



# Emotional Hazards of Nurses' Work

## *A Macro Perspective for Change and a Micro Framework for Intervention Planning*

Deborah A. Boyle, MSN, RN, AOCNS®, FAAN • Marlene M. Steinheiser, PhD, RN, CRNI®

### ABSTRACT

Stress in nurses is multifocal, pervasive, and persistent. They practice in a contemporary health care environment characterized by rapid change, the ongoing integration of novel technologies, and interpersonal challenges. Relationships with patients and families pose unique dilemmas related to witnessing anguish and trauma over time. Interventions are needed to counter the affective demands of nurse caregiving. To this end, national initiatives have been proposed to outline general work setting enhancements promoting well-being. Stressor-specific interventions have also been identified. The goal of this article is to provide an overview of the macro (organizational) recommendations for change and a micro (practice setting) blueprint of potential interventions to promote nurse well-being.

**Key words:** affect, change, emotions, hazards, health care, interventions, nurse, organizations, stress

### THE LABOR OF NURSING IS STRESSFUL<sup>1</sup>

Emotional distress is inherent within the domain of nursing practice. It is uniquely characterized by its multifocal etiologies and historical absence of awareness of its predominance. The outcomes of unrelenting, unaddressed stress can have deleterious personal, professional, and organizational ramifications, ultimately characterizing it as an occu-

**Author Affiliations:** *Advanced Oncology Nursing Resources, Phoenix, Arizona (Ms Boyle); Infusion Nurses Society, Norwood, Massachusetts (Dr Steinheiser).*

**Deborah Boyle, MSN, RN, AOCNS®, FAAN,** is a long-tenured oncology clinical nurse specialist with an interest in recognizing and reducing the emotional consequences of nurses' work and fostering their well-being. For the past decade she has been a frequent lecturer nationally and internationally and has authored numerous publications on this topic. She coauthored the book *Self-Healing Through Reflection: A Workbook for Nurses*, which was awarded second place in the 2012 American Journal of Nursing book of the year. Through her enterprise, *Advanced Oncology Nursing Resources*, she offers organizational education, consultation, and program planning to address this phenomenon. **Marlene M. Steinheiser, PhD, RN, CRNI®,** is the director of clinical education for the Infusion Nurses Society. She has more than 34 years of nursing experience across the health care continuum, including acute care, home care, and skilled nursing facilities. Dr Steinheiser's research focus is compassion fatigue among nurses caring for older adults in skilled nursing facilities. She has authored numerous articles and presented nationally on this topic across the United States.

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**Corresponding Author:** Deborah A. Boyle, MSN, RN, AOCNS®, FAAN, *Advanced Oncology Nursing Resources, 6819 N 12<sup>th</sup> St #18, Phoenix, AZ 85014 (deb Boyle@cox.net).*

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pational hazard of nursing.<sup>2,3</sup> Affective, professional, and organizational etiologies contribute to this phenomenon.

Nurses may be at greatest risk of work-related emotional distress as compared with other health professionals.<sup>4</sup> They experience the anguish of their patients and families in an intimate, ongoing, and cumulative basis as a routine element of their work. Having firsthand exposure to tragedy and suffering in others over time can negatively impact nurses' emotional resilience. The psychological trauma that emanates from nurses witnessing human suffering is often referred to as compassion fatigue, or "the cost of caring."

Another variant of distress emanates from nurses' ethical questioning of patient care decision-making. This usually occurs within the context of life-threatening illness, when nurses believe that inappropriate or futile care is being rendered. This is representative of moral distress, which evolves when nurses are unable to act on the ethically appropriate action on behalf of their patient.

A third major nurse stressor, with affective ramifications but with organizational etiologies, is burnout. The nature of contemporary health care contributes to the stress within nursing practice, often prompting emotional exhaustion and depersonalization. Typified by rapid change, an exponential increase in treatment complexity, record spending, shifting reimbursement paradigms, the inclusion of novel technologies, and the use of electronic communication modalities, today's health care is characterized by unprecedented remodeling.<sup>3,5</sup> These expansive changes alter conventional work expectations and relationships. Roles are evolving as supply and demand staffing ratios are challenged with work expectations exceeding the norm. Financial variables

are continually scrutinized, requiring all providers, not just managers, to be fiscally accountable. The negative impact of compassion fatigue, burnout, and moral distress on both quality and financial outcomes is disconcerting, as they are linked to the prominence of patient safety deficiencies (ie, errors, falls, and malpractice claims) and a lower quality of care (ie, increased mortality and patient dissatisfaction).<sup>6-10</sup> Thus, the emotional sequelae emanating from considerable organizational change promotes health care work environments that are frequently described as strained, dissenting, and disengaged.

To date, nurses and their frontline colleagues' personal emotional responses to work hardship have been the focus of study rather than organizational determinants.<sup>9</sup> A recent publication in the *Harvard Business Review* titled, "Burnout Is About Your Workplace, Not Your People," challenged the notion of individual ownership<sup>11</sup>:

*We tend to think of burnout as an individual problem solvable by learning to say no, more yoga, better breathing techniques, practicing resilience – the self-help list goes on. But evidence is mounting that applying personal, band-aid solutions to an epic and rapidly evolving workplace phenomenon may be harming, not helping.*

The goal of this article is to review organizational (macro) and practice setting (micro) sequelae of the emotional hazards of nursing practice and to propose strategies to prevent, reduce, and manage their consequences. Opportunities to enhance future innovation and discovery are also identified.

## EMOTIONAL IMPLICATIONS OF NURSING AS A CARING SCIENCE

The concept of compassion in health care has been historically deliberated on an international scale.<sup>12</sup> The word *compassion* is derived from 2 Latin terms, namely *pati* and *cum*, which together mean "to suffer with."<sup>13</sup> Compassion is postulated to emanate from moral, spiritual, and cultural contexts and ideally serves as the foundation for the provision of highly personalized and sensitive caregiving of the ill.<sup>14</sup> It is generally perceived as a benevolent emotional response toward another who is suffering coupled with the motivation to alleviate the suffering and promote well-being.<sup>15</sup> Thus, compassion differs from empathy as it is externally focused and action-oriented, whereas empathy reflects internal feelings characteristic of caring deeply for someone suffering.<sup>16-18</sup> Additionally, compassion has immediate health benefits and improves resilience within the context of adversity and threat.<sup>19</sup>

The provision of compassionate nursing care is a core trait and responsibility of nursing.<sup>20</sup> It encompasses attitudes (ie, an enhanced awareness of patient concerns), behaviors (ie, attempting to understand through relational communication), and actions (ie, attending to patients needs in a timely and individualized manner).<sup>21</sup> Yet, while compassion is an expected competency of nurses' work, it is often an invisible skill. Additionally, it may have negative consequences.

Compassionate responses are necessitated when nurses interact with patients and families experiencing trauma. Repeated and cumulative in nature, these scenarios often tax nurses' emotional reserve, especially in the absence of work setting supports and a concerted effort of self-care. Skovholt et al<sup>22</sup> described that interpersonal sensitivity, constant empathy, and one-way caring can have a significant toll on bedside, frontline practitioners, because although the relationship with the patient is collaborative, it is not reciprocal. This has also been described as the effort/reward imbalance. Stebnicki<sup>23</sup> further made an analogy to the wounded healer experience. Health care professionals' personal anguish can resurface when the patient's stories of despair, trauma, and loss are shared or witnessed. Of recent concern is increasing awareness of pathologic psychological experiences in nurses, such as posttraumatic stress disorder and depression associated with nurse suicide.<sup>24-27</sup>

## SPECIALTY IMPLICATIONS

Each nursing specialty has its own examples of stressful scenarios germane to its practice. Emergency department and critical care nurses are exposed to traumatic, life-threatening incidents in which the family often has little or no forewarning of the catastrophic events before them. In this regard, emergency nurses are constrained by not having the chance to develop relationships with the critically ill patient and their family, often unaware of preferences for care.<sup>28,29</sup> Critical care nurses may develop bonds with the patient and family over the intensive care unit trajectory. Admissions are frequently characterized by the patient's fluctuating and unstable clinical condition, the delivery of confusing and at times contradictory medical information, decisional conflict, and uncertainty. Ultimately critical care nurses often feel caught in the middle as their role as advocate is enacted during times of intense need or crisis.<sup>30,31</sup> Pediatric and obstetric nurses may be confronted with existential questioning over the premature death of a mother, child, or neonate.<sup>32,33</sup> Oncology nurses frequently develop relationships with patients and families over time that ultimately render profound sadness and grief when relapse, recurrence, or death results.<sup>34</sup> Palliative care and hospice nurses rarely see their patients recover; hence, cumulative grief may be pervasive.<sup>35</sup> Nurses providing care to patients at home or in other alternative care settings, such as skilled nursing facilities, may also generate emotional bonds with patients over time.<sup>36,37</sup> Infusion nurses practice in a variety of health care settings and nursing specialties characteristic of a practice environment engendering potential emotional distress. Unfortunately, however, due to nurses' common internalization of their personal psychological hardship, the negative ramifications of prolonged compassion are generally unknown and thus understudied. Hence, nurse turnover, absenteeism, poor work satisfaction and engagement, leaving the nursing profession, and even bullying could be considered as proxy metrics.

## IMPACT OF EMOTIONAL DISTRESS ON NURSES, PATIENTS, AND ORGANIZATIONS

The impact of the well-being of health care providers on the quality of patient care has gained national attention.<sup>38</sup> A 2016 systematic research review of quantitative studies addressing measures of well-being and burnout and their association with patient safety revealed the presence of a low sense of well-being and moderate-to-high levels of burnout in staff were associated with poor patient safety outcomes, such as medical errors.<sup>39</sup> The Emergency Care Research Institute (ECRI) has been collecting data on patient safety events since 2009. It publishes an annual list of safety concerns to help organizations identify patient safety challenges across the care continuum. In 2019, ECRI listed burnout as one of their top 10 challenges, citing it as a deterrent to patient safety and quality of care. Central to ECRI's recommendations is that organizations must listen to specific concerns, such as workload, accessibility to resources, and workplace inadequacies elucidated by staff.<sup>40</sup>

Research findings support the need to focus on the impact of nurses' psychological health on organizational outcomes. From a summary of 54 articles published between January 2005 and December 2017, researchers identified that the nature of health care work environments were associated with nurses' psychological health (ie, job satisfaction and compassion satisfaction) and negatively correlated with emotional strain (ie, burnout, compassion fatigue, emotional exhaustion, and stress).<sup>41</sup> These researchers concluded that a healthy work environment for nurses is an essential component for nurse satisfaction, retention, and job performance and is related to the quality of patient care delivered. It is also postulated that a healthy work environment can improve a health care organization's financial opportunities for growth.<sup>41</sup>

In a cross-sectional descriptive study, nearly 2000 nurses (n = 1790) reported suboptimal physical and mental health, and half reported a medical error in the last 5 years.<sup>42</sup> The nurses who reported worse health were associated with a 26% to 71% greater chance for involvement with a medical error. These researchers concluded that to increase quality of care and decrease costs of preventable medical errors, wellness must be positioned as a high organizational priority.

## THE MACRO PERSPECTIVE

### Organizational Recommendations to Promote Nurse Well-Being

In 2010, the World Health Organization launched the international Global Framework for Healthy Workplaces, stating that a healthy workplace is one in which workers and managers collaborate to use continual improvement processes to protect and promote the health, safety, and well-being of all workers.<sup>43</sup> Five keys to healthy workplaces were identified:

1. Mobilize and gain commitment from major leadership stakeholders
2. Involve workers and their representatives
3. Adhere to business ethics, health codes, and laws
4. Use a systematic, comprehensive process to ensure effectiveness and continual improvement
5. Foster sustainability by integrating healthy workplace initiatives into the enterprise's overall strategic business plan.

Since then, numerous national organizations have assumed a leadership position in addressing concerns about clinician wellness. Their perspectives underscore the need for major system-wide interventions that require substantial support (ie, advocacy, manpower, and financial) from top leadership. Table 1 delineates key points of these 4 initiatives.

## NATIONAL RECOMMENDATIONS

### American Association of Critical-Care Nurses

In 2005, the American Association of Critical-Care Nurses (AACN) developed the AACN Standards for Establishing and Sustaining Healthy Work Environments.<sup>49</sup> A second edition was published in 2014.<sup>50</sup> These standards consist of 6 essential nurse-sensitive, evidence-based principles that promote effective and sustainable outcomes. They include:

1. **Skilled communication:** encourages efficient, open conversation, and collaboration among health care team members. Skilled communicators focus on determining solutions and achieving outcomes.
2. **True collaboration:** involves all health care team members who contribute to common goals by granting power, respecting each member's views, allowing for and resolving differences, and preserving each member's contribution to ensure optimal patient outcomes. The goal of true collaboration is to promote a supportive environment.
3. **Effective decision-making:** affords nurses an opportunity to impact the quality of patient care through discussion with organizational leaders and other health care team members.
4. **Appropriate staffing:** includes use of outcome data to address the needs of nurses, patients, and families.
5. **Meaningful recognition:** provides nurses with positive affirmation and acknowledgment of their unique nursing contributions that impact patient care. By individually recognizing nurses in a meaningful way, nurses then feel value and respected.
6. **Authentic leadership:** creates a culture of compassionate care for nurses and their patients. With their enthusiasm, authentic leaders create and sustain healthy work environments. In 2018, 8080 AACN members responded to an online survey used to collect quantitative and qualitative data to evaluate the existing state of critical care nurse work environments.<sup>51</sup> Although an improvement in the work environment was identified in comparison to AACN's earlier findings, there were still areas needing improvement.

**TABLE 1**

## Suggested Components of Major System Initiatives to Enhance Staff Well-Being

World Health Organization (WHO)	American Association of Critical-Care Nurses (AACN)	National Academy of Medicine (NAM)	Institute for Healthcare Improvement (IHI)
<ol style="list-style-type: none"> <li>1. Mobilize leadership commitment and engagement</li> <li>2. Involve workers and their representatives</li> <li>3. Adhere to business ethics and legality</li> <li>4. Use a systems, comprehensive process to ensure effectiveness and continued improvement</li> <li>5. Reinforce sustainability and integration</li> </ol>	<ol style="list-style-type: none"> <li>1. Encourage skilled communication</li> <li>2. Promote true collaboration</li> <li>3. Foster effective decision-making</li> <li>4. Implement appropriate staffing</li> <li>5. Provide meaningful recognition</li> <li>6. Actualize authentic leadership</li> </ol>	<ol style="list-style-type: none"> <li>1. Create a positive work environment</li> <li>2. Create a positive learning environment</li> <li>3. Reduce administrative burden</li> <li>4. Enable technological solutions</li> <li>5. Provide support to clinicians and researchers</li> <li>6. Invest in research</li> </ol>	<ol style="list-style-type: none"> <li>1. Leaders engage colleagues to identify what matters most to them at work</li> <li>2. Leaders identify the processes, issues, or circumstances that are an impediment to what makes and impedes them meeting professional, social, and psychological needs</li> <li>3. Multidisciplinary teams come together and share responsibility for removing these impediments (focusing on the 9 critical components) and for improving and sustaining joy</li> <li>4. Leaders and staff use improvement science together to accelerate improvements and create a more joyful and productive place to work</li> </ol>

Data from references.<sup>43–49</sup>

The key findings included a documented absence of appropriate staffing by more than 60% of participants, an alarming number of physical and mental well-being issues (198|340 incidents reported by 6017 participants), and one third of the participants expressing intent to leave their current positions within the next 12 months. Despite these results, there was evidence of positive outcomes of implementing the AACN Healthy Work Environment (HWE) standards. There was a significant positive relationship between implementation of the HWE standards and appropriate staffing, communication, decision-making opportunities, job satisfaction, and intent to leave. Researchers concluded that there was evidence of a positive correlation between healthy nurse work environments and patient and nurse outcomes.<sup>51</sup>

### National Academy of Medicine

In 2017, the National Academy of Medicine (NAM) responded to an escalating problem within the US health care system. There was a critical imbalance between the job demands imposed on clinicians and the availability of resources to enable them to practice effectively. NAM thus created a website called the Action Collaborative on Clinician Well-Being and Resilience to serve as a web-based knowledge hub for information about the causes, effects, and solutions associated with clinician well-being.<sup>52,53</sup> This collaborative had 3 goals:

1. Raise the visibility of clinician anxiety, burnout, depression, stress, and suicide
2. Improve baseline understanding of challenges to clinician well-being

3. Advance evidence-based, multidisciplinary solutions to improve patient care by caring for the caregiver.

Solutions were categorized as organizational strategies, tools to measure burnout, and individual approaches to promote well-being.

As a follow-up to this work, in 2019 NAM published its consensus study report entitled “Taking Action Against Clinician Burnout: A Systems Approach to Professional Well-Being.”<sup>48</sup> The report stressed that clinician burnout is a multifactorial problem that requires an organizational approach to its amelioration. Specifically, the report concluded, “*Taking action to mitigate burnout requires a bold vision for redesigning clinical systems...Central to the vision for moving forward is an emphasis on the human aspects of care – putting patients, families, caregivers, clinicians, and staff at the center of focus.*”<sup>48(p285)</sup>

### Institute for Healthcare Improvement

The Institute for Healthcare Improvement (IHI) increased awareness about the inherent vulnerability of health care clinicians by citing that their career choice was one characterized by chronic exposure to the worry and sadness of others. Yet, while professional health care roles are intended to help those suffering, the IHI purported that efforts to help the sick should promote joy, not burnout. They purported that when clinicians find joy in their work, improvements in patient safety, outcomes, experiences, and costs are evidenced.<sup>54</sup> Hence joy at work was conceptualized as an antidote to stress and burnout that required focused interventions and engagement of staff to be successful. In 2017, the “IHI Framework for Improving Joy in Work” was published that outlined 4 steps that leaders



**TABLE 2****Characteristics of Nurse Burnout, Compassion Fatigue, and Moral Distress**

Features	Burnout	Compassion fatigue	Moral distress
<b>Etiology/triggers</b>	Reactional: cumulative environmental stressors with little resolution prompt emotional exhaustion; develop defensive response; unable to cope with work setting deficiencies; negative, complaining coping style	Relational: consequence of developing relationships with patients and witnessing their tragedy and suffering over time (ie, experiencing indirect trauma); results in feelings of futility and having nothing more to give; may be compounded by personal unresolved losses and absence of self-care	Ethical: existence of “dueling expectations” about the optimum moral approach to decision-making presents conflict; often prevails around end-of-life decision-making, truth telling, comfort care vs aggressive care; question about patient suffering predominates
<b>Other descriptors</b>	Job/workplace stress	“Cost of caring,” wounded healer, empathy fatigue	Ethical conflict, moral outrage, moral anguish
<b>Chronology</b>	Gradual, over time	Sudden, acute onset	May be acute but often gradual
<b>Manifestations</b>			
Emotional	Anger, frustration, cynicism, blaming, sarcasm	Feels hopeless, apathetic, discouraged, overwhelmed, irritability; sense of being uniquely qualified to care for certain patients	Anger, frustration, resentment, blaming, sadness, tearful
Physical	Cognitive weariness, sleep disturbances, chronic fatigue, gastrointestinal distress, weight fluctuation	Increased somatic complaints, fatigue, lack of energy, weariness	Body tension
Social	Detachment, avoidance	Feelings of alienation, lack of interest in activities once enjoyed, withdrawal from family and friends	Talks with coworkers about stressful nature of work
Work	Indifference, diminished achievement, interpersonal alienation	Diminished performance, tardiness, absenteeism, avoid intense patient/family situations	Avoidance strategies, passive-aggressive behavior, substandard interdisciplinary communication; overinvolvement with patient/family
<b>Outcomes</b>	Absenteeism, decreased empathic responses, withdrawal from work activities and colleagues, perceived as negative, cynical coworker; may leave position	Imbalance occurs between inner resources and ability to “give” to others; ultimately, withdrawal or distancing from patients/families results; may leave position for another with less emotional distress	Team conflict, frustration with colleague(s) perceived as lacking sufficient empathy/sensitivity, negative labeling of family member generating conflict; may leave position for one with less frequent moral distress as a norm

Adapted from Boyle and Bush.<sup>32</sup>

should engage in (Table 1) and 9 critical components of a system for ensuring a joyful, engaged workforce. These components are described below.

### Physical and Psychological Safety

*Physical safety* is defined as being free from harm at work, including workplace violence, bloodborne pathogens, other infections, and musculoskeletal injuries. *Psychological safety* includes being free to express thoughts or bring attention to unsafe situations free of retribution and to be in an environment that promotes respectful interactions. Leaders can promote a fair and just culture and create systems to reduce workplace injuries.

### Meaning and Purpose

Leaders can ask if employees find meaning in their work and if they are connected with the organization’s purpose. Letting employees discuss why their work is important and sharing

stories can help link their work to the organization’s purpose. Do they feel that the work they do makes a difference?

### Choice and Autonomy

Having choices and flexibility in daily lives and work is an important aspect accomplished through shared governance and participatory management. This approach involves giving staff the opportunity to voice what is important to them and to have input on choices such as which products to use and work schedules.

### Recognition and Rewards

Meaningful recognition is accomplished when leaders understand daily work, regularly acknowledge staffs’ contribution to purpose, and celebrate outcomes in a way that is important to staff. This recognition may not be monetary but ideally would emphasize the benefits of teamwork and improvement.

**TABLE 3**

## Literature and Interventions Addressing Nurses' Emotional Distress<sup>a</sup>

Support type	Focus
Distress-specific	
	Burnout <sup>59-73</sup>
	Compassion fatigue <sup>74-88</sup>
	Moral distress <sup>89-95</sup>
Programmatic	
	Caregiver support team <sup>96,97</sup>
	"Care of the Caregiver" <sup>98-100</sup>
	Peer/colleague support <sup>101-104</sup>
	Crisis intervention <sup>105-110</sup>
	Peri-death support <sup>111-118</sup>
	Support groups <sup>119</sup>
	Retreats/distancing <sup>120-126</sup>
	De-briefing <sup>127-135</sup>
	Schwartz Rounds <sup>136-141</sup>
	Meaningful recognition <sup>142-144</sup>
	Empathy enhancement <sup>145</sup>
	Compassion rounds <sup>146</sup>
Education	
	Provider self-care <sup>147</sup>
	Coping with existential issues <sup>148</sup>
	Communication skill-building <sup>149-152</sup>
	Self-care library <sup>153</sup>
Personnel support	
	Counselor for staff <sup>154,155</sup>
	Chaplain support <sup>156-159</sup>
Complementary approaches	
	Art therapy <sup>160-166</sup>
	Qigong <sup>167</sup>
	Journaling/writing <sup>168-173</sup>
	Massage/relaxation/yoga <sup>174-179</sup>
	Mindfulness/meditation <sup>180-195</sup>
	Music therapy <sup>196-199</sup>
	Reiki <sup>200,201</sup>
	Self-reflection <sup>202-205</sup>

<sup>a</sup>Books with exercises to enhance self-awareness of work-related emotional distress.<sup>1,205</sup>

### Participative Management

When leaders are engaged and connected with staff, teamwork and trust can be formed. It is essential in participative management that leaders aim to listen, understand, and involve colleagues in providing input into decisions.

### Camaraderie and Teamwork

Teamwork involves working together toward something meaningful but can also include work design, social engagement, and exercises to build trust among team members. This may be accomplished in courses, retreats, social activities, and role modeling.

### Daily Improvement

When improvement in processes is part of daily practice, staff can see commitment to the organization's purpose. Using visualization tools for tracking successes and monitoring failing interventions provides prompt action and transparency.

### Wellness and Resilience

This goes beyond physical workplace safety and involves a holistic approach to staff wellness. Holistic wellness involves work/life balance, managing stress, providing mental health support, and overall staff self-care. Staff may be assisted with tools and education about health coping mechanisms, mindfulness practice, adoption of healthy attitudes, and self-care practices.

### Real-Time Measurement

Visible display of real-time data (ie, dashboards) demonstrates transparency in addressing staffs' concerns. Data may include turnover rates, engagement or safety culture surveys, or burnout scores.

## OTHER KEY SUPPORTIVE DIRECTIVES

### The Triple Aim

In 2008, Berwick et al<sup>55</sup> introduced the concept of the "Triple Aim," a 3-pronged intervention matrix to improve health system performance. These directives targeted the enhancement of the patient experience, improving population health, and reducing costs. A decade later, a proposal emerged to amend this model to become the "Quadruple Aim," whereby a fourth focus was added to address improving the work life of health care providers.<sup>56</sup> A recent American Academy of Nursing position statement endorsed this initiative and further identified 2 recommendations to address the fourth goal.<sup>57</sup> They included acceleration of interprofessional practice through enhancement of educational infrastructures and the improvement of care-centered clinical documentation for the digital age that increases usability and interoperability and reduces the burden of documentation.

### The Joint Commission

The Joint Commission most recently addressed nurse-specific indices of work environment improvement. In July 2019, the accreditation agency published the document "Quick Safety 50: Developing Resilience to Combat Nurse Burnout."<sup>58</sup> Citing burnout as an occupational stressor, this report outlined specific areas where health care facilities should focus their efforts.

**TABLE 4****Studies Investigating Nurse Wellness and Health Promotion**

Year	Author	Focus
2020	Melnik et al <sup>5</sup>	Interventions to improve mental health, well-being, physical health, and lifestyle behaviors in physicians and nurses: a systematic review.
	Grabbe et al <sup>211</sup>	The Community Resiliency Model® to promote nurse well-being.
	Sampson et al <sup>212</sup>	The MINDBODYSTRONG intervention for new nurse residents: 6-month effects on mental health outcomes, healthy lifestyle behaviors, and job satisfaction.
2019	Sampson et al <sup>213</sup>	Intervention effects of the MINDSTRONG cognitive behavioral skills building program on newly licensed registered nurses' mental health, healthy lifestyle behaviors, and job satisfaction.
2018	Slater and Edwards <sup>214</sup>	Needs analysis and development of a staff well-being program in pediatric oncology, hematology, and palliative care services group.
	Cho and Han <sup>215</sup>	Association among nurse work environments and health promoting behaviors of nurses and nursing performance quality.
2017	Hrabe et al <sup>216</sup>	Effects of the Nurse Athlete Program on the healthy lifestyle behaviors, physical health, and mental well-being of new graduate nurses.
	Ross et al <sup>217</sup>	Nurses and health-promoting behaviors: knowledge may not translate into self-care.
2016	Hersch et al <sup>218</sup>	Reducing nurse stress: a randomized controlled trial of a web-based stress management program for nurses.
	Delaney et al <sup>219</sup>	Pilot testing of the NURSE stress management intervention.
2015	Tsai and Liu <sup>220</sup>	An eHealth education intervention to promote healthy lifestyles among nurses.
2013	Letvak <sup>221</sup>	We cannot ignore nurses' health anymore: a synthesis of the literature on evidence-based strategies to improve nurse health.
	Speroni et al <sup>222</sup>	Helping nurses care for self, family, and patients through the Nurses Living Fit intervention.
2012	Zadeh et al <sup>223</sup>	Taking care of care providers: a wellness program for pediatric nurses.
	Hoolahan et al <sup>224</sup>	Energy capacity model for nurses: the impact of relaxation and restoration.
	Nahm et al <sup>225</sup>	Nurses' self-care behaviors related to weight and stress.
2011	Flannery et al <sup>226</sup>	Physical activity and diet-focused worksite health promotion for direct care workers.

- Educate nurses, preceptors, and nurse leaders on how to identify behaviors caused by burnout and compassion fatigue and to become aware of their individual stress triggers, participate in self-care activities, and discuss resiliency
- Improve clinician well-being by measuring, developing, and implementing interventions and then remeasuring
- Offer nurses opportunities to reflect on and learn from their practice and from other practitioners
- Work with internal teams to assess whether current electronic medical record systems may be customized to better support nursing workflow
- Conduct regular staff meetings that include discussions about new organizational policies, processes, and outcomes from leadership meetings – making sure to engage nurses in these meetings.

Additionally, the report identified 4 leadership empowering strategies that should be used that impact nurse performance and engagement. They included:

1. Create a safe and positive work environment
2. Enable employees to participate in decisions related to their work
3. Express confidence in employees' ability to perform at a high level and help them attain goals

4. Ensure that leaders engage in discussions and have a physical presence in the department.

### THE MICRO-ENVIRONMENT: EMOTIONAL RESPONSES IN THE PRACTICE SETTING TO WORK-RELATED STRESS AND POTENTIAL INTERVENTIONS

Most of the literature and research to date have focused on individual responses to stressors in the workplace rather than organizational origins or confounding determinants. The existing platform of published interventions represents reactive responses to an identified stressor rather than a proactive attempt to decrease the possibility of these phenomena from occurring.

The major affective sequelae of nurses' work have been identified as burnout, compassion fatigue, and moral distress. Characteristics of each are highlighted in Table 2. Of note are overlapping features of these phenomenon. Additionally, they may co-occur. Yet, the genesis of each differs. Burnout emanates from workplace stress and is environmental in nature. Often referred to as the "cost of caring," compassion fatigue is affective in origin, evolving from close relationships

**TABLE 5****Resiliency Enhancement Interventions Targeting Nurses**

Year	Author(s)	Citation
<b>2020</b>	Muir and Keim-Malpass <sup>229</sup>	The emergency resiliency initiative: a pilot mindfulness intervention program.
	Pehlivan and Guner <sup>230</sup>	Effect of a compassion fatigue resilience program on nurses' professional quality of life, perceived stress, resilience: a randomized controlled trial.
	Flanders et al <sup>231</sup>	Effectiveness of a staff resilience program in a pediatric intensive care unit.
	Blackburn et al <sup>232</sup>	THRIVE program: building oncology nurse resilience through self-care.
<b>2019</b>	Michael et al <sup>233</sup>	Virtual reality-based resilience programs.
<b>2018</b>	van Agteren et al <sup>234</sup>	Improving the well-being and resilience of health services staff via psychological skills training.
<b>2017</b>	Mealer et al <sup>235</sup>	Designing a resilience program for critical care nurses.
	Magtiday et al <sup>67</sup>	A blended learning stress management and resiliency training program.
<b>2016</b>	Steinberg <sup>193</sup>	Reducing the 'cost of caring' in cancer care: evaluation of a pilot interprofessional compassion fatigue resiliency programme.
	Lim et al <sup>236</sup>	Strengthening resilience and reducing stress in psychosocial care for nurses practicing in oncology settings.
	Mehta et al <sup>237</sup>	Building resiliency in a palliative care team: a pilot study.
<b>2015</b>	Potter et al <sup>238</sup>	Compassion fatigue resiliency training: the experience of facilitators.
	Weidlich and Ugarriza <sup>239</sup>	A pilot study examining the impact of care provider support program on resiliency, coping, and compassion fatigue in military health care providers.
	Deible et al <sup>240</sup>	Implementation of an integrative coping and resiliency program for nurses.
	Gillman et al <sup>241</sup>	Strategies to promote coping and resilience in oncology and palliative care nurses caring for adult patients with malignancy: a comprehensive systematic review.
	Lee <sup>242</sup>	Promoting staff resilience in the pediatric intensive care unit.
<b>2014</b>	Mealer et al <sup>243</sup>	Feasibility and acceptability of a resilience training program for intensive care unit nurses.
<b>2012</b>	McDonald et al <sup>244</sup>	A work-based educational intervention to support the development of personal resilience in nurses and midwives.

developed with patients and families experiencing emotional and physical trauma. Moral distress is a state of psychological disequilibrium that is prompted when nurses are unable to practice according to their moral standards.<sup>59</sup> It is often prompted by conflicting interactions with physicians and family members around information disclosure, decision-making, and the delivery of futile care.

It is beyond the scope of this article to provide details of interventions that address work setting nurse wellness. However, Table 3 provides an overview of those published. They are categorized into distress-specific, programmatic, education, personnel support, and complementary approaches.

## FOUNDATIONAL SUPPORT FOR NURSE WELL-BEING

Efforts to enhance nurses' health and wellness are underscored by the realization of, and acceptance that, the care of oneself is a critical corollary of helping others. In the absence of self-care and the provision of interventions augmenting nurses' emotional health, negative outcomes will

undoubtedly be manifested. An important component to needed self-care is the concept of self-compassion.

To provide compassionate patient care, nurses must embrace the need to empathically care for themselves. Less is known about this construct, namely the ability to turn compassion inward, be kind to oneself, and acknowledge one's humanity, imperfections, and fragility.<sup>206</sup> Germane to this entity is inner reflection about personal issues nurses bring to the bedside. Past losses, especially those that remain unresolved, family conflict, social issues, and role demands at home may influence emotional reactions at work. Looking inward facilitates awareness of "where you are coming from" as you acknowledge your role in the communication dyad with patients, families, and team colleagues.

Contrary to conventional opinion, self-care is not selfish care. Rather, it is foundational to the nurses' capacity to feel, give, and respond to the suffering of others.<sup>207</sup> Yet nurses often seek permission to care for oneself. Andrews et al<sup>208</sup> revealed that, in managing the emotions associated with caring, nurses feel the need for an external acceptance of caring for oneself. Nurses tend to engage in self-care only when they are struggling (ie, reactively) rather than perceive self-care as a proactive intervention to sustain well-being and offset the



**TABLE 6****10 Potential Research Foci on Nurse Wellness**

1. What is the short and long-term impact on nurse retention of a formal undergraduate preparedness focus on enhanced coping, resilience, wellness, and self-care?
2. How does one's nursing role and specialty influence the nature of work-related stress?
3. What is the influence of nurse self-care on patient outcomes?
4. Does virtual education have comparable results to direct, onsite teaching methods?
5. How do personal characteristics (ie, coping style, presence of co-occurring family stress, age, marital status, presence of dependent children) influence the prominence of nurse distress in the work setting?
6. How do professional characteristics (ie, experience, presence of supportive nurse manager, quality of intradisciplinary collaboration, and teamwork) influence level of burnout?
7. Is one method of teaching resilience more effective than others?
8. What is the influence of time spent documenting on the electronic health record on distress?
9. Is the use of technology and media platforms acceptable and efficacious modes of providing support to nurses?
10. How does meaningful recognition and managerial support influence staff nurse wellness, engagement, and retention?

Data from references.<sup>245-255</sup>

negative emotional sequelae of practice. One of the biggest barriers to nurses engaging in self-care is the perception that there is little or no time nor energy for oneself. Reframing the concept of self-care is needed. Rather than consider it as a recovery intervention following exposure to work-related stress, self-care should be embraced as an ongoing strategy for self-preservation. While issue-specific interventions can be used to augment psychological health in nurses, 2 constructs provide the basis for all health improvement: enhancing wellness and promoting resiliency.

### The Wellness Imperative

In addition to work-associated demands and stressors, today's nurses are at risk for poor health outcomes due to inadequate physical activity and consumption of a low-quality diet. A recent literature review of hospital-based American nurses' lifestyles and health-related outcomes revealed that <5% of nurses engage in 5 healthy lifestyle behaviors related to diet, weight, and activity management, as well as the absence of tobacco and alcohol consumption.<sup>209</sup> Another study revealed nurses functioning as caregivers outside of their work environment had higher stress and less health-promoting behavior scores.<sup>210</sup> Table 4 depicts studies investigating the effectiveness of nurse wellness programs. There is a growing consensus that self-care and wellness should be integrated into basic nursing education as a means to introduce this important concept early in the nurses' career trajectory.<sup>227</sup>

### Fostering Resiliency

Resiliency is more than bouncing back from difficult times. Rather, it is characterized by individuals' success in functioning and evolving despite life's adversities. Corollaries of resilience enhancement have been identified as self-esteem, optimism, perseverance, determination, assertiveness and self-reliance.<sup>228</sup> Resiliency has been central to numerous contemporary nurse-focused wellness initiatives. The majority of reported resiliency enhancement interventions have focused on education specific to building psychological capacity. Table 5 lists investigations specific to this topic.

### A Needed Nursing Research Agenda

While work-associated nurse stress is not a new phenomenon, the current attention given to it is. A rigorous contemporary agenda is needed to promote research on the efficacy and outcomes of nurse-centered, wellness-targeted interventions. Table 6 offers some suggestions to advance this agenda.

### CONCLUSION

Nurses comprise the largest segment of the American workforce and more than half of that worldwide.<sup>256,257</sup> Yet their need for work-setting support has historically been underappreciated. Until now.

The current pandemic and its many negative corollaries have brought the well-being of nurses front and center. The cumulative physical and emotional sequelae of nursing those suffering from coronavirus disease 2019 (COVID-19) is magnified by worry over one's personal safety and family contamination. It also highlights the consequences of not caring for oneself when caring for others.<sup>258</sup>

The "usual care" that nurses provide involves exposure to many sources of stress and proximity to the dying. However, the COVID pandemic is characterized by a surplus of these stressful scenarios, which include prolonged episodes of caregiving in isolation, working conditions where shortages are the norm, and repeated instances of becoming proxy family to the dying.<sup>259</sup> Acknowledging the anguish experienced by staff working with patients infected with COVID in various practice settings has prompted the provision of psychological interventions for staff.<sup>260,261</sup> Hence, perhaps a place to start for the introduction of necessary psychological resources for all nurses would be to consider these COVID-related interventions in a proactive way.

The well-being of nurses can no longer be ignored.<sup>262</sup> Nurses require a prodigious enterprise to foster their fitness, hardiness, and general well-being. Ideal interventions are multifaceted in nature. They include both a comprehensive macro-organizational effort and a micro issue-specific support menu that mitigates risk for impaired nurse wellness. In the absence of such, our health care system remains in serious jeopardy. For without nurses, there is no health care.<sup>263</sup>

## REFERENCES

- Bush NJ, Boyle DA. *Self-Healing Through Reflection: A Workbook for Nurses*. Oncology Nursing Society; 2011.
- Sarafis P, Rousaki E, Tsounis A, et al. The impact of occupational stress on nurses' caring behaviors and their health-related quality of life. *BMC Nurs*. 2016;15:56. [https://doi.org/10.1186/s12912-016-0178-y34\(8\):929-941](https://doi.org/10.1186/s12912-016-0178-y34(8):929-941). doi:10.1177/089011712092045
- Rushton CH, Pappas S. Systems to address burnout and support well-being: implications for intensive care unit nurses. *AACN Adv Crit Care*. 2020;31(2):141-145. doi:10.4037/aacnacc2020771
- Zaghini F, Biagioli V, Proietti M, Badolamenti S, Fiorini J, Sili A. The role of occupational stress in the association between emotional labor and burnout in nurses: a cross-sectional study. *Appl Nurs Res*. 2020;54:151277. doi:10.1016/j.apnr.2020.151277
- Melnyk BM, Kelly SA, Stephens J, et al. Interventions to improve mental health, well-being, physical health, and lifestyle behaviors in physicians and nurses: a systematic review. *Am J Health Promot*. 2020;34(8):929-941. doi:10.1177/089011712092045
- Kelly L. Burnout, compassion fatigue, and secondary trauma in nurses: recognizing the occupational phenomenon and personal consequences of caregiving. *Crit Care Nurs Q*. 2020;43(1):73-80. doi:10.1097/CNQ.0000000000000293
- Kim LY, Rose DE, Ganz DA, et al. Elements of the healthy work environment associated with lower primary care nurse burnout. *Nurs Outlook*. 2020;68(1):14-25. doi.org/10.1016/j.outlook.2019.06.018
- Letvak SA, Ruhm CJ, Gupta SN. Nurses' presenteeism and its effect on self-reported quality of care and costs. *Am J Nurs*. 2012;112(2):30-39; quiz 48. doi:10.1097/01.NAJ.0000411176
- Brand SL, Thompson Coon J, Fleming LE, Carroll L, Bethel A, Wyatt K. Whole-system approaches to improving the health and well-being of healthcare workers: a systematic review. *PLoS One*. 2017;12(12):e0188418. doi:10.1371/journal.pone.0188418
- Halbesleben JRB, Rathert C, Williams ES. Emotional exhaustion and medication administration work-arounds: the moderating role of nurse satisfaction with medication administration. *Health Care Manage Rev*. 2013;38(2):95-104. doi:10.1097/HMR.0b013e3182452c7f
- Moss J. Burnout is about your workplace, not your people. *Harv Bus Rev*. Published December 11, 2019. Accessed December 15, 2020. <https://hbr.org/2019/12/burnout-is-about-your-workplace-not-your-people>
- Sinclair S, Beamer K, Hack TF, et al. Sympathy, empathy, and compassion: a grounded theory study of palliative care patients' understandings, experiences, and preferences. *Palliat Med*. 2017;31(5):437-447. doi:10.1177/0269216316663499
- Trzeciak S, Mazzarelli S. *The Revolutionary Scientific Evidence that Caring Makes a Difference*. Studer Group, LLC; 2019
- Schantz ML. Compassion: a concept analysis. *Nurs Forum*. 2007;42(2):48-55. doi:10.1111/j.1744-6198.2007.00067
- Mascaro JS, Florian MP, Ash MJ, et al. Ways of knowing compassion: how do we come to know, understand, and measure compassion when we see it? *Front Psychol*. 2020;11:547241. doi:10.3389/fpsyg.2020.547241
- Aagard M, Papadopoulos I, Biles J. Exploring compassion in U.S. nurses: results from an international study. *Online J Issues Nurs*. 2018;23(1). doi:10.3912/OJIN.Vol23No01PPT44
- Papadopoulos I, Ali S. Measuring compassion in nurses and other health professionals: an integrative review. *Nurs Educ Pract*. 2016;16(1):133-139. doi:10.1016/j.nepr.2015.08.001
- Dewar B, Adamsen E, Smith S, Surfleet J, King L. Clarifying misconceptions about compassionate care. *J Adv Nurs*. 2014;70(8):1738-1747. doi:10.1111/jan.12322
- Galante J, Galante I, Bekkers MJ, Gallacher J. Effect of kindness-based meditation on health and well-being: a systematic review and meta-analysis. *J Consult Clin Psychol*. 2014;82(6):1101-1114. doi: 10.1037/a0037249
- Theodosius C. *Emotional Labour in Healthcare: The Unmanaged Heart of Nursing*. Routledge; 2008.
- Sinclair S, McClement S, Raffin-Bouchal S, et al. Compassion in health care: an empirical model. *J Pain Symptom Manage*. 2016;51(2):193-203. doi.org/10.1016/j.jpainsymman.2015.10.009
- Skovholt TA, Gries TL, Hanson MR. Career counseling for longevity: self-care and burnout prevention strategies for counselor resilience. *J Career Devel*. 2001;27(3):167-176. doi.org/10.1023/A:1007830908587
- Stebnicki MA. *Empathy Fatigue*. Springer Publishing; 2008.
- Ross R, Letvak S, Sheppard F, Jenkins M, Almotairy M. Systematic assessment of depressive symptoms among registered nurses: a new situation-specific theory. *Nurs Outlook*. 2020;68(2):207-219. doi.org/10.1016/j.outlook.2019.08.007
- Schuster M, Dwyer PA. Post-traumatic stress disorder in nurses: an integrative review. *J Clin Nurs*. 2020;29(15-16):2769-2787. doi.org/10.1111/jocn.15288
- Davidson JE, Proudfoot J, Lee K, Zisook S. Nurse suicide in the United States: analysis of the Centers for Disease Control 2014 National Violent Death Reporting System dataset. *Arch Psychiatr Nurs*. 2019;33(5):16-21. doi.org/10.1016/j.apnu.2019.04.006
- Davidson JE, Proudfoot J, Lee K, Terterian G, Zisook S. A longitudinal analysis of nurse suicide in the United States (2005-2016) with recommendations for action. *Worldviews Evid Based Nurs*. 2020;17(1):6-15. doi.org/10.1111/wvn.12419
- Bailey C, Murphy R, Porock D. Professional tears: developing emotional intelligence around death and dying in emergency work. *J Clin Nurs*. 2011;20(23-24):3364-3372. doi:10.1111/j.1365-2702.2011.03860.x
- Hunsaker S, Chen HC, Maughan D, Heaston S. Factors that influence the development of compassion fatigue, burnout, and compassion satisfaction in emergency department nurses. *J Nurs Scholarsh*. 2015;47(2):186-194. doi:10.1111/jnu.12122
- Epstein EG, Haizlip J, Liaschenko J, Zhao D, Bennett R, Marshall MF. Moral distress, mattering, and secondary traumatic stress in provider burnout: a call for moral community. *AACN Adv Crit Care*. 2020;31(2):146-157. doi:10.4037/aacnacc2020285
- Jenkins B, Warren NA. Concept analysis: compassion fatigue and effects upon critical care nurses. *Crit Care Nurs Q*. 2012;35(4):388-395. doi:10.1097/CNQ.0b013e318268fe09
- Boyle DA, Bush NJ. Reflections on the emotional hazards of pediatric oncology nursing: four decades of perspectives and potential. *J Pediatr Nurs*. 2018;40:63-73. doi:10.1016/j.pedn.2018.03.007
- Margulies SL, Benham J, Liebermann J, Amdur R, Gaba N, Keller J. Adverse events in obstetrics: impacts on providers and staff of maternity care. *Cureus*. 2020;12(1):e6732. doi:10.7759/cureus.6732
- Jarrad RA, Hammad S. Oncology nurses' compassion fatigue, burnout, and compassion satisfaction. *Ann Gen Psychiatry*. 2020;19:22. doi:10.1186/s12991-020-00272-9
- Maffoni M, Argentero P, Giorgi I, Giardini A. Under the white coat: risk and protective factors for palliative care providers in the daily work. *J Hosp Palliat Nurs*. 2020;22(2):108-114. doi: 10.1097/NJH.0000000000000623
- Steinheiser MM, Crist JD, Shea KD. Compassion fatigue among RNs working in skilled nursing facilities. *Res Gerontol Nurs*. 2020;13(6):320-328. doi:10.3928/19404921-20200325-01
- McCreary DDJ. Home health nursing job satisfaction and retention: meeting the growing need for home health nurses. *Nurs Clin North Am*. 2020;55(1):121-132. doi:10.1016/j.cnur.2019.11.002
- Tawfik DS, Scheid A, Profit J, et al. Evidence relating health care provider burnout and quality of care: a systematic review meta-analysis. *Ann Intern Med*. 2019;171(8):555-567. doi:10.7326/M19-1152
- Hall LH, Johnson J, Watt I, Tsipa A, O'Connor DB. Healthcare staff well-being, burnout, and patient safety: a systematic review. *PLoS One*. 2016;11(7):e0159015. doi:10.1371/journal.pone.0159015
- ECRI Institute. Top 10 patient safety concerns for 2019. Published 2019. Accessed December 8, 2020. <https://www.ecri.org/landing-top-10-patient-safety-concerns-2019>

41. Wei H, Sewell KA, Woody G, Rose MA. The state of the science of nurse work environments in the United States: a systematic review. *Int J Nurs Sci*. 2018;5(3):287-300. doi:10.1016/j.ijnss.2018.04.010
42. Melnyk BM, Orsolini L, Tan A, et al. A national study links nurses' physical and mental health to medical errors and perceived worksite wellness. *J Occup Environ Med*. 2018;60(2):126-131. doi:10.1097/JOM.0000000000001198
43. World Health Organization. Healthy workplaces: a world health organization global model for action. Published 2010. Accessed April 30, 2020. [https://www.who.int/occupational\\_health/healthy\\_workplaces/en/](https://www.who.int/occupational_health/healthy_workplaces/en/)
44. Barden C, Distrito C. Toward a healthy work environment. *Health Prog*. 2005;86(6):16-20.
45. Dzau VJ, Kirch DG, Nasca TJ. To care is human: collectively confronting the clinician burnout crisis. *N Engl J Med*. 2018;378(4):312-314. doi:10.1056/NEJMp1715127
46. Perlo J, Balik B, Swensen S, Kabcenell A, Landsman J, Feeley D. *Institute for Health Care Improvement framework for improving joy at work [IHI White Paper]*. Institute for Healthcare Improvement. Published 2017. Accessed April 30, 2020. <http://www.ihl.org/resources/Pages/IHIWhitePapers/Framework-Improving-Joy-in-Work.aspx>
47. Kortum E. The WHO healthy workplace model: challenges and opportunities. In: Leka S, Sinclair RR, eds. *Contemporary Occupational Health Psychology: Global Perspectives on Research and Practice*. Vol 3. John Wiley & Sons; 2014:150-164.
48. National Academy of Medicine. *Taking action against clinician burnout: a systems approach to professional well-being. Consensus study report*. National Academy of Medicine. Published 2019. Accessed April 30, 2020. [www.nam.edu/clinicianwellbeingstudy](http://www.nam.edu/clinicianwellbeingstudy)
49. American Association of Critical-Care Nurses. AACN standards for establishing healthy work environments: a journey to excellence. *Am J Crit Care*. 2005;14(3):187-197. doi.org/10.4037/ajcc2005.14.3.187
50. Ulrich BT, Lavandero R, Woods D, Early S. Critical care nurse work environments 2013: a status report. *Crit Care Nurse*. 2014;34(4):64-79. doi:10.4037/ccn2014731
51. Ulrich B, Barden C, Cassidy L, Varn-Davis N. Critical care nurse work environments 2018: findings and implications. *Crit Care Nurse*. 2019;39(2):67-84. doi:10.4037/ccn2019605
52. National Academy of Medicine. *Collaborative on clinician well-being and resilience*. Published 2017. Accessed August 10, 2020. <https://nam.edu/action-collaborative-on-clinician-well-being>
53. Privitera MR. Organizational contributions to healthcare worker (HCW) burnout and workplace violence (WPV) overlap: Is this an opportunity to sustain prevention of both? *Health*. 2016;8:531-537. doi:10.4236/health.2016.86056
54. Carter K, Hawkins A. Joy at work: creating a culture of resilience. *Nurs Manage*. 2019;50(12):34-42. doi:10.1097/01.NUMA.0000605156.88187.77
55. Berwick DM, Nolan TW, Whittington J. The triple aim: care, health, and cost. *Health Aff (Millwood)*. 2008;27(3):759-769. doi:10.1377/hlthaff.27.3.759
56. Bodenheimer T, Sinsky C. From triple to quadruple aim: caring for the patient requires care of the provider. *Ann Fam Med*. 2014;12(6):573-576. doi:10.1370/afm.1713
57. Boyle DK, Baernholdt M, Adams JM, et al. Improve nurses' well-being and joy in work: implementing true interprofessional teams and address electronic health record usability issues. *Nurs Outlook*. 2019;67(6):791-797. doi:10.1016/j.outlook.2019.10.002
58. The Joint Commission. Quick safety 50: developing resilience to combat nurse burnout. Published July 15, 2019. Accessed April 30, 2020. [www.jointcommission.org/search/#q=developing%20resilience%20to%20combat%20nurse%20burnout](http://www.jointcommission.org/search/#q=developing%20resilience%20to%20combat%20nurse%20burnout)
59. Rushton CH. *Moral Resilience: Transforming Moral Suffering in Healthcare*. Oxford University Press; 2018.
60. Rushton CH, Batcheller J, Schroeder K, Donohue P. Burnout and resilience among nurses practicing in high-intensity settings. *Am J Crit Care*. 2015;24(5):412-420. doi:10.4037/ajcc2015291
61. Kleinpell R, Moss M, Good VS, Gozal D, Sessler CN. The critical nature of addressing burnout prevention: results from the critical care societies collaborative's national summit and survey on prevention and management of burnout in the ICU. *Crit Care Med*. 2020;48(2):249-253. doi:10.1097/CCM.0000000000003964
62. Neumann JL, Mau LW, Virani S, et al. Burnout, moral distress, work-life balance and career satisfaction among hematopoietic cell transplantation professionals. *J Biol Blood Marrow Transplant*. 2018;24(4):849-860. doi:10.1016/j.bbmt.2017.11.015
63. Mukherjee S, Beresford B, Tenant A. Staff burnout in pediatric oncology: new tools to facilitate the development and evaluation of effective interventions. *Eur J Cancer Care (Engl)*. 2014;23(4):450-461. doi:10.1111/ecc.12176
64. Henry BJ. Nursing burnout interventions: what is being done? *Clin J Oncol Nurs*. 2014;18(2):211-214. doi:10.1188/14.CJON.211-214
65. Kravits K, McAllister-Black R, Grant M, Kirk C. Self-care strategies for nurses: a psycho-educational intervention for stress reduction and the prevention of burnout. *App Nurs Res*. 2010;23(3):130-138. doi:10.1016/j.apnr.2008.08.002
66. Couser G, Chesak S, Cutshall S. Developing a course to promote self-care for nurses to address burnout. *Online J Issues Nurs*. 2020;25(3). doi:10.3912/OJIN.Vol25No03PPT55
67. Magtiday DL, Chesak SS, Coughlin K, Sood A. Decreasing stress and burnout in nurses: efficacy of a blended learning with stress management and resilience training program. *J Nurs Adm*. 2017;47(7-8):391-395. doi:10.1097/NNA.0000000000000501
68. LeNoble CA, Pegram R, Shuffler ML, Fuqua T, Wiper DW 3rd. To address burnout in oncology, we must look to teams: reflections on an organizational science approach. *JCO Oncol Pract*. 2020;16(4):e377-e383. doi: 10.1200/jop.19.00631
69. Hellyar M, Madani C, Yeaman S, O'Connor K, Kerr KM, Davidson JE. Case study investigation decreases burnout while improving interprofessional teamwork, nurse satisfaction, and patient safety. *Crit Care Nurs Q*. 2019;42(1):96-105. doi:10.1097/CNQ.0000000000000243
70. Adams A, Hollingsworth A, Osman A. The implementation of a cultural change toolkit to reduce nursing burnout and mitigate nurse turnover in the emergency department. *J Emerg Nurs*. 2019;45(4):452-456. doi: 10.1016/j.jen.2019.03.004
71. Henderson J. The effect of hardiness education on hardiness and burnout in registered nurses. *Nurs Econ*. 2015;33(4):204-209.
72. Wei H, Kifner H, Dawes ME, Wei TL, Boyd JM. Self-care strategies to combat burnout among pediatric critical care nurses and physicians. *Crit Care Nurse*. 2020;40(2):44-53. doi.org/10.4037/ccn2020621
73. Cheung EO, Hernandez A, Herold E, Moskowitz JT. Positive emotion skills intervention to address burnout in critical care nurses. *AACN Adv Crit Care*. 2020;31(2):167-178. doi.org/10.4037/aacnacc2020287
74. Potter P, Deshields T, Rodriguez S. Developing a systemic program for compassion fatigue. *Nurs Admin Q*. 2013;37(4):326-332. doi:10.1097/NAQ.0b013e3182a2f9dd
75. Potter P, Deshields T, Berger JA, Clarke M, Olsen S, Chen L. Evaluation of a compassion fatigue resiliency program for oncology nurses. *Oncol Nurs Forum*. 2013;40(2):180-187. doi:10.1188/13.ONF.180-187
76. Jakel P, Kenney J, Ludan N, Miller PS, McNair N, Matesic E. Effects of the use of the provider resilience mobile application in reducing compassion fatigue in oncology nursing. *Clin J Oncol Nurs*. 2016;20(6):611-616. doi:10.1188/16.CJON.611-616
77. Romano J, Trotta R, Rich VL. Combating compassion fatigue: an exemplar of an approach to nursing renewal. *Nurs Admin Q*. 2013;37(4):333-336. doi:10.1097/NAQ.0b013e3182a2f9ff
78. Zajac LM, Moran KJ, Groh CJ. Confronting compassion fatigue: assessment and intervention in inpatient oncology. *Clin J Oncol Nurs*. 2017;21(4):446-453. doi:10.1188/17.CJON.446-453
79. Yilmaz G, Ustun B, Gunusen NP. Effect of a nurse-led intervention programme on professional quality of life and post-traumatic growth in oncology nurses. *Int J Nurs Pract*. 2018;24(6):e12687. doi:10.1111/ijn.12687



80. Aycock N, Boyle D. Interventions to manage compassion fatigue in oncology nursing. *Clin J Oncol Nurs*. 2009;13(2):183-191. doi:10.1188/09.CJON.183-191
81. Flarity K, Nash K, Jones W, Steinbruner D. Intervening to improve compassion fatigue resiliency in forensic nurses. *Adv Emerg Nurs J*. 2016;38(2):147-156. doi:10.1097/TME.000000000000101
82. Pfaff KA, Freeman-Gibb L, Patrick LJ, DiBiase R, Moretti O. Reducing the 'cost of caring' in cancer care: evaluation of a pilot interprofessional compassion fatigue resiliency programme. *J Interprof Care*. 2017;31(4):512-519. doi:10.1080/13561820.2017.1309364
83. Wentzel D, Brysiewicz P. Integrative review of facility interventions to manage compassion fatigue in oncology nurses. *Oncol Nurs Forum*. 2017;44(3):E124-E140. doi:10.1188/17.ONF.E124-E140
84. Hodge L, Lockwood S. Meaningfulness, appropriateness, and effectiveness of structured interventions by nurse leaders to decrease compassion fatigue in healthcare providers to be applied in acute care oncology settings: a systematic protocol. *JBI Database Sys Rev Implem Rep*. 2013;11(12):81-93. doi:10.11124/jbisir-2013-1027
85. Reiser VL, Gonzalez JFZ. Confronting compassion fatigue in oncology nurses. *Nursing*. 2020;50(5):54-60. doi: 10.1097/01.NURSE.0000659332.20270.6c
86. Fleming K, Mazzata GR, Matarese K, Eberle J. Compassion fatigue and the ART model. *Nursing*. 2020;50(3):58-61. doi:10.1097/01.NURSE.0000654168.38494.dd
87. Mandrell B, Sullivan C. Self-care for oncology nurses: Much more than a luxury [Conference presentation]. ONS Bridge Conference. September 10, 2020. <https://ons.confex.com/ons/bridge20/meetingapp.cgi/Session/3819>
88. Sullivan CE, King AR, Holdiness J, et al. Reducing compassion fatigue in inpatient pediatric oncology nurses. *Oncol Nurs Forum*. 2019;46(3):338-347. doi:10.1188/19.ONF.338-347
89. Zavotsky KE, Chan GK. Exploring the relationship among moral distress, coping, and the practice environment in emergency department nurses. *Adv Emerg Nurs J*. 2016;38(2):133-146. doi:10.1097/TME.000000000000100
90. Lazzarin M, Biondi A, DiMauro S. Moral distress in nurses in oncology and hematology units. *Nurs Ethics*. 2012;19(2):183-195. doi:10.1177/0969733011416840
91. Pavlish C, Brown-Saltzman K, Jakel P, Fine A. The nature of ethical conflicts and the meaning of moral community in oncology practice. *Oncol Nurs Forum*. 2014;41(2):130-140. doi:10.1188/14.ONF.130-140
92. Rushton CH. Creating a culture of ethical practice in health care delivery systems. *Hastings Cent Rep*. 2016;46(suppl 1):S28-S31. doi:10.1002/hast.628
93. Saechao N, Anderson A, Connor B. In our unit: ICU interventions for moral distress and compassion fatigue. *Nurs*. 2017;12(1):5-8.
94. Rogers S, Babgi A, Gomez C. Educational interventions in end-of-life care: part I—an educational intervention responding to the moral distress of NICU nurses provided by an ethics consultation team. *Adv Neonatal Care*. 2008;8(1):56-65. doi:10.1097/01.ANC.0000311017.02005.20
95. Vavilavik EA, Staffileno BA, Carlson E. Moral distress: using mindfulness-based stress reduction interventions to decrease nurse perceptions of distress. *Clin J Oncol Nurs*. 2018;22(3):326-332.
96. Eagle S, Creel A, Alexandrov A. The effect of facilitated peer support sessions on burnout and grief management among health care providers in pediatric intensive care units: a pilot study. *J Palliat Med*. 2012;5(11):1178-1180. doi:10.1089/jpm.2012.0231
97. Graham P, Zerbi G, Norcross W, Montrose-Thomas L, Lobbestael L, Davidson J. Testing of a caregiver support team. *Explore (NY)*. 2019;15(1):19-26. doi.org/10.1016/j.explore.2018.07.004
98. Morales CL, Brown MM. Creating a care for the caregiver program in a ten-hospital health system. *Crit Care Nurs Clin North Am*. 2019;31(4):461-473.
99. Edmonds C, Lockwood GM, Bezjak A, Nyhof-Young J. Alleviating emotional exhaustion in oncology nurses: an evaluation of Wellspring's "Care for the Professional Caregiver Program". *J Cancer Educ*. 2012;27(1):27-36. doi:10.1007/s13187-011-0278-z
100. Copeland D. Brief workplace interventions addressing burn-out, compassion fatigue, and teamwork: a pilot study. *West J Nurs Res*. 2020;193945920938048 [Epub ahead of print]. doi: 10.1177/0193945920938048
101. Wahl C, Hultquist TB, Struwe L, Moore J. Implementing a peer support network to promote compassion without fatigue. *J Nurs Adm*. 2018;48(12):615-621. doi:10.1097/NNA.0000000000000691
102. Chang A, Kicis J, Sanga G. Effect of the clinical support nurse role on work-related stress for nurses on an in-patient pediatric oncology unit. *J Pediatr Oncol Nurs*. 2007;24(6):340-349. doi:10.1177/1043454207308065
103. Macpherson CF. Peer-supported story telling for grieving pediatric oncology nurses. *J Pediatr Oncol Nurs*. 2008;25(3):148-163. doi:10.1177/1043454208317236
104. Francis A, Bulman C. In what ways might clinical supervision affect the development of resilience in hospice nurses? *Int J Palliat Nurs*. 2019;25(8):387-396. doi:10.129668/ijpn.2019.25.8.387
105. Kelly LA, Baker ME, Horton KL. Code compassion: a caring fatigue reduction intervention. *Nurs Manage*. 2017;48(5):18-22. doi:10.1097/01.NUMA.0000515800.02592.d4
106. Stone RSB. Code lavender: a tool for staff support. *Nursing*. 2018;48(4):15-17. doi: 10.1097/01.NURSE.0000531022.93707.08
107. Davidson JE, Graham P, Montrose-Thomas L, Norcross W, Zerbi G. Code lavender: cultivating intentional acts of kindness in response to stressful work situations. *Explore (NY)*. 2017;13(3):181-185. doi:10.1016/j.explore.2017.02.005
108. Everly GS Jr, Lating JM, Sherman MF, Goncher I. The potential efficacy of psychological first aid on self-reported anxiety and mood: a pilot study. *J Nerv Ment Dis*. 2016;204(3):233-235. doi:10.1097/NMD.0000000000000429
109. Shultz JM, Forbes D. Psychological first aid: rapid proliferation and the search for evidence. *Disaster Health*. 2014;2(1):3-12. doi: 10.4161/dish.26006
110. Freedman S, Shalev A. Immediate psychological reactions in the emergency department following exposure to potentially traumatic events. *Int J Emerg Ment Health*. 2016;18(2):742-744. doi:10.4172/1522-4821.1000323
111. Bartels JB. The pause. *Crit Care Nurse*. 2014;34(1):74-75. doi: 10.4037/ccn2014962
112. Mason TM, Warnke J. Finding meaning after a patient's death. *Am Nurse Today*. 2017;12(9):66-68.
113. Boyle DA. Nursing care at the end of life: optimizing care of the family in the hospital setting. *Clin J Oncol Nurs*. 2019;23(1):13-17. doi:10.1188/19.CJON.13-17
114. Neville TH, Clarke F, Takaoka A, et al. Keepsakes at the end of life. *J Pain Symptom Manage*. 2020;60(5):941-947. doi: 10.1016/j.jpainsymman.2020.06.011
115. Castle J, Phillips WL. Grief rituals: aspects that facilitate adjustment to bereavement. *J Loss Trauma*. 2003;8(1):41-71. doi:10.1080/15325020305876
116. Rodgers D, Calmes B, Grotts J. Nursing care at the time of death: a bathing and honoring practice. *Oncol Nurs Forum*. 2016;43(3):363-371. doi:10.1188/16.ONF.363-371
117. Whitmer M, Hurst S, Stadler K, Ide R. Caring in the curing environment: the implementation of a grieving cart in the ICU. *J Hosp Palliat Nurs*. 2007;9(6):329-333.
118. Takaoka A, Vanstone M, Neville TH, et al. Family and clinician experiences of sympathy cards in the 3 wishes project. *Am J Crit Care*. 2020;29(6):422-428. doi.org/10.4037/ajcc2020733
119. Wittenberg-Lyles E, Goldsmith J, Reno J. Perceived benefits and challenges of an oncology nurse support group. *Clin J Oncol Nurs*. 2014;18(4):E71-E76. doi:10.1188/14.CJON.E71-E76

120. Fessick S. The use of a staff retreat with a grief counselor for in-patient medical oncology nurses to assist with bereavement and coping. *Oncol Nurs Forum*. 2011;34(2):529.
121. Altounji D, Morgan H, Grover M, Daldumyan S, Secola R. A self-care retreat for pediatric hematology nurses. *J Pediatr Oncol Nurs*. 2013;30(1):18-23. doi:10.1177/1043454212461951
122. Kuglin-Jones A. Oncology nurse retreat: a strength-based approach to self-care and personal resilience. *Clin J Oncol Nurs*. 2017;21(2):259-262. doi:10.1188/17.CJON.259-262
123. Mt. Sinai recharge room helps calm frontline staff fighting COVID. YouTube.com. Published April 15, 2020. Accessed December 17, 2020. <https://lnkd.in/gtYVbmv>
124. Salmela L, Woehrle T, Marleau E, Kitch L. Implementation of a "Serenity Room": Promoting resiliency in the ED. *Nursing*. 2020; 50(10):58-63. doi: 10.1097/01.NURSE.0000697160.77297.06
125. Cordoza M, Ulrich RS, Manulik BJ, et al. Impact of nurses taking daily work breaks in a hospital garden on burnout. *Am J Crit Care*. 2018;27(6):508-512. doi.org/10.4037/ajcc2018131
126. Van Horne S, Downing V, Farley H. Supporting well-being through the implementation of education and a relaxing retreat space. *J Nurs Adm*. 2020;50(12):655-662. doi:10.1097/NNA.0000000000000955
127. Dietz D. Debriefing to help perinatal nurses cope with a maternal loss. *MCN Am J Matern Child Nurs*. 2009;34(4):243-248. doi:10.1097/01.NMC.0000357917.41100.c5
128. Keene EA, Hutton N, Hall B, Rushton C. Bereavement debriefing sessions: an intervention to support health care professionals in managing their grief after the death of a patient. *Pediatr Nurs*. 2010;36(4):185-190; quiz 190.
129. Huggard J. Debriefing: a valuable component of staff support. *Int J Palliat Nurs*. 2013;19(5):212-214. doi:10.12968/ijpn.2013.19.5.212
130. Schmidt M, Haglund K. Debrief in emergency departments to improve compassion fatigue and promote resiliency. *J Trauma Nurs*. 2017;24(5):317-322. doi:10.1097/JTN.0000000000000315
131. Bateman ME, Hammer R, Byrne A, et al. Death cafés for prevention of burnout in intensive care unit employees: study protocol for a randomized controlled trial (STOPTHEBURN). *Trials*. 2020;21(1):1019. doi:10.1186/s13063-020-04929-4
132. Anderson E, Sandars J, Kinnair D. The nature and benefits of team-based reflection on a patient death by healthcare professionals: a scoping review. *J Interprof Care*. 2019;33(1):15-25. doi.org/10.1080/13561820.2018.1513462
133. Appleton KP, Nelson S, Wedlund S. Distress debriefings after critical incidents: a pilot project. *AACN Adv Crit Care*. 2018;29(2):213-220. doi.org/10.4037/aacnacc2018799
134. Osta AD, King MA, Serwint JR, Bostwick SB. Implementing emotional debriefing in pediatric clinical education. *Acad Pediatr*. 2019;19(3):278-282. doi.org/10.1016/j.acap.2018.10.003
135. Pallas J. The acute incident response program: a framework guiding multidisciplinary responses to acutely traumatic or stress-inducing incidents in the ED setting. *J Emerg Nurs*. 2020;46(5):579-589.e1. doi.org/10.1016/j.jen.2020.05.016
136. Deppoliti DI, Côté-Arsenault D, Myers G, Barry J, Randolph C, Tanner B. Evaluating Schwartz Center Rounds in an urban hospital center. *J Health Organ Manag*. 2015;29(7):973-987. doi:10.1108/JHOM-09-2013-0189
137. Taylor C, Xyrichis A, Learny MC, Reynolds E, Maben J. Can Schwartz Center Rounds support healthcare staff with emotional challenges at work, and how do they compare with other interventions aimed at providing similar support? A systematic review and scoping review. *BMJ Open*. 2018;8(10):e024254. doi:10.1136/bmjopen-2018-024254
138. Leamy M, Reynolds E, Robert G, Taylor C, Maben J. The origins and implementation of an intervention to support healthcare staff to deliver compassionate care: exploring fidelity and adaptation in the transfer of Schwartz Center Rounds from the United States to the United Kingdom. *BMC Health Serv Res*. 2019;19(1):457. doi:10.1186/s12913-019-4311-y
139. Farr M, Barker R. Can staff be supported to deliver compassionate care through implementing Schwartz Rounds in community and mental health services? *Qual Health Res*. 2017;27(11):1652-1663. doi:10.1177/1049732317702101
140. Thompson A. How Schwartz Rounds can be used to combat compassion fatigue. *Nurs Manag (Harrow)*. 2013;20(4):16-20. doi:10.7748/nm2013.07.20.4.16.e1102
141. Maben J, Taylor C, Dawson J, et al. *A Realist Informed Mixed-Methods Evaluation of Schwartz Center Rounds® in England*. NIHR Journals Library; 2018.
142. Miller A, Marshall J, Edmonson C, Kobilansky BJ, Cross E. Stress mitigation strategies for trauma nurses: a case study. *J Trauma Nurs*. 2019;26(3):147-153. doi:10.1097/JTN
143. Lefton C. Strengthening the workforce through meaningful recognition. *Nurs Econ*. 2012;30(6):331-338, 355.
144. Longo J. Nurses caring for nurses. *Holist Nurs Pract*. 2011;25(1):8-16. doi:10.1097/HNP.0b013e3181fe2627
145. Hudnall JA, Kopecky KE. The empathy project: a skills development game—innovations in empathy development. *J Pain Symptom Manage*. 2020;60(1):164-169.e3. doi:10.1016/j.jpainsymman.2020.02.008
146. McManus K, Robinson PS. A thematic analysis of the effects of compassion rounds on clinicians and the families of NICU patients. *J Health Care Chaplain*. 2020:1-12 [Epub ahead of print]. doi:10.1080/08854726.2020.1745489
147. Meadors P, Lamson A. Compassion fatigue and secondary traumatization: provider self-care on intensive care units for children. *J Pediatr Health Care*. 2008;22(1):24-34. doi:10.1016/j.pedhc.2007.01.006
148. Udo C, Danielson E, Henoch I, Melin-Johansson C. Surgical nurses' work-related stress when caring for severely ill and dying patients with cancer after participating in an educational intervention on existential issues. *Eur J Oncol Nurs*. 2013;17(5):546-553. doi:10.1016/j.ejon.2013.02.002
149. Anderson WG, Puntillo K, Cimino J, et al. IMPACT-ICU: multicenter implementation of a palliative care professional development program for bedside critical care nurses. *Am J Crit Care*. 2017;26(5):361-371. doi:10.4037/ajcc2017336
150. Boyle DA, Barbour S, Anderson W, et al. Enhancing palliative care communication in the ICU: special implications for an oncology-critical care nursing partnership. *Semin Oncol Nurs*. 2017;33(5):544-554. doi:10.1016/j.soncn.2017.10.003
151. Pehrson C, Banerjee SC, Manna R, et al. Responding empathically to patients: development, implementation, and evaluation of a communication skills training module for oncology nurses. *Patient Educ Couns*. 2016;99(4):610-616. doi:10.1016/j.pec.2015.11.021
152. El Khamali R, Mouaci A, Valera S, et al. Effects of a multimodal program including simulation on job strain among nurses working in intensive care units: a randomized clinical trial. *JAMA*. 2018;320(19):1988-1997. doi:10.1001/jama.2018.14284
153. Oncology Nursing Society. Nursing self-care learning library. Published 2020. Accessed August 11, 2020. [www.ons.org/learning-libraries/self-care-nurses](http://www.ons.org/learning-libraries/self-care-nurses)
154. Luquette JS. The role of on-site counseling in nurse retention. *Oncol Nurs Forum*. 2005;32(2):234. doi:10.1188/05.ONF.234-236
155. Delaney KR, Naegle MA, Valentine NM, Antai-Otong D, Groh CJ, Brennaman L. The effective use of psychiatric mental health nurses in integrated care: policy implications for increasing quality and access to care. *J Behav Health Serv Res*. 2018;45(2):300-309. doi:10.1007/s11414-017-9555-x
156. Carey LB, Hodgson TJ, Krikheli L, et al. Moral injury, spiritual care and the role of chaplains: an exploratory scoping review of literature and resources. *J Relig Health*. 2016;55(4):1218-1245. doi:10.1007/s10943-016-0231-x



157. Roze des Ordons AL, Stelfox HT, Sinuff T, Grinrod-Millar K, Sinclair S. Exploring spiritual health practitioners roles and activities in critical care contexts. *J Health Care Chaplain*. 2020;11:1-22. doi:10.1080/08854726.2020.1734371
158. Hughes B, Whitmer M, Hurst S. Innovative solutions: a plurality of vision—integrating the chaplain into the critical care unit. *Dimens Crit Care Nurs*. 2007;26(3):91-95. doi:10.1097/01.DCC.0000267801.62949.6d
159. Taylor JJ, Hodgson JL, Kolobova I, Lamson AL, Sira N, Musick D. Exploring the phenomenon of spiritual care between hospital chaplains and hospital based healthcare providers. *J Health Care Chaplain*. 2015;21(3):91-107. doi:10.1080/08854726.2015.1015302
160. Salzano AT, Lindemann E, Tronsky LN. The effectiveness of a collaborative art-making task on reducing stress in hospice caregivers. *Art Psychother*. 2013;40:45-52. doi.org/10.1016/j.aip.2012.09.008
161. Potash JS, Hy Ho A, Chan F, Lu Wang X, Cheng C. Can art therapy reduce death anxiety and burnout in end-of-life care workers? a quasi-experimental study. *Int J Palliat Nurs*. 2014;20(5):233-240. doi:10.12968/ijpn.2014.20.5.233
162. Repar PA, Patton D. Stress reduction for nurses through arts-in-medicine at the University of New Mexico hospitals. *Holist Nurs Pract*. 2007;21(4):182-186. doi:10.1097/01.HNP.0000280929.68259.5c
163. Kaimal G, Carroll-Haskins K, Mensinger JL, Dieterich-Hartwell RM, Manders E, Levin WP. Outcomes of art therapy and coloring for professional and informal caregivers of patients in a radiation oncology unit: a mixed methods pilot study. *Eur J Oncol Nurs*. 2019;42:153-161. doi:10.1016/j.ejon.2019.08.006
164. Reed K, Cochran KL, Edelblute A, et al. Creative arts therapy as a potential burnout and build resilience in health care professionals. *AACN Adv Crit Care*. 2020;31(2):179-190. doi.org/10.4037/aac-nacc2020619
165. Parks-Stamm EJ, Ferrell EM. Artist impact: effects of live art on patients and staff in an out-patient chemotherapy treatment environment. *Clin N Oncol Nurs*. 2019;23(1):92-96. doi:10.1188/19.CJON.92-96
166. Italia S, Favara-Scacco C, DiCataldo A, Russo G. Evaluation and art therapy treatment of the burnout syndrome in oncology units. *Psychooncology*. 2008;17(7):676-680. doi:10.1002/pon.1293
167. Griffith JM, Hasley JP, Liu H, Severn DG, Conner LH, Adler LE. Qigong stress reduction in hospital staff. *J Altern Complement Med*. 2008;14(8):939-945. doi:10.1089/acm.2007.0814
168. Dimitroff LJ, Sliwoski L, O'Brien S, Nichols LW. Change your life through journaling: the benefits of journaling for registered nurses. *J Nurs Educ Pract*. 2017;7(2):90-98.
169. Raterink G. Reflective journaling for critical thinking development in advance practice registered nurse students. *J Nurs Educ*. 2016;55(2):101-104. doi:10.3928/01484834-20160114-08
170. Zori S. Teaching critical thinking using reflective journaling in a nursing fellowship program. *J Contin Educ Nurs*. 2016;47(7):321-329. doi:10.3928/00220124-20160616-09
171. Morgan N. Writing for good health: expressive writing can be a coping tool for nurses. *Am Nurs Today*. 2014;9(7):22-23.
172. Saeedi S, Jouybari L, Sanagoo A, Ali Vakili MA. The effectiveness of narrative writing on the moral distress of intensive care nurses. *Nurs Ethics*. 2019;26(7-8):2195-2202. doi:10.1177/0969733018806342
173. Sexton JD, Pennebaker J, Holzmueller CG, et al. Care for the caregiver: benefits of expressive writing for nurses in the United States. *Prog Palliat Care*. 2009;17(6):307-312. doi: 10.1179/096992609X12455871937620
174. Markwell P, Polivka BJ, Morris K, Ryan C, Taylor A. Snack and Relax®: a strategy to address nurses' professional quality of life. *J Holist Nurs*. 2016;34(1):80-90. doi:10.1177/0898010115577977
175. Hand M, Margolis J, Staffileno BA. Massage chair sessions: favorable effects on ambulatory cancer center nurses' perceived level of stress, blood pressure, and heart rate. *Clin J Oncol Nurs*. 2019;23(4):375-381. doi:10.1188/19.CJON.375-381
176. American Nurses Association. Restoration rooms: a safe place for nurses to recharge. *Amer Nurs Today*. 2019;14(6):19.
177. Veiga G, Rodrigues AD, Lamy E, Guiose M, Pereira C, Marmeleira J. The effects of a relaxation intervention on nurses' psychological and physiological stress indicators: a pilot study. *Complement Ther Clin Pract*. 2019;35:265-271. doi.org/10.1016/j.ctcp.2019.03.008
178. Alexander G, Rollins K, Walker D, Wong L, Pennings J. Yoga for self care and burnout prevention among nurses. *Workplace Health Saf*. 2015;63(10):462-470; quiz 471. doi.org.10.1177/2165079915596102
179. Zhang XJ, Song Y, Jiang T, Ding N, Shi TY. Interventions to reduce burnout of physicians and nurses: an overview of systematic reviews and meta-analyses. *Medicine (Baltimore)*. 2020;99(26):e20992. doi:10.1097/MD.00000000000020992
180. Moody K, Kramer D, Santizo RO, et al. Helping the helpers: mindfulness training for burnout in pediatric oncology—a pilot program. *J Pediatr Oncol Nurs*. 2013;30(5):275-284. doi:10.1177/1043454213504497
181. Bianchini C, Copeland D. The use of mindfulness-based interventions to mitigate stress and burnout in nurses. *J Nurs Prof Devel*. 2020. doi:10.1097/NND.0000000000000708
182. Hevezi JA. Evaluation of a meditation intervention to reduce the effects of stressors associated with compassion fatigue among nurses. *J Holist Nurs*. 2016;34(4):343-350. doi:10.1177/0898010115615981
183. Botha E, Gwin T, Purpora C. The effectiveness of mindfulness-based programs in reducing stress experienced by nurses in adult hospital settings: a systematic review of a quantitative evidence protocol. *JBI Database System Rev Implement Rep*. 2015;13(10):21-29. doi:10.11124/jbisir-2015-2380
184. Duarte J, Pinto-Gouveia J. Effectiveness of a mindfulness-based intervention on oncology nurses' burnout and compassion fatigue symptoms: a non-randomized study. *Int J Nurs Stud*. 2016;64:98-107. doi:10.1016/j.ijnurstu.2016.10.002
185. Orellana-Rios CL, Radbruch L, Kern M, et al. Mindfulness and compassion-oriented practices at work reduce distress and enhance self-care of palliative care teams: a mixed-method evaluation of an "on the job" program. *BMC Palliat Care*. 2017;17(1):3. doi:10.1186/s12904-017-0219-7
186. Guillaumie L, Boiral O, Champagne J. A mixed-methods systematic review of the effects of mindfulness on nurses. *J Adv Nurs*. 2017;73(5):1017-1034. doi:10.1111/jan.13176
187. Condon P, Desbordes G, Miller WB, DeSteno D. Meditation increases compassionate responses to suffering. *Psychol Sci*. 2013;24(10):2125-2127. doi:10.1177/0956797613485603
188. De Cieri H, Shea T, Cooper B, Oldenburg B. Effects of work-related stressors and mindfulness on mental and physical health among Australian nurses and healthcare workers. *J Nurs Scholarsh*. 2019;51(5):580-589. doi:10.1111/jnu.12502
189. Freedenberg VA, Jiang J, Cheatham CA, et al. Mindful mentors: is a longitudinal mind-body skills training pilot program feasible for pediatric cardiology staff? *Glob Adv Health Med*. 2020;9:2164956120959272. doi:10.1177/2164956120959272
190. Suleiman-Martos N, Gomez-Urquiza JL, Aguayo-Estremera R, Canadas-De La Fuentes GA, De La Fuentes-Solana EI, Albendin-Garcia L. The effect of mindfulness training on burnout syndrome in nursing: a systematic review and meta-analysis. *J Adv Nurs*. 2020;76(5):1124-1140. doi:10.1111/jan.14318
191. Belton S. Caring for the caregivers: making the case for mindfulness-based wellness programming to support nurses and prevent staff turnover. *Nurs Economics*. 2018;36(4):191-194.
192. Montanari KM, Bowe CL, Chesak SS, Cutshall SM. Mindfulness: assessing the feasibility of a pilot intervention to reduce stress and burnout. *J Holist Nurs*. 2019;37(2):175-188.
193. Steinberg BA, Klatt M, Duchemin AM. Feasibility of a mindfulness-based intervention for surgical intensive care unit personnel. *Am J Crit Care*. 2016;26(1):10-18. doi:10.4037/ajcc2017444

194. Chiappetta M, D'Egidio V, Sestili C, Cocchiara A, LaTorre G. Stress management interventions among healthcare workers using mindfulness: a systematic review. *Senses Sci.* 2018;5(2):517-549. doi:10.14616/sands-2018-5-517549
195. Smith SA. Mindfulness-based stress reduction: an intervention to enhance the effectiveness of nurses' coping with work-related stress. *Int J Nurs Knowl.* 2014;25(2):119-130.
196. Hilliard RE. The effect of music therapy sessions on compassion fatigue and team building of professional hospice caregivers. *Art Psychother.* 2006;33(5):395-401. doi.org/10.1016/j.aip.2006.06.002
197. Phillips CS, Volker DL, Davidson KL, Becker H. Storytelling through music: a multidisciplinary expressive arts intervention to improve emotional well-being of oncology nurses. *JCO Oncol Pract.* 2020;16(4):e405-e414. doi:10.1200/JOP.19.00748
198. Wlodarczyk N. The effect of group music intervention for grief resolution on disenfranchised grief of hospice workers. *Prog Palliat Care.* 2013;21(2):97-106. doi:10.1179/1743291X13Y.0000000051
199. Phillips CS, Becker H. Systematic review: expressive arts interventions to address psychosocial stress in healthcare workers. *J Adv Nurs.* 2019;75(11):2285-2298. doi:10.1111/jan.14043
200. Cuneo CL, Cooper MRC, Drew CS, et al. The effect of Reiki on work-related stress of the registered nurse. *J Holist Nurs.* 2011;29(1):33-43. doi:10.1177/0898010110377294
201. Vitale A. Nurses' lived experience of Reiki for self-care. *Holist Nurs Pract.* 2009;23(3):129-141, 142-145; quiz 146-147. doi:10.1097/01.HNP.0000351369.99166.75
202. Turner J, Kelly B, Girgis A. Supporting oncology health professionals: a review. *Psycho-Oncologie.* 2011;5:77-82. https://doi.org/10.1007/s11839-011-0320-8
203. Thorpe K, Barsky J. Healing through self-reflection. *J Adv Nurs.* 2001;35(5):760-768. doi:10.1046/j.1365-2648.2001.01908.x
204. Bagay JM. Self-reflection in nursing. *J Prof Nurs.* 2012;28(2):130-131. doi:10.1016/j.profnurs.2011.12.001
205. Henry LG, Henry JD. *The Soul of the Caring Nurse.* American Nurses Association; 2004.
206. Heffernan M, Quinn-Griffin MT, McNulty SR, Fitzpatrick JJ. Self-compassion and emotional intelligence in nurses. *Int J Nurs Pract.* 2010;16(4):366-373. doi:10.1111/j.1440-172X.2010.01853.x
207. Mills J, Want T, Fraser JA. On self-compassion and self-care in nursing: selfish or essential for compassionate care? *Int J Nurs Stud.* 2015;52(4):791-793 doi:10.1016/j.ijnurstu.2014.10.009
208. Andrews H, Tierney S, Seers K. Needing permission: the experience of self-care and self-compassion in nursing: a constructivist grounded theory study. *Int J Nurs Stud.* 2020;101:103436. doi:10.1016/j.ijnurstu.2019.103436
209. Priano SM, Hong OS, Chen JL. Lifestyles and health-related outcomes of U.S. hospital nurses: a systematic review. *Nurs Outlook.* 2018;66(1):66-76. doi:10.1016/j.outlook.2017.08.013
210. Tucker SJ, Weymiller AJ, Cutshall SM, Rhudy LM, Lohse CM. Stress ratings and health promotion practices among RNs: a case for action. *J Nurs Adm.* 2012;42(5):282-292. doi:10.1097/NNA.0b013e318253585f
211. Grabbe L, Higgins MK, Baird M, Craven PA, Fratello SS. The Community Resilience Model® to promote nurse well-being. *Nurs Outlook.* 2020;68(3):324-336.
212. Sampson M, Melnyk BM, Hoying J. The MINDBODYSTRONG intervention for new nurse residents: 6-month effects on mental health outcomes, healthy lifestyle behaviors, and job satisfaction. *Worldviews Evid Based Nurs.* 2020;17(1):16-23.
213. Sampson M, Melnyk BM, Hoying J. Intervention effects of the MINDBODYSTRONG cognitive behavioral skills building program on newly licensed registered nurses' mental health, healthy lifestyle behaviors, and job satisfaction. *J Nurs Adm.* 2019;49(10):487-495. doi:10.1097/NNA.0000000000000792
214. Slater PJ, Edwards RM. Needs analysis and development of a staff well-being program in pediatric oncology, hematology, and palliative care services group. *J Healthc Leadersh.* 2018;10:55-65. doi:10.2147/JHL.S172665
215. Cho H, Han K. Association among nursing work environments and health promoting behaviors of nurses and nursing performance quality: a multilevel modeling approach. *J Nurs Scholarsh.* 2018;50(4):403-410. doi.org/10.1111/jnu.12390
216. Hrabec DP, Melnyk BM, Buck J, Sinnott LT. Effects of the Nurse Athlete Program on the healthy lifestyle behaviors physical health, and mental well-being of new graduate nurses. *Nurs Adm Q.* 2017;41(4):353-359. doi:10.1097/NAQ.0000000000000258
217. Ross A, Bevans M, Brooks AT, Gibbons S, Wallen GR. Nurses and health promoting behaviors: knowledge may not translate into self-care. *AORN J.* 2017;105(3):267-275. doi:10.1016/j.aorn.2016.12.018
218. Hersch RK, Cook RF, Deitz DK, et al. Reducing nurses' stress: a randomized controlled trial of a web-based stress management program for nurses. *Appl Nurs Res.* 2016;32:18-25. doi:10.1016/j.apnr.2016.04.003
219. Delaney C, Barrere C, Robertson S, Zahourek R, Diaz D, Lachapelle L. Pilot testing of the NURSE stress management intervention. *J Holist Nurs.* 2016;34(4):369-389. doi:10.1177/0898010115622295
220. Tsai YC, Liu CH. An eHealth education intervention to promote healthy lifestyles among nurses. *Nurs Outlook.* 2015;63(3):245-254. doi:10.1016/j.outlook.2014.11.005
221. Letvak S. We cannot ignore nurses' health anymore: a synthesis of the literature on evidence-based strategies to improve nurse health. *Nurs Adm Q.* 2013;37(4):295-308. doi:10.1097/NAQ.0b013e3182a2f99a
222. Speroni KG, Williams DA, Seibert DJ, Gibbons MG, Earley C. Helping nurses care for self, family, and patients through the Nurses Living Fit intervention. *Nurs Adm Q.* 2013;37(4):286-294. doi:10.1097/NAQ.0b013e3182a2f97f
223. Zadeh S, Gamba N, Hudson C, Wiener L. Taking care of care providers: a wellness program for pediatric nurses. *J Pediatr Oncol Nurs.* 2012;29(5):294-299. doi:10.1177/1043454212451793
224. Hoolahan SE, Greenhouse PK, Hoffman RL, Lehman LA. Energy capacity model for nurses: the impact of relaxation and restoration. *J Nurs Adm.* 2012;42(2):103-109. doi:10.1097/NNA.0b013e31824337d3
225. Nahm ES, Warren J, Zhu S, An M, Brown J. Nurses' self-care behaviors related to weight and stress. *Nurs Outlook.* 2012;60(5):e23-e31. doi:10.1016/j.outlook.2012.04.005
226. Flannery K, Resnick B, Galik E, Lipscomb J. Physical activity and diet-focused worksite health promotion for direct care workers. *J Nurs Adm.* 2011;41(6):245-247. doi:10.1097/NNA.0b013e31821c464d
227. Boardman L. Building resilience in nursing students: implementation techniques to foster success. *Int J Emerg Ment Health & Hum Resilience.* 2016;18(3):1-5. doi:10.4172/1522-4281.100039
228. Scoloveno R. Measures of resilience and an evaluation of the Resilience Scale (RS). *Int J Emerg Ment Health.* 2017;19(4):380. doi:10.4172/1522-4281.1000380
229. Muir KJ, Keim-Malpass J. The Emergency Resiliency Initiative: a pilot mindfulness intervention program. *J Holist Nurs.* 2020;38(2):205-220.
230. Pehlivan T, Guner P. Effect of a compassion fatigue resilience program on nurses' professional quality of life, perceived stress, resilience: a randomized controlled trial. *J Adv Nurs.* 2020;76(12):3584-3596. doi:10.1111/jan.14568
231. Flanders S, Hampton D, Missi P, Ipsan C, Gruebbe C. Effectiveness of a staff resilience program in a pediatric intensive care unit. *J Pediatr Nurs.* 2020;50:1-4. doi:10.1016/j.pedn.2019.10.007
232. Blackburn LM, Thompson K, Frankenfield R, Harding A, Lindsey A. The THRIVE® program: building oncology nurse resilience through self-care strategies. *Oncol Nurs Forum.* 2020;47(1):E25-E34. doi:10.1188/20.ONF.E25-E34

233. Michael SH, Villarreal PM, Ferguson MF, Wiler JL, Zane RD, Flarity K. Virtual reality-based resilience programs: feasibility and implementation for inpatient oncology nurses. *Clin J Oncol Nurs*. 2019;23(6):664-667. doi:10.1188/19.CJON.664-667
234. van Agteren J, Iasiello M, Lo L. Improving the well-being and resilience of health services staff via psychosocial skills training. *BMC Res Notes*. 2018;11(1):924. doi.org/10.1186/s13104-018-4034-x
235. Mealer M, Hodapp R, Conrad D, Dimidjian S, Rothbaum BO, Moss M. Designing a resilience program for critical care nurses. *AACN Adv Crit Care*. 2017;28(4):359-365. doi:10.4037/aacnacc2017252
236. Lim HA, Tan JYS, Liu J, et al. Strengthening resilience and reducing stress in psychosocial care for nurses practicing in oncology settings. *J Contin Educ Nurs*. 2016;47(1):8-10. doi:10.3928/00220124-20151230-03
237. Mehta DH, Perez GK, Traeger L, et al. Building resilience in a palliative care team: a pilot study. *J Pain Symptom Manage*. 2016;51(3):604-608. doi:10.1016/j.jpainsymman.2015.10.013
238. Potter P, Pion S, Gentry JE. Compassion fatigue resiliency training: the experiences of facilitators. *J Contin Educ Nurs*. 2015;46(2):83-88. doi:10.3928/00220124-20151217-03
239. Weidlich CP, Ugarriza DN. A pilot study examining the impact of care provider support program on resilience, coping, and compassion fatigue in military health care providers. *Mil Med*. 2015;180(3):290-295. doi:10.7205/MILMED-D-14-00216
240. Deible S, Fioravanti M, Tarantino B, Cohen S. Implementation of an integrative coping and resiliency program for nurses. *Glob Adv Health Med*. 2015;4(1):28-33. doi:10.7453/gahmj.2014.057
241. Gillman L, Adams J, Kovac R, Kilcullen A, House A, Doyle C. Strategies to promote coping and resilience in oncology and palliative care nurses caring for adult patients with malignancy: a comprehensive systematic review. *JB I Database System Rev Implement Rep*. 2015;13(5):131-204. doi:10.11124/jbisir-2015-1898
242. Lee KJ, Forbes ML, Lukasiewicz GJ, et al. Promoting staff resilience in the pediatric intensive care unit. *Am J Crit Care*. 2015;24(5):422-430. doi.org/10.4037/ajcc2015720
243. Mealer M, Conrad D, Evans J, et al. Feasibility and acceptability of a resilience training program for intensive care unit nurses. *Am J Crit Care*. 2014;23(6):e97-e105. doi:10.4037/ajcc2014747
244. McDonald G, Jackson D, Wilkes L, Vickers MH. A work-based educational intervention to support the development of personal resilience in nurses and midwives. *Nurse Educ Today*. 2012;32(4):378-384. doi:10.1016/j.nedt.2011.04.012
245. Cochran KL, Moss M, Mealer M. Prevalence of coping strategy training in nursing school curriculae. *Am J Crit Care*. 2020;29(2):104-110. doi:10.4037/ajcc2020287
246. Connor JA, Zinini SI, Porter C, et al. Interprofessional use and validation of the AACN healthy work environment assessment tool. *Am J Crit Care*. 2018;27(5):363-371. doi:10.4037/ajcc2018179
247. Goroll AH. Addressing burnout: focus on systems, not resilience. *JAMA Netw Open*. 2020;3(7):e209514. doi:10.1001/jamanetworkopen.2020.9514
248. Kelly LA, Lefton C. Effect of meaningful recognition on critical care nurses compassion fatigue. *Am J Crit Care*. 2017;26(6):438-444. doi:10.4037/ajcc2017471
249. Ross A, Yang L, Wehrle L, Perez A, Farmer N, Bevans M. Nurses and health promoting self-care: do we practice what we preach? *J Nurs Manag*. 2019;27(3):599-608. doi:10.1111/jonm.12718
250. Dean S, Halpern J, McAllister M, Lazenby M. Nursing education, virtual reality and empathy? *Nurs Open*. 2020;7(6):2056-2059. doi.org/10.1002/nop.2.551
251. Harris D, Haskell J, Cooper E, Crouse N, Gardner R. Estimating the association between burnout and electronic health record-related stress among advanced practice registered nurses. *Appl Nurs Res*. 2018;43:36-41. doi.org/10.1016/j.apnr.2018.06.014
252. Webster NL, Oyeboode JR, Jenkins C, Bicknell S, Smythe A. Using technology to support the emotional and social well-being of nurses: a scoping review. *J Adv Nurs*. 2020;76(1):109-120. doi:10.1111/jan.14232
253. Joyce S, Shand F, Tighe J, et al. Road to resilience: a systematic review and meta-analysis of resilience training programmes and interventions. *BMJ Open*. 2018;8(6):e017858. doi:10.1136/bmjopen-2017-017858
254. Dore C, Duffett-Leger L, McKenna M, Breaux M. Perspectives on burnout and empowerment among hemodialysis nurses and the current burnout intervention trends: a literature review. *CANNT J*. 2017;27(4):16-31.
255. Klein CJ, Weinzimmer LG, Cooling M, Lizer S, Pierce L, Dalstrom M. Exploring burnout and job stressors among advanced practice providers. *Nurs Outlook*. 2020;68(2):145-154. doi.org/10.1016/j.outlook.2019.09.005
256. The Lancet. 2020: Unleashing the full potential of nursing. *Lancet*. 2019;394(10212):1879. doi:10.1016/S0140-6736(19)32794-1
257. McSpedon C. The global year of the nurse and midwife. *Am J Nurs*. 2020;120(1):20-22. doi:10.1097/01.NAJ.0000651992.23965.a5
258. Mills J, Ramachenderan J, Chapman M, Greenland R, Agar M. Prioritising wellbeing and resilience: what COVID-19 is reminding us about self-care and staff support. *Palliat Med*. 2020;34(9):1137-1139. doi:10.1177/0269216320947966
259. Kelly LA, Gee PM, Butler RJ. Impact of nurse burnout on organizational and position turnover. *Nurs Outlook*. 2020;S0029-6554(20):30087-30097. doi:10.1016/j.outlook.2020.06.008
260. Fredericks S, Miranda J, Sidani S, Farooqui MAA. Identifying evidence informed psychological interventions during the COVID-19 pandemic: rapid review of the literature. *Brain Behav Immun Health*. 2020;9:100171. doi.org/10.1016/j.bbih.2020.100171
261. Shen X, Zou X, Zhong X, Yan J, Li L. Psychological stress of ICU nurses in the time of COVID-19. *Crit Care*. 2020;24(1):200. doi.org/10.1186/s13054-020-02926-2
262. Letvak S. Overview and summary: healthy nurses-perspectives on caring for ourselves. *Online J Issues Nurs*. 2014;19(3):1 p preceding 1. doi:10.3912/OJIN.Vol19No03ManOS
263. The Lancet. The status of nursing and midwifery in the world. *Lancet*. 2020;395(10231):1167. doi:10.1016/S0140-6736(20)30821-7