

# The Effects of Preceptor Training on New Graduate Registered Nurse Transition Experiences and Organizational Outcomes

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## abstract

**Background:** New graduate RNs (NGRNs) may experience difficulties in their transition to independent practice. The main role of preceptors is to guide, validate, and supervise the care that NGRNs provide. However, preceptors may not receive training to serve in the role.

**Method:** A literature review of the past 5 years was conducted, with 10 articles meeting the inclusion criteria to analyze the effects of preceptor training on NGRN outcomes.

**Results:** Ten studies indicated a range of positive effects of preceptor training on NGRN transition experiences and organizational outcomes, including critical thinking and retention. Findings on NGRNs' stress levels are contradictory and ambiguous.

**Conclusion:** A variety of positive outcomes can be realized for NGRNs who partner with formally trained preceptors.

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New graduate RNs (NGRNs) can face substantial difficulties during transition to their independent role in patient care. Complex patients with shorter hospital stays, lack of professional support beyond a time-limited orientation period, and challenging workplace dynamics contribute to NGRN anxiety, stress, and exhaustion (Hofler & Thomas, 2016). These difficulties may be the result of the difference between the values and expectations held by nursing students and the values and expectations imposed on them in their first jobs as nurses (Duchscher, 2009). According to the American Organization of Nurse Executives ([AONE], 2010), "It becomes the inherent responsibility of the nursing profession [and]

health care organizations to define and implement strategies to create a learning and supportive environment that will position the new graduate nurse for success" (p. 1).

In response to the need for postlicensure training, transition-to-practice (TTP) programs have been implemented nationwide on a facility-by-facility basis. As of 2006, 97% of practice settings for NGRNs have TTP programs (Spector & Echternacht, 2010), and a preceptorship experience is the most common mode of support during this critical time in an NGRN's professional development (Rush, Adamack, Gordon, Lilly, & Janke, 2012). However, TTP support is hindered by a limited understanding of the NGRN development trajectory among nurse leaders and preceptors (Duchscher, 2009).

Given that the current preceptor role is often supervised workload division that is not grounded in knowledge-transfer models, NGRNs start their independent practice concerned about clinical assignments that are beyond their abilities to perform comfortably (Duchscher, 2009). In 2015, the Commission on Collegiate Nursing Education (CCNE) developed an accreditation program for TTP programs classified as residencies. The CCNE stated only a basic requirement for preceptors to be oriented to their role (CCNE, 2015), but evidence suggests that preceptors

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should receive formal training (Hoffler & Thomas, 2016; McClure & Black, 2013; Rush et al., 2011). The AONE (2010) recognized that preceptors should be trained to assist NGRNs' transition to independent, competent practice. McClure and Black (2013) stated, "Preparation is essential for the preceptorship experience to be successful for both the student and the preceptor" (p. 338).

Regardless of the recommendations for preceptor training, many TTP programs do not include it (AONE, 2010). This disconnect between evidence and practice may be due to perceived costs of additional training, staff development priorities, or lack of knowledge about best practices. Nurse leaders need evidence that implementing time- and cost-intensive training will yield measurable, positive results, but the research that connects preceptor training to NGRN outcomes is lacking in the current literature. This systematic review will help bridge the gap by answering the question, "What effect does the training of preceptors have on new graduate registered nurse transition experiences and organizational outcomes?"

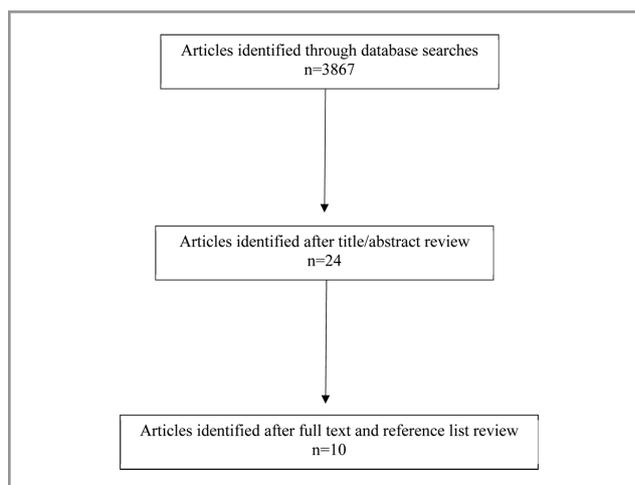
## METHOD

MEDLINE<sup>®</sup>, the Cumulative Index to Nursing and Allied Health Literature (CINAHL<sup>®</sup>), Education Resources Information Center (ERIC<sup>™</sup>), Education Source, HealthSource: Nursing/Academic Edition, and the Cochrane Library were searched using combinations of the following keywords: *preceptor*, *nurs\**, *training*, *new*, *nurses*, *new graduate nurse*, *outcomes*, *nursing preceptor*, and *preceptor training*. A 2012 date limiter and restriction to English-only publications yielded 3,867 articles. Titles were scanned to choose abstracts for further review, and 24 articles were selected for full-text review. Reference lists of the 24 articles were also reviewed. Two of three authors agreed on the final selection of articles based on measurements or analysis of any NGRN outcomes related to preceptor training. A total of 10 research studies met the inclusion criteria for this systematic review (Figure).

In 2015, the National Council of State Boards of Nursing (NCSBN) published a widely-anticipated multisite randomized control trial of their TTP, which included preceptor training. Although the published study conducted by Spector et al. (2015) found significant differences between the TTP and established program groups compared with the limited program groups, the presence or absence of preceptor training in the limited program group was not stated in the study. Therefore, the NCSBN's study was not included in this review.

## Evidence Analysis

A level of evidence was assigned to each study using the hierarchy of evidence for intervention studies (Fineout-



**Figure.** Search and retrieval yields for the current systematic review.

Overholt, Melnyk, Stillwell, & Williamson, 2010). Two controlled trials without randomization (level III), five systematic reviews of qualitative or descriptive studies (level V), and three qualitative or descriptive studies (level VI) were identified. The overall quality of evidence for this review is limited by the individual study designs. Details about preceptor training and the NGRN outcomes measured in each study were extracted and added to a literature evaluation table to facilitate synthesis (Table).

## Outcome Synthesis

All 10 studies indicated a positive effect of preceptor training on specific aspects of NGRN transition experiences. The most commonly measured outcomes were NGRN retention, critical thinking, and stress levels.

## Retention

Improved retention was the organizational outcome reported most frequently (Clipper & Cherry, 2015; Cotter & Dienemann, 2016; Goss, 2015; Hu et al., 2015; Kang, Chiu, Lin, & Change, 2015; Rush et al., 2012; Whitehead et al., 2013). Methods of measuring retention varied, including synthesizing individual study findings in systematic reviews, reporting hospital-wide retention rates postintervention, comparing retention rates of intervention and control groups, and self-reporting of intent to leave among NGRNs. Only one study had a quasi-experimental design that isolated preceptor training as an independent variable and measured retention as a dependent variable with a control group, showing a 6.8% higher retention rate in the intervention group (Clipper & Cherry, 2015). The study

**TABLE**  
**LITERATURE EVALUATION**

<b>Study</b>	<b>Level of Evidence, Study Type, Sample Size<sup>a</sup></b>	<b>Research Question or Focus</b>	<b>Preceptor Training</b>	<b>NGRN Transition and Organizational Outcomes</b>
Clipper & Cherry (2015)	Level III; quasi-experimental posttest with control ( <i>n</i> = 18) and intervention ( <i>n</i> = 41) groups	Compare first-year retention and perceptions of transition to practice among NGRNs with and without trained preceptors	1-day workshop	Retention: 89.5% with trained preceptors versus 82.7% with untrained preceptors
Cotter & Dienemann (2016)	Level VI; descriptive case study	Program evaluation for preceptor preparation	Bundled program, including ongoing support and enhanced training	Turnover rate = 0.68%; improvement in selected quality metrics
Edwards et al. (2015)	Level V; systematic review ( <i>n</i> = 30 articles)	Determine the individual and organizational effectiveness of strategies to support NGRNs	Six studies investigated preceptorship programs with training	Increased competence and confidence in three of four studies; 50% reported lower stress levels in one study; two of three studies found no difference in retention
Goss (2015)	Level V; systematic review ( <i>n</i> = 20 articles)	Identify the significance of the preceptor role on NGRN retention	Continuing education to enhance preceptors' skills	Integral for NGRN retention
Hu et al. (2015)	Level III; quasi-experimental with control ( <i>n</i> = 53) and intervention ( <i>n</i> = 54) groups	Compare the effects of a 10-minute preceptor model on NGRNs' work stress, work experience, and intent to leave	Preceptors trained to Taiwanese Joint Commission standards; intervention group received additional training	Work stress levels and work experience scores at 2 and 3 months and intent to leave were significantly lower in the 10-minute preceptor model group
Kaddoura (2013)	Level VI; qualitative descriptive ( <i>n</i> = 16)	Explore the perceptions of NGRNs on the effect of preceptor behaviors and strategies on their critical thinking skills	All preceptors completed a theory-driven educational program	Self-reported increased critical thinking by end of 6-month preceptorship
Kang, Chiu, Lin, & Chang (2015)	Level VI; quantitative descriptive ( <i>n</i> = 17 preceptor-NGRN dyads)	Describe effects of a preceptor development program on NGRNs' stress levels and intent to leave	Situational initiation training program for preceptors	Stress levels moderate; intention to leave low to very low
Rush, Adamack, Gordon, Lilly, & Janke (2012)	Level V; systematic review ( <i>n</i> = 47 articles)	Identify best practices of NGRN transition programs	Recommended in seven studies	Improved critical thinking; improved satisfaction with preceptorship; improved retention
Schuelke & Barnason (2017)	Level V; systematic review ( <i>n</i> = 9 articles)	Examine interventions implemented by preceptors to promote NGRN critical thinking	Preceptor education on educational theory interventions for critical thinking development	Increased critical thinking
Whitehead et al. (2013)	Level V; systematic review ( <i>n</i> = 24 articles)	Review research related to the development of preceptorship to support NGRNs	Bundled as managerial support, including training preceptors	Increased recruitment; increased retention

Note. NGRN = new graduate RN.

<sup>a</sup> Levels of evidence = Level I: systematic review or meta-analysis of randomized control trials; Level II: randomized control trial; Level III: controlled trial without randomization; Level IV: case-control or cohort; Level V: systematic review of qualitative or descriptive studies; Level VI: qualitative or descriptive study; Level VII: expert opinion or consensus (Fineout-Overholt, Melnyk, Stillwell, & Williamson, 2010).

by Edwards, Hawker, Carrier, and Rees (2015) was the only one that reported ambiguous findings associated with retention: two of the three studies in the system-

atic review found no significant difference in retention among NGRNs with specially trained preceptors (Edwards et al., 2015).

## Critical Thinking

Improvement in critical thinking was reported in all studies that measured it. In the systematic review by Schuelke and Barnason (2017), increased critical thinking was associated with preceptor training on interventions for critical thinking development; however, the authors did not adequately explain how their analysis revealed a connection between the two variables. Qualitative analysis by Kaddoura (2013) uncovered themes of increased critical thinking in interviews with NGRNs. One study in the systematic review by Rush et al. (2012) showed a significant improvement in critical thinking among NGRNs with preceptors who received formal training ( $p < .05$ ). The authors of all three studies recommended training for preceptors as a best practice in TTP programs.

## Stress

Stress levels were reported in three studies. Moderate stress levels were associated with a specific type of preceptor training, and this was reported as a negative finding despite lack of a control group (Kang et al., 2016). In the systematic review by Edwards et al. (2015), only one study associated trained preceptors with stress levels; 50% of NGRNs reported that their preceptors lowered their stress levels, but this finding also means that preceptors either had no effect on stress levels or may have increased stress levels for the other 50% of NGRNs in the study. Hu et al. (2015) compared a specific preceptor training intervention with usual preceptor preparation and reported that NGRNs in the intervention group showed significantly lower stress levels ( $p < .01$ ); however, preceptors in both the intervention group and the control group received some type of training. Although the effect that trained preceptors have on stress levels has been measured, study findings are contradictory or ambiguous.

## DISCUSSION

The findings of this systematic review support preceptor training programs to increase critical thinking and retention of NGRNs. The study sample contained five systematic reviews with more than 100 studies combined, and all studies in the sample were published within the past 5 years. NGRN retention was measured in seven studies (Clipper & Cherry, 2015; Cotter & Dienemann, 2016; Goss, 2015; Hu et al., 2015; Kang et al., 2015; Rush et al., 2012; Whitehead et al., 2013), and only one study reported ambiguous findings (Edwards et al., 2015). This indicates that the overall effect of preceptor training on retention is substantial. Two systematic reviews and one qualitative study all found improved critical thinking among NGRNs with trained preceptors, and the authors of each study strongly recommended preceptor training to

support development of this skill (Kaddoura, 2013; Rush et al., 2012; Schuelke & Barnason, 2017).

The quality of evidence for this review is limited by the individual study designs. The most significant issue was the lack of experimental or quasi-experimental studies that tested training for preceptors to a control group without training. Three studies had no comparison group at all (Cotter & Dienemann, 2016; Kaddoura, 2013; Kang et al., 2015). Only one quasi-experimental study isolated trained preceptors as the sole independent variable with intervention and control groups, but the study also had a small sample size ( $n = 59$ ), significantly more baccalaureate-prepared NGRNs in the intervention group, and an author-created measurement tool without explanation of the content validity process (Clipper & Cherry, 2015). Another quasi-experimental study conducted in Taiwan examined the effect of a particular preceptor training model; however, the Taiwanese Joint Commission requires minimum training for all preceptors, which prevented the researchers from forming a control group without training (Hu et al., 2015). Two studies that showed favorable retention rates had bundled with other TTP interventions in the data analysis, which prevented measuring the effect of the training intervention alone (Cotter & Dienemann, 2016; Whitehead et al., 2013). In addition, the mixed findings on measured outcomes may reflect cultural differences among health care delivery systems, nursing education, and training programs.

## IMPLICATIONS

Based on the current review, NGRN retention and critical thinking skills both can be positively affected by training preceptors on their role as nurse educators at the bedside. Turnover can cost a facility from \$37,700 to \$58,400 per nurse (NSI Nursing Solutions, Inc., 2016). These findings justify expenditure on preceptor training as an investment in their workforce rather than an expense.

## CONCLUSIONS AND RECOMMENDATIONS

This literature review shows a relationship between preceptor training and NGRN transition experience. Several studies revealed that NGRNs who were paired with trained preceptors had increased critical thinking skills and were more often retained by the facility. Studies that isolate preceptor training as an independent variable on NGRN outcomes are lacking. Further research should focus on preceptor training to identify the direct effects on specific NGRN outcomes. The findings of this review, although limited, have important implications for nursing practice.

A preparation–practice gap exists, which makes the transition to practice difficult for the NGRN. In addi-

tion, turnover during the first year imposes a significant financial burden on health care organizations. Preceptors are often not adequately prepared to support and provide the feedback that is needed by the novice nurse. Nurse leaders and educators must recognize the need to invest in the training of preceptors to help bridge the gap for NGRNs. For the NGRN to be successful, strategies must be put into place to provide meaningful learning experiences and support, and preceptors must be developed to take on such a role.

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