Clinical leadership and pre-registration nursing programmes: a model for clinical leadership and a prospective curriculum implementation and evaluation research strategy

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Abstract

Aim To present for wider debate a conceptual model for clinical leadership development in pre-registration nursing programmes and a proposed implementation plan. Background Globally, leadership in nursing has become a significant issue. Whilst there is continued support for leadership preparation in pre-registration nursing programmes, there have been very few published accounts of curriculum content and/or pedagogical approaches that foster clinical leadership development in pre-registration nursing. A doctoral research study has resulted in the creation of an overarching model for clinical leadership. Design A multi-method research study using theoretical and empirical literature 1974-2015, a focus group, expert opinion and a national online survey. Discussion A conceptual model of clinical leadership development in pre-registration nursing programme is presented, including the infinity loop of clinical leadership, an integral curriculum thread and a conceptual model: a curriculum-pedagogy nexus for clinical leadership. In order to test out usability and evaluate effectiveness, a multi method programme of research in one school of nursing in Australia is outlined. Conclusion Implementation of the proposed conceptual model for clinical leadership development in pre-registration nursing programmes and a programme of (post-doctoral) research will contribute to what is known about curriculum content and pedagogy for nurse academics. Importantly, for nursing students and the profession as a whole, there is a clearer expectation of what clinical leadership might look like in the novice registered nurse. For nurse academics a model is offered for consideration in curriculum design and implementation with an evaluation strategy that could be replicated.

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Clinical leadership and pre-registration nursing programmes: A model for clinical leadership and a prospective curriculum implementation and evaluation research strategy

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Abstract

Aim: To present for wider debate a conceptual model for clinical leadership development in pre-registration nursing programmes and the proposed strategy supporting the implementation and evaluation research project.

Background: Globally, leadership in nursing has become a significant issue. Whilst there is continued support for leadership preparation in pre-registration nursing programmes, there have been very few published accounts of curriculum content and/or pedagogical approaches that foster clinical leadership development in pre-registration nursing. A doctoral research study has resulted in the creation of an overarching model for clinical leadership – the infinity loop of clinical leadership and a conceptual model: a curriculum - pedagogy nexus for clinical leadership.


Discussion: A conceptual model of clinical leadership development in pre-registration nursing programme is presented, including the integral curriculum thread and the pedagogical approaches. In order to test out usability and evaluate effectiveness a multi method programme of research to
include a curriculum evaluative inquiry and prospective longitudinal cohort research study in one school of nursing is outlined.

Conclusion: Implementation of the proposed conceptual model for clinical leadership development in pre-registration nursing programmes and a programme of (post-doctoral) research will contribute to what is known about curriculum content and pedagogy for nurse academics. Importantly, for nursing students and the profession as a whole there is a clearer expectation of what clinical leadership might look like in the novice registered nurse. For nurse academics a model is offered for consideration in curriculum design and implementation with an evaluation strategy that could be replicated.

Key words
Clinical leadership; Nursing; Pre-registration; Conceptual Model; Curriculum; Pedagogy; Evaluation.
Introduction

Globally, leadership in nursing has become a significant issue and the importance placed on ‘leadership as a key component in all industries’ is well recognised (Ezziane 2012 p.261). Since the 1990’s, there has been a plethora of literature on clinical leadership and healthcare (Curtis, Sheerin & de Vries 2011). This body of literature generally focuses on the existing registered workforce, despite calls for support for the inclusion of clinical leadership in preparatory health professional programmes (Ezziane 2012 p.261). Despite this continued support there have been very few published accounts of curriculum content and pedagogical approaches that foster clinical leadership development in pre-registration nursing (Brown, Crookes & Dewing 2015). As a means of addressing this deficit, a doctoral research study was designed and two outputs have been developed. First a model for pre-registration clinical leadership – the infinity loop of clinical leadership and second, a conceptual model: a curriculum - pedagogy nexus for clinical leadership has been designed but not yet implemented. In this paper we will define and describe the two models and then we will outline the planned programme of research: a curriculum evaluation inquiry and prospective longitudinal cohort research study in one school of nursing in Australia.

Background

Whilst it is accepted there is no one universal definition of clinical leadership in nursing (Curtis, Sheerin & de Vries 2011) one needed to be adopted in the context of the doctoral research to ensure a shared understanding of the phenomenon of interest. Therefore the definition offered by Millward & Bryan (2005) has been embraced and underpins the research and the conceptual model. Briefly, Millward and Bryan’s definition of clinical leadership in nursing was adopted because it infers management and leadership are implicit and it has been adapted to make this more explicit.

‘...the reality of clinical leadership must involve a judicious blend of effective
management [of self and others] in the conventional sense with skill in transformational

... [leadership of self and others] in order to make a real difference to the care delivery

process...’

Millward & Bryan (2005) p.xiii, (adaptation in square brackets)

(Brown, Crookes & Dewing 2015)

This definition inspired a vision of clinical leadership as a continuum incorporating the two key concepts: leadership and management, initially relating to self and then broadening to encompass others. Our premise is at the point of registration as a novice the new graduate nurse should be able to lead and manage themselves, recognise and respond to effective leadership and management when they see it, including delegation and supervision of junior colleagues where necessary and to assimilate into the health care team appropriately.

The infinity loop or Mobius strip offers a visual image as it is a strip or band with only one side and one edge however appearing to be a two dimensional object (Darling 2004), creating the appearance that there is movement along the continuum. This view of movement of clinical leadership in nursing betwixt and between managing and leading self and others is inspired by Schön (1983) and M.C Escher a Dutch graphic artist (Figure 1).

![Figure 1 The infinity loop of clinical leadership development](image)

In the context of the doctoral research discussed here, the study was designed to identify and verify the antecedents of clinical leadership (leadership and management), that is, the curriculum content
and the best way to deliver the curriculum content once identified in pre-registration programmes. An international literature review revealed clinical leadership in pre-registration nursing is almost invisible in the published literature (Brown, Crookes & Dewing 2015), notwithstanding the association of clinical leadership as fundamental to the provision of safe, effective quality health care (Storey & Holti 2013). In addition, within this limited range of literature there was no consistent or conclusive evidence for either the curriculum content or recommended pedagogical approaches. The doctoral research went onto carry out a national online survey of the nursing profession (clinicians, managers and academics) in Australia seeking their views on curriculum content aggregated from the available literature and other credible sources (Kouzes & Posner 2012, Yukl 2012). The survey results were unequivocal, there was consensus on what was important and relevant (Brown, Crookes & Dewing 2015). Having identified 'what' was needed (i.e. broad content) attention turned to 'how' the content would best be organised and delivered. However, the dearth of empirical evidence on the educational strategies and effective pedagogical approaches required a deeper exploration of existing educational theories and evidence culminating in the development of an integral curriculum thread. (By curriculum thread we mean purposefully structured and logically sequenced content across the curriculum). Further, critical consideration of the antecedents of clinical leadership (as the curriculum content) and integral curriculum thread has accomplished the development of a conceptual model. We are aware that these models need implementing and researching, thus figure 2 sets out the overview of the doctoral research study culminating in the illustration of the conceptual model - the curriculum-pedagogy nexus for clinical leadership in pre-registration nursing programmes. The curriculum-pedagogy nexus is represented within the ellipse and indicates where this aspect of clinical leadership development is situated within the infinity loop of clinical leadership. The straight line is to indicate the minimum required standard of clinical leadership development at the end of the pre-registration programme.
Figure 2. Research Overview and the Conceptual Model
Next, we expand on our description of the conceptual model in more detail as an introduction to the curriculum innovation and the curriculum evaluative inquiry and the proposed longitudinal cohort research study.

**The curriculum - pedagogy nexus for clinical leadership in pre-registration nursing programmes**

A common understanding of curriculum is ‘*a course of study or syllabus*’ (MacNeil & Silcox 2003 p.1) and this is appropriate and applicable within our model. Pedagogy is understood in the context of this model based on the definition offered by the same authors a *‘reasoned, moral, human interaction, within a reflective, socio-political, educative context that facilitates the acquisition of new knowledge, beliefs or skills’* (MacNeil & Silcox 2003 p.1). The curriculum - pedagogy nexus is presented in figure 2 as a series of concentric rings demonstrating the interconnectedness of the concepts within the model encompassing the integral curriculum thread. Central to the conceptual model is the integral curriculum thread utilising transformative/emancipatory learning and teaching methods to support the development of clinical leadership in pre-registration nursing programmes. The proposed thread contains the two core concepts leading-self and managing-self composed of the antecedents (identified content) and suggested educational strategies and effective pedagogical approaches derived from existng educational theories. Fay’s (1987) enlightenment-empowerment-emancipation continuum provides the support for how the antecedents of clinical leadership will be developed over the duration of the programme of study and how the integral curriculum thread will culminate in the context of clinical leadership and the scope of practice as a beginning registered nurse (See Brown, Dewing & Crookes 2016 for detailed description).

The next two rings (shaded) embody the definition of pedagogy (MacNeil & Silcox 2003 p.1); this definition has been interpreted and reflected within the conceptual model as the processes and outcomes of learning and teaching.
'reasoned, moral, human interaction, within = Process of learning and teaching

a reflective, socio-political, educative context

that facilitates the acquisition of new knowledge, beliefs or skills',

The boundaries are permeable reflecting the dynamic nature of the curriculum-pedagogy nexus.

The process of learning and teaching facilitates comprehension and ultimately embodiment of the antecedents of clinical leadership in the context of a new graduate nurse. In the model purposeful and opportunistic learning leadership moments are proposed. By purposeful we mean a planned approach to the learning activities where the antecedents of clinical leadership can be made explicit to the student through the transformative/emancipatory learning and teaching approaches. Opportunistic leadership learning moments were inspired by Sherman & Bishop (2007) who exalted the use of the teachable moment for the development of leadership in practice in pre-registration nursing programmes.

The outcome of learning and teaching incorporates assessment and evaluation. In our model we have identified at the end point of the programme of study there should be a minimum standard of capability demonstrated and this should be assessed in theory and in practice. If the nursing student is to have a heighten sense of awareness that they will need to be clinical leaders from the point of registration some measures of progress will be required. This will enable the student learning and the efficacy of the integral curriculum thread to be evaluated over the duration of the programme. In addition, evaluation is obligatory in educational institutions, internal and external accreditation and regulatory bodies require information on the quality of the programmes and courses provided (Marks-Marans 2015 p.3). Alongside the required quality assurance and quality enhancement processes any new curriculum innovation also needs to be evaluated specifically.
The outer ring is labelled curriculum to illustrate the nexus between the two concepts curriculum and pedagogy, the boundary is a solid line to signify that the curriculum is defined and is influenced by internal and external factors (Keating 2014). We have included antecedents of clinical leadership within the curriculum ring; these are identified as the indicative curriculum content that has been derived empirically from the doctoral research.

The implementation of the conceptual mode is the next step. Whilst the model draws on concepts, theories and empirical findings and offers a sound evidence base, it is necessary to test and refine the curriculum-in-action. These will be achieved by turning the implementation of the integral curriculum thread into a reality and evaluating the success of the curriculum innovation at a programme and individual (student) level.

**Turning the integral curriculum thread into a reality**

There are a myriad of approaches to evaluation of educational programmes (Stufflebeam 2001, Marks-Maran 2015), however when undertaking research into ‘*teaching and its effectiveness on student learning*’ (Marks-Maran 2015 p. 2) it is necessary to look towards research and the scholarship of teaching (Marks-Maran 2015 p.3) not merely reliance on quality assurance and quality enhancement processes. A two phase implementation plan has been devised for the implementation of the integral curriculum thread: Phase 1. Integral Curriculum Thread Preparation and Phase 2. Integral Curriculum Thread Implementation and Evaluation.

Parsons (2002, 2009) model of evaluative inquiry has influenced the research design. Evaluation in this model is defined as ‘*to determine their value*’ and an understanding in evaluation research with two caveats, ‘*evaluation is often seen as something that someone else does*’ and ‘*evaluative inquiry balances attention to the investigation itself with its purpose*’ (Parson 2002 p.xi). This is an ideal approach for the evaluation of our curriculum thread at a programme level and this will inform the
`planning and action` phase in the evaluation. (Parson 2002 p.xi). A prospective longitudinal cohort study is an appropriate research design because according to Ruspini (2002) it provides *the most reliable data on change in knowledge or attitudes* (p.4), the exact outcome required at the individual student level in this curriculum innovation. An overview of the process is presented in figure 3.

![Diagram](image.png)

**Figure 3. A Collaborative multi-methods research study - Implementation and evaluation of the integral clinical leadership curriculum thread**

**Phase 1. Integral Curriculum Thread Preparation**

In figure 3, year 1 is the curriculum innovation component. It is acknowledged that nursing curricula are already congested and there are always suggestions and recommendations for ‘another’ curriculum inclusion (Stanley & Dougherty 2010, Benner, Sutphen, Leonard & Day, 2010, Birks, James, Chung, Cant & Davis 2014). Reflecting Benner et al’s (2010 p.4) call for unburdening curricula we are suggesting our understanding of the what, how and when of the antecedents of clinical leadership as a way forward. We contend that the content already exists in the majority of curricula and through a structured evaluative process. Therefore a curriculum self-assessment tool will be designed; this will facilitate the location of the antecedents in the existing curriculum. Once
identified, the content will be used to create the purposeful and opportunistic leadership learning moments. It is envisaged the design of these learning opportunities will use a collaborative and participative team approach. Expert panel reference groups will be established with representatives from nurse academics, clinicians, managers, educators, students and alumni for consultation, opinion and specialised input to contribute to the co-design of the learning opportunities. The number and type of purposeful and opportunistic leadership learning moments over each year of the curriculum will be determined by the expert reference group. These learning opportunities will incorporate the transformative/emancipatory learning and teaching methods developed in our integral thread within our curriculum model. The integral curriculum thread preparation will then culminate with the scaffolding of the leadership learning moments within tutorials, simulation, practice or directed learning activities and reflecting the enlightenment-empowerment-emancipation continuum.

How the student makes sense of the antecedents of clinical leadership in the context of learning to be a nurse will be ultimate measure of the effectiveness of the curriculum/pedagogical innovation. Therefore, the design of the leading self-managing self-assessment scale will be undertaken in year 1 of the project appropriate statistical advice and guidance on sample frame and power calculation to detect statistical significance. A pilot study prior to implementation will inform usability, validity and reliability.

**Phase 2. Integral Curriculum Thread Implementation and Evaluation**

This phase will include the implementation of the curriculum thread and commencement of the curriculum evaluative inquiry and longitudinal cohort study. The beginning of this phase of the project will coincide with a new cohort of students enrolling in a 3 year Bachelor of Nursing programme at one university in Australia and will follow the students through the three years of the programme and beyond. Ethical approval will be sought as required within the institution; however
Bradbury-Jones & Alcock’s (2010) framework for ethical practice (contribution, relationship and impact) is specifically helpful for the involvement and recruitment of nursing students will be used to inform the ethical application. The students will be informed of the curriculum innovation and invited to participate in the evaluative inquiry. Students will be invited to complete the leading self, managing self-assessment scale at the beginning of the course and informed that this invitation will be repeated during the course at the end of each year of study and in a final assessment six months post-graduation. In addition the students will be invited to provide feedback on the developed learning opportunities. The other major stakeholders in this research study include academics involved in the delivery of the curriculum and clinical assessors involved in teaching and assessing in practice who having contributed to the co-design of the curriculum thread will be invited to contribute to the evaluation. Supplementing existing quality assurance and quality enhancement processes, students, academics and clinical assessors will be invited to participate in interviews and focus groups. Permission to observe/review assessments in theory and practice are also planned to evaluate examples of the purposeful and opportunistic leadership learning moments in action. A timely publication and dissemination strategy of results is planned and the implications for further research will be determined.

Conclusion

We have presented the proposed conceptual model for clinical leadership development in pre-registration nursing programmes developed from the doctoral research and the proposed programme of research. This is the first presentation of this curriculum - pedagogy nexus one of the intentions is to promote feedback and debate in the nursing education community. The planned programme of research will contribute to what is known about curriculum content and pedagogy for nurse academics in the context of clinical leadership and pre-registration nursing curriculum development and pedagogical processes. Specifically, it is with the aim ‘to provide [tentative]
answers for nurse educators who continue to seek ever more effective ways to prepare students to respond proactively to current and future trends in nursing and other health services’ (Fawcett & Desanto-Madeya 2013 p. v). In addition, the results may have policy implications for example, the standards for accreditation of pre-registration nursing programmes may be influenced. Most importantly, for nursing students and the profession as a whole there is a clearer expectation of what clinical leadership might look like in the novice registered nurse with the overall aim to prepare our graduates to provide safe, effective, quality care.
References


