CLINICAL LEADERSHIP IN NURSING STUDENTS: A CONCEPT ANALYSIS

ABSTRACT

Objectives
To undertake a concept analysis of clinical leadership in nursing students.

Design: Concept Analysis

Data Sources: A comprehensive search was conducted using the Cumulative Index of Nursing and Allied Health Literature (CINAHL), Medline and PsychINFO using the following search terms: clinical leadership AND management AND preregistration OR pre-registration OR undergraduate AND nursing student* OR student nurse*.

Review Methods: Nursing student clinical leadership was explored using the eight-step process of concept analysis proposed by Walker and Avant (2014).

Results: The defining attributes included effective interpersonal communication skills, contemporary clinical knowledge and being a role model to others.

Conclusion: This concept analysis provides a definition of nursing student clinical leadership in nursing students. It will support understanding of the concept and how it is enacted in clinical placement settings.

KEYWORDS
Clinical placement, concept analysis, leadership, nursing students, pre-registration

BACKGROUND

Effective leadership is important in health and social care contexts and is integral to providing high quality and compassionate care. The effects of poor leadership are at the centre of several international high-profile reports, which have identified failings resulting in avoidable patient harm (Mohr, 2009; Francis, 2013; Kirkup, 2015; Health Services Executive, 2016). Health services such as the United Kingdom (UK) National Health Service (NHS) and the Irish Health Service Executive (HSE) highlight the need for a collective and disseminated leadership culture, one which values hierarchy but also relies on whomever has the skill and expertise to lead in that moment, resulting in organisational capacity building (West et al., 2015; HSE, 2020).

Internationally, there is a drive to nurture leadership development in novice and newly qualified nurses (World Health Organisation, (WHO) 2020). However,
leadership development in learner nurses can be problematic due to several factors, including the fact that the term might be used interchangeably with management (Patelarou & Vlasiadis, 2012). Leadership is a competency that should be developed over time and supported in both academic and clinical settings, commencing on entry to in pre-registration programmes (Pepin et al., 2011; National Health Service Leadership Academy, 2011). However, preparation for clinical leadership often only occurs towards the end of pre-registration nursing programmes, leaving newly qualified nurses under prepared for their role (Halstead, 2013; Scammell et al., 2020).

To address nursing leadership in the United States (US), the Clinical Nurse Lead role (CNL) was introduced in 2007, to meet higher standards of quality care provision (Clavo-Hall et al., 2018). Similar roles, that have a clear leadership remit such as nurse consultant and nurse practitioner have been developed elsewhere (Mullen et al, 2011; Josi & Bianchi, 2019; Gysin et al, 2020). Such roles do not directly address the pre-registration requirement for effective leadership. Despite there being no definition of clinical leadership in nursing students, there is a clear expectation that preparation for a leadership role is part of pre-registration preparation (Nursing and Midwifery Council, (NMC) 2019; Nursing and Midwifery Board of Ireland (NMBI), 2016; WHO, 2020). This lack of definition and unclear scope creates confusion for nursing students who might be unsure about the parameters of their leadership role during pre-registration preparation. For the purposes of this analysis, the term ‘Nursing Student Clinical Leadership’ (NSCL) will be used to describe clinical leadership in nursing students.

Concept analyses should be conducted when concepts require further clarification, as is the case with NSCL. Previously the concept of clinical nursing leadership has been focussed on registered practitioners and minimal attention has been paid to nursing students. Analysis of the concept of NSCL will identify the key elements of the concept to inform understanding of the role and subsequently inform curriculum development.

**DESIGN**

*Walker and Avant Concept Analysis process*
The Walker and Avant (2014) eight-step process was used to analyse the concept of NSCL. The framework provides a straightforward and systematic approach (Clohessy et al., 2019) and results in meticulously constructed theoretical and operational definitions for further use in theory and research. The eight steps include identifying the concept, determining the aims of the analysis, identifying the uses of the concept, agreeing the defining attributes, harmonising the model case, identifying additional cases (borderline, related, and contrary cases), identifying the antecedents and consequences, and defining the empirical referents.

**METHOD**

**Search Strategy**

The literature search was conducted using the Cumulative Index of Nursing and Allied Health Literature (CINAHL), Medline and PsychINFO using the following search terms: clinical leadership AND management AND preregistration OR pre-registration OR undergraduate AND nursing student* OR student nurse*. Articles included in the analysis were limited to the English language and published between 2008 – 2020 to coincide with the publication of the Standards to Support Learning and Assessment in Practice in the UK (NMC, 2008) and more recently the Nurse Registration Programmes Standards and Requirements in Ireland (NMBI, 2016), the Standards for Student Supervision and Assessment in the UK (NMC, 2018) and equivalent guidance from Sweden (Swedish Nurses Association, (SNA) 2017), The Netherlands (Hammer, 2016), Switzerland (Ledergerber et al., 2009) and Israel (Israel Ministry of Health, (IMOH) 2014).

Exclusion criteria included literature on leadership styles, advanced practice, leadership programmes and research on managers who performed a clinical role. The review included studies from the USA, UK, Sweden, Australia and Thailand. Examination of reference lists of the included articles revealed three further studies outside of the original search date range and these were included in the review. The searched retrieved several articles focused on nursing student leadership educational preparation and these were excluded from the review. This was because the focus of the analysis was how leadership was enacted in the clinical setting by nursing students. Due to the paucity of literature related to NSCL specifically, the
search was widened to include registered practitioners as students are required to practice according to the same codes and standards as registered nurses. This added value by broadening the defining attributes of the concept. It was also pertinent to include this literature, recognising the influence of registered practitioners in the education of nursing students in the clinical practice setting. The search retrieved 174 articles. Following application of exclusion criteria and the deletion of duplicate articles 16 were used to inform analysis of the concept (Table One).

Uses of the Concept

Walker and Avant (2014) suggest searching multiple sources, including dictionaries and thesauruses to support identification of the concept. The Online Oxford English Dictionary was searched for a definition of both ‘Nursing Student Clinical Leadership’ and ‘Clinical Leadership’ with no results. ‘Leadership’ was defined as:

The dignity, office, or position of a leader, esp. of a political party; ability to lead; the position of a group of people leading or influencing others within a given context; the group itself; the action or influence necessary for the direction or organization of effort in a group undertaking (OED, 2020).

A review of the literature revealed several definitions of the term ‘clinical nursing leadership’ although none specifically related to the context of nursing students. The review referenced skills, activities and competencies required for leadership in the clinical area required to influence and direct others, as per the dictionary definition of leadership (OED, 2020). These included, interpersonal skills (Lett, 2002; Stanley, 2006; Martin and Waring, 2012; Harris et al., 2013; Mannix et al., 2014; Bender, 2016; Stanley and Stanley, 2017); an ability to develop interprofessional relationships (Bender, 2013; Bender, 2016); teamworking skills (Bender, 2016; Ekstrom and Idvall, 2015); an ability to influence teams to achieve shared objectives (Chavez and Yoder, 2015); networking activities (Christian and Norman, 1998); acting as a change agent (Harris et al, 2013; Christian and Norman, 1998); having up to date clinical knowledge (Lett, 2002; Stanley, 2006; Supamanee, 2011; Demeh and Rosengren, 2015; Stanley and Stanley, 2017; Clavo-Hall et al., 2018); showing courage, strength and confidence (Supamanee, 2011; Stoddart et al., 2014; Ekström...
and Idvall, 2015) and being a role model (Stanley, 2006; Demeh and Rosengren, 2015; Francis-Shama, 2016; Stanley and Stanley, 2017). Stanley (2006: p111) provides a detailed definition of a clinical nurse leader as:

‘...a clinician who is an expert in their field, and who, because they are approachable, effective communicators and empowered, are able to act as a role model, motivating others by matching their values and beliefs about nursing and care to their practice’.

A wider review of codes and standards of practice revealed an expectation that nursing students would enact clinical nursing leadership and this would contribute to their educational preparation (see Portuguese Nurses Order, (PNO), 2001; IMOH, 2014; NMBI, 2016; SNA, 2017; NMC, 2018; LOOV, 2020).

**Defining Attributes**

Defining attributes are those which ‘appear over and over again’ when exploring definitions of the concept and set it apart from other concepts (Walker and Avant, 2010, p. 162). Three are most prevalent in this analysis: having interpersonal competence; possessing up to date clinical knowledge; being a positive role model (Table Two). Given that nursing students are at the start of their career, these attributes might be more or less evident, depending on the stage of the learner’s education, previous work experience and private life.

//Insert Table Two here\\\\

**Interpersonal Competence**

Interpersonal competence was the most frequently recurring aspect of the NSCL concept and described as having an ability to openly communicate with patients and other staff. Such skills might be gained through the experience of applying constructive feedback, supervision, and appraisal in working with others to develop self-awareness and competence. These skills are used to encourage and motivate other team members.

**Contemporary Evidence Based Clinical Knowledge**
The analysis identified the need for leaders to hold expertise and knowledge about clinical issues so that they can establish priorities and appropriately respond and react to challenges. This knowledge was used to support other members of the team to deliver care and to inform their own care management and delivery.

Role Model
Being a role model was an important aspect of clinical nurse leadership. To be a role model, clinical leaders need to reflect on insights and to be visible and work in congruence with their personal and professional values. Role models were able to use their skills to mentor others in leading, coordinating and delegating and were proud to work with patients. Role modelling also concerned an ability to develop coping, personal wellbeing and resilience skills.

Case Examples
To clarify a concept, Walker and Avant (2014) suggest the use of cases or exemplars. A model case represents the NSCL concept with all attributes present. A borderline case lacks some of the attributes of the model case and a contrary case describes what NSCL does not represent. All cases were developed from the authors’ clinical practice experiences.

Model Case

Peter is a nursing student now mid-way through his nursing programme. He is caring for Anna who has early-stage multiple sclerosis, a history of low blood pressure, and has difficulty mobilising. After reviewing the care plan Peter checks with the house doctor about Anna’s prescription as she has a history of falling due to low blood pressure. Having established that Anna is medically fit for her shower, Peter plans to use this care opportunity to encourage and influence his 1st year nursing student colleague in relation to safe mobilisation. He includes Anna in the decision making asking if she would like to have a shower now or would she prefer to wait till the afternoon. As Anna plans to watch a film later, she opts to have her shower now. Based on his learning from previous appraisals, Peter instigates the plan of care by first prioritising and organising the resources required after effectively communicating this plan with the student who is motivated by Peter’s knowledge and competence.
Peter demonstrates his knowledge of safe moving and handling as he clearly explains to both Anna and the 1st year nursing student of the necessary steps for coordinating the safe transfer from armchair to shower chair. He selects the correct equipment and clearly and competently communicates how to use it. He encourages and enables the student to direct and guide the transfer process after first checking that she had completed her moving and handling course. Peter reflects on the care provided and realises that the transfer boards are stored in the equipment cupboard at the end of the corridor causing an unnecessary time challenge. He thoughtfully suggests afterwards to the nurse manager that transfer boards could be stored in the locker next to patients’ beds as this would save time in organising patients’ care in this rehabilitation ward. The 1st year nursing student is inspired by Peter who she sees as approachable and pledges that she wants to be a nurse just like him.

**Borderline Case**

Kees is a nursing student mid-way through his nursing programme. He is caring for Pipa who has early-stage multiple sclerosis, a history of low blood pressure, and has difficulty mobilising. After reviewing the care plan Kees checks with the house doctor about Pipa’s prescription as she has a history of falling due to low blood pressure. Having established that she is medically fit for her shower, Kees approaches Pipa asking if she would like to have her shower now or later today. Pipa plans to watch a film in the afternoon so opts for having her shower now. Kees proceeds to retrieve the resources he needs to undertake the safe transfer from the cupboard at the end of the long corridor. He sees the new 1st year nursing student at the nurses’ desk but does not think to include her in the process. He uses the transfer board effectively after guiding Pipa on what to do and explaining the process of safe transfer. The 1st year nursing student tries to watch through the window as she recently undertook her moving and handling course and is interested, but she feels reluctant to approach as Kees did not invite her to help him and she feels slightly awkward thinking that he seems to know so much and appears so competent in his nursing role. When finished helping Pipa with her shower Kees proceeds to return the equipment and update the care plan. Kees reflects on the care he provided and realises that the transfer boards are stored in the equipment cupboard at the end of the corridor. He thoughtfully suggests afterwards to the nurse manager that transfer boards could be stored in the locker next to patients’ beds as this would save time in
organising patients’ care in this rehabilitation ward. Kees then takes the opportunity to explain the care he provided to the 1st year nursing student outlining the importance of safe transfers when the patient has limited mobility and is prone to experiencing low blood pressure. The nursing student has learned from Kees but feels less involved in the nursing care process on this occasion.

**Contrary Case**

Tom is a nursing student mid-way through his nursing programme. He is caring for Maria who has early-stage multiple sclerosis, a history of low blood pressure and has difficulty with mobilisation. Tom reads through the care plan and realising that Maria needs a shower he directs the 1st year nursing student to go to the end of the long corridor to collect the transfer board. The nursing student is not sure of where the board is stored but feels that Tom is not very approachable and therefore does not ask where she will find the board. The 1st year student already feels anxious and is not very comfortable about with working with Tom. In the meantime, Tom approaches Maria telling her that as they are very busy on the ward, she will have to have her shower now. He calls out to the 1st year student as to where she is with the board, startling the other patients in the ward area. Maria feels insecure as she is not confident with Tom’s knowledge on how to safely transfer her. Her increased anxiety and the light headedness she suddenly felt, added to Tom’s delay in safely securing the transfer board means that Maria slips from her chair as Tom and the 1st year nursing student commence the transfer. Now everyone is upset, and Maria must attend x-ray as her foot has been twisted under her awkwardly. Tom must complete an incident form and the 1st year nursing student who now dislikes working with Tom believes that nursing may not be the correct choice of career for her after all.

**Antecedents**

Building on the defined attributes, the next stage of the concept analysis process is to identify antecedents, that is the or components or situations that need to occur before the concept can exist (Walker and Avant, 2010). The reviewed studies showed that the antecedents required for NSCL include three key elements: a nursing student undertaking a programme leading to registration/licensure that includes leadership content and outcomes; a practice-based student supervisor
undertaking clinical leadership responsibilities; clinical leadership knowledge and expertise.

The literature indicates that programmes leading to nursing registration/licensure generally specify leadership and/or management content and associated competencies or outcomes that the student is required to demonstrate in clinical practice. Clinical leadership education should be mandated for nursing students at health service policy level to ensure a supply of well-prepared future leaders (Martin and Waring, 2012; Christian and Norman, 1998) and enacted through education programme competencies or programme outcomes (Chavez and Yoder, 2015; Ekström and Idvall, 2015). A competency model is favoured in some states or countries for example, Thailand (Supermanee et al., 2011), USA (Chavez and Yoder, 2015), Sweden (Ekström and Idvall, 2015). Elsewhere leadership outcomes are specified as curricular outcomes, for example, in the UK (Francis-Shama, 2016) and Jordan (Demeh and Rosengren, 2015). Successful outcomes are predicated upon effective university-health care provider partnerships in order that evidence-based theory is transferred and reinforced in practice (Clavo-Hall et al., 2018; Demeh and Rosengren, 2015). This includes the need for well-prepared and knowledgeable faculty both in university and practice settings (Clavo-Hall et al., 2018).

Another antecedent for NSCL is exposure to a practice-based student supervisor who undertakes clinical leadership responsibilities. Clinical supervisors need to be specifically prepared for their role as learning facilitators (Clavo-Hall et al., 2018), including the ability to assess individual needs and set realistic goals (Stanley and Stanley, 2017). As well as being an effective educator, supervisors must act as excellent leader role models (Stanley, 2006; Clavo-Hall et al., 2018, Harris et al., 2013), demonstrate effective inter-personal skills (Stanley and Stanley, 2017), display horizontal leadership acumen (Bender, 2013) to effectively empower teams to perform well (Christian and Norman, 1998) and relate confidently with interprofessional colleagues and the wider integrated team (Bender, 2013; Bender, 2016).

Clinical leadership and nursing clinical knowledge and expertise is another antecedent of NSCL. For clinical staff to have credibility with students they must first demonstrate excellent clinical knowledge and professional nursing expertise in their
field of practice (Chavez and Yoder, 2015; Stanley, 2006; Lett, 2002), with a clear focus on high quality patient care (Stoddart et al., 2014). Building on this foundation, the literature indicates that those with most influence on student learning are staff with a clear leadership role and status (Chavez and Yoder, 2015), who engage in direct patient care as a central part of their job role (Martin and Waring, 2012), lead teams, whilst valuing individual contributions (Mannix et al., 2014) and are recognised innovators and effective change agents (Harris et al., 2013; Christian and Norman, 1998).

Consequences
The next stage is to articulate the consequences arising from the concept. Consequences in this context have been defined as the factors derived from the literature that result from the concept itself (Walker & Avant, 2014). The consequences of NSCL include student achievement of leadership competencies, ability to participate in authentic and effective clinical team relationships and thereby contribute to high quality, safe care.

Achievement of clinical leadership competencies for nursing students thereby contributing to the generation of effective future registered nurse leaders is dependent primarily on exposure to evidence-based leadership curricula (Chavez and Yoder, 2015; Supermanee et al., 2011). Even more importantly is the provision of excellent supervision by expert clinical supervisors (Bender, 2016). Where supervision is inadequate, students feel unsafe and unsupported (Clavo-Hall et al., 2018). If exposed to poor role models they are in danger of acquiring poor standards of care and teamworking practices (Francis-Shama, 2016).

Where there is an effective clinical learning environment (Ekström and Idvall, 2015), staffed by experienced and educationally prepared nurse supervisors (Stoddard et al., 2014), the student learns how to participate in and ultimately create authentic clinical team relationships that result in motivated staff who deliver high quality care (Stanley and Stanley, 2017; Christian and Norman, 1998). Excellent clinical nurse leadership impacts on care quality because it is performed by highly skilled, innovative practitioners (Supermanee et al., 2011; Harris et al., 2013), drawing upon evidence-based clinical knowledge and expertise (Stanley, 2006; Stanley and
Stanley, 2017). Being a member of a team where one feels valued, teaches the student to value others, a key component of good clinical leadership (Mannix et al., 2014; Chavez and Yoder, 2015) and resilience building (Stanley, 2006). Particularly influential is when students work with role models with high levels of inter and intra-professional communication skills (Martin and Waring, 2012; Bender, 2013 and 2016; Christian and Norman, 1998). The antecedents, attributes and consequences of NSCL are summarised in Figure One.

To date it is unclear how the concept of NSCL is enacted in clinical settings. However, based on this review, NSCL involves student engagement with evidence-based leadership theory and exposure to an effective clinical learning environment where theory can be applied to clinical practice under the supervision and support of a professionally knowledgeable and skilled practitioner. This nurse will have had preparation as a clinical educator and leadership education to act as an expert role model to facilitate leadership skills development. Based on these findings the following operational definition is suggested:

“Nursing student clinical leadership is the application of theory and practice derived knowledge and skills demonstrating competence in interpersonal communication, having contemporary, evidence-based, clinical knowledge and being a role model from the outset of their exposure to the practice environment.”

Empirical Referents

Empirical referents are tools which measure the concept being studied and relate to the defining attributes rather than the concept in its entirety (Walker and Avant, 2010). This review identified three tools directly related to the measurement of NSCL, the Self-Assessment Leadership Instrument (SALI) (Linares et al., 2020) and the full and shortened versions of the Nurse Professional Competence Scale (NPC) (Gardulf et al., 2016; Nilsson et al., 2018). The SALI was developed as a self-report instrument for undergraduate nursing students aimed at measurement of strategic thinking, emotional intelligence, impact and influence and teamwork skills. The NPC scale is for nurses at the point of licensure and includes the leadership and
development of nursing as part of a wider theme within the tool. Reviewing these tools was helpful to confirm the attributes of the concept, especially considering the limited literature specifically relating to NSCL and the need to search more widely.

The defining attributes and the associated empirical referents outlined in this analysis could be used to support further development of these tools and approaches to assess NSCL in the future.

**DISCUSSION**

The analysis revealed several individual factors which influenced NSCL. These included interpersonal competence, possessing up to date clinical knowledge, being courageous, confident, a change agent, teamworking skills and an ability to role model to others. Providing clarity about the concept of NSCL has implications for both clinical practice educators and healthcare organisations. Nursing students are learners, supervised by registered practitioners who might be uncertain about the role of a student as that of leader. It is essential that registered staff enact positive role modelling, are approachable and match their values and beliefs with their clinical nursing practices (Stanley, 2006; Demeh and Rosengren, 2015; Francis-Shama, 2016; Stanley and Stanley, 2017).

Being able to role model what is expected from nursing students is essential for educators, as is providing a safe and supportive environment to learn (Mannix *et al*., 2014; Francis-Shama, 2016). Negative role modelling leads to a perpetuation of poor standards of care and students becoming disillusioned about their role (Clavo-Hall *et al*., 2018). Effective clinical leaders are passionate about high quality patient care and have their values ‘on show’, getting involved in hands-on clinical care (Stanley and Stanley, 2017: 1741). This contrasts with leaders who are pre-occupied with other duties and less visible in the clinical setting. If the practice culture is unsupportive of nurse education, students are more open to unprofessional practices, leading to a poor educational experience (Clavo-Hall *et al*., 2018; Francis-Shama, 2016).

In relation to the environment, it is important that nursing students feel welcomed and supported to develop leadership skills (Demeh and Rosengren, 2015). This leads to the development of self-confidence and the ability to develop skills of
autonomous learning and self-support. However, due to the nature of busy clinical environments clinical nurse leaders can be consumed by administrative tasks which inhibit opportunities for leadership (Martin and Waring, 2012). The unmanageable workloads endured by registered practitioners along with inadequate staffing can lead to difficult learning environments. This can lead to nursing students being reluctant to engage in leadership activity, further hampered by the view that leadership is for the chosen few and not for them (Francis-Shama, 2016).

Recommendations from this analysis include the need for educators to identify opportunities for nursing students at all levels to enact clinical leadership. Prioritising educational opportunities can enable students to practice and rehearse their skills in a safe environment so that on registration they are already used to this aspect of their role. The analysis revealed NSCL to rely heavily on relational or interpersonal communication skills, in contrast to the transactional or task focused skills, which might be more readily linked with the development of management competence. Analysis of the concept of nursing student leadership in clinical practice has resulted in the development of an operational definition that will underpin further examination of the concept itself.

LIMITATIONS

Exploration of the concept of NSCL as it is enacted in the clinical setting is restricted due to the paucity of studies that focus on nursing students’ education. In this study, retrieved literature was limited to exploration of the concept in the clinical setting and not specific to nursing students. Registered nurses will have different experiences of leadership although it was noted that similar definitions were found, and students are required to practice according to the same guidance, codes and in the same culture as registered nurses. Analysis of a wider perception of nursing student leadership does not diminish the benefit of the analysis, considering the role of the environment and registered nurses with responsibilities for leadership education in practice, to work within it. Restricting studies to those published in the English language is a limitation of this study.

CONCLUSION
The value of a concept analysis of NSCL is that it explores a complex concept in depth thereby enabling a clarity of its use in curriculum planning, educator preparation and policy. Exploration of ways in which nursing students enact, and are supported to develop leadership competence, has implications for clinical safety, staff retention and the quality-of-care provision. Further research is needed to explore strategies to support students’ enactment of leadership in clinical practice settings. The goal of such research is to enable support and education for learners to promote effective and high-quality patient care while they are students and subsequently on registration.

**HIGHLIGHTS**

Effective nurse leadership is essential to support quality care provision and to maintain patient safety.

Leadership impacts on nursing student motivation and learning during clinical placements.

Literature in relation to this concept is limited; this analysis adds to theoretical understanding, informing appropriate support and education of staff responsible for developing student clinical leadership competence in practice.

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