Evaluating a Web-Based Educational Module Designed to Enhance Advanced Practice Nurse Preceptors’ Clinical Teaching Excellence

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Challenges for graduate level faculty overseeing clinical preceptors- There are challenges in providing appropriate education and training for advanced practice nurse (APN) preceptors especially in a distance education program. These challenges include orienting APN preceptors and ensuring APN quality clinical teaching.

Background: Student enrollment in advanced practice nursing programs is increasing and there is a corresponding increased need for graduate clinical preceptors. Yet there is little agreement on how best to orient APN preceptors and how to ensure excellence in clinical teaching practices of APN preceptors. Indeed, scant research has been published regarding advanced practice nursing (APN) preceptors in general (Donley, Flaherty, Sarsfield, Burkhard, O’Brien, and Anderson, 2014). In a review of APN preceptor literature, several articles were located that presented educational approaches and theories to enhance skill acquisition of the APN preceptor of nurse practitioner or other health care professional (Lucas and Bischof, 2014; Witt, Colbert, and Kelly, 2013). Also, two recent descriptive studies related to APN preceptors were located. One study described nurse anesthetist (CRNA) faculty characteristics (Merwin, Stern, and Jordan, 2008) and another described APN preceptors’ perceptions of benefits and motivations related to precepting (Wiseman, 2013). Several additional studies of APN preceptors were conducted regarding nurse practitioner students’ satisfaction with their preceptors (Hayes, 1998; Tanner, 2003) and a recent study investigated the congruence of perceptions of effective clinical teaching between CRNA students and their preceptors (Smith, Swain and Penprase, 2011). However, no articles could be located that were research reports measuring increased knowledge regarding clinical teaching skills of APN preceptor, specifically using web-based delivery of educational modules. Also, no studies could be located that measured APN preceptor self-efficacy.

Studies of web-delivered content to assist preceptor clinical teaching skills acquisition in clinical nurse preceptors has shown promise. Larsen and Zahner (2008) tested the efficacy of web-delivered educational content with public health nurse preceptors and established an increase in knowledge immediately after the module and three months after the web-delivered content. However, perhaps due to low completion rate of participants, the researchers were unable to establish an increase in preceptor self-efficacy. Therefore, a gap in the literature exists regarding APN preceptor clinical teaching skills acquisition, particularly regarding deployment of web-delivered educational content, to achieve appropriate education outcomes, including increased self-efficacy.

Purpose- To address the gap in the literature, this study’s aim was to measure the effectiveness of a web-delivered evidence-based educational module to increase knowledge of clinical teaching strategies and self-efficacy of APN preceptors.

Design- To measure effectiveness, pre- and post-education module measurements were collected and comparisons made between treatment and control groups. APN preceptors were divided into treatment (Educational module participants) and usual (standard) method groups. Educational module group- For the Educational module group, web-based materials were deployed by embedding a link to a shared Google Drive in the recruitment letter. Educational module participants also completed a Survey Monkey questionnaire prior to and immediately after completion of the Educational Module. The same
questionnaire was completed again at the end of the semester to determine whether there were longer term educational gains. Links for the questionnaires were in the Google Drive materials. Although the Educational Module pilot testing demonstrated that only one hour was needed to complete the materials, 1 CEU was offered to motivate time-burdened professionals to complete the module and questionnaires. Standard methods group-The Standard methods preceptors completed a questionnaire, similar to the Educational module group, at the beginning and end of the semester. It also included an open-ended item querying what techniques the preceptors use to develop critical thinking skills in their APN students. Those in the Standard Methods groups were offered the opportunity to participate in the Educational Module at the completion of the study. The data were analyzed to determine if there were statistically significant differences in outcome measurements between the APN preceptor Educational Module and Standard methods groups.

The One Minute Preceptor clinical teaching strategy- The investigators, in a separate study, queried the APN preceptors to determine their educational priorities. At least, 59% of the respondents identified their number one educational priority was education regarding development of critical thinking skills in their APN students. To address this need, the investigators identified the One Minute preceptor (OMP) as an appropriate clinical teaching strategy to assist APN preceptors to develop the desired teaching skills in their students. Evidence demonstrates the One Minute Preceptor clinical teaching strategy is an appropriate strategy. Farrell and colleagues (2016, p. 278) state, “OMP prompts the teaching of higher level concepts, facilitates the assessment of students’ knowledge and prompts the provision of feedback.” The OMP uses five microskills to assist the APN to reach appropriate clinical decisions after an interaction with their patient. The five skills include 1) Get a Commitment, 2) Probe for supporting evidence, 3) Teach general rules, 4) Reinforce what was right, and 5) Correct mistakes (Sarkin, 2017).

Web-based content delivery-A web-based design for content delivery was selected for this study as evidence supports that adult learners, including nurses, are highly motivated to acquire relevant professional skills (Caputi, 2015; DeBourgh, 2003). Also, Computer Based Learning (CBL) is an effective method to expand nursing knowledge (Dennison, 2011). Additionally, studies demonstrate busy professionals, express satisfaction with self-paced learning (Caputi, 2015; Eaton-Spiva and Day, 2011).

Selected study findings- The results of the study demonstrated increased knowledge in participating preceptors regarding the One Minute Preceptor clinical teaching strategy. Immediately after completion of the Educational Module, there was a 74.62% increase in One Minute Preceptor Clinical teaching strategy knowledge scores. Also, after completion of the Education Module, 77.78% of the participating preceptors indicated they were extremely likely to use the One Minute Preceptor clinical teaching strategy with their nurse practitioner students. Additionally, the participating preceptors indicated they were favorably impressed with the Educational Module and its delivery. The APN preceptors who participated in the Educational Module demonstrated sustained knowledge gains measured at the end of the semester. Finally, there were comparisons on five key measurements between the control group of preceptors and the intervention preceptors, including preceptor self-efficacy in their ability to develop critical thinking skills in nurse practitioner students.

Implications- Because of the study’s pre-and posttest control and comparison design, the findings may aid in filling an identified gap in the nursing literature, especially at the graduate level. The results may guide master’s level faculty in planning educational opportunities for APN preceptors and may be particularly useful for those programs offering distance formatted programs. A small number of preceptors voluntarily completed the Educational module despite to offer of CEUs. In the future, other incentives should be considered to gain APN preceptor participation in educational offerings.

Title:
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Keywords:
One Minute Preceptor clinical teaching strategy, advanced practice nursing education and control-comparison quasi-experimental design

References:


**Abstract Summary:**
Investigators undertook a control-comparison study to evaluate the effectiveness of a web-delivered evidence-based educational module featuring the One Minute Preceptor. The aim was to increase knowledge of clinical teaching strategies and self-efficacy of APN preceptors. The findings demonstrated both short-term and long-term gains in APN preceptor knowledge acquisition.

**Content Outline:**

<table>
<thead>
<tr>
<th>1. The learner will be able to explain several challenges associated with providing appropriate education and training for graduate nurse practitioner preceptors.</th>
<th>Presenters will explain several challenges associated with providing appropriate education and training for graduate nurse practitioner preceptors, especially in a distance education program. Challenges include orienting preceptors and ensuring quality clinical teaching.</th>
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<tbody>
<tr>
<td>1. The learner will be able to name 3 educational priorities identified by graduate nurse practitioner preceptors.</td>
<td>Presenters will discuss the educational priorities identified by graduate nurse practitioner preceptors in a previous Delphi study. The number one priority was strategies to developing critical thinking of nurse practitioner students. Also ranked as important priorities were strategies to bridge the gap between the program’s academic content and the realities of actual clinical practice, and strategies to enhance the development of student's rapport with patients.</td>
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<td>1. The learner will be able to describe the five clinical teaching strategies associated with the One Minute Preceptor.</td>
<td>Presenters will describe the five clinical teaching strategies associated with the One Minute Preceptor and how the preceptor uses these skills to develop critical thinking skills in their graduate nurse practitioner students. The OMP uses five microskills to assist the APN to reach appropriate clinical decisions after an interaction with their patient. The five skills include 1) Get a Commitment, 2) Probe for supporting evidence, 3) Teach general rules. 4) Reinforce what was right, and 5) Correct mistakes.</td>
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<td>1. The learner will be able to discuss 3 of the study’s findings.</td>
<td>Presenters will present selected findings of the study.</td>
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The results of the study demonstrated increased knowledge in participating preceptors regarding the One Minute Preceptor clinical teaching strategy. Immediately after completion of the Educational Module, there was a 74.62% increase in One Minute Preceptor Clinical teaching strategy knowledge scores. Also 77.78% of the participating preceptors indicated they were extremely likely to use the One Minute Preceptor clinical teaching strategy with their nurse practitioner students. Participants expressed satisfaction with content and course delivery. The APN preceptors also demonstrated sustained knowledge gains across the semester. Comparisons between the control and comparison groups were made on five key measurements including preceptor self-efficacy.

1. The learner will be able to apply the findings to a similar educational situation.

Presenters will assist the learners to reflect on the relevance of the study’s findings to their own clinical setting or educational institute. The presenters will lead learners in a pair-share and then group share regarding reflections on the relevance of study findings.

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