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Supporting new graduate registered nurse transition for safety: A literature review update

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Supporting new graduate registered nurse transition for safety: A literature review update

Abstract

Background: Reports suggest higher incidence of medical errors occur during times of transition for new practitioners, in part due to general staff disruption in the health services and inexperience of those entering the workplace. NGRNs experience a range of challenges on transition to professional practice and their transition experience will impact their ability to provide high quality patient care.

Aim: The aim of this review was to critically appraise the contemporary literature concerning the transition of new graduate registered nurses (NGRNs) and their patient safety knowledge and practices

Design: A scoping review of research literature.

Methods: The review used key terms and Boolean operators to search literature from 2015 to September 2018. A search of CINAHL, PsycINFO, Scopus and Medline databases and a manual search of references conducted to identify any other literature not previously detected.

Findings: This review acknowledges NGRNs have varied experiences during initial transition to practice. Transition programs are valuable for the structure and support provided during the first 12-months of practice. Ward culture influences safety practices while disparity between readiness and expectations remains.

Discussion: Practical and emotional support necessary to help new nurses successfully navigate the turbulent early months of transition to clinical practice will ultimately enhance NGRNs' clinical safety.

Conclusions: New graduate nurses require a supportive culture to translate knowledge and skills into safe practice and alleviate stressors. There remains little literature regarding patient safety knowledge and practices of new graduate registered nurses.

Keywords: New graduate registered nurses, transition, readiness, support, culture.

Summary of Relevance

Problem: New graduate nurses' vulnerability and stress during transition places them at greater risk of making an error.

What is already known: New graduate nurses suffer transition shock that affects their ability to translate theoretical knowledge into clinical practice.

What this paper adds: Ward culture is influential on patient safety practices of new nurses and as such, support during transition to practice is a key for successful integration of new graduate registered nurses into the workplace. Understanding the patient safety knowledge of a New Graduate Registered Nurse may assist the workplace to allocate appropriate resources for supporting new nurses.

1. Introduction

New graduate registered nurse (NGRN) transition has been the focus of research in recent years (Ankers, Barton & Parry, 2018; Blevins, 2018; Draper, 2018; Missen, McKenna, Beauchamp & Larkin, 2016a, 2016b; Ortiz, 2016), succeeding Kramer's seminal 1974 publication *Reality Shock*. New graduate nurses transitioning from student nurse to registered nurse face many challenges in practice however the provision of safe and efficient care of their patients is paramount (Duchscher, 2008, 2009; Myers et al., 2010). With global reports revealing 10% of patients experiencing adverse events during the course of their care (World Health Organisation [WHO], Organisation for Economic Co-operation and Development [OECD], and The World Bank, 2018), it is imperative that NGRNs are adequately educated and supported during transition to professional practice so as to prioritise patient safety during their transition to professional practice. The purpose of this literature review is to explore NGRNs knowledge of patient safety, upon entering practice, practical translation of this knowledge, and if transition experiences influence their ability to provide quality patient care.

1.1. Background

New graduate nurse transition has been prominent in nursing literature since Kramer's seminal work *Reality Shock* (1974). Researchers such as Benner (1984) and Duchscher (2008, 2009) continued to explain nurse skill acquisition and transition in an effort to understand the transition experiences in the context of rising NGRN attrition. With NGRN transition being described as *reality shock*, and *transition shock* (Duchscher, 2009), we need to consider how this shock is affecting the NGRNs ability to provide safe, quality nursing care.

Patient safety has had a global focus since the ground-breaking report of the Institute of Medicine (IOM) *To err is human* (Kohn, Corrigan & Donaldson, 2000). In response, the WHO has initiated three worldwide patient safety challenges: *Clean Care is Safer Care* in 2005, *Safe Surgery Saves Lives* in 2008, and in 2016 the *Medication Without Harm* challenge (Medication Without Harm: WHO's Third Global Patient Safety Challenge", 2018). However, incidences of poor patient care continue with inquiries such as the Mid Staffordshire Foundation Trust Inquiry (Francis, 2013), Morecambe Bay Investigation (Kirkup, 2015), and The Queensland Public Hospitals Commission of Inquiry (Davies, 2005) highlighting major failings.

Nurses are at the frontline of patient care and as such are in a prominent position to influence patient care and outcomes (Hendricks, Cope & Baum, 2015). While the inquiries do not necessarily fault nurses for the patient outcomes, the system within which they are working and the culture of the organisation, has considerable impact on the provision of basic nursing care (Francis, 2013).

Duckett and Moran (2018) report that there is a higher incidence of medical errors occurring during times of staff transition, such as the intakes of NGRN, allied health professionals and newly graduated doctors. This is due to general staff disruption in the health services and inexperience of those entering the workplace (Duckett & Moran, 2018). NGRNs experience a

range of challenges on transition to professional practice as described by Duchscher's (2009) transition shock model and their transition experience will impact their ability to provide high quality patient care.

1.2. Aim

The aims of this review were twofold:

1. To update a literature review conducted during the conception of this project which at the time encompassed literature published until 2015, and;
2. To critically appraise the contemporary literature, published since 2015, concerning the transition of new graduate registered nurses and their patient safety knowledge and practices.

2. Methods

The 12-step approach to structured literature reviews described by Kable, Pich and Maslin-Prothero (2012) and PRISMA (Moher, Liberati, Tetzlaff, Altman & The PRISMA Group, 2009) (see Supplementary file 1) guidelines were used to search, assess and conduct a quality appraisal of relevant research literature. The databases CINAHL, PsycINFO, Scopus and Medline were explored, with a manual search of references conducted to identify any other literature not previously detected. The following key terms were combined with BOOLEAN operators:

- New graduate registered nurse OR New graduate nurse OR new nurse OR novice AND patient safety
- New graduate registered nurse OR New graduate nurse OR new nurse OR novice AND transition

2.1. Inclusion criteria

Literature was included if it was published in English; full text and peer reviewed; published between 2015 and September 2018; had a direct relationship to NGRNs; contained data describing the perceptions and real experiences of NGRNs; and related to safety. The date limiters of 2015 to September 2018 were set to build upon the original published literature review for this study that included research literature up to 2015.

2.2. Exclusion criteria

Literature was excluded if it was not published in English; described simulated experiences; not directly related to NGRNs; or published prior to 2015. Literature was also excluded if it had already been considered in the original literature review published by the authors' for this study.

2.3. Ethical considerations

This literature review forms a part of a larger mixed methods project that has received ethical approval from the university Human Research Ethics Committee (#12959).

The search of the databases, and a manual search of references identified 78 articles. Fifty-six of these articles fulfilled inclusion criteria. The abstracts of these 56 were reviewed resulting in the discard of a further 24 articles. The number of articles retained and included in this review is 32 (See PRISMA flow diagram figure 1). Of these 32 articles, 13 were from Australia, six from the United States of America (USA), three each from Canada and the United Kingdom (UK), two each from The Netherlands, and Hong Kong, and one each from Denmark, Finland and New Zealand.

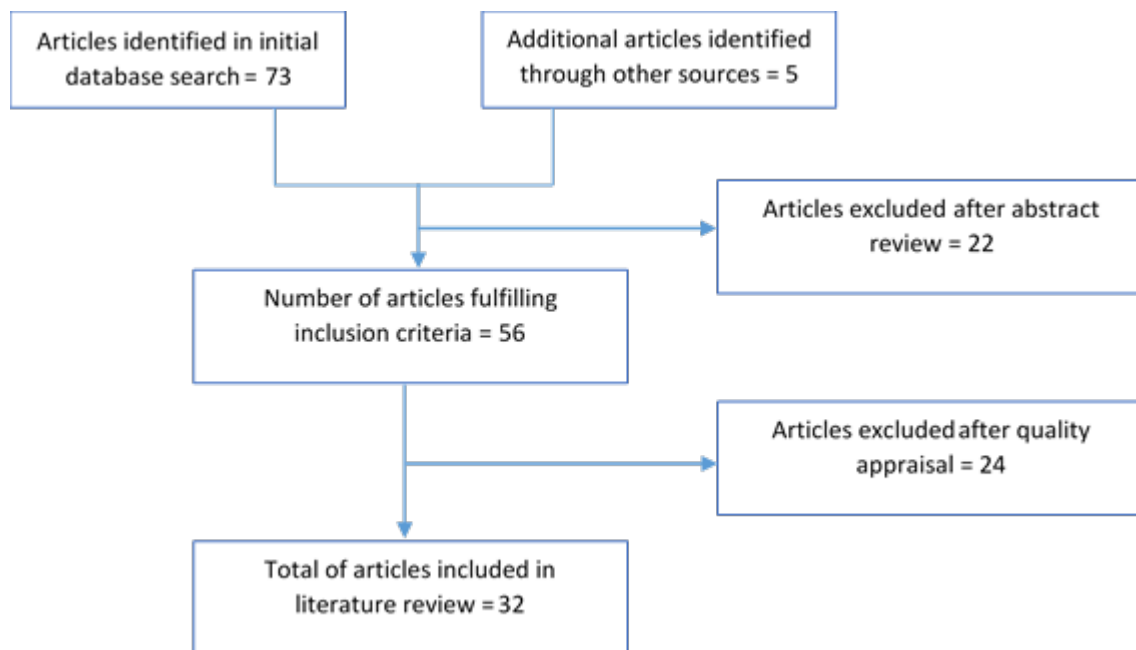


Figure 1: Search Strategy 2015-2018

3. Appraisal of the literature

A single reviewer conducted a quality appraisal using the McMaster Critical Review Form – qualitative studies, and the McMaster Critical Review Form – quantitative studies (Letts et al., 2007a & 2007b). These forms provided the basis of a quality rating of high, medium or low (H/M/L) depending on the content meeting the specified criteria of the relevant critical review form. Following initial review, two other researchers also appraised these articles. Articles meeting inclusion criteria are documented in Table 1. Those articles meeting inclusion criteria but rated medium or low remain in the table as an example of the appraisal process. Although rated medium or low, these articles contain relevant information to be included in this review.

Table 1: Quality appraisal of the literature

	Author (year) Country	Study Design	Sample sizes & sites	Comments/key findings	Quality Appraisal (H/M/L)
1	Aggar, C., Bloomfield, J., Thomas, T.H., & Gordon, C.J. (2017). Australia's first transition to practice in primary care program for graduate registered nurses: A pilot study. <i>BMC Nursing</i> 16(14). Doi: 10.1186/s12912-017-0207-5 Australia	Longitudinal, exploratory mixed methods	NGRNs = 4 Preceptor RNs = 7 Primary care settings (GP practices)	Transition programs transferable to primary care setting NGRNs competent within the 12 mths of the program Low participant limits generalisability	H
2	Ankers, M.D., Barton, C.A., & Parry, Y.K. (2018). A phenomenological exploration of graduate nurse transition to professional practice within a transition to practice program. <i>Collegian</i> 25:319-325. Doi: 10.1016/j.colegn.2017.09.002 Australia	Qualitative - Phenomenology	NGRNs = 7 Metropolitan Transition to practice program	Graduate transition programs continue to benefit new nurses, especially with dedicated staff.	H
3	Blevins, S. (2018). From nursing student to registered nurse: the challenge of transition. <i>Medsurg Nursing</i> 27(3). USA	editorial	n/a	Discussion of the main transition process including structure of GNP's, socialisation, the role of the preceptor, and promotion of success.	L – include Relevant
4	Della Ratta, C. (2016). Challenging graduate nurses' transition: Care of the deteriorating patient. <i>Journal of Clinical Nursing</i> , 25:3036-3048. USA	Qualitative – interpretive phenomenology	8 NGRNs in a transition program with experience in caring for deteriorating patients	Initial fear of failing or harming the patient due to their uncertainty in these situations. Previous exposure to situations of deterioration or pre-deterioration	H

	Author (year) Country	Study Design	Sample sizes & sites	Comments/key findings	Quality Appraisal (H/M/L)
				aided decision making and confidence. Relationships with preceptors and mentors highly valued and assisted with confidence in dealing with these situations Emotional support following deterioration situations highly valued by NGRNs	
5	Draper, J. (2018). 'Doing it for real now' – The transition from healthcare assistant to newly qualified nurse: A qualitative study. <i>Nurse Education Today</i> , 66:90-95. UK	Qualitative descriptive	14 NGRNs <2yrs exp. UK program delivered by distance ed. Where nursing students are employed as HCAs during the 4yr programme.	Results reinforce existing literature pertaining to transition to new graduate nurse. Used Van Gennepe's theory of transition Low participant numbers limit generalisability	H
6	Edwards, D., Hawker, C., Carrier, J. & Rees, C. (2015). A systematic review of the effectiveness of strategies and interventions to improve the transition from student to newly qualified nurse. <i>International Journal of Nursing Studies</i> , 52, p. 1254-1268. UK	Systematic review	30 papers included in systematic review	Transition programs and/or general transition support is beneficial and important for nurses transitioning from student to graduate registered nurse.	H
7	El Haddad, M., Moxham, L., & Broadbent, M. (2017). Graduate nurse practice readiness: A conceptual	Qualitative - Grounded theory	7 NUMs 9 BNPCs	Differing perspectives and expectations of practice readiness	H

	Author (year) Country	Study Design	Sample sizes & sites	Comments/key findings	Quality Appraisal (H/M/L)
	understanding of an age old debate. <i>Collegian</i> , 24:391-396. Australia			between NUMs and BNPCs. NUMs reality of practice ready is to the level of expert. More collaboration required between health services and universities	
8	Freeling, M., & Parker, S. (2015). Exploring experience nurses' attitudes, views and expectations of new graduate nurses: A critical review. Australia	Critical review of Literature	10 articles	Four major categories identified: Nursing skills, inadequate preparation during academic program, attitudes and ward culture, and concerns with confidence.	H
9	Gazaway, S.B., Schumacher, A.M., & Anderson, L. (2016). Mentoring to retain newly hired nurses. <i>Nursing Management</i> , August 2016. USA	Editorial	N/A	Discusses Transition to practice, Professional socialisation, mentorship and the implications of this information for nurse managers on the induction and transition process of new graduate nurses to prevent attrition.	L - include Relevant
1 0	Halpin, Y., Terry, L.M., & Curzio, J. (2017). A longitudinal, mixed methods investigation of newly qualified nurses' workplace stressors and stress experiences during transition. <i>Journal of</i>	Longitudinal, explanatory sequential mixed methods, cohort study.	Phase 1 = 288 Phase 2 = 107 Phase 3 = 86 Phase 4 = 14 (qual)	Investigated stressors and stress experiences of new graduates during their first 12 months. These are entwined	H

	Author (year) Country	Study Design	Sample sizes & sites	Comments/key findings	Quality Appraisal (H/M/L)
	<i>Advanced Nursing</i> , 73:2577-2586. UK		Working as qualified nurse in UK.	with the transition process. Qualitative themes included 'feeling responsible and terrified', 'it's not the job, it's the people you work with', and 'managing the work/workload'. Support, management of incivility, and nurturing essential.	
1 1	Henderson, A., Ossenberg, C., & Tyler, S. (2015). 'What matters to graduates': An evaluation of a structured clinical support program for newly graduated nurses. <i>Nurse Education in Practice</i> , 15:225-231. Australia	Mixed method	Phase 1 = 78 surveys returned Phase 2 = 10 (focus group)	Overall satisfaction with graduate program was high. Scheduled study days were valued and helped to refresh knowledge forgotten from undergraduate education. Also good for networking and socialisation. Preceptors important as a support person and essential for new graduate – senior/experienced nurse engagement.	H
1 2	Herron, E.K. (2018). New graduate nurses' preparation for recognition and prevention of failure to rescue: A qualitative study.	Qualitative – descriptive phenomenology	14 NGRNs <18mths experience	NGRNs recognise most clinical learning is experiential and	H

	Author (year) Country	Study Design	Sample sizes & sites	Comments/key findings	Quality Appraisal (H/M/L)
	<i>Journal of Clinical Nursing</i> , 27(1-2):e390-e401. USA			is the basis for clinical reasoning. NGRNs state a lack of 'suitable experiences to prepare them for the deteriorating patient'. Low confidence is prevalent among NGRNs Lack experience to guide clinical decision making	
1 3	ten Hoeve, Y., Brouwer, J., Roodbol, P.F., & Kunnen, S. (2018). The importance of contextual, relational and cognitive factors for novice nurses' emotional state and affective commitment to the profession. A multilevel study. <i>Journal of Advanced Nursing</i> , 74(9), 2082-2093. The Netherlands	Quantitative - Repeated measures within subjects.	18 nurses (580 diary entries) NGRNs <30yrs <12 mth experience	Contextual, relational and cognitive factors from work experience directly relate to the affective commitment and emotional state of NGRNs. Highlights importance of providing support and feedback to NGRNs to develop professional commitment.	H
1 4	ten Hoeve, Y., Kunnen, S., Brouwer, J., & Roodbol, P.F. (2018). The voice of nurses: Novice nurses' first experiences in a clinical setting. A longitudinal diary study. <i>Journal of Clinical Nursing</i> , 27:e1612-e1626. The Netherlands	Qualitative longitudinal	18 nurses (580 diary entries) NGRNs <30yrs <12 mth experience	Eight themes: competence, development, organisational context, fit, goals, existential, relatedness, and autonomy.	H
1 5	Kaihlanen, A-M., Salminen, L., Flinkman, M., & Haavisto, E. (2018). Newly graduated nurses'	Qualitative descriptive	20 NGRNs NGRNs who had	The final clinical practicum experience is an important guide	H

	Author (year) Country	Study Design	Sample sizes & sites	Comments/key findings	Quality Appraisal (H/M/L)
	perceptions of a final clinical practicum facilitating transition: A qualitative descriptive study. <i>Collegian</i> . (In press) Finland		completed final clinical practicum 3-4mths earlier	for the graduating student nurse and can influence their transition experience. Three main benefits: possibility to prepare for transition; support resources; quality of the final clinical practicum.	
1 6	Kavanagh, J.M., & Szweda, C. (2017). A crisis in competency: the strategic and ethical imperative to assessing new graduate nurses' clinical reasoning. <i>Nursing Education Perspectives</i> , 38(2):57-62. USA	Quantitative – retrospective review of data	>5000 NGRNs post-hire & pre-start Responses to “Performance-based Development system”	PBDS used for on-boarding of NGRNs to identify learning needs and insight into thought processes of the NGRNs to assist in developing individualised orientation plan.	L – include Relevant
1 7	Laschinger, H.K.S., Cummings, G., Leiter, M., Wong, C., MacPhee, M., Ritchie, J....Read, E. (2016). Starting out: a time lagged study of new graduate nurses' transition to practice. <i>International Journal of Nursing Studies</i> , 57:82-95. Canada	Quantitative - Survey	406 nurses <3yrs experience.	Situational (leadership, support and empowerment, job-fit, incivility) and personal (demographics, psychological, coping strategies) factors influence intention to leave and job satisfaction in first 12 months. Burnout has negative effects on NGRNs job satisfaction and intention to leave.	H

	Author (year) Country	Study Design	Sample sizes & sites	Comments/key findings	Quality Appraisal (H/M/L)
1 8	Law, Y.B., & Chan, E.A. (2016). Taken-for-granted assumptions about the clinical experience of newly registered nurses from their pre-registration paid employment: A narrative inquiry. <i>Nurse Education in Practice, 20</i> :1-10. Hong Kong	Qualitative – narrative inquiry	18 NGRNs 11 preceptors 10 stakeholders within 8 hospitals	Narratives from nursing students employed on the wards prior to registration. Assumptions made by senior staff that routines etc were learned during this time would translate to RN routines upon registration. Preceptorship was not consistently provided for these NGRNs due to the assumptions that they'd learned what was required during the undergraduate tenure.	H
1 9	Law, B.Y., & Chan, E.A. (2015). The experience of being able to speak up: a narrative inquiry on newly graduated registered nurses. <i>Journal of Clinical Nursing, 24</i> :1837-1848. Hong Kong	Qualitative – narrative inquiry	18 NGRNs – 3 narratives on speaking up for pt safety	Using mis- educative experiences as educative experiences. Frustration at not being heard, or not encouraged to speak up. All 3 narratives proved the existence of cultural and generational barriers to speaking up in some acute care areas.	H
2 0	Lea, J., & Cruickshank, M. (2015). Supporting new graduate nurses making the	Qualitative case study framework	16 experienced nurses	Ensuring correct skill mix - challenge with	H

	Author (year) Country	Study Design	Sample sizes & sites	Comments/key findings	Quality Appraisal (H/M/L)
	<p>transition to rural nursing practice: views from experienced rural nurses. <i>Journal of Clinical Nursing</i>, 24(19-20):2826-2834.</p> <p>Australia</p>		working with NGRNs in rural settings	<p>budgetary constraints</p> <p>Having realistic expectations of NGRNs – many expectations too high</p> <p>Not knowing the NGRNs learning needs</p> <p>Support needed on how to communicate, especially on how to seek outside help as rural areas are not often medically staffed.</p> <p>Learning to recognise cues for when NGRNs needed support (being flustered, long med rounds, staying late reviewing notes).</p> <p>Insufficient preparation for learning support role for the senior RN</p> <p>Need for implementation of structured transition to rural practice program.</p>	
2 1	<p>Lea, J., & Cruickshank, M. (2017). The role of rural nurse managers in supporting new graduate nurses in rural practice. <i>Journal of Nursing Management</i>, 25:176-183.</p> <p>Australia</p>	Qualitative – longitudinal descriptive case study	15 NGRNs 15 senior nurses working with NGRNs Rural setting	<p>Data collected and presented in line with Duchscher's stages of transition theory. Exploration of 2 subthemes:</p>	H

	Author (year) Country	Study Design	Sample sizes & sites	Comments/key findings	Quality Appraisal (H/M/L)
				<p>'support experiences vs support needs'</p> <p>'providing support to newly graduated nurses'</p> <p>3mths: NGRNs disappointed with amount of support from NM/NUMs</p> <p>6mths: NGRNs needed acknowledgement of progress and meaningful interaction from NM/NUMs. A rare occurrence</p> <p>9mths: management support remained elusive. Support measures outline by Duchscher were absent in this rural transition program and NM/NUMs were not an available source of support for NGRNs in this setting. Possibly due to wide scope and workload in the rural environment.</p>	
2 2	Missen, K., McKenna, L., Beauchamp, A., & Larkins, J. (2016). Qualified nurses'	Mixed Method – reporting on	201 survey respondents	RN's views on NGRNs readiness for practice.	H

	Author (year) Country	Study Design	Sample sizes & sites	Comments/key findings	Quality Appraisal (H/M/L)
	<p>perceptions of nursing graduates' abilities vary according to specific demographic and clinical characteristics. A descriptive quantitative study. <i>Nurse Education Today</i>, 45:108-113.</p> <p>Australia</p>	Quantitative phase		<p>RNs working in preceptor/mentor or CNE roles rated NGRNs readiness lower than other RNs. Older/hospital trained nurses have more negative perceptions of NGRNs readiness compared with university trained RNs. NGRNs and newer nurses rated their abilities higher than that of more experienced nurses which "it is possible that new nurses do not know what they do not know, believing they are competent because they are not yet experienced enough to see otherwise." (p.112). 2 out of 6 key skills rated lower – 'advanced clinical skills' and 'coping with nursing practice'</p>	
2 3	<p>Missen, K., McKenna, L., Beauchamp, A., & Larkins, J. (2016). Qualified nurses' rate new nursing graduates as lacking skills in key clinical areas. <i>Journal of</i></p>	Quantitative - descriptive	245 qualified nurses	<p>Nurses perceptions of NGRNs abilities across seven skill areas – physical assessment,</p>	H

	Author (year) Country	Study Design	Sample sizes & sites	Comments/key findings	Quality Appraisal (H/M/L)
	<i>Clinical Nursing</i> , 25:2134-2143 Australia			technical skills, medication administration, emergency procedures, communication skills, preparedness for practice, and coping. NGRNs perceived as safe to practice but not without areas of concern – critical thinking, problem solving, working independently, and patient assessment.	
2 4	Murray, M., Sundin, D. & Cope, V. (2018). New graduate registered nurses' knowledge of patient safety and practice. <i>Journal of Clinical Nursing</i> , 27(1-2), p. 31-47. Australia	Literature review	45 papers included for review	Confirms the continuation of the theory-practice gap for new nurses. Establishes that with limited practice comes the increased chance of compromised quality of care. Establishment of lack of literature pertaining to the patient safety knowledge of transitioning new graduate nurses.	H
2 5	Ortiz, J. (2016). New graduate nurses' experiences about lack of professional confidence. <i>Nurse Education in Practice</i> , 19:29-24. USA	Qualitative - descriptive	12 NGRNs <12mths experience	General agreement in lacking professional confidence in first 12mths. Themes: "Communication	H

	Author (year) Country	Study Design	Sample sizes & sites	Comments/key findings	Quality Appraisal (H/M/L)
				is huge, making mistakes, disconnect between school and practice, independence, relationship building, positive feedback is important, gaining experience” Confidence development a dynamic process requiring experiences of positive and negative situations	
26	Patterson, E.E.B., Boyd, L., & Mnatzaganian, G. (2017). The impact of undergraduate clinical teaching models on the perceptions of work-readiness among new graduate nurses: A cross sectional study. <i>Nurse Education Today</i> , 55:101-106. Australia	Quantitative - Cross-sectional	28 NGRNs at 5mths into graduate year at a private metropolitan hospital in Melbourne	Assessment of NGRNs perceived work readiness NGRNs who undertook a partnership with the hospital during undergraduate placements had a higher level of work readiness than those who did not. This model is beneficial over others due to the steady supply of new nurses, less orientation requirements, less stressful transition, better socialisation.	H

	Author (year) Country	Study Design	Sample sizes & sites	Comments/key findings	Quality Appraisal (H/M/L)
2 7	Phillips, C., Kenny, A., and Esterman, A. (2017). Supporting graduate nurse transition to practice through a quality assurance feedback loop. <i>Nurse Education in Practice</i> , 27: 121-127. Australia	Mixed method	NGRNs from 2 health services Phase 1 - 34 Phase 2 – 35	Support highly valued by NGRNs and necessary for successful transition Wokplace culture can be a barrier to successful transition – toxic environments contribute to poor learning NGRN and preceptor alignment to foster learning and communication	H
2 8	Regan, S., Wong, C., Laschinger, H.K., Cummings, G., Leiter, M., McPhee, M... Read, E. (2017). Starting out: qualitative perspectives of new graduate nurses and nurse leaders on transition to practice. <i>Journal of Nursing Management</i> , 25:246-255. Canada	Qualitative descriptive	42 NGRNs 28 Nurse leaders	Support necessary to facilitate positive transition experience and intent to stay. Adequate staffing/skill mix and realistic workloads Nurse leader’s ability to provide necessary and appropriate support challenged by organisational restraints. Foster culture of safety, no-blame, free from incivility	H
2 9	Rush, K.L., Adamack, M., Gordon, J., Janke, R. & Ghement, I.R. (2015). Orientation and transition program component predictors of new graduate workplace integration. <i>Journal of Nursing</i>	Quantitative findings of a larger Mixed Method study	245 GNG respondents	Formal transition programmes beneficial for improving transition experiences of NGRNs. Enhancement of	H

	Author (year) Country	Study Design	Sample sizes & sites	Comments/key findings	Quality Appraisal (H/M/L)
	<i>Management</i> , 23, p. 143-155. Canada			transition occurred with orientations of a minimum of four weeks and working a minimum of 49 hours per fortnight.	
3 0	Voldbjerg, S.L., Grønkjær., Wiechula, R., & Sørensen, E.E. (2016). Newly graduated nurses' use of knowledge sources in clinical decision-making: an ethnographic study. <i>Journal of Clinical Nursing</i> , 26:1313-1327. Denmark	Qualitative – ethnography	9 NGRNs in Denmark medical & surgical hospital settings	Observation & semi-structured interviews NGRNs use the experienced nurse as their primary knowledge source and essential to making safe clinical decisions and task-oriented procedures etc Physicians used as educational sources particularly related to areas of pharmacy and physiology NGRNs clinical decisions at times were unknowingly sourced from patients and their families Documents as a knowledge source Oneself – practical experience Gut feeling - intuition	H
3 1	Wakefield, E. (2018). Is your graduate nurse	Review	n/a	Highlighting of transition shock	L – include

	Author (year) Country	Study Design	Sample sizes & sites	Comments/key findings	Quality Appraisal (H/M/L)
	suffering from transition shock? <i>ACORN Journal of Perioperative Nursing</i> , 31(1):47-50. Australia			and the potential mitigating solutions. Barriers include practical and logistical challenges in the OT.	Relevant
3 2	Walton, J-A., Lindsay, N., Hales, C., & Rook, H. (2018). Glimpses into the transition world: New graduate nurses' written reflections. <i>Nurse Education Today</i> , 60:62-66. New Zealand	Qualitative - thematic analysis of post graduate transition course assessments	27 NGRNs previously submitted reflective essays	To identify challenges and learning experiences of NGRNs undertaking post graduate transition course. NGRNs are challenged by their own emotions, to speak up, to ask for help, and to feel part of the team.	M – include Relevant

3.1. Definition of Transition to practice programs

Transition programs are known across the world by many names such as graduate nurse program, transition to practice program, and nurse residency program. These programs are often structured and have dedicated staff to support and provide feedback to NGRNs over the course of the program. Transition programs generally run for 12-months, with two ward rotations such as general medical and surgical. Educational sessions are offered throughout the year to assist NGRNs with ongoing professional development. Graduates are provided with an initial extensive orientation of up to five days before a set period of supernumerary time anywhere from two days to two weeks where NGRNs are often given time to adjust to ward practices without the burden of their own patient allocation (Henderson, Ossenberg & Tyler, 2015; Department of Health, n.d.; Department of Health, 2018; Ramsay Healthcare, 2018).

4. Results – key themes from the literature

The 32 articles reviewed used a range of methodologies including qualitative (n=15), quantitative (n=6), and mixed method designs (n=5). Included too were some editorials and literature reviews (n=6) due to the relevance of the content. Twenty-one studies obtained data directly from NGRNs, four of these also collected data from senior nurses working with NGRNs. Five studies obtained data from senior nurses only regarding experiences with, and expectations of NGRNs. Six articles directly addressed the transition of NGRNs through an editorial or literature review standpoint.

Much of the literature regarding NGRNs pays particular attention to transition, support and readiness, and lacks clarity regarding patient safety knowledge or practices. The themes discussed to follow represent the focus of current literature pertaining to the NGRN.

4.1. Transition programs and support

At the core of a transition program is support. Support has been identified as an important factor affecting transition of NGRNs (Della Ratta, 2016; Gazaway, Schumacher & Anderson, 2016; Henderson et al., 2015; ten Hoeve, Brouwer, Roodbol & Kunnen, 2018; Kavanagh & Szweda, 2017; Laschinger et al., 2016; Lea & Cruickshank, 2015, 2017; Ortiz, 2016; Regan et al., 2017; Voldbjerg, GrønkJaer, Wiechula & Sørensen, 2017; Wakefield, 2018). The qualitative studies of Ankers et al. (2018), Della Ratta (2016), and Voldbjerg et al. (2017) identified that support is required for clinical judgement, clinical skill acquisition and consolidation, and emotional support particularly following clinical events such as patient deterioration. New graduates frequently describe an initial lack of professional confidence during the early stages of their transition, which can be alleviated to a degree with appropriate, timely feedback and positive support during the first twelve months (Ortiz, 2016).

Support offered at ward level can be difficult at times due in part to organisational restrictions (Regan et al., 2017) with Lea and Cruickshank (2017) revealing that senior nurses such as nurse managers (NM) and nurse unit managers (NUM) in the rural setting were rarely

available to NGRNs for support. It was postulated that the visibility of the NM or NUM was variable due to the widened scope and workload for these nurses in the rural environment, and with the added ambiguity over to whose role the transition program was entrusted (Lea & Cruickshank, 2017).

Support does not only include personal contact and being openly approachable, but also encompasses providing appropriate working conditions for NGRNs. NGRNs feel supported when there is adequate staffing and skill mix on their allocated shift, along with realistic workloads for the newly commencing NGRN (Regan et al., 2017).

With all the challenges that burden NGRNs during transition from student to practicing clinician, many recent studies have shown that a transition program provides that added layer of support and guidance that fledgling NGRNs need with clinical decision making and skill development (Aggar, Bloomfield, Thomas & Gordon, 2017; Ankers et al., 2018; Blevins, 2018; Gazaway et al., 2016; Henderson et al., 2015; Kavanagh & Szweda, 2017; Lea & Cruickshank, 2017; Murray, Sundin & Cope, 2018a; Ortiz, 2016; Patterson, Boyd & Mnatzaganian, 2017; Voldbjerg et al., 2017; Walton, Lindsay, Hale & Rook, 2018). These programs have shown to enhance socialisation into the workplace, advance skill development, and reduce uncertainty with the presence of dedicated senior nurses on hand to contact when uncertainty arises (Ankers et al., 2018; Blevins, 2018). Henderson et al. (2015) noted NGRNs valued the study days offered within transition programs as an opportunity to refresh skills and knowledge learned in undergraduate education but not yet translated to practice.

Transition programs are often employed in the acute care setting, yet their benefits can be successfully translated to primary care and rural settings (Aggar et al., 2017; Lea & Cruickshank, 2017). Still within both of these settings, rural and primary care, new graduates require support from senior nurses for the successful facilitation of NGRN transition.

4.2. Culture

Reports of incivility and unjust behaviour continue to be shown toward NGRNs from senior nurses (Freeling & Parker, 2015; Halpin, Terry & Curzio, 2017; Missen et al., 2016). Incivility and intimidation present when NGRNs ask for help or guidance (Missen et al., 2016) and attitudes of senior nurses denoting that 'their way is the only way' and that these new nurses must just 'fit in' and be seen to conform to ward practices are rife (Regan et al., 2017). Phillips, Kenny and Esterman (2017) emphasise that toxic work environments provide limited learning opportunities for NGRN which may ultimately impede successful transition. New graduate nurses often feel conflicted in these instances as they feel compelled to apply short cuts to their practices compromising their quality of care (Halpin et al., 2017; Regan et al., 2017). The culture of the workplace was found to be influential on professional socialisation and retention rates of NGRNs according to Gazaway et al.(2016) and Laschinger et al.(2016). With the continued expectation of a global nursing shortfall into the next decade, Ammouri, Tailakh, Muliira, Geethakrishnan and Al Kindi (2015) maintain that fostering a positive nursing culture will not only retain NGRNs but improve quality patient care.

4.3. Expectations and readiness

To date, several studies have demonstrated that expectations differ between NGRNs, senior nurses and preceptor/nurse educators (El Haddad, Moxham & Broadbent, 2017; Lea & Cruickshank, 2015; Missen et al., 2016a) with NUMs often having the unrealistic expectation of NGRNs entering the workforce as experts (El Haddad et al., 2017). There are also higher expectations placed on NGRNs who have worked in a nursing assistant role during their undergraduate course and as such there was a reported inconsistency in the preceptorship provided to these nurses now in the registered nurse role (Draper, 2018; Law & Chan, 2016).

While employed as a nursing assistant there are opportunities to observe and assist qualified nurses going about their duties, however their role is just that, of a nursing assistant. Draper (2018) and Law and Chan (2016) argue it is unreasonable to assume that upon registration these newly qualified nurses can automatically transition to their new role without

appropriate support and guidance. Law and Chan's (2016) study revealed through the narratives of NGRNs that while these new nurses were familiar with their work environments due to the undergraduate employment, they were not practice ready as registered nurses (RNs) in that same environment.

Readiness for practice has been reported by Missen et al. (2016a, 2016b) and El Haddad et al. (2017) whose studies focus on the perspectives of senior nurses (NUMs), undergraduate program coordinators, and NGRNs themselves. El Haddad et al. report a disparity between the opinions of NUMs and undergraduate program coordinators regarding the practice readiness of NGRNs, with NUMs expecting, as mentioned previously, expert level upon entry. Freeling and Parker (2015) also identified similar expectation disparities through their critical review of research literature, citing "insufficient access to satisfactory clinical placements" (p. e48) as a contributory factor.

Interestingly, NGRNs, as noted by Missen et al. (2016a), perceived themselves more practice ready than expressed by their senior counterparts. However, Missen et al. (2016a, p. 112) stated that "it is possible that new nurses do not know what they do not know, believing they are competent because they are not yet experienced enough to see otherwise". NGRNs also feel the differences in expectations invoking feelings of anxiety and being overwhelmed all the while questioning their own abilities (ten Hoeve, Kunnen, Brouwer & Roodbol, 2018).

A survey study of 245 qualified RNs found that NGRNs were generally perceived to be safe to practice, however areas of concern included their ability to think critically, problem solve, work independently and conduct focused patient assessments (Missen et al., 2016b). Like Missen et al. (2016b), Herron's (2018) mixed method study exploring NGRN's experiences in the recognition of deterioration and prevention of failure to rescue. finding that the very limited exposure, if any, to such situations left NGRNs lacking readiness and confidence in their ability to recognise and appropriately respond to such emergent situations. A study by Patterson et al. (2017) surveyed perceived practice readiness for NGRNs who had differing undergraduate

clinical placement experiences. Those who participated in a fellowship program with a participating hospital were more work ready than those who undertook traditional multi-facility clinical placements. Nursing students who undertake a fellowship program at a participating facility and gain a graduate position at the same facility have the advantage of already being oriented, more familiar with organisational documentation, and are often socialised to the environment and workplace, thus reducing transitional stress (Patterson et al., 2017). This is supported by Kaihlanen, Salminen, Flinkman and Haavisto (2018) who established the importance of the final clinical practicum of the student nurse effects the transition experiences of NGRNs in that they have the possibility to prepare for transition through supportive resources, which is influenced by the quality of this final clinical placement.

4.4. Stress and coping

Previous work by Kramer (1974) and Duchscher (2008, 2009) highlighted the transition experiences of NGRNs particularly related to stressors and coping. Halpin et al. (2017) set out to understand the stressors and stress experiences of NGRNs during their first twelve months of practice finding fear of responsibility, collegial relationships and workload as the prominent concerns for this cohort. Other stressors include responding to emergent situations affecting patient safety such as clinical deterioration (Herron, 2018), lacking confidence (Della Ratta, 2016; Freeling & Parker, 2015; Lea & Cruickshank, 2015), and disparity in expectations between senior nurses and NGRNs in terms of skills which may impact the safety of the patient (Freeling & Parker, 2015; ten Hoeve et al., 2018; Lea & Cruickshank, 2015; Missen et al., 2016a).

The ability to cope with the described stressors often relies on the supports available to the NGRNs within the work environment (Laschinger et al., 2016; Ortiz, 2016). Those who are well supported through either the transition programs or within the team often cope better than those who do not have these supports available (Ankers et al., 2018). The inability to cope

with these stressors leads to burnout and NGRN attrition (Laschinger et al., 2016; Regan et al., 2017).

5. Discussion

This literature review set out to explore NGRNs and patient safety, their knowledge upon entering practice, practical translation of this knowledge, and if transition experiences influence the ability to provide quality patient care. What the literature has unveiled is the continuing research into the transition experiences of NGRNs, revealing that transition remains turbulent for many NGRNs, and little representation of patient safety in regard to this nursing cohort, supporting the outcome of the review by Murray et al. 2018a.

With the global nursing shortage estimate of 12.9 million by 2035 (WHO 2013, 2015) it is imperative that NGRNs are assimilated into the workplace for them to be safe practitioners and remain in the nursing workforce. Patient outcomes and satisfaction remain dependent on ward culture (Aiken et al., 2016), and as such fostering positive cultures within the nursing environment goes a long way to promoting safety (Murray, Sundin & Cope 2018b) and developing NGRNs who provide quality care. These nurses have the most current evidence-based knowledge that can aid healthcare facilities in maintaining, or even improve their patient experiences.

New graduate registered nurses' require support, especially during the first weeks of clinical practice while they adjust to new routines, responsibilities and as Herron (2017) has highlighted, dealing with situations they may not have encountered during undergraduate clinical practicums. Transition programs are in place in many organisations to do just that, provide support and assistance in making the link between theory and practice. However, these programs, in Australia, are highly competitive with more candidates than available positions (Department of Health, n.d.)

The National Council of State Boards of Nursing (NCSBN) in the United States of America (USA) have recognised the importance of adequate transitional support to alleviate increasing NGRN

attrition and patient safety risks associated with NGRN stress during transition ("Transition to Practice | NCSBN", 2019). It is unclear if this has been recognised by the Nursing and Midwifery Board of Australia (NMBA) however, it has been acknowledged by the Australian Nursing and Midwifery Federation (ANMF) who provide a 'Facts and Myths - Information Sheet' (ANMF, 2018) inclusive of 'Best Practice Principles for the transition period for newly graduating nurses and midwives' identifying that transition programs are occur in a culture of safety.

There is correlation among the themes drawn from the literature in that they all affect the transition of the NGRN and thus may influence perceptions of, or practices influencing patient safety. While patient safety was not directly alluded to in much of the literature, there is the undercurrent of patient safety as the premise of why it is important to provide a supportive platform for the transitioning NGRN.

Relevance to clinical practice

Understanding the transition experiences of NGRNs during their initial months post-graduation may assist senior nurses in the development of transition programs that cater to those areas recognised in the literature as being initially troublesome for NGRNs to maintain patient safety. For senior nurses to know the level of practical, as well as emotional support that is necessary to help these new nurses to successfully navigate through the turbulent early months of transition to clinical practice.

6. Conclusion

Transition experiences of NGRNs described more than 40 years ago by Kramer (1974), and again ten years ago by Duchscher (2008) are continuing to be experienced by the NGRNs of today. These nurses are entering contemporary clinical practice with a wealth of evidence-based knowledge. Nonetheless, they require a supportive culture to translate this knowledge and the fledgling clinical skills into safe practice. The culture of the environment is influential in their transition and the safety of their practice. Transition programs have proven to assist NGRN

transition through a supportive environment with ongoing opportunities to translate knowledge to practice and consolidate learned skills. Support is essential to alleviate workplace stressors and if both senior nurses and NGRNs maintain realistic expectations, safety will be maintained. The literature remains unclear about the patient safety knowledge of the new graduate registered nurse.

References

- Aggar, C., Bloomfield, J., Thomas, T., & Gordon, C. (2017). Australia's first transition to professional practice in primary care program for graduate registered nurses: a pilot study. *BMC Nursing, 16*(1).
- Aiken, L., Sloane, D., Griffiths, P., Rafferty, A., Bruyneel, L., & McHugh, M. et al. (2016). Nursing skill mix in European hospitals: cross-sectional study of the association with mortality, patient ratings, and quality of care. *BMJ Quality & Safety, 26*(7), 559-568.
- Ammouri, A., Tailakh, A., Muliira, J., Geethakrishnan, R., & Al Kindi, S. (2015). Patient safety culture among nurses. *International Nursing Review, 62*(1), 102-110.
- Ankers, M., Barton, C., & Parry, Y. (2018). A phenomenological exploration of graduate nurse transition to professional practice within a transition to practice program. *Collegian, 25*(3), 319-325.
- Australian Nursing and Midwifery Federation. (2018). National Early Career Nurse and Midwifery Roundtable: Employment of newly graduated and early career nurses and midwives. Retrieved from http://anmf.org.au/documents/information sheets/Facts_and_Myths_Early_Career_Nurses_and_Midwives.pdf
- Benner, P. (1984). *From novice to expert: excellence and power in clinical nursing practice..* Menlo Park, CA: Addison-Wesley.
- Benner, P. (2001). *From Novice to Expert: Excellence and Power in Clinical Nursing Practice Commemorative Edition.* Upper Saddle River: Prentice Hall.
- Blevins, S. (2018). From nursing student to registered nurse: the challenge of transition. *MEDSURG Nursing, 27*(3).

- Davies, G. (2005). *Queensland Public Hospitals Commission of Inquiry*. Queensland Department of Health. Retrieved from <http://www.qphci.qld.gov.au>
- Della Ratta, C. (2016). Challenging graduate nurses' transition: Care of the deteriorating patient. *Journal of Clinical Nursing*, 25(19-20), 3036-3048.
- Department of Health. (n.d.) Getting ready to apply to GradConnect. Retrieved from <https://ww2.health.wa.gov.au/Careers/Occupations/Nursing-and-midwifery/Graduate-nursing-and-midwifery/Getting-that-graduate-position/Getting-ready-to-apply-to-GradConnect>
- Department of Health. (2018). Graduate nursing and midwifery. (2018). Retrieved from <https://ww2.health.wa.gov.au/Careers/Occupations/Nursing-and-midwifery/Graduate-nursing-and-midwifery>
- Draper, J. (2018). 'Doing it for real now' – The transition from healthcare assistant to newly qualified nurse: A qualitative study. *Nurse Education Today*, 66, 90-95.
- Duchscher, J. (2008). A Process of Becoming: The Stages of New Nursing Graduate Professional Role Transition. *The Journal of Continuing Education in Nursing*, 39(10), 451-452.
- Duchscher, J. (2009). Transition shock: the initial stage of role adaptation for newly graduated Registered Nurses. *Journal of Advanced Nursing*, 65(5), 1103-1113.
- Duckett, S., & Moran, G. (2018). Why you should avoid hospitals in January. Retrieved from <http://theconversation.com/why-you-should-avoid-hospitals-in-january-89857>
- Edwards, D., Hawker, C., Carrier, J., & Rees, C. (2015). A systematic review of the effectiveness of strategies and interventions to improve the transition from student to newly qualified nurse. *International Journal of Nursing Studies*, 52(7), 1254-1268.
- El Haddad, M., Moxham, L., & Broadbent, M. (2017). Graduate nurse practice readiness: A conceptual understanding of an age old debate. *Collegian*, 24(4), 391-396.

- Francis, R. (2013). *Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry*. London: Crown. Retrieved from <http://webarchive.nationalarchives.gov.uk/20150407084231/http://www.midstaffspublicinquiry.com/report>
- Freeling, M., & Parker, S. (2015). Exploring experienced nurses' attitudes, views and expectations of new graduate nurses: A critical review. *Nurse Education Today*, 35(2), e42-e49.
- Gazaway, S., Schumacher, A., & Anderson, L. (2016). Mentoring to retain newly hired nurses. *Nursing Management (Springhouse)*, 47(8), 9-13.
- Halpin, Y., Terry, L., & Curzio, J. (2017). A longitudinal, mixed methods investigation of newly qualified nurses' workplace stressors and stress experiences during transition. *Journal of Advanced Nursing*, 73(11), 2577-2586.
- Henderson, A., Ossenberg, C., & Tyler, S. (2015). 'What matters to graduates': An evaluation of a structured clinical support program for newly graduated nurses. *Nurse Education in Practice*, 15(3), 225-231.
- Hendricks, J., Cope, V., & Baum, G. (2015). Postgraduate nurses' insights into the nursing leadership role. Do they intuitively link the role to patient safety?. *Journal Of Nursing Education And Practice*, 5(9).
- Herron, E. (2018). New graduate nurses' preparation for recognition and prevention of failure to rescue: A qualitative study. *Journal Of Clinical Nursing*, 27(1-2), e390-e401.
- Kable, A., Pich, J., & Maslin-Prothero, S. (2012). A structured approach to documenting a search strategy for publication: A 12 step guideline for authors. *Nurse Education Today*, 32(8), 878-886.

- Kaihlanen, A-M., Salminen, L., Flinkman, M., & Haavisto, E. (2019). Newly graduated nurses' perceptions of a final clinical practicum facilitating transition: A qualitative descriptive study. *Collegian, 26*(1), 55-61.
- Kavanagh, J., & Szweda, C. (2017). A Crisis in Competency. *Nursing Education Perspectives, 38*(2), 57-62.
- Kirkup, B. (2015). *The report of the Morecambe Bay investigation*. Morecambe Bay Investigation. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/408480/47487_MBI_Accessible_v0.1.pdf
- Kohn, L., Corrigan, J., & Donaldson, M. (2000). *To Err is Human: Building a safer health system*. Washington: National Academy Press.
- Kramer, M. (1974). *Reality shock*. St Louis: C.V.Mosby.
- Laschinger, H., Cummings, G., Leiter, M., Wong, C., MacPhee, M., & Ritchie, J. et al. (2016). Starting Out: A time-lagged study of new graduate nurses' transition to practice. *International Journal Of Nursing Studies, 57*, 82-95.
- Law, B., & Chan, E. (2015). The experience of learning to speak up: a narrative inquiry on newly graduated registered nurses. *Journal Of Clinical Nursing, 24*(13-14), 1837-1848.
- Law, Y., & Chan, E. (2016). Taken-for-granted assumptions about the clinical experience of newly graduated registered nurses from their pre-registration paid employment: A narrative inquiry. *Nurse Education In Practice, 20*, 1-10.
- Lea, J., & Cruickshank, M. (2015). The support needs of new graduate nurses making the transition to rural nursing practice in Australia. *Journal Of Clinical Nursing, 24*(7-8), 948-960.

- Lea, J., & Cruickshank, M. (2017). The role of rural nurse managers in supporting new graduate nurses in rural practice. *Journal Of Nursing Management, 25*(3), 176-183.
- Medication Without Harm: WHO's Third Global Patient Safety Challenge. (2018). Retrieved from <http://www.who.int/patientsafety/medication-safety/en/>
- Missen, K., McKenna, L., Beauchamp, A., & Larkins, J. (2016a). Qualified nurses' rate new nursing graduates as lacking skills in key clinical areas. *Journal of Clinical Nursing, 25*(15-16), 2134-2143.
- Missen, K., McKenna, L., Beauchamp, A., & Larkins, J. (2016b). Qualified nurses' perceptions of nursing graduates' abilities vary according to specific demographic and clinical characteristics. A descriptive quantitative study. *Nurse Education Today, 45*, 108-113.
- Murray, M., Sundin, D., & Cope, V. (2018a). New graduate registered nurses' knowledge of patient safety and practice: A literature review. *Journal of Clinical Nursing, 27*(1-2), 31-47.
- Murray, M., Sundin, D., & Cope. (2018b). The nexus of nursing leadership and a culture of safer patient care. *Journal of Clinical Nursing, 27*, 1287-1293.
- Myers, S., Reidy, P., French, B., McHale, J., Chisholm, M., & Griffin, M. (2010). Safety Concerns of Hospital-Based New-to-Practice Registered Nurses and Their Preceptors. *The Journal Of Continuing Education In Nursing, 41*(4), 163-171.
- National Early Career Nurse and Midwife Roundtable: Employment of newly graduated and early career nurses and midwives. (2018). Retrieved from http://anmf.org.au/documents/information sheets/Facts_and_Myths_Early_Career_Nurses_and_Midwives.pdf
- Ortiz, J. (2016). New graduate nurses' experiences about lack of professional confidence. *Nurse Education In Practice, 19*, 19-24.

- Patterson, E., Boyd, L., & Mnatzaganian, G. (2017). The impact of undergraduate clinical teaching models on the perceptions of work-readiness among new graduate nurses: A cross sectional study. *Nurse Education Today*, 55, 101-106.
- Phillips, C., Kenny, A., & Esterman, A. (2017). Supporting graduate nurse transition to practice through a quality assurance feedback loop. *Nurse Education in Practice*, 27, 121-127.
- Ramsay Healthcare. (2018). Graduate Support. (2018). Retrieved from <https://www.ramsaycareers.com.au/Graduates/Our-Graduate-Programs/Grad-Support>
- Regan, S., Wong, C., Laschinger, H., Cummings, G., Leiter, M., & MacPhee, M. et al. (2017). Starting Out: qualitative perspectives of new graduate nurses and nurse leaders on transition to practice. *Journal Of Nursing Management*, 25(4), 246-255.
- Rush, K., Adamack, M., Gordon, J., Janke, R., & Ghement, I. (2015). Orientation and transition programme component predictors of new graduate workplace integration. *Journal Of Nursing Management*, 23(2), 143-155.
- ten Hoeve, Y., Brouwer, J., Roodbol, P., & Kunnen, S. (2018). The importance of contextual, relational and cognitive factors for novice nurses' emotional state and affective commitment to the profession. A multilevel study. *Journal Of Advanced Nursing*, 74(9), 2082-2093.
- ten Hoeve, Y., Kunnen, S., Brouwer, J., & Roodbol, P. (2018). The voice of nurses: Novice nurses' first experiences in a clinical setting. A longitudinal diary study. *Journal Of Clinical Nursing*, 27(7-8), e1612-e1626.
- Transition to Practice | NCSBN. (2019). Retrieved from <https://www.ncsbn.org/transition-to-practice.htm>
- Voldbjerg, S., Grønkaer, M., Wiechula, R., & Sørensen, E. (2017). Newly graduated nurses' use of knowledge sources in clinical decision-making: an ethnographic study. *Journal Of Clinical Nursing*, 26(9-10), 1313-1327.

Wakefield, E. (2018). Is your graduate nurse suffering from transition shock?. *Journal Of Perioperative Nursing, 31*(1), 47-50.

Walton, J., Lindsay, N., Hales, C., & Rook, H. (2018). Glimpses into the transition world: New graduate nurses' written reflections. *Nurse Education Today, 60*, 62-66.

World Health Organisation, Organisation for Economic Co-operation and Development, and The World Bank. (2018). *Delivering quality health services: a global imperative for universal health coverage*. Geneva.

What does this paper contribute to the wider global clinical community?

- New graduate nurses vulnerability and stress during transition places them at greater risk of making an error
- Support during transition to practice is a key for successful integration of new graduate registered nurses into the workplace
- Understanding the patient safety knowledge of a New Graduate Registered Nurse may assist the workplace to allocate appropriate resources for supporting new nurses.