



## SOURCES AND STRATEGIES TO ADDRESS NURSING STUDENT STRESS IN THE CLINICAL SETTING: A LITERATURE REVIEW

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### Abstract

The American Association of Colleges of Nursing's (AACN) (2017) report shows that there are 17,725 nursing students enrolled in baccalaureate programs in the United States. One in three college students have reported that stress has had a negative impact on their school performance (ACHA). The purpose of the review article is to study and synthesize the sources of stressors among baccalaureate nursing students in relation to the clinical practicum, and effective ways to manage those stressors. A literature review was conducted using the following key words: "undergraduate," "baccalaureate nursing students," "stress," and "clinical". The databases used to search for relevant literature included: EBSCOhost, CINAHLhost, Academic Search Complete, and Science Direct. All articles were selected from peer-reviewed journals. Using the following eligibility criteria--articles that addressed the unique experiences of baccalaureate nursing students and stress in the clinical environment, ten articles were selected from 2015-2017 for use in this literature review. The findings indicated that the most common generators of student nurse stress included: inexperience and insufficient knowledge, risk for patient harm, risk of patient death and the lack of support from faculty/nurses. Meditation, adequate sleep, exercise, music listening and utilizing faculty for help are all creative strategies to combat nursing student stress. In conclusion, the literature revealed that baccalaureate nursing students are experiencing varying degrees of stress in response to clinical situations. Strategies for assisting nursing students experiencing clinical stress warrants further exploration to identify effective prevention and coping strategies and modification of the clinical context in ways that minimize stress.

**Keywords:** Stress, Baccalaureate nursing students, clinical practicum

## Introduction

According to the American Association of Colleges of Nursing's (AACN) (2017) report, there are about 470,000 baccalaureate nursing students enrolled in the AACN affiliated nursing programs in the United States. For nursing students, the learning environment is dynamic and extends beyond the traditional classroom into the clinical setting. Multiple sources agree that clinical labs (hereafter referred to as clinical) are an essential part of a nursing student's career (Grobeck, 2015; Karaca, Yildirim, Ankarali, Acikgoz & Akkus, 2017; Khishigdelger, 2016). Clinical prepares them for practice by facilitating integration of theory with bedside care. Blomberg et al. (2014) determined that 57% of nursing students experienced stress in the clinical setting. Clinical prepares students for practice by facilitating integration of classroom theory with bedside care. Numerous studies have been done that explore stress among nurses and nursing students and the impact it has on their wellbeing (Vijayanathan, Premkumar, Jesudoss, & Rajan, 2016; Blomberg et al., 2014; Wallace et al., 2015). Stress can lead to high levels of anxiety which can impede concentration, affect memory and recall, and decrease confidence in clinical performance. Stress is defined as "a physical or psychological stimulus that can produce mental tension or physiological reactions that may lead to illness" (Wallace, Bourke, Tormoehlen, & Poe-Greskanp, 2015, p.1). Stress has been found to have a negative impact on academic performance, as reported by more than one in three college students (American College Health Association [ACHA], 2015). These statistics draw attention to the increasing problem with college student stress. Mechanisms of decreasing stress in the clinical setting can facilitate positive learning environments and enhance clinical performance. Multiple individual studies have been conducted on the sources of clinical stress among baccalaureate nursing students as well as strategies to address the same. However, the findings are not collectively synthesized thus this literature review aims to integrate the findings from existing literature regarding sources of and strategies for clinical stress experienced by nursing students. Reducing high levels of stress may promote self-efficacy, confidence and competence of nursing students (Conner, 2015). The aim of this article is to illuminate common sources of nursing students' stress associated with clinical learning experiences and possible strategies to decrease this stress.

## Literature Review

Stress, as experienced by nursing students, has potential implications for not only students, but also the healthcare population they serve. To develop a better understanding of nursing students' stress in clinical and identify potential coping strategies, a review of literature on this topic was conducted. Gaining more insight into this phenomenon may promote better outcomes, academically and clinically, for nursing students.

## Methods

In order to examine the existing evidence related to nursing students' stress in clinical and effective strategies to combat stress, a literature search was conducted to support the

question. A search of relevant and current literature was conducted using the following electronic databases: EBSCO host, CINAHL host, Academic Search Complete, and Science Direct. The key words used to search the databases for evidence included: “undergraduate”, “Baccalaureate nursing”; “nursing student”, “stress” and “School. These keywords were searched in a variety of combinations using the operators “and” “and or” to identify appropriate studies.

Initial results yielded a large number of articles from peer-reviewed journals. Qualitative studies, quantitative, cross-sectional, correlational design studies, phenomenological studies, descriptive correlational studies, quasi-experimental design studies, randomized control studies were all utilized in this literature review. An initial search of the keyword “Nursing student’s stress” in CINAHL yielded 398 results. This search was narrowed to 40 results when keywords “baccalaureate” and “clinical” were added, in addition to, using “and” as the operator word. The same search was conducted in EBSCO host yielding 1,481 articles and Science Direct yielded 26 results. Results were screened to include articles written in English and dates between 2015 and 2017. A limited number of primary research articles were identified. After extensive searches, 12 articles revealed relevant information to the topic. After careful review of the article’s abstracts, 10 articles were selected for inclusion in this literature review.

## **Results**

Vijayanathan et al. (2016) conducted a qualitative study to identify perceived sources of student stress in clinical and found clinical supervision, instructional teaching and integration into the professional role were key stressors. Wallace et al. (2015) surveyed 110 students and found that they experienced clinical stress from the following: lack of preparation, lack of confidence in nursing knowledge, feeling helpless in clinical situations, and difficulty in application of nursing theory and knowledge into clinical. Shaban, Khater & Akhu-Zaheya (2016) also identified stress resulting from assignment work and the clinical environment. Stress experienced by students may have negative implications for the quality of care they provide.

### **Sources of stressors.**

Studies that have correlated nursing students’ stress with clinical experience have illuminated five main categories of student apprehensions: lack of professional knowledge and skills, potential harm to patients, clinical paperwork and classroom workload, unsupportive faculty and nursing staff, and patient death/dying (Boulton & O’Connell, 2017; Rafati, Nouhi, Sabzehvari, & Dehghan-Nayyer, 2017; Vijayanathan et al., 2016; Wallace et al. 2015). Each of these five categories will be further discussed.

**Lack of professional knowledge and skills/inexperience.**

Rafati et al., (2017) and Vijayanathan et al., (2016) described the clinical experience as stressful for students and the need for student support is essential for clinical success. Vijayanathan et al. (2016) assessed the perceptions of nursing students' clinical experiences in one nursing educational program. Themes emulating from the research in relation to stress included the clinical environment and the professional role. Many students "felt that their clinical knowledge was very superficial" (Vijayanathan et al., 2016, p. 15). Students expressed feeling less confident in their expected professional role at the completion of the program. In the study conducted by Rafati, "a female student with a GPA of A said: 'I had little experience, and I was stressed, fearing the patient or his relatives would ask me questions I didn't know the answer to'" (Rafati et al. 2016, p. 252). Research shows that students' confidence rises with experience. Nursing faculty can help students build confidence by facilitating a variety of experiences to assist the student with transition into the clinical role. By offering a variety of clinical experiences, nursing faculty members can help students build their knowledge base and become more confident in their skills which may also positively influence the students' concern over potentially harming their patients.

**Potential harm to patient.**

The idea of do no harm to the patient is stressed heavily in classrooms. "Fear of making a mistake and causing harm increased student stress" (Wallace et al., 2015, p. 2). Students feel overwhelmed with the plethora of information provided to them by nursing faculty. Students must retain and apply everything from nursing interventions, medications and side effects, all while remaining in the scope of practice and learning to not "diagnose" when interacting with clients (Vijayanathan et al., 2016). For many students, clinical is their first experience interacting with clients: they must learn to adapt their communication techniques to care for clients who have disabilities and /or impairments. Students' lack of confidence increases their worries about harming the client leading to excessive stress in the clinical setting. Just as potential harm to a patient can be a strong source of stress, clinical paperwork, done in addition to classroom work, can be another stressor for nursing students.

**Clinical paperwork as well as classroom workload.**

Many students expressed concern about the writing workload that comes along with clinical, more specifically care plans, and classroom work (Vijayanathan et al., 2016). Results showed that the lack of free time and family time, the amount of material to learn and examinations and grades were very stressful for undergraduates (Boulton et al., 2017). According to Vijayanathan et al. (2016), "Nursing students experience longer hours of study than other colligate students" (p. 13). In addition to classroom work given by nursing instructors, students also must balance general education classes, extracurricular activities, and hours of clinical paperwork.

One student said, “I was too anxious about writing the care plan within 24 hours of period and submitting when I had to study for the class test on the same day” (Vijayanathan et al., 2016, p.14). Beyond clinical and classroom workload, students are also fearful of the potential for them to witness death/dying while in the clinical setting.

### **Patient death/dying.**

Death of a client is something that crosses every health care providers’ mind. As a student, the fear of a client passing is great. In many programs, students complete their clinical with older adults who are prone to passing which may cause stress among students. Older adults are typically sick and present clinically with multiple diagnoses. The stress on a student when a client does pass is a heavy burden to carry. “Even when they had not directly witnessed their patient’s death and had only heard the tragic news from others, participants became saddened and stressed by the incident” (Rafati et al., 2017, p. 253). When students experience death of a patient, whether theirs or another, they need the support of their nursing faculty member to work through this stressful experience. Death, however, is not the only time support is necessary from a nursing faculty member.

### **Unsupportive faculty/nursing staff.**

Nursing staff and “faculty who are unsupportive and highly critical” (Vijayanathan et al., 2016, p.15) have been found to be a major component of student stress. Elizabeth Shelton (2003) conducted a study and included students who were currently enrolled in associate level nursing programs or who had voluntarily or involuntarily withdrawn from their nursing programs. She found that students who had stayed in the programs had greater perceived faculty support, functional support and psychological support than students who had withdrawn. The study showed that faculty support was rated by students as moderate to moderately high for the total sample. Students’ success in a nursing program is related to their perceptions of having a supportive relationship with faculty. In a study headed by Martha Boulton, it was found that “neither group [traditional/nontraditional nursing students] used faculty members as support” (Boulton & O’Connell. 2017. p. 405). When students perceive that a faculty member is unapproachable it creates an unsafe environment for all involved; the students’ learning, the instructors’ license, and most importantly the clients’ well-being are in jeopardy. Students who experience unsupportive nursing faculty and staff in the clinical settings are more likely to exhibit similar unsupportive behavior in their own practice in the future. While having an understanding of the five main categories of student stress is important, it is also crucial that students participate in strategies to decrease stress.

## **Discussion**

Stress reduction interventions have been utilized by universities for decades to address stress. Attempts to instill positive coping mechanisms in the student population have been

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sought. Recent studies explore effective strategies of behavior modifications that can assist nursing students in decreasing stress (Burger & Lockhart, 2017; Drew et al., 2016; Ratanasiripong et al., 2015; Khalil, 2017; Kubec, 2016; Ince & Cevik, 2015). Interventions such as meditation, music listening, adequate sleep, exercise and use of faculty resources are effective mechanisms for nursing students to deal with stress.

**Meditation.**

Burger & Lockhart (2017) explored strategies to enhance nursing students' ability to manage busy healthcare environments. Through a randomized controlled trial, the authors explored differences in nursing students who meditated and those who did not. Meditation involves focusing on one's breathing while paying attention to internal and external stimuli. Meditation has been shown to reduce stress as the student nurse focuses on the present moment and detaches from negative and destructive thoughts (Burger & Lockhart, 2017; Drew et al., 2016; Ratanasiripong et al., 2015). Focused meditation can be used as a means for stress reduction as the technique allows for self-monitoring. Focused meditation is a practice of purposeful self-regulation of attention which guides the student to pay attention through concentration noting internal and external distractors (Burger & Lockhart, 2017). The process of using breathing techniques for 20 minutes a day includes focusing in on an object, loosening your shoulders and breathing from your abdomen. Students should focus on the sound, sight, or smell of the environment while calming their mind to focus on the object. Meditation, when practiced daily increases attention, decreases susceptibility to distraction and can aid nursing students' reduction in stress (Drew et al., 2016). While meditation can be a purposeful activity for stress reduction, having adequate sleep is another critical factor in minimizing the stress experience

**Adequate sleep.**

Adequate sleep is essential for normal human functioning. Nursing students can experience greater rates of stress than other students; which impact their sleep cycles' quality and quantity. Sufficient daily sleep can improve students' physical and psychological well-being as well as increase their academic performance (Khalil, 2017). Greater emphasis should be placed on the importance of sleep and the development of healthy sleep habits. The term sleep hygiene refers to sleep habits that can aid a person to develop healthy patterns of falling asleep and staying asleep (National Sleep Foundation, 2018). Students should be encouraged to complete a two-week sleep diary to help them understand how their daily routines influence their sleep. A consistent sleep schedule, that allots at least seven hours of sleep, aids in less daytime sleepiness. Adequate sleep will promote optimal energy to allow for engagement in other stress-reducing activities such as exercise.

**Exercise.**

Self-care behaviors, such as exercise and yoga, can aid in mitigating stress. Drew et al., (2016) explained that nursing students have been found to be statistically more sedentary than other undergraduate students. An exercise regimen that is adaptable and time efficient can promote stress reduction. While exercising or during skills practice, students can also engage in another stress reducing activity: music listening.

**Music listening.**

Music is a great way to reduce stress because there are “no side effects and plays an important role in physical, psychological, social, emotional, and spiritual improvement” (Ince & Cevik, 2017, p. 11). Anxiety that stems from clinical practice is high and is on overdrive the first time a student practices a skill on a live human. Music can be used during the laboratory practices aimed at skill teaching as an effective intervention that reduces anxiety and has a positive effect on students’ skill performance (Ince & Cevik, 2017). Music is already utilized in some hospitals to help calm and soothe patients but utilizing the simple and inexpensive method to calm nursing students is a remedy worth trying. Just as meditation, adequate sleep, exercise and music listening can help reduce stress, the students’ knowledge of resources available to them, such as their nursing faculty members, will also help mitigate stress.

**Utilizing faculty for help.**

Faculty members and students must strive to maintain a collaborative relationship founded on open communication, respect and compassion. It has been found that nursing students will not seek the help they need when on the clinical floor if they do not feel that they have the faculty’s support (Shelton, 2003). This is problematic because it hinders student success and negatively impacts client care and safety. Having faculty support has been attributed to higher success in nursing students (Kubec, 2017). Higher success is seen because “a mentoring relationship, and functional support, provides direct help and facilitates learning”(Shelton, 2003). As nursing students commit themselves to their future profession and patients, they start to experience stress in their new professional roles. Utilizing faculty members and clearly communicating with them helps decrease misconceptions and frustration and promotes a healthy collaborate relationship that fosters learning. Nursing faculty members may not always perceive a clinical situation as stressful. Open, respectful communication between the student and faculty member can help the faculty member understand how the situation, as experienced by the student, has caused stress. By developing an understanding of this, the faculty member can guide the student in strategies for stress reduction and foster a respectful, collaborative relationship that promotes personal and professional growth for the students.

### Conclusion

Clinical is a long-standing instructional method used in baccalaureate nursing programs. Students experience stress in relation to clinical as a result of a variety of factors including lack of knowledge and experience, potential harm to the patient, caring for a dying patient, and unsupportive faculty. Awareness of strategies to minimize stress such as meditation, sleep and exercise, is critical to helping ensure student success.

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