Unsafe and Unsettling: An Integrative Review on Correctional Nursing Work Environments and Stressors

Elizabeth Keller, BSN, RN, Samantha Boch, PhD, RN, and Beverly M. Hittle, PhD, RN

Background: Stress remains a major occupational hazard among nurses. As the United States maintains the largest correctional system in the world, little is understood regarding the occupational stress of correctional nurses and how that stress impacts their overall health and well-being.

Question Addressed: What are the occupational/environmental stressors and professional burnout factors experienced by correctional nurses?

Review Methods: Guided by Whittemore and Knafl's methodology, an integrative review was conducted using online databases of Scopus, CINAHL, NIOSH-tic, and PubMed in July of 2021 for peer-reviewed articles ever published internationally. Key concepts of "correctional health nursing" and "occupational stress" were used in our search.

Review Results: One hundred fifty-two articles were identified. Eleven articles met eligibility criteria and were included in this review. Three key themes emerged: *conflict*, *fear*, and *demands*.

Discussion: *Conflict* arose from ethical and relational issues among coworkers, management, and incarcerated patients. *Fear* stemmed from physical safety concerns and workplace violence, whereas *demands* involved high workloads paired with a lack of organizational support. Findings revealed evidence on the unique occupational environment of correctional nursing professionals that impacted levels of stress and burnout across all types of correctional settings (e.g., jails and prisons).

Implications: Better assessment and consistent evaluation of the health and well-being of correctional nurses and their correctional nursing environments are needed. Additional resources to reduce stress, along with ensuring policies that mitigate ethical challenges, workplace violence, and bullying, may promote professional and safe workspaces.

KEY WORDS:

Correctional nurses; occupational health; occupational stress; well-being

There is a global prison crisis with over 11 million people incarcerated worldwide, living in institutions designed to be punitive (Penal Reform International, 2020). Keeping in mind this global perspective, we focus our interest on the United States with over 2 million adults confined in more than 7,000 correctional-based facilities (Sawyer & Wagner, 2020; The Sentencing Project, 2021). There is also incredible churn of the U.S. correctional system as roughly 10 million persons cycle through local jails and state and federal prisons on any given year (Assistant Secretary for Planning and Evaluation, n.d.). U.S. facilities differ in length of stay for incarcerated persons and vary in management at the local, state, federal, private, and international levels (Binswanger & Elmore, 2021; Brooks, 2019). Persons who are or have been incarcerated in these

environments are substantially more likely to experience higher rates of infectious disease, chronic health conditions, and serious mental illness compared with those who have not been detained (Binswanger & Elmore, 2021; Davis et al., 2018; Penal Reform International, 2020). With such high churn of medically complex individuals in settings not designed to promote well-being and good health, it is no surprise that correctional facilities have been identified as extreme and stressful environments to work in (let alone live in; Castle & Martin, 2006; Penal Reform International, 2020).

Correctional staff often work in low-resourced settings and witness overcrowding, violence, and inhumane treatment of incarcerated persons (Almost et al., 2020; Penal Reform International, 2020; Wright, 2020). The stress from working in corrections remains a significant occupational safety hazard putting employees at risk for emotional or physical harm (The National Institute for Occupational Safety and Health, 2014). The consequences of stress on health and well-being are widely recognized, including poor sleep quality and duration, burnout, anxiety, depression, and the negative impact on job satisfaction, job performance, and the ability to do one's job safely and effectively (Fortes et al., 2020; Zhang et al., 2019).

With numerous safety and health risks common to correctional environments, most occupational research has focused on correctional officers (El Ghaziri et al., 2020). Current research has uncovered an increased risk for suicide and early death related to chronic conditions including hypertension, depression, and obesity in correctional officers (Buden et al., 2016; Obidoa et al., 2011; Violanti, 2017). The psychological toll and hypervigilance related to correctional officer work has also been linked to stress and burnout, increased divorce rates, and substance use issues (El Ghaziri et al., 2020; Ferdik & Smith, 2017). However, little is known about the experiences of correctional nurses and how this environment impacts their overall health and well-being.

Problem Identification

Correctional nurses are the largest group of health professionals in any given correctional environment and include advanced practice nurses, registered nurses, and licensed practical or vocational-type nurses (Almost et al., 2020; Blair et al., 2014). The role of correctional nurses encompasses a broad range of care responsibilities to effectively manage the complex needs of *all patients* detained in only one correctional setting. These responsibilities range from administration, primary care, acute/emergent care, behavioral health management, and other community/population healthcare duties (such as infectious disease control and prevention; Almost et al., 2013, 2020; American Nurses Association, 2021). Because of their unique work environment and the persistent retention issues experienced globally

(Almost et al., 2020; Chafin & Biddle, 2013; Goddard et al., 2019; Wright, 2020), it is necessary to consider the impact of work stressors on correctional nurses specifically.

Further exploration of contributors to occupational stress in this population may highlight where changes to the occupational environment can be made to enhance the health of correctional nurses and ensure high-quality care delivered to incarcerated persons. Therefore, the purpose of this integrative review was to uncover what is known about the correctional nurse working environment and what factors contribute to stress. This review was guided by Whittemore and Knafl's (2005) five-stage methodology: problem identification, literature search, data evaluation, data analysis, and data presentation. The guiding research question was: *What are the occupational/environmental stressors and professional burnout factors of correctional nurses?*

Review Methods

Literature Search

In July of 2021, the online databases Scopus, CINAHL, NIOSH-tic, and PubMed were reviewed for articles to answer the research question. Key words used for this search included "correctional nurses" and "occupational stress" or "burnout" (refer to Supplemental Digital Content 1, http://links.lww.com/JFN/A86, for database variations). No limitations on years, countries, or correctional settings were used. The inclusion criteria were as follows: Articles written in English, study sample including correctional nurses or other healthcare personnel, peer-reviewed journal articles, primary sources, and psychological stress, physical stress, or burnout as the focus. The exclusion criteria included main study population of general staff at correctional facilities (i.e., correctional officers), a study population of prisoners, the sole focus on nursing interventions in prisons or jails, literature reviews, periodicals, or personal experience narratives.

The search returned 152 articles: 148 from databases and four additional resources identified from ancestry searching. There were 18 duplicates, leaving 134 articles whose titles and abstracts were screened for eligibility. Twenty-seven full-text articles were read, excluding those that included correctional officers without clearly distinguishing results among the occupational groups. Figure 1 displays the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flowchart that provides an overview of the inclusion process for narrowing the articles (Moher et al., 2009).

Articles were critiqued using the Johns Hopkins' Evidence Level and Quality Guide to evaluate rigor and quality (Johns Hopkins Nursing Evidence-Based Practice, 2021). This critique method involved assigning a level to each study design from I to V, where Level I refers to experimental studies, Level II includes quasi-experimental studies, Level III involves only nonexperimental studies, Level IV are opinion

PRISMA 2009 Flow Diagram

Identification

| Articles identified through database searching (n =148) | Additional articles identified through other sources (n =4) |

Screening

Articles after duplicates removed (n =134)

Titles & abstracts screened (n =134) → Articles did not meet criteria (n =106)

Eligibility

Full-text articles assessed for eligibility (n =27) → Full-text articles did not meet criteria (n = 16)

Reasons for not meeting criteria: not a primary source, population not correctional healthcare professionals, stress or burnout not the focus

Included

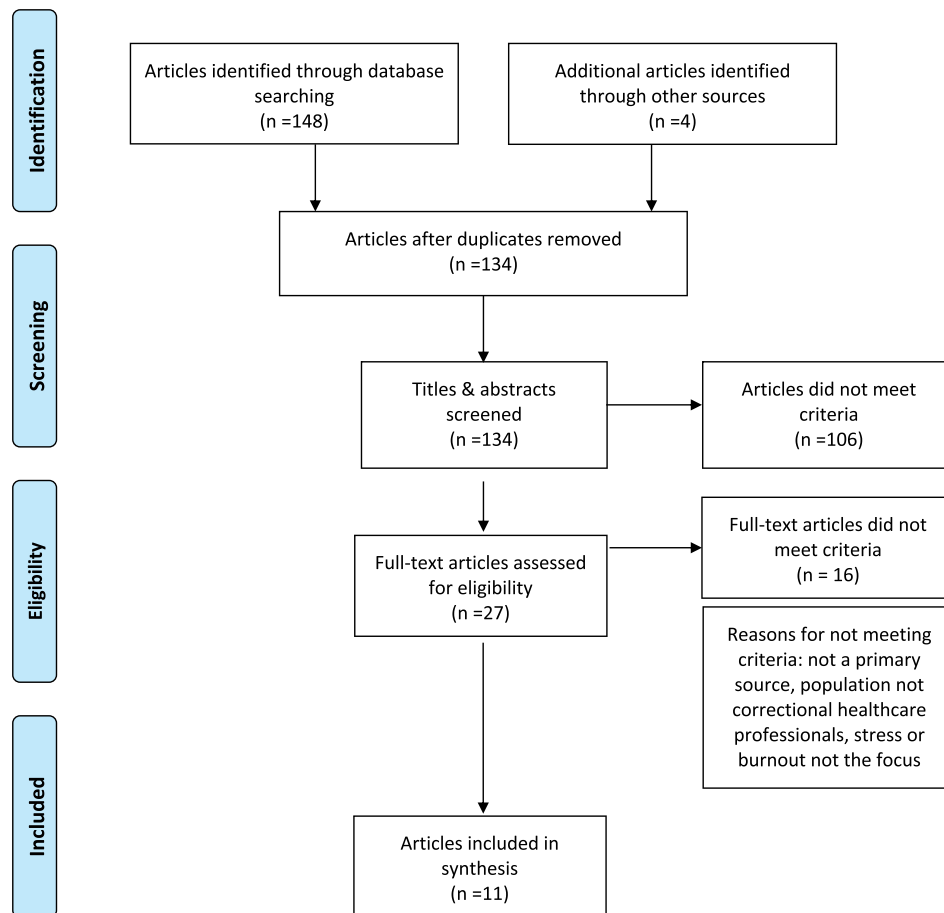Articles included in synthesis (n =11)

FIGURE 1. PRISMA flowchart.

pieces, and Level V is research based on experiential or nonresearch evidence. Researchers using this method also assign a measurement of quality from A (high quality), B (good quality), to C (low quality or major flaws).

■ Review Results

Data Evaluation

Eleven published studies met review criteria. Characteristics revealed five studies were conducted only in prisons, one study was conducted in the jail setting, and five did not limit sampling from any specific type of correctional facility. We included studies conducted in Canada (2), the United Kingdom (2), the United States (5), Italy (1), and Australia (1). Of the 11 studies, six focused solely on staff correctional nurses, another article included nurse managers, and the remaining four articles included other healthcare staff. All the articles were rated per the Johns Hopkins' Evidence Level and Quality Guide as Level III studies because of the nonexperimental designs. Three studies were determined as high-quality

articles (A), seven studies were adequate (B), and one was of lower quality (C). Refer to Supplemental Digital Content 2, http://links.lww.com/JFN/A87, for the detailed characteristics of all articles included in this review.

Of the articles, four had quantitative designs, two had mixed-method designs, and five had qualitative designs. Most studies that listed response rates ranged from 26% to 71% with participants conveniently and purposively sampled. Sample sizes ranged from 95 to 677 survey respondents and 8–13 participants in qualitative data collection. Most of the researchers included a description of instrument validity and reliability, although all studies used varying measurements to evaluate stress and only some reported Cronbach alpha information. Furthermore, 10 of the 11 articles had explicitly mentioned institutional review board approval.

Data Analysis and Presentation

The data were ordered, coded, and categorized by making iterative constant comparisons between articles, discerning

patterns and themes (Whittemore & Knafl, 2005). The key influences of stressors emerged as *conflict*, *fear*, and *demands*. A subgroup of "setting" was created to manage the data and facilitate the analysis. Penal institutions are generally referred to as either "jails" or "prisons" across the globe, but prisons are differentiated from jails in the United States, and thus, institutions are referred to broadly in this article as correctional facilities, unless otherwise specified. This subgroup revealed that nurses experienced similar stressors across the different institutions in this review. The coded patterns and themes were compiled into a matrix for the presentation of the data (refer further to Supplemental Digital Content 3, http://links.lww.com/JFN/A88). This matrix summarizes the evidence and provides information regarding the experience of job stress across this occupational environment.

Conflict

Studies have highlighted multiple sources of conflict for nurses in the correctional setting as ethical and relational. Ethical dilemmas arise when one's personal and professional morals are conflicted as correctional security is prioritized over quality health care delivered to incarcerated persons (El Ghaziri et al., 2019; Flanagan & Flanagan, 2002; Kalra et al., 2016). Unlike other nursing environments, being "too caring" is often seen to make correctional nurses more vulnerable and open to manipulation (Walsh, 2009). Instead, decision making for correctional nurses can be influenced by their need to follow safety protocols and be accompanied by correctional officers who may dictate what care is allowed to be completed and for how long (Weiskopf, 2005). Care can also be canceled if incarcerated persons are moved within the system for custodial or judicial reasons (White et al., 2014).

Studies highlighted how security needs ultimately affect patient interactions and what care is provided to patients, creating ethical concerns for the nurses. Healthcare personnel reflected that their professional duties often conflicted with security duties, and they had to morally decide when security concerns could override professional obligations, and vice versa (White et al., 2014). One study revealed that 24% (*n* = 118) of respondents viewed their ethics to be regularly compromised by their work in jails related to patient treatment and inadequate monitoring for quality care (Kalra et al., 2016). In fact, 91.1% (*n* = 217) of nurses in another study reported complying with regulations and rules that they believed were contrary to their personal ethics (Lazzari et al., 2020). One example includes healthcare personnel reporting the ethical dilemma of being unable to maintain patient confidentiality when correctional officers must remain present during the assessment of patients (Weiskopf, 2005; White et al., 2014).

Complex and challenging relationships can also lead to stress among correctional nurses. Various relationships include those with patients, correctional officers, and supervisors. The desire to facilitate rehabilitation and care for patients paired with a hypervigilance for the risk for abuse or violence conflicts with nurses' traditionally caring role and their professional code of ethics (Kalra et al., 2016; Walsh, 2009).

Although correctional officers help to keep the nurses safe, differing professional roles exist between the care nurses want to provide and safety protocols of correctional officers (Almost et al., 2013; Walsh, 2009). Participants in one study reported a "clash of culture" with correctional officers over a lack of communication and understanding for each other's working roles (Walsh, 2009, p. 146). This conflict is further complicated by the nurses' hesitancy to speak out against the status quo, as they are appreciative of the protection offered by correctional officers, wanting to maintain their help if situations abruptly change (Walsh, 2009; Weiskopf, 2005).

Some studies highlighted a lack of support from other correctional professionals (i.e., nonclinical staff) and organizational leadership (i.e., supervisors, administrators). For instance, correctional healthcare staff have reported not feeling valued, understood, or respected at work (Husted & Dalton, 2021). This was echoed in another study where a nurse reported, "[m]anagement misunderstands the real needs of my department" (Flanagan & Flanagan, 2002, p. 291), suggestive of their dissatisfaction. Inadequate staffing and resources for healthcare personnel to perform their jobs safely further fosters dissatisfaction among nurses and the organization as a whole (El Ghaziri et al., 2019; Flanagan, 2006; Flanagan & Flanagan, 2002; Walsh, 2009).

Fear

Seven of the 11 articles in this review discussed fear stemming from bullying, personal security, physical safety, and violence. Almost et al. (2013) reported sources of bullying for nurses from correctional officers (31%), nursing colleagues (30%), inmates (20%), healthcare managers (11%), and physicians (5%). Gender differences also influenced the experience of bullying with female nurses reporting higher prevalence of regular coworker bullying (El Ghaziri et al., 2019).

Risk for injuries among correctional nurses includes sharps and bodily fluid exposure, along with physical abuse, verbal assaults, and workplace violence (El Ghaziri et al., 2019). Working with aggressive people or difficult patients was reported as a major source of stress for these nurses (Flanagan, 2006). It was found that 96.5% (*n* = 83) of participants reported workplace violence exposure, including being yelled or sworn at, threatened, sexually harassed, or physically hurt by an inmate in the past 12 months (El Ghaziri et al., 2019). Healthcare personnel in another study reported a daily occurrence of receiving or witnessing threats from patients (Husted & Dalton, 2021). To further underscore this experience, one nurse reported: "When I have been

in the clinic with more than one inmate or I've had to walk from one place to another without an officer and there are inmates around, I don't like that, 'cause you never know who they are, what they've done, what crimes they've committed, you don't know if they could just snap, and I just feel unsafe" (White et al., 2014, p. 337). A general concern for the unknown was perpetuated by the chance of rapidly changing situations where fights could break out or violence could be directed at healthcare personnel from incarcerated persons (Almost et al., 2013).

Healthcare personnel tended to cope with the threats by either ignoring them or appearing calm (Husted & Dalton, 2021). This can be considered emotional dissonance, or "labor," involving the need to regulate and display certain emotions expected for one's job, and may include suppressing or hiding gut reactions (Hochschild, 2012; Suh & Punnett, 2021). The emotional labor of maintaining professional standards while caring for vulnerable patients is paired with an increased alertness and paranoia associated with security concerns of the correctional environment, increasing stress, and impacting well-being (Walsh, 2009; Weiskopf, 2005).

Demands

Demands specific to correctional nurses include high perceived workloads with little support from management, leading to job dissatisfaction. One study reported that "one nurse may be responsible for administering medications to over 300 inmates" (Almost et al., 2013, p. 7). Another study found that, when correctional clinics were understaffed, strategies of withholding medications or requiring patients to make an appointment were used (White et al., 2014). Time pressures and heavy workloads create stressful work environments, which are exacerbated by mandatory overtime requirements and a lack of appropriate staffing or resources (Almost et al., 2013; Flanagan, 2006; Flanagan & Flanagan, 2002; El Ghaziri et al., 2019).

Cumbersome task demands and inadequate pay were found to be negatively associated with job satisfaction across studies. Both nurses and nurse managers were most dissatisfied with salary and benefits, followed by limited time to do their work (Almost et al., 2013). Frustration from practice restrictions preventing them from providing high-quality care and feeling like they could not make positive changes also created job dissatisfaction (Stephenson & Bell, 2019; Walsh, 2009). Flanagan and Flanagan (2002) reported that the Nurse Stress Index score was the strongest explanatory variable, accounting for 30.3% of the variance in job satisfaction. An inverse relationship was further supported between job stress and job satisfaction (Flanagan, 2006). Conversely, it was found that correctional nurses were satisfied with levels of enjoyment and quality of care given to patients, along with pay, interaction, professional status, autonomy, purposeful and meaningful work, stability, variety, and "making a difference" (Almost et al., 2013; Flanagan, 2006; Flanagan & Flanagan, 2002; Husted & Dalton, 2021; Stephenson & Bell, 2019).

Discussion

Very few studies have been conducted on the occupational environment, experiences, and stress of correctional nursing professionals. Of the 11 studies meeting review criteria, environmental stressors stemmed from three primary themes: *conflict*, *fear*, and *demands*. Results from this review found correctional nurses are working in demanding and threatening environments with inadequate resources and staffing, along with low perceived support from management (Almost et al., 2013).

In line with our results, other reports have noted that security protocols in the correctional environment often override the quality or frequency of nursing healthcare priorities for incarcerated persons (Dhaliwal & Hirst, 2016), contributing to moral distress (Kalra et al., 2016). Moral distress is described as the negative experiences resulting from when a nurse knows what the right action is and is unable to act on it based on certain obstacles like institutional pressures or policies (Jameton, 1984; Smith et al., 2021). The phenomenon of moral distress could be investigated more within the correctional nurse environment in future studies.

Additional evidence reiterates that certain stressors of correctional nurses may stem from repeated exposure to violent behavior and verbal assaults, manipulation, and frequent exposure to infectious diseases (Almost et al., 2020; Bell et al., 2019; Hancock, 2020). These unique experiences increase the risk for compassion fatigue, vicarious or secondary trauma, and burnout among correctional nurses (Flanagan & Flanagan, 2002; Hancock, 2020; Wright, 2020). In one study of 270 nurses and 27 nurse managers, approximately 19% of each group did not intend to stay at their current job over the next year for reasons including dissatisfaction and work being too stressful (Almost et al., 2013). Another study indicated that 30% (n = 114) of the respondents reported an overall dissatisfaction with their job and 33% (n = 179) experienced burnout by their work (Kalra et al., 2016), highlighting the need for strategies to mitigate stress in this occupational group. Current literature similarly supports that improving the working environment and nurse morale is necessary to increase correctional nurse satisfaction and decrease rates of stress and burnout (Merrifield, 2018).

Efforts to build evidence, support worker well-being, and create a safer and healthier correctional workplace climate are already underway. One study has used a qualitative content review to collaboratively and comprehensively examine the impact of correctional environments on health among correctional officers (El Ghaziri et al., 2020). As new ways to create healthier correctional workforces begin, it is imperative to include correctional nurses in the conversation and examine the ways to alleviate the stressors specific to them.

Implications for Nursing Practice

Results from this study suggest numerous considerations to improve safety and reduce the stress of correctional nurses. The first consideration involves the evaluation of workplace adherence to policies centered on safe nurse–patient ratios and the reduction of workplace violence and bullying. However, these policies and standards vary by each state within the United States, as well as globally, depending on the correctional facility, their size and needs. The National Commission on Correctional Health Care (n.d.) provides a set of standards recommended for U.S. facilities, offering accreditation to those that adhere to best practices. These standards are explained in separate manuals for prisons, jails, and juvenile correctional facilities, and although they discuss the training for healthcare personnel, the manuals mainly focus on the treatment and health outcomes of the patients instead of the workforce caring for them (National Commission on Correctional Health Care, n.d.). The designated Responsible Health Authority person ultimately determines the policies and procedures in each health facility in alignment with state laws and practice regulations, covering resource allocation and staffing ratios (Blair et al., 2014).

Nurses may also benefit from receiving resources such as linkages to up-to-date safe patient care guidelines and stress management strategies to reduce burnout. Employee assistance programs that ensure adequate access to frequent counseling, debriefing activities, and supportive services could help to mitigate emotional labor and encourage positive coping (Walsh, 2009). Educational courses that combine topics of emotional intelligence, health promotion, and well-being could aid in stress management for nurses as well. Cross-sector collaboration between security staff and nursing staff could be another way to reduce role confusion, promote collegiality, and possibly improve patient care. An example to improve communication and teamwork would be simulation-based training for different correctional environment scenarios (Diaz et al., 2019).

Making changes toward a safer workplace environment may be seen as a positive effort from management to understand staff's needs and may improve the relationship between healthcare personnel and the organization. Additional support from supervisors could help correctional nurses to better maintain their sense of professional identity and uphold their code of ethics to practice with compassion and respect, promote health, and advocate for the rights of their patients (American Nurses Association, 2015; Smith et al., 2021).

Limitations

The review was limited to those published online and accessible through databases with certain key terms, increasing the risk that some studies may have been left out of this review. The small number of qualifying studies led to the inclusion of older articles, and lower quality evidence to inform this review, with no randomized controlled trials included. The analysis was also complicated by the differing countries, correctional setting contexts, and the lack of clarification between the roles of licensed practice nurses, registered nurses, and nurse practitioners. Despite these limitations, a rigorous process was used to collect and screen articles. Evidence quality was evaluated using a systematic method from Johns Hopkins Nursing Evidence-Based Practice (2021), and the review was guided by Whittemore and Knafl's (2005) methodology.

Conclusion

Correctional nursing is a highly specialized area that requires adequate supports and resources to carry out tasks effectively (American Nurses Association, 2021). Better high-quality investigation with an array of mixed-method and longitudinal designs is needed to determine how the unique stressors of the correctional working environment impact the well-being of correctional nurses, their families, and the care of incarcerated patients. Doing so can lead to intervention development designed to holistically support the safety, health, and well-being of correctional nurses.

Acknowledgment:

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