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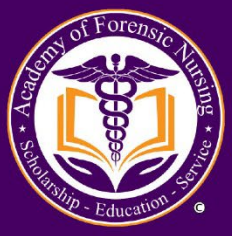


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Journal of the Academy of Forensic Nursing

*Editorial*

# Let It Go

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## Let It Go

How often do we find it challenging to let things go? In our profession we encounter human tragedies and stories that can weigh us down and slowly seep into our personal and private lives. One day, in trying to find an unfiltered perspective on what it means to let it go, I decided to ask my 5-year-old grandson if he ever heard about "letting it go"? He immediately responded that it was a song that Elsa sings in the Disney movie *Frozen*$^{TM}$ (Buck & Lee, 2013). I then asked him what he thought the song meant. Although he said that he did not really know, he did say that he knew that it made Elsa happy when she sang it. He then went on to say, "When Elsa is lonely, she sings to feel better." In the end that conversation, through the lens of childhood innocence, I think my grandson provided me with the result of what it means to let it go; specifically, it should help us move to a level of attainment of "feeling better" when we may be feeling "lonely" in the chaos of the world around us. This then led me to the next necessary "adult" step of how do we start the process of getting to the point where we can let things go and ultimately be successful in enjoying both our personal and professional lives?

I began to think about how we can take a cue from the airline industry during times of crisis – specifically, it is essential that forensic nurses begin to learn the importance of placing that oxygen on themselves first before trying to help others. As noted by Davis et al., (2021) between 2007 to 2018, nurses were 18 percent more likely to die from suicide than the general population. Although there may be many factors that result in the higher rate of suicide among nurses, I am struck with the fact that, simply by the nature of our profession in connecting with our patients, and not taking time to process unusual, emotionally draining events, there is such a significant increased risk toward consuming our inner strength and pervasively seeping into our personal life.

Oddly, most nursing programs do not include a specificity of education on the specific emotional tolls that can result from the daily encounters with patients who disclose traumatic life

events. Nurses are at risk for developing compassion fatigue, secondary traumatic stress, and/or vicarious trauma (Isobel & Thomas, 2022; Peacock, 2023; Wolotira, 2023). The differences between these conditions were discussed in an article I co-authored with Andrea Sebastian in the spring journal (Sebastian & Fay-Hillier, 2024). Nurses who are aware of the risks and informed of protective factors are provided with an opportunity to minimize or prevent the mental toll that exposure to human tragedies can have on our lives (National Academies of Sciences, Engineering, and Medicine, 2021). It is dangerous for nurses to assume that the potential negative consequences are just part of our profession (Melnyk et al., 2020). Why is it so hard for some nurses to learn and do things that make us feel better both emotionally and physically? I believe part of the issue is that most of our education has been to focus on the risk factors when making assessments and perhaps nurses do the same for themselves.

As we begin to infuse looking at protective factors in our assessments as an inherent portion of our practice, it is the perfect time to take care of ourselves. We recognize that recent research validates the positive impact supporting and promoting protective factors have on our care, which can improve overall outcomes that ultimately can improve the quality of life (Machtinger et al., 2024). Nursing education, our professional organizations, and places of employment should include opportunities to both support and build on our wellbeing. An article in this issue is directly related to SANE nurses' wellbeing and burnout, which supports the importance of the development and implementation of wellbeing strategies that enhance health and decrease the risk for burnout. We are comfortable supporting our patients asking for our help, but many nurses are uncomfortable seeking help, with the results potentially leading to death.

Factors of a supportive environment include being aware of the symptoms of potential negative consequences from exposures to trauma and violence while providing appropriate referrals to promote health and recovery (Children's Hospital of Philadelphia, 2021; Peacock, 2023; Peters, 2018). Coming full circle to my grandson's key element of letting it go is it should make us feel better. What makes us feel better should include being healthy and doing so on a consistent basis. It includes finding what works best for you. Although mindfulness, yoga, pilates, massages, reading mindless novels, working out, or long walks could be part of a healthy decompression for some, others may find other means to help promote their health; the key, however, is that it must become a professional (and personal) lifestyle approach if it is going to be effective (Bhattarai et al., 2024). It cannot be the first thing we drop when the day is busy; specifically, taking care of ourselves should not be the thing we find ourselves saying that we had to Let It Go.

Nursing is a helping profession, but we must remember, just like the oxygen masks when they fall from the cabin above, if we stop breathing and become unconscious before we can put the masks on others, we will have to let them go… So, take care of yourself. You deserve it.

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Journal of the Academy of Forensic Nursing

*Original Research*

# Forensic Nursing Domains, Core Competencies, and Content Identified Using the Delphi Method

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## Abstract

*Background:* In 1995, the American Nurses Association designated forensic nursing (FN) a nursing specialty, guided by Lynch's thesis. Schools of nursing subsequently adopted Lynch's theoretical practice framework. Sub-specialty-focused graduate education emerged, creating complex and difficult-to-compare early programs of study. *Objective*: The research aimed to update FN domains, descriptions of and context for FN practices, core competencies, and sub-competencies with content for graduate curricula, aligning FN with the American Association of Colleges of Nursing *Essentials*, and creating a foundation for certification. *Methods:* Methods included the *mini-Delphi* design *Estimate-Talk-Estimate*, with Nominal Group Techniques methods, Cognitive Task Analysis in face-to-face participant conversations, and qualitative analysis using NVivo™ of virtual recordings of experts. The FN sample (N=126) included educators and/or clinicians, who gathered four times face-to-face (2002–04, 2014) and four times virtually (2020–22). *Results*: The 2014 face-to-face meeting used the 2002–04 results, and validated proof-of-concept with three pillars (legal foundations, forensic science, and forensic nursing science). Analysis of 2020–2022 data named key domains, descriptions of and context for practice, core competencies, sub-competencies, concepts, and content in FN science and practice. The research included qualitative analysis of participant conversations, naming key content for each pillar, contributing to the alignment of pedagogy across programs, guiding current scientific research. *Conclusions*: Conducted over 20 years, the complex *mini-Delphi* design transformed knowledge integration into competent generalist and advanced FN education and practice. The research confirmed Lynch's theoretical proof-of-concept of three pillars of knowledge and aligned FN core competencies with *Essentials* and national nursing publications, identifying a common foundation, essential for all FNs. The study's derivation of scientific content, important for certifications, arose from qualitative analysis of expert clinician conversations, implying that as FN science evolves, the diverse FN practices evolve with a basic core foundation for educational application in all FN practices today and in the future.


*Keywords*: Forensic Nursing Certification Board (FNCB), Delphi method, Qualitative analysis (NVivo™), Forensic Nursing Domains of Practice, Forensic Nursing Core Competencies and Content

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# Forensic Nursing Domains, Core Competencies, and Content Identified Using the Delphi Method

The American Nurses Association's (ANA) Congress of Nursing Practice accorded forensic nursing (FN) specialty status in 1995 (Lynch & Williams, 2022). While a relatively recent specialty designation, nurse roles and practices in medical forensic environments is ancient. Archaeological recordings of forensic findings are in medical records from China and Mesopotamia from six thousand years ago, and recordings with testimony by nurses are in Persian papyri two thousand years ago (Payne-James, 2003, 2016). By the 13th and 14th centuries, midwives, also known as deaconesses, appeared in court records opining confirmation

of virginity, sexual assault examinations, pregnancy examinations, and psychiatric care (Cumston, 1913; Payne-James, 2003, 2016; Shahar, 1983), all considered FN practices today.

## Contemporary Historical Recollections

In the 1970s similar role proposals emerged in the literature (Frazier et al., 1978; Hayman & Lanza, 1971; Moynihan & Coughlin, 1978). In the early 1980s, Virginia Lynch, a registered nurse, worked in the United States as a coroner and in an emergency rape response center. In 1986, Lynch conceptualized the FN role as her master's thesis, creating a theoretical framework for practice (Lynch, 1990). In the late 1980s, she successfully petitioned the American Academy of Forensic Sciences (AAFS) for recognition of FN as a unique discipline among forensic scientists, and many FNs joined the General Section (Lynch & Williams, 2022). In 1992, a cadre of nurses caring for patients bisected in legal systems gathered in Minnesota to find commonalities in their practices. They listened to the Lynch thesis presentation identifying the alignment of nursing and nursing ethics with the main three pillars in forensic nurse practices: legal foundations, forensic science, and forensic nursing science. Attendees adopted the name Forensic Nurse to describe their many nursing practices and developed graduate educational programs to teach Lynch's theoretical framework as it applied to their practices.

Reflecting the focus of this champion educator, the early FN graduate education developed without consensus and reflected the variability in the FNs' practices, often revealing the subspecialty focus of the faculty, e.g., domestic violence, victimology, law, or forensic science. There was little agreement or understanding about the common or core elements of all FN practices; consequently, educational programs were as diverse as the FN subspecialties (Speck & Mitchell, 2022). For instance, one early curriculum emphasized psych-mental health and the branch of criminology, called victimology (Boston College 1970s), family violence (Johns Hopkins 1980s), nursing science and public health (the University of Tennessee Health Science Center early 2000s), legal aspects (Duquesne early 2000s), and forensic science (the University of Central Oklahoma late 2000s). Many FNs began their journey in the sexual assault subspecialty, adopting the Memphis' *Scope and Standards for the Sexual Assault Nurse Clinician* (Speck & Aiken, 1989) presented in Minneapolis in 1992, modified and adopted by International Association of Forensic Nurses (IAFN) Sexual Assault Nurse Examiner special interest group in 1996. FN practices expanded over the years to additional populations in programs supported by governments, community agencies, and healthcare organizations. Entrepreneurial expansions were frequent in states without restrictions on advanced nursing practices (e.g., California and Nevada). During the 1990s, FNs were caring for patients across the lifespan, from conception through and including death. The tagline was, "Forensic nursing … defined …[is] the point where law and nursing intersect" (Speck & Peters, 1999).

Nurses practice in environments where violence and subsequent trauma exist. Society expects nurses to provide care to vulnerable persons intersecting with legal systems who are *never-served* by the larger healthcare systems (Hallman et al., 2021; Speck et al., 2008; Speck et al., 2024). FN subspecialty practices expanded rapidly beyond sexual assault in the early 2000s to include death investigation, child physical abuse and neglect, domestic violence and strangulation, stalking, elder abuse, refugees, human trafficking, incarceration, gangs, military, bullying, technology, and many other methods and vulnerable populations (Faugno et al., 2022).

FNs have long identified information inconsistencies in continuing education offerings, undergraduate electives, and graduate education curricula for forensic nurses. FN subject matter

experts knew that understanding the connection between violence and the intersection with legal systems, management of specimens with the potential to serve as medical forensic evidence, trauma reactions, and negative medical and mental health outcomes, were common threads in all FN practices. Early studies concentrated on descriptions of the FN practice—what forensic nurses did and how forensic nurses did it. The early publications were descriptively necessary for the initial alignment of the FN specialty and subspecialty roles within nursing. Initial FN dissertations focused on constructivist methods to identify early thematic education elements in FN practices and, with multiple perspectives existing, all were valuable for the sustainability of the specialty (Kent-Wilkinson, 2008). Tool development, either validating evaluation tools related to characteristics in organizations employing forensic nurses (Speck, 2005) or standardizing language (Carter-Snell, 2011; Ekroos et al., 2024) emerged, identifying gaps in research and education. *The Essentials of Baccalaureate Education for Professional Nursing Practice* (2008), *The Essentials of Master's Education in Nursing* (2011), *The Essentials of Doctoral Education for Advanced Nursing Practice* (2006), all used for accreditation of nursing programs of study, supplied guidance in the early development of curriculum in FN education. The curricula remained unique to each school, reflecting the practices and competencies of the individual FN educator. In the historical environment, leaders steered educators and clinicians (e.g., a generic term, used to cover all providers of FN care), whether BSN or graduate-prepared providers. A recent analysis of FN chronicles the struggles among FN 1965–2005 (Liu, 2024).

Throughout the first and second decades of the millennium, studies continued to affirm Lynch's theoretical framework, guiding research about FN practices and roles. One analysis commented on the original Lynch suppositions and recommended additional considerations when studying forensic nurse practices (Valentine et al., 2020). Others collected and highlighted different known FN practice content from experts and published inconsistent integrative anthologies. A cursory literature search in 2018 identified continuing gaps in the complex FN role, and one identified a variety of differing attitudes about practice components in FN sub-specialty roles (Liu, 2024). An undercurrent of researcher discussions was the impetus to bridge the gap. One discussion about methods recommended resurrecting the Delphi from previous meetings to complete the identification of core competencies and content. The structured process activity and qualitative research were essential because the desired certification for all FN was impossible without collective expert input, agreement, and public exposure.

Recognizing that FN science and practice were growing unleashed, the current pressing need was to build a foundation that identifies common domains of all FN practices, descriptions of the practices, and context for the practices while identifying the content and evidence necessary for generalist and advanced FN education. The purpose was to build the foundation that identified current and specific content topics essential in all FN practices, grouped with one or more of the three pillars of knowledge necessary for certification. Simultaneously, the American Association of Colleges of Nursing (AACN) was guiding nursing education by embarking on a multi-year analysis to combine and replace previous documents for Baccalaureate, Masters, and Doctor of Nursing Practice (DNP) *Essentials* with one comprehensive AACN *Essentials* document for all nursing education. AACN volunteers identified common domains, descriptions, context, core competencies, concepts, and content essential for **all** undergraduate and graduate nursing education, called *The Essentials: Core Competencies for Professional Nursing Education* (AACN *Essentials*, 2021). Next, the Forensic Nursing Certification Board (FNCB) Chair/ Principal Investigator (PI) gathered historical documents of the FN educator's initial work from 2002–2004, and 2014 from attending FNCB Board of Directors (BOD). Of note, many of the

FNCB BOD served in IAFN leadership roles 2000–2015, e.g., President, Board of Directors, Chair of Education Committee, initiation and completion of SANE certification development, the formation of the *Journal of Forensic Nursing*, and other committee and leadership roles to establish the IAFN foundational processes, products, and activities supporting the member organization, including both SANE sub-specialties enjoyed today.

The challenge was to take Virginia Lynch's proof of concept and theoretical practice framework to future graduates of forensic nursing programs of study. In all accredited nursing programs, the expectation is that curriculum socializes to attitudes-aptitudes of the role, with significant new knowledge with a heavy dose of professionalism, creativity, and evaluation (Wilson, 2016). The pedagogical components of future curricula define the expected outcome from teaching methods—"What do we want the forensic nurse to know (knowledge, critical thinking)?" "What are the practice elements for the socialization of a forensic nurse (attitude, application, and evaluation)?" and, "How do the future forensic nurses incorporate domains, core competencies, and emerging forensic nursing science into their practices (creativity and evaluation)?" (Speck & Mitchell, 2022). The background chronicled above was the early evidence necessary to lead the 2018 founding FNCB BOD to formulate the strategy leading to a defensible process establishing the foundation necessary to support the development and sustainability of the Generalist and Advanced FN specialty certifications and subsequent micro-certifications.

## Literature Review

Developed by the RAND Corporation in the 1950s, the Delphi method forecasts future events based on expert opinions on specific subjects and is used in many industries. Delphi is a systematic and qualitative method of forecasting by collecting opinions from a group of experts through several rounds of questions. Common characteristics of Delphi include:

> Delphi may be characterized as a method for structuring a group communication process so that the process is effective in allowing a group of individuals to deal with a complex problem. To accomplish this 'structured communication' there is provided: some feedback of individual contributions of information and knowledge; some assessment of the group judgment or view; some opportunity for individuals to revise views; and some degree of anonymity for the individual responses. (Linstone & Turoff, 1975, p. 3 Introduction)

Controlled interaction is an opportunity for independent thought of the experts gathered for the complex problem. Delphi is a common method used by nurses for the identification of nursing specialty core competencies, practice competencies, identifying consensus on difficult topics, process mapping, expert-based judgments about practice and research priorities, integrated care pathways, and many others (Varndell et al., 2021). Additionally, differing iterations of Delphi methods are modifiable for small groups, face-to-face (Pan et al., 1996), and virtual meetings. The modifiable methods allow for structured groups of experts to forecast in face-to-face meetings, using Cognitive Task Analysis (CTA) to identify critical elements needed for skilled FN performance, and identifying FN decision-making involved in every step of the practices. In nursing, Bloom's taxonomy serves as an accelerant to assemble discussions using CTA. Facilitating the extraction of data from experts, researchers employ groups of experts to think creatively using CTA to arrive at meta-cognitive innovations to identify elements of any nursing practice (Speck, Dowdell, & Mitchell, 2022). Multiple opinions about the FN specialty

role exist; however, the research defining the current understanding of the FN specialty science and practice is absent.

## Purpose

To fill the gap identified in the background and literature review, the challenge was three-fold. The purpose uses the *mini-Delphi*, Estimate-Talk-Estimate (ETE), with Nominal Group Techniques (NGT) methods, and CTA, as well as qualitative analysis of conversations to:

(1) Identify FN core competencies, concepts, descriptions, context, concepts, and content necessary for FN education at the undergraduate and graduate levels.

(2) Align essential content in forensic nursing education at undergraduate and graduate levels through the consensus process.

(3) Establish an evidence-based foundation in all FN practices for use in the first certification examination for the Generalist Forensic Nurse and Advanced Forensic Nurse.

## Design

Building from the Phase I (2002, 2003, 2004), and Phase II (2014) meetings, the research design continued to employ *mini-Delphi, ETE* and *NGT* methods. In Phase III (2020-2022), planners employed the *CTA* for FNCB BOD members and sample participants who were unfamiliar with previous design iterations and methods. The use of NVivo™ assisted the data analysis from recorded conversations, identifying thematic nodes of content for each FN pillar.

## Participants

Phase I and II meetings included FN from accredited graduate programs. Phase III invited Phase I and II participants, and current graduate-prepared clinicians and educators, which included grant recipients teaching graduate courses in FN. After the study was complete in 2022, a general email and announcements to organizations solicited public comment where all community stakeholder participants were welcome to review and provide feedback in the generated document of study results.

## Methods

A total of four meetings occurred; three in Phase I: 2002, 2003, 2004, and one in Phase II: 2014. The sample, which included previous educators and clinicians attending Phase I and II meetings, contributed to the activities with a compilation of historical documents and independent recollection and memory, which aided in understanding the early evolution of FN practice development and early education pedagogy expectations. Institutional review board (IRB) consultation resulted in exempt status for all study phases.

### Phase I: 2002, 2003, 2004

Phase I methods were *mini-Delphi* with ETE and NGT, specific for face-to-face meetings in 2002, 2003, and 2004. The participants were organizational attendees at the 2002 annual meeting, and invitations to universities in 2003 and 2004 followed. Using a *mini-Delphi* design, organizers divided participants into small groups using NGT, specifically to minimize participant influence over three large face-to-face meetings (Humphrey-Murto et al., 2017). Educators and clinicians volunteered to participate in the open-ended consensus building. Participants received

generic *Post-it*® notes and a singular concept—*forensic nurse practice*, followed by a review of Lynch's theoretical framework and the notions therein. Adopting other research methods (Fowler, 2015), the primary lead challenged participants to integrate the nursing metaparadigms (nurse, patient, environment, and health), nursing ethics, and collective understanding of the nurse's social contract with society. Working with the smaller groups of educators and clinicians, the participants wrote their thoughts down and posted them on the walls, generating individual reports, and ensuring the anonymity of small group discussions until their report. A smaller group of participants worked to organize the notes into the early concepts and core competencies, presenting their findings in the afternoon of the third 2004 meeting.

**Phase II: 2014**

Phase II occurred in 2014 and built upon the historical collaborations among forensic nurse educators and clinicians from the 2002–2004 meetings. Additionally, each participant invited other well-known FN educators and clinical providers. The University of Alabama at Birmingham School of Nursing hosted the consensus meeting, again using the *mini-Delphi*, ETE, and NGT methods. Twenty of fifty known FN educators and clinicians convened to review the currency of the 2004 core competencies and embarked on a second *mini-Delphi*, ETE, and NGT design using CTA methods for the face-to-face experience. The steps, while face-to-face, initially included anonymity of thought with *Post-it*® notes, followed by discussions and thematic categorization of participant thinking to confirm and bring consensus about the three pillars of content. The two-day meeting concluded more work was necessary to identify core competencies, given the evolutionary changes to FN science and practice over the past decade. Participants affirmed to revisit the domains and descriptions of practices at a future structured meeting of educators and clinicians.

**Cadre of Forensic Nurses: 2018**

In the intervening time at several professional meetings, educators and clinicians discussed the need for updated FN core competencies and content to guide and align graduate FN education. End Violence Against Women International (EVAWI; in Chicago, 2018) was one meeting attended by a cadre of nurse educators and clinicians, who discussed concerns about the limitations and stagnation of the general or advanced FN role. The decision was to form the Academy of Forensic Nursing (AFN, c. 2018) and resurrect the Forensic Nursing Certification Board (FNCB, c. 2018), specifically to educate (AFN) and offer certifications (FNCB) that reflected the foundation necessary for **all** forensic nurses. The charge of AFN was to fill the gap and develop education for **all** FN. To FNCB, the charge was to develop certifications for the Generalist and Advanced FN. The first step for FNCB BOD was to gather the leaders from the previous FN meetings (now called Phase I and II), to resurrect the historical core competency development efforts, and to use Lynch's theoretical framework with the guiding AACN *Essentials* in nursing education and organizational documents to reflect current FN practice. The information available included the confirmed three pillars of knowledge (Lynch, 1990) and published competencies and content (IAFN, 2004). However, after review, the authors determined the documents were insufficient to guide future FN education, and absent was the evidence supporting the foundation for a certification examination.

The FN community of practice is small, remote, and hard to reach. As such, all known educators, clinicians, HRSA SANE-ANE grant recipients, as well as all former Phase I and II participants, received invitations to join the Phase III research. A purposive sampling method

facilitated email invitations to the potential participant sample. Sent twice, a request was sent to others who were not on the initial list of invitees, if known. Asking invitees to invite others is a qualitative method called *snowball*, with the goal to increase identification of new participants, unknown to researchers but are self-identified FN educators and expert clinicians. The invitation letter was distributed widely among FNs (Appendix A).

**Phase III: 2020–2022**

Phase III officially began with the FNCB founding committee members, whose first action was to create and expand the BOD, specifically to assist in establishing certifications for all FNs. Trained as facilitators, all BOD members received CTA leadership training to create the fidelity (e.g., adherence to the process) without variation from the previous methods and goal implementation of the mini-Delphi design of the study. Phase III required finding any supporting documents from previous meetings—publications, notes, and discussions. The design included recorded conversations among experts amenable to qualitative analysis. NVivo™ software was utilized to analyze conversations identifying thematic nodes (i.e., groups) to qualify underlying concepts describing practice, examples of context for practice, and core competencies guiding forensic nurse practices. The AACN *Essentials* (AACN, 2021) framed the CTA in conversations with expert educators and clinicians in each planning meeting. Extracted from NVivo™ was content supporting the evidence for the three FN core pillars.

The co-occurrence of the Covid-19 pandemic challenged the process, and modifications to the design included virtual meetings. Again, the FNCB extended a broad invitation to begin discussions among experts in 2020. Using an invitation list of the previous participants, using the snowball method again (e.g., word of mouth referrals), the list expanded to include HRSA Advanced Nursing Education - Sexual Assault Nurse Examiner (HRSA-21-016 ANE-SANE) program grant recipients, and known educators who did not participate in the first four meetings. Phase III included three virtual meetings (September 2020, October 2020, and January 2021) and a 30-day public comment period (March–April 2021). The pre-planning required FNCB BOD CTA preparations before the implementation of the methods. The planning included the development of structured questions for participants, derived from the 2014 meeting and leaders' memories, maintaining fidelity to NGT methods, and with encouragement to bring associated FN science and practice to the discussion in the CTA. Sample participants received CTA queries to ponder before the virtual meeting, which included:

- How do you define forensic nurse practice?
- What are essential elements in forensic nurse practice?
- How do we identify themes for forensic nurse practice?
- What domains guide forensic nurse practices?
- What are the descriptors of forensic nurse practices?
- In what context does the forensic nurse practice?
- What are the core competencies?
- What are the sub-competencies?
- How do you measure the activities of a forensic nurse?
- What is the essential information under each pillar for all forensic nurses?

Pillars (legal foundations, forensic science, and forensic nursing science) were used to organize groups and NGT recommended 6–8 participants, plus FNCB BOD facilitators. Technology created the opportunity for anonymous comments, virtual meeting rooms with small

groups, and recordings of conversations. Discussions used the AACN *Essentials* as a guide to the discussions of the pillars, introduced in pre-meeting questions. Important attitudes were to listen to the expertise and ideas of the educators and clinicians without criticism in full transparency. To mitigate bias, facilitators received education from the PI/primary author who did not participate in the group activities. The debriefing of the facilitators allowed them to contribute their expertise during the review. Researchers presented the analysis to participants and FNCB BOD members for feedback and contribution. When feedback integration was complete, the final document was made available for 30-days public comment. The review of public comments by the authors resulted in either accept or reject-as-non-responsive or insufficient-to-warrant-change.

## Results

Over 20 years, a total of 126 FN educators and clinicians participated in a *mini-Delphi*, ETE, and NGT, using CTA to facilitate contributions to the FN domains, descriptors, contextual statements, competencies, and sub-competencies, validating Lynch's FN theoretical framework and three knowledge pillars necessary for a complete and competent FN practice (identified content topics used in FNCB Study Outlines as summarized online).

### Results from Phase I: 2002, 2003, 2004

Phase I meetings produced the Core Competencies for Advanced Practice Forensic Nursing and represented a consensus document (IAFN, 2004). Concepts identified included systems, research, policy, populations, education, ethics, and justice. A list of common content achieved pedagogy in four conceptual areas unique to the FN practices—Response to Violence, Evidence-Based Science, Innovation in Systems, and Education Dissemination. Actualizing statements from the document include:

- The advanced forensic nurse practice will develop, promote, and implement protocols and systems responding to victims and perpetrators of trauma, injury, accidents, neglect, abuse, exploitation, and all forms of violence.
- The advanced forensic nurse practice will impact research and policy affecting human responses to violence, injury, trauma, accidents, neglect, abuse, exploitation, and all forms of victimization.
- The advanced forensic nurse practice will develop and supervise systems of care for complex health problems related to accidents, trauma, crime, victimization, abuse, neglect, exploitation, and all forms of violence.
- The advanced forensic nurse practice will educate others in the concepts and practice of forensic nursing and forensic health (p. 1–5).

### Results from Phase II: 2014

Phase II meetings resulted in the validation of Lynch's three pillars of knowledge necessary for basic, generalist FN education (legal foundations, forensic science, and forensic nursing). Application of CTA implementing the *mini-Delphi*, ETE, and NGT resulted in robust conversations, with attempts to fit the current discussions and topics into an incomplete and unassigned list of competencies in practice, and without time to analyze. In retrospect, the conversations identified content without domains and therefore descriptions of concepts applicable to all practices were unrealized. However, discussions centered around how to teach FN. Participants demonstrated the method of concept-based education (Baron, 2017) with the

content discussed. Two case studies presented included a sexual assault patient and a child who was victimized by predator bullying (Appendix B). Both cases in a conceptual example exhibited elements in competencies, practice descriptions, and context for practices, identifying knowledge in all three pillars.

## Results from Phase III: 2020–2022

Those who participated in the virtual event completed a survey related to their experience and qualifications (Appendix C). The results are shown in Table 1.

**Table 1.**
*Experience of Validating Sample*

*Validating Sample Participants Forensic Nursing Education, Academic Experience, and Practice Expertise in 2020 (N=23)*

| Survey Question | Answers | | | |
|---|---|---|---|---|
| **Level of Education*** | MSN<br>3 (13%) | DNP<br>7 (30%) | PhD<br>14 (17%) | DNP/PhD<br>2 (0.9%) |
| **Fellowships*** | FAAN<br>4 (17%) | | Other Organization Fellowships<br>12 (52%) | |
| **Roles*** | Academic Ranking/Management<br>18 (78%) | | Clinical Management/Practice<br>12 (52%) | |
| **Primary Location of Practice*** | Academia<br>18 (78%) | | Clinic<br>12 (22%) | |
| **Area of Specialization** (self-reported) | Child maltreatment<br>Death investigation<br>Disabilities abuse<br>Elder maltreatment<br>Epidemiology of intentional violence<br>Family violence<br>Legal nurse consulting & testimony<br>Pediatric risk<br>PREA response | | Domestic violence (DV)<br>Child sexual abuse<br>Elder sexual abuse<br>Forensic psychiatry<br>Psych mental health<br>Strangulation in DV<br>Technology risk<br>Title IX<br>Trauma response and recovery<br>Trauma informed care<br>Vulnerable adult abuse | |
| **Ever Faculty in Accredited School of Nursing** | Yes<br>23 (100%) | | No<br>0 (0%) | |
| **Years in Academia (n=18)** | <6<br>2 (9%) | 6 to 15<br>7 (30%) | | >15<br>9 (39%) |
| **Developed curriculum in accredited SON** | Yes<br>17 (74%) | | No<br>6 (26%) | |
| **Years in Forensic Nursing (n=23)** | <6<br>3 (13%) | 6 to 15<br>6 (27%) | | >15<br>14 (60%) |
| **Developed curriculum in academic FN courses** | Yes<br>12 (52%) | | No<br>11 (48%) | |

*some percentages do not equate to 100% as respondents provided multiple answers.

## FNCB Core Competencies

Ten Core Competencies emerged as proof-of-concept from the analysis, building on the AACN *Essentials* but unique to forensic nurses. AACN *Essentials* served as the foundation for FN education at the bachelor (Level 1) and graduate/doctoral (Level II) preparation and as such, was a springboard for the development of the FN core competencies. The FN competencies comprised descriptions of practice domains, FN practice context, essential attributes, and competencies, with a focus on the concepts and subsequent principles of trauma-informed and justice. For any perceived gaps identified during the meetings, individuals referred to the AACN *Essentials* for guidance to avoid duplication and demonstrate specialty status. The expectation is that FN adhere to the AACN *Essentials* according to their level of practice, adding the FN specialty to demonstrate competence in the FN role, regardless of the practice environment. In addition to the domains and brief descriptions of FN practices, a comprehensive document addressing domains, descriptions, contextual statements, competencies, and sub-competencies emerged. Conversations about current evidence identified gaps in the science supporting the specialty practices of FN. A summary of the ten domains of FN practice alignment with AACN and brief descriptions of the FN context for core competencies in all FN practices are in Table 2.

**Table 2.**
*Forensic Nursing Core Competencies for Generalist and Advanced Forensic Nurses – Summary*

| # | DOMAIN | Brief Description of Competency Summaries |
|---|---|---|
| *1* | *Knowledge of Forensic Nursing Practice* | All forensic nurses integrate, translate, and apply established and evolving forensic nursing knowledge, as well as knowledge from other disciplines, which includes a foundation in liberal arts and other sciences. The acquisition of knowledge distinguishes the levels of entry into the practice of professional forensic nursing and forms the basis for clinical judgment and innovation in forensic nursing practices. |
| *2* | *Person-Centered, Trauma-Informed Care* | All forensic nurses implement person-centered care focusing on the individual within multiple complicated contexts, including family and/or important others. Person-centered care with forensic nursing populations is trauma-informed, holistic, just, respectful, compassionate, coordinated, evidence-based, and developmentally appropriate. |
| *3* | *Forensic Populations* | Population health in forensic nursing spans the health care delivery continuum and describes collaborative activities among stakeholders for the improvement of equitable population health outcomes when vulnerable populations experience trauma or intersect with the legal system. |
| *4* | *Forensic Nursing Scholarship* | All forensic nurses participate in the generation, synthesis, translation, application, and dissemination of forensic nursing knowledge to improve health and transform health care for patients intersecting with the legal system. |

| # | DOMAIN | Brief Description of Competency Summaries |
|---|---|---|
| *5* | *Quality and Safety in Forensic Settings* | All forensic nurses participate in the employment of established and emerging principles of safety and improvement of science to further quality forensic nursing care. As core values of forensic nursing practice, quality and safety enhance care and minimize harm to patients and providers through both system effectiveness and individual performance. |
| *6* | *Interprofessional Relationships* | All forensic nurses participate in intentional collaboration across professions and with multidisciplinary and interprofessional team members, patients, families, and communities to optimize care, enhance the medical-legal health care experience, and strengthen outcomes. |
| *7* | *Systems-Based Practice* | All forensic nurses respond to and lead within the complex interprofessional systems of health care and communities by coordinating care delivery, resources, and evaluation to provide safe, quality, equitable care to diverse populations with trauma experiences and/or intersecting with the legal system. |
| *8* | *Informatics and Technology* | All forensic nurses use information and communication technologies where informatics processes are used to support patients intersecting with legal systems. |
| *9* | *Professionalism* | The forensic nurse participates in the formation and cultivation of sustainable professional and advanced forensic nursing identities, including accountability, perspective, collaborative disposition, and comportment that reflects forensic nursing's characteristics and values. |
| *10* | *Lifelong Learning and Leadership* | All forensic nurses participate in activities and self-reflection to foster personal health, overcome barriers, build resilience and well-being, continue lifelong learning, and support the acquisition of forensic nursing expertise and assertion of leadership at professional and advanced forensic nursing roles. |

(FNCB©, 2022; Speck & Mitchell, 2022; AACN *Essentials*, 2021 CC BY-NC-ND)

## Qualitative Analysis of FN Expert Conversations in Phase III 2020-2022

The *mini-Delphi*, ETE method with NGT guidance recorded group conversations. The transcribed recordings were entered into the NVivo™ software and analyzed for overarching conversational expressions related to one of the three knowledge pillars, seeking thematic phrases, and keywords to identify content necessary for all FN pedagogy essential for all practices. Identified themes emerged from the participants under all three pillars.

NVivo™ was used to transcribe group recordings for analysis. The information assembly resulted in one last meeting to present the findings to participants. They were asked again, "Was the report reflective of the conversations, now combined?" Apart from word choice, there was no dissent. The NVivo™ report included the generation of a Word Cloud of terms frequently used by the participants. Qualitative analysis supplied the language necessary to identify themes in all practices and theoretical underpinnings for the science and practice of the FN, regardless of level of education. The language for content topics identified specific components and issues with which to build pedagogy in future academic curriculum. The Word Cloud in Figure 1 identifies

the main themes from NVivo™ analysis. The Word Cloud was derived from recorded conversations of volunteer participants during the mini-Delphi, ETE, and NGT of forensic nurse educators and clinical clinicians, 2020.

**Figure 1.**

*Educator and Clinician Word Cloud*


## Limitations

The *first limitation* is the FN community of educators is small, and as such anonymity, required by the *mini-Delphi*, ETE, and NGT method, was not possible. By design, and with a small community of clinical experts, peripheral experiences have influence and are also a limitation. Each group was unique with a diversity of thought and experience, and while not planned, each discussed all aspects of the core competencies within the three pillars among the group members, and again with the entire group. Yet, the individual group was not influenced by the other two groups. However, the risk of subjectivity bias and internal group influence occurred during the post-discussions with all participants, influencing the participant sample charged with reaching consensus among group members.

A *second limitation* is that there is no predetermined size for Delphi studies. However, NGT created modifications for small study groups (e.g., 6–8 members) to be able to proceed with a concealed initial response between the three groups, actualized with pre-meeting questions and responses, which minimized individual influences initially.

A *third limitation* concerned attendance in virtual meetings, creating a limitation with dropouts and drop-ins (e.g., different participants). For instance, there was attrition and return to the participant sample (e.g., present in 2002 and 2004, not 2003 or 2014), and attendance in only one meeting between 2020–2022. To mitigate the impact of participation factors, the *mini-Delphi*, ETE iterative process minimized influence, subjectivity, and bias with the addition of NGT design.

A *fourth limitation* included the FNCB Board of Director (BOD) members who were facilitators who had the potential to influence group responses with individual biases and experiences while leading discussions and facilitating individual responses. To minimize

facilitator influence, the FNCB BOD facilitator input was delayed until the completion of the first discussions by the expert FN educators and provider participants.

## Discussion

The study was designed to seek proof of concept to align, identify, and validate FN core competencies and content for a pedagogical derivation for the foundation for generalist and advanced forensic nursing certification examinations. Challenges included the creation of an iterative process for experts during consensus building and recording for analysis of expert conversations using the *mini-Delphi*, ETE, and NGT study methods. Researchers snowballed invitations to educators, clinicians, and stakeholders and facilitators recorded conversations. Consequently, diverse creativity and consensus resulted in proof-of-concept, and alignment with AACN *Essentials* Level 1 and Level 2 core competencies and sub-competencies for professional nursing education. Specifically, research identified and validated: (1) FN domains, descriptions, and context for FN practices, (2) FN core competencies and sub-competencies, and (3) (following qualitative analysis) content reflecting current published evidence in each of the three pillars. General acceptance and application of AACN *Essentials* foundation, layered with the unique FN foundation validated evidence for the content essential for a generalist and advanced forensic nurse certification.

The *mini-Delphi*, ETE, NGT, and CLT are study designs and methods, albeit modified during Covid-19, which endured from former face-to-face discussion meetings in Phases I and II and were modified for virtual meetings in Phase III. The face-to-face meetings in Phase I and Phase II were followed by three virtual meetings during Phase III when Covid-19 prevented face-to-face meetings. A 30-day public comment period (March–April 2021) followed Phase III, and the FNCB BOD met to adopt stakeholder input into the final consensus documents.

The *mini-Delphi*, ETE, and NGT methods reduced the initial influence among groups. However, group influence occurred during the post-discussions with all participants. All work groups read and discussed their CTA, preparing answers to the queries for their pillar group. Interestingly, while assigned one pillar, each group contributed to all pillars, creating robust discussions about essential and necessary concepts and content for proof-of-concept and future pedagogy. Following NGT, each group reported their findings to the remaining two blinded groups and, because they also used *mini-Delphi* and ETE, reviewed the remaining two pillars. Robust recorded discussions followed, ensuring diversity of thought and inclusion of all views from many. Reaching consensus, connected group members agreed on common FN domains, descriptions of FN practices, the context for FN specialty practices, and core- and sub-competencies, all aligning with the AACN *Essentials*.

Other evidence-based virtual modifications facilitated robust and recorded discussions among the FN educators and clinicians. The recordings were the basis for qualitative analysis of diverse expert educators and clinician conversations, which focused on building evidence for each of the three knowledge pillars in FN. The quantified and qualified new knowledge, and the three pillars, are essential and necessary in **all** forensic nurse specialty practices for decades to come. Using the *mini-Delphi*, ETE, NGT, and CTA designs and methods, FNCB's Core Consensus-based competencies are proof-of-concept, and content establishes a sustainable FN foundation for pedagogy, now a standard for analyses of and evidence for future evolution of the FN specialty.

## Summary

Lynch's thesis established a theoretical practice framework, providing conceptual guidance for initial FN specialty pedagogy. Three efforts by educators and clinicians in Phase I resulted in an early understanding of FN domains and descriptions. In Phase II, another gathering of FN expert educators and clinicians validated Lynch's three pillars for scientific core content. The attendees provided examples of diverse practices using the three pillars, e.g., FN case conceptualization, and reinforced the initial proof-of-concept. However, comprehensive domains and competencies for FN remained elusive in Phase II. In Phase III, FN expert educators and clinicians attended four virtual meetings. Outcomes included identified core competencies, descriptions and context for practice, and the sub-competencies necessary to measure competent basic FN practice activities. In addition to the core competencies, the qualitative analysis identified current evidence for all FN practices, adding to the evidence for each knowledge pillar—legal foundations, forensic science, and forensic nursing. Recently released, AACN *Essentials* accelerated the alignment journey for FNCB, assisting in alignment of the roles for the first Generalist and Advanced FN certification examinations. The research design, following evidence of defined methods, with adjustments for the Covid-19 circumstance, was necessary to align with all of nursing's guiding documents. Led by the PI and FNCB BOD, FN educators and clinicians completed the 20-year effort to establish consensus about the growing common and overarching domains for all FN practices, descriptions, and context for FN practices. The research completed by the FNCB brought consensus and proof-of-concept to the FN competencies necessary for the specialty role, and qualitative research identified current evidence-based content essential to all FN pedagogy and aligned with the AACN *Essentials*. The Delphi, ETE, NGT, and CTA research methods resulted in confirmation of Lynch's original theoretical practice framework, preserving the initial conceptualization for the FN, both yesterday, today, and in the future.

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# Appendix A: Invitation Letter



Dear Forensic Nurse Educator and/or Practitioner!

As a current or former educator in academia, the Board of Directors of the Forensic Nursing Certification Board (FNCB) invites you to attend the upcoming third consensus meeting to confirm core competencies, domains, and content for forensic nursing curriculum. This meeting is structured as to reference the work of forensic nursing educators participating in previous meetings held in 2002, 2003, 2004 and 2014.

FNCB is a newly formed organization affiliated with the Academy of Forensic Nursing (AFN). FNCB is a separate 501(c)3 not for profit organization whose goal is to complete one aspect toward consensus, developing and delivering a forensic nursing certification. In order to accomplish this goal, it is important to reflect upon the evolution of forensic nursing science and build upon work developed in previous consensus meetings as history and science provide the foundation for forensic nursing certification. As experts in forensic nursing science, practice and/or education, your participation is important in achieving this goal and establishing consensus.

The fifth consensus meeting will be held on September 1, 2020 at 2p ET, 1 pm CT, 12n MT, 11am PT. We anticipate the meeting lasting approximately 3 hours. The following survey helps us understand your expertise and willingness to participate. The survey should take no more than 7-10 minutes. Deadline for survey completion is August 19 at 5 pm CT. A zoom link for participation will be sent to you several days before the meeting.

Survey link: https://tamuhse.co1.qualtrics.come/jfe/form/SV_3EFxkr1WqU4z6G9

We look forward to having robust conversations in these important upcoming meetings. The final product will be posted for public comment when ready. Please be aware that work product derived from this meeting is intellectual property of FNCB and confidentiality is expected and enforced.

The FNCB Board is available to answer questions. Please email me for question at staceymitchell44@gmail.com.


Respectfully,

Stacey Mitchell, President, Forensic Nursing Certification Board

| FNCB Board: | |
|---|---|
| Stacey Mitchell, President | Kathleen Thimsen, Treasurer |
| | Michelle Patch, Secretary |
| Laurie Charles | Kelly Berishaj |
| Elizabeth Dowdell | Josie Doss |
| Patricia Speck | Heather Haynes |
| Max Veltman | Debbie St. Germain |

# Appendix B: Concept-FN Care for Bullying

**Forensic Nursing Curriculum 2014 UAB – E.B. Dowdell**
*Using Linda Caputi Model:*

**DRAFT #1 Concept of BULLYING:**

1. Definition:

Bullying, Harassment, or Horizontal Violence (BHHV) – can be viewed as verbal acts ofaggression. Bullying differs from horizontal violence in that a real or perceived power differential between the instigator and recipient must be present in bullying, while horizontal violence occurs among peers. Individuals covertly or overtly directing their dissatisfaction inward toward each other, toward themselves, and toward those lesspowerful than themselves.

2. Categories:
    a. Lateral or Horizontal Violence
    b. Vertical Violence
    c. Chronic
    d. Time limited / developmental
    e. Single site platform (mechanism)
    f. Multi-site platform (mechanism)
    g. Environment
        i. Overt or covert levels of Violence
        ii. High stress
        iii. Unhealthy relationships
            1. Gender Differences
            2. Generational Differences
            3. Educational Differences
            4. Economic Differences
        iv. Home
            1. Gender Differences
            2. Generational Differences
            3. Educational Differences
            4. Economic Differences
        v. School
            1. Gender Differences
            2. Generational Differences
            3. Educational Differences
            4. Economic Differences
        vi. Work place
            1. Work place bullying
                a. Generational Differences
                b. Educational Differences
                c. Differences in years and type of work experience
                d. Workload and staffing patterns
        vii. Sports/ activities
    3. Risk Factors
        a. Person
            i. Age
            ii. Gender
            iii. History
                1. Peer relationship hx
                2. Social interaction hx
            iv. Location/ environment
                1. Single platform or multi-site platform
        b. Victimization
        c. Environmental
        d. Health
            i. At risk children (profile)
                1. Being different
                    a. Disabled
                        i. Physical
                        ii. Cognitive/ intellectual

iii. Developmental
ii. Physical manifestations
1. Sleeping disorders
2. Eating disorders
3. Aggression
4. Self harm behaviors
5. Increased absenteeism
a. Job instability or changeability
6. Change in social behaviors/ interactions
iii. Psychological Manifestations
1. Depression
2. Anger
3. Anxiety
4. Paranoia
5. Self-esteem/ Self worth

e. Nursing
i. As a victim
ii. As a perpetrator
iii. As a bystander
iv. As a group member

4. Pathology
a. Physical health and outcomes
b. Psychological
i. Mental health & Emotional health outcomes
ii. Developmental progress (growth & development)
iii. Professional progress (novice to expert/ Benner stages)
iv. Lying & manipulation skill set
c. Social
i. Peer group formation
ii. Gangs
iii. Isolation
iv. Bystander/ enabling
1. Potential for victim if speaks up/out
v. Spiritual
1. Lack of human dignity
vi. Culture
1. Ethnicity
2. Culture of sports world
3. Culture of school (middle vs. high school)
d. Diagnostics
i.

5. Clinical management
a. Trusting relationship
b. Justice
c. Interview/ investigation
d. Recognizes honesty as a form of care
e. Focuses on specific data & behaviors
f. Supports individual learning/change
g. Is consistent, timely, & frequent
h. Tests assumptions
i. Uses "I" messages with patient
j. Shares emotions (*concerned, worried, afraid, frustrated, disappointed…*)

6. Impact on Environment
a. Aggression
b. Avoidance
c. The "Silent Treatment"
d. Clique Forming
e. Gossip
f. Poor communication and toxic work environment cited as one of the main reasons for leaving their current position or school environment.

# Appendix C: FN Educator Clinician Survey

**Forensic Nursing Educator Clinician Curriculum Consensus Meeting Survey**

In order to prepare for the upcoming Forensic Nursing Educator Curriculum Consensus Meeting, we ask that you complete the following survey. This survey should take approximately 10 minutes.

1. Name (Free text)
2. Credentials (Free text)
3. Employer (Free text)
4. Position (Free Text)
5. I plan on attending the virtual meeting
    a. Yes
    b. No (if checked, survey ends)
6. Confidentiality Statement: All information discussed during this meeting is considered work product of the Forensic Nursing Certification Board (FNCB). I understand that in participating, I will not divulge any discussions that occur during this meeting.
    a. I agree
    b. I disagree (if checked, survey ends)
7. How long have you been practicing as a forensic nurse?
    a. 0-5 years
    b. 6-10 years
    c. 11-15 years
    d. >16 years
8. What is your area of specialization? (Check all that apply)
    a. Sexual assault
    b. Domestic violence
    c. Elder abuse
    d. Child abuse
    e. Legal nurse consulting
    f. Forensic psychiatric nursing
    g. Corrections
    h. Death investigation
    i. Other (free text)
9. What is your practice location? (Check all that apply)
    a. Academia
    b. Hospital
    c. Clinic
    d. Self-employed
    e. Law office
    f. Medical examiner/Coroner
    g. Children's Assessment Center
    h. Other (free text)
10. How many years have you worked in academia?
    a. 0-5 years
    b. 6-10 years
    c. 11-15 years
    d. >16 years
11. Have you developed forensic nursing curriculum?
    a. Yes
    b. No
12. Do you have experience developing nursing curriculum (excluding forensic nursing courses)
    a. Yes
    b. No
13. Do you teach in forensic nursing academic courses?
    a. Yes
    b. No
14. Do you teach forensic nursing continuing education courses?
    a. Yes
    b. No
15. In what professional organizations are you a member? (Free text)

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*Original Research*

# Wellbeing and Burnout of Nurses Undergoing Sexual Assault Nurse Examiner Education Before and During the Covid-19 Pandemic

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## Abstract

*Background:* Burnout is defined as work-related emotional exhaustion, depersonalization, and lack of personal accomplishment. Sexual assault nurse examiners (SANEs) may be at increased risk for burnout. Wellbeing practices protect against burnout. The purpose of this study was to evaluate the wellbeing and burnout of nurses undergoing education to become SANEs, considering the potential impacts of the Covid-19 pandemic. *Methods:* Data were from the SANE Wellbeing Study offered in conjunction with a SANE education program. The SANE Wellbeing Survey included the Nurse Wellbeing Self-Assessment (NWSAT), Maslach Burnout Inventory (MBI), Connor-Davidson Resilience Scale (CD-RISC), Perceived Stress Scale (PSS), and General Self-Efficacy (GSE) scale. Backward stepwise regression was used to identify factors that predicted NWSAT wellbeing scores. *Results:* A total of 68 nurses participated; most were female, white/non-Hispanic, bachelor's-prepared, and worked in non-rural settings. About two-

thirds completed the SANE Wellbeing Survey prior to the Covid-19 pandemic. Higher MBI Emotional Exhaustion and PSS scores were associated with lower wellbeing on some NWSAT domains. Working in an emergency department as their primary setting, working in a rural hospital, and lower education level were associated with lower scores on some wellbeing domains. Nurses who completed the survey during the pandemic had lower MBI Personal Accomplishment, CD-RISC, and GSE scores, and higher PSS scores. *Conclusion:* Nurses who self-select to become SANEs may have good baseline wellbeing and low burnout. *Implications for Clinical Forensic Nursing Practice:* Strategies to promote wellbeing and prevent burnout after beginning SANE practice can support a healthy SANE workforce and prevent attrition.

*Keywords:* Sexual assault nurse examiners, wellbeing, burnout, Covid-19

## Wellbeing and Burnout of Nurses Undergoing Sexual Assault Nurse Examiner Education Before and During the Covid-19 Pandemic

The term "burnout" was first applied to the work setting by Freudenberger (1974) to refer to feelings of exhaustion, emotional lability, and cynicism experienced by persons in helping professions. Maslach and colleagues (Maslach & Jackson, 1981; Maslach & Leiter, 2016) identified three key dimensions of burnout: *emotional exhaustion* (e.g., feeling worn out, energy loss, fatigue); *depersonalization* (e.g., negative attitudes about people served, irritability, loss of idealism, and withdrawal); and diminished feelings of *personal accomplishment* (e.g., reduced productivity, low morale, inability to cope). Nursing is recognized as a high-burnout profession due to long and irregular work hours, continual time constraints, staffing issues, organizational stressors, and exposure to other people's trauma (Abellanoza et al., 2018; Adriaenssens et al., 2015; Jun et al., 2021).

Sexual assault nurse examiners (SANEs) are registered nurses with specialized education to provide care to patients after sexual assault (American Nurses Association/International Association of Forensic Nurses, 2017). Due to the nature of the work, SANEs are at increased risk of burnout (Bouchard et al., 2022; Maier et al., 2011). Burnout is also associated with intention to leave nursing (Kelly et al., 2021; Shah et al., 2021), and retention is an ongoing challenge for SANE programs (Iritani et al., 2016). Providing care to patients after acute sexual assault increases the risk for SANEs to experience vicarious traumatization (Horvath & Massey, 2018; Raunick et al., 2015; Tabor, 2011; Wies & Coy, 2013), which refers to a person's repetitive exposure to other people's trauma that negatively impacts their personal feelings, beliefs, values, and judgments (Tabor, 2011). Vicarious traumatization is associated with nurse burnout (Beck et al., 2011; Isobel et al., 2022) and intention to leave forensic nursing (Hite et al., 2022). Many SANEs have primary nursing roles in other settings and provide SANE care on an as-needed (i.e., "prn") and on-call basis (Bouchard et al., 2022; Green et al., 2021), increasing risk of exhaustion. Insufficient organizational support for SANE programs is another risk factor for burnout (Bouchard et al., 2022; Green et al., 2021). The primary setting for many SANEs is the emergency department (ED). This exposes them to additional traumatic events and traumatic exposure dose is associated with greater burnout risk (Tabor, 2011). Burnout and intention to leave nursing have been exacerbated by the Covid-19 pandemic due to additional demands and concerns for personal safety (de Cordova et al., 2021; Falatah, 2021).

Recent research demonstrated that regular engagement in wellbeing practices both inside and outside the workplace is associated with lower burnout in nurses (Bogue & Ferren Carter,

2022). Wellbeing practices are activities that decrease stressors and can be engaged in by individuals and supported by workplace leadership to decrease burnout and improve retention (Ferren-Carter & Bogue, 2022). The purpose of the present study was to examine self-reported wellbeing of nurses undergoing education to become SANEs, taking into consideration potential impacts of the Covid-19 pandemic.

# Methods

## Setting and Sample

Data used in this analysis were from the SANE Wellbeing study that was offered in conjunction with a SANE education program funded by a U.S. Health Resources & Services Administration (HRSA) Advanced Nurse Education-SANE grant to Texas A&M University. Details about the setting and sample were described in an earlier publication (Mitchell et al., 2022). Briefly, 127 registered nurses throughout Texas participated in educational offerings between February 2019 and June 2021 for initial education as SANEs. Educational offerings included a didactic SANE course (online or in-person), an in-person sexual assault medical forensic examination simulation course, a mock testimony course, assistance with arranging clinical preceptor opportunities, and ongoing support and mentoring through a virtual Community of Practice. Communities of Practice are groups of individuals who engage in collective learning around a shared practice to learn to improve their practice (Wenger, 1998). Nurses were not required to be currently working in a facility with an established SANE program, though the intent of the SANE education program was to increase access to SANEs in rural and underserved areas.

Nurses participating in SANE educational offerings were invited to participate in the SANE Wellbeing Study. Nurses were invited via email and informed of the study during in-person courses. Emails were sent to participants after enrolling in one of the educational offerings and follow-up reminders were emailed two weeks after the initial invitation. Since it was important to maintain anonymity, emails were sent to all nurses in our enrollment system every time a new cohort joined the SANE education program. Therefore, some nurses completed the Wellbeing Survey after taking initial SANE education or simulation course. In some cases, nurses had completed an initial 40+-hour didactic SANE education course prior to participating in the SANE education program and enrolled in the program to participate in simulation courses or to receive assistance with clinical preceptorship.

All nurses enrolled in the SANE education program were given unique identifiers (IDs). which were used when completing the SANE Wellbeing surveys so responses would be confidential. A crosswalk linking names and unique IDs was accessible to the SANE education coordinator and the principal investigator and only the principal investigator had access to both the crosswalk and SANE Wellbeing survey results. The crosswalk was necessary to match participant demographic data with SANE Wellbeing survey results. The statistician on the project had access to the data with unique IDs but not to the crosswalk. The principal investigator was not involved in providing SANE education.

## Measures

The measures used in this study are outlined in Table 1, including a brief description of the scales and how they are scored. The primary outcome of interest, the wellbeing of nurses undergoing education to be SANEs, was measured with the Nurse Wellbeing Self-Assessment Tool (NWSAT). The NWSAT includes discrete 10-item scales measuring four aspects of

wellbeing: Bio-Physical (BIO), Psycho-Emotional (EMO), Socio-Relational (RELA), and Religio-Spiritual (RELA).

**Table 1.**
*SANE Wellbeing Survey Measures*

| Construct | Measure/Subscales | # Items | Participant rating | Scale | Scoring | Range |
|---|---|---|---|---|---|---|
| Wellbeing | Nurse Wellbeing Self-Assessment ([NWSAT], Bogue & Ferren Carter, 2022) | | How true each statement is about them regarding their wellbeing behaviors | 1 – 9<br>1 = Not at all true of me<br>5 = Neutral<br>9 = Very true of me | Total mean for each subscale is calculated; higher scores indicate higher wellbeing | 10-90 per subscale |
| | Four subscales<br>Bio-Physical (BIO) | 10 | | | | |
| | Socio-Relational (RELA) | 10 | | | | |
| | Psycho-Emotional (EMO) | 10 | | | | |
| | Religio-Spiritual (SPIR) | 10 | | | | |
| Burnout | Maslach Burnout Inventory ([MBI], Maslach & Jackson, 1981) | | How frequently they have each job-related feeling | 0 – 6<br>0 = Never<br>1 = A few times/year or less<br>2 = Once/month or less<br>3 = A few times/month<br>4 = A few times/week<br>6 = Every day | Total mean for each subscale is calculated; higher scores on the EE and DP and lower scores on PA indicate higher burnout | |
| | Three subscales<br>Emotional exhaustion (EE) | 9 | | | | EE: 0-54 |
| | Depersonalization (DP) | 5 | | | | DP: 0-30 |
| | Personal accomplishment (PA) | 8 | | | | PA: 0-48 |
| Resilience | Connor-Davidson Resilience Scale-10 ([CD-RISC-10], Connor & Davidson, 2003) | 10 | How true each item is about their resilience when encountering difficulties | 0 – 4<br>0 = Not true at all<br>1 = Rarely true<br>2 = Sometimes true<br>3 = Often true<br>4 = True nearly all the time | Total mean is calculated; higher scores indicate greater resiliency | 0-40 |
| Self-efficacy | General Self-Efficacy Scale ([GSE], Schwarzer & Jerusalem, 1995) | 10 | How true each item reflects their feelings about their effectiveness at work | 1 – 4<br>1 = Not true at all<br>2 = Hardly true<br>3 = Moderately true<br>4 = Exactly true | Total mean is calculated; higher scores indicate greater self-efficacy | 10-40 |
| Perceived stress | Perceived Stress Scale-10 ([PSS], Cohen et al., 1983) | 10 | How frequently they had feelings and thoughts in the past month about work and personal stressors | 0 – 4<br>0 = Never<br>1 = Almost never<br>2 = Sometimes<br>3 = Fairly often<br>4 = Very often | Total mean is calculated; higher scores indicate greater perceived stress | 0-40 |
| Total # items | | 82 | | | | |

The four scales were originally developed to measure physician wellbeing (Bogue et al., 2011). They were subsequently adapted and evaluated for their psychometric properties with several nurse populations; minor modifications were made in the wording to reflect "health care" rather than "medical care" (Bogue & Ferren Carter, 2022). Sample items are shown in Table 2.

**Table 2.**
*Nurse Wellbeing Self-Assessment Sample Items*

| NWSAT scale | Sample items |
|---|---|
| Bio-Physical Wellbeing (BIO) | I feel healthy and full of energy |
| | *I do not get adequate rest or sleep |
| Psycho-Emotional Wellbeing (EMO) | *I often feel worried, tense, or anxious |
| | I have sufficient opportunities for personal growth |
| Socio-Relational Wellbeing (RELA) | I have positive relationships with my peers |
| | *I feel frustrated by organizational policies |
| Religio-Spiritual Wellbeing (SPIR) | I trust in a higher power |
| | I engage in spiritual self-care |

*Item is reverse scored

The following survey measures were used to evaluate their impact on wellbeing as measured using the NWSAT: Maslach Burnout Inventory-Human Services Scale (MBI; Maslach & Jackson, 1981); Connor-Davidson Resilience Scale (Connor & Davidson, 2003); General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995); Perceived Stress Scale (PSS; Cohen et al. 1983). The MBI has been used in thousands of studies on work-related burnout and validated in a variety of professions including nursing (e.g., Fauzia et al., 2019). The MBI consists of 22 items in three subscales: Emotional Exhaustion, Depersonalization, and Personal Accomplishment. It is important to note that depersonalization in the context of burnout theory applies to an individual's thoughts, feelings, and attitudes toward others; whereas, in psychiatry and psychology, depersonalization is characterized by feelings about oneself (e.g., feeling detached or unreal; American Psychiatric Association, 2022). While both types of depersonalization can occur in nurses, the current study focuses on depersonalization as conceptualized by Maslach and colleagues to refer to negative and cynical feelings toward patients. The Connor-Davidson Resilience Scale consists of 10 items that participants rate according to how true each item is about their resiliency when encountering difficulties. The General Self-Efficacy Scale consists of 10 items that participants rate according to how true each item reflects their feelings about their effectiveness at work. The Perceived Stress Scale consisted of 10 items related to how frequent respondents' feelings and thoughts were in the past month related to work and personal stressors.

Demographic data related to SANEs and their work environment were examined as potential predictors of wellbeing. We obtained participants' informed consent to match their demographic data obtained from them when they enrolled in the SANE education program to their Wellbeing Survey data. Continuous variables, including age and number of sexual assault medical forensic exams completed in the past year, were expressed as means. Categorical variables were expressed as dichotomies to maximize the number of participants in each category. These variables included: educational attainment (associate vs. bachelor's degree or higher), race (white/non-Hispanic vs. other), primary nursing setting (ED vs. other), hospital service location (rural vs. non-rural), employment (full-time > half-time vs. ≤ half-time), and nurse background (disadvantaged vs. not disadvantaged). Disadvantaged background was determined based on a "yes" response to any of the following variables used by HRSA: attended a high school with lower than state-average SAT/ACT scores, 50% or less students attended college, or at least 30% were eligible for free lunch; diagnosed with a physical or mental impairment that limited educational experiences; primary language other than English or English a barrier to higher education; first-generation college student.

**Data Analysis**

With limited prior data to support selection or exclusion of variables that might affect the wellbeing of nurses in our sample, we used a backward stepwise regression model (Hays, 1994; Mark & Goldberg, 2001; Ghavimi, 2021) for each NWSAT subscale (BIO, EMO, RELA, SPIR) to identify factors that predicted higher or lower wellbeing. Using backward stepwise regression permits all potential predictor variables to be entered initially, with variables removed one by one, over a series of regressions, leaving those variables that predict the outcome variable. The co-authors identified variables they judged to be potential predictors of higher or lower wellbeing based on professional experience and data on burnout in nurses and forensic nurses.

Due to the exploratory nature of this study and relatively small number of observations, predictors were permitted to remain in regression models if they contributed to the predictions of wellbeing at or below the 0.10 level of significance (Rubin, 2013). Factors that predicted

wellbeing at or below the 0.05 level of significance would be considered to contribute a larger and more prominent impact on wellbeing.

The Covid-19 pandemic disrupted in-person SANE education for almost one year during the program. More importantly, it significantly disrupted the lives of nurses (Galanis et al., 2021). Therefore, we compared demographic data and results on the SANE Wellbeing Survey between nurses who completed the survey before the pandemic began (defined by the date the Texas Governor declared a state of emergency on March 13, 2020) and after that date. Since some nurses entered the program after completing initial didact SANE education, we compared baseline demographics between the groups as well as compared their Wellbeing Survey results to test for differences that might impact results.

### Ethical Approval

The SANE Wellbeing Study was approved by the Texas A&M University institutional review board (approval number IRB2018-1268D).

## Results

Sixty-eight participants completed the SANE Wellbeing Survey between March 20, 2019, and May 16, 2021. Participant demographics are described in Table 3. All but two participants were female (97.1%). Most were white/non-Hispanic (61.8%); other race/ethnicities included Hispanic (22.1%), Black (11.8%), Asian (1.5%), American Indian (1.5%), and Native Hawaiian/Pacific Islander (1.5%). The most common highest education level was bachelor's degree (44.1%), followed by associate (36.8%), master's (17.7%), and doctorate (1.5%). Almost three quarters of the sample responded yes to at least one question indicating they were from a disadvantaged background (73.5%). Most worked in non-rural hospitals (63.2%). Almost one third of our sample listed their primary nursing setting as the emergency room (32.4%), while 22.1% were in women's health or labor and delivery, and 41.2% listed "other" (commonly listed settings included critical care, psychiatric, mental health, and school nursing). Most were staff nurses (70.6%), while 14.7% were administrators and another 14.7% listed "other". Mean number of medical forensic examinations completed by participants in the past year was 2.9, with a range from 0–50; 42 participants had never completed a medical forensic examination prior to participating in the SANE education program. Approximately equal numbers of participants completed the SANE Wellbeing Survey before ($n$ = 30) and after ($n$ = 31) an initial didactic SANE course. The average interval between completion of the SANE Wellbeing Survey and an initial didactic SANE course ranged from almost one year before to just over two years after taking an initial SANE course, with an average interval of 33 days after taking an initial SANE course. No significant differences in SANE Wellbeing Survey results were found between those who completed the survey before or after didactic SANE education. The only demographic difference between the two groups was a higher proportion of ED nurses in the group who completed the survey after completing a didactic SANE course. There were no significant differences in demographic variables between nurses who completed the SANE Wellbeing Survey before and during the Covid-19 pandemic.

**Table 3.**
*Sample Demographics (n=68)*

| | |
|---|---|
| Age | 41.0 [range 25-63] |
| Gender | *n* (%) |
| Female | 66 (97.1) |
| Male | 2 (2.9) |
| Race/ethnicity | *n* (%) |
| White/non-Hispanic | 42 (61.8) |
| Hispanic | 15 (22.1) |
| Black | 8 (11.8) |
| Asian | 1 (1.5) |
| American Indian | 1 (1.5) |
| Native Hawaiian/Pacific Islander | 1 (1.5) |
| Education (degree) | *n* (%) |
| Associate | 25 (36.8) |
| Bachelor's | 30 (44.1) |
| Master's | 12 (17.7) |
| Doctorate | 1 (1.5) |
| Disadvantaged background | *n* (%) |
| Yes | 50 (73.5) |
| No | 18 (26.5) |
| Hospital setting | *n* (%) |
| Non-Rural (population >50,000) | 43 (63.2) |
| Rural (≤50,000) | 25 (36.8) |
| Primary nursing setting vs. other | *n* (%) |
| Emergency room | 22 (32.4) |
| Women's health/labor & delivery | 15 (22.1) |
| Other (e.g., critical care, psychiatric/mental health, school nursing | 28 (41.2) |
| Missing | 3 (4.4) |
| Job title | *n* (%) |
| Staff nurse | 48 (70.6) |
| Administrator | 10 (14.7) |
| Other | 10 (14.7) |
| Full-time vs. <full-time (%) | *n* (%) |
| Full-time/ > half-time | 55 (80.9) |
| < half-time | 12 (17.7) |
| Missing | 1 (1.5) |
| MFEs completed past year (mean) | 2.9 [range 0-50] |
| Completed SANE Wellbeing Survey prior to SANE education | n (%) |
| Yes | 31 (45.6) |
| No | 30 (44.2) |
| Missing | 7 (10.3) |
| Completed SANE Wellbeing Survey prior to COVID-19 pandemic lockdown | n (%) |
| Yes | 46 (67.6) |
| No | 22 (32.4) |

Results of all measures in the SANE Wellbeing Survey are presented in Table 4. Results are presented for the total sample and separately for groups who completed the survey before ($n$ = 44) and during ($n$ = 22) the Covid-19 pandemic. Means on all NWSAT scales were > 5, even during the pandemic. While NWSAT trended lower during the pandemic, differences were not significant. Notable differences in SANE Wellbeing Survey measures between the groups included lower scores on the MBI Personal Accomplishment ($t$ = 2.54, $p$ = 0.01), Connor-

Davidson Resilience ($t$ = 2.19, $p$ = 0.03), and General Self-Efficacy ($t$ = 2.35, $p$ = 0.02) scales, and higher scores on the Perceived Stress Scale ($t$ = -2.07, $p$ = 0.04) during the pandemic.

**Table 4.**
*Total Sample and Comparison Between SANE Wellbeing Survey Before and During Covid-19*

| Measure | Total sample (*N*=68) Mean (SD) | Before pandemic (*n*=46) Mean (SD) | During pandemic (*n*=22) Mean (SD) | *t* | *p* |
|---|---|---|---|---|---|
| NWSAT – BIO | 6.24 (1.28) | 6.21 (1.38) | 6.30 (1.06) | -0.27 | ns |
| NWSAT – EMO | 6.26 (1.37) | 6.40 (1.41) | 5.98 (1.29) | 1.16 | ns |
| NWSAT – RELA | 7.33 (1.22) | 7.36 (1.09) | 7.28 (1.49) | 0.26 | ns |
| NWSAT – SPIR | 7.62 (1.23) | 7.74 (1.15) | 7.38 (1.36) | 1.13 | ns |
| MBI – EE | 13.8 (10.64) | 13.2 (10.11) | 14.91 (11.81) | -0.61 | ns |
| MBI – DP | 3.9 (4.71) | 3.40 (4.59) | 4.95 (4.87) | -1.28 | ns |
| MBI – PA | 41.1 (7.10) | 42.58 (4.19) | 38.09 (10.29) | 2.54* | .01 |
| PSS | 11.08 (5.15) | 10.93 (4.16) | 13.64 (6.50) | -2.07* | .04 |
| CD-RISC | 33.35 (4.59) | 34.17 (4.12) | 31.64 (5.14) | 2.19* | .03 |
| GSE | 33.79 (3.59) | 34.48 (3.38) | 32.36 (3.67) | 2.35* | .02 |

Key: NWSAT = Nurse Wellbeing Self-Assessment; BIO = Bio-Physical; EMO = Psycho-Emotional; RELA = Socio-Relational; SPIR = Religio-Spiritual; MBI = Maslach Burnout Inventory; EE = Emotional Exhaustion; PA = Personal Accomplishment; DP = Depersonalization; PSS = Perceived Stress Scale; CD-RISC = Connor-Davidson Resilience scale; GSE = General Self Efficacy scale.

Table 5 presents variables that predicted higher or lower wellbeing on NWSAT subscales in the backward stepwise regression models. Predictors of both higher and lower wellbeing are represented in Table 5 by plus (+) or minus signs (-), respectively. Overall, the strongest predictors of wellbeing on the NWSAT included the MBI Emotional Exhaustion scale and the Perceived Stress Scale. The MBI Emotional Exhaustion scale was a consistently strong and inverse predictor of wellbeing across all four wellbeing domains. The PSS demonstrated a strong and inverse relationship with BIO, EMO and RELA wellbeing, but not with SPIR. Working in non-rural hospital positively affected both BIO and EMO to a significant degree, but not RELA or SPIR. MBI PA and Self-Efficacy were strongly and positively associated with SPIR wellbeing.

**Table 5.**
*Backward Stepwise Regression Model Results*

*Factors affecting NWSAT Bio-Physical Wellbeing (BIO)*

| Variable | Coef. | SE | 95% CI | *t* | *p* |
|---|---|---|---|---|---|
| Perceived Stress Scale | -0.11 | 0.03 | -0.17, -0.05 | -3.74 | <0.001 |
| MBI – Emotional Exhaustion | -0.03 | 0.02 | -0.06, 0.002 | -1.85 | 0.070 |
| Rural vs. *non-rural hospital | 0.53 | 0.27 | -0.02, 1.08 | 1.94 | 0.057 |
| (constant) | 7.00 | 0.54 | 5.91, 8.10 | 12.80 | <0.001 |

Note: $R^2$ adjusted = 0.36, $F(3,56) = 12.15$, $p < 0.001$

*Factors Affecting NWSAT Psycho-Emotional Wellbeing (EMO)*

| Variable | Coef. | SE | 95% CI | *t* | *p* |
|---|---|---|---|---|---|
| Perceived Stress Scale | -0.11 | 0.03 | -0.16, -0.06 | -4.35 | <0.001 |
| MBI – Emotional Exhaustion | -0.06 | 0.01 | -0.09, -0.03 | -4.47 | <0.001 |
| Rural vs. *non-rural hospital | 0.45 | 0.25 | -0.04, 0.95 | 1.83 | 0.072 |
| (constant) | 7.17 | 0.56 | 6.05, 8.28 | 12.86 | <0.001 |

Note: $R^2$ adjusted = 0.58, $F(4, 55) = 21.61$, $p < 0.001$

| *Factors Affecting NWSAT Socio-Relational Wellbeing (RELA)* | | | | | |
|---|---|---|---|---|---|
| Variable | Coef. | SE | 95% CI | *t* | *p* |
| Perceived Stress Scale | -0.10 | 0.02 | -0.15, -0.06 | -4.36 | <0.001 |
| MBI – Emotional Exhaustion | -0.05 | 0.01 | -0.08, -0.02 | -4.22 | <0.001 |
| ED vs. *other primary nursing setting | -0.47 | 0.22 | -0.91, 0.03 | -2.12 | 0.04 |
| (constant) | 10.01 | 0.44 | 9.13, 10.89 | 22.87 | <0.001 |
| Note: $R^2$ adjusted = 0.56, $F(4, 55) = 26.00$, $p < 0.001$ | | | | | |
| *Factors Affecting NWSAT Religio-Spiritual Wellbeing (SPIR)* | | | | | |
| Variable | Coef. | SE | 95% CI | *t* | *p* |
| MBI – Emotional Exhaustion | -0.04 | 0.01 | -0.07, -0.02 | -3.28 | 0.002 |
| MBI – Personal Accomplishment | 0.06 | 0.02 | 0.02, 0.09 | 3.12 | 0.003 |
| General Self-Efficacy | 0.08 | 0.04 | 0.01, 0.16 | 2.30 | 0.03 |
| Associate vs. *higher degree | 0.44 | 0.27 | -0.10, 0.99 | 1.64 | 0.11 |
| (constant) | 2.27 | 1.34 | -0.43, 4.96 | 1.69 | 0.10 |
| Note: $R^2$ adjusted = 0.39, $F(4, 55) = 10.44$, $p < 0.001$ | | | | | |

Key: *Variable associated with higher wellbeing scores on the measure; (constant) is used to reduce bias during modeling and is not meant to be interpreted.

The overall model predicting NWSAT BIO was sufficiently strong (Adjusted $R^2 = 0.36$, $F(3,56) = 12.15$, $p < 0.001$). The Perceived Stress Scale was the strongest predictor of BIO, with higher PSS scores predicting lower wellbeing ($t = -3.74$, $p < 0.001$). Meanwhile, working in a non-rural hospital contributed to higher BIO wellbeing ($t = 1.94$, $p = 0.57$) and higher MBI Emotional Exhaustion scale contributed to lower BIO wellbeing ($t = -1.85$, $p = 0.70$).

The NWSAT EMO model followed a similar pattern to BIO wellbeing, but was supported with even stronger evidence (Adjusted $R^2 = 0.58$, $F(4, 55) = 21.61$, $p < 0.001$). Here, the *t*-test of the contributions of the Perceived Stress Scale and MBE Emotional Exhaustion were, again, inversely related with EMO wellbeing ($t = -4.35$ and $t = -4.47$ respectively, both $p < 0.001$). Working in a non-rural hospital demonstrated a more modest but still positive association with higher EMO wellbeing ($t = 1.83$, $p = 0.72$).

The NWSAT RELA prediction model was also strong (Adjusted $R^2 = 0.56$, $F(4, 55) = 26.00$, $p < 0.001$). Again, the Perceived Stress Scale and MBI Emotional Exhaustion were very strong predictors ($t = -4.36$ and $t = -4.22$ respectively, both $p < 0.001$). Working in an ED as a primary setting rather than another primary setting significantly predicted lower RELA wellbeing ($t = -2.12$, $p = 0.04$).

The model predicting NWSAT SPIR was sufficiently strong (Adjusted $R^2 = 0.39$, $F(4, 55) = 10.44$, $p < 0.001$). MBI Emotional Exhaustion strongly and inversely predicted SPIR wellbeing ($t = -3.28$, $p = 0.002$). For SPIR, MBI Personal Accomplishment ($t = 3.12$, $p = 0.003$) and General Self-Efficacy ($t = 2.30$, $p = 0.03$) also contributed positively to SPIR wellbeing. Having a degree higher than an associate degree predicted greater SPIR wellbeing but did not reach significance at the 0.01 level ($t = 1.64$, $p = 0.11$).

## Discussion

Sexual assault nurse examiners may experience lower wellbeing and higher burnout due to the work often being a second nursing role and because of frequent exposure to persons who have experienced acute trauma. We were interested in learning the baseline wellbeing and burnout of nurses prior to SANE practice. While SANE education might have a negative impact on nurse wellbeing due to exposure to vicarious traumatization (Hite et al., 2022), there were no significant

differences in SANE Wellbeing Survey scores between nurses who completed the SANE didactic education before taking the survey and those who took the survey before exposure to SANE education. This finding suggests didactic SANE education did not significantly impact nurse wellbeing.

In general, NWSAT scores indicated nurses in our sample had positive wellbeing, with means above 5.90 on all scales, including for those who completed the SANE Wellbeing Survey during the Covid-19 pandemic (Table 4). However, regression models did identify variables that predicted lower NWSAT wellbeing scores in our sample. Resiliency and self-efficacy scores did not predict NSWAT Wellbeing outcomes so were not included in the final regression models. While NWSAT wellbeing scores trended lower for nurses who completed the SANE Wellbeing Survey during the pandemic, differences were not significant.

Higher scores on MBI Emotional Exhaustion were associated with lower wellbeing in all four domains of the NWSAT (BIO, EMO, RELA, and SPIR). Emotional exhaustion is a known contributor to nurses' intention to leave their nursing jobs (Kelly et al., 2021). Higher Perceived Stress Scale scores contributed to lower wellbeing in all domains except SPIR. Lower MBI Personal Accomplishment and General Self-Efficacy scores were associated with lower SPIR in our sample. Our findings are consistent with a prior study that found greater self-rated spiritual wellbeing was associated with lower MBI Emotional Exhaustion and higher MBI Personal Accomplishment in nurses working in high-intensity areas (Rushton et al., 2015).

Nurses whose primary work setting was the ED reported lower RELA wellbeing. This finding should be further explored to identify potential explanations. Perhaps the nature of ED work limits time for satisfying engagement with patients and colleagues (Staempfli & Lamarche, 2020). Vicarious traumatization can also adversely affect interpersonal relationships for SANEs (Wies & Coy, 2013). This is important to explore further since most SANE programs are based in EDs (Logan et al., 2007). Almost a third of nurses in our sample worked in the ED as their primary setting. Nurses working as SANEs who have primary roles in the ED may be especially at risk for reduced wellbeing and higher burnout due to frequent exposure to other types of trauma in their ED roles. A study comparing burnout scores among SANEs found that nurses who worked in dual SANE and ED roles and were no longer working in either setting had over four times higher burnout scores on the MBI than all other SANEs in the sample, and those currently working in dual SANE and ED roles had almost three times greater burnout scores than nurses who used to work in dual roles or were only working as SANEs (Zelman et al., 2021).

Working in a non-rural hospital was associated with higher BIO and RELA wellbeing compared with nurses working in rural areas. In the United States, physical health is poorer in rural areas compared to urban areas (Abrams et al., 2021), which might be reflected in lower BIO wellbeing scores in our sample. Rural hospital nurses face unique challenges, which can contribute to relational conflict between nurses and other healthcare staff within and beyond their hospitals (Smith et al., 2019). Nurses working in rural hospitals may experience increased stress due to threats of hospital closures, higher workloads, and decreased organizational support (American Hospital Association, 2022; Bai et al., 2020), issues further exacerbated by the coronavirus pandemic (Segel et al., 2021).

In addition to identifying factors that contributed to NWSAT scores in our sample, we identified differences in other measures of wellbeing and burnout when comparing nurses who completed the SANE Wellbeing Survey before and during the COVID-19 pandemic. During the Covid-19 pandemic, vicarious trauma, burnout, and intent to leave their jobs were prevalent

among ED nurses (de Cordova, 2022; Falatah, 2021; Gualano et al., 2021). In our sample, mean MBI Emotional Exhaustion scores were higher among nurses who completed the survey during the pandemic compared to those who completed it before the pandemic, but the difference was not significant and were much lower than those in a systematic review of pandemic-related burnout in healthcare workers (Gualano et al., 2021). Personal Accomplishment was the only burnout indicator that differed between nurses who completed the measure before and during the pandemic, with lower scores during the pandemic. Compared to nurses who completed baseline measures before the pandemic, those who completed them during the pandemic scored higher on the Perceived Stress Scale and lower on the CD-RISC-10 resiliency, General Self-Efficacy, and MBI Personal Accomplishment scales. These findings highlight additional challenges to wellbeing faced by nurses during the pandemic. Nevertheless, Perceived Stress Scale scores even during the pandemic were low in our sample compared with front-line healthcare workers in one study, 80% of whom were nurses (13.64 vs. 21.43; Di Giuseppe et al., 2021) and lower than those in a large normative U.S. sample before the pandemic (Cohen & Janicki-Deverts, 2012). Scores on the Connor-Davidson Resiliency Scale in our sample were consistent with normative samples (Davidson, 2018), while General Self-Efficacy scores were slightly higher than in normative samples (Schwarzer, 2014).

Overall, we were surprised that scores on all SANE Wellbeing Survey measures indicated better wellbeing compared to other published samples, especially considering the SANE role was an additional nursing role for most of our participants, which could be assumed to decrease wellbeing. Compared to a sample of 1174 nurses who were not SANEs across a hospital system in a large Eastern state (Bogue & Ferren Carter, 2022; Downing et al., 2022), our sample scored higher on NWSAT RELA (7.33 vs. 6.57) and SPIR (7.62 vs. 6.63) wellbeing measures, higher on MBI Personal Accomplishment (41.1 vs. 37.57), and lower on MBI Emotional Exhaustion (13.76 vs. 22.28) and Depersonalization (3.97 vs. 5.92). Nurses in our sample were just beginning SANE practice and their scores might be different once they have practiced as SANEs. For example, our sample scored lower on MBI measures compared with practicing nurses with dual ED and SANE roles in a study (Zelman et al., 2022) who had a median MBI Emotional Exhaustion score of 23.5 (vs. 13.8 in our sample) and median MBI Depersonalization score of 8.5 (vs. 3.9 in our sample). Commonly used cutoff scores are > 26 for Emotional Exhaustion and > 9 for Depersonalization (e.g., Rotenstein et al., 2018). Large standard deviations in our sample indicate some nurses in our sample might have experienced scores that exceeded these thresholds.

While there are no current national level data published about SANE characteristics, for many nurses, practicing as SANEs is an on-call, part-time job on top of working in another nursing setting (Green et al., 2021; Zelman et al., 2022). Since most nurses voluntarily pursue SANE education, it is possible that nurses with good wellbeing and low burnout symptoms are more likely to pursue SANE education. Nurses who choose to be SANEs may value social relations, feel spiritually drawn to nursing work, and experience lower burnout than other nurses, which could account for our findings. Empathy has been found to protect against burnout in nurses (Wilkinson et al., 2017). It is possible that nurses with higher empathy are drawn to SANE work, though we did not measure this in our study. Empathy is protective against depersonalization and depersonalization was the largest predictor of intent to leave nursing in one study (Leiter & Maslach, 2009). The nurses in our study were new to SANE practice. With repeated exposure to vicarious traumatization and working in dual nursing roles over time, these nurses may have increased risk for decreased wellbeing and increased burnout.

### Limitations

The purpose of this study was to examine the wellbeing and burnout of nurses undergoing education to practice as SANEs. Regression modeling methods were selected to maximize the ability to identify significant predictors of wellbeing in our sample. Findings were limited to variables collected; there might be other factors that better predict wellbeing. Some variables collected and not included in regression models might have predictive power in larger samples. The small sample size resulted in large standard deviations on some measures, limiting the ability to state there were meaningful differences in perceived stress and personal accomplishment between nurses who completed the SANE Wellbeing Survey before and during the Covid-19 pandemic.

Due to the small sample size and exploratory nature of our study, we did report findings with level of significance up to $p = 0.10$ rather than the conventional 0.05. We did this to identify potential areas for intervention that might impact SANE wellbeing. Intervention studies with larger samples and longitudinal designs will provide further information on factors that are associated with SANE wellbeing. Additional research examining the dual role of being an ED nurse and a SANE would provide greater insight into why this combination is associated with higher risk for burnout compared with SANEs who do not work as ED nurses. Results of further research could be used to identify specific interventions to promote wellbeing in this population. Our sample also does not represent U.S. nursing demographics generally, which is 9.4% male, 80.6% White, 6.7% Black, 5.6% Hispanic/Latinx (Smiley et al., 2021), with mean age 50 (National Center for Health Workforce Analysis, 2019), although it might be more representative of the SANE workforce. We are unsure the significance of the high percentage of nurses in our sample who indicated they were from disadvantaged backgrounds. Criteria for that designation were broad and self-reported. Our sample included almost a third of nurses from rural backgrounds, which was a focus of recruitment in our SANE education program. Historically, there is a shortage of SANEs in rural areas (Government Accountability Office, 2016), indicating our sample may have included more nurses from rural areas than are present in the SANE population generally.

Our original intent was to follow nurses every six months and one year after completing our SANE education program. Unfortunately, due to low response rates for follow-up surveys, we are unable to analyze these data. A 2018 study found no significant relationship between years of forensic nursing practice and levels of vicarious traumatization (Rostron & Furlonger, 2017), which supports our conjecture based on findings of the current study that nurses who choose to be SANEs may have higher wellbeing and less burnout risk compared to non-SANE nurses. On the other hand, Hite and colleagues (2022) found secondary traumatic stress and burnout scores increased in a small sample of nurses after SANE training and performing medical forensic examinations compared with pre-SANE education levels. Future studies using larger sample sizes and longitudinal methods might provide greater insights into the impacts of SANE work on the wellbeing and burnout of nurses.

## Implications for Clinical Forensic Nursing Practice

Our findings suggest nurses who self-select as SANEs have good baseline wellbeing and low burnout. However, because prior studies indicate burnout rates are high in nurses who practice as SANEs (Hite et al., 2022; Zelman et al., 2022), there is a need for evidence-based interventions to support nurses entering SANE practice. Nurses working in dual ED and SANE

roles might require additional interventions to support wellbeing and prevent burnout (Zelman et al., 2022). To our knowledge, there is only a single study involving an intervention to address SANE wellbeing (Flarity et al., 2016). In this very small pilot of nine forensic nurses, Flarity and colleagues used a compassion fatigue resilience intervention that improved compassion satisfaction scores after the intervention. Nevertheless, several SANE education programs are implementing interventions to promote SANE retention, many supported by federal grants from the Health Resources and Services Administration Advanced Nurse Education SANE grants (Colbert & Sekula, 2022). These interventions target SANEs in rural areas and include content and interventions related to vicarious traumatization, monitoring for burnout, promoting resilience, providing opportunities for debriefing, supporting new SANEs through communities of practice, and offering mental health counseling (Bouchard et al., 2022; Burton et al., 2022; Hite et al., 2022; Mitchell et al., 2022; Thomas et al., 2020).

Healthcare leaders can promote wellbeing and prevent burnout by promoting skills such as resilience, mindfulness, compassion satisfaction, and empathy to protect nurses from burnout (Mahon et al., 2017; Salvarani et al., 2019). Targeted self-care measures and intentional organizational strategies to increase resiliency and wellbeing may protect nurses against vicarious traumatization and burnout and promote retention (Ferren Carter & Bogue, 2022; Thomas et al., 2020). A systematic review of effective interventions to reduce burnout in physicians and nurses (Aryankhesal et al., 2019) showed successful interventions included virtual mental health consults, psychosocial training, yoga, meditation, and mindfulness significantly reduced burnout. A recent publication provided concrete guidance for forensic nurses to integrate mindfulness practices into their work (Bhattarai et al., 2024).

## Conclusion

Prior studies indicate SANEs are at risk for higher burnout as they typically work in dual nursing roles and are exposed to other people's trauma (Hite et al., 2022; Zelman et al., 2022). Nurses in our study had higher wellbeing and lower burnout scores than a national sample, suggesting nurses who self-select to undergo SANE education might be at less risk for burnout as they have higher wellbeing than nurses who do not seek SANE education. At the same time, nurses in our study were just beginning their SANE journeys. Studies examining evidence-based interventions to support SANE wellbeing are needed to decrease burnout and attrition.

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Journal of the Academy of Forensic Nursing

*Clinical Perspectives*

# Mock Testimony Simulation: Innovative Teaching Methodology for Forensic Nurses and Prosecuting Attorneys

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## Abstract

Mock testimony is a novel approach to the education of medical professionals who testify in legal proceedings. It allows peer to peer and interdisciplinary education with, about, and from attorneys and forensic nurses. Forensic nurse faculty created a mock testimony simulation in conjunction with attorneys to educate novice forensic nurses. It serves a multitude of purposes including providing a psychologically safe space for forensic nurses to learn key legal concepts while not impacting the criminal trial or patient outcomes.

*Keywords:* Mock Testimony Simulation, Forensic, Sexual Assault Nurse Examiner (SANE), Expert Witness, Education

# Mock Testimony Simulation: Innovative Teaching Methodology for Forensic Nurses and Prosecuting Attorneys

The forensic nurse incorporates information from nursing science, forensic science, and the legal arena. In 1990, Virginia Lynch proposed forensic nursing as a new nursing subspecialty in her seminal thesis to address the unique needs of persons who experience trauma. Forensic nursing is both a nursing and a forensic specialty (Valentine et al., 2020). One subspecialty role is sexual assault nurse examiners (SANEs) who care for persons who experience or perpetrate sexual violence. Forensic nurses may be called to testify in criminal, civil, and military proceedings. However, many are concerned they do not have the educational preparation to be effective fact or expert witnesses (Gary et al., 2023).

Mock testimony is an imitation trial that allows professionals to actively hone their testimony skills (Federal Bar Association, 2024; Werner, 2023). As with any clinical skill, testimony requires refining, but there are few opportunities for mock testimony experiences. Some state boards of nursing or other governmental agencies require courtroom observation hours or courtroom testimony to maintain SANE certification. Texas, for instance, requires state-certified SANEs to complete 12 hours of courtroom observation (Texas, 2020). To meet the requirement, a mock testimony simulation course was created.

## Background and Need

The principles of legal testimony are not components of most academic nursing programs. Yet, nurses may be subpoenaed to testify in criminal proceedings. In response to this education gap and feedback from SANE coordinators, the authors designed a two-day mock testimony course (Gary et al., 2023). Content consisted of one day of classroom and one day of mock testimony simulation. The District Attorney, Assistant District Attorneys, Victims' Assistance Coordinator, and forensic faculty created content. Lead attorneys had a minimum of 8 years' experience as prosecutors, and the forensic faculty each had over 20 years' experience as expert witnesses.

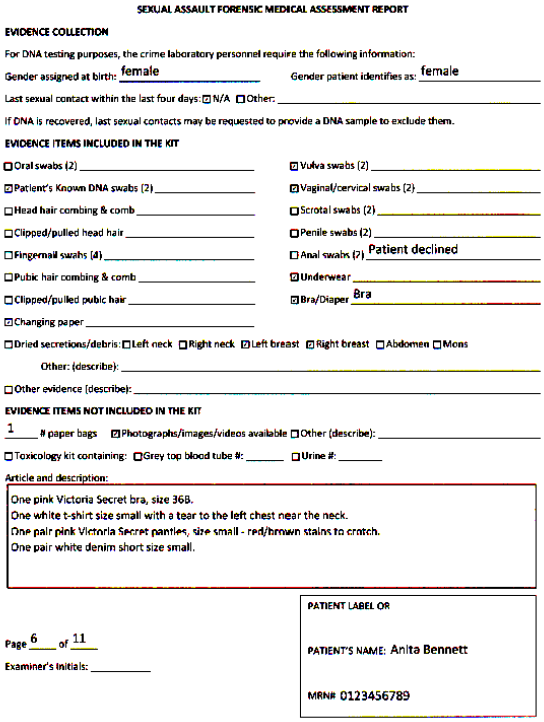
### Pilot Day One Classroom Content.

Initial classroom content included the following topics, as well as a mock sexual assault case report:

- Court processes and the criminal justice system
- Importance of accurate medical forensic record documentation
- Medical legal ethics
- Laws affecting medical testimony and the expert witness
- Testimony preparation
- Self-care/burnout

There was also a mock sexual assault case report. An example of the sexual assault documentation record is shown in Figure 1. Participants created a curriculum vitae (CV) to use in the mock trial. All participants testified to the same case during the mock trial.

**Figure 1.**
*Mock Sexual Assault Documentation Record*



SEXUAL ASSAULT FORENSIC MEDICAL ASSESSMENT REPORT

EVIDENCE COLLECTION

For DNA testing purposes, the crime laboratory personnel require the following information:

Gender assigned at birth: female  Gender patient identifies as: female

Last sexual contact within the last four days: ☑ N/A ☐ Other: _____

If DNA is recovered, last sexual contacts may be requested to provide a DNA sample to exclude them.

EVIDENCE ITEMS INCLUDED IN THE KIT

| | |
|---|---|
| ☐ Oral swabs (2) | ☑ Vulva swabs (2) |
| ☑ Patient's Known DNA swabs (2) | ☑ Vaginal/cervical swabs (2) |
| ☐ Head hair combing & comb | ☐ Scrotal swabs (2) |
| ☐ Clipped/pulled head hair | ☐ Penile swabs (2) |
| ☐ Fingernail swabs (4) | ☐ Anal swabs (2) Patient declined |
| ☐ Pubic hair combing & comb | ☑ Underwear |
| ☐ Clipped/pulled pubic hair | ☑ Bra/Diaper Bra |
| ☑ Changing paper | |

☐ Dried secretions/debris: ☐ Left neck ☐ Right neck ☑ Left breast ☑ Right breast ☐ Abdomen ☐ Mons

Other: (describe): _____

☐ Other evidence (describe): _____

EVIDENCE ITEMS NOT INCLUDED IN THE KIT

1 # paper bags ☑ Photographs/images/videos available ☐ Other (describe): _____

☐ Toxicology kit containing: ☐ Grey top blood tube #: _____ ☐ Urine #: _____

Article and description:

One pink Victoria Secret bra, size 36B.
One white t-shirt size small with a tear to the left chest near the neck.
One pair pink Victoria Secret panties, size small - red/brown stains to crotch.
One pair white denim short size small.

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Examiner's Initials: _____

PATIENT LABEL OR

PATIENT'S NAME: Anita Bennett

MRN# 0123456789

**Pilot Day Two Mock Testimony.**

The in-person simulation began with a pre-trial meeting with the prosecuting attorney in preparation for testimony. Attorneys described their legal strategy. Nurses asked questions and educated the attorneys about anatomy, physiology, and medical terminology; they also highlighted important case information. Participants were pre-briefed about the process and expectations before dividing into two courtrooms. One forensic faculty and 3–5 attorneys staffed each courtroom. Attorneys portrayed prosecution, defense, and the judge, and rotated roles throughout the day. After pre-trials, one group were qualified as experts while the second group experienced direct and cross-examination. In the afternoon, the groups switched so each participant had the opportunity to answer qualifying questions based on their CV (voir dire), direct examination questions, and cross-examination questions.

### *a) Qualifying as an Expert Witness.*

Participants were individually qualified as expert witnesses. Federal Rules of Evidence 702 requires an expert witness to possess "scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue" (2023). Expert witnesses are qualified as experts by testimony that establishes their "knowledge, skill,

experience, training, or education" (Federal Rules of Evidence 702, 2023; Texas Rules of Evidence 702, 2020). Once witnesses qualify as experts where they are providing testimony, they may give testimony in the "form of an opinion or otherwise" (Best, 2022, p. 25). While one participant was qualified, the other participants portrayed the jury. Everyone provided and received immediate feedback from forensic faculty, attorneys, and peers on their presentation style, language choices, and physical presence. Focus was placed on positive feedback since encouraging, frequent feedback facilitates learning (Bradshaw & Hultquist, 2017). Quality peer learning occurs when interactions provide substantive information that the participant can immediately integrate into practice (Bunting & Williams, 2017). Self-reflection and real-world opportunities to integrate learning into practice, as well as competence demonstration assist adults to learn key concepts (Kuh & O'Donnell, 2013). Participants were encouraged to self-reflect while faculty and attorneys aided peer feedback, therefore creating a ripe learning environment.

### *b) Direct and Cross-Examination.*

Participants experienced direct examination and cross-examination. They testified to the mock patient's reported history of sexual assault, physiological findings, and evidence collected. Attorneys' questions included the patient's history, physical examination, evidence collected, and photography. The mock scenario was written with potential oversights in documentation, which not only aided participants in their testimony, but reinforced potential consequences of incomplete or incorrect documentation. Sample questions are shown in Table 1.

**Table 1.**
*Sample Questions*

**Sample Questions**

**Voir Dire**

**Prosecution**

- How long have you been a registered nurse?
- What is a forensic nurse or sexual assault nurse examiner?
- What kind of education is needed to be a forensic nurse?
- What does a sexual assault examination entail?
- Walk the jury through the sexual assault examination process. Is it invasive?

**Defense**

- Are you being paid to be here? Who is paying?
- Do you work for law enforcement?
- You said you advocate for your patient, so you are an advocate, and you are here for the patient? Are you here to say whatever the patient said is true?

**Mock Case**

**Prosecution**

- How did you get involved in this case?
- You said there are no injuries. How is that possible?
- Please tell the jury about the female genital anatomy.
- Walk the jury through evidence collection. What does that look like?

**Defense**

- You said there were no injuries and that can be consistent with sexual assault. Can no injuries also be consistent with 'nothing happened'?
- You were not there when this alleged assault occurred, right? You are just reporting what the patient said to you, right?

Testifying to oversights or inconsistencies enlightened the participants, promoting the importance of documentation and forensic nursing processes. Each participant's testimony is built upon previous testimony. For example, participant one fielded questions about forensic nursing process and this mock patient's history of sexual assault, then the next participant answered questions about the head-to-toe examination, and evidence collected. Finally, another participant answered questions about the anogenital examination process and anogenital evidence collection. Participants provided feedback that the experiential learning was valuable, and observing their peers influenced their learning.

## Contributing Factors

Forensic nurses have extensive education on the treatment of persons who experience or perpetrate violence, state and federal rape, and/or sexual assault laws impacting their practice, and legal processes, since they may be involved in federal, state, or tribal jurisdiction cases. Typically, SANE education includes a minimum of 40 hours of continuing education contact hours on sexual violence, the characteristics of perpetrators and those who are victimized, forensic nursing, laws, collaboration with community partners, medical forensic history-taking, and physical assessment. SANE education includes evidence collection and preservation, photography, sexually transmitted infections testing and prophylaxis, pregnancy risk testing and prophylaxis, documentation and photodocumentation, discharge planning and follow-up care, and courtroom testimony (IAFN, 2022). Nonetheless, there are few opportunities to hone forensic nurse testimony.

### History

IAFN published SANE education guidelines, which indexed training pertaining to the forensic nurse's role in judicial proceedings (2022). However, most SANE education does not provide experiential learning opportunities. The single, traditional, classroom teaching mode is less effective than using multiple modes of teaching (Jaffy, 2017; Tang, 2021). One mode is experiential learning which is learning by doing which requires personally experiencing situations, self-reflecting on actions, and actively doing (Kolb, 2015). Simulation is an effective learning-by-doing teaching strategy.

## Potential Impact on the Forensic Nurse

"Moot court" is routinely utilized in law schools to educate law students on court proceedings (Nesbitt Cosby, 2018). Moot court is typically a competition mock appellate court proceeding without witnesses or a jury. Mock testimony is also frequently used by disciplines who regularly testify in court, such as law enforcement and forensic analysts (Mitchell et al., 2021). An adapted education course for health care professionals who commonly testify was created for nurses to put their knowledge of patient care and forensic science into action, without impacting a criminal case or a patient's health. Typical mock court educational events are participant-centered and are guided by expert attorneys (Tang, 2021). The translation of information from course content to active testimony is a talent that requires practice and constructive feedback. Learning is a process; knowledge is constructed, rather than passively received, therefore adult learners must be able to comprehend and apply their knowledge (Bain, 2004). Adults learn by doing, they need to make sense of the newly acquired concepts. They require "experiencing, reflecting, thinking, and acting" in a recurring process (Kolb & Yeganeh,

2011, p. 4). Firsthand learning in a simulated, safe environment solidifies the theoretical content obtained from the virtual course (Jaffy, 2017). Health care simulation standards were followed to ensure learning outcomes were achieved by participants (INACSL Standards Committee, 2021 a, b, c, & d). Therefore, the concepts of adult learning theories, pre-briefing, and debriefing were threaded throughout the simulation. Since testifying in legal proceedings is an important aspect of forensic nursing practice, moot or mock court can be used as a safe learning environment where nurses may hone their testimony skills.

## Discussion

As with actual criminal court proceedings, participants experienced direct and cross-examination by attorneys with varying levels of experience. Robust discussions resulted regarding the witnesses' understanding of the questions, and ways to communicate any lack of understanding. Post-activity participant comments included feeling less intimidated by criminal court, having an increased awareness of criminal court processes, and reported feeling better prepared for testimony. Participants reported the critique by attorneys who questioned them was helpful to their learning.

### Education of the Attorneys

An unforeseen but positive result was the cross-training of the attorneys. Just as nurses may find the thought of testifying in court intimidating, attorneys may find the thought of questioning expert witnesses to be daunting (Mitchell et al., 2011; Tang, 2021). Lack of familiarity with health care practice, standards of care, and medical treatments may lead some attorneys to not utilize medical forensic experts well in their cases. For evidence, whether medical forensic or forensic science, to be effective and useful by the trier of fact, jurors must be able to understand it (Eldridge, 2019). Jurors may be left with incorrect beliefs about medical treatment, medical symptoms, and patient care if they cannot understand the evidence presented. These incorrect beliefs may result in an injustice to both the defendant/the accused and those who were victimized.

In the course, attorneys with more than eight years' experience were paired with less-experienced attorneys. The senior attorneys were able to provide feedback to the participants and the less-experienced attorneys. Participants were given the opportunity to be questioned by both a senior and less-experienced attorney and provide insight into how they could direct younger attorneys into more effective presentations of evidence. Attorneys with all levels of experience reported enhanced understanding of health care processes, including anatomy, the sexual assault examination, and normal healing processes. Additionally, younger attorneys reported the mock testimony simulation improved their witness-questioning skills and enhanced their confidence in questioning expert medical professionals.

## Recommendations

The participants completed anonymous course evaluations within three days of course completion. These evaluations, coupled with verbal feedback during faculty and attorney-guided group debriefs, were utilized to improve future simulations. Faculty utilized INACSL best practices including facilitation (2021a), preparation and pre-briefing (2021b) of faculty, attorneys,

and participants, and the debriefing process (2021c). From the initial cohort, there was a registration waiting list, highlighting the demand for this content.

**Ample Time for Direct, Cross-examination and Redirect**

The pilot cohort was capped at 20 participants to assess processes, although the plan was to have larger cohorts to address the waiting list. Limited faculty and attorneys, as well as the finite number of available local courtrooms, impacted the size of cohorts. Minimizing the number of cohort participants allowed sufficient time for direct, cross-examination, and redirect, which decreased the participants speaking more than the attorney requested. Subsequent simulations were capped at 16 participants to allow more time for participants to testify at length, and ensured adequate individualized feedback from peers, faculty, and attorneys.

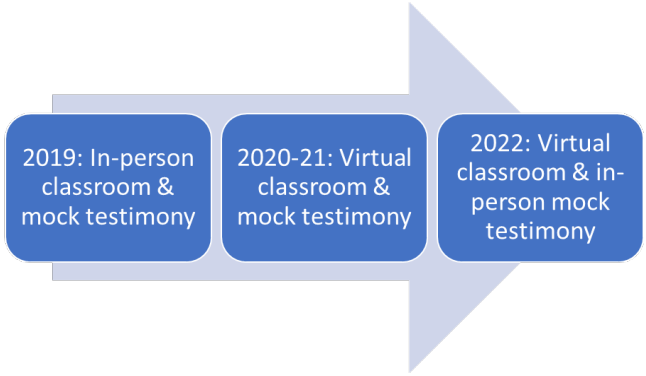
**Pandemic Considerations and Ongoing Course Progression**

The global pandemic caused faculty to pivot from the initial 100% in-person course to 100% virtual course. Early on, two face-to-face courses were presented, then six completely virtual courses were completed. After pandemic restrictions were lifted, faculty and attorneys, with participant feedback, pivoted again to a hybrid course format with a virtual classroom component that is completed before the in-person mock testimony day (Figure 2).

**Course Progression Over Time**

There was minimal attrition due to work or family emergencies, loss of internet connectivity, and weather-related issues (one disconnected mid-simulation to take cover for a tornado warning. Participants unable to complete the course initially were encouraged to enroll in the next mock testimony simulation to finish content. The mock testimony simulation course routinely had a waitlist from positive word-of-mouth recommendations.

**Figure 2.** *Course Progression*




**Pandemic Adaptations**

During the pandemic, faculty reconstructed the course from completely in-person to entirely virtual using a learning management system and video conferencing software. The first day classroom content was flipped to a virtual, on-demand program where participants had three weeks to complete. The mock testimony day schedule remained the same with participants accessing the virtual courtroom through video conferencing software. As pandemic restrictions

began to lift, and based upon participant feedback, the course was again retooled to a hybrid (virtual content and live mock testimony) course.

### Current Hybrid Format

Participants completed the 13-hour virtual content on a learning management system prior to the 8-hour, in-person mock testimony day at the courthouse. The virtual classroom content was available for three weeks prior to the mock testimony day. Content was expanded from eight to 13 hours following faculty, attorney, and learner feedback via guided debriefing and course evaluations. Participants completed several modules created by the forensic faculty, attorneys, and a victim advocate, including:

- Court process and the criminal justice system
- Bias
- Laws affecting medical testimony and expert witnesses
- Forensic nurse role in court proceedings
- CV preparation
- Records and documentation
- Medical legal ethics
- Teaching attorneys and jurors
- Self-care/burnout
- Case scenario and testimony preparation
- Pre-trial preparation and video
- Qualifying an expert witness video

The hybrid course delivery format was maintained after pandemic restrictions were lifted, since evaluations were overwhelmingly positive about the format. Participants create their CVs, and forensic nurse feedback was provided. Additionally, each participant attended a virtual videoconferencing pre-trial with faculty to discuss the case, their CV, and to learn the expectations of the mock court day.

### Next Steps

Since most participants are early in their forensic nursing careers, they may not testify for weeks or months after attending the simulation. That extended time may impact memory and retention of key concepts. An expert witness textbook may refresh the participants' memory of said concepts. A mock testimony computer-based learning course may be an excellent resource to refresh forensic nurses' memory on court procedures and allow them to practice their testimony skills prior to testifying in actual legal proceedings. Forensic faculty are collaborating with others to create such a course that could be accessed remotely and on-demand.

## Conclusion

Simulation is an extremely useful learning modality for health care professionals. It allows participants to learn skills in a low-risk, safe environment with expert faculty and peer feedback. A forensic nurse mock testimony simulation may provide participants with the needed abilities to effectively testify in legal proceedings. Additionally, the mock testimony simulation initially created to fill the gap in nursing education was also found to increase attorney knowledge of

anatomy, physiology, and medical terminology. The mock testimony simulation supported interprofessional teaching and learning.

## Funding

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# AFN Journal Club Research Reviews: Summer-Fall

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## AFN Journal Club Research Reviews: Summer-Fall

The AFN Journal Club meets regularly to review the quality of the evidence available to support our clinical practice. This is a core requirement of professional practice.

**AFN Journal Review Criteria**

- Evidence tables are for the review of studies that may have implications for clinical practice.
- All articles on this table have been reviewed by the AFN Journal Club.
- Abbreviations are listed in the legend following the reviews.

Melnyk Levels of Evidence (Melnyk & Fineout-Overholt, 2015)

- **Level 1 -** Systematic review & meta-analysis of randomized controlled trials; clinical guidelines based on systematic reviews or meta-analyses
- **Level 2 -** One or more randomized controlled trials
- **Level 3 -** Controlled trial (no randomization)
- **Level 4 -** Case-control or cohort study; correlation design; examines relationships
- **Level 5 -** Systematic review of descriptive & qualitative studies
- **Level 6 -** Single descriptive or qualitative study; does not examine relationships
- **Level 7 -** Expert opinion

**Legend** NAAT= *Nucleic Acid Amplification Test*; NG= *Neisseria Gonorrhea;* CT= *Chlamydia Trachomatis;* SA= *Sexual Assault;* TMA= *transcription-mediated amplification;* ED= *Emergency Department*; IPV=*Intimate Partner Violence*

# Completed Reviews

Jansson L, Swensson M, Gifvars E, Hedell R, Forsberg C, Ansell R, & Hedman J. (2022, Jan). Individual shedder status and the origin of touch DNA. Forensic Sci Int Genet. 56:102626. doi: 10.1016/j.fsigen.2021.102626. PMID: 34781198.

**Study Description/Background.** Examine if the shedder status of an individual at a given occasion can be coupled to the DNA levels on the facial skin, and also examine the relation between deposited DNA levels and individual facial sebum secretion levels.

**Literature Review.** 44 references; 22 within 5 years. All references relevant to subject matter.

**Design/Methods.** Experimental design; participants (n=9) were assigned to attend a weekly, one-hour seminar three weeks in a row and were instructed to keep one of their hands "inactive", meaning that this hand could not touch anything, while the other "active" hand was allowed to operate "as usual", i.e. to touch objects, handle phones, scratch the nose, etc. Additionally, to clarify whether the levels of deposited DNA from the hands of an individual is dependent on the DNA levels from sebum-rich areas in the face of the same person, participants (n=15) were asked to deposit DNA from both hands by holding plastic tubes, and at the same occasion also provide two DNA samples from their forehead. Facial sebum levels of the participants were also measured to determine if sebum level is an underlying factor of shedder status. Approval received by Swedish Ethical Review Authority.

**Sample.** Participants at a seminar; did not specify demographic information of subjects, so unclear on gender, age, and ethnicity.

**Analysis.** DNA yields from hands and face were presented in scatter plots and bar chart with mean total DNA yields ± standard deviations. One-way ANOVA followed by Tukey's post-hoc test was applied with R software to examine statistical differences between the participants regarding deposition of foreign alleles from hands and sebum secretion levels. Pearson's correlation coefficient (r) was determined to examine the strength of the linear relationship between (1) DNA yields on inactive versus active hands, (2) DNA yields from hands and face for each participant at a given occasion, (3) DNA yields from hands or face and time since last hand or face wash, and (4) sebum levels and DNA yields from hands or face for each participant.

**Results/Limitations.** No correlation between DNA levels on active and inactive

hands was found, implying that individuals with higher levels of DNA on their inactive hands were not consistently the same as those with higher DNA levels on their active hands. No significant differences in DNA deposition between dominant and non-dominant active hands were seen. Strong correlation between DNA amounts deposited from hands and DNA concomitantly collected from the face; no correlation between individual facial sebum secretion and the amount of shed DNA from hands. Majority of touch DNA was not derived endogenously from the hands but seemed to be transferred to the hands from elsewhere.

**Clinical Significance.** Forensic clinicians should consider behaviors of suspect/offender (sweating, touching inanimate objects, touching own face, etc.) and variables of suspect/offender (gender, age, etc.). Individual levels of deposited DNA are highly associated with the level of DNA accumulation on the skin of the face, but there does not appear to be a correlation between amounts of deposited DNA and facial sebum secretion. Strong association to facial DNA accumulation suggests that physiological mechanisms rather than differences in personal habits dictate the individual shedder status.

**Level of Evidence.** Level 3

Kellogg ND, Melville JD, Lukefahr JL, Nienow SM, & Russell EL. (2018, Nov). Genital and Extragenital Gonorrhea and Chlamydia in Children and Adolescents Evaluated for Sexual Abuse. Pediatr Emerg Care. 34(11):761-766. doi: 10.1097/PEC.0000000000001014. PMID: 28072668.

**Study Description/Background.** The aim of this study was to describe the use in detecting genital and extragenital NG and CT in children and adolescents assessed for SA. Purposes included (1) description of the use of a specific NAAT, TMA, in detecting NG and CT from genital and extragenital sites of children and adolescents presenting for acute and nonacute medical evaluations for suspected SA and (2) to examine the concordance of patient history and examination factors relating to SA.

**Literature Review.** 25 references; 2 within 5 years of publication, some are seminal works but most our outdated. We know that child abuse literature has gaps and the specialty is still relatively newer.

**Design/Methods.** Retrospective medical records review.

**Sample.** Consecutive sample of 1805 children and adolescents who presented to a children's hospital ED and an affiliated outpatient SA assessment center for a 30-month period from March 2011 to September 2013.

**Analysis.** Data were retrospectively abstracted from clinical records by 2 reviewers and subsequently exported into STATA. Descriptive statistics were computed.

**Results/Limitations.** Of those with positive CT results, 99 (95.2%) were female

patients; all patients with a positive NG result were female. Three of the 33 positive NG results and 13 of the positive CT results were in children 11 years and younger. Two positive NG and 11 positive CT tests were in prepubertal children. 155 (8.8 %) had acute genital (129) and/or anal injuries (40), and 31 (1.75%) had healed genital injury (all healed hymenal transections); no healed anal injuries were observed. Five of the 28 with NG infections had acute genital injury, and 4 had healed genital injury; 17 of the 86 patients with CT infections had acute genital injury, and 7 had healed genital injury. One of the 12 patients with anal NG had acute anal injury, and 1 of the 46 patients with anal CT had acute anal injury. One of the patients with oral NG had oral injuries. Acute genital injury was associated with CT infection, and healed genital injury was associated with NG infection, as well as CT infection.

Not all patients were tested at all sites; testing decisions were based on clinical findings, patient history, parent history, and clinician judgment. Most clinicians opted to do more tests when the patient was unwilling or unable to provide complete information about the SA. Further testing may have revealed additional, and unexpected, infections. Sample bias: Limited only to patients that presented and no explicit inclusion/exclusion criteria. Unclear about interrater reliability among clinicians at both sites. Not generalizable to children outside of Texas or to gender-diverse adolescents. Genders and ages of perpetrators not listed so can't generalize to specific victim/perp characteristics.

**Clinical Significance.** Extragenital sites should be considered for testing even if no disclosure; drug facilitated SA and acute or healed trauma should increase suspicion for CT/NG infection. Most patients with a positive anal NG or CT test but no history of anal-penile contact also had a positive vaginal test, supporting the possibilities of contiguous spread and examination site contamination.

**Level of Evidence.** Level 6

Hardeberg Bach M, Ahrens C, Olff M, Armour C, Krogh SS, & Hansen M. (2024, Jan). EHealth for Sexual Assault: A Systematic Scoping Review. Trauma Violence Abuse. 25(1):102-116. doi: 10.1177/15248380221143355. Epub 2023 Jan 11. PMID: 36632639.

**Study Description/Background.** To authors' knowledge, no previous review has systematically explored the utility of eHealth for SA. Aim was to fill the literature gap by investigating how eHealth is currently used to support adolescent and adult survivors across the globe. The review explored what is known about eHealth interventions targeting survivors' post-assault psychosocial needs, hoping to provide valuable insights into the potentially unique advantages and disadvantages to a broad range of eHealth modalities, including websites, video therapy, intervention videos, mobile apps, virtual reality, chat- and text-messaging services, podcasts, and other formats.

**Literature Review.** 107 references; 64 within 5 years. No classical works, but topic is relatively newer. References mostly pertained to topic and most from USA.

**Design/Methods.** An early step in the research involved developing a review protocol to guide the research and secure consensus among authors. The protocol was developed based on key literature on scoping reviews and PRISMA-P was used to structure the protocol. The review seeks to answer the following research question: What is known about eHealth interventions targeting SA survivors' psychosocial needs? The following sub-questions were also posed: (1) What kinds of eHealth interventions are provided to SA survivors today, and which psychosocial needs do they target? (2) How much are eHealth interventions used and what factors influence user-engagement? (3) How is eHealth experienced by survivors and what factors influence user experience? (4) Does eHealth improve psychosocial outcomes for survivors? The systematic search was conducted in CINAHL, Embase, MEDLINE, PsycINFO, and Scopus in November 2021; restricted to 2010 to current to ensure relevancy.

**Sample.** 85 studies were included in the final review (North America=73, Europe=7, and 5 elsewhere). Inclusion: Studies about eHealth utilization following SA survivors of all genders aged 13 or older, or SA service providers/experts, if focused on survivors' use of eHealth. Included all types of empirical studies published in all languages in peer-reviewed journals and grey literature. Exclusion: eHealth interventions for survivors under 13 years of age and interventions for IPV.

**Analysis.** Extraction form was specially made for the review. The following data was extracted by the first author and verified by the fifth author: Citation, Country, Population, Methods, and eHealth Intervention. Additional data about interventions, user-experience, user engagement, and effectiveness were extracted by the first author upon availability.

**Results/Limitations.** 96.4% of websites were found to be "very difficult" or "fairly difficult" to read. Among studies that did provide an explicit psychological aim, most focused on PTSD alone (n=13) or in combination with other conditions (depression, anxiety) (n=15). Among interventions with an explicit psychosocial aim, most focused on substance abuse (n=9). 100% of websites served women; 15% mentioned male SA survivors; only 8% mentioned transgender or sexual minorities and few were in multiple languages or disability friendly. Keeping survivors engaged in treatment over time appears difficult given high dropout. Advantages to eHealth included increased sense of privacy and anonymity, increased flexibility and availability of services, and increased sense of safety and comfort. eHealth should be considered an essential component of comprehensive and contemporary sexual assault service provision. Disadvantages to eHealth were also identified in the review including costs; safety issues; confidentiality issues; technical issues; communication difficulties; discomfort utilizing technology; and LGBTQ and disability inclusivity. Most geared towards a survivor with 9 years of education. Participants in these studies emphasized a need to avoid ambiguous content, impersonal language, blaming language, gender-specific pronouns, and delayed and incomplete responses. Of the 29 studies that investigated if eHealth interventions reduce the negative impacts of sexual assault (and in particular PTSD), at least some positive impacts of eHealth were noted in all studies. Limitations: eHealth is a broad term and search was general so detailed conclusions

cannot be drawn; not generalizable outside North America or for non-English speaking survivors; for most of the studies, only focused on women, quantitative, and had small sample sizes so not generalizable to men or gender-diverse populations, as well as sexual minorities and disabled.

**Clinical Significance.** E-health may have a need in contemporary treatment options but with considerations. Avoid ambiguous content, impersonal language, blaming language, gender-specific pronouns, and delayed and incomplete responses; eHealth may be hard for survivors that do not have technology access or technology familiarity. eHealth should not replace face-to-face treatment, and interventions should be continuously monitored and evaluated to mitigate disengagement and dropouts. More work is therefore still needed to ensure inclusive and effective solutions for all. Ethical considerations should be given for fraudulent situations and content.

**Level of Evidence** Level 5

## Reference

Melnyk, B. M., & Fineout-Overholt, E. (2015). *Evidence-based practice in nursing and healthcare: A guide to best practice*. Wolters Kluwer.

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*Case Study*

# Psychiatric Deprescribing: Case Studies and Clinical Implications in Forensics

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## Abstract

Psychiatric deprescribing occurs when a psychotropic medication is either decreased or discontinued to reduce potential risks for the individual. There is a gap in the literature related to deprescribing in correctional settings. The aim of this paper is to use case studies to illustrate challenges and opportunities for psychiatric deprescribing in a correctional environment. Three case studies were selected based on their relevance to common issues encountered in forensic psychiatric practice, such as cultural competence, dual diagnosis, and treatment resistance. The case studies were analyzed using thematic analysis to identify recurring patterns and challenges in psychiatric deprescribing within correctional settings. Themes were extracted and discussed to derive clinical implications and best practices.

*Keywords*: Psychiatric, Deprescribing, Treatment, Corrections, Forensic Nursing

# Psychiatric Deprescribing: Case Studies and Clinical Implications in Forensics

Psychiatric deprescribing occurs when a psychotropic medication is either decreased or discontinued to reduce potential risks for the individual, especially when those risks are greater than the potential benefits (Paudel et al., 2020). It is a nuanced process that combines clinical expertise with evidence-based guidelines and client preferences (Gupta et al., 2019). The unique nature of mental health care necessitates individualized treatment plans, rather than a one-size-fits-all approach. Forensic nurses and advanced practice nurses must skillfully navigate this complex terrain, drawing from practice guidelines and their own clinical experience to partner with individuals who are incarcerated to meet their needs.

Deprescribing in correctional settings presents a critical gap in the literature within the United States (U.S.), particularly concerning the mental healthcare of incarcerated individuals. In 2020, one in four adults in the United States experienced mental illness and many of those utilized psychiatric medications (SAMHSA, 2021). However, among incarcerated populations, these rates are significantly higher. Roughly half of individuals detained in U.S. jails and over a third of the nation's prison population have received a mental health diagnosis (Taylor, 2022). In forensic environments, it is imperative for advanced practice nurses and forensic nurses to develop keen assessment skills. Their proficiency in diagnosing, treating, prescribing, and continuously evaluating patients is vital, particularly considering the distinctive cultural dynamics present among incarcerated populations (American Academy of Psychiatry and the Law, AAPL, 2018).

Transition into carceral settings can disrupt the continuity of psychiatric treatment, often due to care fragmentation within the community. However, this transition also offers a unique opportunity to reassess and optimize treatment plans. This discontinuity is documented in the findings of Jennings et al. (2021), which reflect how varied and sometimes disjointed treatment histories compounded by factors like inconsistent communication and incomplete records from previous healthcare providers pose significant barriers. Community-based treatment plans are further complicated by undisclosed factors such as patient non-adherence, substance use issues not reported to clinicians, or inconsistent symptom reporting (Gonzalez and Connell, 2014). Additionally, tendencies to doctor-shop or feign illness can lead to convoluted medication regimens not aligned with actual clinical needs (AAPL, 2018; Fay et al., 2023).

In this context, correctional facilities serve as a pivotal point for reassessing psychiatric medication regimens. The controlled environment of incarceration allows for a comprehensive review and potential shift towards deprescribing, supporting a systematic approach to tapering or discontinuing medications when appropriate and beneficial—something less feasible in community settings. Appelbaum (2010) notes the opportunity within correctional settings for healthcare professionals to observe patients longitudinally, thus fostering a more accurate assessment of psychiatric needs and the development of evidence-based treatment plans. The deprescribing goal is to reduce polypharmacy, mitigate side effects, and ultimately improve mental health outcomes, thereby promoting an improved quality of life during and post-incarceration—a potential documented in the long-term observation advantages (AAPL, 2018).

In a correctional setting, the constant supervision of individuals creates an environment conducive to comprehensive health assessments. Integrated healthcare teams in these facilities are uniquely positioned to observe patients' behaviors, such as sleep/wake cycles, social interaction, dietary patterns, and mood fluctuations. These observations are invaluable for clinicians to refine

diagnoses and optimize treatment plans, which may include adjusting medication regimens. While psychiatric medications are instrumental in managing mental health symptoms, they are not without risks. In correctional populations, adverse effects can be particularly concerning, especially when previous diagnoses have been based on subjective reports or heuristic approaches, which may lead to imprecise treatment (Hiber et al., 2020; Lin, 2020; Stutzman, 2021: Berg & Moss, 2022). The prevalence of substance misuse and personality disorders among forensic populations adds layers of complexity to the task of accurately determining medication needs (AAPL, 2018). Thus, the structured environment of correctional facilities can serve as an essential backdrop for the careful re-evaluation of current medication regimens, with an emphasis on deprescribing when appropriate to minimize harm and enhance overall treatment efficacy.

Forensic nurses and advanced practice nurses must monitor and respond to multiple risks. Diagnostic clarity is essential to guide the judicious use of psychiatric medication in forensic settings. For example, treating self-reported serious mental illness that has been diagnosed solely in the context of past active substance use may not only prove ineffective, but dangerous (AAPL, 2018). Forensic nurses and advanced practice nurses play an integral role in assuring that medication benefits and risks are re-evaluated regularly. This is especially pertinent as an individual adapts to incarceration and their symptoms evolve over time. Psychiatric deprescribing is a core competency for clinicians in these settings and is as important as prescribing.

Despite the recognized importance of psychiatric deprescribing, current literature lacks sufficient evidence to inform clinical practice (Harding et al., 2023). Key gaps include the absence of best practices for identifying candidates, specific guidelines, and managing discontinuation concerns (Gupta & Cahill, 2016; Harding et al., 2023). Effective communication, trust, and collaboration with individuals, families, and the interdisciplinary team are vital facilitators of psychiatric prescribing and deprescribing (Magola-Makina et al., 2022; Harding et al., 2023). Within carceral settings, there can be additional challenges to establishing a supported decision-making relationship such as security and facility protocols and internal conflicts of interest for some incarcerated individuals between recovery, possible pending litigation, and responses to being incarcerated (AAPL, 2018). Other barriers to psychiatric deprescribing exist including client and clinician apprehension, lack of validated tools, time constraints, perceived benefits of ongoing medication use, and a clinical culture favoring medication addition or titration (Barnett et al., 2020; Scholten, Batelaan, Van Balkom, 2020; Harding et al., 2023). Nevertheless, incarceration can also provide an opportunity for safe deprescribing with ongoing monitoring and nursing care (Appelbaum, 2010).

## Methods

The aim of this paper is to use case studies to illustrate challenges and opportunities for psychiatric deprescribing in a correctional environment. Case studies are a valuable method for explicating concepts related to psychiatric deprescribing and identifying themes to support this emerging area of clinical importance (Harding et al., 2023; Paudel et al., 2020; Tomova et al., 2021). Through the sharing of clinical expertise and insights gained from real-world experiences, a deeper understanding of psychiatric deprescribing can be achieved, while discussing themes encountered in clinical practice.

### Selection Criteria and Analysis

Three case studies were selected based on their relevance to common issues encountered in forensic psychiatric practice, such as cultural competence, dual diagnosis, and treatment resistance. The cases were drawn from the authors' clinical practice, ensuring that each vignette provided a unique perspective on the deprescribing process. To protect patient confidentiality, fictional names were used and personal details omitted or changed. The case studies were analyzed using thematic analysis to identify recurring patterns and challenges in psychiatric deprescribing within correctional settings. Themes were extracted and discussed to derive clinical implications and best practices.

## Case Studies

### Vignette 1: The Misunderstood Believer

Mr. Jean Baptiste, a 45-year-old man of Haitian descent, became involved in the criminal justice system due to an incident stemming from his deeply held religious beliefs rooted in Vodou. Upon his arrest and prior to transfer to the county jail, he was evaluated at an emergency room. At that time, he was diagnosed with a psychotic disorder and a treatment plan including antipsychotics was initiated. Despite attempts to explain his actions at the emergency room and upon arrival at the county jail, Mr. Baptiste's behavior was continuously interpreted by his evaluators as psychotic symptoms and the antipsychotic medication treatment continued. Over the following months in the county jail, Mr. Baptiste experienced significant weight gain and excessive sedation, side effects that not only compounded his distress but also did nothing to alter his religious expressions, which were consistently misinterpreted as psychotic symptoms. His treatment, devoid of cultural competence, failed to recognize the spiritual context of his behaviors, leading to a continuation of the pharmacological intervention without any meaningful engagement with Mr. Baptiste's actual needs or beliefs.

Concerned by the lack of improvement and the adverse effects of the medication, a newly appointed psychiatric nurse practitioner, specializing in forensic settings, reviewed Mr. Baptiste's case. The psychiatric nurse practitioner requested daily logs from security personnel capturing Mr. Baptiste's functioning, so they could carefully assess for neurovegetative symptoms, overall functioning, self-care, hygiene, and signs of overt psychosis. Recognizing the cultural underpinnings of the patient's behavior, the practitioner initiated a thorough re-evaluation, employing tools such as the Cultural Formulation Interview (CFI) to gain a deeper understanding of Mr. Baptiste's background, beliefs, and the contextual factors influencing his current situation (Aggarwal & Lewis-Fernández, 2015). The re-assessment highlighted the need for a drastic shift in the treatment approach. The psychiatric team, led by the nurse practitioner, embarked on a deprescribing protocol to gradually withdraw the antipsychotics, closely monitoring Mr. Baptiste for any withdrawal symptoms or distress. Concurrently, the team sought the expertise of a cultural liaison to facilitate a more culturally sensitive approach to care.

### Vignette 2: Refining Diagnosis and Treatment in a Complex Case

Ms. Alicia Ramirez entered prison with multiple psychiatric diagnoses and corresponding medications. However, a comprehensive evaluation by the forensic psychiatric team identified her symptoms as closely aligned with borderline personality disorder (BPD), including impulsive behaviors, unstable relationships, identity issues, self-harm, emotional instability, emptiness, intense anger, and stress-induced paranoia. Furthermore, the team determined these

manifestations could be intrinsic to BPD while also being potentially exacerbated by her substance use. This dual factor understanding underscored the intertwined nature of Alicia's psychiatric condition and substance abuse, necessitating a nuanced approach to her treatment. It became evident that the polypharmacy approach, heavily reliant on self-reported symptoms alone, might not only be ineffective but potentially harmful, given the context of a correctional environment and the high risk of medication misuse and diversion.

Confronted with Alicia's staunch resistance to changing her established medication regimen, underscored by threats of self-harm and legal action, the team faced a delicate situation. The decision was made to proceed with a judiciously monitored tapering off non-essential medications, particularly those with a high potential for abuse. This process was to be underpinned by strict detox protocols to safeguard Alicia's physical well-being while attentively observing her psychological adjustment to the changes. In parallel, the introduction of Dialectical Behavior Therapy (DBT) aimed to address the core symptoms of BPD and equip Alicia with more adaptive coping mechanisms. This therapeutic pivot was carefully communicated to Alicia, emphasizing its direct relevance to her diagnosed condition and its potential to offer more meaningful and sustainable mental health outcomes.

**Vignette 3: Navigating Treatment Dynamics in a Forensic Hospital**

Mr. Ethan Clarke, a 38-year-old patient with a diagnosis of schizoaffective disorder, resides in a high-security forensic hospital following a court mandate for treatment. His complex psychiatric needs are managed with high doses of olanzapine and risperidone, a regimen prescribed to mitigate the severe fluctuations in mood and psychosis characteristic of his condition. The court's stipulation is clear: should Ethan refuse oral medication, he would be administered antipsychotics intramuscularly, a directive aimed at ensuring compliance but one that significantly impinges on his autonomy. Central to Ethan's care management is his court-appointed guardian, an attorney with no personal ties to Ethan and a caseload too heavy to allow for deep engagement with any single client. This guardian operates under a philosophy where "more is more" concerning medication, equating higher doses with better control of psychiatric symptoms, an approach not uncommon in high-stakes forensic settings.

Recently, Ethan has voiced complaints about the debilitating side effects of his medication regimen, particularly the profound lethargy and sedation that hamper his participation in therapeutic activities and diminish his quality of life. These grievances, however, hit a wall when presented to his guardian, whose focus on medication compliance overshadows concerns about Ethan's subjective well-being. The guardian's reluctance to adjust the medication, driven by a cautious stance towards treatment alterations in a forensic context, leaves Ethan feeling unheard and trapped in a cycle of excessive medication with minimal consideration for his personal experience.

## Discussion and Clinical Implications

In all settings, the use of psychiatric medications entails risks, particularly in forensic settings where these risks must be carefully balanced with concerns for the safety of incarcerated individuals and staff. For instance, excessive medication use heightens the risk of diversion and misuse, posing dangers to everyone involved (AAPL, 2018). While antipsychotic medications are commonly prescribed for impulsive behaviors or agitation associated with various disorders, including personality disorders, their use carries potential metabolic complications such as weight gain, hyperglycemia, and dyslipidemia, as well as drug-induced movement disorders (AAPL,

2018; Stutzman, 2021). Furthermore, these medications, along with certain antidepressants, can elevate the risk of cardiovascular events like stroke or QT prolongation, which may result in cardiac arrest (Einoff, et al, 2020). Sedation, weight gain, and apathy are prevalent side effects that can lead individuals to discontinue treatment (Einoff, et al, 2020; Hiber et al, 2020; Lin, 2020). Importantly, the risk of medication-related adverse events escalates with the number of psychiatric medications prescribed to an individual (Tomova et al., 2021). The use of real-life experiences can aid in the decision making for clients in the forensic setting needing mental health care.

The case vignettes portray clinical experiences that closely correspond to the literature emphasizing the obstacles to psychiatric prescribing and deprescribing in forensic environments (Jennings et al., 2021). Numerous factors impede inmates from accessing essential mental health care, including appropriate medications, monitoring, and non-pharmacologic interventions (AAPL, 2018). Moreover, the lack of proficient providers impedes accurate assessments distinguishing genuine mental health disorders from cultural norms or malingering.

**Cultural Competence and Deprescribing in Forensic Psychiatry**

In Mr. Baptiste's case, the importance of cultural competence in deprescribing cannot be overstated. Initially diagnosed with a psychotic disorder and prescribed antipsychotics, his deeply held religious beliefs, rooted in Haitian Vodou heritage, were mistaken for symptoms of psychosis. This misinterpretation not only failed to address his true needs but also led to adverse effects like significant weight gain and excessive sedation. The intervention by a psychiatric nurse practitioner specializing in forensic settings and cultural competence marked a turning point. Through tools like the Cultural Formulation Interview, a deeper understanding of Mr. Baptiste's cultural context was gained, revealing the inadequacy of the initial diagnosis and treatment approach (Aggarwal & Lewis-Fernández, 2015). Informed by this cultural awareness, a deprescribing protocol was initiated, gradually withdrawing antipsychotics. This holistic approach acknowledged Mr. Baptiste's cultural identity and spiritual needs, aiming to treat him comprehensively rather than solely focusing on psychiatric symptoms. The integration of a cultural liaison further enhanced the cultural sensitivity of Mr. Baptiste's care, ensuring his perspectives were respected and incorporated into the treatment plan.

**Complexities of Dual Diagnosis and Resistance to Treatment**

Ms. Alicia Ramirez's case illustrates the intricate challenges posed by dual diagnosis, personality disorders, substance abuse, and treatment resistance within the forensic setting. Initially diagnosed with multiple psychiatric conditions and prescribed corresponding medications, a comprehensive evaluation by the forensic psychiatric team revealed a closer alignment with BPD (Fineberg, Gupta, & Leavitt, 2019). Her symptoms, characterized by impulsive behaviors, unstable relationships, self-harm, emotional instability, and intense anger, highlighted the complex interplay between her psychiatric condition and substance use. This dual diagnosis understanding emphasized the need for a treatment approach that considers both aspects of her presentation. However, Alicia's firm opposition to changing her medication regimen, coupled with threats of self-harm and legal action, posed a significant challenge for the treatment team. In response, a judiciously monitored tapering off non-essential medications, particularly those prone to abuse, was initiated alongside strict detox protocols. Simultaneously, DBT was introduced to address the core symptoms of BPD and provide Alicia with adaptive coping strategies. This therapeutic intervention was carefully communicated to Alicia, highlighting its relevance to her diagnosed condition and its potential for more meaningful and sustainable mental

health outcomes. The complexities in Alicia's case emphasize the need for a personalized, interdisciplinary approach to address dual diagnosis and treatment resistance in forensic psychiatry. Additionally, the potential for malingering or feigning behaviors adds further complexity to the clinical assessment.

**Re-evaluating Psychiatric Care and Treatment Individualization**

Mr. Ethan Clarke's case emphasizes the vital need for patient-centered psychiatric care in forensic settings, stressing the significance of integrating the patient's perspective and customizing treatment approaches to meet individual needs. Despite his diagnosis of schizoaffective disorder, Ethan's experience with excessive sedation and lethargy from his medication regimen highlights the necessity for careful consideration of subjective well-being alongside symptom management (Kouijzer, Kip, & Kelders, 2024). The rigid adherence to medication compliance, as mandated by the court and enforced by Ethan's guardian, neglects Ethan's autonomy and exacerbates his feelings of being unheard (Kouijzer et al., 2024). This case offers valuable lessons for other care teams in forensic settings, highlighting the importance of fostering open communication with patients, actively involving them in treatment decisions, and prioritizing their quality of life alongside symptom control (Clercx & van Pinxteren, 2024). By adopting a more collaborative and personalized approach to care, care teams can better address the complex needs of clients like Ethan, ultimately leading to improved treatment outcomes and client satisfaction (Kouijzer et al., 2024).

**Diagnostic Accuracy and the Opportunity for Deprescribing**

In forensic settings, ensuring diagnostic accuracy is paramount not only for legal proceedings but also for guiding appropriate treatment interventions (Clercx & van Pinxteren, 2024). By providing clinicians with access to comprehensive assessment tools, ongoing training, and interdisciplinary consultations, forensic settings can support the accurate diagnosis of psychiatric conditions (Machetanz et al., 2023). This precision in diagnosis serves as a critical antecedent for effective deprescribing initiatives (Neumann & Neumann, 2024). With a clear understanding of the client's psychiatric profile, including any comorbidities or underlying factors contributing to their presentation, clinicians can develop targeted deprescribing strategies tailored to the individual's needs (Machetanz et al., 2023). Moreover, fostering a culture of evidence-based practice and regular case reviews can further enhance diagnostic accuracy and facilitate the identification of opportunities for deprescribing (Clercx & van Pinxteren, 2024). By leveraging these resources and promoting a collaborative approach to client care, forensic settings can optimize clinical outcomes while minimizing the risks associated with unnecessary medication use (Neumann & Neumann, 2024).

**Integrating Behavioral Therapies and Facilitating Collaborative Deprescribing**

Non-pharmacologic interventions like Dialectical Behavior Therapy (DBT) are essential alongside deprescribing in forensic settings, offering alternative strategies for managing psychiatric symptoms and promoting holistic recovery (Soler et al, 2022). Additionally, focusing on skills training, emotion regulation, and interpersonal effectiveness, equips incarcerated individuals with adaptive coping mechanisms, reducing reliance on medication. The structured environment of correctional settings supports other interventions like vocational training, education, and mindfulness-based programs, fostering skill-building and behavior change. Integration of support networks, collaborative decision-making, and continuous evaluation further enhance deprescribing efforts, promoting client empowerment, engagement, and successful

reintegration into society. This comprehensive approach in the correctional healthcare framework optimizes clinical outcomes and enhances overall well-being.

### Medication Reconciliation

Ensuring medication access and continuity for incarcerated individuals is critical for maintaining their health and well-being. A key strategy is to perform a thorough medication reconciliation at the time of admission to any facility. The Agency for Healthcare Research and Quality's (AHRQ, 2022) Medications at Transitions and Clinical Handoffs (MATCH) Toolkit for Medication Reconciliation is one resource that facilities could adopt. This toolkit provides a standardized format that can be completed electronically by any team member in real time during transfers between facilities, ensuring accurate and timely medication reconciliation. Given the reality of staffing and resource limitations among carceral settings, standardization with such a tool enhance efficiency and communication during transitions in case. Furthermore, this would allow the team to identify potential polypharmacy, contraindications, and unnecessary or harmful prescriptions.

### Structured Deprescribing Protocols and Team-Based Care

Facilities could develop and implement structured protocols for evaluating the necessity of each psychotropic medication. These protocols should guide healthcare clinicians in systematically tapering or discontinuing medications that are not clinically justified, with an emphasis on safety. Protocols should be designed with an emphasis on identifying potentially unsuitable medications and then safely deprescribing while monitoring for any withdrawal symptoms or worsening of primary mental health symptoms. It is essential to appreciate that deprescribing may not always be appropriate, nor is the goal always to be entirely free of any particular medication. Tapering to a lowest effect dose or reducing polypharmacy are also deprescribing interventions. An interdisciplinary team approach is key to ensure individualized care. This team could include pharmacists, physicians, advanced practice nurses, and nursing staff to oversee the deprescribing process. Telehealth and teleconferencing may be necessary in order to leverage the expertise of multiple disciplines within the carceral setting. Incarcerated individuals may use telepsychiatry to engage in specialty evaluations, especially in facilities with limited on-site mental health professionals. These teams would review incoming cases, prioritize individuals with the most concerning medication regimens, and coordinate care plans. Team-based care enhances the ability to monitor and respond to clinical changes over time.

### Education and Outcomes Monitoring for Correctional Staff

Deprescribing is an individualized process and the carceral setting introduces additional benefits and complexities. Incarcerated individuals are a vulnerable population for whom additional vigilance and care are required when deprescribing. Specialized training for healthcare clinicians in correctional settings on the principles of deprescribing, including how to recognize inappropriate polypharmacy and safely manage medication reduction is key. This training could be incorporated into ongoing professional development programs. Discussing individual cases as a team and having a structured review of outcomes of deprescribing cases can help develop the team's knowledge, skills, and confidence in this area.

## Conclusion

In correctional settings, psychiatric deprescribing is crucial due to various factors such as limited access to healthcare, potential for medication misuse, and the higher prevalence of certain

conditions among incarcerated populations. However, there is limited literature identifying best practices for psychiatric deprescribing in forensics. Case studies serve as invaluable tools for forensic psychiatric nurses in emerging areas of evidence-based practice. Analyzing real-life scenarios demonstrates key themes of psychiatric deprescribing in forensics, individual response variations, and the impact of comorbidities such as substance use disorders. Integrating case studies into practice and sharing client and clinician experiences can help shape priority areas for further research to support development of a knowledge base to support evidence-based practice. Furthermore, implementing standardized medication reconciliations, such as the MATCH toolkit, at time of transfer in and out of corrections, deprescribing protocols when an individual has been identified as meeting criteria for decreasing, or deprescribing medication will improve patient quality and safety during their time in corrections. Forensic nurses and advanced practice nurses can collaborate with each other and with clients to build momentum and prioritize improving evidence for forensic psychiatric deprescribing.

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Journal of the Academy of Forensic Nursing

## *Community Updates*

# Forensic Nursing Certification Board (FNCB) Fall Report

Patricia M. Speck, DNSc, CRNP, FNP-BC, AFN-C, DF-IAFN, FAAFS, DF-AFN, FAAN[1]
Debbie St. Germain, *DNP, RN, AFN-C, SANE-A, SANE-P, IVSE-C* [2]

Forensic Nursing
Certification Board

*Corresponding author*: Debbie St. Germain
Drdeblsu@gmail.com

**New Officers**

Elected for the 2025-2026 term:

Dr. Debbie St. Germain, President
Dr. Elizabeth B Dowdell, President-Elect
Dr. Max Veltman, Secretary
Dr. Heather Head, Treasurer
Dr. Patricia M Speck, Immediate Past President
Dr. Stacey A Mitchell, Emeritus President, Advisor

**Pass Rates**

Generalist Forensic Nurse Certification – 80.81% (2022-2024)
Advanced Forensic Nurse Certification – 79.26% (2022-2024)
Interpersonal Violence Strangulation Evaluation Certification – 100% (2024)

**Accreditation**

FNCB is completing and submitting the Accreditation Board for Specialty Nursing Certification (ABSNC) Accreditation Application by the end of 2024.

**FNCB Certification Pins**

AFN-C and GFN-C Certification Pins are available for purchase!

AFN-C with a rhinestone signifies you were in the first year of Certified AFNs!

Others purchase AFN-C and GFN-C to designate their accomplishments in Years 2 & 3!

Recertification is Underway!

Can you believe it has been nearly 3 years since the first test-takers completed the inaugural AFN and GFN Certifications? Get your free re-certification handbook! There is a timeline for success recommended. First, purchase the re-certification, and follow the handbook outlining application information. Get your documents ready and upload them with your application. The Re-certification Course with the literature update opens on October 15, 2024.

VISIT FNCB WEBSITE: https://goforensicncb.org/

Journal of the Academy of Forensic Nursing

## *Community Updates*

# International Forensic Nursing Activities

**Catherine J. Carter-Snell**
ccartersnell@afnmail.org

A number of our AFN members have given us updates through the International Special Interest Group (SIG) and emails. We would like to share those with you. We'd love to hear from you and what you are doing in your country. We have learned so much from other countries about similarities and differences in practice and how they are able to influence care for trauma clients in their area. A key function of the SIG is also to help support those nurses in countries without forensic nursing or in areas where forensic nurses have not yet been actively involved. These position statements have arisen from a realization with the war between Israel/Hamas that nurses in this as well as other conflict/disaster areas may feel isolated and not supported. The International SIG hopes to provide a vehicle to support them. One of the initiatives that resulted was to begin work on new position statements on the forensic nursing role in war and conflict, as well as in disasters and health emergencies. AFN members will see these in the new year for feedback and further suggestions. Members have also been able to reach out to support each other with references, contacts, and resources to support initiatives.

### United Kingdom

The UK Association of Forensic Nurses and Paramedics includes forensic nurses and paramedics in sexual assault centres and custody settings. There is a new law in England/Wales/Northern Ireland that all sexual assault centres must be accredited by 2025 to ensure they meet ISO 151-89 international standards UKAS (UK accreditation service for laboratories). It is not changing how "sexual offense examiners" examine clients but addresses challenges re: buildings, control of modules, kits, training competencies of staff, forensic security of DNA/evidence, verification of colposcopy images, injury databases, etc. The Faculty of Forensic and Legal Medicine is guiding terminology standardization. The custody examiners (those working with police/corrections) will be next but are under a different authority.

### France

Forensic nurses in France held their first forensic nursing congress this year.

### Switzerland

The Swiss Association of Forensic Nursing held its third annual forensic nursing forum in May 2024. There is a strong forensic nursing education program available which nurses from other European countries also take (e.g. Germany). There are some changes in the role of forensic nurses and how the role functions and they are currently navigating their way.

### Brazil

Dr. Lucilene Cardoso reported that the III International Congress of Forensic Nursing (CIEF) was held by the Brazilian Society of Forensic Nursing (SOBEF) in partnership with

renowned universities in Brazil. It is the largest scientific event in the field of Forensic Nursing in Brazil and in 2024 the III CIEF was held from November 6–8, at the Federal University of Brasília, in the Federal District, the country's capital. The central theme was "Connecting professionals, strengthening practice and broadening horizons" and brought together renowned specialists from the United States and Brazilian researchers, as well as students and professionals from different areas, including those working in forensic nursing. The main thematic areas of the congress were: Forensic Nursing in the Civil and Criminal Sectors; Violence and Vulnerability; Education in Forensic Nursing; Forensic Nursing and the Preservation of Traces; Ethical and Legal Aspects of Forensic Nursing; Human Trafficking and Humanitarian Disasters; Systematization in Forensic Nursing; Psychiatric Aspects in Relation to Violence; working with the indigenous population; catastrophes and mass casualties; and forensic nursing in situations of sexual and guideline violence. A number of collaborators took part from the U.S. including: Dr. David Williams and Dr. Joyce Williams; Ms. Liana Hill; Ms. Sarah Sharp; and Ms. Isle Polonko.

The "Sexual Assault Nurse Examiner–SANE Nursing Brasil" was also held: a 40-hour theoretical-practical course for training Brazilian professionals with GTAs in a partnership between SOBEF, the University of Brasilia and Crisis Services of North Alabama in the person of Liana Hill (MSc, RN, RSCN, SANE-A, SANE-P, and Forensic Nurse Program Director), following the standards of the American Nurse Credentialing Center (ANCC) and international regulations for the training and practice of forensic nursing.

**Canada**

The Canadian Forensic Nurses' Association has advocated for and gotten approval for a Canadian Forensic Nursing certification. This recognition of forensic nursing as a specialty has been sought after for a long time and the first applicants will be assessed in 2025.

Nurses in eastern Canada (Nova Scotia) are expanding their services beyond sexual assaulted clients to also respond to those experiencing intimate partner violence. They have been receiving province-wide training and have updated protocols.

The Canadian government has been pushing for increased availability of sexual assault services, especially in rural areas. There are many northern areas where there are sparse populations, few opportunities for SANEs to practice, and often only one physician or nurse practitioner in the hospital or outpost, limiting their time to care for the client. It often means clients are turned away or transported to a town/city hours away, apart from family and supports. Instead, some communities are implementing alternate models to provide care. One being used by the Canadian Military and a number of provinces is a collaborative model developed by Dr. Cathy Carter-Snell, called the Enhanced Emergency Sexual Assault Services (EESAS). The nurses obtain the consent, history and interview, conducts the head-to-toe exam and body evidence using a trauma-informed approach. The physician/nurse practitioner then conducts the genital exam, prescribes medications and orders diagnostics.

Please let us know what is happening with forensic nursing in your country either by emailing the co-chairs of the International SIG or joining our meetings. The co-chairs are Dr. Cathy (CJ) Carter-Snell (ccartersnell@afnmail.org) and Dr. Kimberly Kasper (kasperk@afnmail.org). We meet on the sedond Tuesday of each month at 11 a.m. EST (4 p.m. UK, 5 p.m. Europe). Please contact us if you wish to be added to the calendar invitations and receive the Google Meet link.

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## *Letter to the Editor*

# Response to "Health Care Needs of Sex Trafficking Patients"

Dear Dr. Carter-Snell,

I am Anna Becks, Forensic Unit Manager at MetroHealth Hospital, a Level I trauma center in Cleveland, Ohio. I am writing in response to Calow's article on the "Health Care Needs of Sex Trafficking Patients," published in the *Journal of the Academy of Forensic Nursing* (Calow, 2024). The article highlights the challenges healthcare providers face with victims who often present with multiple injuries and inconsistent stories and how human trafficking signs are frequently overlooked, leading to inadequate care and potentially life-threatening health issues (Centers for Disease Control and Prevention [CDC], 2024a). This letter aims to highlight the critical gaps in recognizing and addressing human trafficking in healthcare settings, share insights from my efforts to improve identification and support for victims and underline the importance of education and comprehensive training for healthcare professionals.

A key challenge is the lack of education for healthcare providers on recognizing human trafficking, which is not included in healthcare training. While Ohio mandates education on human trafficking for various professions, including cosmetologists and law enforcement, tanning salons and schools, healthcare providers are not covered (Ohio Legislative Service Commission, 2024). A system-wide education program has been implemented at our hospital to address this gap. Before this initiative, there were only three victims identified in 2022. Since introducing the program in April 2023, we identified 21 victims in the first nine months and an additional 27 in the subsequent seven months. Education at the local county jail was also extended to recognize the prevalence of carceral backgrounds among victims of human trafficking. Over the past 12 months, this has led to the identification of 6 victims within the carceral system.

The article also notes missed opportunities to educate victims on their healthcare needs. In response, I secured a grant from AGO, funding 40 hours per week for an in-house forensic nurse. This nurse screens patients in the emergency department, provides education, and ensures proper medication before discharge. The National Human Trafficking Prevention Framework highlights the importance of peer supporters in helping victims access available assistance (U.S. Department of Health and Human Services Task Force et al., 2024). Our peer supporter follows victims throughout their exit journey, attending medical appointments, rehabilitation, and court hearings and providing mental health support.

Using the public health approach to violence prevention—assessment, planning, implementation, and evaluation—has been crucial in our work. This model has allowed me to educate multidisciplinary teams, including EMS, police, and healthcare providers, improving our ability to identify and support victims (CDC, 2024b). Our comprehensive approach, integrating education and collaboration, has significantly enhanced victim identification and care. The

involvement of a peer supporter and survivor has provided invaluable insights, making our training more effective.

Thank you for considering this important issue and for your commitment to improving healthcare responses to human trafficking.

Sincerely,

Anna Becks, BSN, RN,
Sexual assault nurse examiner
Forensic Unit Manager
MetroHealth Hospital

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## *Final Notes*

# Thank You!

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As we approach the end of 2024, we want you to know how thankful the editorial team and I are for all the people involved with the journal. The clinicians and academics who have submitted articles are so appreciated—you help keep us informed of the latest practice changes and research evidence. The peer reviewers have been critical in ensuring we can bring relevant and credible information to you. The editorial team ensure the final version is readable, professional, and accessible. To the readers who take time to access the articles and download them for their practice: We can't thank you enough for all you do to support those clients involved in violence and trauma. Our thanks also to you for contributing to the success of this journal, as a reader, contributor, peer reviewer, or editor!

There were only two issues this year as we did not have enough submissions for an early spring issue and/or there were delays with reviewer feedback or revisions. That led to some delays for those who did submit earlier in the year, as they had to wait for this issue. We are glad we waited however, as we believe this allowed authors and ourselves to ensure we have an excellent issue for you to read and use in practice. The articles contained in this issue are informative, engaging and even ground-breaking in some cases.

In the coming year we plan three issues: March, July, and November. We hope to hear from you in the new year. Please consider submitting to one of our upcoming issues. At least two months is required between submission and final version to allow for peer review and revisions. If you are new to publishing, please reach out to me or one of the editorial team and we would be pleased to support and mentor you.

The editorial team and I want to wish you a happy holiday, whatever your beliefs, and a healthy 2025 to come.

Catherine (CJ) Carter-Snell,
Editor-in-Chief, JAFN