondents are not highly qualified nurses and may project the recruitment trends of KSA general hospitals.

Figure (18.) shows the number of years' service of the respondents. Most of the respondents (about 65%) have five or more years of service, while the rest have less than five years of service. The majority of respondents have served between 5-10 years in the health department.



Figure 18. Nurse participants' distribution by years of service in the healthcare sector

This distribution is likely to give a better picture of the nurses' experiences in KSA general hospitals given that the majority of the respondents are experienced nurses.

4.2.2. Descriptive statistics: Nurses' perceptions and experiences in in Saudi general hospitals

This study explores nurses' perceptions and experience of healthcare quality. To do so, the questionnaire looked at four dimensions/scales of perception, namely: policy development, training and skills support, extensive specific assets, and reward and recognition systems in the Saudi general hospitals. This part of the results describes nurses' answers regarding items within each of these dimensions. Each of the items within the scale represents a different element or experience, hence understanding how such items are evaluated, for example on agreement level will contribute to the understanding of nurses' perceptions of the practices of healthcare quality.

4.2.2.1. Perception of policy development

Perceptions of nurses about the effectiveness of policies and the quality of healthcare management practices in Saudi public hospitals have been estimated. This part of the

questionnaire sought to find out the degree to which the participants agreed with eight aspects that underpin the effectiveness of healthcare policies and quality of management practices, as shown in Table (9.) below.

Table 9. Percentages of average scores of nurses' perceptions of the quality of healthcare policies and management practices

Item	S/A	A	Ν	D	S/D	Mis.	Mean	SD	Rank
I understand the healthcare	;								
policy from the quality perspective is primary care clearly.		63.7	10.5	3.4	1.7	2.1	3.96	0.77	1
Management support to health care system leads to developments in primary care.	12.2	54.4	16.5	13.1	2.1	1.7	3.63	0.94	4
The practice to carry out the quality of care is clearly communicated as part of the quality care	21.5	50.2	16.0	7.6	3.4	1.3	3.80	0.98	3
policy. I implement quality management for most tasks	21.5 s.	57.8	12.7	3.8	2.1	2.1	3.95	0.84	2
My manager supports me when I have quality management related problems.	13.1	47.7	19.4	11.8	6.3	1.7	3.50	1.07	5
I like some aspects of quality management but no others.	ot5.5	39.7	30.0	19.8	2.5	2.5	3.26	0.93	6
I think the quality management processes used in this hospital are a waste of time.	8.0	15.2	21.9	36.3	18.6	0.0	2.58	1.19	7
Overall mean							3.59	0.55	-

S/A: Strongly agree, A: Agree, N: Neutral, D: Disagree, S/D: Strongly Disagree, Mis: Missing, SD: Standard deviation

Table (9.) shows that the average scoring of the sample is 3.59 (based on a five-point Likert scale), which indicates that the nurses generally have positive perceptions of the quality of

policies and healthcare management practices (more agreement than disagreement) in Saudi public hospitals. The mean score was based on a five-point Likert scale (1 =strongly disagree, 2 =disagree, 3 =neutral, 4 =agree, 5 =strongly agree). By examining the frequencies (%) in the table above, there is more agreement (above neutral point 3) than disagreement and the mean score reflects that. The rank column shows items ranked based on agreement (highest to lowest). Although the table is self-explanatory, here are the highest (most agreed upon) and the lowest (least agreed upon) items.

The nurses gave 82.3% positive responses to confirm their clarity of understanding of healthcare policy, with an emphasis on quality management in primary care (i.e., 18.6% strongly agreed and 63.7% agreed). Only 5.1% gave a negative opinion, whilst 10.5% gave a neutral opinion and 2.1% were missing. The scores were supported by a mean value equal to 3.96; it should be noted that the mean score is considered an average of a five-point Likert scale per item (high scores reflect disagreement) as presented for each of the scales.

Lastly, the least agreed upon item was 'I think the quality management processes used in this hospital are a waste of time'. The results showed that 23.2% agreed with this statement, while 21.9% remained neutral and 54.9% disagreed with this statement. This finding was backed up by a mean value of 2.58.

4.2.2.2. Perception of training and skills support

This part of the questionnaire sought the degree of the participants' agreement with their training experiences and support in Saudi general hospitals, i.e., this sheds light on participants' perception or views about the current training they receive Table (10.). Training is considered an aspect of healthcare quality, which feeds into the main aim of the study.

Item	S/A	Α	Ν	D	S/D	Mis.	Mean	SD	Rank
I have received adequate training for quality of healthcare practices	r 8.9	45.1	20.7	20.7	4.6	0.0	3.33	1.05	3
Management is committed to Quality Management training	11.4	45.1	25.3	13.5	3.8	0.8	3.47	0.99	1
Every nurse is happy with the content of training	3.4	32.5	32.9	19.4	10.1	1.7	3.00	1.04	5
Nurses are motivated to advance training and education	13.9	38.0	24.5	13.9	6.3	3.4	3.41	1.10	2
Health managers encourage nurses to learn new skills) 8.9	40.9	23.2	13.5	13.5	0.0	3.18	1.19	4
Overall mean							3.28	0.85	

Table 10.Nurses' perceptions expressed as percentage frequencies and average scores

S/A: Strongly agree, A: Agree, N: Neutral, D: Disagree, S/D: Strongly Disagree, Mis: Missing, SD: Standard deviation

The results show that the overall mean value of the sample is 3.28 (based on the five-point Likert scale). This indicates the nurses' agreements with the items presented are generally leaning towards neutral on their experience of training and skills support in Saudi general hospitals. However, by observing frequencies (%), all items generated more agreement than disagreement, and the mean score was indicative of that.

The highest agreement was for the item asking nurses whether the 'Management is committed to Quality Management training'. The results show that 11.4% of the participants strongly agreed, while 45.1% agreed, giving a total of 56.5% positive responses, those with neutral opinions comprised 25.3%, while those who showed negative opinions represent 17.3%. The least agreement was generated when the participants were asked to share their perceptions on whether they felt that 'Every nurse was happy with the content of training'; the statistics in the table revealed that 3.4% strongly agreed, 32.5% agreed, while 32.9% showed neutral views and 29.5% held negative views, whereby 35.9% gave positive views. Thus, the majority, 62.4%, provided neutral and negative perceptions. This is also supported by an overall average scoring of 3.00.

4.2.2.3. Perception of extensive specific assets

This part of the questionnaire sought participants' perceptions of the availability and quality of resources in Saudi general hospitals. Accordingly, the participants were provided with five items, as shown in Table (11.) below. Nurses' evaluation of healthcare quality is also considered through their views about the extensive specific assets.

Item	S/A	A	Ν	D	S/D	Mis.	Mean	SD	Rank
The hospital is well sourced.	5.5	32.1	20.7	27.4	12.7	1.7	2.90	1.16	4
I feel safe working in this hospital.	8.4	38.0	23.2	15.2	12.7	2.5	3.15	1.18	2
There are enough nurses in this hospital.	3.4	14.8	14.8	36.3	29.5	1.3	2.25	1.14	5
There is a shortage of experienced and skilled nurses.	22.4	29.5	21.5	17.7	8.9	0.0	3.38	1.26	1
I have enough time to get all my work done efficiently in a normal workday.	8.0	36.3	24.5	18.1	11.8	1.3	3.11	1.16	3
Overall mean							2.96	0.78	

Table 11.Nurses' perceptions expressed by means and percentages on extensive specific assets

S/A: Strongly agree, A: Agree, N: Neutral, D: Disagree, S/D: Strongly Disagree, Mis: Missing, SD: Standard deviation

The results show that an overall mean score of 2.96 (five-point Likert scale) was achieved by the participants in relation to their perceptions of the availability of extensive specific assets in Saudi general hospitals, based on their experience of quality management practices. The mean leans more towards disagreement, and this is reflected by the frequency of scores (%) in each item.

By focusing on agreement scores, the most agreement was generated for the items asking whether 'There are enough nurses in this hospital'. The results show that 3.4% of the participants strongly agreed, 14.8% agreed, 14.8% were neutral, while 65.8% disagreed. Thus, it could be concluded that the majority of staff nurses working in Saudi general hospitals confirmed that there were insufficient nurses in those hospitals.

On the other side of the spectrum, the least agreement was for the items asking nurses whether they felt 'there is a shortage of experienced and skilled nurses. The results revealed that 22.4% of the participants strongly agreed, while 29.5% agreed, 21.5% were neutral, and 26.6% gave negative responses. Hence, it could be concluded that more than half (51.9%) of the participants confirmed that there was a shortage of experienced and skilled nurses in Saudi general hospitals – the focus of the study – which is reflected by an average score of 3.38.

In conclusion, by observing the whole scale, the results suggest that there was an insufficient number of nurses available in the KSA, the hospitals were not well sourced, there was not enough time for nurses to do their work efficiently, and the hospital environment was not sufficiently safe to cater for a large majority of the nurses' needs.

4.2.2.4. Perception of reward and recognition systems

The results in Table (12.) show the nurses' perceptions of the reward and recognition system in Saudi general hospitals. This dimension consisted of seven items to capture the nurses' experience of health care quality.

Item	S/A	A	Ν	D	S/D	Mis.	Mean	SD Rank
Performance reward for being the best worker is fair and square.	t 1.7	23.2	24.9	24.1	24.1	2.1	2.53	1.15 7
Reward systems used in this hospital allow nurses to reflect on their performance.	5.9	32.5	23.6	20.3	17.7	0.0	2.89	1.21 2
In this hospital, every nurse goes through a reward system.	3.8	19.8	27.0	28.3	18.6	2.5	2.61	1.12 6
I am satisfied with the salary I receive.	5.9	34.2	23.6	18.6	17.7	0.0	2.92	1.21 1
Employees are motivated in this hospital.	1.7	32.5	20.3	19.4	23.6	2.5	2.68	1.22 5
Senior manager's support system leads to satisfied employees.	3.4	31.2	25.7	18.6	19.8	1.3	2.79	1.19 3
Highly motivated and committed nurses are promoted.	2.5	29.5	27.4	16.5	22.4	1.7	2.73	1.19 4

 Table 12. Nurse participants' perceptions expressed by means and percentages of reward and recognition

 systems

S/A: Strongly agree, A: Agree, N: Neutral, D: Disagree, S/D: Strongly Disagree, Mis: Missing, SD: Standard deviation

The overall mean value is equal to 2.73. Reflecting on the percentages, there is more disagreement than agreement among nurses regarding reward and recognition systems. The middle point of a five-point Likert scale is 3 (neutral), so a score above this leans towards agreement, and below it leans towards disagreement. Saying that, there is a proportion of nurses who provided neutral opinions or agreement. It could be said that participants seem to differ in their perceptions about the practices of reward and recognition systems.

Focusing on agreement scores (%), the highest agreement was for the statement about whether they are satisfied with the salary they receive. The result shows that 5.9% strongly agreed, 34.2% agreed (forming a total of 40.1% positive responses), 23.6% had neutral views. Furthermore, 36.3% did not express satisfaction with the salary they receive.

The least agreement was found for the item asking whether the 'Performance reward for being the best worker is fair and square'. The results in the table showed that only 1.7% of the participants strongly agreed, 23.2% agreed (hence, a total of 24.9% positive responses), while

24.9% gave neutral responses. However, 48.2% held negative perceptions of the performance reward for the best worker being held honestly.

All these findings presented in the table suggest that there is a need to set up a clear system to promote advancement in nurses' career development and enhance the quality of the healthcare management system in KSA general hospitals.

4.2.3. Inferential statistics of nurses' perceptions (QMS): Demographic differences

There was a need to deeply understand the topic and see whether demographic variables influence nurses' perceptions. This could add valuable information that could enhance the contribution of this study beyond what was intended. For instance, this part could answer a question about how demographic variables (group differences) impact nurses' opinions of healthcare quality. The main aim of the analysis in this section is to assess whether nurses differ much in their perceptions about quality management practices in Saudi general hospitals related to hospitals, gender, age, education, and years of service in the healthcare sector.

4.2.3.1. Differences between hospitals in QMPs

Table (13.) illustrates the results of analysis of variance (ANOVA) to examine whether nurses are statistically different in their perceptions regarding the healthcare quality management practices in Saudi general hospitals related to hospitals. ANOVA allows us to measure the difference between all hospital across all practices. The results show statistically significant differences (p<0.05) between 12 hospitals in nurse's perceptions about training and skills support (p<0.01), and extensive specific assets related to the hospital (p<0.01). These results should be treated with importance, as they raise the question of why such differences in perceptions exist. No significant differences were found in perceptions in policy development (p>0.05) or reward and recognition system (p>0.05).

Table (13.) below shows that by grouping participants according to hospital, the mean scores for perceptions varied – especially in training and skills support, where the nurses in F had the highest agreement, followed by K King Khaled. The least agreement mean was generated for T and Q, showing poorer training and skills support. As for views about extensive specific assets, nurses in F still showed the highest agreement, while T and R general hospitals generated the lowest mean agreement with regard to extensive specific assets.

Hospital	Policy development		Training and skills support		Extensive specific assets		Reward and recognition system		
	Mean	SD	Mean		SD	Mean	SD	Mean	SD
F	3.85	0.36	3.94		0.71	3.64	0.34	2.74	0.84
S	3.81	0.28	3.62		0.66	2.97	0.86	3.05	0.81
Κ	3.63	0.31	3.68		0.62	3.16	0.55	2.80	0.81
Ι	3.61	0.48	3.55		0.69	3.00	0.53	2.81	0.88
G	3.46	0.62	3.17		0.78	3.18	0.57	2.96	0.91
Т	3.66	0.58	2.82		0.90	2.48	1.05	2.20	1.09
AL	3.52	0.60	3.08		0.93	2.82	0.87	2.74	0.87
Ν	3.69	0.39	3.48		0.96	3.12	0.85	2.62	1.14
В	3.41	1.14	3.44		1.20	3.20	0.93	3.18	0.95
R	3.41	0.65	3.04		0.78	2.55	0.77	2.24	0.87
Q	3.79	0.37	2.95		0.92	2.89	0.71	2.73	1.05
F	1.334		2.598		_	2.543		1.817	
Sig.	0.207		.004**			.005**		0.053	
J	3.60	0.35	3.13	0.78	2.96	0.67	2.67	0.84	

Table 13. Descriptive statistics of QMPs across hospitals

p < 0.05, p < 0.01

4.2.3.2. Level of education differences in QMPs

The results in Table (14.) examined whether nurses, based on level of education, are statistically different regarding their perceptions of the healthcare quality management practices in Saudi general hospitals. The results of ANOVA found that there were statistically significant differences between education levels (for nurses) in perceptions about the quality of healthcare management practices with regards to policy development, training and skills support, and extensive specific assets. Significant differences across education levels were found in perceptions of policy development (p<0.01), perception of training and skills support (p<0.001), and extensive specific assets (p<0.05). However, there was no significant differences between education levels for reward and recognition system (p>0.05). Education has shown to impact on perceptions among nurses, so this also expands the knowledge.

From Table (14.) below it is clear that those with postgraduate degrees had the highest agreement for policy development, training and skills support, and extensive specific assets, while those with a diploma showed the lowest agreement across all domains. To test at which educational level the differences exist, a post-hoc test was conducted. The results found that for policy development, a significant difference was found between those with a diploma and those with bachelor's degrees (p<0.01). For training and skills support, differences were found between those with a diploma compared to a bachelor's degree (p<0.001) and compared to a postgraduate degree (p<0.05). For extensive specific assets, a significant difference was only found between those with a diploma and those with a bachelor's degree (p<0.05).

Table 14. Descriptive statistics (mean and standard deviation) in perceptions of QMPs based on education
level

	Policy development		Training and skills support		Extensive specific assets		Reward and recognition system	
Education	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Diploma certificate	3.46	0.62	3.02	0.88	2.82	0.82	2.60	0.93
Bachelor's degree	3.73	0.42	3.58	0.72	3.11	0.70	2.90	0.90
Postgraduate degree	3.88	0.32	3.71	0.51	3.27	0.71	2.79	0.84
F	7.473		14.100		4.505		2.843	
Sig.	.001**		.000***		.012*		.060	

***p<0.001 ** p<0.01 *p<0.05

4.2.3.3. Years of experience and perceptions of QMPs

The results in Table (15.) examined whether nurses have statistically significant differences in their perceptions of the quality management practices available at Saudi general hospitals according to years of experience. The analysis of variance (ANOVA) found that there were statistically significant differences between experience categories in both extensive specific assets (p<0.05) and reward and recognition (p<0.05). No significant differences were found between experiences in policy development (p>0.05) and training and skills support (p>0.05). Table 4.10 shows that nurses with the highest level of experience (>15 years) had the highest agreement across all domains, while the least agreement was found for nurses with experience of less than five years.

To test whether significant differences exist with regards to years of experience in nursing staff perceptions about extensive specific assets and reward and recognition systems, post-hoc tests were calculated showing that there were no significant differences between any two of the groups in terms of the extensive specific assets (p>0.05). However, with reward and recognition, significant differences were only found between those with less than five years of experience and those with more than 15 years (p<0.05).

	Policy development		Training and skills support		Extensive specific assets		Reward and recognition system	
Experience	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Less than 5	3.55	0.51	3.22	0.91	2.79	0.81	2.57	0.98
5- 10 years	3.59	0.59	3.23	0.81	3.01	0.76	2.73	0.87
11-15 years	3.64	0.58	3.34	0.93	3.14	0.65	2.97	0.87
More than 15 years	3.77	0.30	3.68	0.69	3.26	0.64	3.17	0.81
F	.925		1.819		3.040		2.983	
Sig.	.429		.145		.030*		.032*	

Table 15. Descriptive statistics of results in QMPs across level of experience in nursing

*p<0.05

4.2.3.4. Conclusions for nurses

The results above looked at the nurses' survey results. The survey examined their perceptions and experiences of service quality in their hospitals, namely their perception of policy development, training and skills support, extensive specific assets, and finally reward and recognition systems. These dimensions were measured on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree), all of which align with the overall aim of examining nurses' perceptions of QMPs.

By observing the number of participants disagreeing with items presented in each of these dimensions, the researcher was able to see which of the dimensions had the most negative views and which generated the most positive views. Also, items within each of the dimensions indicated where most disagreement is (see descriptive and frequency tables). By observing nurses' perception of policy development, it could be concluded that views were generally positive, reflected by high percentages of agreement with across all items (M=3.59). When looking at the views on training and skills, the results also showed positive views (agreements and perceptions) – this was reflected by higher agreement scores than disagreement across items (M=3.28), and in particular many agreed that management is committed to quality management training. However, there was a sizable proportion of nurses who were not happy (disagreed) with the content of training. As for extensive specific assets (M=2.96), the results reflect sizable disagreements across all items; nurses seem in particular to disagree that there are enough nurses in hospitals. As for reward and recognition (M=2.73), nurses showed much disagreement reflecting poor reward and recognition practices Figure (18.). There was particularly high disagreement that performance rewards for being the best worker is fair and square. However, many agreed that they are satisfied with their salaries.



Figure 18. Nurses' mean perceptions overall

To further understand the data and group differences in perceptions, inferential statistics showed statistically significant differences between nurses' perceptions of training and skills support, and extensive specific assets related to hospitals, while the results did not find any significant differences between nurses' perceptions of policy development and reward and recognition systems. It indicates that hospitals (in this study) have some sort of difference in their management. It also suggests that hospitals are not similar in their performance; some are running their systems more efficiently in terms of training, reward and recognition systems, and in following standards, compared to others. So, responses were the reflection of their hospital management. This would be helpful for hospital ranking and for precisely focusing on improvement.

Older nurses aged over 40 years, perceived healthcare quality management as being practised more compared to other nurses. The results found that in all three domains (policy development, training and skills support, and extensive specific assets) there were differences between bachelor's degree holders and diploma holders, with bachelor's degree holders making a more positive impact on the quality of healthcare management. Nurse staff with more years of experience supported the extensive specific assets and rewards systems as the domain of healthcare quality management, practiced more in Saudi general hospitals.

4.3. Patients' survey

This part of the data analysis is devoted to patients' perceptions about their satisfaction with services received in Saudi general hospitals. This mainly seeks to answer, 'What are the views of patients about their satisfaction of services received in Saudi general hospitals?'. To answer this research question, it is necessary to provide contextual demographic information followed by descriptive analysis of what was found. Inferential statistics will add depth to the analysis (secondary analysis) beyond the main aims of the study.

It is important to remind the reader that for assessing the patients' perceptions, as mentioned in Chapter Three, the researcher adopted the same questionnaire used currently by the general hospitals in KSA to assess patient satisfaction as a way to determine quality of care. Although the use of this questionnaire may pose a few limitations (see Section 6.6), it was important to use the same method the hospitals are using as measurement to improve the quality. In fact, the findings represented in this chapter can offer the hospitals some indications as to what they would be looking at when QMS and its practices is addressed, and at the same it would give indications as to what improvements should be put in place.
This part of the patient results section is divided into three sections. The first section describes patients' demographic characteristics. This is followed by a section describing patients' satisfaction with the received services in Saudi general hospitals; patients' satisfaction is measured by examining knowledge and providing information, clinical skills, caring, communication, decision making, family involvement, professional behaviour, and global rating. The final section is concerned with patients' satisfaction with the received services in relation to their demographic characteristics (age, gender, nationality, and residence).

4.3.1. Demographic characteristics

In this section, the demographic characteristics of the patients are presented according to age, gender, nationality, and residence. Distribution of patients related to age Figure (19.) shows that there were 42.9% of patients aged 20 to 30 years old, 29.0% of the patients were aged 31-40 years old, and 11.9% of the patients were over 50 years of age. 9.1% of the participants were aged 41-50 years, and 7.1% were aged less than 20 years. Thus, it can be concluded that the majority of patients participating in this study were between 20 and 40 years old.





Regarding the sample distribution according to gender Figure (20.) it was noticed that male patients constituted 51.2%, while female patients comprised 48.8%.



Figure 20. Patients' distribution according to gender

From the distribution of patients according to nationality Figure (21.), it can be observed that the majority of patients were Saudi with 97.2% of the sample, while non-Saudis comprised only 2.8%. Thus, it can be noted that the dominance of patients in Saudi general hospitals was related to Saudi nationals and the health system does not provide favourable access to other nationals in government hospitals.



Figure 21. Patients' distribution according to nationality

In terms of patients' distribution according to city of residence Figure (22.), it can be seen that the majority of patients were residents, living in the city (66.7%) whereas one third (33.3%) of patients were from outside the city.



Figure 22. Patients' distribution according to city of residence

4.3.2. Descriptive statistics of patient satisfaction

This section is concerned with research question two: "What are the views of patients regarding their satisfaction with services received in Saudi general hospitals?".

The main aim in this part of the data analysis is to assess patients' satisfaction with the services received in Saudi general hospitals – the focus of the study – as described in the following tables. In this section, patients' rating of several questions in the survey are examined, which includes 37 items across eight domains of patients' satisfaction, knowledge and providing information, clinical skills, caring, communication, decision-making, family involvement, professional behaviour, and finally, global rating. The following subsections describe patients' answers to each of the eight dimensions separately. This descriptive side of the statistics will provide an answer to the research question stated above by examining each dimension and its items.

4.3.2.1. Satisfaction with knowledge and providing information

The results and findings in Table (16.) present the participants' responses about their satisfaction with the knowledge and information provision in Saudi general hospitals. Generally, it seems that patients were satisfied with the knowledge and information provided to them by the service providers in these hospitals.

Item	S/A	A	Ν	D	S/D	Mean	SD	Rank
1. They seemed to have good knowledge in	21.8	36.5	23.0	7.1	11.5	3.50	1.24	2
their field.								
2. They provided me with clear and complete								
information about my/my patient's condition,	25.0	34.1	24.2	7.9	8.7	3.59	1.20	1
tests, medication, and treatment.								
3. They addressed my questions/concerns	21 4	30.3	22.2	71	99	3.55	1.19	5
satisfactorily.	21.7	57.5	22.2	/.1).)	5.55	1.17	5
4. They provided me with clear and adequate								
discharge instructions including what to do and	19.4	36.1	27.0	7.9	9.5	3.48	1.17	4
what to expect when discharged.								
5. They provided me with clear and adequate	17.9	42.1	21.8	7.9	10.3	3.49	1.18	3
health education related to me/my patient's								
condition.								
Overall mean					3.52	1.06		
5. They provided me with clear and adequate health education related to me/my patient's condition.	17.9	42.1	21.8	7.9			1.18	3

Table 16. Participants' satisfaction levels regarding 'knowledge and providing information' provided in Saudi general hospitals

S/A: Strongly agree, A: Agree, N: Neutral, D: Disagree, S/D: Strongly Disagree, SD: Standard deviation

The table above clearly illustrates agreements and disagreements in percentages and mean scores (M=3.52). Overall, there are more agreements and positive satisfaction. By examining the items individually, the highest agreement was found for the item enquiring about patients' satisfaction – statement number 3: 'they addressed my question/concerns satisfactorily'. The results in Table 4.16 revealed that 21.4% of the participants strongly agreed, 39.3% agreed, 22.2% gave neutral responses, and those with negative attitudes constituted 17.0%. Therefore, it was noticed that the majority of participants felt satisfied that the medical staff in Saudi general hospitals addressed their questions/concerns at a satisfactory level. It presents the views from the majority sample population. Negative views need solid consideration for an action plan to improve services.

The least agreement was generated for the item asking whether patients were satisfied – statement number 2: 'they provided me with clear and complete information about my/my patient's condition, tests, medication and treatment'. The statistics in Table (16.) show that about 25.0% of the patients strongly agreed that the medical team provided them with clear and complete information about the patient's condition, tests, medication, and treatment, whereas

34.1% agreed. In the same way, 24.2% had neutral responses, whereas those holding negative views constituted 16.6%. Thus, it can be observed that the majority of participants had positive attitudes about providing clear and complete information about the patient's condition, tests, medication, and treatment. These positive responses were statistically supported by the mean value equal to 3.59 (out of 5 points). It represents the provision of fair service overall.

In conclusion, and in answering the research question, participants' satisfaction with knowledge and provision of information they received seems satisfactory.

4.3.2.2. Satisfaction with clinical skills

Clinical skills were examined using six items. The statistics in Table (17.) show the patients' satisfaction with clinical skills practices in Saudi general hospitals, the focus of the current study. Generally, by reviewing items corresponding with clinical skills, it seems that patients were satisfied with the practices of clinical skills in these hospitals, as the overall mean value reached 3.46.

Table 17. Patients	' satisfaction with	clinical skills in	Saudi general hospitals
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Item	S/A	Α	Ν	D		Mean	SD	Rank
6. They appeared confident when performing clinical skills.	16.3	39.7	31.0	3.6	9.5	3.50	1.11	1
7. They were able to coordinate my/my patient's care effectively with another healthcare team.	·14.7					3.47	1.07	4
8. They checked me/my patient regularly and kept track of how he/she was doing.							1.09	2
9. They delivered the care in an organised way.	17.5	36.1	32.5	4.8	9.1	3.48	1.12	3
10. They washed hands before and after performing a procedure.	17.5	32.5	32.5	7.1	10.3	3.40	1.16	6
11. They observed for safety when delivering care.	17.5	34.5	32.5	7.1	8.3	3.46	1.12	5
Overall mean						3.46	0.98	

S/A: Strongly agree, A: Agree, N: Neutral, D: Disagree, S/D: Strongly Disagree, SD: Standard deviation

By examining items individually, the highest agreement was found when patients were asked about their satisfaction with statement number 6: 'They appeared confident when performing clinical skills'. The results show that 16.3% strongly agreed, 39.7% agreed, neutral responses comprised about 31.0%, and those holding negative responses constituted 13.1%. Thus, it can

be concluded that approximately 56.0% of the patients felt that working staff in Saudi general hospitals appeared confident when performing clinical skills. This positive satisfaction was supported by the mean value of sample responses equal to 3.50.

The item with the least agreement was statement number 10, which stated that 'They performed hand washing before and after performing a procedure'. The result in Table (17.) confirms that 17.5% strongly agreed, 32.5% agreed that healthcare providers do wash their hands before and after performing a procedure, 32.5% responded neutrally, and those holding negative views constituted 17.4%. Thus, it can be confirmed that 50.0% of the patients felt that they were satisfied with the practice of hand washing before and after performing a procedure, with the other half standing between neutral and negative responses. In conclusion, with regard to patient satisfaction with the practice of clinical skills in Saudi general hospitals, the results suggest that the views of the majority of patients seem to be satisfactory, however it should be noted that a sizable proportion of the sample provided neutral opinions

4.3.2.3. Satisfaction with caring

The caring scale with eight items, as shown in the statistics in Table (18.), show the patients' level of satisfaction with practices of care in Saudi general hospitals. In general, patients seemed satisfied with the practices of care by healthcare providers in the hospitals, as the overall mean value reached 3.45 (based on a five-point Likert scale).

Table 18. Patients' responses, in percentages, to their level of satisfaction with care provision in Saudi general hospitals

Item	S/A	А	Ν	D	S/D	Mean	SD	Rank
12. They responded to the calling bell promptly	20.6	27.0	33.3	9.5	9.5	3.40	1.19	5
13. They were available when needed	18.3	33.3	31.7	7.5	9.1	3.44	1.15	4
14. They allocated enough time for me/my patient during the shift.	18.3	32.1	32.9	8.7	7.9	3.44	1.13	4
15. They considered my opinion in planning implementing the care.	and 19.8	30.6	32.1	6.7	10.7	3.42	1.19	6
16. They comforted and reassured me when needed.	20.6	34.5	29.4	6.3	9.1	3.51	1.16	2
17. They maintained a quiet environment around me.	19.8	28.6	31.7	9.1	10.7	3.38	1.21	7
18. They were approachable.	19.0	34.5	28.2	8.7	9.5	3.45	1.17	3
19. They observed my rights.	20.2	36.1	29.0	6.3	8.3	3.54	1.13	1

S/A: Strongly agree, A: Agree, N: Neutral, D: Disagree, S/D: Strongly Disagree, SD: Standard deviation

Although all items indicated more agreement than disagreement, the lowest agreement was found for item number 17, which stated that 'healthcare providers maintained a quiet environment around patients. The results in Table (18.) reveal that 19.8% of respondents strongly agreed, 28.6% agreed, 31.7% responded in a neutral way, and those who had negative responses comprised about 19.8%. Thus, it is concluded that only 48.4% of the patients felt that they seemed satisfied with the practice of healthcare providers in Saudi hospitals for maintaining a quiet environment around patients. These results indicate that there are some hospitals where healthcare providers do not maintain a quiet environment for the benefit of patients.

The highest agreement was found for statement number 19, which stated that: 'healthcare providers observed my rights'. The results in Table (18.) show that 20.2% of the patients strongly agreed, while 36.1% agreed, 29.0% had neutral views, and those with negative views comprised 14.6%. Hence, it may be noticed that 56.3% of the patients confirmed that healthcare providers observed patients' rights, while others stand between neutrality and negative perceptions.

In conclusion to patients rating their satisfaction with care provided by the healthcare providers in Saudi general hospitals, the precise indications were considered. It was noticed from the previous statistical indications that although most patients felt satisfied with the care provided, the results highlighted that some patients felt there were hospitals where healthcare providers were negligent in providing effective care to their patients.

4.3.2.4. Satisfaction with communication

The results in Table (19.) demonstrate patient satisfaction with practices of communication in Saudi general hospitals. In general, it can be observed that patients were satisfied with practices of communication by healthcare providers in the hospitals, as the overall mean value of the positive response rate reached 3.64.

 Table 19. Patients' responses, in percentage, regarding their rating of communication between staff and patients in Saudi general hospitals

Item	S/A	Α	Ν	D	S/D	Mean	SD	Rank
20. They communicated with me in a clear								
and easy way which helped me to	21.8	38.5	25.0	4.0	10.7	3.57	1.19	2
understand the language.								
21. They listened to my complaints.	21.8	36.9	27.0	4.0	10.3	3.56	1.18	3
22. They respected my religion and culture.		40.1	20.2	1.2	9.1	3.79	1.15	1
Overall mean						3.64	1.05	

S/A: Strongly agree, A: Agree, N: Neutral, D: Disagree, S/D: Strongly Disagree, SD: Standard deviation

By looking at the three items individually, there is more agreement than disagreement but also relatively high percentages of neutral opinion. When patients were being asked to provide their opinion regarding the respect of their religion and culture, it was noticed that there were 29.4% who strongly agreed, 40.1% agreed, 20.2% were neutral, and those with negative attitudes comprised just 10.3% of the total patients. Thus, it can be concluded that the majority of patients confirmed that they seemed satisfied with the respect for their religion and culture in Saudi general hospitals. This was followed by statement 20, which stated that 'They communicated with me in a clear and easy way which helped me to understand the language' – here, it could be noticed that 21.5% strongly agreed, and 38.5% agreed. Contrary to this, 25.0% neither agreed nor disagreed, while those who had negative responses comprised 14.7%. Hence, it can be concluded that the majority of patients confirmed that they were satisfied that the communication in the hospitals practiced by healthcare workers was clear and easy to understand.

In the same way, the patients were required to provide their views regarding statement number 21: 'They listened to my complaints'. It was obvious that 21.8% strongly agreed, while 36.9% agreed. Whereas 27.0% had neutral views, the negative attitudes comprised 14.3%. So, it can be concluded that the majority of patients feel that they were satisfied that healthcare workers listened to their complaints.

4.3.2.5. Satisfaction with decision making

The statistics in Table (20.) illustrate the patients' satisfaction with practices of decisionmaking in Saudi general hospitals. It can be concluded that patients feel that they were satisfied with decision-making practiced by healthcare providers in the hospitals. The overall mean value of the positive responses was 3.62.

Table 20.Patients' responses, in percentages, to their satisfaction with decision making process in Saudi
general hospitals

Item	S/A	Α	Ν	D		Mean		
23. They appeared confident makin decisions about my/my patient's care.	^{ng} 19.4	37.7	31.0	3.2	8.7	3.56	1.11	3
24. They responded to changes in my/n patient's situation promptly.								
25. They notified team members when my/n patient's condition changed.	^{ny} 25.0	39.7	24.6	3.2	7.5	3.71	1.11	1
Overall mean						3.62	1.02	

S/A: Strongly agree, A: Agree, N: Neutral, D: Disagree, S/D: Strongly Disagree, SD: Standard deviation

The three items in the table above clearly show more agreement than disagreement. By looking at them individually, the highest agreement was found for the item when patients were asked to show their satisfaction with the style of notifying the appropriate team members when the patients' condition changed. The results in Table (20.) show that 25.0% of the participants strongly agreed, 39.7% agreed, the neutral views comprised 24.6%, and participants with negative views constituted 10.7%. Thus, it is concluded that the majority of participants confirmed that they seemed satisfied with the notification style among team members when the patient's condition changed.

Furthermore, when patients were giving their thoughts about the response of healthcare providers to changes in patients' situations, the results showed that 19.0% strongly agreed, while 41.0% agreed. 27.0% provided neutral responses, where those holding negative views comprised 12.3%. Therefore, it was obvious that the majority of patients felt satisfied that healthcare staff responded to changes in patients' situations promptly.

Lastly, patients of the study were implored to give their thoughts regarding healthcare providers. It appeared that hospital staff were confident in making decisions regarding patients' care. It was observed that 19.4% of the patients strongly agreed, 37.7% agreed, 31.0% were neutral, and only 11.9% did not think that healthcare providers appeared confident in making

decisions regarding patient care. Thus, it can be seen that the majority of the patient sample of this study seemed satisfied with the confidence in making decisions about patients' issues.

Thus, based on the earlier analysis of patients' thoughts about their satisfaction with decision making, it could be noticed that most patients seemed satisfied by the practices of decision making in Saudi general hospitals.

4.3.2.6. Satisfaction with family involvement

The statistics in Table (21.) demonstrate the results of patients' satisfaction with family involvement in Saudi general hospitals. Using four items, it was noticed that the participants were satisfied with family involvement in the hospitals, as the overall mean value reached 3.58.

Table 21. Patients' responses, in percentages, regarding their satisfaction with family involvement in Saudi general hospitals

Item	S/A	A	Ν	D	S/D	Mean	SD	Rank
26. They encouraged family members to take part in the care when possible.	16.7					3.48	1.11	4
27. They respected my decision about family involvement in my care.	^y 18.7	39.7	29.8	4.4	7.5	3.58	1.08	2
28. They kept the family updated about changes to my/my patient's situation when appropriate.		36.5	31.0	6.3	6.3	3.57	1.07	3
29. They treated my family members with respect.	21.4	43.7	24.6	2.8	7.5	3.69	1.08	1
Overall mean						3.58	0.99	

S/A: Strongly agree, A: Agree, N: Neutral, D: Disagree, S/D: Strongly Disagree, SD: Standard deviation

Out of the four items in the table above, the highest agreement was found for item 29 asking about agreement that their family was treated with respect. 21.4% strongly agreed, 43.7% agreed, while 24.6% held neutral views, and 10.3% had negative views about the respect factor of staff behaviour.

The least agreement was found for item 26, which asked participants to state their satisfaction regarding whether healthcare providers encouraged family members to participate in the care whenever possible. The results show that 16.7% strongly agreed, and 38.5% agreed that they were satisfied. On the contrary, 29.0% had neutral views and 15.8% held negative views in the study. Thus, it is obvious that although there is an estimated number of participants who

confirmed that they seemed satisfied with the encouragement received by family members to take part in care when possible, some disagreed too.

Finally, regarding the involvement of family members in patients' care, the results confirm that there is a respect for family involvement, but that is not observed at all times.

4.3.2.7. Satisfaction with professional behaviour

The results in Table (22.) show the participants' satisfaction level with professional behaviour in Saudi general hospitals, as reflected in six items. It was noticed that, overall, the participants looked satisfied with professional behaviour practices in the hospitals, as per the focus of the study, as the overall mean value reached 3.72 (five-point Likert scale).

Table 22. Patients' responses, in percentages, regarding their satisfaction with professional behaviour in Saudi general hospitals

Item	S/A	Α	Ν	D	S/D	Mean	SD	Rank
30. They treated me with dignity and respect.	30.2		20.2				1.18	1
31. They acted professionally with patients families and other healthcare team members.	25.8	42.5	21.0	2.8	7.9	3.75	1.11	2
32. They dressed appropriately and professionally.	25.8	38.9	21.8	4.0	9.5	3.67	1.18	4
33. They maintained my/my patient's privacy.	25.8	39.7	23.0	2.0	9.5	3.70	1.16	3
34. They maintained my/my patient's confidentiality all the time.	27.0	39.7	22.6	2.4	8.3	3.75	1.13	2
35. They conveyed positive attitudes toward nursing.	21.8	40.1	27.4	3.2	7.5	3.65	1.09	5
Overall mean						3.72	1.05	

S/A: Strongly agree, A: Agree, N: Neutral, D: Disagree, S/D: Strongly Disagree, SD: Standard deviation

By observing the items in the table above, the highest agreement was found when patients were required to indicate their satisfaction regarding healthcare providers treating the patient with dignity and respect. It was clear that 30.2% strongly agreed, 37.3% agreed, 20.2% had neutral views, and 12.3% had negative attitudes with regard to treating patients with dignity and respect. Thus, it can be concluded that the majority of participants felt that they were satisfied with healthcare providers' behaviour, as the average of the responses showed patients' positive views towards the dignity and respect given by the staff to patients.

The least agreement was generated for item 35, asking about patients' views that healthcare providers conveyed positive attitudes toward nursing. The results in Table 4.22 show that 21.8% strongly agreed with the statement, 40.1% agreed, 27.4% responded in a neutral way, and those holding negative responses comprised 10.7%. Thus, it is said that most participants (with an overall average of 61.2% response rate) felt satisfied.

It can be concluded that most patients seemed satisfied with the professional behaviour of healthcare providers.

4.3.2.8. Satisfaction with global rating

The findings in Table (23.) shows the patient sample of the study regarding their satisfaction with the global rating. Using two items, it was clear that overall, the participants seemed satisfied with the global rating, as the overall mean value reached 3.61.

 Table 23. Patients' responses, in percentages, regarding their satisfaction with the global rating

Item	S/A	A	Ν	D	S/D	Mean	SD	Rank
36. If I had to be admitted again, I would be happy to be cared for by Saudi nurses.	27.4	32.1	24.2	4.4	11.9	3.59	1.26	2
37. Generally, I am satisfied with the care delivered by Saudi nurses.	28.6	31.7	23.8	6.7	9.1	3.64	1.22	1
Overall mean						3.61	1.21	

S/A: Strongly agree, A: Agree, N: Neutral, D: Disagree, S/D: Strongly Disagree, SD: Standard deviation

When participants were asked to express their thoughts about whether they would be happy to be cared for by Saudi nurses if they had to be admitted again, 27.4% strongly agreed with the statement, 32.1% agreed, 24.2% had neutral attitudes, whereas 16.3% expressed negative responses. Thus, it can be concluded that most patients in the study felt that if they had to be admitted again, they would be happy to be cared for by Saudi nurses.

In the same way, patients were required to provide their satisfaction levels regarding whether they were generally satisfied with the care delivered by Saudi nurses in general hospitals. The results showed that 28.6% strongly agreed, 31.7% agreed, 23.8% had neutral views, and those with negative views comprised 15.8% of the total patient sample.

4.3.3. Inferential statistics of patient questionnaires: Demographic differences

In this section, the patients' perceptions were examined to see whether they differed significantly in their satisfaction regarding the healthcare services received in Saudi general hospitals, related to age, gender, nationality, and residency. It should be noted that this section is an extension to the main research question about the views of patients about their satisfaction of service received in the Saudi general hospitals. Particularly, this part seeks to examine whether such views are different according to the demographic factors of patients.

4.3.3.1. Satisfaction differences according to age

Table (24.) shows the results of analysis of variance to examine whether patients are statistically different in their satisfaction with received healthcare services in Saudi general hospitals according to age. Patient distribution by age includes the following groups: less than 20 years old, 20-30 years old, 31-40 years old, 41-50 years old, and over 50 years of age. The results of analysis of variance in the table shows no statistically significant differences across age groups regarding the patients' satisfaction with the healthcare services provided with respect to the age distribution of the patients. It means that age has no specific effect on people's perceptions of service quality received in government hospitals. People of all age groups had similar views about clinical skills, caring, communication, decision-making, family involvement, professional behaviour, and global rating (healthcare service domains). Some were highly satisfied, while some had negative views, others were neutral based on their experiences of hospital services. Age had no influence on people's perceptions at all.

By observing the average scores for each of the scales, in Table (24.) it is clear that patients across all ages showed similar agreements. No post-hoc tests were conducted due to the results of ANOVA not being significant.

	Less than 20	20-to 30 years	31-to 40 years	41-to 50 years	More than 50	F	Sig.
Knowledge and providing information	3.42	3.54	3.58	3.49	3.39	.239	.916
	1.11	0.96	1.20	0.99	1.07		
Clinical skills	3.42	3.44	3.48	3.48	3.52	.051	.995
Chine Band	1.07	0.94	1.10	0.79	0.93		

Table 24. Descriptive statistics of results across age groups

Caring	3.36	3.43	3.51	3.37	3.47	.141	.967
	1.04	0.97	1.14	0.86	0.85		
Communication	3.37	3.66	3.76	3.61	3.48	.711	.585
	1.22	1.04	1.13	0.89	0.90		
Decision making	3.50	3.59	3.69	3.71	3.56	.254	.907
	1.11	1.01	1.12	0.87	0.93		
Family involvement	3.28	3.57	3.70	3.57	3.48	.771	.545
	1.11	0.98	1.05	0.88	0.88		
Professional behaviour	3.44	3.77	3.74	3.56	3.75	.516	.724
	1.37	0.94	1.13	1.00	1.03		
Global rating	3.61	3.67	3.64	3.39	3.53	.285	.888
	1.49	1.18	1.23	1.18	1.11		

4.3.3.2. Satisfaction differences according to gender

Table (25.) demonstrates the results of t-test statistics to check whether patients are statistically different in their satisfaction with the healthcare services provided in Saudi general hospitals according to gender (male, female). The results of the t-test determine whether there are any statistically significant differences in this regard. No significant differences were found among the perception levels or viewpoints related to gender. That means both male and female patients demonstrated the same level of satisfaction with the healthcare services provided in Saudi general hospitals, which indicates that gender has no effect on satisfaction. We can say that both are treated in the same way or with no discrimination in Saudi general hospitals. Both are benefitted by the equal level of facilities.

Domains of healthcare services	Gender	Number	Mean	SD	t-value	Sig.
Knowledge and providing	Male	129	3.52	1.01	091	0.93
information	Female	123	3.53	1.10		
Clinical skills	Male	129	3.50	0.92	.637	0.53
	Female	123	3.42	1.04		
Caring	Male Female	129 123	3.47 3.42	0.97 1.04	.460	0.65
Communication	Male Female	129 123	3.70 3.57	1.02 1.09	.967	0.34
Decision making	Male	129	3.70	0.98	1.190	0.24

Table 25. Results of t-test to see whether patients' responses differ according to gender

	Female	123	3.54	1.06		
Family involvement	Male Female	129 123	3.67 3.48	0.92 1.05	1.602	0.11
Professional behaviour	Male Female	129 123	3.80 3.62	0.93 1.15	1.354	0.17
Global rating	Male Female	129 123	3.61 3.62	1.21 1.20	062	0.95

*p<0.05 **p<0.01

4.3.3.3. Satisfaction differences according to nationality

Table (26.) demonstrates the results of t-test statistics to check whether patients are statistically different in their satisfaction with the healthcare services provided in Saudi general hospitals according to nationality (Saudi nationals, other nationals).

The results of t-test statistics in the above table show that there is only one significant variation (at the significance level of 0.05); a difference between patients' satisfaction regarding their contribution in the decision-making process according to nationality was observed. It was obvious that the difference is statistically significant on the side of non-Saudi patients. No other statistically significant difference was observed in the patients' satisfaction related to other domains of healthcare provided in Saudi general hospitals.

Domains of healthcare	Nationality		Mean	SD	t-value	Sig.
services						
Knowledge and providing	Saudi	245	3.51	1.06	-1.509	0.13
information	Non-Saudi	7	4.11	0.60		
Clinical skills	Saudi	245	3.45	0.98	-1.742	0.08
	Non-Saudi	7	4.10	0.71		
Caring	Saudi	245	3.44	1.01	574	0.57
	Non-Saudi	7	3.66	0.83		
Communication	Saudi	245	3.62	1.06	-1.527	0.13
	Non-Saudi	7	4.24	0.60		
Decision making	Saudi	245	3.60	1.02	-2.138	0.034*
U	Non-Saudi	7	4.43	0.50		
Family involvement	Saudi	245	3.57	0.99	371	0.711

Table 26.Results of t-test to see whether patients' responses differ according to nationality

	Non-Saudi	7	3.71	0.65		
Professional behaviour	Saudi Non-Saudi	245 7	3.71 4.00	1.05 0.88	728	0.47
Global rating	Saudi Non-Saudi	245 7	3.61 3.71	1.20 1.38	225	0.82

*p<0.05

4.3.3.4. Satisfaction differences according to residency

Table (27.) demonstrates the results of t-test statistics to check whether patients were statistically different in their satisfaction with the healthcare services provided in Saudi general hospitals according to their residency (within the city, out of city).

The results of conducting t-test statistics in the above table show that there are statistically significant differences between patients' satisfaction with the healthcare services provided in Saudi general hospitals with respect to their residency. Furthermore, it was found that all significant differences are on the side of the patients who live in the city. This indicates that patients who live in the city are more satisfied compared with those who live outside the city. It

can also be assessed that, typically, local citizens were the major users of their city's general hospitals.

Domains of healthcare services	Residence		Mean	SD	t-value	Sig.
Knowledge and providing information	City	168	3.62	0.99	2.037	0.043*
	Outside city	84	3.32	1.16		
Clinical skills	City Outside city		3.59 3.21	0.92 1.05	2.990	0.003**
Caring	City Outside city		3.56 3.21	0.92 1.11	2.635	0.009**
Communication	City Outside city		3.78 3.36	0.97 1.16	2.851	0.005**
Decision making	City Outside city		3.77 3.33	0.96 1.08	3.258	0.001**
Family involvement	City		3.71	0.91	3.024	0.003**

Table 27. Results of t-test to see whether	natients' resnanses di	iffer according to residency location
Table 27. Results of t-test to see whether	patients responses u	mer according to residency location

	Outside city	84	3.32	1.08		
Professional behaviour	City Outside city				2.544	0.012*
Global rating	City Outside city				3.278	0.001**

*p<0.05 **p<0.01

4.3.3.5. Conclusion for patients

This study aimed to examine the views of patients regarding their satisfaction of services received in Saudi general hospitals. Patients' satisfaction was measured by examining the themes of knowledge and providing information, clinical skills, caring, communication, decision making, family involvement, professional behaviour, and global rating. The final section is concerned with patients' satisfaction with the received services in relation to their demographic characteristics (age, gender, nationality, and residence).

The previous statistical indicators showed that the most important domain that patients were satisfied with is the professional behaviour of healthcare providers in Saudi general hospitals. The second one is communication, followed by decision-making process in which the patients were also involved. The domains that patients were least satisfied with were clinical skills and caring – Figure (23.) provides a graphical presentation of the received services. It gives an excellent comparison of the areas under study, and from this the areas that need crucial amendments can be identified. With time, the pressure is increasing on resource demand, so this assessment will be helpful for decision-making to accommodate future requirements.





By looking at the inferential statistics, patients' satisfaction with the received services provided by Saudi general hospitals, according to the demographic characteristics of the patients (gender, nationality, hospitals, and residency), was determined by applying statistical tools, ANOVA test, and t-test for group differences (as explained in the methodology chapter and earlier sections). The results found that there were no statistically significant differences between patients related to hospitals or gender, while the results detected that there is only one significant difference between patients related to nationality in the domain of decision-making. However, the results found statistically significant differences between patients related to residency in all domains of the received services. It was found that the differences were positive on the side of the city residents, which indicates that patients who live in cities feel more satisfied with the received services.

4.4. Chapter Summary

Overall, the results confirm that generally, patients seemed satisfied with different services when the matter of QMS is assessed. Noticeably, there was occasionally negative responses about the caring and the clinical skills. For example, there is need to advance the equipment, lap structure, and resource management at all levels in general hospitals. Safety measures to avoid contamination and disease spread, staff must be encouraged to wash the hands before and after check-ups and to sterilize equipment. These matters are related to the daily practices where quality can be controlled from the roots.

Importantly, the outcomes of the nurses' questionnaire reported lacking of training and support in addition, although nurses recognised the existence of the policy, there is no evidence that written policy was placed in the hospitals to control the practices of the nurses. The findings from the patients' questionnaire could be crossed with the findings from the nurses at the point of practices and clinical skills as there is clearly lacking the required on-going support to keep the practices of the nurses up to the exception of the patient. Noticeably, there are relatively high percentages of neutral opinions which could indicate that further investigation should be carried out with more participations from both nurses and patients. In the following chapter the qualitative data will be reported and then both will be taken into the discussion to illuminate the most critical issues that influence on the QMS and its practices in general hospitals.

Chapter Five: Qualitative Findings

5.1. Introduction

The qualitative aspect of the study was undertaken with the aim of investigating the perceptions of middle managers (heads of department) regarding their understanding of the quality management system and its implementation in Saudi general hospitals. Addressing this aim may inform the development of a framework to help general hospitals in KSA enhance their practices in applying a robust quality management system. Data were collected using seven semi-structured interviews in one Saudi general hospital with heads of the following departments:

- A Head of Emergency Department,
- B Assistant Director of Medical Services,
- C Head of Quality Department,
- D Head of Management Training and Research and Education Department,
- E Head of Surgery Department,
- F Head of Infection Control Department,
- G Head of Patient Safety and Patient Affairs Departments.

In addition, comments from nine nurses extracted from the nurses' questionnaires were added to the findings of this chapter as they add value to the themes extracted from the descriptive data from the heads of department interviews. These descriptive findings illuminate the following research questions:

- 1. How are quality management systems perceived by heads of department?
- 2. What challenges might hinder the enhancement of the efficient implementation of a quality management system?
- 3. What are the requirements to improve the current quality management?

These research questions are derived from the gaps identified during the analysis of the related literature presented in Chapter Two. As a result of the analysis, and the implementation of all six steps (see section 3.10.10), a thematic network emerged with levels of theme Figure (24.):

- 1. Three Global themes are coloured in green.
- 2. Four Organising themes are coloured in light blue.
- 3. Nine Basic themes are coloured in yellow.



Figure 24. The Set of Qualitative Themes

Figure (24.) summarises all three sets of global themes that made up the entire thematic network for the interview findings and open-ended questionnaire data. In the following sections, all the sets of themes will be presented that are associated with quotations extracted from the interviews and the questionnaires as needed to illuminate the key findings. The three global themes that summarise the entire dataset are:

- 1. The first global theme is the role of hospital management to assure quality of care services
- 2. The second global theme is the impact of governmental agency in controlling the quality of healthcare services
- 3. The third global theme is building a culture of patient safety.

Each global theme will be presented in detail and applied to the relevant research question/s.

5.2. Global theme 1: Role of hospital management in assuring quality of care services

In this section, the term management is used as an umbrella term to include both (top management referring to Ministry of Health and senior management referring to hospital management or directorship). Upon this, the section summarises the issues that are related to the role that hospital management is expected to play in terms of assuring the quality-of-care services as sourced from the interview data. One focus of this research was to identify how quality is assured in Saudi general hospitals. When heads were asked whether quality is a responsibility of management, most of them agreed that quality is a responsibility. The data also suggests that there are a few other issues that should be considered by management in assuring the quality of the services. Those issues are framed in the following organising themes:

5.2.1. Organising theme 1: Building an organisational culture that supports quality improvement

According to the findings, five heads out of seven suggested that developing an organisational culture that supports quality improvement is one of the duties in which hospital management should play a role in general hospitals. On that, Head E said:

"It is not that simple; it is rather more complicated. In a large hospital like ours, the whole culture of the place will either empower you [as a manager] to take the lead to enhance the quality or the culture of the place is careless." Head E

Head E's comment suggests that assuring the quality of the services should be a holistic culture in the hospital and managers are responsible for enabling it. This statement could explain why, when nurses were asked who they think should be responsible to assure quality in the hospital, a significant number of them responded similarly to this:

"It is the responsibility of top management in the hospital" Nurse 12 (questionnaire)

Nevertheless, although assuring the quality of services is the responsibility of (top) management, the policy of the hospital should be clear enough to be followed, as Head D stated:

"When it comes to checking the quality of the services, we [departments] follow the hospital policies and we always do our best to give more." Head D

This assumes that the quality of the care service is legislated by the power of the hospital policy and managers in the hospital are requested to adopt the new policy. The interest in enhancing the quality of care has recently become centralised in the hospital, as each hospital manager is in charge of assuring the quality.

Some heads suggested that assuring the quality of care should not only be the responsibility of management as different stakeholders in the hospital should be involved in checking the quality of the services. For that, Head C declared that:

"Although hospital directors visit the departments daily and checks the patients' files, there is also a unit called patients' affairs available 24 hours and responsible for checking the quality of the services." Head C

Hence, the patients and staff should also be involved in checking the quality and ensuring that the patients are able to access the services and that patients should be able to give their opinion freely as additional observers of the services.

As the questionnaire was analysed, it was found that a few nurses suggested that the patients should be empowered to play a role in assuring the quality of the services because, as one of the nurses wrote:

"They [patients] are the ones who are using the services and checking the quality should be their job." Nurse 6 (questionnaire)

Thus, as patients are the direct users of the health services and they are one of the fundamental stakeholders to be influenced by the quality of the services, they should be given a voice and the power to check and correct the services.

As a part of the organising theme: regarding the influence of the organisational culture aspects, it was suggested by the data that some aspects of the organisational culture in health organisations

could hinder the improvement of service quality and some of the aspects require further development to ensure that the quality of the services is maintained. Upon those suggestions, two different basic themes were articulated:

- 1. Obstacles that prevent management from preserving the best quality services.
- 2. Training and education requirements to empower middle management to improve the quality of the healthcare services.

5.2.1.1. Basic theme 1: Obstacles that prevent management from maintaining the best quality services

The findings of all seven interviews alongside a few responses from the nurses on the questionnaire suggested that the current structure of health organisations could hinder the improvement of the quality of healthcare services. On that, Head A commented that:

"The system in this hospital is highly hierarchical. The key person is the hospital director and he is the one who is responsible for appointing heads of departments. On the other hand, the heads of departments are responsible for appointing their staff." Head A

The above quotation suggested that as the structure of the hospital is built upon a hierarchical style, the head in senior management (the directorship in the hospital) is mainly responsible for establishing the whole 'hierarchical' system, as he or she can appoint the heads who meet the criteria there. In fact, one of the nurses wrote:

"The director of the hospital not only manages the hospital but tells who should be where and do what." Nurse 6 (questionnaire)

From the nurses' response, the directors of the hospitals have the power of managing the hospital and controlling the staff, which could lead to the following:

"When they give you no power to take an action you will have no sense of responsibility to make a move and promote change." Head F

This comment from Head F explains that giving the power to staff will empower them to feel more responsible to act, which will have its own positive impact on the staff motivation to enhance the quality of the services.

Another obstacle is explained by Head C, who stressed that lack of clear strategic vision to enhance quality could prevent management from maintaining the best quality of the services. He explained that: *"When patients are affected by the lack of quality, the management must take certain actions."* Head C

This statement suggests that when a complaint about quality is put forward, then managers are expected to act in response to the complaint. This also raised the problematic part of the manager's role where a lack of clarity regarding responsibility for elements of quality is identified. On this, Head F suggested:

"As a head of *****, I sometimes do things that are not my duty." Researcher: "Like what?" Head F: "Sometimes we receive random orders from the hospital management to do some quality checks which are not in my job description."

The above comment could have two different interpretations: either the head is not aware of his role in assuring the quality of the services he is responsible for, or the heads of department resist compliance with and support for the hospital managers because orders come randomly without further negotiation or argument. In contrast to Head F, Head C revealed that:

"Yes, the senior management is urging all departments to take seriously any idea provided by staff that might help improve the quality in the hospital." Head C

This suggests that the senior management is opening the floor for sharing new ideas to improve quality. This may indicate that senior management is interested in enhancing service quality and seeking further support; however, Head B disagreed that senior management is doing enough to enhance the quality. Head C's opinion is supported by another statement made by Head G, who said:

"The issue is that sometimes we see lack of performance from some doctors, but we can do nothing to them because I am not eligible to take actions against them." Head G

The above comment explains that senior management has the power to act when something goes wrong, but departmental heads as middle managers feel less empowered and all they do is communicate with each other when they have concerns about someone or something that is not their direct role.

A further concern was explained as unnecessary bureaucracy. Head F referred to this as:

"Bureaucracy in getting things done in this hospital. When we need anything in this unit, it has to go through different offices, and this will cause the delay when it is highly needed." Head F

According to Head F, the quality of the services can be influenced negatively by the bureaucracy of the management systems in place, causing unnecessary delay in meeting patient needs. This statement could suggest that even if management is willing to speed up the process of meeting needs, the rigid hierarchical structure impedes the quality-of-service delivery. To improve service quality through the management line, some of the heads and nurses made few suggestions related to offering further education and training. The matter of training and education programmes is explored in the next basic theme: Training and education requirements to empower middle management to improve healthcare service quality.

5.2.1.2. Basic theme 2: Training and education requirements to empower middle management to improve healthcare service quality

The provision of more training and education programmes was suggested as a requirement to enhance the management line capability to improve the quality of current services in the studied departments. According to the comments from the head of the training department, training and education are always offered to enhance the quality of services as he said:

"As a head of management training and research and education, I always try to be up to date as this will help us reach a high level of patient quality care. It is of crucial importance in my role to provide training, conduct lectures, and conferences." Head D

Thus, for Head D it is part of his duty to offer the required training to enhance the quality of hospital services. But, from the nurses' responses, there were several nurses who complained that training towards enhancing service quality is backward and inadequate. One of the nurses wrote:

"Until now, the hospital has not been able to provide us with up-to-date training courses. Some of the courses I have attended have been the same for over 5 years." Nurse 12 (questionnaire)

According to the comments of Nurse 12, the problem with the current training services offered to nurses is not lack of training but the quality of the training and the need for new and up-todate programmes to meet the staff's newly demanding needs. From his perspective, Head F admitted that some of the training programmes are not always available through 'in-house' training and education.

"In some cases, we are unable to provide doctors and nurses with certain aspects; therefore, attending conferences and inviting specialised doctors from different areas and sending staff for training can help in improving the service." Head F

According to Head D's comment, hospitals are able to offer alternative options to local training, which is to attend conferences and send staff to do external training. Head F added that:

"By the way, I am not obliged to do that. It is just that I want to improve the service in this hospital and what is helping me to do that is we have the green light from the hospital director. I also provide the hospital director with a report that includes the statistics of the number of staff who went for external training and conferences as well as the consultants who conducted lectures internally. You know I need to record everything because everything is paid by the hospital budget, and I do not want trouble with them [laughing]." Head D

The above statement can tell a significant amount about the role that heads of department, especially with training, can play in enhancing the quality of hospital services. The comment also suggests that this head thinks they are going above and beyond what is a minimal requirement in the delivery of their job role. Such perceptions could impact on 'quality provision'.

When the nurses were asked about the current quality of care services offered to patients, some of them left comments on the open-ended questions. One of the nurses said:

"There is a long way to go before saying that Saudi general hospitals are in control in relation to quality care services." Nurse 18 (questionnaire)

The above statement should be a call for hospital management that the quality of services currently offered are not sufficient from the nurses' perspectives. This is reinforced by a question raised by one of the nurses in the questionnaire:

"What do you mean by quality care services?" Nurse 5(questionnaire)

It is problematic to interpret the above question; one of the assumptions could be that the nurse does not know what quality services means, or maybe he does not know what it involves or how it could be achieved. Regardless of the interpretation, it is an important question that must be taken into consideration and not ignored.

To sum up, the quality-of-care services has recently become a concern for senior management and heads of departments in general hospitals in KSA. According to some of the heads, higher management is doing their best within their capabilities to develop the quality-of-care services, but for some others, the directors are not doing enough. Rather, they are controlled by the hierarchical structure of the hospitals which hinders decision making. By contrast, one of the heads (for training and education) was convinced that the senior management are doing what the policy requested them to do and at the same time when there is space for trust, heads would be given the space to act for the benefit of enhancing the quality of the services through enhancing the quality of the staff.

5.3. Global theme 2: Impact of governmental agency in controlling the quality of healthcare services

In Section (5.2), the role of senior management in terms of assuring the quality of care services is reflected from the lens of the heads and nurses. In this section, the same participants were asked to comment on how the Ministry of Health in KSA is following up the quality systems in general hospitals. The answers to this question suggested the emergence of one organising theme with two further basic themes. The organising theme emerged as:

1. The role of the Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI) in controlling quality

Underneath this global theme, one originating theme has been identified:

1. The role of the Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI) in controlling quality in general hospitals

In the following sections, perspectives offered by the participants will be provided and associated with supportive quotations from the interview scripts, and questionnaires' open-ended answers.

5.3.1. Organising theme 1: Role of CBAHI in controlling quality in general hospitals

One objective of this research is to understand how the current quality management systems and their practices are established in general hospitals in KSA. The findings from the interviews suggested that the Saudi CBAHI plays an important role in the practice of QMS in general hospitals. According to Head F:

"The Central Board for Accreditation of Healthcare Institutions (CBAHI) has paid special attention to competent assessment of the quality of the services that has to be done continuously by each department either monthly or every three months. For example, there is a committee in the medical management unit that assesses doctors and nurses." Head F

Indeed, CBAHI is not only a local authorised agency, but also it is connected to the universal accreditation system by satisfying an international health agency, as Head C stated:

"What is also interesting about CBAHI is that it is re-evaluated and improved yearly as they are seeking JCI accreditation [Joint Commission International]." Head C

According to the comment from Head C, CBAHI is also committed to developing their own level of accreditation and keep updating and evaluating to keep up with the international standards requirements.

In fact, CBAHI is the main agency appointed to follow up and inspect the quality system in general hospitals. CBAHI set a routine for each department and the major focus of inspecting activities is the medical team. From the perspective of Head D, the role of CBAHI is more comprehensive than just assessing medical staff, as he said:

"CBAHI has had a great impact on the hospital. It has changed the system thoroughly. The previous system was old and does not meet the hospital's needs. CBAHI, however, has provided new quality standards that suit the hospital and clarified different aspects in the hospital." Head D

Hence, the role which CBAHI is given is the authority and the legislative power to not only inspect the quality, but also take action to promote change when systems are not performing effectively enough to serve the needs of the hospital. Additionally, a fact about the previous version of CBAHI is that the focus was on the hospital but not on the patient. Nevertheless, in the most recent version of the CBAHI standards, patient safety started to receive further attention and also linked to the quality of the services, as Head G suggested:

"The recent version of CBAHI's standards has paid more attention to the patient safety." Head G

It is noticeable that CBAHI as a governmental agency played an important role in developing the quality of the healthcare services provided by healthcare departments in Saudi general hospitals. The question about which benefits hospitals gained from involving CBAHI is explained underneath the first basic theme: the benefits from CBAHI's involvement.

5.3.1.1. Basic theme 1: Benefits of CBAHI's involvement in QMS and its practices

Most of the heads interviewed (6 out of 7) were pleased with CBAHI's involvement in supporting the quality-of-care services. This claim is evidenced by the comment made by Head B, who said:

"We have done a great job with [CBAHI] and I admit that this hospital reached its zenith during [CBAHI] times in terms of good service. We used to conduct daily meetings. I used to come to work happily because there were some good services and patients were happy.

I remember once I told my line manager that I enjoy coming to this hospital because I feel that my patients are safe. "Head B

The above statement presents a couple of important issues. Firstly, the positive impact of CBAHI on the quality of the services itself, which has been also addressed by Heads F and G. Secondly, the positive feeling that the improvement of the quality-of-care services generated among the heads who felt satisfied. Indeed, Head A agreed, and added that:

"We have improved many things such as documenting patients' details and they have become easily accessible despite the fact we have kept the same amount work and effort. This improvement happened after CBAHI was adopted. It is really useful, and many services have existed because of CBAHI." Head A

According to Head A, CBAHI assisted the hospital in improving the quality of principal services such as accessing the patient's documents without increasing the time or the effort needed to accomplish the target. Head C said:

"CBAHI has had an impact on the patient. Once the patient has arrived at the registration, desk, they are checked primarily and then directed to their right department." Head C

According to Head C, CBAHI has helped the hospital enhance the quality of the administration process by organising the protocols of checking in.

The benefits of CBAHI's involvement, as recognised by the participants, is enhancing the quality of communication and relationships. On that, Head C commented:

"CBAHI has organised the relationship among departments, specialists' technique, nurses and doctors. They are clarified based on their role and responsibilities." Head C

Hence, CBAHI helped in setting better communication among all staff in the hospital because the agency was able to organise the network of roles and responsibilities.

CBAHI as an agency regularly updates the standards offered to the hospitals. This statement is supported by the opinion offered by Head C, who revealed:

"We joined the CBAHI experience three years ago and we passed it according to the second version standards ... It is also worth mentioning that a new trend has been added to the third version of CBAHI. This trend focuses mainly on the patient's safety care. What

is also interesting in CBAHI is that it is re-evaluated and improved yearly as they are seeking JCI accreditation." Head C

According to a comment from Head C, the new version of CBAHI has paid more attention to the quality of services. This statement harmonises with the statement made earlier in section 5.2 by Head F, who declared that the recent emphasis on quality has been noticed.

The heads also sensed the impact of CBAHI on their understanding of their duties and responsibilities:

"We, as doctors, have been unaware of many issues in the hospital and, honestly, CBAHI has opened our eyes to these issues. For example, CBAHI has organised the way we work and each one is now clear about his/her responsibilities." Head G

The above statement indicates that before CBAHI involvement, doctors had limited access to important issues happening in the hospital which made them less effective.

According to the above opinion, CBAHI built the quality system of the hospital upon emergency criteria. Following this system helped the check-in desk understand what to do and when, without fearing a delay in meeting the patients' needs. Further explanations are offered by Head G, who continued to say:

"Time management is also of crucial importance to CBAHI. For instance, doctors have to be physically available for emergency cases within the first half an hour of their arrival. Also, CBAHI has organised the relationships among departments, specialities, technicians, nurses, and doctors. They are classified based on their roles and responsibilities." Head G

CBAHI understood the nature of the care services and the role each actor/member of staff should play, as well as organising the relationships around the hospital to serve the needs of the patients. On that, Head C added that:

"Generally, CBAHI had a positive impact on patients' quality care services and in order to obtain better results, staff have to follow and commit to the CBAHI standards and regulations." Head C

The role of CBAHI is in embedding a culture of patient safety. It was mentioned earlier in the section that CBAHI has played an important role in enhancing the quality of the management system in hospitals. At the same time, CBAHI has updated its standards and regulations to enhance its positive impact on patient quality care. On that, Head C said:

"Now there are 16 standards for essential safety requirements and one single chapter, whereas these standards used to be distributed among 23 chapters ... staff have to follow and commit to CBAHI standards and regulations." Head C

Head C, according to the statement, thinks that CBAHI did not only update their standards but at the same time they advocated implementing them through the staff.

Turning the hospital into one unit that collaborates together and understands how to make the best use of time, as well as identifying the priorities and the responsibilities of each player, are issues concerned with CBAHI as the official agency that is accountable and responsible for controlling and enhancing the quality of healthcare services.

Indeed, CBAHI has a role in enhancing the accessibility to patients' records, as Head C stated:

"CBAHI has also played an important role in setting up an effective filing system. Patient documents and records are now easily accessible." Head C

According to the above response from Head C, accessibility is more than accessing the services and the hospital, but also it involves organising the systems to allow the practitioners better accessibility to information and records

5.3.1.2. Basic theme 2: Challenges in adhering to CBAHI's quality standardisations

CBAHI is an accountable inspecting agency responsible for offering the required standardisations to improve the quality of management systems operating in general hospitals in KSA. However, in the data there is disagreement among the heads on the methods used by CABHI to perform this role. For example, Head D stated that:

"Whenever there are CBAHI members in this hospital, there is an alert and a high-quality performance from employees. In my opinion, it would be much better if CBAHI members visited this hospital without anyone's previous knowledge. Hence, an alert and high-quality performance would be available all year long. Employees become scared if any notice or warning is being placed against them. They start to think of punishment. Unfortunately, this is the real case and at the end of the day, it goes back to individuals if they have 'taqwa' [fear Allah, God] and do their jobs as required and to the best of their abilities." Head A

In the above statement there are two important points. First, is the alerting process that CBAHI is using before visiting hospitals. It seems that giving staff prior notice that a visit is going to happen makes them develop a strategy to control the consequences of the visit, rather than

celebrating the standards that they know they regularly deliver, suggesting that establishments fear negative consequences from a CBAHI review.

Second, as Head A referred to the Islamic value of fearing Allah which is a deep Islamic value called *taqwa* which is usually used to indicate that the person has God consciousness (self governed) which keeps him up to standard, even without being inspected. The argument here could be, however, how practitioners could be held accountable for being sub-standard if they do not actually comply with what CBAHI standards are asking them to do or how they should be implemented by them or their services. Indeed, there was an indication in an earlier subtheme that participators have not been trained by management about how to think practically about quality and how to implement it. In the Saudi context, Islamic values seemed to be a personal matter where every practitioner in the hospital can have his or her own standards. However, when it comes to practising and delivering quality as part of a holistic management about the actual role of CBAHI in terms of controlling quality. Head A stated that:

"In fact, patients' services have not changed neither before nor after CBAHI. The change only took place on documentation. For instance, doctors provide full data about their patients and chemists provide clear information of what the patients have gone through. I would say that CBAHI has changed the mechanism of working effectively. For instance, CBAHI provided equipment that have never been in the hospital such as safety showers for those working in the laboratory where water is released to flush off the entire body and clothing in case of large serious chemical splashes." Head A

This statement could be interpreted in two ways: either the head did not have a comprehensive understanding of the meaning of a quality management system, or the head completely understands that changes will happen on paper only, and as middle managers they do not have the ability or feel unable to implement any changes themselves. Both possible interpretations bring to light the question asked by one of the nurses earlier: "What do you mean by quality system?" see Section (5.2).

In his turn, Head E was critical:

"The benefit was for the sake of the hospital, not for the patient. Now, everything has become computerised, and the documenting services have improved. Doctors, now, find all patient documents saved on the computer." Head E

The head distinguished between the benefits for the hospital as a system from CBAHI and the benefits for the patients, and how the hospital would benefit but not the patient if doctors are

able to access records easily. Again, this would raise another question about the ability of middle managers to see the benefit of practicing QMS as a holistic hospital matter.

What could help in the long run from the perspective of a few middle managers is putting a reward system in place to encourage staff who worked very hard during the CBAHI time to keep going afterwards. This position was reinforced by Head B, who added that:

"I am retiring in two years' time, and I really want to do so because I feel tired from providing a bad service to patients and I really lost my psychological grip. Now, there are no regular serious meetings and some committees have never conducted any meeting since CBAHI was dismissed." Head B

The above statement raises two issues: first, the ethics of nursing in that practitioners' rewards are not materialistic, but rather are when patients have healed and recovered. So, although putting in place a reward system is important, keeping ethics and standardisations at the heart of nursing is the most important. Second, earlier the idea of self-governing and God consciousness did not seem powerful when it came to thinking about maintaining the quality of the work after CBAHI left. In fact, does CBAHI need practitioners to work hard? The answer from Head F came as follows:

"As soon as CBAHI goes, the quality of the services goes to a very bad state. The mess was everywhere." Nurse 19 (questionnaire)

Having CBAHI in place may enhance the culture of quality in the hospital; however, according to the comment from the nurse, there was a sense of disappointment felt by nurses about losing trust in the quality of services after CBAHI was dismissed. In addition, the nurse was able to distinguish the quality of the services during the visit of CBAHI and after CBAHI. The word 'mess' could indicate the extent of damage that having no regular control over the quality of the services in place can cause. Another comment within the questionnaire from Nurse 12 stressed that:

"The internal conscience is dead in many hearts. They do not watch Allah when they provide the services. They fear CBAHI more than they fear Allah." Nurse 12 (questionnaire)

The nurse in the above statement is suggesting strong judgement that reflects the pain they may feel because the staff they work with may not be as committed to quality services as expected. The issue of self-governing appears again in this comment, giving indications that religious cultural values could be involved in making an evaluation of the level of service quality.

To sum up, CBAHI is an independent agency appointed by the MoH in KSA to support general hospitals in controlling service quality and managing the entire quality system, including the performance of professional staff, management, and patients. The general atmosphere of CBAHI's involvement appeared to be positive, although a few heads felt that CBAHI was not as effective in enhancing the long-term quality of care services. Some of the heads indicated lack of belief that CBAHI will make a significant change and contribute towards building a culture of quality. It could be true that the culture of quality service for patients and staff should not be conditioned by the presence of CBAHI, as further issues should be concerned with embedding this culture of quality as a concern of the quality management system.

The third global theme concerns patient safety.

5.4. Global theme 3: Building a culture of patient safety

Building a culture of patient safety to enhance service quality is the last global theme that emerged from the qualitative data collected via semi-structured interviews and qualitative questions in the questionnaire. The theme covered one of the major concerns related to improving the quality of health services in Saudi general hospitals. Nurses and heads were asked to reflect on their experiences and share their perspectives about how they think the culture of patient safety could be related to the concept of quality in health organisations. On that, one of the heads said:

"Today's hospitals are requested to look at the patient safety when they evaluate the quality of their services." Head C

From the above statement, it seems that the head is aware that a change in the way of assessing the quality of the services in the hospital has happened, and therefore a shift in the way of focusing on the patient safety should be achieved. This comment from Head C harmonises with one of the answers offered by Nurse 9, who wrote:

"Thinking about the quality of the services means thinking about the patient and to what extent they are safe and happy with the services." Nurse 9 (questionnaire)

From the above comment, it can be seen that the nurse not only made the link between quality of services and safety, but also between safety and satisfaction. This may indicate that the quality of services is also connected to patient satisfaction.

Relatively, when the participants were asked who they think should be responsible for embedding a culture of patient safety, different responses were suggested. For example, Head D explained:

"The medical director and his/her staff such as doctors, pharmacists, and specialists are responsible for patient safety. Also, the nursing unit is playing a vital role in ensuring patient safety." Head D

Hence, there is no single professional who should be responsible for ensuring that the patient safety culture is embedded; rather, it is a collective effort from different medical professionals. Additionally, the comment from Head D echoed with another comment from Head E, who said:

"Doctors and nurses have shared responsibility for patient safety." Head E

Head E limited the responsibility of establishing patient safety to nurses and doctors who are expected to share the responsibilities – unlike Head C, who suggested that:

"It [establishing a culture of patient safety] is everyone's job and everyone needs to do their job well every individual needs to play a meaningful role in the safety process." Head C

Obviously, according to Head C, everyone in the hospital has a responsibility to ensure that the culture of patient safety is embedded. Relatively, as each one has his or her own role, then the role must be clearly defined to ensure that the quality of the job is high. This argument brings to light a comment written by one of the nurses:

"Efficiency is the key to assure that patient safety culture is protected." Nurse 7 (questionnaire)

Nurse 7 offers a new understanding of the way in which patient safety culture should be dealt with in health organisations. According to Nurse 7, it is not about embedding the culture, but protecting it. This may suggest putting a plan in place to assess the efficiency and then reflecting on the outcomes of the assessment of the quality of patient safety culture as a method of protecting it. The process of ensuring efficiency in relation to patient safety culture is explained by Head A who said:

"To assess efficiency, everything [evaluation] is requested to go through the executive board which is conducted monthly." Head D

Safety and efficiency are not concepting that necessarily relate to each other. Head D thinks that in order to protect patient safety, a monthly assessment of the level of efficiency should be undertaken by the senior management. Head A agreed with Head D, and added that:

"Monthly reports provided by the departments plays an important role in evaluating and measuring patient safety." Head A

Hence, for the executive board to create an effective audit trail, heads of the departments need to offer reports that provide information about patient safety measurement. This may explain why Head G suggested that the culture of patient safety should be called 'patient medical culture'.

Head G commented:

"Medical staff are the people who are responsible for monitoring the efficiency of patient safety; [laughing] therefore we should call it the patient medical culture." Head C

According to the above comments from Head C, two main issues have been raised: first, medical staff should be playing a role not only in embedding the culture, but also monitoring to what extent it is protected. Second, the culture of safety is controlled around the medical needs of the patient. Upon this, a couple of heads explained that patient centred culture is the culture that puts the patient first in terms of needs and protects them from any possible harm. For example, Head E said:

"The hospital director always stands beside patients and gives them the chance to express their opinions about the services. Keeping the patient protected from any harm while he or she is enjoying the services is what we consider patient safety culture." Head D

From the comment offered by Head D, it is the management's role to support patients and give them a space to share their opinions about the services provided to meet their needs, in order to embed the culture of quality. This argument paves the way towards the presentation of two different organising themes:

- 1. The challenges and barriers that hinder building a quality and patient safety culture.
- 2. The requirements to embed a culture of quality and patient safety.

5.4.1. Organising theme 1: Challenges and barriers to building a patient safety culture

The last organising theme that emerged from the findings addressed the challenges that might face general hospitals while patient safety culture is questioned. Those challenges appeared across the data and seemed to hinder the establishment of an efficient patient safety culture. Those challenges emerged as basic themes and are listed below as:

- 1. Lack of governmental support, and
- 2. Lack of understanding of the concept of quality.
5.4.1.1. Basic theme 1: Lack of governmental support

Lack of support from the government appears to be problematic and comes from different angles. The first angle is the lack of financial support to set a reward and recognition system that allows hospitals to improve the quality of their services, as well as encourage all staff to do more to ensure the quality of patient safety. This is reinforced by the comment from Head C, who said:

"We need further financial support from the government to set a system of recognition to motivate staff to innovate new ideas and share them." Head C

From the above quotation, Head C suggested that the additional finances would go to staff rather than better patient experience. Being a public hospital means the main funding of the hospital is from the budget set by the government, and as Head C said, the current budget does not allow the hospital to set a strategic plan to reward and recognise the staff who work hard to implement the culture of patient safety. One of the nurses added:

"Implementing the culture of patient safety requires extra work, especially at the beginning. We were told to do a lot, but there is not much benefit to us." Nurse 6 (questionnaire)

From the above quotation, there is a signal that nurses not only think about reward, but a personal financial reward, which brings to light the nurses' understanding of the nursing profession. Accordingly, this comment suggests that for staff to put in more effort and share in the responsibility for making the government vision flourish, further personal financial benefit is required. The benefit should be set as a long-term plan, such as increased salaries, rather than short-term because the process of implementing the culture of patient safety is long and it requires time and effort.

Another perceived gap is in relation to supplying general hospitals with highly qualified human resources, or at least offering further up-to-date training programmes. It was explained earlier that one of the challenges is the lack of education and qualified staff (Section 2.8.1.1). One of the heads said that:

I contacted the Ministry of Health via email 45 days ago regarding some clarifications in the third version and regarding providing some training; unfortunately, no answer so far." Head C.

According to Head C, when complaints are made to the top management in the MoH, staff receive no response which may negatively influence the staff who trust that the government cares about the quality of hospital services and the safety of patients. One of the heads said:

"They [MoH] do not care. They waffle all the time about the quality and safety culture, but when it comes to practical steps no one cares." Head D

From Head D's comment, it appears that Head D is disappointed and not satisfied with the current response (or lack thereof) from the MoH. The use of the word 'waffle' suggests that he feels that although much talk has taken place, when it comes to practical steps – as he said – things are not as promising as they seem to be.

In addition, one of the heads mentioned that inequality in terms of distributing financial resources is problematic. He said:

"General hospitals in rural cities are less fortunate with receiving financial support from the government. The government pays more attention to modernising hospitals in big cities than hospitals in rural areas." Head C

According to Head C, individual socioeconomic characteristics and regional economic development are the principal determinants of inequality in terms of distributing governmental financial support in his hospital. But with the question that needed to be asked regarding how inequality can influence the quality of services, a comment left by Nurse 4 explained that:

"Equality is a big problem. We do not have the same resources given to hospital X in Rayed, so we would not be able to perform as good as they do." Nurse 4 (questionnaire)

According to Nurse 4, assuring the quality in hospitals requires the government to make a strategic plan to ensure equal support is given to all hospitals, so the quality of the whole health system will improve.

5.4.1.2. Basic theme 2: Lack of understanding of the concept of quality

The last aspect that emerged from the data that could influence the effective implementation of patient safety is a potential lack of understanding of the concept of quality. This challenge is identified in some of the comments made by a few participants. For example, Head C said:

"Some of the staff are not taking the concept of quality seriously." Head C

And when he was asked why he thought that his response was:

"How will they be able to take it seriously if they do not know what quality means?" Head C.

Head C's comments suggest an explicit misunderstanding of the concept of quality amongst staff. This was reinforced by participants demonstrating a limited understanding of the issues of accessibility and efficiency, which are key components of the concept of quality. For example, when Heads D, B, F and G were asked about accessibility, they referred to the location of the hospital, but not to the services offered by the hospital to enhance the accessibility of the services to patients.

5.4.2. Organising theme 2: Requirements to embed a culture of quality and patient safety

In order to overcome the challenges and address the barriers and as the matter of quality in relation to the culture of patient safety was questioned, a set of requirements appeared as conditions to assure that the culture of patient safety is not only embedded, but also protected. Those requirements emerged from three basic themes:

- 1. Creating a culture of learning from mistakes.
- 2. Offering different tools to perform different types of assessment.
- 3. Changing the style of management.

These basic themes will be explained and supported with quotations from the raw data.

5.4.2.1. Basic theme 1: Creating a culture of learning from mistakes

One of the basic themes that emerged from the data and is linked to the requirements of establishing a culture of patient safety is creating a culture of learning among healthcare organisations. One of the heads said:

"Patient safety increases when people do learn from our mistakes... [silent] Learning from mistakes makes us better in identifying the meanings of patient safety culture." Head C

According to Head C, the safety status of patients could become critical if health organisations do not learn from their mistakes. In order to enhance the health organisations' understanding of the meaning of patient safety culture, a culture of learning from mistakes is needed, as explained by Head G:

"You want to establish a strong patient safety culture; you need to admit your mistakes and learn from them. Without establishing a strong culture of learning from mistakes you would not have patient safety ... simple equation." Head G

For Head G, it is an equation that suggests that without learning from mistakes, the culture of establishing patient safety could be questioned. However, a question asked was how can health organisations support the creation of a 'learning from mistakes' culture? The answer came from all of the heads who agreed that building trust is key to establishing a culture of learning from mistakes. On that, one of the heads stated:

"We all make mistakes, mistakes have happened, the staff need to feel safe to report the mistakes in detail without fearing from the consequences." Head E

It is fearing the consequences that could put off some staff from reporting the mistakes that happen during practice. Trusting that the consequences would not harm their future career would give the staff the required courage to report their mistakes. One of the nurses wrote:

"We need to feel that we can record the mistakes without fearing that we would lose our job." Nurse 3 (questionnaire)

For Nurse 3, feeling safe in the knowledge that reporting mistakes would not lead to negative implications on their future employment would encourage reporting, which in turn enhances the chance to learn from these mistakes when they happen and also to record them. Head F suggested that the use of technology to report mistakes for the purpose of learning could help, as he said:

"Technology today offers many solutions to report the mistakes without even a need to provide the name. The purpose from reporting the mistake should not be announcing who made the mistake, but what happened and what led to the mistake." Head F

From the perspective of Head F, the hospital can benefit from technology to establish the culture of learning from mistakes because technology can help record and share mistakes anonymously, where the focus is on the mistake and not on who made the mistake. Another head suggested creating a strong reward and recognition system to celebrate those who record their mistakes and allow others to learn from them. Head A said:

"We need to encourage recognition differently to allow those who make mistakes to admit the mistake and tell how they have learnt from it." Head A

It was discussed earlier that staff did not follow up on the improvements that took place during CBAHI due to the lack of recognition and reward. On this theme, recognition and reward

reappeared and was emphasised as a way to enhance staff engagement in making changes to the current culture and practices in Saudi general hospitals. Head A offers an innovative way to help and support staff to record mistakes and disclose what they have learnt from it. The idea of Head A seemed braver compared to the suggestion offered by Head F, who suggested keeping the reporter anonymous. This may bring to light again the matter of trust, which seems necessary to create a culture of learning from mistakes. Nevertheless, one of the nurses suggested that cultural training would be needed to empower the staff to share and communicate their mistakes:

"In our culture making a mistake is a shame. Every one of us wants to be the perfect one who does not make any mistakes. I think to overcome this challenge we need cultural training in place to educate us how to understand the mistakes and deal with them." Nurse 12 (questionnaire)

According to Nurse 12, not just any type of training could do the job; it should be cultural training to enhance staff awareness of what mistakes are supposed to mean and how to learn from them. In a culture like the Saudi culture, it is a challenge for someone to admit their mistake and to deal with the outcome and consequences. Therefore, it is not only about encouragement to record the mistake, but also to understand why recording the mistake is important and how to share it for learning. Another head argued that:

"We need to learn how to communicate first and then share the mistakes. It is the management's job to establish such a culture of sharing and trust." Head F

From the perspective of Head F, management is responsible for taking the lead in establishing not only the culture of patient safety, but also to set a well-established communication channel to transfer and share experiences in order to achieve more learning from errors. An additional opinion is also offered by one of the nurses, who wrote:

"The greatest challenge is not lacking labour, but lacking professionals who understand how to set a culture that respects that errors are a way of learning rather than a way of blaming people for mistakes." Nurse 6 (questionnaire)

According to Nurse 6, the critical part of lacking human resources is not the quantity of labour available to provide the services, but rather is the quality of the current human resources – i.e. lacking professionals who are able to establish a new meaning to the culture of learning and sharing. The comment from Nurse 6 echoed with another comment from Head B, who said:

"To build up the culture of patient safety you need professionals who are capable to think beyond the traditional way of running and managing health organisations. The culture of blaming but not learning is putting us behind." Head B

Thinking about managing the challenges experienced by today's health organisations requires, as Head B said, for managers to understand how the change in the external environment has changed the type of culture required for healthcare organisations. Having the patient's safety as a core value of the healthcare organisation means admitting to mistakes for the sake of development and learning, but not to blame the individuals who make them.

5.4.2.2. Basic theme 2: Offering different tools to perform different types of assessment

As an approach to enhance the culture of learning from mistakes, some of the participants suggested the use of current assessment methods to check the establishment of such culture. One of the heads said:

"We are now using Ocerens Version Reporting (OVR) to check the patient safety system and whenever anything wrong happens, we get informed... [Silent]... the management can use such a system to record the errors and set a new culture of learning." Head D

Ocerens Version Reporting (OVR) is a system used by hospitals to offer some help in regard to patient safety. According to Head D, his hospital is not required to adopt a new system; rather, they can use the current system to carry out more duties. Heads F, G and A all agreed that using the questionnaire as a current method of assessment to support a culture of learning would not help, because as Head A said:

"Although the use of daily questionnaires could be useful to track the status of patient safety, it would not be offering adequate information to understand the mistakes happening and why they happened." Head A

According to Head A, using a questionnaire to measure the culture of patient safety could be useful to assess patient safety matters, but the benefit from using it to enhance the culture of learning is questionable. In addition, one of the nurses said:

"There is a unit called the Patients Affairs Committee that visits the hospital regularly along with the hospital director. When I see a mistake happening, I can report it to this unit." Nurse 7 (questionnaire)

It seems from Nurse 7's comment that the Patient Affairs Committee unit has been used as another channel to assess the quality of patient safety. But at the same time, there is a possibility that this unit can be used to report and record the errors happening to learn from them. Hence, one of the requirements to establish the culture of learning from mistakes is to collaborate with one of the units that is already established to assess patient safety and to take further duties and record mistakes reported by the staff. In his turn, Head C said:

"I myself keep moving around asking nurses certain questions and by this I will be able to evaluate and measure the patient safety and at the same time I can recognise the mistakes and comment on them." Head C

Another method of evaluation used by Head C to assess the implementation of patient safety culture is to observe the errors and educate staff about how to learn from them.

5.4.2.3. Basic theme 3: Changing style of management

One of the requirements identified by the participants and seems fundamental to build an effective culture of patient safety was changing the current style of management. On that, Head C said:

"I think the traditional school of management that runs general hospitals in Saudi is unable to meet the demand of the new requirement [pause] Many managers or directors would claim that they understand patient safety culture but in reality, and during practice you can see that they do not." Head C

In his comment, Head C pointed out at two main issues: first, that in order to apply and implement new changes suggested into the general hospitals in Saudi, a different management style is needed. The new management style should be capable of meeting the requirements of embedding a new culture of patient safety. Second, some managers would claim that they understand how to deal with the demands of the new culture, but in practice they would struggle. When Head E was asked about his capability to support embedding the new culture of patient safety, he said:

"Before we were thinking about patient satisfaction and safety was a small part of it. Now the whole quality including satisfaction is about safety of the patient. Safety becomes the universal concept of all other organisational aspects. Now if I think I am ready to embed it as a culture, I am not sure." Head E

Head E described the shift that occurred in the core values of the hospital in relation to patients. While satisfaction was the core of quality, safety became the main concept that all other aspects in the hospital should support. Noticeably, Head E seemed unsure about his ability to lead the change and tackle the needs of the new culture. Nevertheless, Head D commented that: "A few days ago, I had a conversation with the hospital director and explained to them that we need a strategic training programme to train specifically how to promote change to the current management style to be able to meet the new requirements of the reforming strategy." Head D

Head D, who is head of the training department, seemed aware that training should be put in place to support the change in management style and that the new management style should meet the needs of the Vision 2030 reforming strategy, where the focus is on patient safety and quality.

To sum up, establishing a culture of learning from mistakes as a sub-culture to support the effective implementation of a patient safety culture is an emerging concern for the participants of the research. According to the findings, establishing a culture of learning from mistakes requires support from management, who should encourage thinking about mistakes differently and empower the staff by trusting them and rewarding them when they report mistakes and share their learning experience. For that, a new management style should be promoted to meet the demand of the new requirements. The findings suggest that new training to change the management to a new style should be provided. Several participants suggested that the use of some of the established methods to assess patient safety could set a new culture of recording and reporting errors.

5.5. Chapter summary

In conclusion, the qualitative outcome of this research articulated r three different global themes, with four organising themes and nine basic themes. The first theme illuminated the role that the general hospital management in KSA should play to ensure that quality of care services is addressed. The conclusion is that although quality assurance is the responsibility of every stakeholder in hospitals, the main role of the management including middle managers is to build an organisational culture that supports quality improvement. Indeed, the reality of the hospital being one complicated system that includes many sub-systems means that achieving such a target is not an easy goal. Obstacles such as the lack of coherent written policy and traditional organisational structures where the power to make decisions and force implementation of the practices that lead to better service quality were identified. Consistently, giving power to first line staff such as nurses is identified as powerful tool to enable nurses and other grassroots staff to feel more responsible for quality assurance, which will have its own positive impact on staff motivation to enhance the quality of services. The need for systematic and up-to-date data, training, and education is identified as a main empowering factor for middle managers to improve

healthcare service quality. Although the general hospitals in KSA offer staff various training packages, there was complaint that training towards enhancing the quality of services is backward and inadequate. In fact, the research demonstrated a clear inadequate understanding or misunderstanding of the main concept of quality and how it could be achieved in a systemic way where complex sub-systems are involved.

The second global theme gathered the opinions of middle managers and the qualitative answers of the nurses upon the impact of governmental agency in controlling the quality of healthcare services – i.e., the role of CBAHI in controlling quality in general hospitals. One of this research objectives was to identify how CBAHI has benefitted the general hospitals in their mission to implement QMS and to improve practices. According to the findings, the benefits of CBAHI involvement in QMS and its practice seemed to be limited to satisfaction that CBAHI has a positive influence on organising the documenting process and patients' medical record systems, saving time and effort. This also includes the booking in and checking out systems. The agency offers hospitals with up-to date standardisation, but challenges in adhering to CBAHI quality standards were identified. Middle managers saw that the method of giving prior notice before visiting the hospital for inspections is problematic because hospital management then prepared the hospital setting for the inspection. Managers thought that setting a better reward system would help keep the staff motivated to follow the practices suggested by the standardisation. Indeed, the matter of self-organising and self-governing came into the scene as a sub-theme related to God consciousness. But such a suggestion raises concerns about the nurses' and managers' understanding of the spirit of nursing, and the purpose of the general hospital as an organisation designed to provide high quality services to the public to save their lives. Indeed, it raises questions about staff understanding and training around CBAHI standardisations. The quality of healthcare, hence, is not related to the need for professional agencies to support the implementation of QMS, but also needs a culture that helps set a long-term quality strategy to serve the ethos and the purpose of the general hospital.

The third global theme is found to be building a culture of patient safety. Interestingly, this theme highlighted the requirement to embed the culture of quality and patient safety as 1) creating a culture of learning from mistakes and avoiding a blaming culture, as this would not help in assuring that lessons have been learned. Indeed, having different tools to perform different types of assessment such as the OVR system that could offer some help in regard to patient safety could be helpful. Changing the style of management is identified as one of the requirements to embed the culture of learning. A new style is needed because it will allow the promotion of changes to

the current practices in hospitals where patient safety is not a concern, and the correlation between patient safety and QMS has not been well articulated. This again brings to light the need for specific training to increase staff skills and, in turn, the quality-related practices. However, in order to accomplish their requirements, general hospitals need to face their challenges including the lack of governmental support and clear understanding of the concept of quality. It is a serious struggle for general hospitals, as the participants must create a shared meaning of the concept of quality within the general hospital that is centralised around patient safety, although the primary purpose of general hospitals is to serve all patients equally and effectively to save lives without wasting resources.

Hence, in answering the questions listed in section 5.2, namely:

- 1. How are quality management systems perceived by heads of department?
- 2. What challenges might hinder the enhancement of the efficient implementation of a quality management system?
- 3. What are the requirements to improve the current quality management?

It could be said that for supporting the implementation of QMS and its practices, general hospital management needs to create a culture of quality that is centralised upon a shared value of patient safety. Indeed, centralising patient safety means reforming the current practices of nurses, ensuring they revolve around the original ethos of nursing were serving patients and aiding their recovery is the main reward. Indeed, challenges are found not only in organisational culture that does not centralise patients, but also in the clarity of the purpose of CBAHI and the lack of communication to open up the discussion around matters of quality and implementation of QMS and its practice. For that, the requirement would be to start by setting a clear, coherent policy and changing the style of management to become more open to error and mistake reporting. Moreover, developing systems that help share such errors to build staff trust and to allow learning from these mistakes is a vital step in developing the quality of the practice. God consciousness and self governing are powerful and persistent sub-standards embedded in the practice of some of the nurses and middle managers, and there is no doubt that following the standardisation introduced in the general hospitals and understanding them brings a new level of professionalism into the practices of QMS. The central concern of the QMS is the conduct of quality practices that serve the purpose of the general hospitals as a holistic approach rather than a personal one. Clearly, the outcomes of the research highlight some of the possible answers to the research questions, as answers are limited to a few managers and the qualitative responses of nurses.

Chapter Six: Discussion

6.1. Introduction

This chapter aims to synthesise the findings of the nurses' and patients' questionnaires as well as the themes that emerged from the middle managers' semi-structured interviews to address the research questions posed in Chapter One.

- 1. What are the perceptions of patients, nurses, and heads of department regarding the implementation of QMS and its practices in KSA general hospitals?
- 2. What challenges are identified as hindrances to the successful implementation of QMS in KSA general hospitals?
- 3. What changes do general hospital management teams need to consider supporting the successful implementation of QMS and its practices?

At the end of the chapter, the developed framework will be provided in both versions (before and after modification) in a way that will pave the way towards the final chapter of this thesis – the recommendations and conclusion chapter.

This chapter is structured upon the important issues that emerged from the fourth and fifth chapters. The first section discusses the role of the hospitals' senior management in establishing QMS and addressing the role that the MoH has played in ensuring that hospitals adhere to the Saudi government's requirements and standards of quality. The second section discusses the challenges: there is a need to discuss different aspects of organisational culture, such as organisational structure, policies, and decision-making processes in the general hospitals. These aspects were found to have either negative or positive influences on the implementation of effective quality management systems in hospitals. Other challenges that emerged from the findings related to a lack of strategic understanding of the holistic concept of patient safety culture, a lack of understanding of the concept of quality, a lack of communication between top management and those lower down, and a lack of training, support, and an effective reward and recognition system; these will all be discussed. In the final section, the requirements for establishing effective QMS in Saudi general hospitals will be synthesised and compared with the literature. These study findings suggest the emergence of a theoretical framework. The last section of this chapter offers an explanation of the framework and will compare between the framework and other frameworks offered by the literature.

6.2. Question One: What are the perceptions of patients, nurses, and heads of department regarding the implementation of QMS and its practices in KSA general hospitals?

To prompt information on the perceptions of QMS in the Saudi general hospital context, both quantitative and qualitative data were collected. Although questionnaires helped to address the existence of some of practices related to QMS such as policy development, the middle managers' perspectives enriched the debate to answer the first question. The discussion in this section will refer consistently to the qualitative data due to the variations and richness of its content. In addition, in answering this question, different issues were raised for discussion, namely:

- 1. Developing equality and quality policy.
- 2. CBAHI's role and involvement in controlling QMS practices.
- 3. Nurses' and middle managers' engagement in QMS implementation.

6.2.1. Developing equality and quality policy

Policy development is one of the main dimensions in the nurses' questionnaire that received the most positive perceptions, reflected by high percentages of agreement across all items (M=3.590). According to Aryankhesal (2016), policy development is one of the most important elements that should be considered when QMS and its practices are implemented in Iranian hospitals. However, according to the interviews with middle managers, although each department in the general hospital has its own policy that was orally communicated to the staff, this was not enough to implement QMS and ensure that its practices were controlled and guided. Additionally, when the nurses were asked whether they were clear about the general quality policy of the hospital, the majority agreed that they were. However, when the interviews were carried out with the heads, a couple of the organising themes suggested a lack of strategic understanding of the holistic vision to develop QMS policy. The contradiction between both groups of participants may indicate that even the orally communicated policy has not been agreed or well publicised among practitioners in hospitals. In fact, admitting that there is no QMS policy development should highlight concerns about the role of middle managers in leading and managing their departments. From the interviews, when Head D was asked about the strategic vision of the hospital towards quality of care, he seemed to lack awareness of such vision and he referred the researcher to a specific section he believed would have an answer. Such a referral would indicate that Head D did not know whether a general policy of quality exists.

The evidence from all qualitative and quantitative data revealed that developing QMS policy for each hospital should be an integral part of the overall policy of the MoH to enable general hospitals in KSA to determine their strengths, weaknesses and opportunities in the service quality area, optimise the use of resources, and ensure that deployment will be effective. The new changes in the Vision 2030 suggest the need to think differently about the service quality in general hospitals and its relationship with performance in order to create a mechanism for internal feedback and external accountability.

In order to set the required policy and ensure that the guidelines serve the implementation of QMS and develop its practices, the findings suggest that healthcare management should be in charge. Healthcare management in KSA refers to the senior management of the hospital which is allocated by the MoH. When the heads of department were asked whether they think the matter of QMS is a concern of the hospitals' management, significant numbers of them agreed that quality assurance is a concern and is the responsibility of the senior management in the hospital. This opinion is also offered by the some of the nurses who responded to the open questions in the questionnaire. The findings of the participants agreed with Almalki et al. (2011), who suggest that senior management in Saudi general hospitals are appointed by the MoH – who has the main power to set the policies and long-term healthcare service strategies.

Lacking the strategic vision to enhance the quality of management was also identified by the participants, who suggested not to prevent management from maintaining the best vision for service quality. As per Scott et al. (2018), in healthcare organisations, a lack of awareness from staff of the main strategic values of the organisation's attempts to improve quality has an influence on the general level of performance and the ability of staff to feel that they are engaged. In Saudi Arabia, the Vision 2030 has been shared with all hospitals and the core values are identified as quality and patients being the centre of the services.

To sum up, developing a written holistic policy that guides the micro polices of each hospital and each department is necessary to implement QMS and its practices in general hospitals. Although it is the responsibility of hospital management to ensure that implementation complies with government standards, it is the responsibility of the MoH to provide general hospitals with the required support – including funding to implement their own visions, micro visions, and strategies of each department that comply with the government vision, and to improve service quality to meet the government standardisation. It was suggested in Chapter Two that the MoH makes sure that general hospitals' senior management are committed to its quality standards

through cooperating with different agencies. The literature identified the Central Board for Accreditation of Healthcare Institutions (CBAHI) as one of the main agencies supporting the Saudi government to improve the quality of healthcare services, but the question of what role CBAHI is playing is addressed in the following section.

6.2.2. CBAHI's role and involvement in assessing and improving QMS practices

In the interview question regarding the role of CBAHI in controlling the practices of QMS, the respondents agreed that CBAHI is no more than an inspecting and accreditation agency. This echoes Almasabi (2013), who observed that CBAHI was recognised as a centre of accreditation in 2005. However, since 2011 CBAHI has been playing a considerable role in supporting healthcare services in the KSA to improve the quality of their services; yet, the findings also suggest that improving quality in general hospitals was limited to the fast access to patients' records and to the time when CBAHI was present in the hospital. This possibly happened because CBAHI promoted the understanding of quality control as it has been enforced by the KSA government - that is, inspecting related QMS practices rather than organisational related concepts, as suggested by the literature. It was argued by Hashjin et al. (2014) that in order to assure the quality of public services in hospitals, the government is advised to adopt a combined mandatory and voluntary approach that consists of licensing, annual evaluation and grading, and regulatory statutory inspections. Regular inspections could be an important issue to consider as well as the integration of other practices that could maintain the quality of services. Hashjin et al. (2014) found that senior hospital management should be empowered to carry out their inspection and evaluation in order to help them establish better QMS. This brings to light the findings from the interviews about the struggle of the middle managers to enact the power of their position, as managers, to promote a culture of quality, which is one of the requirements for developing QMS.

Standardisation is an important element related to CBAHI's role in maintaining and controlling QMS related practices. According to the findings of the interviews, CBAHI helps to control existing standards and introduces up-to-date standards to ensure that the quality of healthcare services run parallel to the universal standardising systems. In this vein, Shaikh (2017) explained that the Saudi MoH established CBAHI to ensure that QMS in hospitals adhere to the universal standards available to assure the quality of healthcare services. Yet, from the literature review it is seen that there was some resistance to compliance with universal quality standards because they do not always reflect the needs of each hospital – especially in countries such as KSA that are still struggling to establish their understanding of quality and what practices best relate to the implementation of QMS.

Accordingly, upon the findings, it seems that although the intervention of CBAHI was to improve the quality of some services, for example helping to document patients' details and making them easier to access, there was doubt about the role of CBAHI in supporting the long-term establishment of holistic QMS among all services provided by the general hospital. CBAHI paid most of their attention to the patients' information and the accessibility of the data. This may indicate that patient privacy, data protection, and the ability to access information safely and easily are elements to be considered when the matter of quality is discussed. Shaikh (2017) agreed that being an accreditation agency made CBAHI responsible for improving the quality of the services as a system. For that, the majority of CBAHI standards clearly focus on the rights of the patients and the matter of patient safety in relation to quality.

Noticeably, several heads had negative opinions about the role CBAHI played and their disappointment was due to CBAHI's methods of making their power of inspection obvious and taking the responsibility away from the staff for their own practices. According to Ferrer et al. (2018), improving practices in the public healthcare sector in the KSA requires management to empower staff to be responsible for the quality of service that Foucault (1972; 2018) in his theory of power suggested: that individuals can hold productive power that gives them the ability to inspect the quality of their work. Nurses and heads of department may be given more trust as some heads requested, and at the same time they would comply with the policy of the MoH. Beach and Connolly (2005) added that empowering staff should include the continuous process of reflection or introspection, whereby humans challenge patterns of behaviour to ensure they are still applicable; this results in empowerment. It may be that the nurses and heads are already empowered, but have misunderstood the role of inspection in relation to building the culture of quality that leads to better practices of QMS in general hospitals.

The level of patient satisfaction with the level of management's involvement in improving service quality is questioned. The findings of the questionnaires suggest that the highest percentage of both nurses and patients were satisfied with the quality of the services and the level of management involvement in assuring the quality. This finding offers a different perspective to those found in the literature that suggested there is evidence that people become more interested in the services provided by private hospitals due to the poor quality of the services offered by general hospitals (Al-Borie & Damanhouri, 2013; Ferrer et al., 2018). The findings of the interviews give further insights in relation to patient satisfaction. For example, one of the heads said:

"I am retiring in two years' time, and I really want to do so because I feel tired from providing a bad service to patients and I really lost my psychological grip. Now, there are no regular serious meetings and some committees have never conducted any meeting since CBAHI was dismissed." Head B

The above comment opens the door for two different types of dissatisfaction. First, this is a clear statement from the head that the services offered within hospitals are not of controlled quality, to the extent that the doctor feels under pressure because of their moral and ethical concerns as a medical professional. As a result, this statement from Head B could explain Al-Borie and Damanhouri's (2013) opinion in regard to patients moving to private services.

In conclusion, CBAHI was created to give the Saudi government – through an external accreditation agency. Yet, during 15 years of working with hospitals, although standardisations have been updated, general hospitals in KSA are still struggling with the service quality levels and have begun to lose patients. The outcome of the research shows that despite the patients' satisfaction with the level of communication the nurses were able to establish, critically nurses and middle managers still believe that there is still huge room for improvement in terms of practice that practitioners' ethos and morals advocate.

6.2.3. Nurses' and middle managers' engagement in QMS implementation

Engaging nurses and middle managers in the implementation of QMS seems important to ensure that practices are harmonised with the hospital's vision of quality of care. In fact, the findings suggest that improving the quality of services is a request for practitioners to achieve job satisfaction. According to the findings of the interviews, the level of staff satisfaction was higher during the CBAHI period (according to comments from the middle managers) because, as suggested in the interviews, the heads were in control of service quality, and in turn, in control of the satisfaction of the patients whose needs were met. Staff feel responsible and they are satisfied when they feel that they are able to demonstrate their capabilities to control service quality. This type of empowerment is explained by Delaney and Huselid (1996), who state employee empowerment includes giving employees at all levels the authority and responsibility to make decisions on their own. In relation to QMS, this could be interpreted as staff needing to be given space to make decisions about the quality of the services and give opinions on how to improve it. In fact, according to the findings of the interviews, it is suggested that nurses and heads would appreciate the trust if it was given to them through responsibility so that they could determine how best to do their work. As explained in Chapter Two, empowering hospital staff with leadership skills can be seen as a useful technique for improving the quality of healthcare

services (Carneiro and Sokbae, 2011), because accountability and the ethos of nursing will be promoted forwards through practice.

Empowering staff to take responsibility and be leaders was an important aspect related to the practice of QMS, as the findings suggested. QMS practices could not be applied if staff were not empowered to lead. The power of leadership can be given to the staff through responsibilities and trust, while for patients it can be given by making them responsible for monitoring the level of service quality. According to the findings from the questionnaire, patients were empowered to report any problem with the quality of the services directly to the MoH, who have a specific department for complaints. The questionnaire findings concluded that the majority of the patients felt satisfied that healthcare workers listened to their complaints, as the overall mean value was 3.56 with a standard deviation (SD) of 1.18. Also, in the interviews, it was mentioned by several heads that the survey method of assessing patients' satisfaction and complaints has been used to improve the quality of services. In the open question of the questionnaire, one of the comments made was:

"They [patients] are the ones who are using the services and checking the quality should be their job." Nurse 6

According to the above comment, patient satisfaction is the most important measurement because patients are the end users of the services in general hospitals, and hospitals were created to serve them to achieve equality of access to care, which is the core of QMS. According to AlAbri and Al-Balushi (2014), the use of a patient satisfaction questionnaire is not only a tool to improve the quality of healthcare services but can also elicit further details to assess the services more deeply. In addition, although patient satisfaction surveys offer significant information that can help create healthcare quality improvement plans, the available information has not been systematically and extensively utilised for creating strategic quality plans (Al-Abri & AlBalushi, 2014).

Importantly, the findings from the nurses in the questionnaires and heads in the interviews stressed the link between improving quality, patient safety, and patient satisfaction. Head F explained that:

"Yes, especially recently, there has been great quality care." Head F

This comment from Head F echoes the recent announcement of King Salman bin Abdulaziz to enforce his new vision for 2030, which is to improve the quality of the services provided by the

public sector in Saudi Arabia and, more specifically, general hospitals (Kinninmont, 2017). The reformation also focused on sustainable development goals whereby health issues occupied the centre stage of the discussion (Yamey et al., 2014).

The agenda also stressed the achievement of high-quality services, and safety is the key theme to be covered (Lee et al., 2016). Conspicuously, Vision 2030 links stakeholders involved in healthcare. In fact, Head C explained that in the last version of CBAHI, more attention was paid to the matter of safety, and it was linked to the matter of quality. Indeed, the new trend of CBAHI runs parallel with the universal trend: focusing on patient safety to enhance the quality of healthcare organisations (Shaikh, 2017). The best example to explain this perspective is the insight offered by Head D, who was not able to contribute his opinion when asked what the strategy to support the culture of patient safety would include. In fact, his response directed the researcher to the patient safety section, which may indicate that his vision towards patient safety is limited to that section of the hospital. The position from Head D may reflect a lack of engagement. It has been explained by Jiang et al. (2013) that for hospitals to achieve sustainable improvement to the quality of their services, managers need to be fully engaged in developing the general vision of the hospital in order to be able to contribute to the establishment of an functional QMS.

The findings from the questionnaires and the interviews as well as the literature suggest that there are different implications of the first question of this research on the implementation of QMS and its practices on the quality of care in general hospitals. The first is on the current policy development in general, as more attention should be paid to producing a strategic vision and policy that concerns the department's needs and the management's expectations. Second, CBAHI, as an agency set up to support quality control in hospitals, should restructure the relationship with hospitals and negotiate better representation of the MoH in regard to the role CBAHI is willing to play in developing standardisations that meet the contextual needs of general hospitals. Indeed, staff should be given the power to make decisions regarding the quality of the services. Importantly, staff need to be more aware of their potential in leading quality practice to improve the quality of the services in their hospitals. The findings of this research may shed light on the level of staff engagement and commitment. However, further research studies should be conducted to address the connection between staff engagement and commitment and the successful implementation of QMS in healthcare organisations.

6.3. Question Two: What challenges are identified as hindrances to the successful implementation of QMS in KSA general hospitals?

The previous section addressed the role of senior management in Saudi general hospitals in relation to the practice of QMS. Nevertheless, the findings of the interviews and questionnaires suggest that there are different challenges that could hinder the implementation of a quality management system in Saudi general hospitals. These challenges are outlined below.

6.3.1. Lack of understanding of the concept of quality

There is a lack of comprehensive understanding of what the concept of quality is in the context of general hospitals when the matter of QMS and its practices is addressed. This statement is proven by the findings from the questionnaire, as one of the nurses asked:

"What do you mean by quality care?" Nurse 5

The comments from Nurse 5 may indicate that he or she is either unsure of what quality care represents or adding the term 'quality' to 'care' made the concept complicated and unexplainable. The question from the nurse echoes the debate provided in Chapter Two, when the researcher argued that the concept of quality until now seemed unclear due to the fact that it was driven from outside the healthcare context. However, when we think about Florence Nightingale's and Donabedian's effort to develop the practice, the concept of quality of care or quality care brings immediately to mind the principle of saving patients' lives. Indeed, as argued by Ferrer et al. (2018), in the Saudi context public healthcare services are suffering from a lack of clear understanding of the concept of quality and this, in turn, influences performance. Earlier, in Section 6.2.1, it was explained that developing QMS policy is important to create a holistic understanding of quality in general hospitals. Hence, the aim of introducing policy is not only to control the quality, but also to create an understanding of the concept of quality that will help develop practices and improve general performance. In this research, there was a suggestion that understanding the concept of quality and its practice in general hospitals also has an influence on the establishment of a patient safety culture, bearing in mind that quality of care and patient safety are main conceptions related to QMS and its practices (To Err is Human Report: Kohn et al., 2000).

In Chapter Two it was explained that the development of the concept of quality care followed by QMS was a result of the changes in the perspectives of healthcare organisations towards patients as end users of healthcare services. According to Desmedt et al. (2018), there is a significant indication that the matter of examining the concept of patient safety in healthcare organisations

has been linked in many studies to research concerning QM and QMS. In fact, Dixon-Woods et al. (2014) demonstrated that little progression has taken place in terms of embedding safer practice, technology and changing culture, which could also be linked to lack of clarity of how safe culture can be embedded and what safe culture would mean. Relatively, Bell et al. (2016) concluded that the quality of health services would not be improved without embedding a safe and reliable patient care culture supported by managers who understand how different aspects of organisational culture can have influence on the general implementation of the strategic vision of the organisation. Comparing this to the findings of the current research, patient safety was seen as the heart of QMS, and it is fundamental to assure not only the quality of the services, but also management's capability to sustain the services. But, with the current level of understanding of the meaning of quality, it seems a challenge to claim that any practice related to QMS is centralised around patients' safety. In addition, lack of clarity of what the concept of quality would mean and how it could be linked to patient safety should be addressed and dealt with to ensure that the King's vision in relation to enhancing the quality of general hospitals is implemented (Ferrer et al., 2018).

6.3.2. Power relations within hospital organisational culture

According to the findings, management in general hospitals should work collaboratively with staff to identify different aspects of organisational culture, such as management and leadership, that could hinder the successful implementation of QMS in Saudi general hospitals. In the literature, a considerable number of studies have made links between the matter of improving the quality of healthcare services and the organisational culture when the issue of organisational culture is discussed. As argued by Hignett et al. (2018), organisational culture has always been a challenge for healthcare organisations; the authors refer to the complexity of the organisations and to the human element which resists change.

Power relations controlled by the hierarchical structure of hospitals is one of the challenges identified by this research. In fact, in this research some of the heads seemed aware that the power relation of the management system has influenced the role of different shareholders and their capability to lead quality improvement initiatives. For example, Head F seemed, with the level of power given to him to lead, to link the lack of power to the current culture in the general hospital that does not empower heads to take the lead. This matter was also highlighted earlier in Section 6.2, when the role of the general hospital management was discussed regarding the responsibility to prepare an environment that supports QMS implementation and its practices. On that, research by Al Khamisi et al. (2018) showed that the highly hierarchically structured

environment in public healthcare organisations in Oman – which is culturally and contextually very similar to the KSA – has been a considerable challenge that hinders improving QMS. According to the findings, the hierarchical structure culture led staff believe that heads and other managers in power are the only ones responsible for assuring and improving the quality. In fact, Head E was able to identify the power of the hierarchy in the hospital in controlling the ability to take the lead to enhance quality management. He said:

"It is not that simple, it is rather more complicated. In a large hospital like ours, the whole culture of the place will either empower you [as a manager] to take the lead to enhance the quality or the culture of the place is careless." Head E

Khamisi et al. (2018) and the opinions of the heads agree with the opinions offered by the staff, as Nurse 6 sensed the nature of the power relation network established in the hospital and also who holds the power and authority to make decisions that could influence the level of quality in general. Head F identified the hierarchical structure of the hospital as an aspect of organisational culture that constrains the power of enhancing QMS practices and leaves decision making to the top, while the rest of the stakeholders are depowered. For the National Health Service (NHS) in the UK to improve the quality of healthcare services, there is a need to understand the nature of the professional network and their involvement in improving the quality management in healthcare organisations (Hignett et al., 2018). Hignett et al. (2018) also point out that one of the most common aspects that disempowers middle managers is the activities required to assure quality improvement.

6.3.3. Style of management

Management is the mind that drives the general hospital to meet its purposes and achieve its aim. Hence, the style of management also influences the way in which different stakeholders conduct their duties. The bureaucratic style of management in general hospitals is considered to be one of the main challenges identified by some of the participants and appeared to hinder the implementation of QMS and its practices. Head F referred to that bureaucratic style of management, as he said:

"Bureaucracy in getting things done is in this hospital. When we need anything in this unit, it has to go through different offices, and this will cause the delay when it is highly needed." Head F

According to the above comment, bureaucracy is responsible for delays and if we link this into the definition of quality provided by AHRQ (2008) as 'doing the right thing at the right time', then bureaucracy, in this sense, will apparently be a cause of poorer quality. Indeed, the delay in making the decision may cost hospital resources and people's lives (Bogers et al., 2005; Hignett et al., 2018).

According to Head E, bureaucracy is even more challenging in large hospitals due to exacerbating complications and the complexity of making decisions. McFarland et al. (2017) suggested that there is a positive correlation between the size of the hospital and the level of patient satisfaction, as larger hospitals recorded fewer scores in regard to hygiene standards, communication with professionals, and time needed to respond to patient enquiries. Hence, in large hospitals more attention should be paid to the type of management style chosen to lead the hospital in order to not influence the rest of the organisational performance and service quality levels.

Indeed, as explained in Section 6.2.1, although the nurses were aware of development policy, it seemed that they meant the departmental policy rather than the general policy of the hospital. This is not an assumption, as when asked about the policy related to patient safety as one of the concepts related to QMS, Head D referred the researcher to another department as he said he cannot comment, as he should adhere to the power structure – indicating the power of the bureaucracy of the system. Hofstede (2003) explained, using the theory of culture, why individuals respond to the power of hierarchy the way they do. Hofstede (2003) shaped the relationship among individuals in organisations on the different distances in the power. In societies such as Saudi society, where power is controlled by the King at the top of the hierarchy, the distance of power can also be linked to another dimension recognised by Hofstede (1991), which is the power of individualism vs. collectivism.

In Saudi general hospitals, the power distance and individual collectivist values are intertwined because of the nature of Saudi society, which tends to be more collectivist, whereas the opposite is true of individualistic societies. In individualist cultures like the Western culture, the idea of quality could be more individual rather than collectivist in nature. This claim is supported by the opinion of Furrer et al. (2000) – that people in individualistic societies consider reliability, responsiveness, and tangibility to be important. Those elements are related to productivity and quality. Hence, there is no need to ensure or require service provider empathy, because empathy is negatively correlated with individualism. Individuals from collectivist societies assume that reliability, responsiveness, and tangibility are not as crucial to patients as reassurance and empathy (Donthu & Yoo, 1998), which could lead to misunderstanding or unequal commitment

to practicing QMS. Conversely, as explained in Section 6.2.3, staff can be empowered to take the lead and contribute more towards enhancing the quality of services. However, the findings also suggest that some of the participants who submitted to the power inherited by the hierarchical structure of the hospital had peace of mind that they do not have to be involved in setting the strategy.

6.3.4. Lack of up-to-date training

When reviewing the dimension of training and skills, the results from the questionnaire demonstrated positive views (agreements and perceptions); this was reflected by higher agreement scores than disagreement across items (M=3.28), and in particular many nurses agreed that management is committed to quality management training. On the other hand, there was a sizable proportion of nurses who were unsatisfied (disagreed) with the content of training. As for extensive specific assets (M=2.96), the results reflect sizable disagreements across all items, particularly nurses who disagree that there are enough nurses in hospitals.

The issue of training and the need for further education programmes was also addressed by a number of heads during the interviews. Although different educational and training programmes have been designed and delivered by the hospital management to inspire professionals to upgrade their competencies with new skills, a few heads and nurses are concerned that the current training programmes provided are insufficient to enable staff to meet the requirements of implementing QMS and its practices. This can be referred to the traditional style of managing hospitals, as training is imposed on staff rather than designed upon their needs. This could also be related to a lack of awareness of the staff's level of skills, as there was evidence from the patients' questionnaire that clinical skills are critical. Referring back to Nurse 12's thought that no type of traditional training would do the job, the nurse suggested that staff in Saudi general hospitals are in need of culturally relevant training to enhance awareness of what mistakes are supposed to mean, and how to learn from them. The nurse insisted that in Saudi culture it is a challenge for someone to admit their mistakes and to deal with the outcome and consequences.

In Saudi culture, people want to appear perfect to others; in other words, people are highly concerned with their self-image, and they want – or pretend to have – the best skills, even if they do not hold the skills needed to achieve perfection. That is why admitting errors is critical practice and requires a supportive system that respects people make mistakes. In the literature, cultural competency for healthcare professionals became a concern for new research studies (Clifford et al., 2017). Providing professionals in the healthcare sector with cultural training is

important to support them with the required skills to provide better quality healthcare and to create a culture of patient safety. Developing cultural training for healthcare professionals is important for improving their knowledge, attitudes, skills, and for enhancing patient satisfaction (Chiodo et al., 2014). Similarly, to Clifford et al.'s (2017) findings, some of the participants of this research agreed that the problem is not with the quantity of training programmes offered to health professionals, but with the quality and modernity of the programmes.

Head D explained that directorship has given the green light for further training, but the challenge is that the response to patient safety has been to provide behaviourist training. This is also in agreement with Hignett et al. (2018), who suggest that different types of training should be offered to health professionals that include cultural and behaviourist training, where not only the practical skills of the staff will be improved but also their understanding of their role and different methods of engagement.

6.3.5. Lack of reward and recognition system

As for reward and recognition, the nurses' questionnaire demonstrated much disagreement reflecting poor reward and recognition practices (M=2.73). There was high disagreement that performance reward for being the best worker is fair and square. However, a few nurses agreed that they are satisfied with their salaries. From the interviews, Head A emphasised the importance of setting up a strategic reward system to enhance staff engagement and commitment towards better quality improvement. Abduljawad and Al-Assaf (2011) found that the issue of the lack of recognition and reward is still an ongoing issue that could influence staff engagement in terms of improving quality. Their suggestion is to ensure that there is a variety of incentive programmes and options available for each type of programme. The challenge for health organisations is to select a programme that can be customised, well-focused on the needs of the staff, and fits with the health organisation's culture.

The lack of reward and recognition has also been linked to a lack of communication and support from the human resources department of the MoH in KSA. As previously mentioned, being under the umbrella of the MoH, further funds and financial support have been requested by the head of the professional development department to maintain the needs of Saudi general hospitals including training, education, and reward systems. Increasing funding and financial support for general hospitals will give the hospital management further space to build a more functional reward and recognition system to empower staff and to reward those who make the effort to improve service quality. Chukwudozie (2015) stressed that the financial support provided by governments for public health services including general hospitals is a core necessity to ensure the sustainable improvement of healthcare service delivery. Nevertheless, one of the main challenges is inequality in terms of accessing financial resources. For example, the quality of public health services in China has been influenced by the general socioeconomic moods of the political system and inequality in terms of distributing financial resources (Chen et al., 2018). In the Saudi context, the matter of inequality is identified by many nurses and heads within the current study. Head A suggested that equality in distributing resources and providing support is key to ensuring that all general hospitals in the KSA improve. This will only happen when resources are given fairly according to needs and mainstream large hospitals are not given disproportionate funding. The findings of this research suggest that there is not only a lack of resources, as revealed in the questionnaire, but there is also the matter of inequality that could reduce the possibility of improving the entire public health sector.

6.4. Question Three: What changes do general hospital management teams need to consider supporting the successful implementation of QMS and its practices?

The previous section discussed the challenges hindering the development of QMS and its practices. To overcome these challenges, there are several changes that must be promoted to support the implementation of QMS and its practices. The following sections address these changes.

6.4.1. Change the culture from blaming to learning

It was discussed in Section 6.3.1 that developing a culture of quality that suits the implementation of QMS and its practices requires centralising patients, as they are the end users of the healthcare services. Hence, according to the findings from the interview, some of the participants suggested creating a culture of learning from mistakes which, in turn, will help the staff, as explained by Head C:

"Learning from mistakes makes us better in identifying the meanings of patient safety culture." Head C

Clearly, Head C is aware that further explanation and understanding of the culture of patient safety is needed in his context, and that understanding cannot be developed without learning from mistakes. According to the questionnaire findings, nurses were not happy with their training and patients were not satisfied with the clinical skills of the practitioners, which means putting the lives of patients at risk. Hignett et al. (2018) responded to this and added that one of

the major challenges facing healthcare organisations in the UK and reduces their capabilities to establish a safety culture is blaming people for their mistakes instead of learning from them. The study carried out in the UK proposed similar concerns, indicating that the matter of QMS is not only about the context but also about the culture of the hospital and the attitudes of the staff towards change and learning. Indeed, all of this should happen for the purpose of serving the patients' needs.

In fact, Head G identified the correlation between establishing a culture of learning and creating a safety culture for patients, as he said:

"If you want to establish a strong patient safety culture, you need to admit your mistakes and learn from them. Without establishing a strong culture of learning from mistakes you would not have patient safety ... simple equation." Head G

Hence, it is a requirement to set a culture of learning but establishing such culture would not be possible without admitting and recording mistakes. A few studies have recorded three salient cultural elements that have direct relationships with medical errors: interdisciplinary action team culture, disciplinary culture, and learning culture (Khatri et al., 2009). While interdisciplinary action team culture and disciplinary culture suggest a threat to collecting information, learning culture encourages individuals in the organisation to share and record information (Chuang et al., 2007). But, for creating a culture of learning there is a need to establish a micro interdisciplinary team culture, where team working and collaboration to solve problems is required.

Practising professional responsibility to accurately record whistle blowing and ensure anonymity is a critical issue identified by the interview participants in the current research, who wanted to feel safe reporting and recording information about mistakes that have happened during practice. As explained by some of the participants, feeling insecure and fear of the negative consequences of reporting mistakes prevent staff from sharing their experiences. The role of leadership is hypothesised to impact the three constructs. In a highly hierarchical organisational culture, staff are less likely to report their errors, therefore it is suggested that leadership among different professional groups could be used to help create a culture where employees feel safe (Kim and Newby-Bennet, 2012). Schein (2016) stressed that positive empowerment from the leadership is expected to impact on employees' behaviour and lead to change. In this research, the impact of leadership on staff empowerment to lead quality improvement has been identified. However, the participants of this study did not recognise leadership as an enabler for embedding a culture of learning from mistakes. Nevertheless, the participants of this research suggested the use of

technology to create a safe platform for staff to share the lessons they have learned from the errors that occurred during practice, as Head F said:

"Technology today offers many solutions to report the mistakes without even a need to provide the name. The purpose of reporting the mistake should not be announcing who made the mistake, but what happened and led to the mistake." Head F

Sharing experiences and reporting mistakes could be achieved through the use of technology and, as Head F suggested, there are various solutions available to hospitals to select from depending on which best suits the hospital's needs. According to McCormick et al. (2012), the challenge is not in adopting the available technology, but rather with staff who may not understand the potential of using the technology to record and share errors. They add that for the use of information technology in the health sector and to positively progress with patient safety in a precise manner by learning from errors, staff in the healthcare sector should not respond to errors using disconcerting reports with denials and defensiveness; rather, they should see it as a way to improve their practice.

According to Nurse 12, it is a cultural barrier that prevents professionals from reporting the errors that happen during practice. Nurse 12 thinks that the Saudi culture is perfectionist in nature, wherein individuals will be shamed if they make a mistake. Hence, people tend to hide their mistakes and avoid sharing or admitting them because they fear the consequences of sharing, both for their image and for their chances of promotion to a better position. Nevertheless, the comment from Nurse 12 echoes recent research studies such as Waring et al. (2015) and Zabari and Southern (2018), suggesting that the failure to achieve noticeable progression in establishing an error reporting culture is likely due to the limitations of the perspectives through which safety culture should be studied, which does not acknowledge significant social, cultural and political factors. Feelings of guilt and shame are very much related to a person's self-image within the KSA and respect, and as explained by De Hooge et al. (2011), this kind of feeling becomes stronger among staff who perceive that their organisational culture is too risky to maintain their self-image. Hence, although this research finding is not new to the literature and has been acknowledged by other researchers (Lynne et al., 2018; Waring et al., 2015), it is a testament to the perseverance of the culture of shame that is rooted in feeling perfect.

6.3.2. Use of technological tools to support change and QMS implementation

One of the heads went to the extent of suggesting a reward system to acknowledge staff who use the technology to share their experiences, explaining how they have learned from their mistakes. Wallace et al. (2017) used a type of technology called the 'Good Catch' programme and showed that it can help hospitals to set a culture of learning from errors to improve patient safety. The use of technology can be useful to reduce the pressure on staff from sharing face to face. They can even use pseudonyms to share their experience as the aim should not be to expose them, but rather to record the lesson and learn from it. According to Wallace et al. (2017), the benefit of using Good Catch helps increase occurrence up to 100 times more frequently than serious events. This is understandable, because as more lessons are recorded, fewer errors take place. In relation to this research, participants seemed to be challenged by a culture that does not justify the errors happening during practice. But the reality is that staff are humans and are all likely to make mistakes at some point. Hence, for assuring that quality improvement is sustainable, changing the way of thinking about errors is needed. Indeed, as the literature suggests, technological solutions can be utilised that could help break down the barriers and improve practice.

In light of the findings of this research, establishing a culture of learning from errors or mistakes to improve the chances of creating a culture of patient safety and a connection that improves the quality management system is a fundamental move for today's healthcare organisations. This can be achieved by increasing staff awareness of the importance of learning and encouraging them to share. To setting the culture of learning, staff need to feel respected, secure, and their self-image protected when they report or share an error. This could be achieved through controlling the negativity in the culture and reducing the effect of the culture of shame and enhancing the sense that no one is perfect. The findings of this research agree with the findings of other research studies (as previously explained) in terms of suggesting the use of technology to report and share errors. Additionally, this research considered the role of management in advocating the culture of learning. The findings suggest that useful management focuses on learning from mistakes and helping staff to do their best, and that traditional methods of managing today's healthcare organisations would fail to meet the need to develop a new type of culture that considers reporting errors as a positive pathway to quality improvement.

6.3.3. Centralising patient safety

The matter of patient safety is one of the issues that has been consistently mentioned across all the questionnaires and semi-structured interviews. According to Head E, the matter of patient safety goes beyond measuring and assessing patient satisfaction to be a culture of practice. For that, safety is not a personal matter; rather, it is organisational matter that is not limited to one department or group of practitioners as expressed earlier by Head F, who thought that patient safety is limited to the department that is set to serve this purpose.

In the literature it is found that promoting this change requires the management team first to extend their limited understanding of safety to a more holistic and comparative understanding. It is agreed by Fursh et al. (2018) that lack of competency among management lines to perform change management needed to centralise the concept of patient safety can negatively influence the general performance of the healthcare organisation and lead to a reduction in the level of quality, thus putting patient safety at risk. They added that clinical department heads and frontline staff may not be familiar with the change management competencies because the organisational culture is not conducive to driving or empowering such training and practices. This argument brings back to light the need to change the culture and management style to pave the way for introducing new changes and a new central value of patient safety.

It has been suggested that the use of technology can prepare hospital staff for change in the current practice that did not lead to improvements in the quality of services (Fursh et al., 2018). Comparing this with the findings of this research, the participants suggested the use of different tools to help hospital management perform better assessments of patient safety, and as a method to enhance staff's understanding of the requirements of establishing a culture of patient safety in the studied hospital.

The use of different instruments to assess the quality of care and the promotion of patient safety culture has been the concern of a considerable body of research (Bridie et al., 2018; Hsieh et al., 2016; Tejedor et al., 2013). But, a recent study by McCarthy et al. (2018) suggested the use of technology called 'Electronic Nursing Documentation Interventions' as a tool that could intervene to improve quality care and patient safety. The outcomes of their research suggest that such a tool could be useful to assess the promotion of patient safety and quality care. This argument in the literature suggests that technology can be used not only as a method to improve quality, but also to centralise the patient – and this can, at the same time, improve the trust and bond among the management team and practitioners.

Comparing this to the current research findings, although some of the participants suggested the use of different technologies as tools to perform assessments of the promotion of patient safety, some of the participants, such as Head C, still believe that centralising the patient happens when patients see that managers are physically visiting the departments and checking service quality. The method of observation to assess patient safety is suggested by Lindfiled et al. (2015) as an affordable method to complete the assessment in low income countries. However, the researchers conditioned the valuable use of the method by the development of a set of 20 codes gathered under four themes that described patient safety in these settings. The themes were team, the environment, patient-centred care, and the process. Noticeably, those themes varied from one context to another. Hence, further research should be carried out to assess the effectiveness of such a tool and to identify further, similar, or alternative themes in a Saudi context. In fact, the physical visit can be a powerful tool, especially for patients who cannot see what the technology could offer. This brings into the argument that the responsibility for creating the culture of quality and implementing QMS and its practices is holistic, and every stakeholder in the hospital is accountable to improve the quality of care. Upon this argument and discussion, the building of a framework that contains all of the issues that matter is proposed in the following section.

6.5. Proposition of the QMS strategic framework

The idea of proposing a framework is the ultimate objective of this research, but at the same time, it is important to compare the findings to the existing literature. Relatively, the current literature of QMS offers a variety of models and frameworks, but as explained in Chapter Two, each framework has its purpose.

6.5.1. QMS strategic framework

The QMS strategic framework is the framework that fits together the issues and factors that general hospitals need to address to be able to improve the quality of QMS and its practices. Indeed, it is beyond the interests of the researcher to generalise the framework or to claim perfection. important to be reminded that the findings of this research agreed, to a significant extent,

Upon the above argument in previous Sections 6.2, 6.3 and 6.4, it has been suggested that the MoH and senior management in Saudi general hospitals hold the main responsibility towards assuring that the requirements to improve QMS practices are met. Indeed, heads of department should be involved as well as nurses in developing the strategic vision. Patient feedback is vital to direct the internal stakeholders of the hospital to the needs and expectations of the end users of

the services. According to the discussion, patients are the core of the hospital but at the same time, they are main players not only in assessing quality, but in giving their feedback and opinions and in engaging with quality-related decision making. Upon this, there are six main actors:

- 1. MoH (top management).
- 2. CBAHI (support agency).
- 3. The directorship of the hospitals (Senior management).
- 4. Middle managers (heads of the department).
- 5. Nurses (practitioners).
- 6. Patients.

While the requirements are:

- 1. Creating a culture of learning from mistakes.
- 2. Centralising patient safety.
- 3. Supporting a culture of quality.
- 4. Using technology to enhance levels of communication and sharing.
- 5. Improving the sense of leadership among nurse and middle managers.
- 6. Using different assessment and evaluations' tools to improve patient involvement and feedback.
- 7. Changing the current style of management.

Upon the discussion, several challenges were identified and seemed to hinder the effectiveness of QMS practices. These are:

- 1. The rigidity of the structure of the hospital.
- 2. Lack of up-to-date professional training.
- 3. Lack of a reward and recognition system.
- 4. Lack of funding and financial resources.
- 5. Lack of a holistic strategic vision.
- 6. Lack of understanding of the holistic meaning of a culture of quality in healthcare.
- 7. Lack of understanding of the matter of accessibility and equality Figure (25.).



Figure 25. Quality Management Strategic Framework

As can be seen from Figure (25.), the components of the framework represent the outcomes of the research from the nurses' and patients' questionnaires and the semi-structured interviews with middle managers, as well as the literature. Now, linking the components of the framework to the Six Sigma model, concentrated into four components in this research (Section 2.4.2.1), it can be said that the different stakeholders – the MoH and CBAHI at the top, senior hospital management (directorship), heads of department (middle management), nurses in the hospital, and patients from outside the hospital – should work together to support the development of a quality policy. Accessibility in general hospitals should be monitored through patients, who can provide feedback on the services and whose satisfaction levels can be assessed. Patients are central to the service provided by general hospitals, and therefore services must be developed with the patient in mind as the end user.

Indeed, patient safety is centralised as a core value to develop the implementation of QMS in general hospitals. This can be achieved through establishing a culture of learning from mistakes because it is a culture that save lives – which is the ethos of the general hospital. Effectiveness and efficiency should be approached through up-to-date training along with the involvement of CBAHI to help with standardisation training. CBAHI, as a supporting agency, should work to develop the policy rather than just monitoring the compliance of the hospitals to the standardisations, as standards should be developed from the practices of nurses and middle managers and then formulated by experts to assure and control the practices to ensure quality. Indeed, tools supported by either technology or physical assessment can be used for evaluation and assessment. The framework also included the issues raised by the questionnaire such as the need to establish a reward and recognition system that keeps staff motivated to contribute to policy development, and the establishment of a quality and equality culture. Staff must also be encouraged to share their mistakes so that a culture of learning from mistakes can be well established. In addition, the training should be able to help improve patient satisfaction and staff engagement in the implementation of QMS and its practices in general hospitals in KSA. An important challenge was highlighted with regards to the nurses', middle managers' and patients' understanding of the issue of accessibility. As explained in Chapter One (1.6) and Two (2.4.2.1.1), Wasta - nepotism - has an influence on equality as favouritism reduces the ability of all patients to receive fair, unbiased treatment and accessibility to services.

The current challenge for supporting the implementation of QMS in general hospitals in KSA is the style of management, where the power of leadership and management is centralised at the top levels of management. In addition, there is a need to improve the stakeholders'

understanding of the meaning of the concept of quality. The current findings suggest that there is inadequate support or funding; hence, funding bodies and decision makers involved in the healthcare system should be looking again at the current resources and making the best use of them to ensure that the implementation of QMS and its practices is not challenged. In addition, any policy that is not up to standard requires the cooperation of all stakeholders to fill the gap instead of keeping the system of the hospitals running on orally communicated policy. General hospitals in KSA have the chance to start developing micro-policies at the departmental level with a view to achieving a more holistic policy that serves the whole healthcare system.

Regarding the implications of the framework and its aim to mainly serve the purpose of the implementation of QMS and its practices in general hospitals in KSA, the first implication concerns the approach adopted by decision makers to create a holistic quality policy, whereby different stakeholders including patients are involved in policy development. The second implication concerns the patients' engagement in controlling and improving quality. Previous research studies (see Chapter Two) have addressed the role patients can play in developing the QMS and its practices through their feedback and as well as the outcomes. However, this research suggests that patients are a main player in the building of policy and culture where the patient is centralised. An important implication of this research is the training provided to nurses and middle managers, where further emphasis should be placed on more up-to-date training and CBAHI standardisation training. Finally, the framework should represent CBAHI differently, improving the traditional image of CBAHI from merely an accreditation agency into a quality system control and quality development agency.

6.6. Limitations of the research

This research has different limitations that influence the ability to generalise the findings and the insights emerging from it. The research involved three different stakeholders (patients, nurses, and heads of department), but it did not involve upper management decision makers, hospital directors, and CBAHI principles, despite this research having a direct impact on them. This can be seen as a limitation because the study did not investigate their opinions, yet hospitals' top and senior management are in charge of making decisions regarding QMS and policies related to its practices. Indeed, this research offers some significant insights in relation to the upper management and MoH decision makers involved in developing the strategic vision of general hospitals to be more quality centred. This study was conducted in the Saudi general hospital context in three different districts, mainly because residents of these areas now constitute a large percentage of the country's population and as the participants were purposely selected. Therefore, the findings of this research may not necessarily represent the diverse population of Saudi general hospitals' stakeholders. However, since there is a suggestion in very recent research (Ferrer et al., 2018) that public healthcare hospitals face many challenges in relation to the level of service quality, the findings of this research emphasised some of those challenges which suggests the possibility for generalisability. However, it is still important to mention that further research is recommended to cover general hospitals in the rural districts of the country (see Chapter Seven).

Additionally, a few pragmatic agreements were exercised in the research during the data collection stage. For instance, the researcher had to use his personal contacts to be able to access some of the heads of department. This is limitation because it introduces the possibility that the selected participants may not have provided the most valuable information; however, the insights provided by the participants were useful to make sense of the practice of quality management. In addition, as noted in Chapter Three, the nurses' and patients' questionnaire items may have contained unintentional biases in the way they were worded, and this may have led participants to answer in a certain way.

Another limitation is related to the critical challenge of the interview guide (see Appendix 6) in relation to the language used to collect the data. The native language in Saudi Arabia is often the local dialect of Arabic, whereas within the Saudi healthcare system, English is the professional language. However, the interviewer who happened to be the researcher was a native Arabic speaker and the interviewees were all Arabic speakers, and therefore the interviews were conducted in Arabic. The language barrier did not create any challenges at this stage; however this was different in the case of the quantitative study in which the questionnaire was written in English. To mitigate this challenge, the researcher was readily available to explain the contents of the questionnaires to the respondents.

This research led to initiating a QMS strategic framework. However, a lack of time and the complexity of completing the required ethical approval to perform further investigation limited the validity of the framework. It is recommended, therefore, that the suggested framework is limited to its context and the findings of this research.

The English written literature seemed more advanced in understanding the issue of quality and extending it beyond a management issue to become a holistic organisational matter. Some voices complained that the standardised questionnaires to assess the quality of the services and the culture of patient safety are not locally developed. Liu et al. (2014) suggest customising the questionnaires to meet the local contextual and cultural requirements of the studied context. The limitation of this is related to the discourse used and the clarity, reflection of the words, and connections of the terms to practice. This suggestion is re-emphasised in this research, as are further requests to evaluate the suitability of the current questionnaire in meeting the local needs of Saudi healthcare organisations. This, in turn, may influence the quality of the data collected via the questionnaire, although a pilot study of the translated questionnaire was conducted before completing the actual questionnaire.

6.7. Chapter summary

Building a quality management system to ensure that the Saudi Arabian public healthcare system meets the demands of international standards and control, and to prevent negative healthcare practices, may be an available choice to overcome the challenges experienced by Saudi general hospitals in terms of low quality and performance. Accordingly, regardless of the different attempts that have been made by the Saudi government to propose different solutions, including inspection and accreditation agencies (such as. CBAHI), the findings of this research suggest that the current quality system that exists in Saudi general hospitals lacks the necessary cultural, human, and financial resources to achieve what can be called a quality health system for patients. In fact, the findings suggest that there is a lack of holistic understanding of the concept of quality and how it can be practised in general hospitals to maintain services of a high standard. Moving towards reforming practices brings to light the significant question of whether Saudi general hospitals require the promotion of changes in their current practices to offer better quality services, and to advocate a culture of patient safety that is suggested to have an immediate impact on the level of quality in healthcare organisations. Approaching such questions requires carrying out an empirical investigation of the overall aim of the study as well as reviewing the research questions and addressing the approach used to respond to them. Indeed, offering a list of recommendations is the core aim of the next chapter, which will summarise the answers to the research questions and revisit the main objectives and findings.
Chapter Seven: Summary, Conclusions and Recommendations

7.1. Introduction

This chapter summarises the main issues arising from this research and revisits the research objectives identified in Chapter One and highlights how they have been approached. This is followed by a set of recommendations for policy makers in the MoH and the directorship in general hospitals in KSA, based on the implications of the findings presented and discussed in Chapters 4, 5, and 6. The chapter provides the strengths of this research, followed by the contributions to the knowledge. Section 7.3.3 offers suggestions for further studies and the research overall.

7.2. Review of the research objectives

Examining the perceptions of key stakeholders – namely patients, nurses, and heads of department – in relation to current quality management systems and their practices in general hospitals in the Kingdom of Saudi Arabia was necessary. To accomplish the aim identified in this study, the overarching objectives were:

- To explore the meaning of the concept of QMS, and its practices, in general hospitals in KSA.
- 2. To identify the possible elements needed for implementing quality healthcare provision in general hospitals in KSA from the perspectives of healthcare providers (middle-level managers, heads of department, nurses) and patients.
- 3. To explore the role CBAHI plays in accrediting quality practices in general hospitals and the possible challenges and barriers that hinder the application of QMS.
- 4. To develop a framework for QM systems in general hospitals in KSA based on a practical and detailed understanding of the current situation and experiences of key stakeholders.

The first objective was to explore the meaning of the concept of QMS and its practices in Saudi general hospitals. This objective was approached through assessing the awareness of nurses and patients towards the existence of practices that could be related to QMS implementation. The outcomes suggested that although nurses and patients identified the correlation between the notion of quality care and the core values of QMS, there was a lack of understanding of the meaning of quality and the concept of QMS. In addition, this objective was addressed in the semi-structured interviews conducted with seven middle managers in one Saudi general hospital. The interviews allowed the emergence of some factors perceived to

relate to creating the meaning of QMS in practice, such as the need for a holistic understanding of the culture of quality to assure that the concept of QMS is understood and that every stakeholder in the hospital, including the patient, holds a responsibility in transferring the concept to organisational concept that allows hospitals achieve stability, but also sustainability and development. It is clear that this research agrees to a large extent with recent research in the area of QMS in healthcare services in KSA. Indeed, the challenges identified by this research inform that the current status of QMS application in KSA general hospitals is critical, and immediate action is required to meet the demand of the new Vision 2030.

The second and third objectives were to identify the possible elements needed for implementing quality healthcare provision in general hospitals in the KSA from the perspectives of healthcare providers (middle managers and nurses) and patients, and to address the role CBAHI played in controlling the quality practices in general hospitals in KSA.

The first objective was achieved through two phases of the research (quantitative and qualitative phases). In the first phase, 252 questionnaires were distributed to nurses, and 237 questionnaires were distributed to patients. In the second phase, seven semi-structured interviews were conducted with heads of department in one of the general hospitals under investigation.

During the first phase, general quantitative data about different issues related to quality was assessed. The results of the patients' questionnaire suggested that although patients were satisfied with the information provided to them and the level of communication, they demonstrated a lack of satisfaction in relation to staff clinical skills, family involvement, as well as the current level of caring. Conversely, nurses claimed to understand the healthcare policy and that their hospitals achieved the required level of QM. But at the same time, the outcomes from the questionnaire revealed that nurses complained about a lack of education, training, culture of learning and a poor recognition and reward system. It can be argued that if the successful implementation of QMS requires assuring that quality of care for patients is secured, then the outcomes of the patients' questionnaire suggest that staff did not meet patients' expectations in regard to not only the level of care, but also the level of clinical skills (practice). In fact, on some occasions in the questionnaire, several nurses demonstrated a lack of understanding of CBAHI standardisations.

Noticeably, the findings from the interviews agreed to a limited extent with and support the questionnaires with three different sets of themes (global, organising, and basic themes), which represent the role of hospital middle management in quality assurance and the important influence of different organisational cultural aspects such as structure, policy, and management style on shaping the role and responsibilities of the management in establishing a culture of quality. In addition, the findings of the interviews helped illuminate the role CBAHI has played in supporting hospitals' mission to set a QMS that responds to patients' needs. The outcome of the interviews revealed that although CBAHI is promoted in general hospitals' QMS related practices such as patient record systems, CBAHI has so far failed to establish a culture of quality where quality practices can be secured.

For creating a culture of quality, different challenges should be tackled such as lack of a holistic understanding of the meaning of quality, lack of a 'learning from mistakes' culture, lack of an adequate recognition system, lack of adequate financial and logistical support from the MoH, and lack of training focused on up-to-date and significant skills such as cultural competencies. The current management style is inappropriate, and it is hard to accept changes and opinions because it is built upon bureaucracy and is heavily hierarchically structured.

Hospitals need to think about bringing more values to leadership to support the establishment of a culture of sharing, collaboration, and trust; in time, staff will be more confident in sharing their errors. The use of technology is vital to empower sharing, and a recognition system should be built to reward those who decide to be pioneers and share the lessons they have learned. Noticeably, alongside the struggles and the challenges found in the research, possible solutions and alternative ways to overcome these challenges have also emerged.

Although the suggestions offered by this research represent the perspectives of some of the Saudi general hospitals' key stakeholders, namely nurses, patients, and middle managers, comparing the findings with the recent literature demonstrates that other researchers in healthcare organisations are tweeting with similar or the same concerns identified by the participants of this research. Such findings suggest that the findings of this research could be useful to establish a strategic framework to enhance the QMS systems in general hospitals in KSA (Section 6.5).

The final objective was to develop a framework for QMS systems in general hospitals in KSA, based on a practical and detailed understanding of the current situation and experiences of key stakeholders. Thus, the framework was designed based on the detailed understanding of the

current situation and experiences of patients, nurses, and heads of department. The first level of awareness of the current challenges and issues related to the practices of QM appeared in the first phase of the questionnaire. At this stage, a considerable number of the nurses were found to have adequate understanding of the meaning of a quality system and their hospital's quality assurance policy. However, the findings of the qualitative data revealed different opinions, suggesting that nurses and heads are struggling to establish a clear meaning to the concept of quality and the role that each one of the key stakeholders, including the government, plays in assuring quality and building a culture that sustains high quality performance. The findings of the research suggest that some of the heads were more aware of the possible solutions than others, but in general all heads lacked a clear understanding of the organisational aspects of quality, including matters of hospital accessibility and performance efficiency. Upon this, a strategic framework that aims to enhance QM in general should operate in Saudi hospitals in three main phases, as explained in the following section.

7.3. Recommendations for decision makers in MoH and directorship in general hospitals

Two sets of recommendations are offered in this section. The first is directed to decision and policy makers in the MoH. The aim from the recommendations is to help general hospitals understand the steps needed to build a strategic vision of QM. The recommendations for the policy are derived from the theoretical perspectives offered in the literature, as well as the findings of this research. The second recommendations are directed to the senior managers who could lead the practical steps for developing QMS practices in general hospitals.

7.3.1. Recommendations for policymakers

Chapter One explained that QMS is a complex organisational phenomenon that has been introduced to general hospitals to assure the quality of care. For management of this complex phenomenon, financial, technological, and other systems in the hospital should be combined to not only serve the patient, but also to serve the purposes of general hospitals in providing equal, timely, and quality services. In the KSA, although each general hospital has its own management, all hospitals are requested to comply with the regulations and standardisations supported by the government. The findings of this research, however, suggest that there is still significant room for improvement in terms of policymakers from the MoH to establish a policy that helps hospitals improve their implementation of QMS and its practice. Such a policy may include the following points:

 There is a need for regular assessment of the current status of general hospitals and the capability to create their own organisational policy that complies with MoH policy. The findings of this research suggest that regardless of the significant effort of the government, the quality of public healthcare providers is still critical. The findings of this research suggest that there is a lack of strategic vision and training needs have not been met. All of these issues are a reasonable signal that previous strategic visions were not meeting expectations. It is recommended that systemic and holistic assessments of the current status

of general hospitals could feed back to the decision makers with useful information about ways to inform strategic decision making on quality management. Based on this information, a new policy can be created to guide practice as highlighted in the framework emerged from this research.

- 2. For implementing QMS, in KSA general hospitals need agencies to support the creation of a holistic culture of quality. Hence, instead of playing the role of inspector, CBAHI could be restructured to monitor the practices of QMS and the communication between different stakeholders to ensure that the requirements of QMS and the challenges that hinder its implementation are recognised and addressed.
- 3. Up-to-date, relevant, and specific training has been identified as a key requirement to forward the implementation of QMS. As the main training provider for general hospitals, it is recommended that the MoH in KSA assesses the need for training in respect to the requirements of implementing QMS before designing training packages or contacting training providers to ensure that the training meets the needs of the stakeholders that need it. In fact, in this research, patient leadership was identified as a concept related to the implementation of QMS and its practices.
- 4. The current research suggests that the culture of patient safety and improving the quality of the services run parallel. The MoH in KSA should define the role patients could play in shaping the strategic vision of QMS and its practices in Saudi general hospitals. The policy should include directions and guidelines that hospitals should be following to educate patients about the possible role they could play. The policy should give hospitals the lead to encourage their patients to take part in explaining their vision and how they wish their general hospitals to perform services in the future. This

education can be achieved either through the MoH website, through marketing materials, or via personal visits to patients and their families.

- 5. Establishing an alliance with private professional training providers/external agencies should be addressed in the policy. The findings of this research suggest that further professional training courses, such as cultural training, are vital for nurses of general hospitals in KSA and other professionals in healthcare in order to improve service quality and understanding of the issues related to patient safety, as well as cultural norms. Indeed, specific training in regard to understanding the standardisations and the principles of general hospitals should be provided. MoH policy should guide hospitals on how to identify the training providers who are best able to address the requirements of QMS and help to overcome challenges.
- 6. As the outcome of this research suggested, the financial element of the policy is vital. An increase of funding and financial resources will allow general hospitals to adopt the technological tools necessary to hasten sharing, thus leading to the creation of a culture of learning from errors, which is a requirement to improve the QMS practices as suggested by this research.

7.3.2. Recommendations for the level of practices

The positive engagement of the general hospitals' directorship is suggested to have positive influence on developing the practice of QMS. Considering the findings of this research and in the context of KSA general hospitals, the recommendations to improve the practices are set as:

- Developing the reward and recognition system to enhance the sense of transparency and support the managers who introduce the culture of sharing and learning from errors. This should not be achieved with enforcement or monitoring, but rather through a reward and recognition system.
- 2. Setting activities and events that empower staff to share their opinions such as open events and seminars. Setting a holistic strategic vision to improve QMS practices is likely to require coordination and cooperation among several stakeholders. There is a need for a mechanism of sharing opinions and a vision. Strategic vision without input from different stakeholders cannot fulfil its purposes.

- 3. Empowering the sense of leadership among the staff and giving them the lead to self govern their performance; staff who have a sense of leadership feel more responsible for improving the quality of their hospitals.
- 4. Opening up a discussion with different stakeholders on what concepts of QMS should be adopted by general hospitals and what the related practices are that hospitals need to advocate to assure that QMS and its practices are secured.

7.3.3. Suggestions for further research

Based on the constraints and limitations identified in this study, and in light of the above recommendations, it is suggested that further research needs to be conducted in order to provide more conclusive findings on the QM practices in general hospitals. Although it is possible for the findings of this research to provide a landmark for theoretical understanding and conceptions of QM, collating more qualitative data could be a way to create a deeper understanding of what is available on QM in the Saudi healthcare context. Hence, further research to collect more qualitative perspectives from managers and senior managers about the practices of QMS is recommended.

This research was limited to a few public sector hospitals in Saudi Arabia, which means that there is potential for further research studies in other parts of the private sector to extend the contextual understanding of QMS. It is recommended to extend the map of possible practice of QM, as it is one of the main motivations underlying this research due to the paucity of research on QM in the Saudi general hospital context. Future attention should be paid to general hospitals in rural districts, which differ from city-based hospitals in terms of the contextual and cultural settings.

Although the nurses' questionnaire offered quantitative data about the demographic characteristics of the participants, the research aim was not to study the correlation between participants' demographic backgrounds such as education and gender. Rather, the focus of this research was on assessing QMS and its practices in general hospitals in KSA. Hence, it is recommended that further studies should be carried out to explore the possible correlation between demographic characteristics and QMS.

7.4. Strengths and contributions of the research

7.4.1. Strengths

The quality of the data is to be considered as a strength of this research as both qualitative and quantitative data were collected. Assuring the quality of the research was explained in Chapter Three, pilot studies for both questionnaires and interviews were conducted, and Arabic and English written literature was reviewed to make sure that a more comprehensive understanding was achieved.

The novelty of the research also relates to initiating the QMS framework. The framework was enriched with details about the actors, the challenges and the requirements to improve QMS practices. The importance of the framework is that it was built from a new point of view – that of understanding quality management systems – which has not been provided in the literature prior to this research.

The research suggests that bureaucracy and the hierarchical structure of healthcare organisations could prevent or hinder the improvement of QMS. The framework offered in this research claims to pave the way towards achieving more autonomy for management, so more plans can be established to enhance the service quality. The findings from the Arabic written literature suggests that further work will be needed to enrich the literature with a local theory or theories, which is built upon local findings. This is seen as a strength of this research because it is a new attempt to map another meaning of QMS made by other Saudi and Arab researchers willing to study different contexts with different participants.

Patients and nurses were given equal opportunity to give their opinions that were heard and articulated in the framework, as well as the voices of the heads who are decision makers. This is a strength of the research because it gave the stakeholders a voice to express their opinions and at the same time, their voices were transferred to be heard by others. Giving them the platform to voice their opinion means there are variations in the perspectives of QMS and enhancing of the possibilities to better shape practices. Hence, this kind of attempt could empower other stakeholders to express their opinions and give further insights for policymakers to hear their voices and address their concerns and ideas in polices and guidelines to achieve further development.

The findings demonstrated that some of the heads were motivated to promote change to the current quality system, which is a significant gain of this research because it indicates that new attempts for change can be supported by those who are motivated to do so. The

managers provided valuable insights into stakeholder perceptions of (and attitudes towards) the current challenges of QMS practices in Saudi general hospitals. It has also shed light on how the heads of department, along with patients and nurses, may help to shape and influence the improvement of QMS practices. Indeed, although the quantitative dimension of this research satisfied the ontological paradigm to meet one of the research purposes, the qualitative dimension enriched the epistemological inquiry of this research that addressed some of the cultural-religious implications of the participants' backgrounds on the practices. Clearly, it was beyond the interests of this research to examine the cultural and contextual factors that shaped the practices, and therefore highlights the social element of QMS that needs further investigation.

Based on the above, this study has its own strengths as well as limitations (See section 6.6) for further insights. In the following section, the researcher will summarise the contributions and then provide some ideas to invite other researchers to develop further insights about the current practices of QM in hospitals and other healthcare organisations. The suggestions for further research studies are offered in Section 7.3.3.

7.4.2. Contributions to the knowledge

This research is pioneering in its approach to address the focus: it is the first study in the Saudi general hospital context that addresses the layers of complexity in the concept and practice of QMS. There are many studies that perceive QMS as an organisational concept where management should be in control of its practices. However, this research suggests that patients, nurses, and middle managers can and do have different perceptions when it comes to the level of practice. For that, the researcher used the pragmatic approach to address not only the existence of QMS, but also the epistemological knowledge constructed in the culture of the hospital and influence on practice. From another but related perspective, using this approach has revealed the complexity of the interconnecting challenges among different key stakeholders. Those challenges underpin the practices of QMS in the context of general hospitals in KSA. At the same time, it has allowed the emergence of the requirements that, if adopted, would alert decision makers in the MoH to the vital importance of adopting a more holistic approach when devising policies or interventions aimed at improving QMS.

The framework developed from this research is one of the main contributions of the research to the field of quality management practice in general hospitals. The components of this framework will not only build upon the findings of the research, but also upon the arguments sought from the literature and the possible implications of the findings in the wider context of Saudi general hospitals. The researcher needs to put the framework in the hands of the stakeholders who contributed to its components.

The findings of this research revealed the need for further empowerment of leadership practices among staff. The benefits and significance of the need of engaged leadership in healthcare organisations, namely in hospitals, has been the concern of a few research studies that focused on the relationship between leadership and QM (Idris & Ali, 2008; Khan, 2010). In fact, a famous aspect of strategic QM is the empowerment of leadership. This claim is also held by the Malcolm Baldrige National Quality Awards (MBNQA), where Standards for Performance Excellence are some of the most used quality standards for QM. Empowered leadership is one of the main categories in MBNQA. The criteria address the role that empowerment of leadership plays in achieving quality performance in healthcare organisations. This category emphasises the role that senior managers and decision makers can play to guide the health organisation and encourage superior performance.

Finally, this research aims to make valuable and innovative contributions to the field in several respects. Firstly, it offers useful country-specific research for researchers interested in understanding the possible links between QMS practices and the healthcare environment. Secondly, the QM framework could also be of particular interest to public health researchers and policymakers in other Arab countries currently undergoing reforming stages, provided they have the same or similar health systems. During the study, those motivations were accompanied with a more detailed and specific one: to advocate for proper QM training and support for nurses and managers as well as heads. As a practical outcome, the researcher believes this is one important thing that must now be a priority for him, within the resources currently available for Saudi general hospitals.

7.5. Researcher's reflection on the findings and the research

As this project is reaching its end, it does not imply that the attempt to improve the quality of healthcare services has been accomplished. This research is only a stone to pave the way for other researchers to contribute with more insight and suggestions. The findings of the research allow the creation of the framework, but the framework itself needs to be tested, evaluated and practised. The researcher understood the term 'decision makers' to refer to every individual who holds the power or authority to make decisions or promote change. In this research, it was noticeable that some of the heads that participated in the research were more keen to

implement change than some of the other heads, who tended to complain without having any vision for change or development. For both groups, and upon the spirit of the findings of this research, the researcher thought to list his own reflections on the findings, which aim to give further insights not necessarily related directly to the outcome of the research, but from the experience of the researcher, it is useful to give further insights upon the researcher's experience.

The findings of this research proposed that some heads thought that they had not been given the power or the trust to lead or promote change. Yet in the literature there have been suggestions that individuals have their own power. Power is, therefore, not owned by one channel, but handed to individuals according to their position in that society; it is consequently a system resource (Cheung et al., 2015). The social system in which people live and function determines the responsibilities that individuals should take, usually dependent on the skills, abilities, or knowledge they may have. As a decision maker, an individual is expected to adhere to rules because he/she feels obliged to do so, and not because of fear or coercion. As a decision maker, the position generates its own power when the individual is more knowledgeable and skilful, and this gives them legitimacy to assume authority (Tyler, 2006). On that, the research suggests that general hospitals in the KSA are lacking staff who hold the required knowledge and skills. Some of the respondents of this research addressed the matter of lack of training and professional education. However, the research also had the example of Head C, who was self-motivated and was performing further self-education and self-reading to ensure that he was up to the position requirements and responsibilities. There is no doubt that further support from the government is needed to boost the quality of current training provided by the hospitals. But at the same time, individuals in charge of responsibilities should work on their skills and knowledge to adhere to the role's requirements.

Patients, as one of the main key stakeholders, seemed to play an important role in inspecting the quality of the services provided to them. In fact, the view of the patient could be more critical because they are the end users of the services, and it is for their benefit to ensure that the service quality is up to its best possible level. For that, the patient complaints unit should be empowered and open up the space for patients to share their experiences and feelings towards the services provided to them from the hospitals. Indeed, the hospital could call for a representative from the patients' group to attend some of the meetings organised by the management to hear their opinions.

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Appendices

Appendix 1: MMU Ethical Approval

Manchester Metropolitan University

FACULTY OF HEALTH, PSYCHOLOGY AND SOCIAL CARE

Re: Ethics and data collection

15/04/2014

Student: Basim Alanazi Id: 12501680 Programme: PhD full time Department of Health Professions Director of Studies: Dr Fatoye

To whom it may concern

This is to confirm that Basim Alanazi is a full time PhD student at MMU in the Faculty of Health, Psychology and Social Care, in the Department of Health Professions. As part of his research Mr Alanazi will undertake data collection in the Kingdom of Saudi Arabia. The nature of the data collection means that he does not have to apply for full ethical approval from MMU. He has satisfied his Director of Studies that ethical concerns have been addressed.

Confirmation of this is attached. If you have any questions or require further information then please contact me.

Yours sincerely,

Dan OConnor Research Degrees Administrator



Elizabeth Gaskell Building T117a Hathersage Road Manchester M13 0JA United Kingdom

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المملكة العربية السعودية Kingdom of Saudi Arabia **Ministry of Health** وزارة الصحة مدينة الملك فهد الطبية **King Fahad Medical City** مدينة الملك فهد الطبية (162) (111) King Fahad Medical City IRB Registration Number with KACST, KSA: H-01-R-012 IRB Registration Number with OHRP/NIH, USA: IRB00008644 Approval Number Federal Wide Assurance NIH, USA: FWA00018774 May 11, 2015 IRB Log Number: 15-145E Department: External Category of Approval: EXEMPT Dear Basim Muzil Alanazi, I am pleased to inform you that your submission dated May 10, 2015 for the study titled 'An assessment of quality management systems and practices in General Hospitals in Kingdom of Saudi Arabia (KSA): towards developing a framework was reviewed and was approved. Please note that this approval is from the research ethics perspective only. You will still need to get permission from the head of department or unit in KFMC or an external institution to commence data collection. We wish you well as you proceed with the study and request you to keep the IRB informed of the progress on a regular basis, using the IRB log number shown above. If you have any further questions feel free to contact me. Sincerely yours, 5 MAY 1915 Prof. Omar H. Kosule Chairman Institutional Review Board-- RB. King Fahad Medical City, Riyadh, KSA. Tel: + 966 1 288 9999 Ext. 26913 E-mail: okasule@kfmc.med.sa

Appendix 2: Permission from the Saudi authorities

Appendix 3: English and Arabic versions of consent forms: Questionnaires and interviews

English consent form for the patient questionnaires

My name is Basim Alanazi and I am a PhD research student at Manchester Metropolitan University UK in the Faculty of Health, Psychology and Social Care, in the Department of Health Professions. My research is focused on Quality Management in healthcare and this questionnaire forms an important part of my research.

This study has been approved by Dammam University, Dammam, Saudi Arabia and the Saudi Cultural Bureau and Ethics Committee, Manchester Metropolitan University, United Kingdom.

The aim of this study is to undertake a critical evaluation of the current Quality Management practices adopted in general hospitals in KSA with a view to suggest possible solutions for any issues discovered.

Patient satisfaction and feedback is an important part of quality of care. For this reason, I am kindly asking you to complete the attached questionnaire which will help me assess the quality of care that patients in KSA are receiving. Your responses are important and will help me understand and recommend strategies for Quality Management improvement which will hopefully help you with not only a better level of care

Many of the questions posed rely on your experience and observations at the hospital, so we are not expecting definitive results, rather, we would like to know about your experiences with regards to the matters described in the survey.

Be rest assured that all information from this questionnaire will be used for research purposes only and that your answer will be kept confidential - there is no need to provide your name, address or phone number. Please mark your answer with a tick or cross in the box you feel best matches your opinion. Participation in this survey is completely voluntary and should you not wish to take part this will not affect your treatment in the hospital.

If you have any queries about this survey or about my research, please contact me on:

The researcher:

Basim Muzil Alanazi

Telephone:

0044 7459 256600 (UK)

00966 5979 77799 (KSA)

Email:

basim-muzil.m.alanazi@stu.mmu.ac.uk

English consent form for the nurse questionnaires

Informed consent for semi-structured interview

My name is Basim Alanazi and I am a PhD research student at Manchester Metropolitan University UK in the Faculty of Health, Psychology and Social Care, in the Department of Health Professions. My research is focused on Quality Management in healthcare and this interview forms an important part of my research.

This study has been approved by Dammam University, Dammam, Saudi Arabia and the Saudi Cultural Bureau and Ethics Committee, Manchester Metropolitan University, United Kingdom.

The aim of this study is to undertake a critical evaluation of the current Quality Management practices adopted in general hospitals in KSA with a view to suggest possible solutions for any issues discovered.

I wish to interview you in order to gain understanding of how you implement quality of care in your capacity as ... [job role]. There are no right or wrong answers, I am just looking for your honest opinions and experiences.

Notes:

- 1. The final thesis will not identify any hospital by name. All names will be coded for confidentiality
- 2. Rest assured that all information will be used for research purposes only and that your answers and identity and audio recordings of interviews will be kept confidential.
- 3. This interview is entirely voluntary, and you have the right to withdraw at any point

Name of Participant: _____

Signature:		Date:	
Name of Researcher:			
Signature:			Date:
If you	1 have any questions or nee	d any further information	, please
contact me.			
The researcher:			
Basim Muzil			
Alanazi			
Telephone:			
0044 7459 256600 (UK)			
00966 5979 77799 (KSA	A)		
Email:			
basim-muzil.m.alanazi@	stu.mmu.ac.uk		

الموافقة على المقابلة

تقييم نظم ادارة الجود ة والممارسات في المستشفيات العامة في المملكة العربية السعودية: نحو وضع إطار

أولا، أود أن أشكرك لأخذ بعض الوقت من جدولكم المزدحم من أجل الحديث معي.

اسمي باسم مزعل العنزي وأنا طالب دكتوراه في جامعة مانشستر متروبوليتان البريطانية في كلية الصحة النفسية والرعاية الاجتماعية، في إدارة الصحة المهنية. بحثي يركز على إدارة الجودة في الرعاية الصحية وهذا اللقاء يشكل جزءا هاما من بحثي.

هذه الدراسة قد تم الموافقة عليها من جامعة الدمام المملكة العربية السعودية ولجنه اخلاقيات البحث العلمي في مدينه الملك فهد الطبية في الرياض والمكتب الثقافي السعودي في بريطانيا ولجنة اخلاقيات البحث العلمي في جامعة مانشستر متروبوليتان في المملكة المتحدة.

الهدف من هذه الدراسة هو اجراء تقييم نقدي لممارسات إدارة الجودة الحالية المعتمدة في المستشفيات العامة في المملكة العربية السعودية بهدف اقتراح الحلول الممكنة لأي قضايا يتم اكتشافها.

والهدف من مقابلتي لك هو فهم كيفية تنفيذ نوعية الرعاية بصفتك الدور الوظيفي. ليس هناك إجابات صحيحة او خاطئة انا فقط ابحث عن الأراء الصادقة الخاص بك من خلال خبرتك بالعمل.

ملاحظات:

- النظرية النهائية لا تحدد أي اسم مستشفى جميع أسماء يتم ترميز للسرية.
- وكونوا على ثقة من أن جميع المعلومات ستستخدم لأغراض البحث فقط وأن إجاباتك و هويتك والتسجيلات الصوتية والمقابلات في سرية تامة.
 - . هذا اللقاء هو طوعي تماما ولك الحق في الانسحاب في أي وقت.

اسم المشارك : : التاريخ التوقيع اسم الباحث : : التاريخ____: التوقيع إذا كان لديك أي أسئلة أو إذا كنت تحتاج إلى أي مزيد من المعلومات يرجى الاتصال بي. الباحث: باسم مزعل محمد العنزي الهاتف: المملكة المتحدة (١٨١٨١٨، ٠٠٤٤٧٤٠٠) المملكة العربية السعودية (٠٩٦٦٥٩٧٩٧٧٩٩) البريد الإلكتروني:

- muzil.m.alanazi@stu.mmu.ac.uk

Appendix 4: Nurses' questionnaire in Arabic and English

The Arabic version of the nurses' questionnaire

الرجاء الإجابة على الأسئلة التالية بوضع علامة (X) في الخانة المناسبة، أو عن طريق ملء إجابتك في الفراغ المناسب كما هو موضح بالأسفل

يان:	مثال على كيفية تعبئة هذا الاستب
	الجنس
	إذا كنت ذكرا
1 ×	ذكر
2	انثى

القسم الأول:

يسعى هذا القسم على الاطلاع على بعض المعلومات الشخصية وعن السيرة الذاتية لك. ومن المهم الحصول على هذه المعلومات، وهذا سوف يسمح للباحث لمقارنة بين مجموعات من المشاركين. فإن المعلومات التي قدمتها تكون مجهول لأنه لا يطلب منك إعطاء اسمك وسوف تكون سرية لأنه لن يتم الكشف عنها اجابتك الفردية الخاصة بك مع أي شخص آخر.

الرجاء الإجابة على الأسئلة التالية بوضع علامة (X) في الخانة المناسبة، أو عن طريق ملء إجابتك في الفراغ المناسب كما هو موضح بالأسفل

1. نوع الجنس

1	الذكور
2	أنثى

2. اذكر عمرك (بالسنوات)

3. ما هو اسم المستشفى الذي تعمل فيه

المستوى التعليمي؟

دبلوم او دبلوم عالي	1
بكالوريوس	2
الدراسات العليا (ماجستير او دكتوراه)	3

6. عدد سنوات الخدمة?

1	أقل من 3 سنوات
2	5-3 سنوات
3	6-10 سنوات
4	اکثر من 10 عاما

القسم الثاني:

هذا القسم يستكشف خبراتكم بشأن جودة الخدمة. لا توجد إجابات خاطئة. كل الدراسة مهتمة على الرقم الذي يعكس حقا رأيك اتجاه جودة الخدمة المقدمة. يرجى الإشارة وتحديد مدى موافقتك على كل من العبارات التالية عن طريق وضع علامة (x) على واحدة من خمسة أرقام فى العبارات التالية:

```
1- غیر موافق بشدة 2- غیر موافق 3- محاید 4- موافق 5- موافق بشدة
```

موافق بشدة	موافق	محايد	غير موافق	مات غیر موافق بشدة	السياس بيان	رقم
5	4	3	2	1	افهم سياسة الرعاية الصحية من حيث الرعاية الاولية بوضوح؟	1
5	4	3	2	1	دعم نظام إدارة الرعاية الصحية تؤدي إلى التطورات في الرعاية الصحية الاولية.	2
5	4	3	2	1	الممارسة لتنفيذ نوعية الرعاية واضحة بالنسبة لي.	3
5	4	3	2	1	احقق مستوى مناسب من ادارة الجودة في عملي	4
5	4	3	2	1	أطبق ادارة الجودة على معظم الواجبات	5
5	4	3	2	1	تساعدني الادارة عندما يكون لدي مشاكل متعلقة بإدارة الجودة	6
5	4	3	2	1	بر المرب المجرود أحب بعض جوانب إدارة الجودة دون غيرها	7
5	4	3	2	1	أعتقد أن إدارة الجودة والعمليات المستخدمة في هذا المستشفى هي مضيعة للوقت.	8

في كلماته، يرجى إعطاء رأيك في ممارسات إدارة الجودة إدارة الجودة ومراقبة تنفيذ الرعاية في المستشفيات العامة. يرجى تقديم أي توصية بشأن التطورات المحتملة إذا أي

.....

			ات	لتدريب والمهار	دعم	
موافق	موافق	محايد	غير موافق	غير موافق	البيان	رقم
بشدة				بشدة		
					لقد تلقت تدريبا كافيا على نوعية الرعاية الصحية	1
5	4	3	2	1	الممارسات	
					الادارة ملتزمة بالتدريب على ادارة الجودة	2
5	4	3	2	1		
					كل ممرض سعيد بمحتوى التدريب	3
5	4	3	2	1		
					الممرضون متحمسون لتلقي التدريب والتعليم	4
5	4	3	2	1		
					يشجع مدراء الصحة على تعلم مهارات جديدة	5
5	4	3	2	1		

في كلامك أنت، يرجى إعطاء رأيك في مستوى التعليم والتدريب البرنامج أي توصية فيما يتعلق بالتدريب.

.....

••••••

	توفر موار د معینة						
موافق بشدة	موافق	محايد	غير موافق	غير موافق	البيان	رقم	
				بشدة			
5	4	3	2	1	المستشفى ممولة بشكل جيد	1	
5	4	3	2	1	اشعر بالامان في هذا المستشفى	2	
					هناك ما يكفي من الممرضات في المستشفى	3	
5	4	3	2	1			
					في هذا المستشفى، هناك نقص خبرة ومهارة	4	
5	4	3	2	1	الممرضات		

_			_		لدي ما يكفي من الوقت للحصول على جميع أعمالي	5
5	4	3	2	1	بكفاءة في يوم العمل العادي	

في كلماته، يرجى إعطاء رأيك في الموارد، واجبات وشروط العمل مع المستشفى أي توصية نحو تحسين.

.....

	نظم المكافآت والتقدير								
موافق	موافق	محايد	غير موافق	غير موافق	البيان	رقم			
بشدة				بشدة					
5	4	3	2	1	نظام مكافأة الاداء للمتميزين في العمل عادل	1			
5	4	3	2	1	مكافأة الأنظمة المستخدمة في هذا المستشفى يسمح الممرضات إلى التفكير في أدائها	2			
5	4	3	2	1	في هذا المستشفى كل ممرض يطلع على نظام	3			
5	4	3	2	1	انا راض عن الراتب الذي اتقاضاه	4			
5	4	3	2	1	الموظفون في هذا المستشفى يلاقون تشجيعا	5			
5	4	3	2	1	يدعم المدراء الكبار النظام المؤدي لرضى	6			
5	4	3	2	1	الممرضون الملتزمون والذين لديهم دافع قوي للعمل تتم ترقيتهم	7			

بطريقتك يرجى شارك برأيك في تقييم الأداء والحوافز التي تقدم مديرو صحة الموظف حافزا بشأن أداء. يرجى تقديم أي توصية بشأن التطورات المحتملة.

.....

شكرا لك على وقتك لاستكمال هذه الدراسة

The English version of the nurses' questionnaire

PLEASE ANSWER THE FOLLOWING QUESTIONS BY CROSSING (X) IN THE APPROPRIATE BLOCK OR BY FILLING IN YOUR ANSWER IN THE SPACE

EXAMPLE of ho	w to complete this questionnaire:	
Your gender?		
lfyou are Male:		
Male	X	
Female	2	

SECTION A: Demographic information

This section seeks some background or biographical information about you. It is important to obtain this information, as this will allow the researcher to compare groups of participants. The information you provided will be anonymous because you are not required to give your name and will be confidential because your individual response will not be disclosed with anyone else

Please indicate your answer by crossing (x) in the relevant block or by filling in your answer in the space provided.

1. Gender

Male	1
Female	2

2. Indicate your age (in years)



3. Your highest educational level?

Diploma or certificate	1
Bachelor's degree	2
Post-Graduate Degree	3

4. How many years of service do you have in the Department of Health?

Less than 3 years	1
3-5 years	2
6-10 years	3
More than 10 years	4

5. What staff position do you occupy presently.....

SECTION B: Experience with the services

B.1 Policy development

This section explores your experiences regarding service quality. There are no wrong answers; all the study is interested in is a number that truly reflects your opinion. Please indicate the extent which you agree with each of the following statements by crossing (x) ONE of the five numbers to the statement using 5-point scale where:

1. =Strongly disagree, 2. =Disagree, 3. =Neutral, 4. =Agree, and 5. =Strongly Agree

No.	POLICY DE Statement	EVELOPN Strongly	IENTS Disagree	Neutral	Agree	Strongly
		Disagree				Agree
1.	I understand healthcare policy from an emphasis in primary care clearly?		2	3	4	5
2.	Management support healthcare system lead to developments in primary care.		2	3	4	5
3.	The practice to implement quality of care is clear to me	1	2	3	4	5
4.	I achieve an appropriate level of quality management in my work	1	2	3	4	5
5.	I implement quality management for most tasks	1	2	3	4	5
6.	My manager supports me when I have quality management related problems.		2	3	4	5
7.	I like some aspects of quality management but not others	1	2	3	4	5
8.	I think the quality management processes used in this hospital are a					
	waste of time.	1	2	3	4	5

In your own words, please give your opinion on quality management practices that management implemented to control quality of care in the public hospitals. Please provide any recommendation regarding possible developments if any

.....

B.2 Training and Skills support

	TRAINING AN	D SKILLS	SUPPOR	Г		
No.	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
1.	I have received adequate training for quality of health care practices	1	2	3	4	5
2.	Management is committed in Quality Management training	1	2	3	4	5
3.	Every nurse is happy with the content of training	1	2	3	4	5
4.	Nurses are motivated to advanced training and education	1	2	3	4	5
5.	Health managers encourages nurses to learn new skills	1	2	3	4	5

In your own words, please give your opinion on level of education and training programme and any recommendation relating to training programme.

.....

No.	Statement	Strongly	Disagree	Neutral	Agree	Strongl	
		Disagree				agree	
1.	The hospital is well resourced	1	2	3	4	5	
2.	I feel safe working in this hospital	1	2	3	4	5	
3.	There are sufficient nurses in this hospital						
		1	2	3	4	5	
4.	In this hospital, there is a shortage of experienced and skilled nurses						
		1	2	3	4	5	
5.	I have enough time to get all my work done efficiently in a normal						
	workday	1	2	3	4	5	

B.3. Extensive specific assets

In your own words, please give your opinion on resources, duties and working conditions with the hospital and any recommendation towards possible improvement.

.....

B.4. Reward and recognition systems

	REWARD AND REC	OGNITIO	ON SYSTE	CMS		
No.	Statement	Strongly	Disagree	Neutral	Agree	Strongly
		Disagree				Agree
1.	Performance reward for being the best worker is fair and square					
		1	2	3	4	5
2.	Reward systems used in this hospital to allows nurses to reflect					
	on their performance	1	2	3	4	5
3.	In this hospital, every nurse goes through an reward system					
		1	2	3	4	5
4.	I am satisfied with the salary I receive	1	2	3	4	5
5.	Employees are motivated in this hospital					
		1	2	3	4	5
6.	Senior managers support system lead to satisfied employees					
		1	2	3	4	5
7.	Highly motivated and committed nurses are promoted					
		1	2	3	4	5

In your own words, please give your opinion on performance appraisals and motivation that health managers offer to employee used as an incentive regarding work performance. Please provide any recommendation regarding possible developments if any.

.....

Thank you for taking the time to complete this survey

Appendix 5: Patients' questionnaire

The Arabic version of the patients' questionnaire

تقييم نظم وممارسات إدارة الجودة في المستشفيات العامة في المملكة العربية السعودية: نحو اقتراح إطار استراتيجي تطبيقي

أولا، شكرا لأخذ الوقت الكافى لقراءة هذا الاستبيان

اسمي باسم مز عل العنزي وانا طالب دكتوراه في جامعة مانشستر متروبوليتان البريطانية في كلية الصحة النفسية والرعاية الاجتماعية في إدارة الصحة المهنية. بحثي يركز على إدارة الجودة في الرعاية الصحية و هذا الاستبيان يشكل جزءا هاما من بحثي.

هذه الدراسة قد تم الموافقة عليها من جامعة الدمام المملكة العربية السعودية والمكتب الثقافي السعودي في بريطانيا ولجنة أخلاقيات البحث العلمي في جامعة مانشستر متروبوليتان في المملكة المتحدة.

الهدف من هذه الدراسة هو إجراء تقييم نقدي لممارسات إدارة الجودة الحالية المعتمدة في المستشفيات العامة في المملكة العربية. السعودية بهدف اقتراح الحلول الممكنة لأي قضايا يتم اكتشافها.

إن تجارب الممرضين والممرضات وملاحظاتهم هو جزء مهم من نوعية الرعاية التي تقدمها المشافي العامة. لهذا السبب ان تتكرم يطلب منك استكمال الاستبيان المرفق والتي سوف تساعدني على تقييم جودة الرعاية التي يتلقونها المرضى في المملكة العربية السعودية.

ر دودكم مهمة وسوف تساعدني على الفهم والتوصية باستر اتيجيات لتحسين إدارة الجودة والتي نأمل على أن تساعد تقديم مستوى أفضل من الرعاية للمجتمع.

الاستبيان يطرح العديد من الأسئلة التي تعتمد إجاباتها على خبر اتك والملاحظات في المستشفى، الاجابات التي نتوقعها لا تحتمل الصح والخطأ، بدلا من ذلك، نود أن نعرف عن تجاربك فيما يتعلق بالمسائل المطروحة في المسح.

ملاحظات:

- جميع المعلومات من هذا الاستبيان سوف تستخدم لأغراض بحثية فقط، إجابتك ستبقى سرية حيث أنه غير مطلوب منك أن تشارك اسمك وعنوانك أو رقم الهاتف.
 - المشاركة في هذا الاستبيان طوعية تماما.

إذا كان لديك أي استفسار حول هذا المسح الاستبياني، يرجى الاتصال ب

الباحث: باسم مزعل محمد العنزي

الماتف:

المملكة المتحدة 0044740581818

```
المملكة العربية السعودية 00699597977799
```

البريد الالكتروني:

basim-muzil.m.alanazi@stu.mmu.ac.uk

العمر: الجنس : الجنسية: مكان الإقامة: المدينة / الضواحي / ال قرية الجناح الطبي:

يُرجى وضع علامة X على مربع الإجابة ذات الصلة

1 = لا أو افق بشدة 2 = لا أو افق 3 = محايد 4 = أو افق 5 = أو افق بشدة

5	4	3	2	1	الاستبيان	رقم
					المعرفة وتوفير المعلومات	
					يبدو أن لدى العاملين المعرفة اللازمة في مجال عملهم	1
					قدم لي العاملين معلومات واضحة وكاملة عن حالة مرضي / مريضي والفحوصات والدواء والعلاج	2
					يجيبون على أسئلتي واهتماماتي بشكل مرضي.	3
					قدم لي العاملين تعليمات خروج واضحة وكافية بما في ذلك ما يجب عمله وما هو متوقع بعد مغادرة المشفى.	4
					قدم لي العاملين توجيه واضح وكافي حول حالة مرضي /مريضي.	5
					المهارات السريرية	
					بدى لى أن الممرضين كانوا واثقين عند أداء المهام السريرية.	6
					كان الممرضين قادرين على تنسيق رعاية مرضي / مريضي بشكل فعال مع باقي اعضاء فريق الرعاية الصحية الاخرين.	7
		1			يتابعون ويراجعون حالة مرضي / مريضي بإنتظام.	8
					قدم الممر ضين لي الرعاية بطريقة منظمة.	9
					يقوم الممر ضين بغسل الإيادي قبل وبعد إداء المهمة.	10
					يراع الممرضين السلامة عند تقديم الرعاية.	11
					الرعاية	
					يستجيب الممرض للنداء فورا.	12
					الممرض موجود عند الحاجة.	13
					يخصص الممرض وقت كافي لمرضي / مريضي أثناء نوبة العمل.	14
					يأخذ الممرض برأيي في تخطيط وتنفيذ الرعاية.	15
					يقوم الممرض بتطميني عند الحاجة.	16
					يحافظ الممرض على بيئة هادئة حولي.	17
					يمكنني الوصول إلى الممرض.	18
					يراع الممرض حقوقي.	19
					الاتصال	
					يتواصل الممرض معي بلغه واضحة وسهلة الفهم.	20
					يصغون للشكوى المقدمة مني.	21
					يحترم الممرض ديانتي وثقافتي.	22
					صنع القرار	
					الممرض كان واثقا في اتخاذ قرار بشأن رعاية مريضي.	23
					يستجيب الممرض للتغيرات في وضع مرضي / مريضي فورا.	24
					يبلغون أعضاء الفريق المناسب عندما نتغير حالة مرضي / مريضي.	25
					مشاركة الأسرة	
					يشجعون أعضاء الأسرة على المشاركة في الرعاية عند الإمكان.	26
					يحترم الممرض قراري بشأن مدى تدخل العائلة في رعايتي. شريل من المدن التقاتير التربيب التقليب المناقية المربيب المالي	27
					يشعر الممرض العائلة بالتغيير في حالة مرضي / مريضي عند اللزوم.	28

		يعامل الممرض أعضاء أسرتي باحترام.	29
		السلوك المهني	
		يعاملني الممرض بكرامة واحترام.	30
		يتصرف الممرض بشكل مهني مع المرضى والعائلات واعضاء فريق الرعاية الصحية الاخرين.	31
		ملابس الممرضين مناسبة ومهنية.	32
		يحافظ الممرض على خصوصية المريض.	33
		يحافظ الممرض دائما على أسر ار المريض.	34
		يعكس الممرض الاتجاهات الإيجابية نحو التمريض.	35
		تقدير عام	
		إذا لزم إدخالي ثانية سأكون سعيدا بر عاية الممرضين السعوديين.	36
		إذا لزم إدخالي ثانية سأكون سعيدا بر عاية الممرضين السعوديين.	37

ارجو كتابة أي ملاحظات اخرى:

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The English version of the patient's questionnaire

An assessment of quality management systems and practices in General Hospitals in the Kingdom of Saudi Arabia: Towards developing a framework

Thank you for taking the time to read this questionnaire

My name is Basim Alanazi and I am a PhD research student at Manchester Metropolitan University UK in the Faculty of Health, Psychology and Social Care, in the Department of Health Professions. My research is focused on Quality Management in healthcare and this questionnaire forms an important part of my research.

This study has been approved by Dammam University, Dammam, Saudi Arabia and the Saudi Cultural Bureau and Ethics Committee, Manchester Metropolitan University, United Kingdom.

The aim of this study is to undertake a critical evaluation of the current Quality Management practices adopted in general hospitals in KSA with a view to suggest possible solutions for any issues discovered.

Patient satisfaction and feedback is an important part of quality of care. For this reason, I am kindly asking you to complete the attached questionnaire which will help me assess the quality of care that patients in KSA are receiving. Your responses are important and will help me understand and recommend strategies for Quality Management improvement which will hopefully help you with not only a better level of care

Many of the questions posed rely on your experience and observations at the hospital, so we are not expecting definitive results, rather, we would like to know about your experiences with regards to the matters described in the survey.

Be rest assured that all information from this questionnaire will be used for research purposes only and that your answer will be kept confidential - there is no need to provide your name, address or phone number. Please mark your answer with a tick or cross in the box you feel best matches your opinion.

Participation in this survey is completely voluntary and should you not wish to take part this will not affect your treatment in the hospital.

If you have any queries about this survey or about my research, please contact me on:

The researcher:

Basim Muzil Alanazi

Telephone:

0044 7459 256600 (UK) 00966

5979 77799 (KSA)

Email:

basim-muzil.m.alanazi@stu.mmu.ac.uk

Age: _____ Gender: M/F Nationality: _____ Residence: City /

Outside City / Village

Ward:_____

Please mark the relevant box with an X

1. =Strongly disagree, 2. =Disagree, 3. =Neutral, 4. =Agree, and 5. =Strongly Agree

No.	Statements	1	2	3	4	5
	Knowledge and providing information:					
1	They seemed knowledgeable in their field.					
2	They provided me with clear & complete information about my/my					
	patient condition, tests, medication & treatment.					
3	They addressed my questions/concerns satisfactorily.					
4	They provided me with clear & adequate discharge instructions					
	including what to do and what to expect when discharged.					
5	They provided me with clear & adequate health education related to					
	my/my patient condition.					
	Clinical skills:					
6	They appeared confident when performing clinical skills.					
7	They were able to coordinate my/my patient care effectively with					
	other healthcare team members.					
8	They checked on me/my patient regularly and kept track of how					
	he/she was doing.					
9	They delivered the care in an organized manner.					
10	They performed hand washing before and after performing a					
	procedure.					
11	They observed for safety when delivering care.					
	Caring					
12	They responded to the calling bell promptly.					
13	They was available when needed.					
14	They allocated enough time for me/my patient during the shift.					
15	They considered my opinion in planning and implementing the care.					
16	They comforted and reassured me when needed.					
17	They maintained a quiet environment around me.					
18	There were approachable.					
19	They observed for my rights.					
	Communication					
20	They communicated with me in a clear and easy to understand					
	language.					
21	They listened to my complaints.					
22	They respected my religion and culture.					
	Decision making					
23	They appeared confident in taking decision regarding my/my patient					
	care.					

24	They responded to changes in my/my patient's situation promptly.		
25	They notified appropriate team members when my/my patient		
	condition changed.		
	Family involvement		
26	They encouraged family members to participate in the care		
	whenever possible.		
27	They respected my decision regarding the extent of family		
	involvement in my care.		
28	They kept the family updated about changes to my/my patient		
	situation whenever appropriate.		
29	They treated my family members with respect.		
	Professional behaviour		
30	They treated me with dignity and respect.		
31	They acted professionally with patients, families and other		
	healthcare team members.		
32	They dressed appropriately and professionally.		
33	They maintained my/my patient's privacy.		
34	They maintained my/my patient's confidentiality all the time.		
35	They conveyed positive attitudes toward nursing.		
	Global rating:		
36	If I had to be admitted again, I would be happy to be cared for by		
	Saudi Nurses.		
37	Generally, I am satisfied with the care delivered by Saudi Nurses.		

Any further comments:

Appendix 6: Interview protocol

The English version of the interview protocol

Ice breaking

Thank you very much for attending this interview.

Have you read the consent? If not do you want me to read it for you or you would like to go through it by yourself?

Do you understand your right well?

Can we start the interview now?

The interview will be audio recorded; do you give the consent?

General questions about quality

What is the role of the management in addressing the matter of quality of care in this hospital? How do you know?

Do you think that the management is committed to quality of care in this hospital?

How so?

This hospital is CBHAI accredited, do you think this has had a positive effect on the quality of patient care?

Why do you think this is?

Safety

Who is responsible for ensuring patient safety in the hospitals?

Who is responsible for controlling patient safety in the hospitals?

What are the main tools that have been used in this hospital to measure or assess safety culture?

What is the hospitals strategy to build a safety culture?

What are the challenges or obstacles the hospitals is facing in maintaining the patient's safety?

Efficiency:

Who is responsible for ensuring that the hospital is run efficiently?

Do you believe that the hospital promotes a culture of staff participation in improving efficiency in the hospital?

Yes -How does it do this? // No – why not?

What steps is the hospital taking to improve efficiency in running the hospital?

What are the challenges or obstacles the hospitals is facing in maintaining the efficiency?

Accessibility:

Do you believe that the hospital is easily accessible to everyone who needs it?

If no – Why not?

What steps are the hospital management taking to ensure that the hospital is accessible?

What are the challenges or obstacles the hospitals is facing in maintaining the accessibility?

Patient-centred:

Do you think that the care in the hospital is patient centred?

Yes -How does it do this? // No – why not?

How is patient feedback incorporated into care?

What are the challenges or obstacles the hospitals is facing in maintaining the patient centred approach?

Other:

Please discuss anything else you feel is relevant to the topic of quality management in this hospital

Appendix 7: Evidence of SPSS analysis

	Name	Туре	Width	Decimals	Label	Values
1	A1	Numeric	8	2	age	None
2	A2	Numeric	8	2	gender	{1.00, Male}
3	A3	Numeric	8	2	nationality	{1.00, Saudi
4	A33	Numeric	8	2	nationality	{1.00, Saudi
5	A4	Numeric	8	2	residence city	{1.00, City}
6	q1	Numeric	8	2	they seemed kn	{1.00, strong.
7	q2	Numeric	8	2	they provided m	{1.00, strong.
8	q3	Numeric	8	2	they adressed	{1.00, strong.
9	q4	Numeric	8	2	they provided m	Constraint and Con
10	q5	Numeric	8	2	they provided m	
11	q6	Numeric	8	2	They appeared	a construction of the second sec
12	q7	Numeric	8	2	they were able t	
13	q8	Numeric	8	2	They checked o	
14	q9	Numeric	8	2	They delivered t	Provide and the second s
15	q10	Numeric	8	2	They performed	Construction of the local data in the local data
16	q11	Numeric	8	2	they observed f	and the second se
17	q12	Numeric	8	2	they responded	and the second second second
18	q13	Numeric	8	2	they was availa	and the second strends at the second s
19	q14	Numeric	8	2	They allocated	and the second se
20	q15	Numeric	8	2	They considere	and the state of the
21	q16	Numeric	8	2	They comforted	Conservation of the second sec
22	q17	Numeric	8	2	They maintaine	

patients survey 2016.sav

	N	Minimum Maximum		Mean	Std. Deviation	Skewn	ess	Kurto	osis
							Std.		Std
	Statistic	: Statistic	Statistic	Statistic		Statistic Error	Err	or Sta	tistic
Nurses									
Policy development	218	1.00	4.63	3.5935	.55118	-1.354	.165	1.888	.328
Training and skills support	227	1.00	5.00	3.2802	.85046	451	.162	310	.322
Extensive specific assets	225	1.00	4.80	2.9582	.78047	607	.162	.094	.323
Reward and	222	1.00	4.43	2.7297	.92119	199	.163	-1.013	.325
recognition system									
Patients									
Knowledge and providing information	252	1.00	5.00	3.5222	1.05528	792	.153	.064	.306
Clinical skills	252	1.00	5.00	3.4643	.97605	800	.153	.495	.306
Caring	252	1.00	5.00	3.4464	1.00068	627	.153	.103	.306
Communication	252	1.00	5.00	3.6402	1.05334	978	.153	.698	.306
Decision making	g 252	1.00	5.00	3.6204	1.02171	912	.153	.768	.306
Family involvement	252	1.00	5.00	3.5774	.98796	789	.153	.587	.306
Professional behaviour	252	1.00	5.00	3.7163	1.04548	-1.084	.153	.944	.306
Global rating	252	1.00	5.00	3.6131	1.20511	723	.153	269	.306

Appendix 8: Testing the distribution of results for main variables of nurses' and patients' surveys

Appendix 9: Searching for codes

Yes, to a certain degree. We joined the (CBAHI) experience three years ago and we passed it according to the second version standards. The third version of (CBAHI) has been printed out and distributed and will be applied in January The Hence, we can say that the management is committed to quality of care to some extent. 2018

This hospital is accredited by the Saudi Central Board for Accreditation of Healthcare

which are: identify patients correctly, improve effective communication, improve the safety of high-alert medications, ensure correct-site, correct-procedure, correct-patient surgery, reduce the risk of health care-associated infections, and reduce the risk of patient harm resulting from falls. These six international patient safety goals help to promote specific improvements in patient safety and highlights problematic areas in health care. The monthly

As a matter of fact, safety is not only for patients, but also for employees. However, let us pay more attention to patients' safety and put the needs of patients first. For example, managing test results effectively is vital to quality patient care; failure to follow up on test results can lead to patient harm. Therefore, I have to make sure that the lab results match the patient's name. Also, the medicines should be given on time and in the correct doses. Tests, investigations and treatments provided to patients should be suitable for their condition, with procedures performed accurately and in a timely and effective way.

In this hospital, for instance, there are certain regulations that have to be followed in providing medicine to patients. This process starts when the pharmacist prepares the medicine and stamps the prescription and then hands it down to second person to confirm and stamps as well. Basically, there should be two stamps on the prescription before it reaches the patient.

Appendix 10: Searching for themes

I myself, keep moving around asking nurses certain questions and by this, I will be able to evaluate and measure the patients' safety. This is referred to as intients' medical enture We also have a system called Ocerens Version Reporting (OVR) and we get informed whenever mothing wrong happens. These outcome indicators help us measure the safety ervice. We also have to pay special attention to the Six International Patient Safety Goals which are: identify patients correctly, improve effective communication, improve the safety of high-alert medications, ensure correctsite, correct-procedure, correct-patient sargery, induce the risk of health care-associated infections, and reduce the risk of patient harm resulting from falls. These six international patient safety goals help to promote specific improvements in patient safety and highlights problematic areas in bealth care. The monthly report provided by departments plays at important role in evaluating and measuring patients safety.

and a to the hospital strategy to build a safety culture?

The risk manager who belongs to medical risk unit is responsible for patients' safety. Also, the patient safety unit is responsible for ensuring that patients' safety is obtained. This is achieved by following the 16 standards for essential sufety recruitments and making sure that All The stass Shold Tead staff are aware of these standards. What are the main tools used in this hospital to measure safety culture? Krow

Safety is everyone's job and everyone needs to do their job well. I toll directed at a safety, manager to supervisor to technician to worker on the floor, it is a team job to win at safety. Simply, every individual needs to play a meaningful role in the safety process. Nevertheless, some staff are not taking safety seriously.