The Impact of Resiliency on Nurse Burnout: An Integrative Literature Review

Shanon Brown
Ramona Whichello
Sheila Price

To develop programs that support nurses with needed resources and tools to overcome adversity, nurse leaders should understand the challenges nurses face and how they respond to these challenges. The goal of this integrative review is to identify causes of nurse burnout, characteristics of nurses with high resiliency, and strategies to increase resiliency in nurses.

The following questions were used to guide the review:
• What factors contribute to nurse burnout?
• Is there a relationship between nurse burnout and resiliency?
• What characteristics are present in nurses with high resiliency?
• What strategies can nurses implement to increase their resiliency?
• What strategies and programs can organizational leaders implement to increase resiliency among nurses?

Background
Estimates suggest the nursing shortage will reach 260,000-400,000 by 2025 (Lowe, 2013). Nursing turnover has contributed substantially to the current shortage, with nursing schools unable to meet the demand of the healthcare market (Cochran, 2017). Recent research has investigated why nurses leave the profession and what qualities are present in nurses who continue to work in high-intensity settings (Foureur, Besley, Burton, Yu, & Crisp, 2013; Kutluturkan, Sozeri, Uysal, & Bay, 2016; McDonald, Jackson, Wilkes, & Vickers, 2013; Mealer et al., 2014; Mealer, Jones, & Meek, 2017; Mroz, 2015; Potter et al., 2013; Rushton, Batcheller, Schroeder, & Donohue, 2015). Information gained from these studies can guide leaders to identify strategies to maintain a productive, healthy nursing workforce.

Burnout occurs when a person can no longer manage the effects of stress (Kutluturkan et al., 2016). Nurses are leaving the profession in part because of burnout, worsening the nursing shortage. Nurse burnout also contributes to poor patient satisfaction scores and increased infection rates (Steinberg, Klatt, & Duchemin, 2017). Coping strategies, which are determined by nurses’ level of resiliency, are important for nurses to use in overcoming a stressful environment.

In this literature review, the correlation between resiliency and nurse burnout is analyzed, and strategies to increase resiliency are identified. By identifying contributing factors associated with burnout and high-risk work environments, healthcare leaders can implement strategies to build resiliency and prevent burnout.

Lee and colleagues (2015) defined resiliency as an individual’s ability to overcome an adverse situation with optimism and self-control. Rushton and co-authors (2015) identified it as the ability to overcome stress by using external and internal coping strategies. They also noted having a sense of hope and meaning along with external coping strategies will increase resiliency and decrease burnout. According to Foureur and colleagues (2013), resiliency is a process of adaptation through experience when facing adversity. Because of the potentially detrimental impacts of nurse burnout and turnover on healthcare organizations, leaders need to find ways to support the development of resiliency among nurses.

Shanon Brown, BSN, RN, CMSRN*, NE-BC, is Nurse Manager, Radiology Nursing, Vascular Access Program, and Ambulatory Radiology Unit; and Professional Practice Council Chair, Vidant Medical Center, Greenville, NC.

Ramona Whichello, DNP, RN, NEA-BC, is Associate Professor and Director, Master of Science – Nursing Leadership, and Master of Science – Nurse Educator Programs, Western Carolina University, Asheville, NC.

Sheila Price, MS, RN, FACHE, CNEA, is Assistant Professor and Program Director, RN to BSN Program, School of Nursing, Western Carolina University, Asheville, NC.
Methods

The search was conducted using the electronic databases Medline, CINAHL, PsychInfo, and Health Source: Nursing Academic Edition with the key words and mesh terms resiliency, burnout, stress, nursing, turnover, and nurse resiliency. The following criteria were applied: articles published 2012-June 1, 2017, available abstract, academic peer-reviewed journals in English, and full text available. The final search identified 16 articles. Empirical studies were retrieved in full text; additional review of the reference lists for these articles did not identify other relevant research. See Table 1 for selected studies. Research for selected articles was conducted in the United States, Poland, Australia, South Africa, Turkey, and South Korea. Levels of evidence were determined using a 7-level scale; level 1 supported the strongest level of evidence while level 7 supported the least level of evidence. See Figure 1 for search results.

Results

Research Samples

Several studies involved all females (Foureur et al., 2013; Kim & Windsor, 2015; Marais et al., 2013); two studies did not report gender identity (Lee et al., 2015; Mroz, 2015). Ethnicity was not reported in 10 studies. Thirteen studies reported educational level of participants, to include nursing students and nurses with diplomas, associate degrees, bachelor’s degrees, and master’s degrees.

Factors Contributing to Nurse Burnout

Several factors contributed to burnout and possibly affected resiliency in the healthcare setting. Workload, moral distress, poor support systems, and bullying were identified in three studies (Marais et al., 2016; Rushton et al., 2015). Nurses may face one or more of these factors in the work environment; how nurses handle them is based on their resiliency.

Workload was identified in several studies (Dolan, Strod, & Hamernik, 2012; Tubbert, 2016). Nursing turnover, increased nurse-to-patient ratios, and inexperienced co-workers impacted workload in research by Marais and co-authors (2016). Workload may impact nurses’ personal feelings of accomplishment and their ability to meet patients’ physical and psychological needs, contributing to burnout.

Moral distress was identified as a contributing factor in the development of depersonalization. Moral distress occurs when a moral dilemma is recognized and the subsequent decision to act creates perceived moral wrongdoing. Moral distress was identified by Rushton and co-authors (2015) as a notable determinate in nurses leaving their current positions. Lack of training related to death and dying and how to support patients and families emotionally also contributed to moral distress (Marais et al., 2016; Mealer et al., 2014; Mroz, 2015). In addition, ethical dilemmas in healthcare settings can contribute to moral distress in nurses (Kutlurkan et al., 2016; McDonald et al., 2013; Potter et al., 2013; Rushton et al., 2015). This research suggested moral distress may be one of the most notable contributing factors to burnout.

Limited training and limited resources may increase stress levels for nurses in difficult situations (Dolan et al., 2012). Co-worker support may be limited due to inexperience and larger patient assignments (Potter et al., 2013). While patients need to receive excellent care, healthcare professionals need adequate resources to maintain these standards.

Conflicts also may arise between members of the healthcare team due to elevated levels of stress (Marais et al., 2016). In addition, the complexity of the work environment may allow limited time for staff to build interpersonal relationships with other team members (Dolan et al., 2012). However, staff need to build relationships to support each other and prevent burnout.

Effects of Burnout on Nurses

Nurses exposed to prolonged stress experience anxiety, depression, sleep deprivation, compassion fatigue, nurse turnover, depersonalization, and burnout (Mealer et al., 2014; Potter et al., 2013). Patients and families may be less satisfied with care and experience inferior outcomes when nurses experience burnout. The effects of stress also are perceived by the interprofessional healthcare team through interpersonal relationships (Steinberg et al., 2017).

Multiple authors identified anxiety and depression as psychological side effects of prolonged exposure to stress, eventually resulting in burnout (Mealer et al., 2014; Mealer et al., 2017; Potter et al., 2013; Rushton et al., 2015). In addition, impaired sleep from stress can lead to burnout, poor mental and physical health, and poor patient outcomes (Kemper, Mo, & Khayat, 2015). Nurses may leave their work setting or the profession to escape the effects of stress, worsening the situation for remaining co-workers (Steinburg et al., 2017).

Compassion fatigue, depersonalization, and burnout are intensified by effects of prolonged stress. Nurses may become callous and uncaring toward patients and disgruntled about their work environment (Dolan et al., 2012). When physical and mental collapse occur, nurses experience burnout. Another study suggested depersonalization occurs in approximately 34% of nurses (Kutlurkan et al., 2016). All these factors impact the nursing profession. Leaders should invest in strategies to increase resiliency, which reduces burnout, to maintain a healthy workforce.

Personal Characteristics of Resilient Nurses

Rushton and co-authors (2015) found high resiliency in nurses to be correlated with personality traits of optimism, self-efficacy, hope, and flexibility. Authors also identified a positive correlation between hope and resiliency. Tubbert (2016) identified several personal characteristics common among resilient
## TABLE 1. 
Selected Studies Regarding Nurse Burnout and Resiliency

<table>
<thead>
<tr>
<th>Author/Year</th>
<th>Method</th>
<th>Setting/Sample</th>
<th>Results</th>
<th>Level of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mealer et al., 2017</td>
<td>Secondary analysis of descriptive statistics; participants completed CD-RISC to identify resiliency characteristics.</td>
<td>Intensive care units, nurse members (N=744) of American Association of Critical-Care Nurses</td>
<td>Characteristics present with resiliency: having children (p=0.01), years of experience (p=0.02), degree BSN and graduate (p=0.001)</td>
<td>Level V</td>
</tr>
<tr>
<td>Kutluturkan et al., 2016</td>
<td>Survey to assess emotional exhaustion, depersonalization, personal accomplishment</td>
<td>Nurses (N=140) in oncology-hematology clinics, chemotherapy units, policlinic</td>
<td>Correlation found between burnout and resiliency; resilience impacted by education on stress management, positive work environment, relaxation techniques, communication skills, positive self-perception.</td>
<td>Level VI</td>
</tr>
<tr>
<td>Marais et al., 2016</td>
<td>Quasi-experimental pre-post intervention surveys to assess resiliency</td>
<td>Nurses (N=52) in operating room, intensive care units</td>
<td>Sensory stimulation room created; intervention group had increased resiliency post-intervention (p=0.00).</td>
<td>Level II</td>
</tr>
<tr>
<td>Tubbert, 2016</td>
<td>Qualitative interviews with questions related to seven resiliency concepts</td>
<td>Nurses (N=16) in emergency departments</td>
<td>Resiliency present in all participants with resetting used as an intervention.</td>
<td>Level VI</td>
</tr>
<tr>
<td>Rushton et al., 2015</td>
<td>Cross-sectional survey assessed characteristics in context of burnout, moral distress, resiliency.</td>
<td>Nurses (N=114) in adult critical care, pediatric critical care, medical-surgical</td>
<td>Moral distress predicted burnout; spiritual/physical well-being contributed to personal accomplishment that increased resiliency.</td>
<td>Level VI</td>
</tr>
<tr>
<td>Kemper et al., 2015</td>
<td>Cross-sectional</td>
<td>Nurses (N=21) in academic health center</td>
<td>Resilience correlated with self-compassion (p=0.01), mindfulness (p=0.01); sleep disturbances correlated with perceived stress (p=0.01).</td>
<td>Level VI</td>
</tr>
<tr>
<td>Lee et al., 2015</td>
<td>Descriptive; nurse leaders completed leadership survey; individuals completed survey to assess resiliency.</td>
<td>Phase I (N=20); Phase II (n=1066) nurses in pediatric ICU</td>
<td>1:1 discussions and social interactions outside hospital most impactful; breaks from stressful events, relieve duty after patient deaths, rounds were impactful but underused; correlation between increase in teamwork, resiliency (p=0.001)</td>
<td>Level VI</td>
</tr>
<tr>
<td>Mroz, 2015</td>
<td>Method not identified; three assessments of perceived stress, resiliency, coping</td>
<td>Nurses (N=173) in hospitals, clinics, welfare houses</td>
<td>Negative correlation between perceived stress and active coping, denial, venting; negative correlation between perceived stress, resiliency factors (p=0.44)</td>
<td>Level V</td>
</tr>
</tbody>
</table>

continued on next page
TABLE 1. (continued)
Selected Studies Regarding Nurse Burnout and Resiliency

<table>
<thead>
<tr>
<th>Author/Year</th>
<th>Method</th>
<th>Setting/Sample</th>
<th>Results</th>
<th>Level of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kim &amp; Windsor, 2015</td>
<td>Inductive and deductive reasoning; series of interviews regarding resiliency</td>
<td>Nurses (N=20) in university hospitals in Korea</td>
<td>Positive thinking, flexibility, work-life balance impacted resiliency.</td>
<td>Level VI</td>
</tr>
<tr>
<td>Mealer et al., 2014</td>
<td>Randomized controlled intervention study, pre-post surveys to assess resiliency, depression, burnout</td>
<td>Nurses (N=27) in ICUs</td>
<td>12-week resiliency training program, 2-day workshop: significant decrease in PTSD symptoms (p=0.10), depression (p=0.03); increase in resiliency (p=0.05) post-intervention</td>
<td>Level II</td>
</tr>
<tr>
<td>Potter et al., 2013</td>
<td>Descriptive pilot; four surveys completed pre-post intervention</td>
<td>Nurses (N=14) in oncology units</td>
<td>Small group sessions, retreat as interventions; completed self-care plan; decreased intrusion of events (p=0.004), decreased incidence of secondary trauma stress (p=0.044) post-intervention</td>
<td>Level VI</td>
</tr>
<tr>
<td>McDonald et al., 2013</td>
<td>Collective case study; interviews conducted in three stages pre-post</td>
<td>Nurses (N=14) in clinical settings</td>
<td>Six resiliency workshops, mentoring program offered over 6 months; interviews identified three themes: professional and personal resiliency gains, personal resiliency initiatives</td>
<td>Level VI</td>
</tr>
<tr>
<td>Foureur et al., 2013</td>
<td>Pilot; pre-post surveys on stress, anxiety, depression</td>
<td>Nurses (N=40) in teaching hospitals</td>
<td>1-day workshop followed by daily 20-minute practice sessions on compact disc regarding mindfulness; decrease in stress (p=0.0004) post-intervention</td>
<td>Level VI</td>
</tr>
<tr>
<td>Dolan et al., 2012</td>
<td>Qualitative; 40-60-minute interview</td>
<td>Nurses (N=16) on renal unit and two satellite renal units</td>
<td>Moderate to high resiliency, low burnout reported; emotional distancing was effective coping strategy.</td>
<td>Level VI</td>
</tr>
</tbody>
</table>

BSN = bachelor of science in nursing, CD-RISC = Connor-Davidson Resilience Scale, ICU = intensive care unit, PTSD = post-traumatic stress disorder

nurses. One characteristic, presence d'espirit, is described as possessing flexible, creative thinking. Resetting and optimism also were identified through interviews as resiliency concepts among nurses. Problem solving and critical thinking were identified as assisting with the management of stress. Identifying common characteristics among highly resilient nurses can help leaders choose nurse candidates for highly stressful positions. Kutluturkan and colleagues (2016) also found resiliency increases with increased nursing experience. Further research is needed to investigate if a correlation exists between a nurse’s experience and level of education, and level of resiliency.

**Strategies to Increase Resiliency**

Mindfulness-based stress reduction (MBSR) training, emotional distancing, conflict training, and event trigger exercises were found to have positive impact on resiliency (Dolan et al., 2012; Mealer et al., 2014; Rushton et al., 2015). Workshops on these strategies can provide resources and techniques for nurses to implement during stressful situations. MBSR training incorporates several strategies that improve self-care. Foureur and colleagues (2013) created a 1-day instructional workshop and an 8-week intervention. Significant reductions in stress (p=0.0004) occurred after the workshop; participants indicated a belief the inter-
The Impact of Resiliency on Nurse Burnout: An Integrative Literature Review

FIGURE 1
Levels of Evidence

<table>
<thead>
<tr>
<th>Potential publications identified by initial search</th>
<th>n = 1,146 n = 8,199</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publications excluded based on additional search criteria</td>
<td>n = 1,116</td>
</tr>
<tr>
<td>Publications reviewed for empirical research and nursing profession</td>
<td>n = 40</td>
</tr>
<tr>
<td>Publications included in literature review</td>
<td>n = 16</td>
</tr>
</tbody>
</table>

Discussion and Implications for Practice, Education, and Research

Nurses who work in high-stress situations have a high risk of developing burnout and leaving their work settings (Mealer et al., 2014; Rushton et al., 2015; Tubbert, 2016). Although strategies to prevent burnout have been identified, growing challenges in the work setting coupled with a nursing shortage continue to contribute to nurse burnout (Rushton et al., 2015). Nurse leaders must understand the challenges nurses face and identify appropriate strategies.

Nurses who reported high resiliency also reported more optimism, self-efficacy, hope, and flexibility (Mroz, 2015). They possessed problem-solving skills for use in stressful situations, skills that can be developed through experience and professional development sessions (McDonald et al., 2013). Rushton and colleagues (2015) found hope and spirituality were also significant coping strategies. Assessing candidates for resiliency characteristics during interviews can identify nurse leaders and recruit candidates with higher resiliency tendencies. Leaders also must provide resources to reduce stress and promote resiliency.

Workshops can have positive impact on the development of resiliency in nursing staff (Foureur et al., 2013; McDonald et al., 2013; Mealer et al., 2014; Potter et al., 2013). Several programs included group sessions and individual exercises to develop resiliency characteristics and strategies. Written exercises, relaxation techniques, exercise programs, identification of event triggers, and mindfulness training were some of the strategies included in the workshops (Foureur et al., 2013; McDonald et al., 2013; Mealer et al., 2014; Potter et al., 2013).
End-of-life (EOL) situations created moral distress for employees. Limited resources, limited time, and lack of training related to EOL scenarios also increased nurses’ stress and eventually contributed to burnout (Lee et al., 2015; Rushton et al., 2015). Organizational leaders should consider investment in programs to develop EOL skills for nursing staff as well as resources to support staff during and after the death of a patient. Patients and families benefit from compassionate care and staff have the resources to support them emotionally while caring for a dying patient (Lee et al., 2015; Rushton et al., 2015). Lee and co-authors (2015) also identified positive impact on resiliency when staff had breaks from demanding situations, relief of duty after a patient’s death, and notification of a patient’s death.

The national nursing shortage has created challenges for managing causes of stress and burnout. Workload was identified as a common cause of stress for clinical nurses (Kemper et al., 2015; Kutluturkan et al., 2016; Marais et al., 2016; McDonald et al., 2013; Mroz, 2015). Creation of innovative solutions to address workload can prove helpful for organizations. Social events and team-building exercises are helpful for employees to build interpersonal relationships. Conflict resolution training and communication skills may provide resources staff can use to address lateral violence.

Future Research

Further research is needed to validate correlations identified in the studies in this review. High resiliency in nurses with children, associate degrees, or years of nursing experience has been identified (Kutluturkan et al., 2016; Mealer et al., 2014). Nurses with graduate degrees were more likely to experience PTSD than nurses with bachelor's degrees (Mealer et al., 2014). Resiliency research can help leaders identify characteristics in new nurses and implement resiliency strategies to maintain a healthy workforce.

Strengths and Limitations

Methodological issues were identified related to diversity of participants, sample size, and research setting. Without consistent methodology, researchers cannot generalize results to other populations or settings. Study design also was identified as a limiting factor. Several studies used cross-sectional designs, which limit identification of causality because a control group was not used. The small sample sizes and specific research settings in several studies also prevent generalization of results. One study used a qualitative design that included telephone interviews. Because interviews were not conducted in person, interviewers may have missed non-verbal cues. Self-selection of participants occurred in several studies. Diversity among the participant group is limited when staff volunteer for the study.

continued on page 378
Conclusion

Burnout has marked impact on the nursing workforce, which translates to increased costs for healthcare organizations related to turnover, absenteeism, and poor patient outcomes (Mealer et al., 2014; Potter et al., 2013, Rushton et al., 2015). Staff experiencing higher levels of burnout can develop skills and characteristics to build resiliency. Workshops are effective in developing skills needed to overcome difficult situations. Mindfulness-based interventions, writing exercises, conflict resolution training, and communication skills can decrease stress and improve resiliency. Positive work environments, programs that enhance resiliency, and support systems can prevent burnout as a key to maintaining a skilled, resilient nursing workforce (Mealer et al., 2014; Potter et al., 2013).

REFERENCES


RESILIENT WORKFORCE

Port systems can prevent burnout and turnover, absenteeism, and poor patient outcomes (Mealer et al., 2014; Potter et al., 2013). Staff experiencing higher levels of burnout can develop skills and characteristics to build resiliency. Workshops are effective in developing skills needed to overcome difficult situations. Mindfulness-based interventions, writing exercises, conflict resolution training, and communication skills can decrease stress and improve resiliency. Positive work environments, programs that enhance resiliency, and support systems can prevent burnout as a key to maintaining a skilled, resilient nursing workforce (Mealer et al., 2014; Potter et al., 2013).