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EVALUATING FORENSIC NURSING CONTENT WITHIN MAINE'S
UNDERGRADUATE CURRICULA

by

Paige E. Solans

A Thesis Submitted in Partial Fulfillment of
the Requirement for a Degree with Honors
(Nursing)

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Advisory Committee:

Kelley Strout, Ph.D., RN, Associate Professor, interim Associate Dean Health
Science, Director of Nursing

Saul Allen, Ph.D., Associate Director of Research Development, Honors College
Preceptor

Polly Campbell, RN, BS, BA, Clinical Director, Advanced Nursing Education
SANE Program, University of New England School of Nursing and Population
Health

Amanda Chambers, Program Manager Rape Response Services

Sid Mitchell, Ph.D.

ABSTRACT

Victims of violence are highly likely to be under the care of a nurse at some point in their life and require specific assessments, communication techniques, and background knowledge to ensure high-quality patient-centered care. Therefore, it is imperative that senior nursing students who are about to enter the nursing profession are properly educated on how to care for these vulnerable patient populations. The aim of this study was to determine the efficiency of the forensic nursing content in Maine's public universities' nursing curricula in preparing its students to care for these patients. This study included a 28-item survey distributed to nursing students enrolled in the state of Maine's five public Bachelorette of Science in Nursing (BSN) programs. The survey included questions on the student's perceived knowledge, preparation, and satisfaction of their nursing school education of forensic nursing topics. These topics include sexual assault and rape, interpersonal violence, human trafficking, child abuse, elder abuse, and the role of forensic/SANE nurses. As a whole, most of the responses indicated a moderate or higher level of knowledge, preparation, and satisfaction for all forensic nursing topics that align with basic competency requirements of the governing body of BSN curriculum—the American Association of Colleges of Nursing (AACN). The results of the survey point to the need for additional content on human trafficking in Maine's undergraduate nursing curricula.

Keywords: forensic nursing, child abuse, elder abuse, nursing curriculum, human trafficking, interpersonal violence, sexual assault

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CHAPTER I: VICTIMS AND VIOLENCE

What is Forensic Nursing?

Forensic nursing is a subspecialty within the larger nursing profession. It specializes in the care of patients who are victims of violence, including domestic violence, sexual abuse, child abuse, elder abuse, and human trafficking (Cleveland Clinic, 2021). Like many nursing specialties, forensic nursing requires a specific skill set in terms of knowing the signs of symptoms of violence and abuse, communication, and evidence-based (Cleveland Clinic, 2021). Forensic nursing is a unique form of nursing because nurses are able to act as a link between the healthcare, justice, and legal systems (Cleveland Clinic, 2021) to best advocate and care for their patients. Forensic nursing is still a relatively new field and was only formally recognized by the American Nurses Association (ANA) in 1995. Despite its late beginning, the specialty has had a lot of growth and development over the last two decades (International Association of Forensic Nurses, 2020) Forensic nurses have the ability to form deep empathic connections with victims of violence in ways that other nurses are not able to due to time constraints or other limitations. Forensic nurses also play an important role in filling in the cracks of the healthcare system in which victims of violence often fall through. Before efforts were made to train nursing staff to recognize and screen for signs of violence and abuse, victims of violence would often be overlooked. Teaching nurses how to recognize and treat victims has been proven to be extremely effective (McClure, 1996).

Forensic nursing concepts were integrated into the undergraduate nursing school curriculum in 1999. The American Association of Colleges of Nursing (AACN, 1999)

recommended that Bachelorette of Science in Nursing (BSN) nursing students receive educational content on violence-related subject matter (AACN, 1999). However, since then, there have been few studies that have examined the student's perception of preparedness of this content, specifically within the undergraduate setting, and none have been focused on the State of Maine (Woodtli and Breslin, 1999). What is the student's perceived preparedness on forensic nursing content in Maine's public BSN programs?

Forensic Nursing and The Victims

The International Forensic Nursing Association (IAFN) is the leading association on the regulation and education of forensic nurses. IAFN identifies forensic nurses as working in a variety of different populations, including survivors of sexual assault survivors, domestic violence, child and elder abuse and neglect. Forensic nurses can also work in a corrections center, assist with death investigations, or in the aftermath of mass disasters (IAFN, 2020). Therefore, their patients can be children, intimate partners, older adults, incarcerated persons and those who are deceased. Each type of patient requires different knowledge on perpetrators, the varied forms the abuse can come in, common assessments, risk factors, etc. Abuse and violence is often a complex issue in which nursing assessments can vary case by case.

Sexual Assault and Rape

Sexual assault and rape exists on a spectrum from unwanted touching to forcible penetration (Campbell, 2015). Overall, sexual assault can be defined as sexual activity

when consent is not given or is unable to be obtained (Center of Disease Control, 2022). There are several groups who are unable to consent to sexual activity including minors (minor consent laws vary from state to state), mentally-disabled and unconsciousness persons (Basile, et.al, 2014). The inability to refuse occurs when someone is forced to consent to sexual activity due to threats of violence (Basile, et.al, 2014). The societal perception of rape has changed a lot over the years. A few pervasive social movements, such as the “Me Too” movement, can be credited to bringing attention to the prevalence of sexual violence in our society and the impact it has on the victims. The “Me Too” movement was founded in 2006 by Tamara Burke as a way for survivors of sexual violence, particularly women of color and individuals from low socioeconomic backgrounds to empower themselves through the sharing of their story and to build a community of support (Global Fund for Women, 2021). The movement gained traction on social media sites such as Twitter in October 2017, through the use of the hashtag MeToo (Global Fund for Women, 2021). This led to several powerful figures being called out for past sexual misconduct, including director Harvey Weinstein, singer R. Kelly and socialite Jeffrey Epstein. The “Me Too” movement showed that powerful and trusted members of society are capable of sexual violence (Global Fund for Women, 2021). Most instances of rape and sexual assault are perpetrated by someone that the victim knows or is close to (Catalano, 2006). Possible perpetrators include intimate partners, family members, authority figures, coworkers, friends, or acquaintances (Basile, et.al, 2014). Strangers can also be perpetrators of violence but it is far less common. In fact, 78% of rape and sexual assault victims know their attacker. Thirty-four percent of

perpetrators are current or former partners of the victim, 38% are acquaintances and 6% are family members (Planty & Langton, 2013).

The odds of a nurse encountering a survivor of sexual violence are high due to the prevalence of this crime. According to the CDC (2022), 1 in 5 American women and 1 in 38 men have experienced completed or attempted sexual assault within their lifetime. In 2020, there were 475 rapes reported to the Maine police and 14 attempted rapes (Uniform Crime Reporting Division, 2020). It is important for those in the nursing profession to understand that any kind of abuse is *never* caused by provocation by the victim, stress, alcohol or drug use, loss of control or anger, mental health issues, etc. (Center for Relationship Abuse Awareness & Action, 2021). Abuse is always the perpetrator's choice and a learned behavior. (Center for Relationship Abuse Awareness & Action, 2021).

Interpersonal Violence

Interpersonal violence (IV) can go by a few other terms such as domestic violence or intimate partner violence. Oftentimes, it is associated with violence within a romantic partnership such as boyfriend and girlfriend or spouse. However, the term IV is better suited for this topic because it emphasizes that this type of violence can occur outside of relationships. IV transpires between married spouses, common-law spouses, domestic partners, boyfriends/girlfriends, former partners or ongoing sexual partners (CDC, 2021). It can be a chronic issue or episodic, meaning it only occurs every once in a while. A common misconception when it comes to victims of IV is that they should just simply leave their abuser. However, there is a multitude of research that shows that there are many barriers to separation in these abusive relationships. Some of these include isolation

from friends and family by their abuser, fear of violent retaliation, or fear of the safety of their loved ones, including pets, children, and more. It is also common that the abusive partner harbors financial control and that leaving could mean they would end up without food or shelter. There is also the psychological manipulation aspect, in which the victim may believe that their partner will change or they may feel that the abuse is their fault, largely because of societal victim blaming (Center for Relationship Abuse Awareness & Action, 2022).

IV can fall into categories of physical abuse, stalking and psychological aggression (CDC, 2021). Abusers often share common psychological notions and attitudes. They may have narcissistic traits, retain a sense of entitlement, believe that it is normal to have control over their partner (often stemming from patriarchal views) or have learned that abusive behaviors gets them what they want (Center for Relationship Abuse Awareness & Action, 2021).

One in four women and nearly one in ten men have experienced physical violence and/or stalking by an intimate partner at one point in their lives (CDC, 2021). IV victims also have additional risks of violence at the hands of their partners. About One and five homicide victims are killed by an intimate partner (CDC, 2021) and that women are more likely to be killed by a current or former partner than anyone else (Violence Policy Center, 2015). As for Maine, this state has had a historically high prevalence of domestic violence. In 2017, there were 4,178 domestic violence incidents reported to Maine's law enforcement, comprising almost half of the total assaults (National Coalition Against Domestic Violence, 2016). In that same year, 22% of the homicides in the state were committed by intimate partners. Maine has an overall low rate of homicides but these

statistics show there is a larger issue of domestic violence that needs to be addressed. In the 2019 Maine Crime Report, there was a total of 23 murders. Of those 23 murders, 34.8% of those murder victims were females killed by their male partners (Uniform Crime Reporting Division, 2019). Janet Mills, the current governor of Maine, has spoken out about the pervasive issue of IV throughout the region. The topic hits close to home, as she shares her own story of domestic violence at the hands of an abusive, alcoholic partner (Leary, 2021). Mills was finally prompted to flee the relationship after years of abuse when he had pointed a gun to her head and threatened her life. Governor Mills was interviewed by Maine Public news outlet where she shares this quote:

“That woman went to law school, she became a prosecutor, later Attorney General and now is the Governor of the State of Maine. I will never forget that night, and I will always know I was one of the lucky ones” (Leary, 2021).

Human Trafficking

Human trafficking is often categorized into two different types including: labor and sexual trafficking. Labor trafficking is when individuals are forced into labor through use of coercion, threat or fraud (Office of Trafficking of Persons, 2020) and these may include cases of debt bondage, in which one is tricked into work to pay off their ‘debt’ (U.S. Department of State, 2022). The other form of trafficking is what is most often thought of when it comes to the subject of trafficking; Sexual trafficking is when a victim is forced into sex work through the use of coercion or threats (Office of Trafficking of Persons, 2020). Vulnerable populations are at-risk of becoming a victim of trafficking such as individuals who experienced abuse as a child, migrant workers, undocumented

persons, queer individuals, those living in poverty, persons with substance-use disorder, and Native Americans (Office of Trafficking of Persons, 2020). Women make up the majority of human trafficking victims, yet there is still a significant amount of survivors who are male (Anti-Slavery International, 2021). In *The Typeography of Modern Slavery*, Polaris created a classification system that illustrates the 25 most common labor locations in which human trafficking occurs (Anthony et al., 2017). Each location and type of trafficking have their own methods for recruiting and controlling their victims which can make it difficult to recognize as a healthcare professional (Anthony et al., 2017). The three most common labor services that used trafficked labor are escorting services, illicit massage parlors and the health and beauty sector (Anthony et al., 2017). Much like other types of abuse, victims of human trafficking are controlled either through threats or use of physical violence, or psychological methods such as isolation, false promises, or shame (CDC, 2021). In recent years, there has been a focus on educating healthcare workers, especially nurses, on the signs of human trafficking in order to best identify and assist victims (Powell, et. al, 2017).

Human trafficking is an issue that prevails throughout the entire country. Kasie Robbins is a survivor of human trafficking and tells her story, highlighting the manipulation and control tactics employed by her abuser that keep victims dependent, ““I had tons of pimps and they never once said, 'Give me all your money or I'm going to beat you. They said, 'Ok baby, I got a gram for you when you get back.' They said, 'Are you hungry?'” (Brogan, 2020). These situations can often be very complicated for victims when the person they believe loves them or is looking to protect them, is actually trafficking them. Those who are at a greater risk of trafficking include individuals in

lower socioeconomic classes, people of color, and those who struggle with substance-use disorder. As nurses it is important to assess factors as a part of patient-centered care and know that trafficking is often an initiator of other issues and it is often only one piece of the puzzle (Sprague, 2016). In Maine, trafficking victims are often white women between the ages of 14 to 30, who have a history of sexual abuse, domestic violence, or substance abuse (Hornby Zeller Associates, 2015).

Child Abuse

The Federal Child Abuse Prevention and Treatment Act defines child abuse as any action or failure to act on the part of a caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation of a minor (Child Welfare Information Gateway, 2019). Like other forms of abuse, child abuse can be classified into different categories: physical, emotional or sexual abuse or neglect (CDC, 2021). Neglect can be further divided into physical, emotional, medical or educational neglect. Abandonment can also be considered a form of neglect (Child Welfare Information Gateway, 2019). For families living in poverty, these forms of neglect may come at a higher rate. Prevalence of abuse and neglect is five times higher for families from low socioeconomic background compared to families from high socioeconomic backgrounds (CDC, 2021). Children under the age of four, or those that have mental or physical disabilities are at a higher risk of abuse (CDC, 2021). Younger children are at higher risk because uncontrollable crying can be a trigger for abuse or shaken baby syndrome (Walsh, 2021). Risk factors for caregivers include substance-use, mental illness, experienced child abuse themselves, young and inexperienced parents, economic stress, non-

biological caregivers (such as step parents, adopted parents, etc), or the use of corporal punishment (CDC, 2021). Domestic violence within the family unit is another risk factor that may contribute to child abuse (CDC, 2021).

From the year 2017 to 2018, 678,000 of those children were determined to be victims of maltreatment. Of those children, 60.8% were victims of neglect, 10.7% were physically abused and 7.0% were sexually abused (ACF, 2020). The issue of child abuse has hit quite close to home here in Maine. In the year 2020, there were about 4,500 children who were victims of child abuse in Maine (Best, 2021). Maine has had many high-profile child abuse related deaths in the last couple years, which has led to criticism and auditing of the child welfare system. Four children died at the hands of their parents in the summer of 2021, either due to neglect or outright abuse (Walsh, 2021).

In 2018, there was a well-known case of a child abuse related death that received national attention. Marissa Kennedy, only 10 years old at the time, was beaten to death by her mother and her stepfather in Stockton Springs, ME (Andrews, 2021). Multiple employees at the school Kennedy attended, healthcare providers, police and beyond had made reports of suspected abuse to the state child welfare officials (Andrews, 2021). In total, DHHS had received 25 reports regarding the child in the 16 months leading up to her murder, including eye-witness reports of physical abuse and bruises (Lambrew, 2021). This case put a lot of pressure to overhaul the reporting process, but as evidenced by the deaths in 2021, there is still a high probability that new nurses can encounter an abused child in the patient-care setting.

Elder Abuse

Older adults are a group that can experience victimization because they are often isolated from family and friends, may have physical disabilities and rely on others for care or have memory issues such as dementia (National Institute on Aging, 2020). Elder abuse falls into one of the following five categories: physical Abuse, sexual abuse, emotional and psychological abuse, neglect and financial abuse. Older adults are especially vulnerable to financial abuse because they often live on fixed incomes, have large amounts of savings, have high risks of loneliness and are at a higher risk for cognitive decline. Some may insist on staying in their homes, even if they are in unsafe situations, because it may be a place where they have lived for decades and even raised their family (Maine Coalition to End Domestic Violence (MCEDV), 2020). Reporting abuse is always difficult, but in the case of elder abuse, it can be especially shameful and distressing if the abuser is their adult child or other family member (MCEDV, 2020). In almost 60% of elder abuse and neglect incidents, the majority of perpetrators are adult children or spouses (The National Council of Aging, 2021). Elder abuse can also occur in the nursing home setting and can be attributed to severe staffing shortages, with 63% of Maine's long-term care facilities reporting staffing shortages at the end of 2021 (Paulin, 2021). Understaffing can lead to neglect of care, which can result in injuries, bed sores or muscle deterioration, or the stress and exhaustion that can trigger abusers to act violently (NHAC, 2019). Abuse of the older adults can also be linked to cultural or familial beliefs. For example, Asian cultures, older members of the family are taken care of by younger members and treated with high amounts of respect. Many families will have a multigenerational household in order to care for the older family members. America does

not have the same types of attitudes towards older adults and thus they can be viewed as burdens (NHAC, 2019).

The state of Maine is known for having an aging population, with one and five residents 65 or older, giving the state the largest amount per capita of older residents in the nation, as of 2019 (Leins, 2019). Sources from Maine Department of Health and Human Services stated that they have been having an influx of about five new cases of elder abuse each week, which is putting a major strain on the social workers who investigate these claims (White, 2019). Many older Mainers are reluctant to report abuse because of strong values of privacy and self-sufficiency (MCEDV, 2020). To combat the rise in elder abuse, Governor Janet Mills signed an executive order to combine several government agencies into The Elder Justice Coordinating Partnership (Leins, 2019). Mills spoke out during the signing of this legislation on elder abuse in the state: "the abuse of vulnerable people, especially our older citizens, is an insidious crime and has no place in Maine" (Leins, 2019).

Impacts of Violence

The Individual

Exposure to violence has deep impacts on an individual's short and long term physical and emotional health. In the short-term, of a national sample of female rape victims 39.1% reported injury (e.g., bruises, vaginal tears), and 12.3% reported a sexually transmitted disease (Basile, et. al, 2021). Victims of sexual assault are more likely to be diagnosed with chronic anxiety, insomnia, depression, Post Traumatic Stress Disorder (PTSD), or hypertension (Mozes, 2018). These mental health issues can also lead

survivors to unhealthy coping mechanisms such as substance use, alcoholism, smoking or illicit drug use. Sexual assault can also lead to survivors experiencing pain during consensual sexual encounters later in life (Gluck, 2021). Victims of domestic violence are one and a half times more likely to have Human Immunodeficiency Virus (HIV) or another serious Sexual Transmitted Infections (STI) such as syphilis or gonorrhea (National Resource Center on Domestic Violence , 2021). Domestic violence victims may also have reproductive issues such as miscarriages due to violence at the hands of their partner and 16% of DV survivors will have babies with low birth weight (National Resource Center on Domestic Violence , 2021).

Victims of sex trafficking may have a medical history of sexually transmitted infections, infertility due to untreated STIs, HIV or Acquired Immunodeficiency Syndrome (AIDS), rectal trauma, urinary difficulties and a history of pregnancy or abortions (Department of Health and Human Services, 2011). Labor trafficking victims are likely to experience chronic back pain, hearing, cardiovascular or respiratory problems as a result of unsafe working conditions (Department of Health and Human Services, 2011).

As for child victims, higher Adverse Childhood Experiences (ACEs) scores can lead to a higher risk of future victimization and substance use behavior. It has been found that abused children are more likely to engage in risky behaviors, including participating in sexual behaviors earlier and having more sexual partners, putting them at risk for STIs (Child Welfare Information Gateway, 2019). Children who are abused are also more likely to have delayed brain development and an impaired ability to form healthy, trusting relationships. Surviving abuse can also lead to difficulty in school later on in life. (CDC,

2021) Experiencing violence or neglect as a child has also been linked to many health conditions later on in adult life, such as diabetes, lung disease, back problems, hypertension, COPD, migraines, cancer, strokes, etc. (Child Welfare Information Gateway, 2019).

Elder abuse can lead to the destruction of familial ties and a mistrust of others due to trauma they have encountered. In some cases, it can even lead to early death because of the stress and impact on physical health. Financial abuse can lead to bankruptcy, loss of assets or otherwise financial loss that the individual has built up over their lifetime (National Institute on Aging, 2020).

The Community

It is well documented that violence has a large impact on those who experience it but abuse can impact the community and society as a whole as well. Children who were abused are both likely to engage in criminal behaviors (Herrenkohl, Jung, Lee, & Kim, 2017) and develop antisocial behaviors later on in life (U.S. Department of Justice, Office of Justice Programs, National Institute of Justice, 2017). They are more likely to go on to mistreat their own children than those who did not experience violence. This is because children's minds and beliefs are malleable in childhood and if they grew up around violence, they will most likely become conditioned to believe that this is the norm (Child Welfare Information Gateway, 2019), perpetuating an ever present cycle of violence. There is also an economic element of abuse. Child abuse and neglect can lead to direct costs (e.g., hospitalizations, foster care payments) or indirect costs (e.g., long-term care, lost productivity at school, juvenile and criminal justice systems fees) (Child Welfare

Information Gateway, 2019). According to the CDC (2021), the lifetime economic cost associated with medical services for IPV-related injuries, lost productivity from work, criminal and legal costs, are \$3.6 trillion.

Violence as a Public Health Issue

Throughout the years, beliefs regarding how violence occurs through communities has changed. Crime and violence used to be seen as random and senseless acts that could not be prevented or predicted. Research has shown that violence spreads similar to an epidemic in that it spreads, clusters, and transmits through exposure (American Public Health Association, 2018). If violence spreads like a disease, then healthcare workers can play a role in preventing the transmission. The Surgeon General's Workshop on Violence and Public Health in 1985 was the first time that a top health professional formally recognized violence as an issue of public and community health (Dahlberg & Mercy, 2009). Surgeon General Coop (2022), states "Our focus squarely on how health professions may provide better care for victims of violence and also how they might contribute to the prevention of violence" (IAFN, 2021). In 2018, the American Public Health Association (APHA) came out with a statement that public health officials are essential to the treatment and prevention of violence in the United States. The APHA also proposed that hospitals, schools, universities, nonprofit organizations, and justice systems all work together and share data for a unified effort and that all interactions between these systems present an opportunity to prevent violence (APHA, 2018). Promoting Health/Preventing Disease: Objectives for the Nation called for reductions in the number of child-abuse cases and improvements in the reliability of data on child

abuse and family violence by 1990” (Dahlberg & Mercy , 2009). These were the first measurable objectives to try and combat violence in the community. In 1994, Congress passed the Violence Against Women Act established rape programs throughout the country (Dahlberg & Mercy, 2009). As of today, crime and violence continue to be issues included in the Healthy People 2030 report, which points to improvements still needing to be made.

CHAPTER II: DEVELOPMENT OF FORENSIC NURSING

History of Forensic Nursing

Forensic nursing has roots in the 18th century when nurse midwives would testify on behalf of women on sexual assault trials (Burgess, et. al, 2004). In 1974, Ann Burgess and sociologist Lynda Lytle Holstrom published a landmark research piece that led to the coining of the term “rape trauma syndrome” (Burgess & Holmstrom, 1974). Burgess went on to work with the Federal Bureau of Investigations (FBI) Behavioral Analysis Unit to work on rapist profiles and remains one of the founders of forensic nursing (Scannell, 2021). In 1991, the American Nurses Association published a statement on violence as a nursing practice issue (Burgess, et. al, 2004). The IAFN was established in 1992 by 72 nurses, most of whom were sexual assault nurse examiners (SANEs) (IAFN, 2022) and worked toward having forensic nursing formally recognized as a nursing specialty. They were formally recognized by the ANA in 1995 (Burgess, et. al, 2004). Virginia Lynch played a large role in this recognition. She was the first president of the IFAN and is considered one of the founding members of forensic nursing (Scannell, 2021). Lynch discovered the possibility of nurses to play a role of evidence collection after visiting a forensics lab. She is quoted as saying:

When I asked the police if the person who abused, raped or killed these patients would be caught and punished, they told me it was unlikely because the doctors and nurses lost and destroyed the evidence. It had never occurred to me that the healthcare professions were unintentionally obstructing justice. (Waszak, 2018).

The next big step for the speciality was in 1996 when the IAFN published the *Sexual Assault Nurse Examiner Standards of Practice* in order to provide guidelines and expectations for this nursing role and *Forensic Nursing: Scope and Standards of Practice*

followed in 1997 (OVC, 2016). As of 2021, the IAFN has over 6000 members, 30 different chapters throughout the country, and 2135 current certified SANEs (1511 Adult SANEs and 624 Pediatric SANEs) (IAFN, 2021).

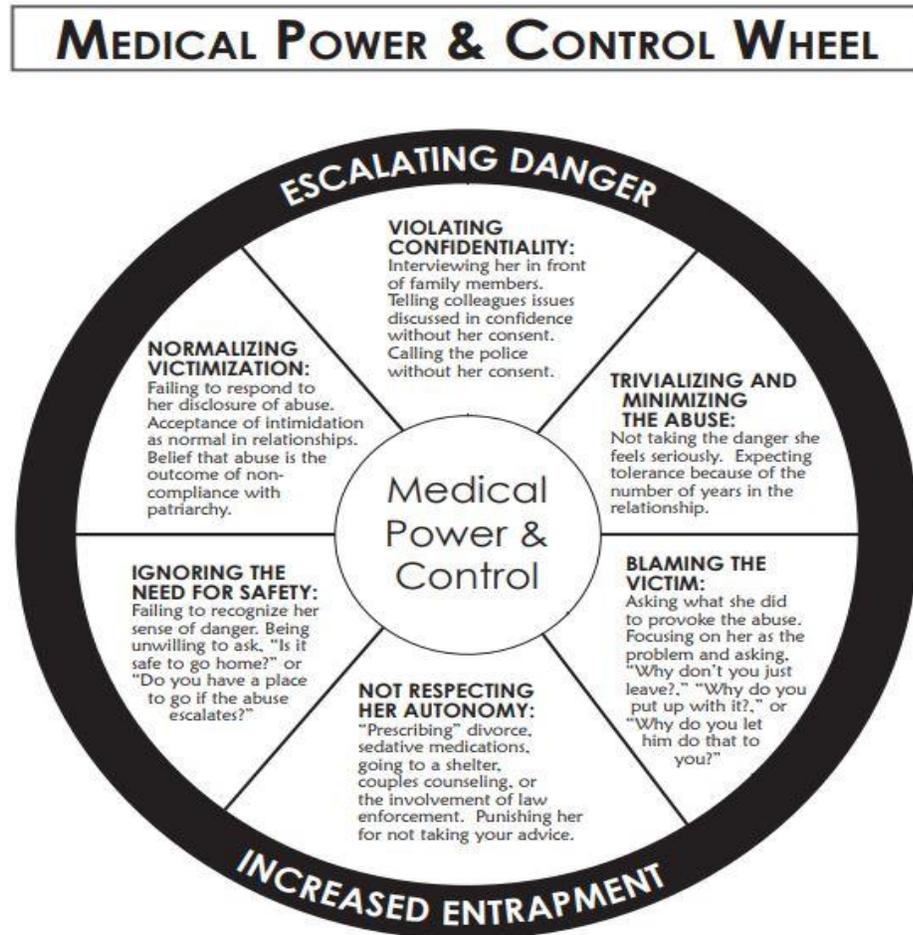
The following year, in 1998, the Maine Coalition Against Sexual Assault (MCASA) was developed with the mission to provide sexual violence prevention and response to Maine's citizens. Maine has had its own development of the forensic nursing practice. Recently, the University of New England (UNE) Department of Nursing located in Southern Maine also recently received a one and a half million dollar grant from the U.S. Health Resources & Services Administration (HRSA) for the purpose of increasing the number of SANE certified nurses in Maine within the next three years (UNE, 2021). The majority of the state's 34 hospitals have at least one SANE certified on staff. There are five hospitals who do not have SANE nurses, including Calais Hospital, AR Gould, Blue Hill, Maine Coast and Penobscot Valley (Rhoda, 2019). This however, shows that the effort of SANE nurses and the development of certified programs in the state have been effective in that 85% of Maine's hospitals have access to a SANE.

Role of the Forensic Nurse

Historically, victims of violence who present to the Emergency Department have encountered obstacles that may make them reluctant to seek care. There can be long waiting periods where the patient is asked not to eat, drink or urinate at risk of destroying evidence. They may have had to retell their story to multiple examiners, experience a lack of compassionate care or had the collected evidence thrown out due to incompetent or incomplete kit collection (Campbell, 2015). The National Center of Domestic and Sexual

Violence (n.d.) has developed the “Medical Power and Control” (See Figure I) wheel which depicts ways in which medical professionals can inadvertently support or escalate violence through their actions and words. The wheel includes six categories: violating confidentiality, trivializing and minimizing abuse, ignoring the need for safety measures, normalizing the violence, blaming the victim or not respecting the patient's autonomy. These acts exist on a spectrum, in which some actions are more likely to increase entrapment while others may escalate the danger the victim is in. Normalizing victimization is an especially interesting category because it requires the health professional to reflect on their own beliefs and biases on relationships, such as believing that intimidation or patriarchal values are normal parts of healthy relationships. This wheel promotes reflection of those in the healthcare profession, including nurses, on how their actions and behaviors can not only not help a victim of violence, but actually make the situation more dangerous.

Figure I. Medical Power & Control Wheel



1

According to the Offices of Victims of Crime, these are the five principles that guide SANE care. These are also applicable to all forensic nursing care. These principles include patient-centered care, trauma-informed care, evidenced-based practice, recognition of community uniqueness and a multidisciplinary approach. Patient-Centered Care in the context of forensic nursing involves examining the individual needs of patients in order to make them feel the most seen and comfortable (OVC, 2016). Trauma

¹ From the Domestic Violence Project, n.d. Adapted from the original "Power & Control" wheel created by the Domestic Abuse Intervention Project in 1984.

informed care allows nurses and other health professionals to employ empathy and identify how the past experiences can impact the patient's health and overall wellbeing. It builds relationships in which the nurse can closely identify with their patient (Duquesne University School of Nursing, 2020). Evidence-based practice is a core principle of the nursing profession. An example specific to forensic nursing includes having an understanding of why injuries to the genital may or may not be present after an assault (OVC, 2016). Multidisciplinary approach refers to forensic nurses being the link between the healthcare, justice and legal system. These may include law enforcement, prosecutors, child and adult protective services, school counselors, and mental health care providers. These are the principles that should influence all forensic nursing care.

Kim Hendrick is a survivor of sexual assault. She was violently assaulted by a man she had gone on a couple of dates with. Her story shows the important role forensic nurses play in supporting the victim and helping them navigate the justice system during one of the worst moments of their lives (Honor Health, n. d.).

She was calm and soft spoken that night, and let me know she was so sorry this happened to me. She was gentle and put me at ease while collecting evidence, and explained each process and why she was doing it. She was genuinely concerned about my injuries and believed me that something really horrible had happened (Honor Health, n.d.)

Sherri Thornton represents the other perspective. Thornton is an influential SANE nurse here in Maine and is currently the coordinator for MaineGeneral Medical Center's regional forensic examiner program (Rhoda, 2019). When she is assigned a patient who has been sexual assaulted, she spends at least 45 minutes listening to the patient's story.

This builds trust by allowing a safe space to share one's story. Thornton states that these exams can take up to 12 hours. According to Campbell (2021), roles and responsibilities of the SANE nurse include avoiding inflicting further trauma, providing compassionate care, conducting medical/forensic examination, promoting patient safety, providing referrals for outside sources and giving courtroom testimony if needed. There are also many benefits to having forensic/SANE nurses in the hospital setting. Having SANE's on staff decreases the wait time for the patient and ensures efficient care (Campbell, et. al, 2001). They also conduct quality forensic examinations due to hours of training and supervision during the certification process (Campbell, et. al, 2001). If there are not properly trained nurses, patients are at-risk of revictimized and are unlikely to have their immediate and long-term healthcare met (Campbell, et. al, 2001).

Evidence Collection

A large role of SANE nurses is evidence collection for the forensic examination. The SANE will collect two types of evidence, including trace and biological. Trace evidence includes hair and fibers from the perpetrator or victim. Biological evidence is body fluids, such as blood, semen, saliva, etc (Campbell, 2015). SANEs are effective in their evidence collection, not only during the physical collection process but because of how they speed up the process, ensuring no evidence degrades while the patient is waiting in the ED (Ledray & Simmelink, 2020). Ledray & Simmelink (2020) showed that when compared to kits collected by non-SANE certified healthcare professionals, those collected by SANEs were completed quicker and had higher quality of evidence collection. They also made less crucial collection errors that could lead to an evidence kit

to be inadmissible in court. This, in turn, leads to the kits collected by SANEs to lead to more guilty pleas from perpetrators (Ledray & Simmelink, 2020). In cases of sexual assault, the victim was more likely to have their case referred to a prosecutor if they had had an exam done by a SANE nurse (Campbell, et al., 2012). In a study conducted by Sievers, et al. (2003), 515 forensic evidence kits collected in the state of Colorado in 2003 were audited. Overall, the forensic evidence collected by SANE was 92% more likely to have a completed chain of custody. The kits completed by SANE's were also more likely to be sealed correctly, include the correct number of pubic and head hairs, have the right number of blood tubes, etc, that made them more effective for law enforcement use. (Sivers, 2003).

Forensic Nursing Education

The fundamentals of forensic nursing education include evidence collecting, documentation, interviewing skills, criminal, procedural and constitutional law, scope of practice, interdisciplinary collaboration, and how to testify in court as an expert witness (Burgess, 2004). There are several different routes in which a nurse can enter the forensic nursing field. Many healthcare facilities or schools of nursing offer continuing education courses, certification programs, including SANE-A and SANE-P, a minor or concentration in forensics or a graduate degree in forensic nursing (Burgess, 2004). There is also a division of the forensic nursing speciality of nurse death investigators, who are responsible for assisting with examining the condition of the body after death. This fits within the nursing scope of practice because it allows the nurse to advocate for and assess patients, even after death (Burgess, 2004).

SANEs are the most common type of forensic nurse and this is what is typically thought of when the topic of forensic nursing is introduced. This is a certification program in which a registered nurse completes a 40-hour training that goes over possible victim signs and symptoms, proper documentation, history taking skills, evidence collection, and forensic photography (Lause, n.d.). There is also a separate training program required for SANEs who wish to work with pediatric populations.

Integration into Undergrad Curriculum

In 1999, the American Association of Colleges of Nursing (AACN) recommended that nursing students at the baccalaureate and graduate levels receive educational content on violence-related subject matter (AACN, 1999). The AACN states that, at a minimum, this content should include information of the scope of the violence in our society, skills to identify and document abuse, understanding of the health effects of violence, nursing interventions to promote safety in women, children, and elders, and the legal and ethical issues in treating these types of patients (AACN, 1999). Past research has shown that although the AACN has standardized the inclusion of this content, it was integrated minimally and not equal attention was paid to all victim populations (Woodtli and Breslin, 1996).

One of the landmark studies regarding the inclusion of forensic nursing in undergraduate curricula conducted by Woodtli and Breslin (1996). Researchers mailed a 35-item survey to National League for Nursing (NLN)-accredited baccalaureate nursing schools throughout the country to discover the scaffolding and amount of forensic nursing topics along with the qualifications and training of the faculty teaching the

material. The study specifically looked for the inclusions of topics of abuse towards children, women, and older adults, sexual assault, suicide, and self-destructive behavior. The results from the study showed that most of the forensic nursing topics were often covered in less than two hours of class time over the course of the nursing undergraduate curricula. Child abuse was covered the most in-depth, while elder abuse got the least amount of instruction (Woodtli & Breslin, 1996). Woodtli and Breslin conducted a follow-up survey in 1999 which followed a similar design and purpose. Overall, this second survey showed that there had been little gains in the integration of these topics since 1996. Notably, in this survey, thirty-five percent of faculty respondents indicated violence-related content was not a priority. Ross et al., (1998) had a similar survey design that they conducted on Canadian nursing schools where they indicated a need for standardized integration of violence related topics. Child abuse, similar to Woodtli and Breslin's study in 1996, was covered the most in-depth across Canadian universities. Domestic violence and sexual assault had the least amount of educational content (Ross, et al., 1998). Ross et al., (1998) had a similar survey design that they conducted on Canadian nursing schools where they indicated a need for standardized integration of violence related topics. Child abuse, similar to Woodtli and Breslin's study in 1996, was covered the most in-depth across Canadian universities. Domestic violence and sexual assault had the least amount of educational content (Ross, et al., 1998).

Victims of violence are highly likely to be under the care of a nurse at some points in their life. Therefore, it is imperative to ensure that nurses are properly educated on how to care for these vulnerable patient populations. Prior studies have been conducted on the amount of forensic nursing instruction in nursing schools, but are

outdated or focus on too broad of a population sample. This study seeks to understand student's perceived knowledge and feelings of preparedness when it comes to caring for victims of violence, specially victims of sexual assault and rape, interpersonal violence, human trafficking, child abuse or elder abuse. In turn, this will speak to the student's satisfaction or lack thereof of the undergraduate nursing curricula of BSN programs in Maine when it comes to instructing on these topics.

CHAPTER III: METHODS

Research Questions

Research question:

- 1) How do students enrolled in their final semester of nursing school at Maine's public baccalaureate of science in nursing programs perceive their knowledge of forensic nursing concepts?
- 2) Are students enrolled in their final semester of nursing school at Maine's public baccalaureate of science in nursing programs satisfied with the amount of forensic nursing curriculum?
- 3) How important do students enrolled in their final semester of nursing school at Maine's public baccalaureate of science in nursing programs perceive forensic nursing topics within the undergraduate curricula?
- 4) How prepared do students enrolled in their final semester at Maine's public baccalaureate of nursing programs perceive the amount of forensic nursing educational content they received?

Internal Review Board

The student researcher completed an application with the Internal Review Board (IRB) in order to conduct research with human subjects and was approved to distribute the survey on 12/2/2021. The IRB approval document is located in Appendix I.

Participants

Participants in the study must fit the following criteria: must be at least 18 years of age and in their final semester of nursing school in a BSN program at one of the five participating public universities. These universities are all public universities, except for Husson University, and all offer a Baccalaureate of Science in Nursing (BSN) programs. The student survey was distributed by the directors of the respective schools of nursing via email. Emails were sent to a number of participants via email by the director of the university's nursing program and were posted to the course learning management system. There were a total 115 survey responses. The total response rate was after filtering the responses that answered 'no' to the question "Are you in your final year of a BSN nursing program?" there were a total of 99 viable responses.

Measurement

A 28-item survey that outlines in Appendix IV. There was only 1 open-ended question included in this survey that allowed for a write-in option. This open-ended question was used to collect information on why participants felt that additional classroom instruction on the forensic nursing topics were not needed. Question 1 and 2 were used to ensure that the survey was reaching the correct participants. The first question asked the participant to identify if they attended one of the selected universities and the second question asked if the participant was in their final year of a BSN nursing program. Responses from participants who selected no to question 2 had their responses filtered out from data analysis. Survey design was inspired by the 'understand' and 'remember' levels of Bloom's Taxonomy. Bloom's Taxonomy of the different

classification systems for educators use of learning objectives for their students (Shabatura, 2013) and is used to build nursing curriculum. This theory states that remembering is the first level of learning and involves recognizing and recalling facts. Understanding is the second level and involves constructing greater meaning from said facts (Shabatura, 2013). Additionally, the Kirkpatrick Model works off four levels of training evaluation and was used in the design of the survey. Level 1 is the “reaction” level which seeks to evaluate if the participants find the training engaging and favorable to their overall job development (Kirkpatrick Partners, 2022). Level 2 involves learning new skills and knowledge applicable to one’s job duties. Level 3 is when trainees apply what they have learned to their jobs appropriately and Level 4 is when targeted outcomes occur as a result of the training (Kirkpatrick Partners, 2022). This survey design is based in Level 1 because it measures student’s perception of their forensic nursing education and intends to evaluate how effective and engaging the content was for preparing them to work with this patient population. The survey items were vetted by the student researcher’s thesis advisor. The survey data was collected through Qualtrics and no identifying information was collected via the program.

Study Procedure and Data Collection

This study involved two different quantitative survey design distributed to BSN nursing programs at the chosen public universities in the state of Maine. The survey was distributed to nursing students in their final semester of the BSN program at 5 participating public universities and included quantitative questions using Likert scale

responses (see Appendix IV). Surveys were distributed via an anonymous email link through the Qualtrics program. Student recruitment emails can be seen in Appendix II.

There were six general topics that were included through the student survey. These were as follows: Sexual assault and rape, interpersonal violence, human trafficking, child abuse, elder abuse and the role of forensic/SANE nurses. Regarding these topics, students were asked to rank their perceived knowledge, how important they felt these topics were to the overall nursing curriculum, how prepared they feel to care for these patient populations, and how satisfied they were with the current amount of instruction on these topics.

Results

Overall, there were 99 survey responses that data was drawn from. There were a total of BLANK surveys sent out and a total of 115 responses for a response rate of BLANK. One school did not [participate even after agreeing for a total of 4 participating public universities.

Table I. Responses to “Do you believe that additional classroom instruction and learning material on these topics would be beneficial to your overall nursing education?”

	Percentage of Responses (%)
Yes	89
Somewhat	9
No	2

Data from the remainder of the questions were analyzed based on the victim population the questions pertain to. For the questions that evaluated the students' knowledge, "moderately knowledgeable " was the most common answer. BSN nursing students enrolled in public education programs in Maine perceive that they are knowledgeable on the topics of elder and child abuse. Similarly, students felt the most prepared to provide care for victims of elder and child abuse. They felt least prepared to care for the human trafficking victims. Students felt the most satisfied with their undergraduate education on domestic violence, child abuse and elder abuse. These students felt all these topics were vital to the undergrad nursing education. The questions on human trafficking had the lowest results in knowledge, preparation and satisfaction.

Table II. Responses from nursing students in their final semester at public universities in Maine to questions regarding their perceived knowledge, satisfaction, preparation and importance of sexual assault (%)

	Not at All	Slightly	Moderately	Very	Extremely
How knowledgeable do you feel on the topic of Sexual Assault from your nursing school education?	5.88	20.59	38.24	26.47	8.82
How important do you feel the topic of Sexual Assault is within the nursing BSN undergraduate curriculum?	3.03	3.03	6.06	30.30	57.58
.How well has nursing school prepared you to work with patients who are a past or current victim of Sexual Assault?	12.5	21.88	40.63	15.63	9.38
How satisfied are you with the current amount of information/classroom instruction on Sexual Assault in your university's nursing program?	12.5	15.63	37.50	25.0	9.38

Table III. Responses from nursing students in their final semester at public universities in Maine to questions regarding their perceived knowledge, satisfaction, preparation and importance of domestic violence (%)

	Not at All	Slightly	Moderately	Very	Extremely
How knowledgeable do you feel on the topic of Domestic Violence/Interpersonal Violence from your nursing school education?	5.88	20.59	44.12	23.53	5.88
How important do you feel the topic of Domestic Violence/Interpersonal Violence is within the nursing BSN undergraduate curriculum?	0	6.06	9.09	36.36	48.48
How well has nursing school prepared you to work with patients who are a past or current victim of Domestic Violence/Interpersonal Violence?	9.38	25.00	43.75	12.5	9.38
How satisfied are you with the current amount of information/classroom instruction on Domestic Violence/Interpersonal Violence in your university's nursing program?	9.38	6.25	31.25	40.63	12.5

Table IV. Responses from nursing students in their final semester at public universities in Maine to questions regarding their perceived knowledge, satisfaction, preparation and importance of human trafficking (%)

	Not at All	Slightly	Moderately	Very	Extremely
How knowledgeable do you feel on the topic of Human Trafficking from your nursing school education?	20.59	23.53	38.25	8.82	8.82
How important do you feel the topic of Human Trafficking is within the nursing BSN undergraduate curriculum?	3.03	9.09	6.06	30.30	51.52
How well has nursing school prepared you to work with patients who are a past or current victim of Human Trafficking?	25.00	31.25	31.25	3.13	9.38
How satisfied are you with the current amount of information/classroom instruction on Human Trafficking in your university's nursing program?	15.63	25.00	31.25	18.75	9.38

Table V. Responses from nursing students in their final semester at public universities in Maine to questions regarding their perceived knowledge, satisfaction, preparation and importance of child abuse (%)

	Not at All	Slightly	Moderately	Very	Extremely
How knowledgeable do you feel on the topic of Child Abuse from your nursing school education?	0	14.71	44.12	32.35	8.82
How important do you feel the topic of Child Abuse is within the nursing BSN undergraduate curriculum?	0	3.03	12.12	27.27	57.58
How well has nursing school prepared you to work with patients who are a past or current victim of Child Abuse?	3.13	12.50	56.25	15.63	12.50
How satisfied are you with the current amount of information/classroom instruction on Child Abuse in your university's nursing program?	3.13	6.25	21.88	50.00	18.75

Table VI. Responses from nursing students in their final semester at public universities in Maine to questions regarding their perceived knowledge, satisfaction, preparation and importance of elder abuse (%)

	Not at All	Slightly	Moderately	Very	Extremely
How knowledgeable do you feel on the topic of Elder Abuse from your nursing school education?	0	14.71	32.35	32.35	20.59
How important do you feel the topic of Elder Abuse is within the nursing BSN undergraduate curriculum?	0	3.03	6.06	30.30	60.61
How well has nursing school prepared you to work with patients who are a past or current victim of Elder Abuse?	0	12.50	59.38	9.38	18.75
How satisfied are you with the current amount of information/classroom instruction on Elder Abuse in your university's nursing program?	3.13	6.25	15.63	46.88	28.13

Table VII. Responses from nursing students in their final semester at public universities in Maine to questions regarding their perceived knowledge, satisfaction, preparation and importance of SANEs and their role (%)

	Not at All	Slightly	Moderately	Very	Extremely
How knowledgeable do you feel on the topic of Sexual Assault Nurse Examiners (SANEs) and their role from your nursing school education?	17.65	23.53	32.35	20.59	5.88
How important do you feel the topic of Sexual Assault Nurse Examiners (SANEs) and their role is within the nursing BSN undergraduate curriculum?	3.03	9.09	15.15	30.30	42.42
How satisfied are you with the current amount of information/classroom instruction on Sexual Assault Nurse Examiners (SANEs) and their role in your university's nursing	12.50	15.63	37.50	25.00	9.38

Discussion

As a whole, in their final semester of nursing school in a BSN enrolled in Maine's public universities perceived a moderate or high level of knowledge, preparation and satisfaction for all the forensic nursing topics. BSN programs aim to have students meet basic nursing competency levels to provide safe patient care upon graduation and entry into practice. The AACN Essentials Guide shares the educational standards for BSN nurses. The AACN aims for colleges to prepare its nursing students to have a generalized amount of knowledge for practice across the lifespan and for diverse populations (AACN, 2021). It is important for BSN nurses who are entering the nursing profession to

have a baseline of knowledge on all nursing areas and age groups in order to provide safe nursing care to any type of patient.

Sexual Assault

The majority of students in their final year of BSN nursing school at a public university in the state of Maine perceived themselves as satisfied with the amount of educational content they received on sexual assault. Most students felt knowledgeable on sexual assault and considered the topic of sexual assault to be an highly important part of the curriculum. A study by Shrunk (2017) showed that integrating education on sexual assault into the undergraduate program lead to nursing students having a reduction of ‘victim blaming’ beliefs towards victims of rape, which in turn will lead to better patient outcomes.

Domestic Violence

Students enrolled in Maine's public BSN nursing programs in their final semester perceive that they are knowledgeable and prepared to provide care for patients who experience domestic or interpersonal violence. They also perceive nursing education content related to domestic/interpersonal violence as extremely important. Alshammari, et al., (2018) found that nurses did not feel confident in their ability to treat patients of domestic violence because of a lack of education, training and specialized communication skills for this vulnerable population. These knowledge deficiencies can negatively impact patient outcomes. On the other hand, when nurses possess these skills, they are able to validate survivors by ensuring them that domestic violence is a legitimate

health concern and open the door to additional resources (Campbell et al., 2017.). This shows the importance of education of nursing students in this area to promote proper care of these patients and meets the nurse's ethical and moral goal to care for those in need (Campbell et al., 2017).

Human Trafficking

Human trafficking had the most notable results that point to a deficient in educational content. Students enrolled in Maine's public universities in their final semester of their nursing BSN program perceive themselves to be knowledgeable about human trafficking, but do not feel as prepared to provide care for a patient who is or has been trafficked. Maine's students enrolled in public BSN programs perceive curriculum focused on human trafficking as extremely important. However, on the question on satisfaction with the amount of human trafficking content in the cirrcula, 40.63% of students responses either 'not at all' or 'somewhat' satisfied.

In the year 2020, the National Human Trafficking Hotline received 87 contacts from residents of Maine. They identified a total of 24 cases of trafficking within the state. Human trafficking is a crime that is hard to track due to its complex nature and the ability for traffickers to hide their victims in plain sight. Victims can be perceived as just another laborer, sex worker or housecleaner if their is not proper education on assessments associated with trafficking. Nurses are in a unique position to help screen, identify, support and connect victims with the proper resources to escape (Association of Women's Health, Obstetric and Neonatal Nurses, 2016). Without this proper education , nurses could fail to intervene and help these vulnerable patients. Trafficking survivors were surveyed

and 28% reported that they had come into contact with a healthcare professional while being trafficked but were not recognized as victims (AWHONN, 2016). Possible signs of a trafficked patient may include accompanied by someone who speaks for the patient or does not want to leave the patient alone, inconsistent past medical history or explanations for injuries, or lack of identification or important documents (OTIP, 2021). Nursing curriculum regarding human trafficking should include specific patient assessments and interventions if a patient is suspected of being trafficked, proper care coordination and how to work with interdisciplinary healthcare team members, such as social services, in order to best treat this patient population.

The Adult Human Trafficking Screening Tool (AHTST) is a way for professionals who may encounter these victims to assess them in a consistent manner (Konstantopoulos & Owens, 2018). When a nurse notices some of these common assessments associated with trafficking on a patient, the next step should be to separate the patient from the person they came with, if possible, to ask the patient questions in private (Konstantopoulos & Owens, 2018). It is important to recognize that the patient is probably fearful and reluctant to report abuse due to fear of retaliation. Thus, it is best for the nurse to establish trust first. The AHTST (2018) suggests doing so by creating a safe space to ensure privacy, use open, non-threatening body language, adapt screening questions to individual patients and be prepared for possible trauma reactions (Konstantopoulos & Owens, 2018). Next, once the victim is identified, the nurse should express their concern for the patient and other than referrals/resources. Intervention could vary based on facility. If the patient is a minor, the nurse may be mandated to report (Konstantopoulos & Owens, 2018). Lastly, the nurse can be a resource in developing a

safety plan. It is important to create strategies that involve the least amount of risk for the patient (Konstantopoulos & Owens, 2018).

A lack of knowledge of human trafficking is not unique to Maine's nursing students. The idea of training nurses to assess victims is being researched and added into many emergency rooms, primary care facilities, etc, in order to best help this patient population. In 2017, Ford conducted a educational presentation on the identification of human trafficking victims to local Emergency Department nurses where she identified gaps in nursing professionals' knowledge (Ford, 2017). Ford's survey involved a pre-survey of ER nurses, an educational presentation of human trafficking and a post-survey to gauge the amount of information learned. For a true/false question that read "Over 80% of trafficking victims seek medical help", only 10.5% correctly selected true in the pre-survey. Both Ford's study and this student researcher's study were conducted in the state of Maine and point to knowledge deficits in both nursing student's and ER nurses on human trafficking patients.

Child Abuse

Students enrolled in Maine's public nursing programs consider themselves knowledgeable and prepared to provide care for abused or neglected children. Nursing students perceive nursing education content related to child abuse as extremely important. Child abuse was one the topics that had the highest satisfaction of instruction, perceived knowledge and preparation, along with elder abuse. These results align with research hypotheses. These results are also on par with Woodtli and Breslins' (1996) study, where child abuse was the topic covered the most in-depth out of all the patient populations.

This shows that there is always been an emphasis on child abuse educational with the nursing school curriculum and that Maine's curriculum in specific has been perceived as effective by its students.

In 2014, nurse Virginia McNamara lost her license to practice due to the failure to report suspected child abuse. The infant, who had bruising and a broken arm during McNamara's visit, later died at the hands of his father (The Boston Globe, 2014). Proper reporting and identification of signs of child abuse by the nurse could have prevented this infant's death. Just in the summer of 2021, 4 children were murdered by their parents because of either physical abuse or neglect (Walsh, 2021). To combat this alarming issue of child abuse related deaths, Maine DHHS hired an outside source to examine the issues within the system that lead to these fatal oversights and provide suggestions for change (Casey Family Programs, 2021). Casey Family Programs, the outside auditing company, made numerous suggestions, including the establishment of joint protocol standards between Law Enforcement, Hospitals and Child Welfare services (Casey Family Programs, 2021). This points to the integration of nursing staff into the prevention of child abuse related deaths in the state of Maine.

Due to the prevalence of this issue in the state of Maine, it is promising that senior nursing students who are graduating with their BSN degree from a public university in Maine feel prepared to care for this patient population. Nurses are in a position where they are able to easily identify and report cases of child abuse (Lines, Hutton, & Grant, 2017). There could be several reasons that nurses fail to report child abuse, including a lack of sufficient knowledge of the signs, lack of confidence in their ability to interpret these signs or lack of education their facilities reporting process (Lines et al., 2016). Thus, it is

important to start the education process during nursing school so students can be prepared when they enter the field.

Elder Abuse

Nursing students in Maine's public nursing programs perceive that they are knowledgeable and prepared to provide care for patients who experience elder abuse, as well as view it as extremely important. Students perceive nursing education content related to elder abuse as extremely important. This did not align with the research hypothesis that states that the survey results will reflect that elder abuse is an area that students rank low for knowledge and preparedness. It is promising that elder abuse is such a well-received topic since reports of elder abuse have been on the rise in Maine. Elder abuse is important for Maine nursing students to learn about because there is a large aging population in this state, thus this is an issue that could potentially impact a large amount of the patient population they encounter on a daily basis. Being aware of the signs of elder abuse and nursing interventions will better prepare students when they encounter these patients in the field.

There are several factors which could point to the perceived importance of elder abuse among this undergraduate nursing population. Since Maine is a state with a high percentage of elderly residents, there is a lot of exposure to this patient population at clinical sites. It should also be worth noting that one of the Maine Nurse Core Competencies is aging, which shows that care of elderly patients has been emphasized within the curriculum.

Woodtli and Breslin (1996) found that elder abuse had the least amount of in-class instruction, with less than 2 hours total, with about 10% of the participating nursing schools covering elder abuse content only in readings. These survey results from Maine's nursing students show that they feel prepared, knowledgeable and satisfied with the amount of classroom instruction on elder abuse. These findings point to an improvement in the integration of these topics since Woodtli and Breslin's study in 1996, although it does not necessarily equate to a higher amount of instructional time, but that the manner in which elder abuse is being taught resonates with the students. This improvement may be due to the recognition that nurses are on the frontline of this issue and are in a valuable position to recognize and help these patients (Rynearson, 2019).

Sexual Assault Nurse Examiner (SANEs)

Students enrolled in their final semester Maine's public BSN nursing programs perceive that they are knowledgeable and prepared on the topic of SANEs and their role. They also perceive this topic as extremely important. This could possibly point to the emerging interest in SANE/forensic nursing by undergrad nursing students or because of exposure to the role through classroom visits from registered SANE nurses. Especially when compared with the 89% of respondents who said they would like to see more forensic nursing content included in the curriculum (See Table III) It was found that hospitals with SANE programs were more likely to provide emergency contraceptives and STD prophylaxis than Emergency Departments without SANEs present Crandall & Helitzer (2003). SANEs have also been found to have a positive emotional impact on survivors and make them feel safe, respected and listened to after such a dehumanizing

experience (Fehler-Cabral et al., 2011). Additionally, kits collected by non-SANE certified healthcare professionals, those collected by SANEs were completed quicker and had higher quality of evidence collection Ledray & Simmelink (2020). It is important for BSN nursing students to have information on the role of these nurses in order to understand their impact on patients and how they fit into the larger healthcare team. Undergraduate nursing schools in the state of Maine may consider classroom visits from this professionals and the effects they may have on overall perception and understanding of their role in the community.

Limitations

This study has several limitations. There opportunity to go more in-depth with some of the questions. For example, instead of asking how generally knowledgable the students felt on a given topic, the researcher could have asked how capable the students felt *assessing* a domestic violence victim or *identifying the risk factors* of child abuse. The survey also only measured perceived knowledge and behaviors about preparedness in specific forensic nursing concepts. Students are in their senior year, and their level of preparedness is unknown until they encounter a patient when they are Registered Nurses. Also, students' perception of knowledge may be less than their actual knowledge. This study did not assess actual patient care of the identified populations. There was a low response rate which could have skewed results. There also was a self-selected bias, in which students whose responses to the surveys may have been motivated to do so because of personal interest or perceived importance of the topics which could have skewed the results. This tool was self-created by the student researcher and did not use

psychometrically sound survey design, however it was reviewed by thesis advisor Kelley Strout, who has a background in research. Modifications were made based on feedback.

Future Implications

Due to the weak responses outcomes on the topic of human trafficking, a qualitative study can be conducted on Maine's nursing students to assess their understanding of human trafficking, risk factors, identifying signs and nursing interventions. Further studies could also be conducted with a similar survey design on specific university populations, to hone in on the strengths and weaknesses of the forensic nursing content in that particular curriculum. A survey can be conducted that evaluates students' knowledge of assessments/interventions for these patient populations to assess actual understanding. In order to increase response rates, the researcher could have provided in-person assessment opportunities for senior nursing students to encourage participation but geographical barriers prevented this approach.

There should be more educational content and classroom time dedicated to patient risk factors, identification and nursing interventions for past or current victims of human trafficking. Maine's nursing schools should integrate these changes in order to better prepare nursing students to work with this population in the patient-care setting.

Conclusion

This study aimed to answer the research question: How effective is the undergrad nursing curriculum in the state of Maine in preparing nursing students to encounter patients who are current or past victims of violence? Overall, these survey results show

that programs are doing well based on student perceptions. Findings point to the integration of forensic nursing topics in undergraduate curricula. However, there are still possible improvements. Based on the survey results, there is room for improvement on the topic of human trafficking in the undergraduate curriculum. Programs should consider further integrating topics related to assessment, interventions, risk factors, etc of victims of human trafficking in order to better prepare students to encounter this patient population. Undergraduate nursing programs in the state of Maine are properly preparing the new generation of nurses to work with patients who may have a past or current history of victimization. Continuing on this track will hopefully prevent victims of violence from ever falling through the cracks of the healthcare system again.

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APPENDICES

APPENDIX I
IRB APPROVAL

Application #: 2021-07-12

Title: Evaluating Forensic Nursing Content within Maine's Undergraduate Curricula

PI: Paige Solans

Approval Period End Date: **12/1/2022**

Dear Paige,

The Institutional Review Board for the Protection of Human Subjects (IRB) reviewed the above referenced application in expedited review and approved it on 12/2/2021. We will contact you in December 2022 to check with you if the application should be closed.

Attached is the approved copy of the application. The approved informed consent form must be duplicated and used when enrolling subjects.

Please remember that each subject must be given a copy of the informed consent document. Any unanticipated problems or injury to the subject must be reported to the IRB.

Any proposed changes to the research must be approved by the IRB prior to implementation. If you require a modification in the future please visit our website for instructions.

Please contact me if you have any questions. Thank you.

Best regards,

Paula

APPENDIX II
STUDENT RECRUITMENT EMAIL

Greetings!

You are invited to participate in a research study to enter a raffle for the chance to win a new iPad! This survey has been sent out on behalf of Paige Solans, a senior nursing student at UMaine Nursing, via the Director of your nursing program.

This survey seeks to evaluate how forensic nursing topics in the undergraduate nursing curriculum correlate to student's perceived understanding and application of skills in patient care settings. You must be in your fourth year of nursing school at your given university and at least 18 years old to participate in this survey.

If you agree to participate, you will be asked to take an anonymous survey. The survey will take approximately 10-12 minutes to complete. The link to access the iPad raffle will be available after the completion of the survey.

Please click on the link below to learn more about the study and to take the survey itself. If you have any questions, please feel free to contact me at:

paige.solans@maine.edu

APPENDIX III

CONSENT

You are invited to participate in a research project being conducted by Paige Solans, an senior undergraduate student in the Department of Nursing at the University of Maine.

This research is being conducted under the supervision of Dr. Kelley Strout, the Director of the School of Nursing at the University of Maine. The purpose of the research is to determine how forensic nursing topics in undergraduate nursing curriculum correlates to student's perceived understanding and application of skills in patient care settings.

In order to participate, you must be:

- at least 18 years of age
- in your last year of nursing school
- currently attending one of the following universities: University of Maine, University of Maine Augusta, University of Southern Maine, University of Maine Fort Kent, and Husson University.

What Will You Be Asked to Do?

If you decide to participate, you will be asked to take an anonymous survey. The survey should take you about 10-12 minutes to complete.

Risks

This questionnaire contains sensitive topics that may be triggering to some individuals. If at any time you become uncomfortable during this survey, you may stop taking the

survey or skip any questions. Under the Resource section is a list of local and national hotline numbers.

Benefits

While this study will have no direct benefit to you as a participant, this research may help us determine if there is enough information included in the current nursing undergraduate curriculum at your university to prepare nursing students to work with patients who have been victims of violence. It is very likely that as a future nurse, you will encounter a patient who has experienced some act of violence in their lives. To properly care for these patients holistically, it is important that nursing school prepares future nurses. As for the overall potential benefit of my research, forensic nursing is a specialty that focuses on some of the most vulnerable patient populations and helps bridge the gap between nursing care and law enforcement (Hammer et al., 2013). It is very likely that a nurse will encounter a patient who has experienced some act of violence in their lives. In order to properly care for these patients, nursing schools must prepare them appropriately.

Undergraduate nursing school is a place where these skills can be taught and managed before new RNs enter the workforce. If a new grad nurse has not been taught forensic nursing topics, such as how to spot patients who are victims of human trafficking, then this could have lastly negative effects on patient outcomes. Nursing students need to be educated on these topics in order to best treat this large population effectively and emphatically.

Compensation

After completing this survey, you will have the opportunity to enter a raffle for a new iPad. After reaching the end of the survey, you will be brought to a separate page not connected to your responses. The winner will be chosen at random and will be contacted for their shipping information to receive the prize. If the chosen winner does not respond to the email within the 14 day allotted time frame, then a new winner will be drawn.

Information for the compensation is not connected to survey responses. In order to comply with the Human Subject Payment Guidelines, I am required to report my compensation to the Michael Noblet in the Department of Purchasing through the University of Maine. I will work with the Department of Purchasing to comply with IRS regulations that require the University of Maine System to issue a Form 1099, since the payment has a monetary value of over \$75.00. The information that I will report includes the winner's name, address, date of payment, value of payment, and name of the researcher. Information will be sent to the Purchasing Department. If you receive \$600+ during a calendar year (January 1 - December 31) from participating in UMaine research projects. Form 1099 will be generated and mailed to you. If you do not receive that much money, information will be destroyed at the end of the calendar year (i.e., December 31st).

Confidentiality

This study is anonymous. Please do not write your name on any open response portions of the survey. There will be no records linking you to the data. Data will be kept on a password protected computer until June 2022

Voluntary

Participation is voluntary. If you choose to take part in this study, you may stop at any time and skip any questions you choose. You may stop at any time, but in order to receive access to the compensation raffle, you must reach the end of the survey and respond to all questions. Submission of the survey implies consent to participate.

Resources

This questionnaire contains sensitive topics that may be triggering to some individuals. If at any time you become uncomfortable during this survey, you may stop taking the survey or skip any questions.

Included below is a list of local and national hotline numbers:

National Suicide Prevention Lifeline: 1-800-273-8255

Partners for Peace- Domestic Violence 24-Hour Hotline: 1-800-863-9909

Rape Response Services- 24-Hour Helpline: 1-800-871-7741

Contact Information

If you have any questions about this study, please contact me at paige.solans@maine.edu.

You may also reach the faculty advisor on this study, Kelley Strout, Ph.D., RN at kelley.strout@maine.edu. If you have any questions about your rights as a research

participant, please contact the Office of Research Compliance, University of Maine, 207-581-2657 or e-mail umric@maine.edu.

If you have read and understand these terms, please answer "Yes" to continue on to the survey.

APPENDIX IV
STUDENT SURVEY

Table I. Student Survey Items

Question 1: What university from the list below do you attend?

University of Maine- Orono

University of Maine- Augusta

University of Maine- Fort Kent University of Maine- Southern Maine

Husson University

Question 2: Are you in your final semester of your nursing program?

Yes

No

Question 3: Are you familiar with the term “Forensic Nursing”?

Yes

Somewhat

No

The next set of questions will ask you how knowledgeable you are with the following topics within the context of nursing school. Although you might have knowledge of these topics from outside resources, we ask you to reflect how nursing school has or has not introduced and familiarize you to these topics.

Question 4: How knowledgeable do you feel on the topic of Domestic Violence/Interpersonal Violence from your nursing school education?

Not at all knowledgeable

Slightly knowledgeable

Moderately knowledgeable

Very knowledgeable

Extremely knowledgeable

Question 5: How knowledgeable do you feel on the topic of Human Trafficking from your nursing school education?

Not at all knowledgeable

Slightly knowledgeable

Moderately knowledgeable

Very knowledgeable
Extremely knowledgeable

Question 6: How knowledgeable do you feel on the topic of Sexual Assault from your nursing school education?

Not at all knowledgeable
Slightly knowledgeable
Moderately knowledgeable
Very knowledgeable
Extremely knowledgeable

Question 7: How knowledgeable do you feel on the topic of Child Abuse from your nursing school education?

Not at all knowledgeable
Slightly knowledgeable
Moderately knowledgeable
Very knowledgeable
Extremely knowledgeable

Question 8: How knowledgeable do you feel on the topic of Elder Abuse from your nursing school education?

Not at all knowledgeable
Slightly knowledgeable
Moderately knowledgeable
Very knowledgeable
Extremely knowledgeable

Question 10: How knowledgeable do you feel on the topic of Sexual Assault Nurse Examiners (SANE) and their role from your nursing school education?

Not at all knowledgeable
Slightly knowledgeable
Moderately knowledgeable
Very knowledgeable
Extremely knowledgeable

The next set of questions will ask how important you feel these topics are within the nursing BSN undergraduate curriculum.

Question 11: How important do you feel the topic of Domestic Violence/Interpersonal Violence is within the nursing BSN undergraduate curriculum?

Not at all important
Slightly important
Moderately important
Very Important
Extremely important

Question 12: How important do you feel the topic of Human Trafficking is within the nursing BSN undergraduate curriculum?

Not at all important
Slightly important
Moderately important
Very Important
Extremely important

Question 13: How important do you feel the topic of Sexual Assault is within the nursing BSN undergraduate curriculum?

Not at all important
Slightly important
Moderately important
Very Important
Extremely important

Question 14: How important do you feel the topic of Child Abuse is within the nursing BSN undergraduate curriculum?

Not at all important
Slightly important
Moderately important
Very Important
Extremely important

Question 15: How important do you feel the topic of Elder Abuse is within the nursing BSN undergraduate curriculum?

Not at all important
Slightly important
Moderately important
Very Important
Extremely important

Question 16: How important do you feel the topic of Sexual Assault Nurse Examiners (SANE) and their role is within the nursing BSN undergraduate curriculum?

Not at all important
Slightly important
Moderately important
Very Important
Extremely important

The next set of questions will evaluate how prepared you feel to work with these patient populations in a patient care setting (e.i. hospital , primary care faculty, schools, prisons, long term care facilities, etc.).

Question 17: How well has undergrad nursing school prepared you to work with patients who are a past or current victim of Domestic Violence/Interpersonal Violence?

Not at all prepared
Slightly prepared
Moderately prepared
Very prepared
Extremely prepared

Question 18: How well has undergrad nursing school prepared you to work with patients who are a past or current victim of Human Trafficking?

Not at all prepared
Slightly prepared
Moderately prepared
Very prepared
Extremely prepared

Question 19: How well has undergrad nursing school prepared you to work with patients who have been a victim of Sexual Assault?

Not at all prepared
Slightly prepared
Moderately prepared
Very prepared
Extremely prepared

Question 20: How well has undergrad nursing school prepared you to work with patients who are a past or current victim of Child Abuse?

Not at all prepared
Slightly prepared
Moderately prepared

Very prepared
Extremely prepared

Question 21: How well do you feel undergrad nursing school has prepared you to work with patients who are a past or current victim of Elder Abuse?

Not at all prepared
Slightly prepared
Moderately prepared
Very prepared
Extremely prepared

Question 22: How satisfied are you with the current amount of information/classroom instruction on Domestic Violence/Interpersonal Violence in your university's nursing program?

Not at all satisfied
Slightly satisfied
Moderately satisfied
Very satisfied
Extremely satisfied

Question 23: How satisfied are you with the current amount of information/classroom instruction on Human Trafficking in your university's nursing program?

Not at all satisfied
Slightly satisfied
Moderately satisfied
Very satisfied
Extremely satisfied

Question 24: How satisfied are you with the current amount of information/classroom instruction on Sexual Assault in your university's nursing program?

Not at all satisfied
Slightly satisfied
Moderately satisfied
Very satisfied
Extremely satisfied

Question 25: How satisfied are you with the current amount of information/classroom instruction on Child Abuse in your university's nursing program?

Not at all satisfied
Slightly satisfied

Moderately satisfied
Very satisfied
Extremely satisfied

Question 26: How satisfied are you with the current amount of information/classroom instruction on Elder Abuse in your university's nursing program?

Not at all satisfied
Slightly satisfied
Moderately satisfied
Very satisfied
Extremely satisfied

Question 27: How satisfied are you with the current amount of information/classroom instruction on Sexual Assault Nurse Examiners (SANE) and their role in your university's nursing program?

Not at all satisfied
Slightly satisfied
Moderately satisfied
Very satisfied
Extremely satisfied

Question 28: Do you believe that additional classroom instruction and learning material on these topics could be beneficial to your overall nursing education?

Yes
Somewhat
No

Question 29: If you answered Somewhat or No to the previous question, what reason from the list below would you cite as to why? You may choose multiple options or write in your own answer.

I did not answer Somewhat or No.
These topics do not seem relevant to the nursing curriculum.
These topics are already covered adequately.
There is not enough time to cover these topics.
Write in option

AUTHOR'S BIOGRAPHY

Paige Solans is currently studying for her nursing degree from the University of Maine and will be graduating in May 2022. She is a member of the Honors College and was awarded a Charles Slavin grant for her undergraduate research. Outside of school, Paige is a part of Partners of World Health and is the current President of the UMaine Crew Club. When the weather permits, you can find her rowing with her crew on the StillWater River, hiking or kayaking.

After college, she plans on moving to Joshua Tree, CA, taking a position in an Intensive Care Unit, and obtaining her ACLS, CCRN, PALS, and SANE-A certifications. Her overall career goal is to work as a flight nurse and work with victims of domestic violence.