Prevalence of Coping Strategy Training in Nursing School Curricula

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CE 1.0 Hour

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Background Stress and burnout are plaguing critical care nurses across the globe and leading to high levels of turnover. Resilience-building strategies such as mindfulness, self-care, and well-being can help shield nurses from the negative effects of workplace stress. As the first line of defense, nursing schools could provide students with strategies that build resilience; however, little is known about the availability of such resources in nursing education.

Objectives To determine the prevalence of resources and curricula targeting resilience training and stress reduction at nursing schools across the United States.

Methods Raters analyzed publicly available college/university websites and course catalogs of a sample of nursing schools in the United States to determine the availability of resilience resources and curricula.

Results None of the schools surveyed regularly screened their students for burnout syndrome, and only 9% of schools had a formal curriculum that included resilience training.

Conclusions Training in practices to build resilience and prevent burnout is essentially absent from accredited nursing schools. This highlights an important opportunity to modify existing curricula to include preventative strategies—such as developing positive coping skills—that could mitigate symptoms of workplace stress in future generations of nurses. (*American Journal of Critical Care.* 2020;29:104-110)

For several years, the global nursing workforce has been experiencing a shortage of qualified professionals.[1-3] In response, many in the nursing field are placing a resounding priority on identifying and managing burnout syndrome (BOS), particularly as it applies to critical care.[4-7] Although no universal definition of BOS currently exists, it is most often defined as a psychological syndrome characterized by emotional exhaustion, depersonalization, and diminished personal accomplishment.[8]

In health care settings, burnout is routinely attributed to high workloads, lack of support, high-intensity situations, moral distress, and low job satisfaction.[9,10] These factors initiate a negative feedback cycle that can result in decreased quality of patient care, lower patient satisfaction, reduced nurse productivity, and low morale, and can lead to an unacceptably high and costly nursing turnover rate.[5]

Newly licensed registered nurses are particularly vulnerable to psychological distress and turnover, with roughly 1 in 3 new nurses leaving the profession within the first 2 years after graduation.[11] Moreover, those who continue their nursing education at the graduate level tend to experience higher rates of posttraumatic stress disorder than their peers do.[5]

Although the prevalence of burnout varies by nursing discipline, education level, and country, moderate-to-high levels of BOS and nursing turnover seem to be universal and are particularly evident in complex specialty areas such as intensive care.[12,13] To help mitigate this negative cycle and improve both the physical and mental health of critical care nurses at all stages, early education and adoption of interventions geared toward prevention and reduction of distress symptoms are especially important.[14]

Resilience training is a promising approach to improving health and well-being. Resilience is a psychological construct that involves innate and/or modifiable capacities that allow an individual to adapt positively to adverse situations.[15] Common characteristics of resilience are optimism, faith/spirituality, cognitive flexibility, exercise, goal-setting, moral integrity, autonomy, humor, and the ability to engage with support systems.[16-18] Resilient nurses have positive coping skills and hold the necessary tools to handle intense situations such as medical emergencies, role conflicts, patient or workplace aggression, and death.[19,20] As many psychological characteristics of resilience can be learned,[16,17] researchers are now studying specific interventions that aim to refine these characteristics.[4,19]

Emerging evidence suggests that health care professionals benefit from building their capacity for resilience by practicing mindfulness, self-care, and well-being.[21-25] These tools have the potential to decrease burnout and psychological distress, and training programs that focus on these strategies have demonstrated feasibility and acceptability with both nurses and nursing students.[4,26] A pilot study of a multimodal resilience intervention that included expressive writing, event-triggered counseling, mindfulness-based stress reduction, and exercise sessions showed that building and practicing resilience strategies had the potential to significantly reduce posttraumatic stress disorder and depressive symptoms and increase resilience scores of intensive care unit nurses.[4] Furthermore, in a systematic review, McConville and colleagues (2017) evaluated the results of 19 trials focused on mindfulness interventions with students of health sciences, including nursing. Results demonstrated that mindfulness training has significant effects on students' psychological health, and the authors suggest that given the variety of methods presented, mindfulness training can easily be adopted by health professional training programs as a way to improve clinical performance.[26]

Although the literature presents promising results on the benefits of resilience training,[4,21-26] whether such training is being provided to students, to help them develop a strong foundation and buffer the effects of stress once they reach the hospital environment, remains unknown. Nursing students are often taught to encourage patients to adopt

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Table 1
Survey guide, resilience resources

Question
1. Name of nursing school _____

2. Type(s) of nursing programs
   a. Associate's
   b. Bachelor's
   c. Graduate MSN
   d. PhD
   e. DNP
   f. Other

3. Location (city, state) _____

4. Year school was accredited _____

5. Does your school have a formal wellness center? (Y/N)

6. Does your school have a health care/exercise/gym facility that is available to students? (Y/N)
   ⟶ If yes
         2a. Is the facility available to full-time students for free? (Y/N)
         2b. Is the facility available to part-time students for free? (Y/N)

7. Does your school regularly screen students for burnout? (Y/N)
   ⟶ If yes
         3a. How often do you screen students?

8. Does your school have independent seminars that teach students techniques to improve mindfulness, resiliency, self-care, or well-being? (Y/N)

9. Does your school have any of the following that are completely devoted to or have components that teach mindfulness, resiliency, self-care, or well-being? (Y/N)
   • Required course
   ⟶ If yes
         a. Does the course focus on mindfulness (Y/N), resiliency (Y/N), self-care (Y/N), or well-being (Y/N)?
   • Elective course
   ⟶ If yes
         a. Does the course focus on mindfulness (Y/N), resiliency (Y/N), self-care (Y/N), or well-being (Y/N)?
   • Club/interest group
   ⟶ If yes
         a. Does the club/interest group focus on mindfulness (Y/N), resiliency (Y/N), self-care (Y/N), or well-being (Y/N)?

Abbreviations: DNP, doctorate in nursing practice; MSN, master of science in nursing; N, no; PhD, doctor of philosophy; Y, yes.

resilience-building strategies, but these lessons are taught in the context of recovery from illness or injury; thus, it may not be intuitive for nurses to apply these strategies to stress from the workplace. Therefore, the primary goal of this study was to determine the availability of resilience training and education provided to student nurses in nursing school curricula. A secondary question was whether curricula differ between faith-based and non–faith-based institutions, given both the historical role of faith in nursing[27] and the premise that spirituality is a component of resilience.[19]

> Study staff assessed the existence of curricula targeting 4 key concepts: mindfulness, resilience, self-care, and well-being.

Methods
Inclusion Criteria
All nursing schools accredited by the Commission on Collegiate Nursing Education (CCNE) were eligible for inclusion (N = 775). Between July and September 2017, we recorded and analyzed content from a 20% simple random sample (n = 155) of all schools listed in the CCNE accreditation directory. Data from all schools were included in the final analysis.

Data Collection
Study staff analyzed the content of course catalogs and college/university websites to determine the prevalence of a resilience-based curriculum and burnout screening and the availability of resilience-based resources in accredited nursing schools across the United States. To facilitate analysis, the study team developed a coding sheet to identify and categorize resilience-related resources (Table 1). The a priori codes were selected on the basis of evidence that supports the use of resilience-building for mitigating work-related stress[5,6,23,28] and the gap that exists related to incorporating resilience techniques into nursing curricula. Two raters (K.L.C., M.M.) collected information on the general demographics of the nursing school programs; education and interventions related to BOS; and whether classes

on mindfulness, resilience, self-care, or well-being were offered. Additionally, study staff recorded the availability of wellness centers, recreation centers, and practices related to screening students for BOS. The information collected in this analysis did not meet the definition of human subject research, and therefore institutional review board approval was not needed.

Members of the research team retrieved information from each institution's publicly available website and recorded it on the coding sheet. Data collected included information on the availability of fitness and wellness centers, relevant past and future seminars listed on nursing-specific and overall event calendars, information on the nursing program's homepage in particular, and all nursing classes listed in a school's undergraduate course catalogs. When available, syllabi also were reviewed.

Study staff assessed the existence of curricula targeting 4 key concepts with potential to decrease burnout: mindfulness, resilience, self-care, and well-being. Answers were coded yes if the nursing program offered courses aimed at the nurses themselves that either were completely devoted to or incorporated one or more of these concepts, as defined here:

- Mindfulness–a practice that cultivates present moment awareness[29]
- Resilience–a psychological trait or capacity that allows one to thrive in the face of adversity[15]
- Self-care–the practice of maintaining one's physical and mental health[19]
- Well-being–the state of being happy, healthy, and comfortable[30]

Schools were considered to have adopted a "formal curriculum" if the institution required all nursing students to take a course that addressed at least 1 of the 4 concepts just listed.

For the purpose of this study, geographic regions were categorized on the basis of the US Census Bureau designations,[31] and schools were categorized as "faith-based" if they had a registered religious affiliation, including Christianity, Judaism, Islam, Buddhism, or Hinduism.

Statistical Analysis

Descriptive statistics were reported as frequencies and percentages. Differences between faith-based and non–faith-based schools were compared with a χ^2 analysis. A significant α level of .05 was used for all tests. Simple random sampling, one of the most popular probability sampling methods to ensure reliable and valid inferences,[32] was used for this study.

Table 2
Demographic characteristics of sample (n = 155)

Characteristic	No. (%) of schools
Degree offerings	
Bachelor's	151 (97)
Master's	108 (70)
Doctorate	61 (39)
Postgraduate certificate	54 (35)
Geographic region	
Northeast	31 (20)
Midwest	49 (32)
South	53 (34)
West	22 (14)
Religious affiliation	
Faith-based	40 (26)
No affiliation	115 (74)

Table 3
Availability of resilience resources (n = 155)

Resource	No. (%) of schools
Fitness center	132 (85)
Wellness center	110 (71)
Elective course	18 (12)
Club or interest group	17 (11)
Required course	14 (9)
Independent seminar	9 (6)
Screen for burnout	0 (0)

Results

The convenience sample (n = 155) included nursing schools in 39 US states. Roughly a quarter of the sampled schools had formal religious affiliations. Most schools (n = 151; 97%) offered bachelor's degrees, and many offered a variety of graduate programs as well (Table 2). The geographic distribution of the sample was similar to that of nursing schools overall.

We found that no nursing schools regularly screened their students for BOS, and few schools offered resilience training as part of the curriculum (Table 3). Only 9% (n = 14) of the undergraduate programs had a formal curriculum that included training in resilience, with no significant differences between faith-based and non–faith-based schools (Tables 3 and 4). Non–faith-based schools were significantly more likely to offer independent seminars dedicated to resilience training than faith-based schools were (8% vs 0%, P = .02; Table 4). The majority of schools had fitness facilities available to students (n = 132; 85%), but faith-based schools were significantly more likely to provide this resource (P = .03).

Discussion

Although nursing programs are increasingly aware of student and new graduate burnout, no

Table 4
Availability of resilience resources stratified by faith affiliation

School resource	No. (%) of schools		
	Faith-based (n = 40)	Non–faith-based (n = 115)	P
Fitness center	38 (95)	94 (82)	.03
Wellness center	25 (63)	85 (74)	.18
Elective course	2 (5)	16 (14)	.10
Club or interest group	4 (10)	13 (11)	.82
Required course	3 (8)	11 (10)	.69
Independent seminar	0 (0)	9 (8)	.02
Screen for burnout	0 (0)	0 (0)	>.99

schools included in our sample regularly screen their students for burnout. Although most nursing schools have fitness and/or wellness centers available to their students, few schools engage in proactive resilience training. Only 9% of schools surveyed have adopted a formal curriculum focused on addressing burnout; and although independent seminars on resilience training were rare overall (n = 9, 6%), non–faith-based schools were significantly more likely to provide this resource. Although evidence suggests that faith is an important component of resilience,[19] we found few differences between faith-based and non–faith-based nursing schools in resilience resources offered to students.

> No nursing schools regularly screened their students for burnout syndrome.

Resilience Strategies

Programs targeting mindfulness, self-care, and well-being build resilience and buffer the negative effects of workplace stress.[4] Meditation and relaxation,[29] therapeutic writing,[33] and exercise[34] are common approaches to stress reduction that promote health and may be especially beneficial to nurses and students.

Application of resilience interventions and stress reduction techniques during the earliest phases of training represents an important opportunity for nursing education. Yet to date, very few schools have adopted curricula dedicated to building practices of mindfulness, resilience, self-care, or well-being. Although healthy coping skills can be employed during any stressful situation, it may be beneficial to reinforce the utility of these strategies within the scope of nursing practice itself. Acknowledging the inherent stresses of the critical care environment and giving students tools to cope effectively with and tackle challenges could lower levels of burnout and disrupt the costly cycle of nursing turnover.

Spirituality in Nursing Education

Although many of the psychological characteristics associated with resilience are central to faith and spirituality, our study reveals no significant difference in course offerings between faith-based and non–faith-based programs. Results did show that faith-based schools more commonly provided fitness centers, but non–faith-based schools were more likely to host independent seminars related to building resilience. Faith-based nursing promotes a holistic health model, emphasizing the integration of body, mind, and spirit for prevention, care, and recovery.[35,36] However, the overarching mission of faith-based nursing education is to (1) integrate the practices of faith and nursing and (2) promote patients' healing through engagement in personal and community endeavors to achieve "harmony with self, others, the environment, and a higher power."[37] As such, we found that faith-based education tends to highlight the self-care and social support strategies of resilience but may not actively focus on the promotion of other resilience-related tools. Our results reveal that, although the underlying themes of the curriculum may differ between faith-based and non–faith-based nursing schools, both overwhelmingly focus on the patient or community and rarely focus on the nurses themselves.

Detecting Burnout

Although the utility of screening critical care professionals for burnout is controversial,[38-40] it is relevant to apply these ideas to nursing students preparing for a career in the intensive care unit. By formally screening for burnout, nursing schools could benefit from understanding levels of burnout in students after clinical experiences and stressful patient interactions. Regular screening efforts by nursing departments can help identify individuals who are in need of additional resources and support. Although these screenings could be conducted by student health offices, departmental or course-based screening may produce a better response rate, contain questions specific to the nursing profession, and lead to follow-up with familiar faculty/staff. Screening results may also provide a method of evaluating and documenting the value of programs and courses adopted to build resilience and well-being.

Limitations

This study had some limitations. First, the design of this study did not allow for communication with school leaders to understand the specifics of the resilience training provided or identify other types of self-help curricula not included in our analysis,

nor could we discern if there were plans or ongoing efforts to change the curriculum to add these resources. However, the design of this study was selected to avoid common barriers and biases in surveying or interviewing nursing school leaders that have been seen in previous studies.[13,41,42] This design allowed the study team to systematically sort, identify, and code relevant data without the introduction of response or interviewer bias. A second limitation is that we sampled only 20% of accredited nursing schools, which may have resulted in overestimation or underestimation of the availability of formal resilience curricula and resources; however, the sample did represent all geographic locations of accredited nursing programs in the United States. Likewise, we did not formally assess whether an institution was public or private. Although the source of funding may influence what resources are offered to students, our random sampling frame most likely mitigates this concern.

An additional limitation is that the availability of BOS screening might not have been reflected on institutional websites. For this reason, we could be underreporting the prevalence of BOS screening. Furthermore, we did not systematically review the offerings of other campus resources such as the student health center or counseling centers. These resources may provide additional resilience-based training, though they typically require students to initiate engagement with services. Finally, it is difficult to account for how individuals may apply lessons regarding promoting patients' self-care, well-being, and spirituality to themselves; however, given the stressful nature of nursing school and the critical care environment and the focus on caring for others, students may not make these connections without explicit guidance.

In conclusion, resilience training and resources related to coping skills, self-care, and well-being are essentially absent from the curricula of accredited nursing schools in the United States. As we develop interventions to mitigate symptoms of distress in critical care nurses, there is an opportunity to incorporate preventative strategies into the nursing school curriculum to better prepare nurses for clinical practice in the acute care setting.

FINANCIAL DISCLOSURES

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CE 1.0 Hour Category B

Notice to CE enrollees:

This article has been designated for CE contact hour(s). The evaluation demonstrates your knowledge of the following objectives:

1. Describe the importance of self-care strategies for nurses/nursing students.
2. Identify gaps in resources and nursing curricula related to the prevention of burnout.
3. Describe how nursing programs can incorporate resilience-building strategies into curricula.

To complete the evaluation for CE contact hour(s) for this article #A2029023, visit www.ajcconline.org and click the "CE Articles" button. No CE evaluation fee for AACN members. This expires on March 1, 2023.

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