Review

The impact of residency programs on new nurse graduates' clinical decision-making and leadership skills: A systematic review

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SUMMARY

Background: Health care institutions have adapted residency programs to help new graduate nurses to become fully competent and transition from a student nurse to an independent practicing nurse and a bedside leader.
Objectives: The study's aim is to review the literature on the impact of residency programs on new graduate nurses' clinical decision-making and leadership skills.
Review Methods: An electronic search was conducted between 1980 and 2013 using databases of the scientific literature in Medline, PubMed, Cochrane EPOC, Cumulative Index to Nursing & Allied Health Literature database guide (CINAHL), and PsychInfo using a range of keywords. Information gathered was evaluated for relevance.
Results: Thirteen studies that met the inclusion criteria were used in this systematic review.
In several studies considered in this review, residency programs were developed to improve new graduates skills and promote their transition into the nursing workforce. In fact, the transition programs reduced turnover in that first year of practice and promoted professional growth of the new graduate such as hand-on nursing skills, clinical decision-making and leadership skills, satisfaction, and retention.
Conclusion: There is a need for effective residency programs that are designed to prepare new graduate nurses in providing safe, competent and effective patient care.

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Introduction

The Bureau of Labor Statistics reports that registered nurses' employment is expected to grow by 26% by 2020. Ten percent of the nursing workforce in hospital settings is composed of new graduate nurses, and this number is expected to increase as a result of the aging nurses reaching retirement (U.S. Bureau of Labor Statistics' Occupational Outlook Handbook, 2010–2011 Edition). Because of the intense working environment, increasing patient acuity, nursing shortages, and complex technologies, health care settings create challenges for new graduate nurses. As health care needs are becoming increasingly complex and technology is expanding to accommodate patients' needs (Taylor, 2008), the new graduate nurse is required to possess clinical decision-making (CDM) and leadership skills (LS).

Although approximately 90% of nurse education leaders in the United States believe that new nurse graduates are adequately prepared to enter the workforce and practice, 90% of nurse leaders in the hospital setting disagree (Berkow et al., 2009). This discrepancy in views of the new nurse graduate's preparation between nursing educators and

nurse leaders might be explained by the new graduate's ability to put knowledge into practice. The journey from education to practice can be extremely stressful for the new graduates. The transition experience for the new graduate nurse is described as the "experience of moving from the known role of a student to the relatively less familiar role of professionally practicing nurse" (Duchscher, 2009, p.1105). Also, the transition can be associated with a reality shock "apparent contrast between the relationships, roles, responsibilities, knowledge and performance expectations required within the more familiar academic environment to those required in the professional practice setting" (Duchscher, 2009, p. 1105). The high levels of stress are associated with the inability of new nurses to properly transition from education into practice (National Council of State Boards of Nursing, 2012) leading to negative consequences such as increased turnover and potentially disastrous outcomes for patient care.

To alleviate this problem, many healthcare institutions have adopted residency programs (RPs) to help new graduate nurses to transition and become fully competent independent practicing nurses and bedside leaders. In the nursing profession, the transition period for new graduate nurses between graduation and the first year has been an issue for many years (Fink et al., 2008). Nurse RPs support new graduate nurses, ease the transition period, and help with skill acquisition. Nurse RPs have helped to increase recruitment, improve retention, and/or increase commitment to the organization, and have led to the satisfaction of new graduate nurses (Olson-Sitki et al., 2012).

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The Institute of Medicine (IOM) report (2011) on the Future of Nursing emphasized the need to establish RPs for new graduate nurses at clinical settings, and highlighted the advantages of developing these programs. In fact, implementing RPs in clinical settings provide advantages to new graduate nurses, organizations, and patients. Residency programs can equip new graduate nurses with the skills needed to navigate the complex health settings. The RPs are an opportunity to support the new graduate nurse transition to practice and to develop proficiency.

However, there is a need to understand how to improve new graduate nurses' transition from student role to practitioner, and specifically how RPs influence this transition with regards to CDM and LS. Despite a growing body of knowledge on this topic, the impact of RPs on new graduate nurses' CDM and LS remains underexplored. Few studies measured the impact of RPs on new graduate nurses' CDM and LS (Halfer et al., 2008; Anderson et al., 2009; Goode et al., 2009; Kowalski and Cross, 2010). It is essential that the new graduate nurse acquire CDM and LS to provide patients with safe and competent care (Patrick et al., 2011). Therefore, the purpose of this review paper is to provide a detailed description and assessment of the current knowledge on how RPs influence new graduate nurses' CDM and LS. This review includes identifying gaps in knowledge about the impact of RPs on new graduate nurses' CDM and LS as well as compiling the best possible research evidence in order to develop evidence-based practice about RPs.

The findings of this integrated literature review might be helpful to health care administrators and nursing educators in designing effective RPs that can ease the transition of new graduates from education to practice. Further, findings from this review study can assist efforts in improving the work environment and educational practices.

Methods

Search Methods for Identification of Studies

An electronic search was conducted between 1980 and 2013 using databases of the scientific literature in Medline, PubMed, Cochrane EPOC, Cumulative Index to Nursing & Allied Health Literature database guide (CINAHL), and PsychInfo. The search terms used were decision-making, CDM, clinical leadership, leadership, nursing, new graduate nurse, residency and RPs. A literature search was conducted to identify primary published studies with data on CDM, clinical leadership, new graduate nurse, and RPs. All peer-reviewed journal articles that studied the impact of RPs on new graduate nurses' CDM and LS, and were published in English were examined. A total of thirteen articles were included.

Inclusion Criteria for Considering Studies for this Review

Studies evaluating the impact of RPs on new graduate nurses' CDM and LS were included in this systematic review. Specifically, we included studies that discussed the content, components, content, processes, goals, and duration of the RP. However, case reports, pilot studies, and non-English articles were excluded. Further, studies were rejected if they did not include CDM and LS as the outcomes that can be affected by RPs.

Study participants in the reviewed studies were new graduate nurses and newly licensed registered nurses, with no previous experience. The review is focused on two specific outcomes, namely CDM and LS.

Data Extraction and Analysis

Studies were grouped based on the RP content, teaching and learning strategies approach used. We also examined the methodological rigor and quality of study design, recruitment methods, sample size and outcome measures employed by each study. Further, we

evaluated the findings of the intervention presented in each study as they pertain to the impact of RPs on CDM and LS. Limitations, future research directions and implications for the nursing profession are discussed.

Results

Over the period of 33 years, we identified 756 studies using the key word RPs. The search resulted in 59 studies when key words such as RPs and nursing were used. When search was restricted even further by using more precise key words such as RPs and decision-making, we retrieved 32 studies. Finally, 17 articles were retrieved when the terms RPs, clinical, and leadership were used. Of these, only 13 studies met the inclusion criteria. What follows is an analysis of peer-reviewed studies on nurse RPs, focusing on study methods and findings.

Nurse Residency Programs

In nursing literature, RPs were first reported in the 1980s (Altier and Krsek, 2006). According to Fink et al. (2008), numerous hospitals have developed RPs for new graduate nurses due to the impending expertise gap and the need to assist the new graduate nurse in the transition process. Herdrich and Lindsay (2006, p. 55) defined RPs as "a joint partnership between academia and practice that is learner focused. [And where the] post-graduate experience [is] designed to support the development of competency in nursing practice. The role of the academic partner is to aid in the development of the theoretical framework and conduct the research based program evaluation, whereas the role of the practice partner is to actualize and guide the program itself".

According to the National League for Nursing (1983), RPs are formal contracts between the new graduate nurse and the employer, describing and defining activities. Altier and Kresk (2006) indicate that nurse RPs contribute significantly to the success of the new graduate nurse. In fact, nurse RPs are designed to provide the new graduate nurse with additional support, mentoring and guidance as they transition into practice. Further, nurse RPs provide the novice nurse with a supportive and protective environment to develop her/his critical thinking, problem solving, CDM and LS.

Residency programs are developed to improve new graduates skills, confidence, and experience in promoting their transition into the nursing workforce. Numerous studies demonstrated that nurse RPs improved new graduate nurses' competencies, skills and increased self-confidence, and decreased the turnover rate (Valdez, 2008; Goode et al., 2009). In Blanzola et al. (2004) study, the nurse residents significantly improved self-confidence ($t = -4.61$, p-value $= 0.002$). Further, evidence has shown that nurse RPs have improved the new graduate nurse commitment to the nursing profession, and have increased the overall retention of new graduate nurses (Fink et al., 2008; Scott et al., 2008).

According to the National Council of State Boards of Nursing, the transition programs reduced turnover in that first year of practice (NCSBN, 2009); and promoted professional growth of the new graduate such as hands-on nursing skills, CDM and LS, satisfaction, and retention (Scott et al., 2008). Further, RPs offer the new graduate nurses guidance and support to cope with the stressors in the first year of practice (Fink et al., 2008).

Clinical Decision-making and Leadership in the Nursing Literature

According to Standing (2007, p.266), clinical decision-making is defined as "a complex process involving information processing, critical thinking, evaluating evidence, applying relevant knowledge, problem-solving skills, reflection, and clinical judgment to select the best course of action which optimizes a patient's health and minimizes any potential harm." Furthermore, the American Association of Colleges of Nursing (AACN) (2008) states in the second essential of nursing