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# Ohio Forensic Nurse Examiners: Readiness to Care for Victims of Sexual Assault with Disability

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**Final Scholarly Project**

**Ohio Forensic Nurse Examiners: Readiness to Care for Victims of Sexual Assault with  
Disability**

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Department of Nursing, Otterbein University

2023

In Partial Fulfillment of the Requirements for the Degree

Doctor of Nursing Practice

DNP Final Scholarly Project Team:



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### Executive Summary

Forensic nurse examiners (FNEs) care for crime victims in acute care settings. These nurses are specifically trained in trauma-informed care and evidence collection in cases of sexual assault, domestic violence, abuse, and human trafficking (RAINN, 2022). The scholarly project focuses on the care of victims of sexual assault living with disability, as this population is three times more likely to be victimized than any other population (NSVRC, 2022). The project literature review reveals a lack of data on preparation standards for FNEs on caring for victims with disability and providing accommodations during forensic examination. Currently, it is unknown if FNEs in the state of Ohio receive the same degree and quality of education regarding the specific needs of disabled victims who have experienced and been affected by a criminal act. Also, it is unknown if knowledge deficits and clinical practice gaps exist among the Ohio FNEs providing care to this potentially vulnerable population. To identify, assess, and address any existing gaps in preparation a 10-question survey was distributed to FNE's in the state of Ohio through email. The survey was formulated with the assistance of the Dr. Joy Shoemaker of Otterbein University, Ruth Downing of Forensic Nursing Network, LLC, and the Adult Advocacy Centers administration team. Findings of the survey concluded that 57.9% of respondents did not have disability-specific education in their FNE training course in the state of Ohio. Respondents were from all 5 identified regions of Ohio, with the majority practicing in Central Ohio with representation from all regions included. In conclusion, the survey established that disability training is not standardized in current FNE training programs in the state of Ohio.

*Keywords:* Sexual Assault, Victims with Disability, Forensic Nurse Examiner, Forensic Nurse Examiner Preparedness, FNE, Forensic Nurse Examiner Care for Victims with Disability

## **Ohio Forensic Nurse Examiners: Readiness to Care for Victims of Sexual Assault with Disability**

After seven and a half years as a forensic nurse examiner (FNE), the author has had extensive experience caring for victims of sexual assault, domestic violence, abuse, and human trafficking. This knowledge has propelled a desire to dig deeper into the issues surrounding sexual assault and improve the care provided to victims in acute care settings. Sexual assault occurs every 68 seconds in the United States of America (RAINN, 2022). Many hospitals provide patients with a sexual assault response team (SART) that employs trained FNEs to respond to the bedside of victims of sexual assault and provide comprehensive care (RAINN, 2022). These FNEs are specially trained registered nurses who conduct a forensic examination and, if required, expert testimony (RAINN, 2022). FNEs are registered nurses who typically have two years or more of bedside experience that engage in a didactic sexual assault nurse examiner course and complete a clinical education and preceptorship process following didactic training (IAFN, 2022). The years of clinical practice and training equip FNEs with the ability to be experts in their field and, in the experience of the author, to provide expert testimony. Sexual assault is a prevalent crime and years of research have shown factors that perpetrators prey upon in victims. One of the largest risk factors identified in the United States is living with a disability (NSVRC, 2022). The risk of being a victim of sexual assault increases threefold for people with disabilities versus people without disabilities (NSVRC, 2022). The ADA defines a person with a disability as, “a person who has a physical or mental impairment that substantially limits one or more major life activities, a record of such an impairment, or being regarded as having such an impairment” (Brennan, 2013, p. 1). This knowledge of the increased victimization of people who live with a disability requires action to ensure adequate care is provided on behalf of FNEs.

**Problem Statement**

The clinical practice problem addressed through this scholarly project is regarding specific training for FNEs examining victims of sexual assault with disabilities. Statistics consistently show that adults with disabilities are at a higher rate of sexual violence than those without disabilities (Danmeyer & Chapman, 2018); (Dembo, Mitra, & McKee, 2018) (Kahan, 2021); (McGilloway, Smith, & Galvin, 2018). Adults with disabilities who are victims of sexual assault must also overcome barriers that exist in the healthcare and legal system (Kahan, 2021). Current concepts taught in FNE didactic training include treatment of victims of sexual assault, domestic violence, and human trafficking, pharmacology provided for victims of sexual assault, barriers to care, the interprofessional team involved in care, resources for post-assault care, evidence collection and documentation, and working with the criminal justice system (IAFN, 2022). There is no defined training for caring for victims of sexual assault with disabilities (IAFN, 2022). Considering their high victimization rate, this area of forensic nursing practice requires further information.

**PICO(T)**

The PICO format provides a framework for examining and answering a specific question related to the previously described problem (Melynck & Fineout-Overholt, 2005). The PICO format was used to develop the clinical question as well as provide strategic key search terms to obtain the best evidence for this project. The four components include ‘population and problem of interest [P], the intervention of interest [I], comparison of interest [C], and outcome of interest [O]’ (Melynck & Fineout, 2005, p.29). The PICO question relevant to this project is as follows: (P) Among Ohio Forensic Nurse Examiners who care for sexual assault victims, how does the incorporation of (I) a clearly defined, EBP education/training program about caring for disabled

victims of sexual assault, compared to (C) the traditional FNE training that does not cover this specialized topic, affect (O) FNE's knowledge, skill proficiency, and preparedness to care for sexual assault victims who are disabled (as measured by a state-wide needs assessment survey)?

### **Significance to Nursing Profession**

The improvement of the forensic nursing profession regarding care for victims of sexual assault with disabilities has profound implications for the nursing profession. There are long-term sequelae of sexual assault. The most prominently identified effects of sexual violence include post-traumatic stress disorder (PTSD), depressive thoughts, suicidal ideation and/or attempt, and increased likelihood to use drugs (RAINN, 2022). These ramifications of sexual violence are more frequently experienced by victims with disabilities (Coston, 2019). PTSD is a health condition that causes a person to re-experience trauma, maintain a state of hyperarousal, have emotional dysregulation, and negative self-concept (Lantz, 2020). The effect of PTSD over prolonged periods alters neural circuits leading to decreased activation of the prefrontal cortex, changes to the hypothalamic-pituitary-adrenal (HPA) axis, increased activity of the amygdala, reduced size of the hippocampus, and hyperactivity of the sympathetic branch of the autonomic nervous system (Lantz, 2020). These collective changes impact life span, aging, and early disease development (Lantz, 2020). Ensuring that victims of sexual assault with disabilities receive comprehensive and informed care from providers will mitigate risk and provide better outcomes for victims of sexual assault with disabilities in all areas of healthcare.

### **Literature Review**

The literature review conducted for this scholarly project was conducted in July 2022 and used a combination of the following keywords: "sexual assault" and "adults with disabilities" and "forensic" and "sexual assault nurse examiner". Overall strengths of this literature review

included re-iteration of the higher-than-average rates of sexual assault occurring to adults with disabilities worldwide, the need for more training of professionals within the field of forensics and victim care, and the critical role of the forensic nurse in care for victims of sexual assault with disability. Weaknesses of the data include little evidence on what gaps currently exist in training for FNEs regarding victims with disabilities, what can be improved by FNEs to better serve victims of sexual assault with disabilities, the comfort of FNEs in the field to provide adequate accommodations for victims of sexual assault. The existing literature further enforces the validity of this scholarly project evaluating the training and experience of FNEs in the state of Ohio to identify specific gaps and areas for improvement in the practice of forensic nursing to better serve victims of sexual assault with disabilities (see Appendix A).

### **Critical Appraisal and Synthesis**

In January 2018, a systematic review and meta-analysis specific to victims of sexual assault who are adults with intellectual disabilities were completed in Ireland. This systematic review analyzed thirteen qualitative studies and consolidated the evidence in the meta-analysis to reveal common themes and increase understanding (McGilloway, et. al., 2018). The systematic literature review was completed in 2014 (McGilloway, et. al., 2018). The study started with 3,672 articles found on database searching and excluded based on duplication, relevance, eligibility, and finally for involving other forms of disability separate from intellectual (McGilloway, et. al., 2018). The meta-analysis of these studies disseminated three overarching themes that were described in the context of interpersonal, professional, and social (McGilloway, et. al., 2018). The interpersonal context subthemes were fear, communication, and sexual knowledge and understanding. The professional context subthemes were intellectual disability identification, lack of collaboration between service providers, the presumption of capacity and

credibility, and lack of resources. The social context subthemes were myths and misconceptions. The strengths of this systematic literature review and meta-analysis include the identification of stakeholders, including FNEs, to explore the current level of disability education and evaluate current level of knowledge to improve care (McGilloway, et. al., 2018). Weaknesses of this study for this scholarly project include timeframe, literature selection for systematic review, and a small body of evidence taken from studies involving sexual assault nurse examiners. Due to the time of the literature review being 2014 with articles dating back to 2001, this may be more historical versus the current state of the scope of the forensic nursing practice about victims of sexual assault with intellectual disabilities (McGilloway, et. al., 2018, p. 53). Also, the systematic review did not include studies of adults with psychiatric illness, physical disability, and adults with intellectual disabilities classified as sexual offenders (McGilloway, et. al., 2018, p. 52-53). This may be limiting for this scholarly project. Another limitation identified is that this review had only three articles that were specific to sexual assault nurse examiners (McGilloway, et. al., 2018, p. 59). Overall, this was a strong body of evidence with contributing research for this scholarly project.

The next body of literature utilized for this literature review was published in June 2017 by the St. Mary's Sexual Assault Referral Centre (SARC) in Manchester, UK. The study surveyed staff working at the center to assess their knowledge and confidence in their ability to adequately provide care to victims of sexual assault with learning disabilities (Olsen, et. al., 2017). This survey was compared with an audit of patient charts to assess the care provided (Olsen, et. al., 2017). The results of this survey found that even with years of experience and a high level of confidence in the preparation received by the staff, patients with learning disabilities accessed fewer follow-up care services than people without learning disabilities



(Olsen, et. al., 2017). The strengths of this survey for this scholarly project include the inclusion of medical forensic professionals in the survey conducted, the assessment of confidence in disability training, and specific feedback from surveyed staff about what they would desire in additional disability training (Olsen, et. al., 2017). Weaknesses include the broad range of professionals surveyed at the SARC. The staff surveyed included crisis workers, forensic doctors, counselors, child advocates, administrators, management, and young person's advocates with 48% of the responses being from forensic doctors/medical providers (Olsen, et. al., 2017). Other weaknesses include this survey only identifying gaps in care for those with learning disabilities, and the indicator of adequate care only being the metric of follow-up services utilized (Olsen, et. al., 2017). Overall, this body of literature provides a re-iteration of the gap in care for victims of sexual assault with disabilities and again enforces the need for further training in identifying and properly caring for victims of sexual assault with disabilities.

### **The Gap in Current Literature**

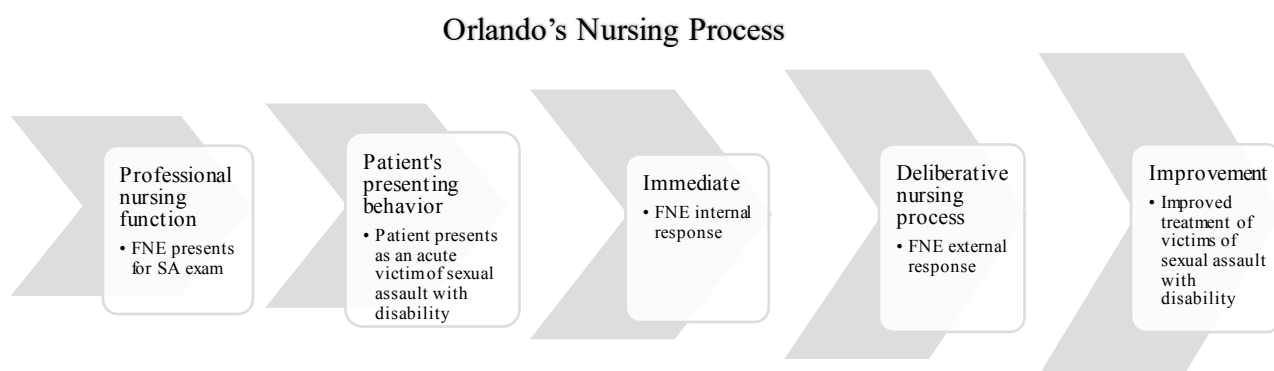
The gap in the current literature is specific qualitative data on how to improve preparedness for FNEs to adequately care for victims of sexual assault with disabilities. Each study in the literature review identifies that communication with this population is a deficit and that these communication deficits lead to care deficits and a lack of appropriate follow-up. There is a relative gap in literature specific to FNEs and care for victims with disabilities, although data has shown that most victims will have a disability. The goal of this scholarly project will investigate this identified gap to provide more comprehensive training for FNEs in caring for victims of sexual assault with disabilities.

## Theoretical Framework

The theoretical framework utilized for the scholarly project is Orlando's Nursing Process Discipline Theory. Orlando's theory was introduced by Ida Jean Orlando Pelletier as a middle-range, research-based theory rooted in the nursing process (Potter, 2008). Orlando first founded her theory in the 1950s while performing research at Yale University (May 2013). The choice of this theory is due to the ability of Orlando's theory to emphasize the experience of the nurse at the bedside while caring for a complex situation. Orlando's Nursing Process Discipline Theory is defined by five interrelated concepts as follows: 1) professional nursing function; 2) patient's presenting behavior; 3) immediate reaction; 4) deliberative nursing process; 5) improvement (May, 2013). Concerning the stated scholarly project, Orlando's theory concepts transposed to this project are: 1) FNE presenting to complete a sexual assault examination; 2) the patient presents as an acute victim of sexual assault with a disability; 3) FNE internal response; 4) FNE external response; 5) improved treatment of victims of sexual assault with disabilities. This can be seen below in Figure 1.

**Figure 1**

*Orlando's Nursing Process Discipline Theory and its use in the scholarly project*



**Objectives**

The scholarly project is anticipated to improve care in the state of Ohio for victims of sexual assault with disabilities. The rate of sexual assault in Ohio in 2018 was just above 10,000 cases (ODVN, 2021). The definition of sexual assault used for this data in the state of Ohio is dictated by the Ohio Revised Code (ORC) and includes rape, public indecency, sexual imposition, gross sexual imposition, sexual battery, importuning, voyeurism, and unlawful sexual contact with a minor (ODVN, 2021). The incidence of being a victim of sexual assault increases threefold for people living with a disability (NSVRC, 2022). Victims of sexual assault are offered specialized care by trained FNEs if they present to acute healthcare settings following their assault (RAINN, 2022). The role of the FNE is to conduct a medical forensic examination, and trauma-informed interview detailing the events of the assault and provide appropriate resources and follow-up care options (IAFN, 2022). The scholarly project will identify if current FNE training provides an adequate knowledge base for providing specialized care to victims of sexual assault who have a disability.

The first objective of the scholarly project involves the implementation of a survey for FNEs in the state of Ohio regarding care for victims of sexual assault with disabilities. Baseline knowledge will be compared with the knowledge of FNEs who have undergone disability training. The development of this survey will be done with the Forensic Nursing Network (FNN) and Adult Advocacy Centers (AAC). These organizations provide specialized training and care for victims of crime with disabilities.

The second objective of the scholarly project is to utilize the data collected from the survey to identify areas of improvement in current disability education for FNEs. Current studies indicate there are higher rates of negative mental health consequences for victims of sexual

assault with disabilities (Coston, 2019). Victims of sexual assault with disabilities are more likely to under-report abuse (Kahan, 2021). These findings are in comparison to their counterparts who do not have an identified disability and have been a victim of sexual assault. The improvement of existing forensic nursing care in the state of Ohio will allow for dangerous gaps in care for victims of sexual assault with disabilities to be addressed.

The third objective for this scholarly project is to analyze survey findings, identify training opportunities for improvement, and disseminate findings along with recommendations to key stakeholders including the FNEs, FNN, ACC, and Otterbein University Nursing Department Faculty and Students. The identification of training opportunities based upon findings can be further utilized by these key stakeholders to enrich the existing body of knowledge around FNE training and care of victims with a disability, as well as inform future training and education.

### **Method**

The scholarly project utilized a survey developed with AAC and FNN input as well as oversight by Dr. Joy Shoemaker. The survey is attached in Appendix B and is eleven questions in length. The survey assessed (outcome) the comfort of caring for victims of sexual assault with disabilities by comparing (independent variable) FNEs with standard training and no additional experience or training with disability-specific training versus (dependent variable) FNEs who identify as having either personal or professional experience in disability-specific care. The survey is formulated with questions to determine the region of Ohio, years of experience in forensic nursing, length of time since training, comfort in caring for victims of sexual assault with disabilities, and understanding of accommodations available for sexual assault examinations. The survey is intended to be a qualitative inquiry into the experience of learning for FNEs who have been trained in the state of Ohio. The survey was available for 4 weeks. The goal

population for the scholarly project is FNEs from across the state of Ohio with a diverse population. The Director of Project Development at Forensic Nursing Network (FNN) made available an extensive email database utilized to ensure multiple regions are engaged in the survey period.

**Population.** The population of FNEs in the state of Ohio is fluid as this field has high turnover, therefore the basis of numbers can be better evaluated based on the programs across the state. There are 84 hospitals in the state of Ohio spanning 39 counties that offer a sexual assault response team (SART) with on-call FNEs to respond to cases of sexual assault (IAFN Ohio, 2020). To place this into perspective, there are 252 hospitals in the state of Ohio in total (OHA, 2021), meaning 33% of hospitals provide forensic services to victims of sexual assault. The target sample is based on Ohio regions: central, northeast, northwest, southeast, and southwest (see Figure 2). This differentiation based on the region protects the anonymity of the hospital system and location, while also representing the needs of different regions of our state. The regions are determined based on the state of Ohio Department of Development and Tourism (Ohio Department of Development and Tourism, 2020). To best represent the population of FNEs and regions, the goal is to have a response from 75% of the hospitals in the state of Ohio with a 20% even representation for each region of the state. The sample will be contacted through email communication utilizing the existing contact network information from Ruth Downing of Forensic Nursing Network. The email communication will include a link to the survey being utilized as well as information regarding the purpose and use of this survey.

**Figure 2**

*Ohio Regions Map (University of Akron The Ray C. Bliss Institute of Applied Politics, 2011)*



## Protection of Human Subjects

Human subject protection was ensured during the survey process by utilizing consent before completing the survey and being allowed to exclude any personal identifying information during the survey process. The disclosure was provided to participants on the use of their survey responses and the intent of the project. As such, the initial email to all potential participants includes a synopsis of the aim of the scholarly project and how their participation will be utilized to achieve this aim.

The study was reviewed by the Otterbein University Doctoral Nursing Program IRB and approved on October 26<sup>th</sup>, 2022. The project was conducted with the oversight and advisory of Dr. Joy Shoemaker. The consent process was completed through a digital waiver of consent to be signed digitally before completing the questions. The waiver of consent (Appendix C) discloses that this project is to be utilized to obtain anonymous qualitative information from FNEs practicing in the state of Ohio to establish their knowledge base and any areas for improvement in existing training protocols and preparation for care of victims of sexual assault with a

disability. The survey was sent as a Google form and data collected from participants was sent directly to a protected Google spreadsheet of results. No personal identifying information was included in the survey, google form, or Google spreadsheet. FNEs were only be asked to identify the region of the state that they practice in and the year range they have been in practice.

### **Enrollment**

Enrollment occurred through opting in or out of a mass email recruitment campaign. The inclusionary criteria included having an active nursing license in the state of Ohio, having completed FNE training, and working as an FNE in the state of Ohio. Exclusionary criteria include having a restricted or inactive nursing license in the state of Ohio, did not complete FNE training, are not working as an FNE in the state of Ohio. The enrolled participants are considered a convenience sample, as they are the FNEs who have received the email and are chosen to participate.

### **Project Team and Expertise**

The project team involved in the survey includes Dr. Joy Shoemaker academic supervisor, Ruth Downing Director of Project Development at Forensic Nursing Network (FNN), Laura Kaiser Executive Director at Forensic Nursing Network (FNN), Adult Advocacy Centers Executive Director and Deputy Director, and master prepared statistician for data analysis. Ms. Downing and Ms. Kaiser are master's prepared nurses who are experts in the field of forensic nursing and lead the Forensic Nursing Network based in Ohio. The Adult Advocacy Centers are experts in the field of caring for individuals living with disabilities and are providing care and education across the state to facilitate improved access in areas of need.

### **Data Analysis Plan**

The data collected includes the region the FNE is currently practicing, how many years they have been practicing in segments of 2-year intervals, their training before entering practice, their training following entering practice, their experience with victims with disabilities, their experience providing accommodations to victims with disabilities, their comfort providing care to victims with disabilities, and their perceived knowledge deficit regarding care for victims with disabilities. This survey provided the working definition of disability and accommodation as standardized by the ADA.

### **Data Collection Plan**

The tool being utilized during the scholarly project is a survey consisting of questions aimed at assessing the human experience of FNEs at the bedside caring for victims of sexual assault with disabilities (see Appendix B). The tool development took place with the input of the project team and the previous work done in the field of forensics found during the literature review phase for the project (see Appendix A). The validity of the survey was addressed by utilizing expert input from both forensic nursing experts and disability care experts. These include members of the project team listed previously. They will have input in the formation of the survey and editing of content to ensure it is appropriately capturing the phenomena of patient care for victims with a disability.

### **Outcome Analysis Plan**

The success of the scholarly project will be determined based on having a response from FNEs in all 5 regions of the state of Ohio to allow for comparison of equity across the regions regarding training for the care of victims with disabilities. The intention is to have multiple responses from each region, allowing for a richer set of data to be analyzed and providing a more



comprehensive representation of the phenomena being researched. This data will then be analyzed by a statistician to determine common themes and data trends that are statistically significant. The expected limitations include the lack of a reliable sample size, varying levels of communication with rural FNE department staff, and the potential for low involvement rates. Facilitators include the ease of use of survey method study and the low-cost projection by utilizing email communication and Google forms and documents to manage data.

### **Timeline & Budget**

The specific timeline of the scholarly project is developed in September and October of 2022. Implementation during November and December of 2022 for 4 weeks of open survey completion. Data management and statistician analysis December 2022 and January 2023. The survey offers a raffle for all participants with a chance of winning a \$50 Target gift card. The recipient was selected using a randomized drawing software based on the email address tied to their submission and number in order of entry of their results into the Google form. The statistician is estimated to cost \$300 for 1.5-2 hours of work analyzing the qualitative data collected over the 4-week course of the open survey time. The total estimated budget for this project is \$350.

### **Deviations from Project Plan**

The survey editing process took longer than initially anticipated due to the need to collaborate with three different expert sources. The delay caused a change in the timeline for enacting the survey method. It was open for 4 weeks from Friday, February 3rd, 2023, to Friday, March 3rd, 2023. The survey was successfully sent to an email list of SART coordinators from across the state of Ohio with a reminder email sent weekly and instructions to forward the survey to other applicable colleagues. The results of the survey were shared with statistician Christopher

Bomba, MS Mathematics. A delay in the proposed timeline of results for the survey occurred due to the adjustment of the survey period from winter 2022 to spring 2023. The final statistician report was received on April 4, 2023, and submitted for review to Otterbein University.

### **Analysis and Outcome**

The information collected with the survey tool was shared with the project statistician for further assistance in evaluation and analysis. The ten-question survey tool was then further analyzed by question-specific responses comparing question five and other responses on the survey. The selection of question five was due to the question being the aim of the study to ask if participants received disability-specific training during their FNE preparation courses/training. The comparison of this question with the other experience and comfort-related questions on the survey was then run through chi-square testing for independence. If these results had a p-value below 10% (p-value 0.1), they were determined to be significant for dependence. This testing was chosen due to the nature of this study involving categorical data instead of numerical and the goal is to establish current practice and prior training levels to find which areas may have an opportunity for improvement or standardization.

The first comparison questions one and five evaluate if there is a correlation between the years of experience and if a respondent had disability-specific education in the FNE training course (see Figure 3). The outcome of the Chi-Square Test was 6.5 with a p-value of 8.91% (0.89) and therefore significant in showing dependence. This is a rejection of the null hypothesis. The highest level of 'no' responses to training by the experience groups was in the 2–4-year range. This was a small survey size in the range of five respondents, yet with responding no to having disability-specific training incorporated it is worth mentioning that this time period involves the COVID-19 pandemic and could be a confounding factor.

**Figure 3***Chi-Square Testing for the Independence of Q1 vs Q5*

COUNTA of Q1 How long have you been a forensic nurse in the state of Ohio?	Q5 Was there disability-specific education in your forensic nurse training course?		
Q1 How long have you been a forensic nurse in the state of Ohio?	No	Yes	Grand Total
0-2 years	3	5	8
2-4 years	4	1	5
4-6 years	1	4	5
6+ years	14	6	20
<b>Grand Total</b>	<b>22</b>	<b>16</b>	<b>38</b>

The second comparison was between question five and question three. Question three asked participants if they have any training or job experience working with individuals with disabilities. The outcome of the Chi-Square Testing for Independence was 11.12 with a p-value of 1.11% (0.01) and therefore significant in showing dependence (see figure 4). This is a rejection of the null hypothesis. This comparison showed that if an FNE did not have training or job experience there is a 98% likelihood they did not have disability-specific training during their preparation courses and vice versa, if they did have the training there is a 98% likelihood they did disability-specific training during their preparation courses.

**Figure 4***Chi-Square Testing for the Independence of Q3 vs Q5*

COUNTA of Q1 How long have you been a forensic nurse in the state of Ohio?	Q5 Was there disability-specific education in your forensic nurse training course?		
Q3 Do you have training or on-the-job experience regarding caring for victims of crime with disabilities?	No	Yes	Grand Total
No	13	1	14
Yes	9	15	24
<b>Grand Total</b>	<b>22</b>	<b>16</b>	<b>38</b>

The third comparison was between question five and question six. Question six asked participants the much you know about disabilities using the Likert scale for grading. The outcome of the Chi-Square Testing for Independence was 5.18 with a p-value of 15.90% (0.159) and therefore not significant in showing of dependence (see Figure 5). This is an acceptance of the null hypothesis and shows that this is likely not a display of causation, more likely a matter of chance.

**Figure 5***Chi-Square Testing for the Independence of Q6 vs Q5*

COUNTA of Q1 How long have you been a forensic nurse in the state of Ohio?	Q5 Was there disability-specific education in your forensic nurse training course?		
Q6 How much do you know about disabilities?	No	Yes	Grand Total
Just enough to do my job	8	8	16
Not enough to do my job as well as possible	6		6
Quite a lot	7	7	14
Very little specific knowledge	1	1	2
<b>Grand Total</b>	<b>22</b>	<b>16</b>	<b>38</b>

The fourth comparison is of question five and question seven. Question seven is again utilizing the Likert scale to assess how confident participants feel in providing accommodation in general during medical forensic examinations. The outcome of the Chi-Square Testing for Independence was 4.66 with a p-value of 19.81% (.198) and therefore not significant in showing dependence (see Figure 6). This is an acceptance of the null hypothesis.

**Figure 6**

*Chi-Square Testing for the Independence of Q7 vs Q5*

COUNTA of Q1 How long have you been a forensic nurse in the state of Ohio?	Q5 Was there disability specific education in your forensic nurse training course?		
Q7 How confident do you feel providing accommodations during medical forensic exams?	No	Yes	Grand Total
Not Confident	3		3
Not sure	8	3	11
Quite Confident	8	10	18
Very confident	3	3	6
<b>Grand Total</b>	<b>22</b>	<b>16</b>	<b>38</b>

The fifth and last comparison is of question five and question ten. Question ten is again utilizing the Likert scale to assess how confident participants feel in providing accommodation in general during medical forensic examinations. This is very similar to question seven, except that it is the following question nine regarding eight specific forms of accommodation that are commonly used in the disability community within forensic medical examination settings. All respondents used at least accommodation at some point in their practice. The outcome of the Chi-Square Testing for Independence was 7.36 with a p-value of 6.14% (0.06) and therefore significant in showing dependence (see Figure 7). This is a rejection of the null hypothesis.

**Figure 7***Chi-Square Testing for the Independence of Q10 vs Q5*

COUNTA of Q1 How long have you been a forensic nurse in the state of Ohio?	Q5 Was there disability specific education in your forensic nurse training course?		
Q10 How confident do you feel utilizing accommodations during medical forensic examinations?	No	Yes	Grand Total
Not Confident	1		1
Not sure	11	2	13
Quite Confident	8	10	18
Very confident	2	4	6
<b>Grand Total</b>	<b>22</b>	<b>16</b>	<b>38</b>

Further evaluation of outcomes of this project is in relation to stated objectives prior to starting the scholarly project. The first objective of the scholarly project was to develop a survey tool with the assistance of experts in the field from Otterbein University, FNN, and AAC was completed prior to sending the tool to the target population. The tool provided demographic information on the location and experience within the state of Ohio for the 38 respondents as well as information on their baseline knowledge in disability care, initial FNE training course, and comfort level at the bedside.

The second objective of the scholarly project is to utilize the data collected to identify areas of improvement in current disability education for FNEs that is occurring within the FNN and AAC organizations. The survey results further bolster the need of these programs to standardize training in the state of Ohio to include evidence-based disability-specific training during traditional FNE training. The AAC hosts free FNE training in the state taught by FNN. The most compelling data of the survey included that 57.9% of respondents had not received disability education in their FNE training, 36.8% of FNEs did not feel comfortable utilizing

accommodations during medical forensic examinations, and 21.1% of respondents did not feel that they knew enough to do their job as well as possible and/or very little specific knowledge.

The third objective for the scholarly project is the final phase for the project. The information gleaned from the survey tool and findings will be disseminated to FNN and AAC organizations as well as sent to other professionals in the field of forensic nursing care. The FNN and AAC are actively working on grant funding to advance the reach of their FNE training courses to the entire state of Ohio as well as open specialized centers across the state specifically tailored to care for victims of crime with disability. The work of the AAC will expand existing care standards exponentially for this population in need of greater advocacy and care.

### **Conclusion and Recommendations**

Based on the scholarly project outcomes one can conclude that standardized disability-specific FNE training would improve FNE readiness and comfort at the bedside caring for victims with disability. The current landscape of FNE preparation and comfort caring for victims of assault with disability was shown to be varied and dependent more on the previous work experience and conferences attended following initial training versus initial preparation as an FNE. Also, information showed that while all respondents had used a form of accommodation during their work as an FNE, only 63.2% of respondents felt confident utilizing them and there was a statistically significant correlation between comfort level and having disability-specific FNE training courses.

These findings and conclusions can be transposed outside of the acute care response setting for FNEs and transposed to other nurses on the continuum of care for victims of crime. The findings raise the concern that if experts in the field of forensics report a mixed comfort level in appropriate care standards, how do other medical professionals feel in these acute care

settings? And if they share similar levels of comfort, could they benefit from additional training as well? These are areas that require further evaluation. In our consultation, the statistician suggested further investigation utilizing a larger-scale experience-based study.

Limitations of this scholarly project include the small data collection size. The email survey was disseminated to FNE coordinators across the state of Ohio. Only a portion of them responded, and only one respondent was gathered from the snowball method from the original email list of coordinators forwarding to colleagues. In further research, it would be beneficial to allow a longer survey time and have bi-weekly versus weekly reminder emails to the professionals who have received the survey to encourage further participation and dissemination. The population was not evenly distributed across the identified regions in Ohio as initially hoped for in the sample size. The largest sample was from central Ohio, which includes three major health systems with 12 hospitals. This sample size did not capture an accurate portrayal across the state as there are a total of 187 acute care hospitals in the state and 15 major health systems (OHA, 2021). In future surveys, it would be beneficial to ensure adequate coverage across regions within the state to adequately capture the collective experience of forensic nurses.

### **Summary**

The scholarly project aimed to evaluate the preparedness for Ohio FNEs for caring for a widely victimized population. Findings of the survey tool utilized for this scholarly project found that more than half of FNEs did not receive disability-specific training in their preparation course the outcomes were found to be statistically significant indicators of comfort level in utilizing common practice accommodation methods at the bedside. The scholarly project's limitations were regarding the sample size and limited distribution which may negatively impact the results thus, further investigation of the topic is strongly indicated.



### References

U.S. Department of Health and Human Services. (2020, January). *People with Disabilities*.

Retrieved from Healthy People 2030: <https://health.gov/healthypeople/objectives-and-data/browse-objectives/people-disabilities>

ADA. (2022, May). *What is the definition of disability under the ADA?* Retrieved from ADA

National Network: <https://adata.org/faq/what-definition-disability-under-ada>

Brennan, J. (2013). *The ADA National Network Disability Handbook*. Houston: Southwest ADA Center.

Coston, B. (2019, April). Disability, sexual orientation, and the mental health outcomes of intimate partner violence: A comparative study of women in the U.S. *Disability and Health Journal*, 12(2), 164-170. doi:10.1016

FNN. (2022, March 1). *About the US*. Retrieved June 1, 2022, from Forensic Nursing Network, Inc.: <https://forensic.nursingnetwork.com/page/45121-about-us>

Hickson, L., Khemka, I., Golden, H., & Chatzistyli, A. (2013, September). Views and Values of Developmental Disabilities and Domestic Violence/Sexual Assault Support Professionals Regarding the Prevention and Handling of Situations of Abuse. *Journal of Policy and Practice in Intellectual Disabilities*, 10(3), 207-214.

IAFN. (2022, May 20). *Sexual Assault Nurse Examiner*. Retrieved from IAFN: <https://www.forensicnurses.org/page/aboutSANE>

IAFN Ohio. (2020). *SANE Hospitals in Ohio*. Retrieved from International Association of Forensic Nurses, Ohio Chapter: <https://www.ohioiafn.org/sane>

Kahan, S. (2021). *Barriers faced by adults with intellectual disabilities who experience sexual assault: A systematic review and meta-synthesis*. Retrieved from Adult Advocacy

Centers:

[https://www.adultadvocacycenters.org/assets/documents/white\\_paper\\_kahan\\_aacs\\_comprehensive\\_response.pdf](https://www.adultadvocacycenters.org/assets/documents/white_paper_kahan_aacs_comprehensive_response.pdf)

Marocco, A., & Krouse, H. (2017). Obstacles to Preventive Care for Individuals with Disability: Implications for Nurse Practitioners. *Journal of the American Association of Nurse Practitioners*, 282-293. doi:DOI: 10.1002/2327-6924.12449

McGilloway, C., Smith, D., & Galvin, R. (2018, March 13). Barriers faced by adults with intellectual disabilities who experience sexual assault: A systematic review and meta-synthesis. *JARID*, 51-66. doi:10.1111

McGilloway, C., Smith, D., & Galvin, R. (2018). Barriers faced by adults with intellectual disabilities who experience sexual assault: A systematic review and meta-synthesis. *JARID*, 51-66. doi: 10.1111/jar.12445

NSVRC. (2022, May 20). *Victim-Centered Approaches: Victims who have disabilities*. Retrieved from NSVRC: <https://www.nsvrc.org/sarts/toolkit/6-6>

ODVN. (2021, May). *Sexual Violence Fact Sheet*. Retrieved from Ohio Domestic Violence Network: <https://www.odvn.org/wp-content/uploads/2021/05/Sexual-Violence.pdf>

OHA. (2021). *Facts and Figures*. Retrieved from Ohio Hospital Association: <https://ohiohospitals.org/About-OHA/Ohio-Hospitals/Facts-Figures>

Ohio Department of Development and Tourism. (2020). *Ohio Regions*. Retrieved from Ohio Department of Development and Tourism: <https://ohio.org/home/regions>

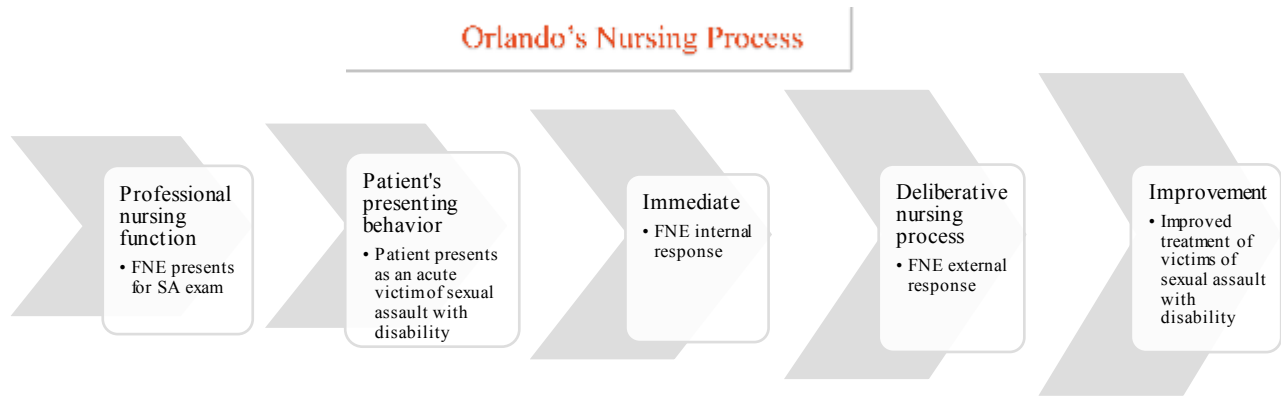
RAINN. (2022, May 20). *Scope of the Problem*. Retrieved from RAINN: <https://www.rainn.org/statistics/scope-problem>

RAINN. (2022, May 20). *What is a SANE/SART?* Retrieved from RAINN:

<https://www.rainn.org/articles/what-sanesart>

**Figure 1**

*Orlando's Nursing Process Discipline Theory and its use in the scholarly project*



**Figure 2**

*Ohio Regions Map (University of Akron The Ray C. Bliss Institute of Applied Politics, 2011)*



**Figure 3***Chi-Square Testing for the Independence of Q1 vs Q5*

COUNTA of Q1 How long have you been a forensic nurse in the state of Ohio?	Q5 Was there disability specific education in your forensic nurse training course?		
Q1 How long have you been a forensic nurse in the state of Ohio?	No	Yes	Grand Total
0-2 years	3	5	8
2-4 years	4	1	5
4-6 years	1	4	5
6+ years	14	6	20
<b>Grand Total</b>	<b>22</b>	<b>16</b>	<b>38</b>

**Figure 4***Chi-Square Testing for the Independence of Q3 vs Q5*

COUNTA of Q1 How long have you been a forensic nurse in the state of Ohio?	Q5 Was there disability specific education in your forensic nurse training course?		
Q3 Do you have training or on the job experience regarding caring for victims of crime with disabilities?		Yes	Grand Total
No		13	1
Yes		9	15
<b>Grand Total</b>		<b>22</b>	<b>16</b>

**Figure 5***Chi-Square Testing for the Independence of Q6 vs Q5*

COUNTA of Q1 How long have you been a forensic nurse in the state of Ohio?	Q5 Was there disability specific education in your forensic nurse training course?		
Q6 How much do you know about disabilities?	No	Yes	Grand Total
Just enough to do my job	8	8	16
Not enough to do my job as well as possible	6		6
Quite a lot	7	7	14
Very little specific knowledge	1	1	2
<b>Grand Total</b>	<b>22</b>	<b>16</b>	<b>38</b>



**Figure 6***Chi-Square Testing for the Independence of Q7 vs Q5*

COUNTA of Q1 How long have you been a forensic nurse in the state of Ohio?	Q5 Was there disability specific education in your forensic nurse training course?		
Q7 How confident do you feel providing accommodations during medical forensic exams?	No	Yes	Grand Total
Not Confident	3		3
Not sure	8	3	11
Quite Confident	8	10	18
Very confident	3	3	6
<b>Grand Total</b>	<b>22</b>	<b>16</b>	<b>38</b>

**Figure 7***Chi-Square Testing for the Independence of Q10 vs Q5*

COUNTA of Q1 How long have you been a forensic nurse in the state of Ohio?	Q5 Was there disability specific education in your forensic nurse training course?		
Q10 How confident do you feel utilizing accommodations during medical forensic examinations?	No	Yes	Grand Total
Not Confident	1		1
Not sure	11	2	13
Quite Confident	8	10	18
Very confident	2	4	6
<b>Grand Total</b>	<b>22</b>	<b>16</b>	<b>38</b>

## Appendix A

### Literature Review Summary Table

Authors	Country	Purpose	Target Population	Type of Disability
Child et al. (2011)	United States of America	Identification of experienced barriers encountered when reporting crime	Adults with disabilities who are victims of crime	All disabilities
Cols and Scior (2012)	England	Evaluation of attitudes towards adults with intellectual disabilities from White British and South Asian cultural groups.	White British and South Asian people	Intellectual disability
Eastgate et al. (2011)	Australia	Evaluate the experience of sexual relationships, baseline sexual knowledge, and barriers to disclosure of abuse	Females with intellectual disabilities	Intellectual disability
Edwards et al. (2012)	Ireland	Explore barriers adults with disabilities encounter when reporting crime and navigating the criminal justice system in Ireland		All disabilities
Evans (2013)	United States of America	Explore shared views and differences between adults with intellectual disabilities, service providers, and supervisors' perceptions of victimization	Adults with intellectual disabilities, service providers, and supervisors	Intellectual disability
Gorden (2013)	United States of America	Explore perceived barriers when working with victims of sexual assault who have intellectual disabilities	Sexual assault professionals, sexual assault nurse examiners, advocates	Intellectual disability

## Appendix A

### Literature Review Summary Table (Cont.)

Henshaw and Thomas (2012)	Australia	Explore the frequency of working with individuals with disabilities and the challenges of identification	Police officers	Intellectual disability
Hughes et al. (2011)	United States of America	Explore barriers encountered by police when working with and interviewing people with disabilities	Police officers	All disabilities
Keilty and Connelly (2001)	Australia	Perceived barriers women with intellectual disabilities when reporting sexual assault to law enforcement from the perspective of sexual assault workers, court and legal service workers, and police officers	Sexual assault workers, police officers, court, and legal service	Intellectual disability
Olsen et al. (2017)	Ireland	Improving services provided to people with learning disabilities who have been sexually assaulted	Staff members at St Mary's Sexual Assault Referral Centre.	Intellectual disability
Parley (2011)	United States of America	Explore care worker perception of the term vulnerability and their attitude on vulnerability about the abuse of people with intellectual disabilities	Care workers	Intellectual disability
RCNI (2011)	Ireland	Identify concerns of people with disabilities regarding disclosing and reporting violence	Adults with disabilities	All disabilities
Saxton et al. (2006)	United States of America	Evaluate males with disability's experience and levels of abuse by personal assistants	Males with disabilities	Physical and cognitive disability

**Appendix B**

## Survey Tool

# Ohio Forensic Nurse Examiners: Readiness to Care for Victims of Sexual Assault with Disability

The following survey is part of a doctoral project for the Otterbein University nursing program and all information collected will be utilized to improve bedside care for victims of assault with disability. Thank you for your participation.

The working definition of disability for this study is from the Americans with Disabilities Act (ADA): a person must have a disability, which is defined by the ADA as a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such an impairment, or a person who is perceived by others as having such an impairment.

The development of this survey was done in conjunction with Dr. Joy Shoemaker, the Forensic Nursing Network (FNN), and Adult Advocacy Centers (AAC).

\* Required

Email\*

Your email

1. How long have you been a forensic nurse in the state of Ohio?

\*

0-2 years

2-4 years

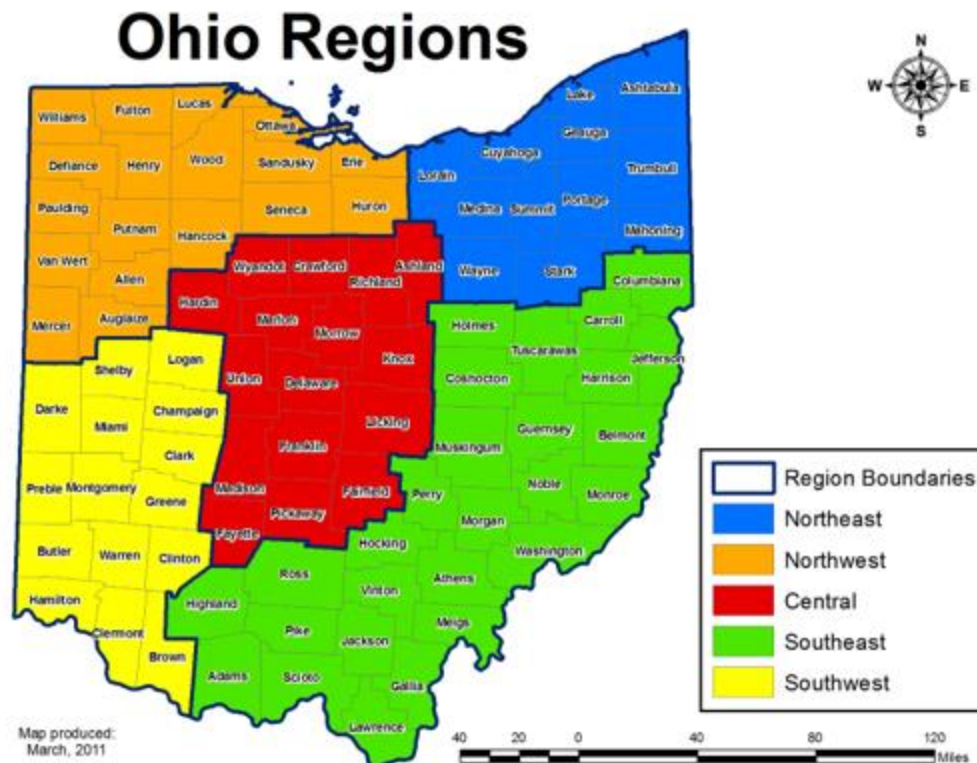
4-6 years

6+ years

## Appendix B

### Survey Tool (Cont.)

2. Which region of the state of Ohio do you currently practice based on the attached map?\*



Northeast  
Northwest  
Central  
Southeast  
Southwest

3. Do you have training or on-the-job experience regarding caring for victims of crime with a disability? \*

Yes  
No

4. Please elaborate on your experience if you answered yes to question 3.

Your answer

**Appendix B**

## Survey Tool (Cont.)

5. Was there disability-specific education in your forensic nurse training course?

Yes

No

6. How much do you know about disabilities?

I am an expert

Quite a lot

Just enough to do my job

Not enough to do my job as well as possible

Very little specific knowledge

7. How confident do you feel when working with a victim of sexual assault who has a disability?

Very confident

Quite Confident

Not sure

Not Confident

8. You are at the bedside preparing to conduct a medical forensic examination on a patient with a disability. How confident are you in deciding the patient's mental ability to consent to the examination?

Very confident

Quite Confident

Not sure

Not Confident

9. Which of the below accommodations have you utilized during past medical forensic examinations?

Limiting and/or eliminating fluorescent lighting

Noise-canceling tools (ex: headsets or earphones)

Exam tables to accommodate physical disability access (ex: wheelchair access)

Accessible bathrooms, including a shower

Sensory tools (ex: fidgets)

Visual pain scale

Language interpretive services (ex: ASL)

Augmented and alternative communication devices (AACs)

**Appendix B**

## Survey Tool (Cont.)

10. How confident do you feel utilizing accommodations during medical forensic examinations?

Very confident

Quite Confident

Not sure

Not Confident

11. If you would like to be entered into a drawing for a \$50 gift card to target for completing this survey, please put your email address in the space below. To ensure the anonymity of your employer please only provide a personal email address. Thank you.



## Appendix C

### INFORMED CONSENT

The Department of Nursing at Otterbein University supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time without penalty.

This study is titled 'Ohio Forensic Nurse Examiners: Readiness to Care for Victims of Sexual Assault with Disability'. We are interested in studying current forensic nurse examiner education in caring for victims of sexual assault with disability. You are being asked to take part in a research study. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Participation involves answering an 11-question survey with responses in the form of short answers, multiple choice, and selecting all that apply. The approximate time estimate of this survey is 10 minutes. Although it is not likely, there is a chance that you might feel slightly uncomfortable with some of the questions. Anticipated benefits include an increased body of knowledge that can be utilized to improve training protocols to include more comprehensive education and resources to care for victims of sexual assault with disability.

Your participation is solicited although strictly voluntary. We assure you that your name will not be associated in any way with the research findings. The information will be identified only by a code number.

If you would like additional information concerning this study before or after it is complete, please feel free to contact me by phone or mail.

Sincerely,

Joy Shoemaker, Principal Investigator  
Otterbein University, Department of Nursing  
1 S. Grove Street  
Westerville, Ohio 43081  
[jshoemaker@otterbein.edu](mailto:jshoemaker@otterbein.edu)

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Signature of the subject agreeing to participate

With my signature, I affirm that I am at least 18 years of age.

**Appendix D**

## IRB Approval Letter



## INSTITUTIONAL REVIEW BOARD

Review

☒ Original Review☐ Continuing☐ Amendment

Dear Dr. Shoemaker,

With regard to the employment of human subjects in the proposed research:

**HS # 22/23-26****Shoemaker & Smith: Ohio Forensic Nurse Examiners: Readiness to Care for Victims ...**

THE INSTITUTIONAL REVIEW BOARD HAS TAKEN THE FOLLOWING ACTION:

☒ Approved☐ Disapproved☐ Approved with Stipulations\*☐ Waiver of Written Consent

Granted

☐ Limited/Exempt/Expedited Review☐ Deferred

\*Once stipulations stated by the IRB have been met by the investigator, then the protocol is APPROVED.

1. As Principal Investigator, you are responsible for ensuring all individuals assisting in the conduct of the study are informed of their obligations for following the IRB-approved protocol.
2. It is the responsibility of the Principal Investigator to retain a copy of each signed consent form for at least four (4) years beyond the termination of the subject's participation in the proposed activity. Should the Principal Investigator leave the university, signed consent forms are to be transferred to the IRB for the required retention period.
3. If this was a limited, exempt, or expedited review, there is no need for continuing review unless the investigator makes changes to the proposed research.
4. If this application was approved via full IRB committee review, the approval period is one (1) year, after which time continuing review will be required.

**Appendix D**

## IRB Approval Letter (Cont.)

5. You are reminded you must promptly report any problems to the IRB and no procedural changes may be made without prior review and approval. You are also reminded the identity of the research participants must be kept confidential.

Signed: Noam Shpancer  
IRB Chairperson

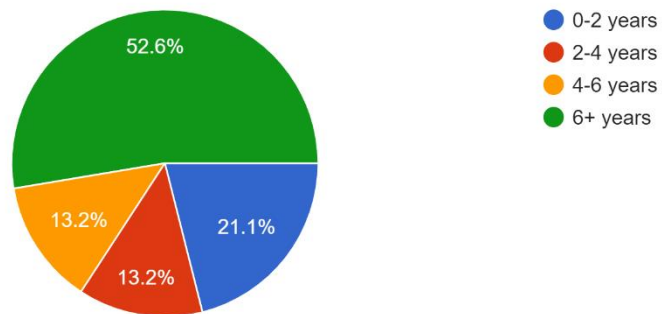
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## Appendix E

### Results of the Survey Tool

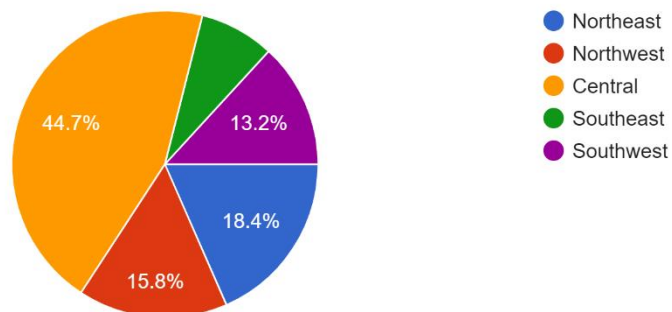
How long have you been a forensic nurse in the state of Ohio?

38 responses



Which region of the state of Ohio do you currently practice in based on the attached map?

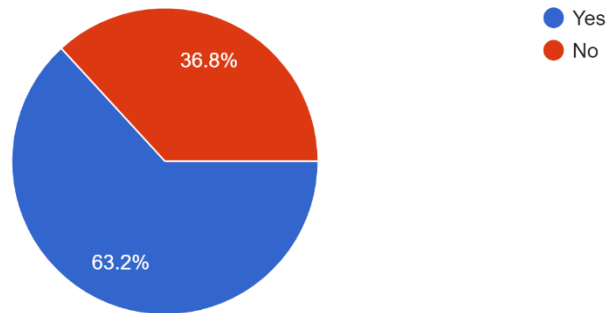
38 responses



**Appendix E (cont.)****Results of Survey Tool**

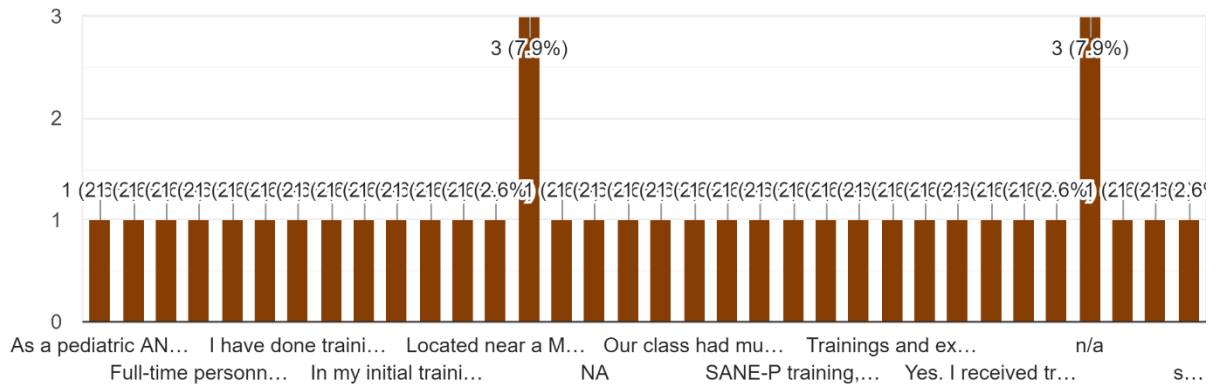
Do you have training or on the job experience regarding caring for victims of crime with disabilities?

38 responses



Please elaborate on your experience if you answered yes to question 3.

38 responses

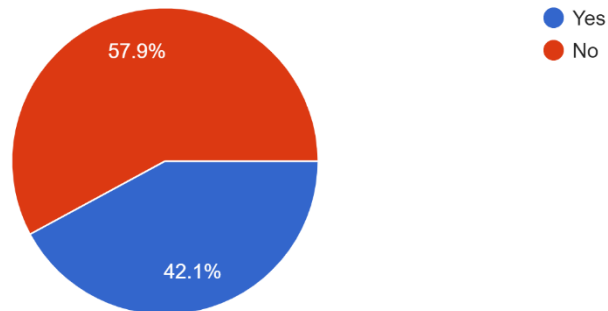


**Appendix E (cont.)**

## Results of Survey Tool

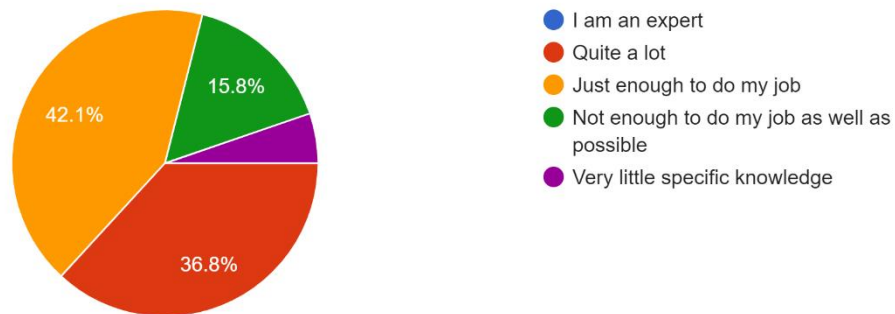
Was there disability specific education in your forensic nurse training course?

38 responses



How much do you know about disabilities?

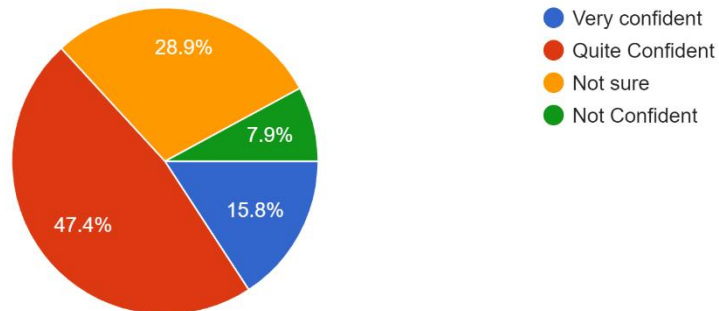
38 responses



**Appendix E (cont.)****Results of Survey Tool**

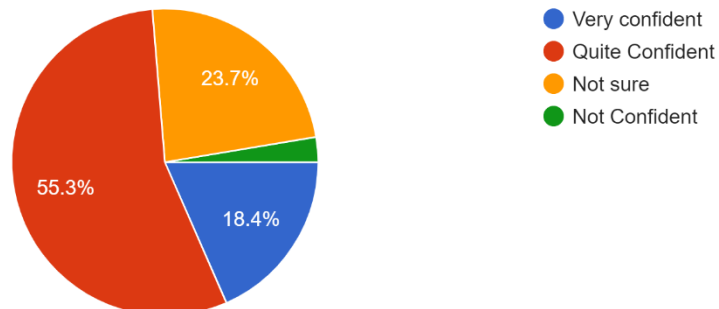
How confident do you feel providing accommodations during medical forensic exams?

38 responses



You are at the bedside preparing to conduct a medical forensic examination on a patient with a disability. How confident are you in deciding the pat...ation? \*see definition of capacity in introduction\*

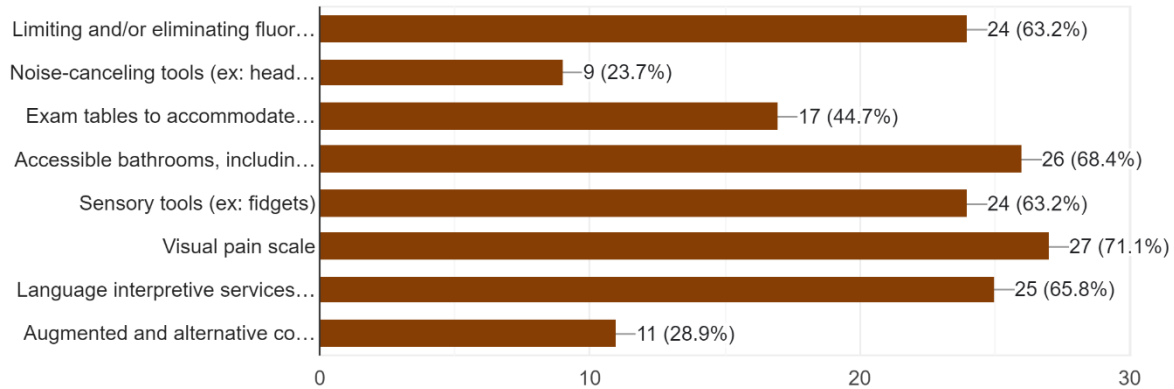
38 responses



**Appendix E (cont.)****Results of Survey Tool**

Which of the below accommodations have you utilized during past medical forensic examinations?

38 responses



How confident do you feel utilizing accommodations during medical forensic examinations?

38 responses

