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**Title:**

Are new nurses work ready – the impact of preceptorship. An integrative systematic review.

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JP: conception, design, data extraction, manuscript development

JG: data collection and synthesis, manuscript development

## Abstract

The aim of this integrative systematic review was to systematically search, critically appraise, and summarise reported research related to readiness to practice and types of clinical support offered to newly registered nurses and preregistration nurses (such as, mentoring, preceptorship, or clinical facilitation). The review was undertaken in February 2017. The databases of Medline, CINAHL, Academic Search Complete, and Cochrane Library were searched. The search returned 137 articles. The final number of papers (after screening and exclusions) was 15 articles related to the topic. Key findings that influence work readiness for newly registered nurses were - Importance of Preceptors for Facilitating Work Readiness with the sub themes of *Positive relationships between the preceptors and the student or newly registered nurse*, *Preparing and supporting the preceptor for the role* and *Using a model to guide preceptorship of students*, the second theme was related to Clinical Exposure, including a sub theme of *Adequate clinical exposure and clinical competence*. Work readiness has been attributed to many factors and this review has revealed a number of key factors that contribute to newly registered nurses' work readiness such as preparation of the preceptor, positive relationships and adequate clinical exposure..

Key words: work readiness; newly registered nurse, student nurse; preceptor; mentor

## Introduction

The impacts of the shift in nursing education from a hospital based apprenticeship to university education have been considerable, despite this occurring many years ago in most countries. Now-a-days, it may be considered that newly registered nurses are more knowledgeable, however this may come at the cost of their work readiness. Most preregistration nurses are at least gaining some clinical exposure through either practical placement or simulation, however the number of workplace experience hours and exposure to a diversity of healthcare settings can be varied. This seemingly limited clinical exposure that contributes to the work readiness of newly registered nurses (RNs) and continues to be an area of much debate.

Work readiness is the extent to which new RNs are perceived to possess the knowledge and skills to work autonomously (Levett-Jones, Gersbach, Arthur, & Roche, 2011).

Understanding the work readiness of new nurses and the impact of any support offered in the workplace to these new nurses may have the potential to inform models of clinical support offered. It may also be useful to understand the impact of clinical practicum and supports offered to the undergraduate nurse in achieving work readiness. Rebeiro, Edward, Chapman, and Evans (2015) have argued that the development of work readiness relies upon the type and quality of clinical preceptorship or mentorship at the undergraduate level. Further Warne et al. (2010), found that the duration of clinical placements at the undergraduate level influenced nursing students' overall satisfaction with the clinical placement and in a longer placement (i.e. > than 1-2 weeks) they obtained a more holistic experience of nursing care.

## Background

Work readiness is commonly known as the ability to *hit the ground running* (Romyn et al., 2009). However, new RNs are often perceived by more senior staff as unable to readily link theory to practice and unable to work autonomously even though they are now registered to do so. This point is important given that due to limited graduate year positions, not all new RNs are supported in the first year post completion of their degree. In addition to hitting the ground running, work readiness is a concept that comprises more than a mere focus on competence, skills, and ability. The term is also used to assume the new RN will also possess generic industry related skills including: team work; time management; communication skills; social skills and; emotional intelligence (Walker & Campbell, 2013). Nursing curricula has recently identified the importance of integrating opportunities (such as clinical immersion with effective mentoring and exposure to clinical experiences) that can facilitate the preregistration nurse to better understand the socialisation process of the profession (Hegney, Eley, & Francis, 2013).

Globally there exists a lack of uniformity regarding the amount of clinical practicum hours required to successfully complete a nursing degree, suggesting a lack of consensus about the amount of clinical exposure necessary to ensure work readiness. In Australia, a minimum of 800 hours of work experience in a range of healthcare settings is required (Health Workforce Australia, 2014). Arrangement of clinical practicum are varied, for example, a block placement or an integrated (flexible) placement. Previous research has examined the various impacts related to clinical practicum including: workplace socialisation (Clayton, Broome, & Ellis, 1989), clinical experience satisfaction levels (Lee & Lee, 2006) and the benefits of mentorship (Pataliah, 2002). There is however, little information examining the overall impact of clinical practicum on the work readiness of newly registered nurses.

The aim of this integrative systematic review was to report research related to work readiness of new RNs, in regards to the clinical practicum they have experienced at the preregistration level including any transitional supports they receive as new RNs. This is an important consideration given that globally, student nurses experience a varied number of clinical practicum/field experience and may not have necessarily experienced a variety of clinical exposure in diverse healthcare settings. Additionally, this is of significant concern given the expected healthcare requirements of a burgeoning global population and the increased need for a nursing workforce to care for people across the illness-wellness continuum in a range of settings. The following research questions guided the review - Are newly registered nurses considered work ready? And what ensures newly registered nurses are work ready?

## Methods

### Design

We conducted an integrative systematic review in accordance to the Cochrane Collaboration Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flowchart (see Figure 1) (Liberati et al., 2009). The integrative review method allowed for the inclusion of diverse studies that investigated this phenomenon (Whittemore & Knafl, 2005).

The primary outcomes of interest for this review were: work readiness and how it related to newly graduated nurses and supports that facilitate this in both the pre and post-registration levels. The review included any paper reporting primary research that related to work readiness of newly graduated nurses, including (a) and the types of resources required to facilitate the work readiness of newly graduated nurses following registration and (b) papers that considered work readiness and supports provided at the preregistration level.

### Literature Searching and Data Sources

The literature search was undertaken in February 2017. The literature search was conducted using the electronic bibliographic databases of Medline Complete, CINAHL Complete, Academic Search Complete and Cochrane Library. The databases were searched using a well defined search strategy with search terms shown in Box 1.

#### Inclusion and Exclusion Criteria

Articles were initially included in this review if they were (a) peer-reviewed scholarly papers (b) published between 1980 to 2017 (this time parameter was determined as it coincides with the move to higher education for nurses in most countries around the world) (Altschul, 1987; Duffield, 1986) and (c) quantitative or qualitative research papers. Papers were excluded if they were (a) not written in English (b) unpublished work such as theses and (c) papers not reporting primary research such as literature reviews, commentaries, letters to the editor and grey literature.

#### Data Evaluation

The returned papers were screened for eligibility based on title and abstract (by authors JG and KE), if considered suitable they were collected for a full read and evaluation. The researchers developed an extraction tool for this evaluation which they based on the Critical Appraisal Skills Programme (CASP) quality appraisal checklists for research quality assessment (Taylor et al., 2000). The papers were then further evaluated for suitability and methodological rigour using this extraction tool. The data extraction was completed independently by three authors (KE, KO, and JP). The completed extraction tools were collated by two authors (KE and KO) with any disagreements being discussed between the team, papers were only included if there was team consensus.

## Data Analysis

Data were extracted from the included articles including any information related to the concept of work readiness, sample characteristics and methods used (see Table 1 for details of the included articles). Once the data extraction was completed using the extraction tool, the qualitative method of thematic analysis was undertaken by two reviewers (KE and JG). The findings of the papers were identified in regards to their themes and common patterns in these themes were identified and then categorised into common themes (Whittemore & Knafl, 2005).

### Box 1 – Search terms used in the review

1. Nurse
2. Nurs\*
3. "Student nurs\*"
4. (MH "Students, Nurse Midwifery") OR (MH "Students, Nursing") OR ""student nurse"" graduate nurse, newly registered nurse
5. #1 OR #2 OR #3 OR #4
6. readiness for practice
7. work readiness
8. work ready employees
9. "work ready"
10. #6 OR #7 OR #8 OR #9
11. preceptor
12. preceptorship
13. preceptorship in nursing
14. mentoring
15. mentor
16. mentorship
17. mentoring in nursing
18. mentoring relationships
19. mentorship programs
20. clinical facilitator
21. clinical facilitation
22. mentorship in nursing
23. #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22
24. #5 AND #10 AND #23



## Results

The search returned 137 articles. The final number of papers read in full (after screening and exclusions) from the returned articles was 28 where 15 articles were related to the research question (see Table 1) and 13 articles were excluded with reasons (see Figure 1).

Of the included papers, the total amount of participants involved was  $n=2,853$ . Of these - 102 of those were preregistration nurses, 185 were newly registered nurses, 1,562 were experienced nurses and the remaining 1,004 participants included nursing staff not specifically categorised but included new nurses, student nurses, employers, nurse managers, preceptors, educators and academics. The review included qualitative, quantitative and mixed method studies, which were made up of eight qualitative research articles, three quantitative research articles and four mixed method studies. The research studies were undertaken in a number of countries including four articles were based in Australia, five in the United Kingdom, three in the United States, two in Canada and one in Finland, representing a Western culture only.

**Figure 1. PRISMA Flowchart**

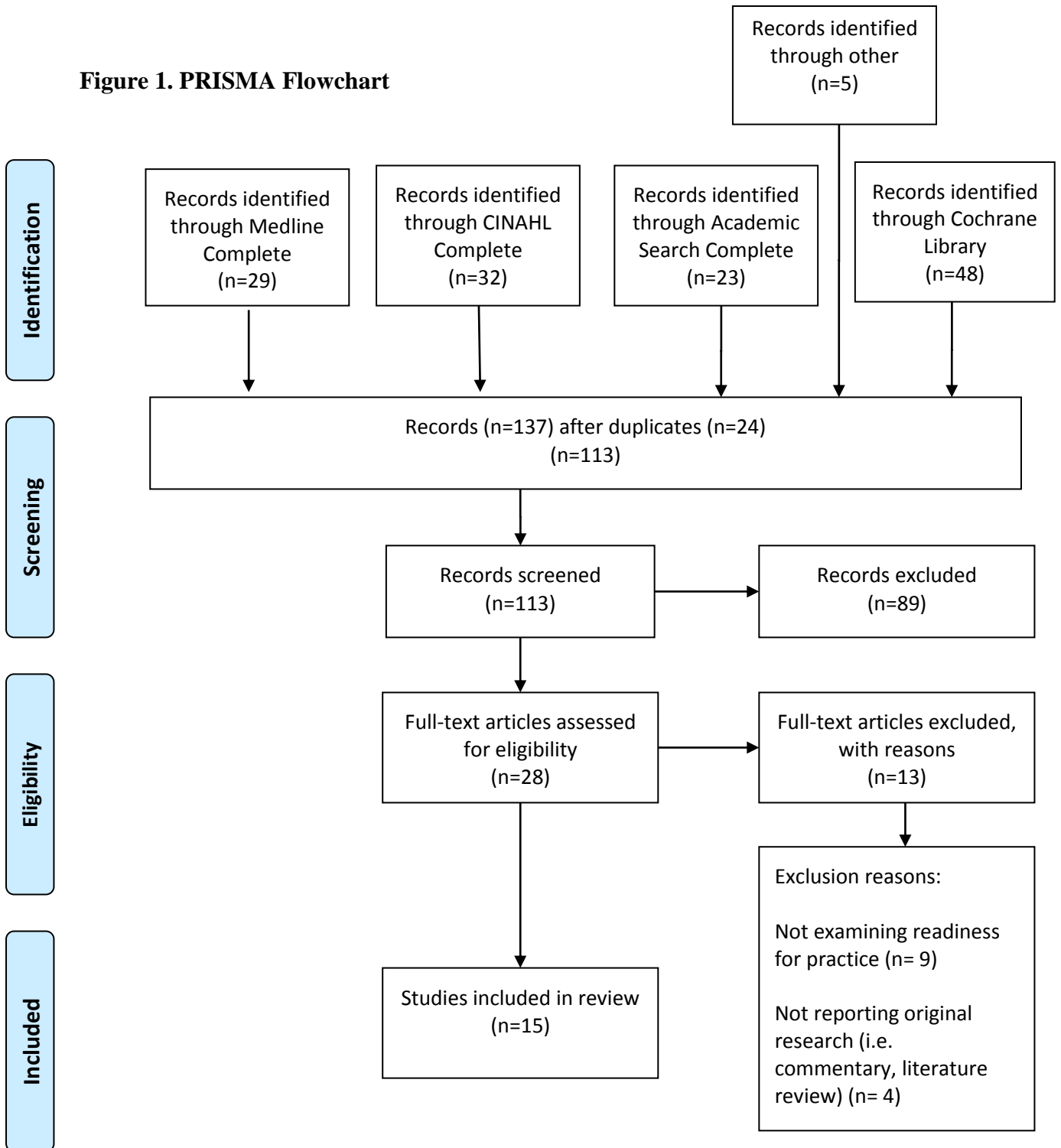


Table 1. Summary of selected articles

Author	Year	Methods	Participants	Intervention	Outcomes
Barnett et al	2010	Mixed method study using an iterative process to develop a new preceptorship model. Focus groups, interviews and clinical placement data were analysed. Study undertaken between 2004 and 2007 where the model was developed, implemented and evaluated.	Australian rural hospital setting, offering range of clinical services 83 acute in-patient beds and 90 aged care beds. Student nurses, preceptors, education and management staff were involved in survey (n=79), focus group (n=9) and interview (n=5). Other demographic data not reported.	Implementation of a new preceptorship model which was developed by an expert reference group (senior hospital staff and education providers). The model consisted of eight key attributes and implementation was phased in from 2005.	Increased the number of student placements. Students indicated positive feedback about their learning experience. Preceptors felt the job was demanding but felt supported by the addition of a clinical facilitator.
Christiansen & Bell	2010	Interpretive qualitative design. Focus group interview data were analysed thematically.	University in the UK. Student nurses (first – third year) were purposively selected (n= 54) if they had participated in the program. Five male and 49 female, aged between 21- 41+).	A peer assisted learning initiative was introduced in undergraduate nursing curriculum. The programs using peer mentorship aimed to increase peer support for first year students and develop mentorship skills in older students.	Support from a peer learner can aid the transition for first year students to nursing. Developing mentoring skills and awareness in students is beneficial for future roles.
Crombie et al	2013	Qualitative ethnography study. Data collection took place in 2010, through a combination of document review, non-participant observations, focus groups and interviews.	SNs on placement in two NHS Trust hospitals, inner London and outer London, UK that were partnered with the same HEI. Twenty-eight year 2 SN's participated in focus group and interviews. Group were predominately female, 5 males.	No intervention was used, the study considered factors that impacted on student's desires to continue their course, and placement was provided as routine.	Clinical placements experiences and mentors were the most important factor for SNs to remain in the course.
Draper et al	2014	Qualitative exploratory design using telephone interviews. Content analysis was used to identify themes.	Alumni (n=17) and employer (n=7) were recruited if they were > 2 years post qualification. The participants were from the UK.	The participants had all been part of the Open University's pre-registration nursing programme. The programme is offered to healthcare support workers to lead to registration as a nurse.	Working in healthcare environment prior to gaining registration can provide familiarity, mentorship and foundational skills vital for readiness to practice.
Hegney et al	2013	Qualitative analysis of survey	Australian study, data were	No intervention was used, the	Nurses indicted that new nurses were

		questions with open-ended questions. The survey was part of a large study, data collected between 2007 and 2010.	collected from nurse members of an industry body (n=3000). Half of this sample (n=1500) provided qualitative data.	study surveyed nurses regarding workforce issues.	not ready for practice.
Hickey	2009	Descriptive mixed methods design. Survey data was gathered and qualitative analysis of open-ended responses was undertaken.	A 591-bed teaching hospital in US which uses a preceptor model to orientate new nurses. Of a possible 200 preceptors n=62 responded. The preceptors were RNs who had been a preceptor in the last year. 58% were female, 26-58 years old. They had on average 9 years of experience as a preceptor.	No intervention was used. The preceptors were surveyed using the Clinical Instructional Experience Questionnaire developed by the researchers.	Structured preceptor training programmes are needed.
Holland et al	2010	Mixed method, reported findings from a larger three phase design study.	Students, nurses, managers, academics and service users (n=311) were recruited in Scotland, UK.	No intervention used	Support for new nurses through mentorship is important for new nurses to build confidence following registration.
Moore & Cagle	2012	Qualitative phenomenological design. Narrative data was analysed thematically	A US study including n=7 new nurse graduates who had participated in internship program. Six females and one male were included.	No intervention was used.	The preceptor-new nurse relationship has an impact on transition to practice.
Numminen et al	2014	Quantitative survey design.	Five major universities and associated hospital in Finland. Participants included nurse educators (n=86), and nurse managers (n=141).	No intervention was used.	Nurse managers and nurse educators can differ in their assessments and expectations regarding new nurses' readiness for practice.
Phillps et al	2012	Qualitative interpretive descriptive design using focus groups. Data were collected in 2008.	Australian based study, first year RNs (n=67) were included. 63 were female and 6 male with age range from 20 – 50+ years.	No intervention was used.	Employment in health services as a student helped transition as it provided students experience and familiarity.
Romyn et al	2009	Qualitative descriptive study.	The study was conducted across	No intervention was used. The	Early hands on experience such as

		Discussion groups were used to gather data in 2008.	health services in Alberta, Canada. Total of n=186 participants, including nurse graduates and more experienced nurses, manager and educators. 95% were female working in hospital-based settings.	discussion groups were facilitated with open ended questions related to knowledge, skills, transition and expectations for graduate nurses.	employment as a nurse assistant may assist in the transition from student to nurse.
Sharpnack et al	2014	A pilot project using survey design.	Study was conducted in the US. Preceptors (n=10), 25-64 years of age and just over half had 2-3 years of experience.	A preceptor education course was developed. Each preceptor received a toolkit, reference materials and completed learning modules.	Students provided positive feedback regarding the preceptor's abilities to develop their readiness for practice.
Swallow et al	2007	A mixed methods design, focus groups and questionnaires. Framework technique and descriptive statistics used.	Participants were from NHS Trusts and Universities in the UK Healthcare assistant - pre-registration nurses (n=20) and mentors (n=20), three clinical facilitators and three University tutors.	OPEN project – Opening up access to Pre-registration for Nurses – leading to articulation to Diploma in Nursing Studies/Registered Nurse Programme	Familiarity of the workplace assisted students with development of work readiness.
Walker & Campbell	2013	Quantitative study using survey design.	Two regional hospitals in Victoria, Australia. Graduate nurses (n=94) were recruited. 88 females and 6 males. Mean age 26 (range 21-52) years.	No intervention was used. The survey used was the Work Readiness Scale.	Work readiness dimensions – organisational acumen, clinical competence, social intelligence – predict job satisfaction and work engagement. Work readiness is more than clinical competence.
Wolff et al	2010	Qualitative exploratory study using focus groups. Data was collected in 2006.	Nurses were recruited in British Columbia, Canada. The nurses were recruited if they were graduate nurse, preceptors, involved in new nurse transition initiatives or from regulatory sectors. There were 150 nurses from practice, education and regulatory sectors.	No intervention used. Semi-structured interview protocol guided the focus group where nurses were asked to define work readiness for graduate nurses.	There is a lack of consensus for a definition of work readiness – leading to unrealistic expectations for new nurses.

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HEI – Higher Education Institution, RN – registered nurse SN – student nurse, UK – United Kingdom, US – United States

The themes found in the studies that investigated work readiness and the influences for work readiness for newly registered nurses included: Importance of Preceptors for Facilitating Work Readiness with the sub themes of *Positive relationships between the preceptors and the student or newly registered nurse*, *Preparing and supporting the preceptor for the role* and *Using a model to guide preceptorship of students*, the second theme was related to Clinical Exposure, including a sub theme of *Adequate clinical exposure and clinical competence*.

#### Importance of Preceptors for Facilitating Work Readiness

##### *Positive relationships between the preceptors and the student or newly registered nurse*

Working positively with experienced peers, including both mentors and preceptors can significantly influence new nurses' transition into practice and may therefore impact work readiness. Supportive and positive relationships between SNs and RN preceptors was the focus of Christiansen and Bell (2010) and Moore and Cagle (2012) studies. They aimed to explore the impact of supportive relationships between SNs and RNs in practice settings using a peer partnership initiative pre-registration programme for the facilitation of work readiness. Christiansen and Bell (2010) suggest that formalising peer relationships in learning partnerships has the potential to improve the student learning experience and a heightened sense of readiness for registration and future work readiness. Importantly, the use of a peer learning partner from a clinical setting heightened student's awareness of the importance of the role of the mentor/preceptor.

Similarly, Moore and Cagle (2012) revealed that, despite significant education, new nurses come to the workplace needing support and socialisation to the nursing role in a complex and multi-faceted health care setting. These findings suggest that beyond preregistration there

exists a need for a positive preceptor-new nurse relationship. The outcomes of these studies include the importance for healthcare organisations to support nursing preceptors who have a responsibility in the developing the work readiness and future success including the retention of new nurses in the workforce.

### *Preparing and supporting the preceptor for the role*

Formalising and preparing the role of preceptor and mentor should be a focus for healthcare settings. Preceptors are often expected to assume this role in the workplace, however often preceptors feel unprepared to take on this responsibility. Preceptors too often consider newly registered nurses as not work ready adding to the strain of this role. A study by Hickey (2009) investigating the role of preceptors and their perceptions of new nurses' work readiness revealed that while the role of the preceptor beared important influence on work readiness, for a vast majority of this group (74%) they have never attended formal preceptor training. The outcomes of this researcher related to recommendations including the development of a structured preceptor training programme that could assist preceptors to identify learning styles and provide feedback effectively. Further the researchers recommended an increase in the provision of resources and support for preceptors in their educational role.

Sharpnack, Moon, and Waite (2014) recently evaluated an education intervention for preceptors comprising of a toolkit of resources and online education for their role. The key findings of the study related to appropriate selection of preceptors committed to student success, ensuring an appropriate and manageable patient load to allow for student engagement and closer ties between the university and the practice setting to foster effective clinical exposure. These findings suggest that positive preceptorship relies upon a

combination of nurses with an affinity for teaching students and appropriate levels of support between the practice setting and the university.

Romyn et al. (2009) too argued that preparation of RNs for the role of clinical preceptor/mentor/educator may have an impact on helping new graduates *hit the ground running*. They aimed to understand perceived gaps and consensus about strategies to foster and assist the transition from SN to new graduate. They found that preceptors were exposed to heavy workloads, excessive overtime, inflexible scheduling, a lack of leadership and limited access to professional development opportunities. These factors related to the preceptors' work environments resulted in the poor transition and potential negative impact on work readiness of new graduate nurses. Considerations towards enhancing work readiness included improving education within nursing programmes related to scheduling, workloads and mentorship in clinical settings. Of importance was the finding that formal preceptor and mentor positions are vital to the successful transition of new nurses, ensuring that new nurses are fostered adequately comprises of a more flexible mentorship/preceptorship arrangement (i.e. ensuring that nurses' have the time to mentor new nurses and constant contact by scheduling the mentors and mentee on the same shift) or a mentorship program that is not bound by a one-on-one mentoring model. Some of the included studies investigating nurses work readiness have identified models to guide preceptorship of students and newly registered nurses.

#### *Using a model to guide preceptorship of preregistration nurses*

A number of papers focused on enhancing work readiness and using a preceptorship model to achieve this end. One such study featured a new preceptorship model (Barnett, Cross, Shahwan-Akl, & Jacob, 2010) to increase healthcare staffing capacity and improve students'



workplace readiness. Attributes of this new model involved – leadership and commitment to collaboration for all stakeholders, a philosophy of a learning community with a common preceptorship programme for all SNs, in addition to, a dedicated clinical facilitator. The model included a greater use of shifts and weekends for clinical placements and a shared clinical calendar between the stakeholders (i.e. senior staff from the hospital and staff from the education providers). Common clinical placement objectives, skill set and evaluation tools were included in the model with regular face-to-face communication between key stakeholders. SNs and preceptors were surveyed at completion of their clinical block placement to understand participants' views regarding their preparation for clinical placements; learning environment and learning community; value of shifts allocated over the weekend; ways to improve learning outcomes and; perceptions of work readiness. Although the study participants were recruited from a single small study site, results indicated that the model was associated with a 58% increase in the number of students on placement (130 students 2004 compared to 205 in 2007) and a 45% increase in the number of student placement weeks (therefore increasing clinical exposure for students) over a four year period. Students reported that the impact of the model was positive in terms of their perceived readiness for practice due to the diversity of their clinical experiences; however they reported that having too many different preceptors was not particularly helpful, as they experienced difficulties in forming positive relationships.

Another learning model investigated by Draper et al. (2014) focused on the up-skilling of nurse assistants to registered nurses in the United Kingdom. The role of mentors in facilitating supportive relationships and providing an effective practice based learning environment were pivotal to the effectiveness of this mentoring registration nursing programme on student's employability and career progression. This learning model was

centred around clinical placement being conducted in the student's existing place of employment. This familiarity removed barriers that can exist when new nurses and students enter unfamiliar and new work environments. This model though while being successful as a result of the support of the employer and university partnership the transitioning from nurse assistant to student and then to RN within the same workplace created some role conflict for the student/new nurse.

### Clinical Exposure

#### *Adequate clinical exposure and clinical competence*

A number of the returned papers investigated work readiness in regards to sufficient clinical experiences and the adequate preparation of new nurses in terms of clinical competence. Often experienced nurses, employers and nurse academic were surveyed for their perceptions of new nurses' work readiness. Hickey (2009) aimed to identify preceptor's views of new graduate's work readiness using set criteria. More than half of the participants agreed that clinical experiences during the academic education programme did not adequately prepare newly registered nurses for the work environment in healthcare. Key results identified that participants thought newly registered nurses were not adequately prepared for work with 63% indicating new graduates needed more assistance than expected (specifically with performance skills). These findings were also true in Romyn et al. (2009) study, however preceptors explained the changing healthcare climate with staff workloads and increased patient acuity contributed to the complexity of the nursing role such that new nurses were often thrown in the deep end with little support.

Numminen et al. (2014), too, argued that nurses criticize novice nurses in regards to having insufficient clinical competence and patient management skills. Their findings indicated that nurse educators' assessment of novice nurses were significantly higher than the nurse managers' assessment in all competence categories ( $p < 0.001 - 0.005$  at significance level of  $p \leq 0.05$ ). While they agreed on some core nursing competencies such as direct patient care there were also differences, in particular managers had a low expectation on novice nurse's ability to use evidence based practice. However the study had a low response rate and as such care should be taken with the interpretation of these findings due to potential for response bias. The findings, however, do highlight an inconsistency in the expectations of work readiness for the newly registered nurse.

Similarly, Holland et al. (2010), investigating fitness for practice, commented that work readiness of newly registered nurses often centred on reporting deficiencies rather than nurses' competence to practice in general. These researchers highlighted that nurse registration marks the beginning of a lifelong learning experience where professional competence develops with practice and experience; work readiness being a process of development and growth through practice and familiarity.

The importance of SNs' familiarity with the workplace has been discussed by Swallow et al. (2007) who reported that when SNs were more familiar with the workplace they could effectively explore practice issues and implement change. These students reflected that they *'had become more assertive and questioning, more disciplined in relation to time management, increasingly independent as learners and very proud of their own development'* (Swallow et al., p.144). Indeed, Phillips, Kenny, Smith, and Esterman (2012) investigated

the part-time vocational choices SNs made and skills developed concluding that the majority of their participants worked in health settings and these students arguably reported more comfort at transitioning to nursing practice. All participants, however, engaging in some type of part-time employment learnt 'life skills,' and identified that this eased the transition to their RN role.

Clinical exposure was also the focus of Hegney et al. (2013) study that explored attitudes in regards to entry preparation of nurses. Specifically the paper reported on one-open ended question "what are the 5 key issues and strategies that you see could improve nursing and nursing work?" Findings indicated that respondents believed there was *insufficient* clinical experience and *inappropriate* curriculum content which did not ensure graduates were 'ready for practice' upon registration. Three major themes emerged– (1) lack of clinical exposure for students and the need to increase clinical hours; (2) the place of preparation; and (3) financial considerations (such as, paid work for students). A key limitation of this study was that participants were recruited from aged care and the private sector that led to an under representation of nurses from the public sector.

Crombie, Brindley, Harris, Marks-Maran, and Thompson (2013) aimed to capture work readiness information from their participants, where the SNs interviewed indicated that experiences from clinical placements/practice had the greatest influence on them to continue with their course, the concept of work readiness, however, was not mentioned in their findings. Whereas Wolff, Regan, Pesut, and Black (2010) explored the meaning of work readiness pertaining to nurse graduates and revealed that the term work readiness was seen by participants as being related to having a generalist foundation, providing safe client care, keeping up with the current realities, future possibilities of the profession, and possessing a

balance of doing, knowing and thinking. Of note, the participants conveyed the staff in practice environments held unrealistic expectations of new nurse graduates in relation to work readiness. They argued that the use of the term work readiness in the nursing literature was still not clearly defined or developed as a concept and was often used interchangeably with readiness for practice (which is a term that relates to the ability to be registered for practice). Clinical competence while viewed as one key measure of work readiness is not the only factor related to this concept. Walker and Campbell (2013) explored the relationship between work readiness dimensions and a number of other work outcomes (job satisfaction, work engagement and intention to remain) and indicated that work readiness can predict work outcomes and furthermore work readiness comprised generic skills and attributes beyond discipline specific competence.

## Discussion

This integrative systematic review investigated the work readiness of newly registered nurses, the included articles investigated what does it mean to be work ready, including supporting nurses at the preregistration and graduate level. These supports included: the use of a preceptorship model to support students, adequate preparation of preceptors, sufficient clinical exposure, effective facilitation of clinical opportunities to enhance competencies and promote good working relationships between students and the RN clinical preceptor/mentor. The importance of clinical exposure and clinical education is integral to establishing an effective student-preceptor/educator relationship that will maximise readiness for practice and thereby facilitate development of work readiness of newly registered nurses. Preceptors, clinical educators and/or mentors work in diverse ways to achieve appropriate and satisfactory clinical exposure for students therefore generic models used to guide the clinical

education delivery is advocated (Barnett et al., 2010; Hellström-Hyson, Mårtensson, & Kristofferzon, 2012; Newton, Cross, White, Ockerby, & Billett, 2011).

Work readiness is considered to be central in the provision of a smooth transition into the workplace once registered. However the term ‘work readiness’ is generally ill defined due to the multi-factorial role of nurses – however it should as a minimum include clinical competence and other professional skills and attributes inclusive of flexibility, adaptability and communication skills. Currie and Watts (2012) suggest there is a need to reinforce and embed systematic preceptorship into organisational structures thus allowing clinical preceptors/mentors an awareness of differing learning needs of students who are preparing for transition to RN. In addition, not making assumptions about the level of students' clinical skills is important to the success of the student's work readiness (Hickey, 2009; Levett-Jones et al., 2011; Spiers et al., 2010; Wolff et al., 2010).

In light of adequate clinical exposure at the preregistration level, the experience of isolation, not belonging, uncertainty and anxiety often reported by preregistration and newly registered nurses can have a negative impact on the preparation of nurses. This may impact nurses' preparation for the realities of practice and consequently work readiness. Belonging and familiarity can be achieved for newly registered nurses through adequate clinical exposure, however there are no global recommendations for length of clinical exposure that preregistration nurses should undertake; for example, in the UK, students must complete 2,300 hours of clinical practice prior to registration; in Australia a minimum of 800 hours of workplace experience for RNs, not inclusive of simulation activities, is incorporated into programmes providing exposure to a variety of health-care settings is required (Health Workforce Australia, 2014).

## Limitations

Terminology used around readiness for practice, work readiness and preceptorship/mentorship programmes may be globally variable. Limiting the search criteria to only peer-reviewed original research written in English may have eliminated pertinent findings that could have been located elsewhere, such that this review only reported findings for the majority of Western based studies. The inclusion of other literature such as books or grey literature may have also offered valuable insights. Further exploration of the clinical practice exposure (mentoring or preceptorship) experienced by preregistration nurses matter in relation to their readiness for practice is warranted as is the amount of clinical exposure time required by student nurses to become work ready.

## Conclusions

Work readiness of newly registered nurses and readiness for practice of students continue to be a topic of debate and discussion amongst nursing professionals globally. Work readiness, though having a range of definitions, has been attributed to key factors that can be focused on when aiming to improve the potential for new nurses to be ready for work upon registration. Specifically, preparing RN preceptors/mentors for the role and allowing SNs adequate clinical exposure can lead to improvements in clinical competence and confidence of students facilitating readiness for practice. Frustrations for RNs are related to the variable educational/clinical preparation and apparent lack of competence of newly registered nurses leading to poor relationships between RNs and newly registered nurses. Positive relationships with clinical staff (including preceptors/mentor/clinical educators) during clinical placements are likely to facilitate SNs' immersion in the learning experience and subsequently promote socialisation into the profession. There needs to be development and dissemination of the role and expectations of clinical mentors/preceptors thus promoting an equity of support for all preregistration nurses. Similarly support for mentors/preceptors in practice is crucial to

effectively prepare for them for their clinical support role in assisting newly registered nurses to be 'ready for practice' upon graduation.



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