



Doctorate Studies

Benner's model and Duchscher's theory: Providing the framework for understanding new graduate nurses' transition to practice

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ABSTRACT

The transition to quality and safety in the new graduate registered nurses' practice remains problematic directly impacting patient outcomes. Effective mentoring during transition serves to enhance experiential learning, allowing the development and establishment of safe, quality nursing practice. Comprehensive understanding of the transition process, including the barriers and effective enablers to transition is the key to effective mentoring. A theoretical framework guided by Duchscher's *Stages of Transition Theory* and *Transition Shock Model* and Benner's *From novice to expert* model can facilitate such understanding. Nurse Theorists play an important part in shaping nurse education and practice and have provided nurse educators and leaders an understanding to shape skill acquisition and the transition process for new graduate registered nurses. The resultant research models and theory of these influential nurses are pertinent to transition of new graduate registered nurses. This paper outlines the theories of Duchscher and Benner and how their research formed the theoretical framework to facilitate the measurement, understanding and improvement of the safety and quality of nursing care and impact the future nursing workforce.

1. Introduction and background

Patient safety is critically important to obviate tragic consequences. For example, medical errors account for thousands of hospital complications and deaths per year (Gluyas and Morrison, 2013). It has been recognised that more preventable errors occur during times of new staff inductions than at other times of the year (Duckett and Moran, 2018). New graduate registered nurses' (NGRNs) and their patients are especially vulnerable in healthcare's safety-critical environment due to their limited prior exposure to a myriad of clinical situations (Henderson et al., 2015). As NGRNs, and many other health professionals, enter the workplace for the first time, there is general staff disruption that impacts on patient care. These new nurses may not yet have the technical skills necessary to monitor patients sufficiently or the experience to apply the requisite critical thinking and thus aspects of care that may ultimately lead to best patient outcomes (Duckett and Moran, 2018; Myers et al., 2010). It is imperative for NGRNs to build the clinical competence and experience necessary for recognition of a deteriorating patient to prevent poor patient outcomes.

New graduate registered nurses are an important cohort of the nursing community, bringing current evidence based theory and a fresh vigour to the workplace. Transition to practice though, is a turbulent

time for new graduate registered nurses as they are vulnerable newcomers who require understanding and support from their more experienced colleagues (Boamah et al., 2016; Chang and Daly, 2016; Regan et al., 2017).

NGRN transition has been at the fore of nursing research in recent years as we question this cohort's work readiness and attempt to understand how best to assimilate these new nurses into clinical practice (El Haddad, Moxham & Broadbent, 2017; Laschinger et al., 2016; Missen et al., 2016). NGRN transition has been studied since Kramer's 1974 seminal work 'Reality shock: why nurses leave nursing' wherein "Kramer suggested that nursing students were inadequately prepared to make sense out of, or subsequently be acculturated into, the behaviours and expectations of their new professional working culture." (Duchscher and Cowin, 2004 p.290; Gazaway et al., 2016). Continuing what Kramer began, and prompted by the continuing NGRN attrition, Benner (1984) and Duchscher (2008, 2009), developed models and theory to understand the stages of skill acquisition and the process of transition to practice which facilitated the development and adoption of appropriate learning supports for newly registered nurses integrating into the workplace in an attempt to alleviate ongoing attrition.

With the NGRN attrition rate continuing to plague healthcare, Duchscher's (2001, 2008; Duchscher and Cowin, 2004, 2006)

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exploration of the transition from nursing student to Registered Nurse (RN) highlights the importance of the work environment and conditions into which NGRNs are entering. This led to the development of her *Stages of Transition Theory* and subsequent *Transition Shock Model* identifying themes that equate to stages of transition from nursing student to competent practitioner (Duchscher, 2008, 2009). The importance of understanding the transition process is to foster and maintain competent practitioners.

Given the reported impending global nursing shortage (Health Workforce Australia, 2014; Liu et al., 2017), and the impact of low retention rates (Parker et al., 2014), there is a need to consider the safety of the NGRNs entering the workforce and the stressors affecting their transition to practice. Initial stressors affecting the NGRN include the weight of responsibility, being afraid to question, and the knowledge-practice gap that challenges clinical reasoning and critical thinking (Halpin et al., 2017). In the clinical environment these stressors may be better understood in the light of Duchscher's *Transition Shock Model*, for nurses transitioning to the graduate nurse program. This model considers reality shock, transition theory, role adaptation, and growth in the development of new graduate nurses (Duchscher, 2009).

2. Conceptualising nursing theories: why this is important

NGRN workplace integration and retention remains a current issue with a reported ten percent of Australian NGRNs indicating an intent to leave nursing and another 32% uncertain of their intentions (Parker et al., 2014). Local figures in Western Australia (WA) indicate that 7.6% of NGRNs between 2010 and 2016 resigned from their graduate nurse program prior to completion (Centre for Nursing Education, n.d.). Attrition is an international problem, with rates of 30–50% reported in the United States of America (USA) and may be influenced by some pre-conceived expectations of competence (Phillips et al., 2017).

There remains an expectation within healthcare organisations that NGRNs should be able to 'hit the ground running' (Boamah et al., 2016; Duchscher, 2009; Missen et al., 2016; Regan et al., 2017). This implies that NGRNs should be able to translate theory to practice to provide safe and quality care. University nursing programs provide education for nurses to provide safe and effective care for stable patients (Herron, 2017). It has been suggested by Phillips et al. (2014) that initial placements in clinical areas such as surgical or medical wards allows for acquisition and consolidation of foundational skills in a stable clinical environment. Simulation is increasing in both the undergraduate and post graduate spaces to assist student nurses, NGRNs and experienced nurses alike to recognise and respond to the clinically deteriorating patient, however, there remain barriers to this for the NGRN. Barriers include the stressors of transitioning as described by Duchscher (2008) and lack of situational awareness due to limited experiential learning as recognised by Benner (1984).

Benner highlighted the differences between practical knowledge ("knowing how") and theoretical knowledge ("knowing that"), asserting that knowledge is embedded in expertise and expertise develops with experience and exposure to clinical situations (Benner, 1984; Benner and Wrubel, 1982). Limited experience in situations of clinical deterioration is in itself a cause for anxiety and stress, and add to that communication anxieties between NGRNs, senior nurses, medical staff, and allied health, and therein lies the potential for decreased quality of patient outcomes (Levett-Jones, 2014).

The purpose of this paper is to consider the utility of Benner's *novice to expert model*, and Duchscher's *transition shock model* and *stages of transition theory* as the framework for investigating NGRNs' transition to practice with a focus on quality and safety.

3. The study

The intent of this study was to explore the patient safety knowledge,

clinical behaviours, and the attitudes of NGRNs' to patient safety, medical errors, and quality care. In essence, the study's aim was to more clearly describe the NGRNs' understanding of patient safety as it applies to clinical practice as they transitioned from final year nursing students to first year registered nurses.

This study adopted a fixed mixed methods approach to examine newly registered nurses' perceptions of their own understandings of patient safety and measure this knowledge over time. The convergent design used in this study saw the researcher gather both qualitative data and quantitative data, analyse these data sets separately, and combine the results to obtain "a more complete understanding" (Creswell and Plano Clark, 2018, p. 65) of the perceptions; understanding and knowledge of one group NGRNs toward patient safety and during their transition to practising clinicians.

4. Theoretical frameworks

Schneider (2013) describes a theoretical framework as the link between the proposed or current study to that of established theories or models. Benner's *Novice to Expert model* and Duchscher's *Stages of Transition Theory* and *Transition Shock model* provide a framework upon which experienced nurses, nurse educators, and researchers may review expectations of the NGRN. These expectations then provide a basis for mentoring and support, during the transition process. Benner's and Duchscher's models and theory provide an established knowledge base for this researcher to explore the relationship between the NGRN and patient safety knowledge upon transition to clinical practice. As a theoretical framework for research, these models and theory "... provide a structure to guide the development of the study" (Engberg and Bliss, 2005, p.157) and upon which to review this study's results.

Benner's stages of skill acquisition in the nursing context demonstrates skill acquisition is experiential. Duchscher acknowledges this and provides a model of transition that helps proficient and expert nurses understand and facilitate NGRN transition during their initial months of practice. This provided a basis for the researcher to explore the NGRNs knowledge of, and attitude to, patient safety during transition to practice. Given that Duchscher placed her model in a timeline demonstrating the development of the NGRN emotionally and professionally, the researcher was able to use those same time points to survey NGRNs to ascertain knowledge levels and attitudes, and compare them with the NGRNs characteristics Duchscher theorised at the concurrent times (Fig. 1).

Further, theory offers a response to the need to provide evidence based practice (Jirojwong et al., 2014). Addressing the NGRN attrition problem, both Benner and Duchscher provided theory upon which transition and residency programs have been developed. Workplaces

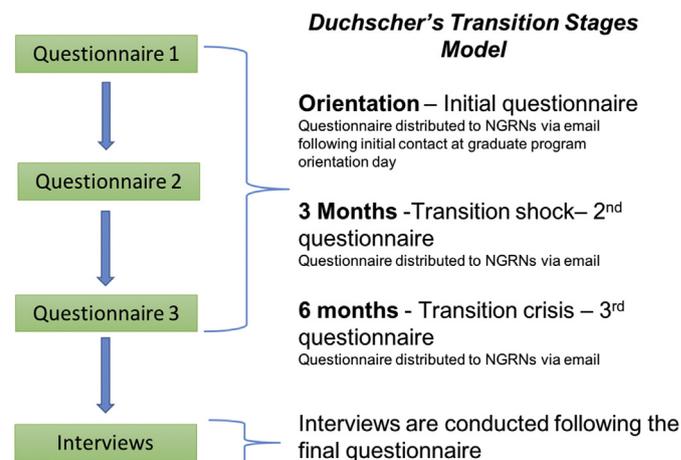


Fig. 1. Data collection process in line with Duchscher's Stages of Transition Theory.

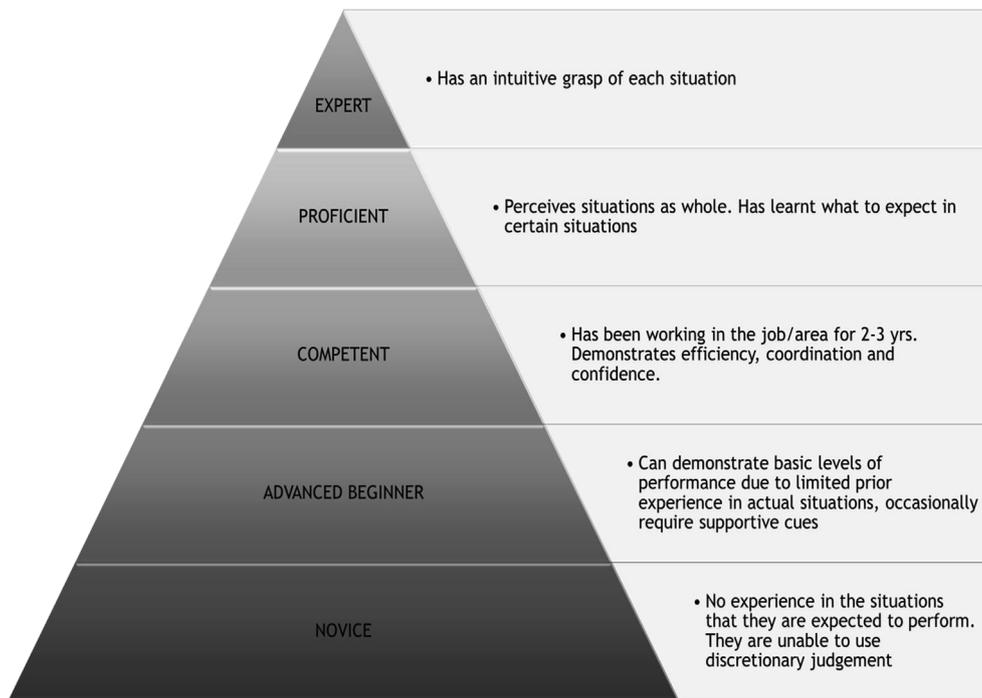


Fig. 2. Benner's Novice to expert model of skill acquisition.

have the opportunity to offer placement within a graduate program to provide additional support and resources, as the expected skill level of the NGRN along with the turbulence experienced throughout the first twelve months is known (Boamah et al., 2016; Chang and Daly, 2016; Duchscher, 2008, 2009; Regan et al., 2017). Thus the theoretical underpinning, based on Benner and Duchscher's theories and models, is that NGRNs will have increasing knowledge during their initial six months that translates into increased patient safety knowledge and practices by completion of their transition year.

Benner's *Novice to Expert model*, and Duchscher's *Stages of Transition theory* and *Transition Shock Model* were used to underpin the data collection phase of this study as illustrated in Figs. 2 and 3. The following paragraphs describe these models and how they informed this study.

5. Dreyfus to Benner

The Dreyfus model of skill acquisition (Dreyfus and Dreyfus, 1980) was initially developed to “study pilots’ performance in emergency situations” (Benner, 2001a, p. xxiii). Professionals in both the airline industry and health care must practice with utmost safety at all times

and it is important for individuals in both these fields to be able to competently manage emergent situations, achieving the best possible outcome for all in the given situation (Benner, 2001). The Dreyfus model of skill acquisition posits that learning is experiential and performance is intimately dependent upon the circumstances people face/are placed in (Benner, 1984; Dreyfus and Dreyfus, 1980). The Dreyfus model suggests that to fully develop a skill, one must pass through five proficiency levels. The levels described by Dreyfus and Dreyfus (1980) are: *novice*, *competence*, *proficiency*, *expertise*, and *mastery*. This concept of learning and skill development were embraced and then modified by Benner in her work as she described the development of the novice nursing student’s acquisition of knowledge, confidence and expertise (Benner, 1982).

6. Novice to expert

Benner's (1982) adaptation of the Dreyfus model to nursing labelled the stages: *novice*, *advanced beginner*, *competent*, *proficient*, and *expert*. The level focussed on in this study is that of the *advanced beginner*.

NGRNs upon transition are considered to have the skill level of an *advanced beginner* (Benner, 1984). These new nurses are able to demonstrate basic skills due to prior exposure, however they require prompting and support from guidelines or mentors (Benner, 1982). As Benner (1984) would describe, these nurses have little to no aspect recognition. Aspect recognition is a knowledge element that evolves and is dependent on exposure to certain situations or prior experience (Benner, 2001a). This is important for NGRNs when deciphering and acting on patient observations. Some believe the use of early warning score patient observation charts may now provide these nurses with prompts to assist in recognising and further investigating these patients based on observations alone (Hughes et al., 2014).

Undergraduate education provides explanation of many aspects of nursing care, and guidelines on recognising a variety of situations, however the *advanced beginner*, with limited exposure to such situations uses up their time and energy in remembering the rules and guidelines and can miss the patient's cues. Furthermore, the meaning of cues are not synonymous for all patients and recognition of these cues and their meanings is experiential (Benner, 1984). Benner (1984) explains that

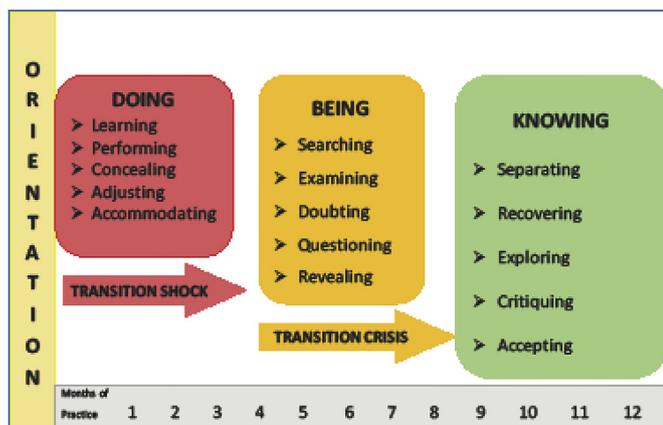


Fig. 3. Duchscher's stages of transition theory.

advanced beginners need support and back up from experienced, competent nurses “... to ensure that important patient needs do not go unattended because the advanced beginner cannot yet sort out what is most important” (p. 25).

The NGRNs interviewed for this study described an initial struggle with time management and priorities, thinking only of their patients in terms of tasks. It was reported by some that they considered they had a good day when all tasks were completed. It was clear that at this early stage the NGRNs were focusing on the importance of task completion rather than consideration of what these tasks meant as a whole for the patient. There were also times during the first weeks of transition where some NGRNs were torn between maintaining patient safety and their time management: a struggle that emulates Benner's descriptions and exemplars of the transitioning *advanced beginner*. These descriptions also reflect, in part, Duchscher's *Stages of Transition theory* and *Transition Shock Model*.

7. Stages of transition theory & transition shock model

Duchscher's research supported Benner's in that NGRNs, in their first two to three months of practice, have very linear thought processes, perceiving what is right and wrong, and setting boundaries to their practice using these perceived parameters (Duchscher, 2001). The *Stages of Transition Theory*, illustrated in Fig. 2, describes transition as progressing through three main stages; *doing*, *being*, and *knowing*. These three phases are overarched by what Duchscher describes as *transition shock*, occurring in the first three to four months of transition, and *transition crisis*, culminating approximately at eight to nine months into the NGRNs initial twelve months of clinical practice (Duchscher, 2008).

Duchscher learned that early in the *doing* phase, NGRNs had idealistic expectations and anticipations that were far from reality. The nurses blamed this disparity on a lack of educational preparation and it was not until the NGRNs were a few months into their practice, when they felt more comfortable, had accepted their limitations, and could ask questions of their colleagues, that they were able to mentally move into their next phase of learning (Duchscher, 2001). This concept was supported in the current study by NGRNs who noted that more undergraduate clinical placements would have benefitted their transition process and would have provided them with sounder knowledge of clinical skills/practices. One NGRN described her own transition as being hampered by her own expectations stating “... I think it's my expectation, that my high expectations of myself ... that is what's letting me down”. Others felt their confidence in asking questions increased when they realised that if they hesitated to ask questions, their patient's safety would be in jeopardy. As one interview participant put it “... well either I get embarrassed and this patient gets good treatment, or I save my face and something goes wrong”. This indicates a move into what Duchscher defines as *being*.

Duchscher's second progression, *being*, recognised the transition of the NGRN from new beginner to someone who can now look beyond their own abilities, or inabilities, to *see* the patient. NGRNs in this stage felt torn between remaining under the somewhat comfortable umbrella of student/graduate and free-falling into the professional role of RN (Duchscher, 2008). They had a distinct increase in knowledge level, skill competency and critical thinking while they began settling into their new role and responsibilities; recovering from the initial shock experienced during those first three months. During this stage the NGRN has gained some trust in their own capabilities and begins to apply practical meaning to their theoretical knowledge (Duchscher, 2001), Benner's “knowing that” and “knowing how” are beginning to merge into Duchscher's stage of *knowing*. One participant stated “... you've worked at time management sort of around that and now its time to really slow down and think, ok, there's something else going on here, like what else is it?”.

The final stage of *knowing* sees shifts in personal and professional socialisation and changes to their stress influences, as frustrations move

from the NGRNs own insecurities and abilities, to frustrations with the system and being at the bottom of the pecking order (Duchscher, 2008). Duchscher describes this stage as transition crisis. The recovery of the *being* stage continues into this *knowing* stage with NGRNs beginning to take stock of what it is to be a nurse. It is time for the NGRN to explore, separate, critique, recover, and accept their role as an RN (Duchscher, 2008, 2012).

During the *knowing* stage, these nurses remain in Benner's *advanced beginner* stage of clinical competence, however, their focus has shifted from themselves, toward the whole of the patient and the system they are working in. The NGRN recognises this transitional progression when they find themselves answering questions rather than asking them; assisting colleagues with their workloads; and approaching their own workloads beyond the task list on which they were initially focussed. They approach situations similarly to earlier months but have developed different coping mechanisms (Duchscher, 2008). An example of this is a participant explaining, at six months into her graduate nurse program, her shift in thinking away from “... you do your basic stuff, and your just like right, I've done my, all my stuff on my time planner is done. Whereas now you're going, looking at why are we doing this and sort of asking those why questions.”

8. Implications for nursing

Undergraduate education acknowledges Benner's stages of skill acquisition by teaching nursing skills in stages throughout a three year baccalaureate degree, preparing nursing students as advanced beginners upon graduation. For nurse educators, mentors and leaders in the workplace, acknowledging and understanding Benner's stages of skill acquisition and Duchscher's *stages of transition theory* and *transition shock model* can serve to enhance the NGRN's transition to practice through experience. This will assist in the establishment of quality patient safety practices through targeted education and mentoring, and realistic expectations of competence and experiential skill acquisition in the first year of clinical practice.

This will also have a positive impact of retention of our new graduates. Attrition is costly for health services; leading to nursing shortages, and ultimately impacting patient safety (Phillips et al., 2014). Acknowledging Benner and Duchscher, numerous studies recommend mentoring, socialisation, positive reinforcement and continuing support for NGRNs (Chang and Daly, 2016; Gazaway et al., 2016; Laschinger et al., 2016; Neville and Wilson, 2016; Numminen et al., 2015; Phillips et al., 2014). These findings are synonymous with job satisfaction and occupational commitment. Without these, NGRNs are prone to higher intention to leave during the first twelve months after graduation.

9. Conclusion

Nursing theories, models and resulting frameworks provide a benchmark against which nurse researchers can investigate and measure phenomenon that may be affecting the safety and quality of nursing care and impact the future nursing workforce. Benner's adaptation of Dreyfus's model of skill acquisition for nurses, and Duchscher's *Stages of Transition theory* and *Transition Shock model* provides a scaffold upon which nurse educators, managers, and nurse leaders can build a sound transition experience for the new graduate registered nurses. This paper has demonstrated the utility of these models in understanding the learning experiences of the students nurses as they transition towards the establishment of safe, quality nursing practice and job satisfaction.

Conflicts of interest

No conflict of interest has been declared by the authors.

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Appendix A. Supplementary data

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