# PROMOTING PROFESSIONAL QUALITY OF LIFE AND RESILIENCY IN SEXUAL ASSAULT NURSE EXAMINERS

Lindsay Bouchard, Deborah Williams, Lisa Kiser, Erica Freese, and Douglas Taren

Lindsay Bouchard, DNP, PMHNP-BC, RN
Clinical Assistant Professor
University of Arizona College of Nursing
1305 N Martin Avenue
PO Box 210203
Tucson, AZ 85721 USA
Phone: (520) 815-9065
Email: labouchard@arizona.edu

Deborah Williams, PhD, MPH, RN
Clinical Assistant Professor
University of Arizona College of Nursing
dwilliams@arizona.edu

Lisa Kiser, DNP, CNM, WHNP
Clinical Assistant Professor
University of Arizona College of Nursing
lkiser@arizona.edu

Erica Freese, MPH
Program Coordinator, ANE-SANE Program
University of Arizona College of Public Health
ebfreese@arizona.edu

Douglas Taren, PhD
Western Region Public Health Training Center Director and Professor
University of Arizona College of Public Health
taren@arizona.edu

**Funding Source**: This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number T96HP32508, "Advanced Nurse Education Sexual Nurse Assault Examiner program."

**Conflict of Interest**: None declared.

**Ethical Approval**: The study protocol was approved by an Institutional Review Board at the University of Arizona (No. 2003455124).

**Title:** Promoting professional quality of life and resiliency in Sexual Assault Nurse Examiners

**Abstract:**
**Background:** Sexual Assault Nurse Examiners (SANEs) have received specialized education and clinical training in providing forensic care for sexual assault and abuse victims. SANEs provide compassionate and competent care that promotes emotional recovery for their patients; however, caring for this population puts SANEs at risk for secondary traumatic stress, professional burnout, and compassion fatigue. The research regarding SANEs indicates that there may be multiple personal and organizational factors that affect their development of negative outcomes related to professional quality of life.
**Purpose:** Explore challenges SANEs experience in their work and what resources can be utilized to promote their resiliency and professional quality of life.
**Methods:** SANEs were recruited to complete an anonymous online survey through the International Association of Forensic Nurses community; 69 SANEs completed the survey. Eight of the SANEs also participated in follow-up focus groups.
**Results:** The participants reported many gratifying aspects of their work. They also described challenges related to personal, professional, organizational, and community factors. Many of the reported negative effects align with secondary traumatic stress and professional burnout. The SANEs identified multiple ways to support their resiliency in the context of this difficult work.
**Implications:** The nature of this work puts SANEs at risk for developing adverse symptoms related to professional quality of life. SANEs need better support and resources to cope with the demands of their work. Findings of this study will be used to design SANE Well®, a support application to promote SANE wellness and resiliency.

**Keywords:**
- SANE (Sexual Assault Nurse Examiner)
- FNE (Forensic Nurse Examiner)
- Burnout
- Secondary traumatic stress
- Resiliency
- Phone applications

## Introduction

A review of the literature confirms the value of having a Sexual Assault Nurse Examiner (SANE) provide forensic examinations to patients requesting sexual assault forensic medical examinations (SAFMEs); however, a severe shortage of SANEs exists in the United States (US), especially in rural and underserved areas (United States Government Accountability Office [GAO], 2018). This shortage should be addressed to ensure equity for persons who have experienced sexual assault. SANE shortage has been documented in Virginia, an Eastern US

state. The Virginia Joint Commission on Health Care (2019) study on increasing forensic nursing in the state found 16 out of 122 hospitals in Virginia provided sexual assault forensic exams and approximately 150 out of 94,000 registered nurses in the state were certified forensic nurses. These shortages lead to patients having to travel for hours for a forensic exam or go to two to three hospitals before finding care. Similarly, the GAO (2018) report from six surveyed US states found an insufficient number of qualified SANEs to meet SAFME needs in their states, with states reporting that half to most of their counties did not have forensic nurses.

Multiple factors have been identified that contribute to the SANE shortage in the US, including lack of awareness of national educational standards and training opportunities (GAO, 2018). The low retention rates of trained SANEs necessitates that more research and interventions be focused on the nature of the work itself and how nurses can be better supported to remain in the field. The GAO (2018) found low SANE retention rates were related to the physical and emotional costs of the work, with one state reporting only 42 out of 540 forensic nurses (~8%) that had been trained were still working as forensic nurses at the end of the two-year training period. Thus, the GAO (2018) identified retention of SANEs as one of the three key challenges that should be addressed to provide equitable care in this country.

The costs of being a SANE can include secondary traumatic stress (also referred to as vicarious trauma), burnout, and compassion fatigue, all of which are exacerbated by a chronic shortage of SANEs in the US. SAFMEs can take two to six hours to complete and SANEs may end up completing two to three exams in one shift (Central Minnesota Sexual Assault Center [CMSAC], 2016). SANEs often work as part of an on-call system where shortages are common; 77% of nurses in one study reported ongoing gaps in schedules , leading to increased stress (Maier, 2011). Additionally, SANEs should be available to confer with interdisciplinary team

members, including law enforcement, and testify in court, which may interfere with their professional schedule (Hilton, 2020). These work demands, and the emotional and psychosocial challenges inherent in the work, contribute to forensic nurses leaving practice, with the estimated average length of practice being two years (Hilton, 2020). Patients report that SANEs provide compassionate, respectful, and competent care which promotes emotional recovery, indicating the importance of this work (Fehler-Cabral et al., 2011); yet SANEs may experience detrimental effects on their personal and professional lives. A negative aspect of professional quality of life for those who help others experiencing suffering is compassion fatigue, commonly thought to be composed of secondary traumatic stress/vicarious traumatization and burnout (Stamm, 2010).

Secondary traumatic stress or vicarious trauma refers to the negative emotional and psychological effects from exposure to work-related trauma (Stamm, 2010; Tabor, 2011). Compassion fatigue, secondary traumatic stress, and vicarious traumatization are constructs associated with empathy-based strain, which is a trauma exposure process (Rauvola et al., 2019). Professionals who encounter the suffering of others can develop trauma exposure responses which include lack of empathy, cynicism, chronic exhaustion, dissociation, hypervigilance, and negative emotions such as helplessness, hopelessness, fear, guilt, and anger (Figley, 1995; van Dernoot Lipsky & Burk, 2009). Some of these are also symptoms of posttraumatic stress disorder (American Psychiatric Association, 2013; Figley, 1995), so in some cases, the professional caregiver develops similar adverse effects as the patients they care for following a traumatic experience (Figley, 1995).

Empathy-based strain can lead to adverse occupational health and wellbeing outcomes, including burnout (Rauvola et al., 2019). Professional burnout is defined as overwhelming exhaustion, feelings of cynicism or detachment, and a sense of ineffectiveness (Maslach et al.,

2001). A worker's psychological relationship to their job can be conceptualized on a continuum, from the positive experience of engagement and efficacy to the negative experience of burnout (Maslach et al., 2011). Burnout is a more gradual, chronic process of emotional exhaustion than acute secondary traumatic stress (Figley, 1995); thus, compassion fatigue can manifest in both immediate stress responses and progressive negative effects (Rauvola et al., 2019).

Compassion fatigue can cause a variety of deleterious symptoms related to physical (e.g., insomnia, headaches), behavioral (e.g., impaired clinical decision-making, increased alcohol use), psychological (e.g., intrusive thoughts, negative self-image), and spiritual (e.g., less discernment) aspects (Panagioti et al., 2018; Profit et al., 2014; Sinclair et al., 2017; Sorenson et al., 2016; Stamm, 2010). Given the demands of their work, SANEs may be at high risk for both components of compassion fatigue (burnout and secondary traumatic stress). Patients have reported some SANEs acted in a cold and distant manner (Fehler-Cabral et al., 2011); this could suggest that these nurses may be experiencing symptoms of burnout (e.g., detachment; Maslach et al., 2001) and/or vicarious trauma (e.g., decreased empathy, dissociation; van Dernoot Lipsky & Burk, 2009). SANEs have been found to have higher levels of vicarious trauma and associated cognitive changes compared to other nursing specialties (Raunick et al., 2015). In one study examining SANEs in the Midwest, 59% reported signs of vicarious trauma (Wies & Coy, 2013). Other researchers found 46% of their sample of SANEs experienced burnout, and 51% experienced vicarious or secondary trauma related to their work (Maier, 2011). In another study, the prevalence of moderate to high levels of secondary traumatic stress and burnout in forensic nurses was found to both be 73% (Flarity et al., 2016).

The available research regarding SANEs indicates multiple personal and organizational variables that can affect their development of burnout and secondary traumatic stress. These

include prior nursing experience, age, education, personality, coping and relaxation skills, peer and organizational support, call schedule, compensation, and the goals and prosecution orientation of their facility's SANE program (Maier, 2011; Seng & Johnson County (Iowa) SANE Team, 2004; Strunk & Strunk, 2012; Townsend & Campbell, 2009). Currently, there is limited available information regarding how SANEs can best promote resiliency and avoid detrimental psychological and emotional effects of work. Therefore, the purpose of this study was to explore the challenges SANEs experience related to work and what resources can be utilized to promote resiliency and improve professional quality of life. Data from this study will be utilized to create SANE Well®, a SANE Support Application (SSA), that will be designed to promote SANE resiliency. To promote the effectiveness of the SSA, the content and format will be created based on the data collected and analyzed from the online survey and focus groups.

## Methods

### Research Design

This project is an exploratory, mixed-methods design and included two parts: development, administration, and analysis of an online survey; and focus group meetings within the sub-set of the SANEs who completed the online survey. The purpose of the online survey was to obtain exploratory data and gain insight into formulating the open-ended questions for subsequent focus groups (see Appendix). It was essential to find out which topics were most important, if critical topics were missing, and most importantly, if there were topics that needed more in-depth follow-up in the focus groups and how they should be addressed within SANE Well®. Given the sampling approach, the survey was not conducted to get prevalence point estimates for a population. The semi-structured interview questions for the focus groups were

developed following an analysis of the online survey data to obtain more explanatory information regarding the issues identified by those who completed the survey.

**Sample and Recruitment**

Before conducting this research, the protocol was approved by an Institutional Human Subjects Committee. Participants were recruited by posting the survey link on the website of International Association of Forensic Nurses (IAFN) and the Western Region Public Health Training Center (WRPHTC)-SANE Program. The IAFN Research Committee approved the post prior to listing on the Member Community. SANEs of any gender, ethnicity, and location were eligible to participate in the study. The primary sampling frame was the IAFN listserv, as it is composed mostly of SANEs. Additionally, the WRPHTC-SANE program participants listserv was used because it is the home site for the WRPHTC-SANE education program.

Focus group participants were recruited via an item included in the online survey that inquired about their interest in participating in a follow-up focus group session. An e-mail was provided to contact the co-principal investigator to express interest in a focus group. Focus group recruitment occurred until three focus groups with 3-5 participants were scheduled (Spring to Summer 2020). Participants interested in participating in the focus group sessions received an electronic copy of the disclosure form. The focus group participants provided verbal consent at the beginning of the focus group sessions. The online focus groups were conducted using Zoom® and end-to-end encryption, role-based user security, and password protection were used for all sessions. The focus group questions were designed after the researchers received and analyzed the online survey data to obtain more specific information to address the aims of the study.

**Data Collection**

Data for this study were collected between May 1 and August 31, 2020. Before starting the online survey, participants were given a disclosure statement explaining the study and were asked to provide consent before continuing with the survey. Once participants provided consent, they completed the anonymous online survey administered via Qualtrics®. Each person who completed the survey was asked if they were willing to participate in a follow-up focus group and if they would pilot test the SSA. Interview questions for the focus groups included:

> *1) What is most gratifying about your work as a SANE? 2) What is most challenging about your work as a SANE? 3) What do you experience mentally, emotionally, or physically after a hard workday? What do you do when you experience these? 4) How do you cope with the demands of your work? 5) How do you stay present in the moment when you are doing your work? 6) In what ways do you support fellow SANE nurses? 7) What apps do you use on your phone to help promote your own self-care? 8) If you had access to a SANE support tool, would you prefer a phone app or a web-based support tool? 9) What features would best help you in a support tool? and 10) What educational resources for your work would be helpful to include in a tool like the above?*

The audio data was transcribed and analyzed utilizing qualitative methods.

Content analysis was performed within Microsoft Excel. Each question was entered into a spreadsheet with the participants' responses to each inquiry. The unit of analysis was the recurrent words or phrases which were transferred to columns and coded. Conceptual categories were identified from the data. Three analysts performed triangulation; two were involved in the focus groups. The criteria of credibility, transferability, dependability, and confirmability provide a standard for evaluating data's trustworthiness (Creswell, 2013). Credibility is the measure of the truth of the data (Lincoln & Guba, 1985). Credibility was met by providing clear questions,

providing an environment where participants could openly share their experiences, and member checking responses. During the interviews, member checking was conducted by the researchers restating what they have heard from the participants and revising until confirmation was obtained. Transferability is the applicability of the findings (Lincoln & Guba, 1985). While this study was with SANEs, nurses, in general, experience high levels of stress and need self-care, supporting the transferability of the findings. Dependability is the consistency of the findings (Lincoln & Guba, 1985). An audit trail consisting of raw data, notes from analysis, findings, and instrument development was created, supporting the dependability of this study. Confirmability is the impartiality of the researchers to reflect the findings of the participants (Lincoln & Guba, 1985). Analyst triangulation with three reviewers was performed to arrive at the findings supporting the confirmability of this study.

## Results

The online survey was answered by 69 SANEs from 21 states, with 24 residing outside the US (see Table 1). Almost all of the participants identified as a SANE-Adult and 42.6% identified as a SANE-Pediatric, with just less than half practicing as both. Most (53.62%) were older than 45 years of age, and only a few (5.80%) were less than 29. The majority held an associate or bachelor's degree, and 26.4% had a graduate degree. More than half (65.22%) worked at least part-time in a rural area, and 81.16% practiced in an urban area, with 46.38% working both settings. More than half the respondents had practiced for more than six years, and 38.23% had practiced for more than 11 years. Over a third (38.24%) practiced as a SANE more than 40 hours per week, including on-call time, and 17.65% practiced as a SANE less than 11 hours per week. Most (76.40%) saw less than 10 cases per month, and 10.29% saw more than 20 cases per month. From the survey participants who indicated their interest in participating in a

follow-up focus group session, eight SANEs were recruited for the focus groups. The focus group participants reported working in Arizona (n=4), North Dakota (n=1), Pennsylvania (n=2), and Georgia (n=1).

The participants reported gratifying aspects of working as a SANE included having the ability to help, taking focused time for patient care, providing high-quality care, patient gratitude, knowing you are helping the community, and making a difference. However, two important outcomes from the online survey were related to the challenges SANEs have at work and how they cope with being a SANE (see Figure 1). Challenges presented were being on-call, lack of community agency support, societal beliefs of the victims, the emotional toll, lack of work-life balance, and the need for more community resources and education. One participant reported challenges related to "buy-in and cooperation from the community, law enforcement, and local family advocacy centers," and multiple other participants mentioned challenges related to lack of community support and resources. SANEs reported they felt positive emotions (e.g., empathy, gratitude, satisfaction) and also experienced intrusive thoughts and emotional, physical, and mental exhaustion after a hard workday. One SANE shared, "I've just spent hours with the patient and their story or account of what happened, and was sort of, you know, spinning in my head." Multiple participants reported that after difficult shifts they experienced detachment; this was exemplified in comments such as: "I want to 'check out'…" and "don't really want to talk much (to family and friends)." They also reported undesirable emotions with people in their social support network, like "tenseness," "negative impact on intimacy time," and feeling "very impatient…and easy to get angry."

A variety of responses were provided for dealing with the demands of SANE work and coping (see Figure 1). Social and peer support was a leading response followed by physical self-

care, hobbies, technology, relaxation, spirituality, humor, time with pets, and professional mental healthcare. One SANE reported, “I think it would be helpful to have some support outside of, you know, my small network of nurses that I work with.” SANEs reported they stay in the present moment for their work by focusing on providing high-quality care, focusing on the patient, knowing the meaning of their work, breathing, grounding, practicing mindfulness, and some said this just came naturally to them. Interestingly, common answers from the previous coping question arose in this question of staying present. Common responses included spirituality, peer support, social support, and hobbies. Support for fellow SANEs included offering support, positive feedback, encouragement, listening, teaching, educational offerings, meetings, debriefing, social events, and connecting with other SANEs. One SANE suggested including, “what are some solutions that I don’t know...Even some potential solutions or connections with people that have it figured out.”

Features requested in a SANE Support Application (SSA) included self-care activities, games, fitness, music, audible/library loan, educational material, nutrition, and podcasts. One participant said, “I like watching like cooking videos or animal videos.” Responses on the design of an SSA were that it be basic, fast, free, interactive, interesting, short, customizable, easy to use, and accessible. Educational resources reported to be helpful in a support tool were case reviews, best practices and protocols, research, upcoming events, tip sheets, review of anatomy, and legal information. Two SANEs from the focus groups reported that they come from various nursing backgrounds, and the documentation and vocabulary are challenging to remember. They each had been a SANE for almost two years. One participant stated, “I think the first thing that popped into my head is documentation help because it is so specialized … and you know the describing what you see is a lot harder for me than I feel like it should be.” Another participant

stated, “I know what this looks like, it looks like a scratch to call it an abrasion. Is it a puncture wound? You know, I don't have that lingo right in my head.”

## Discussion

Nurses trained as SANEs provide a higher quality of care for sexual assault survivors and have more positive attitudes toward this patient population (Nielson et al., 2015; Plichta et al., 2007); however, this work can come at a cost for these nurses. This study adds to the literature by reporting specific challenges and negative effects SANEs experience related to their work and what resources and activities can promote their resiliency and enhance their professional quality of life. Compassion fatigue can cause a variety of deleterious physical, behavioral, and psychological symptoms (Panagioti et al., 2018; Profit et al., 2014; Sinclair et al., 2017; Sorenson et al., 2016; Stamm, 2010), and the participants in this study endorsed experiencing many symptoms described in the literature. These included negative emotions, detachment, difficulty concentrating, intrusive thoughts, and physical, mental, and emotional exhaustion. These negative aspects of professional quality of life should be targeted to mitigate their detrimental effects and promote SANE retention. The participants reported multiple deleterious consequences they experienced outside of work, such as worrying about patients after the shift ended and a decreased desire to interact with their families. These findings highlight the scope of their work’s impact and the importance of addressing their professional quality of life to improve the overall quality of life and effect on social support networks.

The findings of this study align with previous research, which describes many factors related to SANE work that can contribute to their professional quality of life and intent to remain working in this nursing specialty. Participants reported personal (e.g., difficulty with work-life balance), job (e.g., exposure to child abuse, administrative duties), organizational (e.g., being on-

call, limited resources), and community (e.g., lack of community agency support) factors that presented challenges related to their work. Townsend and Campbell (2009) found organizational variables were significantly associated SANE burnout and secondary traumatic stress levels, including caseload and level of organizational and peer support. Some aspects of personal history, such as experience with rape, could put SANEs at higher risk for secondary traumatic stress (Maier, 2011). Other researchers have recommended addressing personal and organizational factors to decrease SANEs' turnover intention, such as increasing SANE coverage, limiting on-call shifts, organizational compassion fatigue prevention programs, and encouraging SANEs to engage in self-care to manage work-related stress (Flarity et al., 2016; Logan et al., 2007; Strunk & Strunk, 2012). Thus, the literature supports targeting interventions at both the personal and organizational level to promote SANE professional quality of life and retention.

This study utilized quantitative and qualitative data collection methods by employing an online survey and subsequent focus groups with participants from multiple states and countries. This allowed for rich data collection and the opportunity to obtain more focused and detailed data with focus group interview questions crafted after survey data analysis. Limitations of this research include the number of participants; the findings may not be generalizable or applicable to local practice settings. Additional research is needed to explore the prevalence, symptoms, and effects further, and applicable interventions related to professional quality of life and resiliency in SANEs.

**Implications for Clinical Forensic Nursing Practice**

SANEs in this study reported the importance of peer support, and this aligns with other research findings. Maier (2011) described that SANEs coped with their work by reaching out to

other SANEs one-on-one or in group meetings. Regular SANE meetings were also recommended by Logan et al. (2007) to promote communication and retention. Receiving support from other SANEs may be especially important for new SANEs and those working in rural areas (Seng & Johnson County (Iowa) SANE Team, 2004). Individual SANEs and SANE programs should implement mentorship and group interactions to develop a peer support network to promote professional coping and retention. Local peer support resources may be particularly helpful, as SANEs experience program- and community-specific factors that influence their professional challenges and fulfillment.

Another way to address compassion fatigue may be to support nurses' compassion satisfaction, the positive emotions and aspects related to the work (Stamm, 2010). The SANE participants in this study reported many gratifying aspects of their work as a SANE, including positive emotions, job activities that were fulfilling, and personal gains. In their study with 55 forensic nurses, Flarity et al. (2016) found that 69% of participants reported moderate to low compassion satisfaction. Exploring ways to enhance or highlight the positive aspects of the work may be one avenue to attract and keep SANEs working in this field.

The study participants identified a variety of interventions they find helpful in coping with the demands of their work. These activities were at the personal (e.g., hobbies, self-care practices) and community (e.g., social support) levels. The SANEs identified specific aspects of a support tool that could promote their engagement in these activities. The authors will utilize these suggestions in designing SANE Well®, a targeted support application to promote SANE wellness and resiliency which will be beta tested with SANEs recruited from the present study and then made widely available. This app will include specific content and activities identified by the study participants as helpful to promote their resiliency and coping related to the demands

of their work. Finding effective interventions and self-care practices to mitigate the negative effects could improve SANEs' patient care by decreasing SANE development of detachment, dissociation, cynicism, negative emotions, and desire to leave the specialty.

The results of this study highlight the need to heighten the awareness that SANEs are at risk for developing negative effects related to compassion fatigue, secondary traumatic stress/vicarious trauma, and burnout because of the nature of their work. Professionals who interact with people following trauma should be prepared for the hazards of this type of work and understand how the work affects them (Figley, 1995; van Dernoot Lipsky & Burk, 2009). SANE programs need better access to screening, diagnosis, and health care services to prevent and manage health issues resulting from conducting SAFMEs. Education related to professional quality of life, trauma-informed care, coping strategies, and self-care should be incorporated into SANE training and ongoing education. The WRPHTC-SANE Program, designed and implemented by the authors, now includes this education in its trainings, which has been well received and appreciated by participants. Developing the SANE Well® app will be another venue to support the health, resiliency, and professional longevity of SANEs.

## Conclusion

There is an emergent need to raise the number of SANEs to meet the increasing cases and improve the quality of care for sexual assault victims. The nature of this work puts SANEs at risk for developing adverse symptoms related to professional quality of life and turnover. This study collected information via an international online survey and focus groups about the challenges SANEs experience in their work and what resources can be utilized to promote their resiliency and improve their professional quality of life. This data is being used to create SANE Well®, a resource and resiliency app to enhance SANEs' quality of life and retention.

**Acknowledgement**

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number T96HP32508, "Advanced Nurse Education Sexual Nurse Assault Examiner program." This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

**Table Legends**

Table 1

*Sample Characteristics*

Figure 1

*Responses from the online survey*

**References**

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Association.

Central Minnesota Sexual Assault Center [CMSAC]. (2016). *What you need to know about a sexual assault exam*. Retrieved March 26 from https://centralmnsac.files.wordpress.com/2011/03/sexual-assault-nurse-exam-info-book.pdf

Creswell, J. W. (2013). *Qualitative inquiry and research design* (3rd ed.). Sage Publications.

Fehler-Cabral, G., Campbell, R., & Patterson, D. (2011). Adult sexual assault survivors' experiences with sexual assault. *Journal of Interpersonal Violence, 26*(18), 3618-3639. https://doi.org/10.1177/0886260511403761

Figley, C. R. (1995). *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized.* Routledge.

Flarity, K., Nash, K., Jones, W., & Steinbruner, D. (2016). Intervening to improve compassion fatigue resiliency in forensic nurses. *Advanced Emergency Nursing Journal, 38*(2), 147-156. https://doi.org/10.1097/TME.0000000000000101

Hilton, L. (2020, March 26). Forensic nursing gives RNs more tools to help victims of violence. https://www.nurse.com/blog/2020/02/19/forensic-nursing-rns-tools-help-victims-violence

Logan, T., Cole, J., & Capillo, A. (2007). Sexual assault nurse examiner program characteristics, barriers, and lessons learned. *Journal of Forensic Nursing, 3*(1), 24-34.

Maier, S. L. (2011). The emotional challenges faced by sexual assault nurse examiners: "ER nursing is stressful on a good day without rape victims". *Journal of Forensic Nursing, 7*, 161-172. https://doi.org/10.1111/j.1939-3938.2011.01118.x

Maslach, C., Leiter, M. P., & Jackson, S. E. (2011). Making a significant difference with burnout interventions: Researcher and practitioner collaboration. *Journal of Organizational Behavior, 33*(296-300). https://doi.org/10.1002/job.784

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52*, 397-422.

Nielson, M. H., Strong, L., & Stewart, J. G. (2015). Does sexual assault nurse examiner (SANE) training affect attitudes of emergency department nurses towards sexual assault survivors? *Journal of Forensic Nursing, 11*(3), 137-143. https://doi.org/10.1097/JFN.0000000000000081

Panagioti, M., Geraghty, K., Johnson, J., Zhou, A., Panagopoulou, E., Chew-Graham, C., Peters, D., Hodkinson, A., Riley, R., & Esmail, A. (2018). Association between physician burnout and patient safety, professionalism, and patient satisfaction: A systematic review and meta-analysis. *Journal of the American Medical Association Internal Medicine, Advanced online publication*. https://doi.org/10.1001/jamainternmed.2018.3713

Plichta, S. B., Clements, P. T., & Houseman, C. (2007). Why SANEs matter: Models of care for sexual violence victims in the emergency department. *Journal of Forensic Nursing, 3*(1), 15-23. https://doi.org/10.1111/j.1939-3938.2007.tb00088.x

Profit, J., Sharek, P. J., Amspoker, A. B., Kowalkowski, M. A., Nisbet, C. C., Thomas, E. J., Chadwick, W. A., & Sexton, J. B. (2014, Oct). Burnout in the NICU setting and its relation to safety culture. *BMJ Quality & Safety, 23*(10), 806-813. https://doi.org/10.1136/bmjqs-2014-002831

Raunick, C. B., Lindell, D. F., Morris, D. L., & Backman, T. (2015). Vicarious trauma among sexual assault nurse examiners. *Journal of Forensic Nursing, 11*(3), 123-128. https://doi.org/10.1097/JFN.0000000000000085

Rauvola, R. S., Vega, D. M., & Lavigne, K. N. (2019). Compassion fatigue, secondary traumatic stress, and vicarious traumatization: A qualitative review and research agenda. *Occupational Health Science, 3*, 297-336. https://doi.org/10.1007/s41542-019-00045-1

Seng, J. S., & Johnson County (Iowa) SANE Team. (2004). The first year as sexual assault nurse examiner: Role transition and role-related stress within a new SANE team. *Journal of Emergency Nursing, 30*(2), 126-133. https://doi.org/10.1016/j.jen.2003.12.009

Sinclair, S., Raffin-Bouchal, S., Venturato, L., Mijovic-Kondejewski, J., & Smith-MacDonald, L. (2017, Apr). Compassion fatigue: A meta-narrative review of the healthcare literature. *International Journal of Nursing Studies, 69*, 9-24. https://doi.org/10.1016/j.ijnurstu.2017.01.003

Sorenson, C., Bolick, B., Wright, K., & Hamilton, R. (2016). Understanding compassion fatigue in healthcare providers: A review of current literature. *Journal of Nursing Scholarship, 48*(5), 456-465. https://doi.org/10.1111/jnu.12229

Stamm, B. H. (2010). *The concise ProQOL manual* (2nd ed.). ProQOL.org.

Strunk, K. C., & Strunk, K. K. (2012). The contribution of personality and workplace characteristicsin predicting turnover intention among sexual assault nurse examiners: A path analytic study. *Journal of Forensic Nursing, 8*, 144-150. https://doi.org/doi: 10.1111/j.1939-3938.2012.01141.x

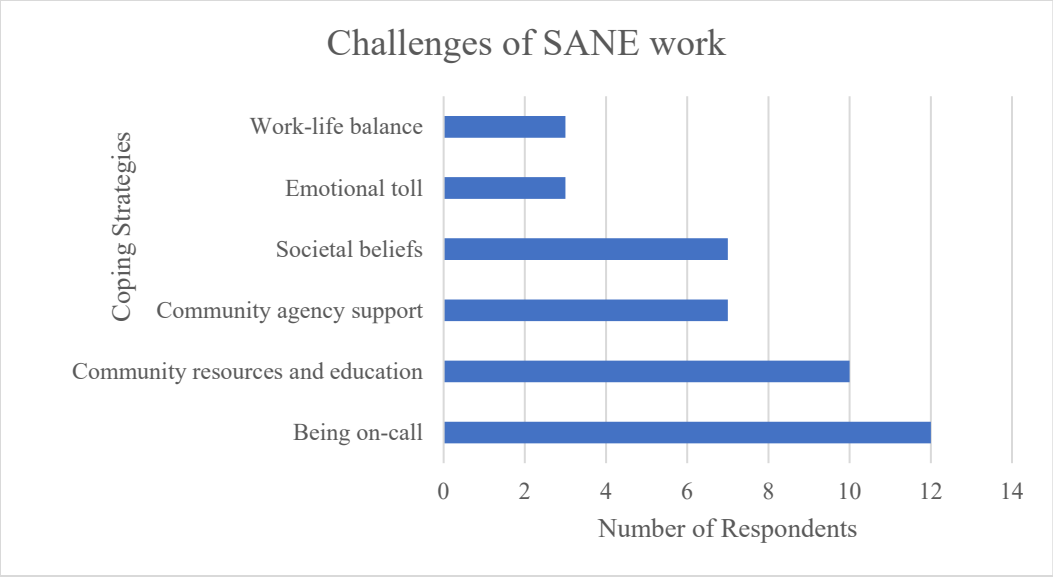
Tabor, P. D. (2011). Vicarious traumatization: Concept analysis. *Journal of Forensic Nursing, 7*, 203-208. https://doi.org/doi: 10.1111/j.1939-3938.2011.01115.x

Townsend, S. M., & Campbell, R. (2009). Organizational correlates of secondary traumatic stress and burnout among sexual assault nurse examiners. *Journal of Forensic Nursing, 5*, 97-106. https://doi.org/10.1111/j.1939-3938.2009.01040.x

United States Government Accountability Office [GAO]. (2018). *Sexual assault: Information on the availability of forensic examiners*.

van Dernoot Lipsky, L., & Burk, C. (2009). *Trauma stewardship: An everyday guide to caring for self while caring for others*. Berrett-Koehler Publishers.

Wies, J. R., & Coy, K. (2013). Measuring violence: Vicarious trauma among sexual assault nurse examiners. *Human Organization, 72*(1), 23-30.



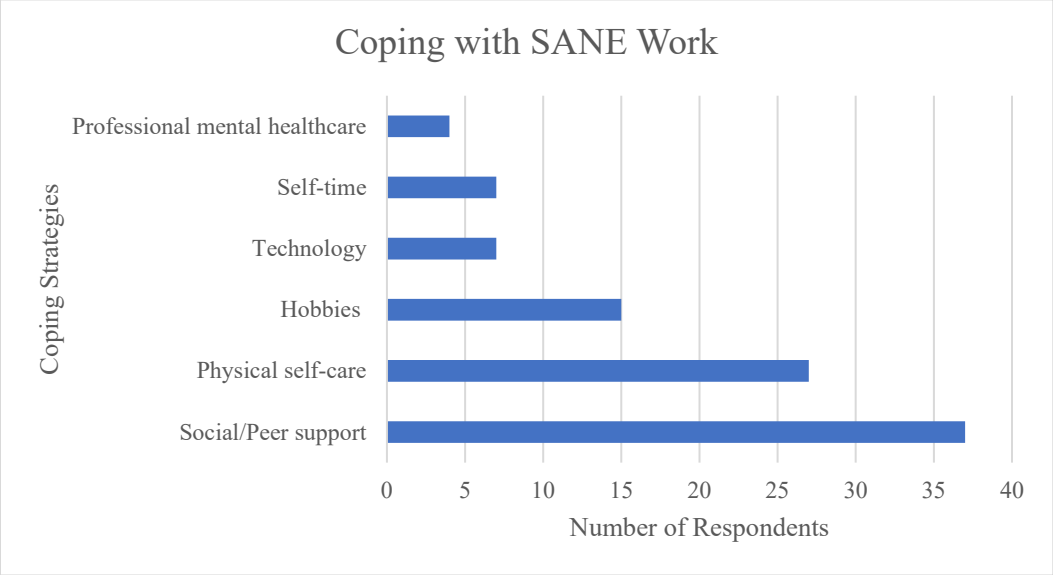




Figure 1. Responses from the online survey

**Table 1**

*Sample Characteristics*

| Type of SANE | n | % |
|---|---|---|
| SANE A | 25 | 57.38 |
| SANE P | 1 | 1.64 |
| SANE A & P | 36 | 40.98 |
| **Highest Degree** | **n** | **%** |
| Associate | 11 | 16.20 |
| Bachelor | 36 | 52.90 |
| Master | 6 | 8.80 |
| Doctoral | 12 | 17.60 |
| Other | 3 | 4.41 |
| **Age (years)** | **n** | **%** |
| < 29 | 4 | 5.80 |
| 30 - 44 | 28 | 40.58 |
| 45 - 60 | 26 | 37.68 |
| 60+ | 11 | 15.94 |
| **Experience (yrs)** | **n** | **%** |
| < 1 | 3 | 4.41 |
| 1 - 5 | 26 | 38.20 |
| 6 - 10 | 13 | 19.12 |
| 11 - 15 | 14 | 20.59 |
| 16 - 20 | 8 | 11.76 |
| 20+ | 4 | 5.88 |
| **Practice Setting** | **n** | **%** |
| Rural | 13 | 18.84 |
| Urban | 24 | 34.78 |
| Urban & Rural | 32 | 46.38 |
| **Cases per month** | **n** | **%** |
| < 1 | 9 | 13.20 |
| 1 - 10 | 43 | 63.20 |
| 11 - 20 | 9 | 13.20 |
| 21+ | 7 | 10.29 |
| **Practice Effort (hrs/week)** | **n** | **%** |
| 0 - 10 | 12 | 17.65 |
| 11 - 20 | 8 | 11.76 |
| 21 - 30 | 11 | 16.18 |
| 31 - 40 | 11 | 16.18 |
| 41+ | 26 | 38.24 |

# Appendix

## Online Survey Questions

1. Are you a SANE-Pediatric/Adolescent (SANE-P) or SANE-Adult/Adolescent (SANE-A)?
2. What is the highest level of education you have completed?
3. What is your age?
4. In which state do you currently practice in?
5. Is your practice setting in rural areas, urban areas, or both?
6. How long have you practiced as a SANE?
7. On average, how many hours a week do you work as a SANE (including on-call)?
8. On average, how many sexual assault patients do you see per month?
9. What is your typical call schedule?
10. What is most gratifying about your work as a SANE?
11. What is most challenging about your work as a SANE?
12. What do you experience mentally, emotionally, and/or physically after a hard workday as a SANE?
13. How do you recharge or cope with the demands of your work as a SANE?
14. What helps you stay present in the moment when you are doing work as a SANE?
15. In what ways do you support fellow SANEs?
16. What apps do you use on your phone to help promote your own self-care?
17. If you had access to a SANE support tool, would you prefer a phone app or a web-based support tool?
18. What features would best help you in a support tool?
19. What educational resources for your work would be helpful to include in a tool like the above?
20. If you are interested in participating in an online focus group, please contact [contact information provided].

## Focus Group Questions

1. Please tell us your name, your role as a SANE, and how many years you have been practicing.
2. In what ways do you think you could you use a support app during your shift as a SANE?
3. In what ways do you think you could you use a support app outside of work to help your work as a SANE?
4. If it was possible, would you prefer a support app to connect you to local and/or distant SANEs?
5. Would it be more useful to have a support app direct you to other resources, or have the information within the app?
6. Have you used an app before? If so, what do you like about the apps you have used?
7. What do you think are barriers of using an app?
8. If you know a fellow SANE nurse is struggling, what would you do to assist them?