AN EDUCATION IMPLEMENTATION PROJECT IN AN EMERGENCY DEPARTMENT TO INCREASE AWARENESS AND REFERRAL FOR TRAFFICKED PERSON ENCOUNTERS

A Scholarly Project

Submitted to the

Faculty of Liberty University

In partial fulfillment of

The requirements for the degree

Of Doctor of Nursing Practice

By

Stacey Lynn Alderman, BSN, RN

January, 2019
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Scholarly Project Chair Approval:

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ABSTRACT

Human trafficking impacts sufferers on a global scale with serious and lifelong health issues associated with the illegal practice. Interventions for these victims’ extensive health issues must ignite healthcare staff education and expert clinical interventions. Due to these health problems, healthcare staff function on the front lines to identify and help trafficked persons. This study focused on the scope of trafficking and health staff awareness, identification strategies to help recognize trafficked persons, techniques for interviewing, best practice strategies for intervention and referral, and new coding guidelines. During the intervention, health staff received a human trafficking pre-education questionnaire, a research supported education training intervention, and a post-intervention questionnaire. Data on post-education intervention referrals was also completed to discern impact of education on trafficking recognition and resource support. Qualities examined for ease and efficacy included the education intervention strategy, utilization of resource support, reported issues with trafficking recognition, and increase or decrease of staff confidence within interactions. Questionnaire results demonstrated increases for questions one through four following the educational intervention. Post-intervention data showed some recognition of potential human trafficking persons particularly related to mental health. Project results were consistent with other research recommendations. Continued human trafficking encounters in health systems necessitates continued research into best education, interviewing, intervention, and post-care methods.

Keywords: Human trafficking, emergency department, mental health, sex trafficking, labor trafficking.
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List of Abbreviations

ED: Emergency Department
ER: Emergency Room
HEAL: Health, Education, Advocacy, Linkage
HT: Human Trafficking
ICD: International Classification of Diseases
IRB: International Review Board
PATH: Physicians Against the Trafficking of Humans
PTSD: Post-Traumatic Stress Disorder
SECTION ONE: INTRODUCTION AND BACKGROUND

Human trafficking infiltrates every country around the world with an estimated 21 million people encounter some form of trafficking exploitation (CdeBaca & Sigmon, 2014). Trafficking affects both females and males, includes victims of all ages, has been reported in every U.S. state, and crosses all socioeconomic lines (Konstantopoulos, 2016). Types of trafficking includes forced sexual labor, domestic servitude, or forced manual labor (Richards, 2014). The United States defines human trafficking as the “recruitment, harboring, transportation, provision, and obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.” (National Institute of Justice, 2018).

Current evidence indicates an extensive knowledge and intervention gap for human trafficking victim encounters within the health system (CdeBaca & Sigmon, 2014). Victims often encounter health staff while under trafficking control with 87% of post-trafficked victims reporting at least one healthcare encounter (Lederer & Wetzel, 2014). The Polaris BeFree Textline and National Human Trafficking Hotline found an increase in reported human trafficking cases in 2016 by 35% (Patient Safety Monitor Journal, 2017). However, only 1% of human trafficking person are rescued per year.

Health staff trafficking encounter awareness and interaction confidence increases through educational support. Research currently identifies the emergency room as one of the most likely places to encounter trafficking victims in a healthcare setting (Stevens & Berishaj, 2016). Furthermore, 75 participants in one human trafficking education intervention reported improved competence (Egyud et al., 2017). Consequently, the emergency department and health staff population are the chosen site and population of study (Stevens & Berishaj, 2016). The proposed
intervention targets improved emergency department staff knowledge, focuses on population health support, follows national recommendations for practice, and fills a current educational gap in healthcare practice.

Background

**Trafficking in the U.S.** United States law describes sex trafficking as actions that involve the provision, harboring, recruitment, transportation, or obtaining of an individual for the intent of a commercial sex act (National Human Trafficking Resource Center, 2018. This type of commercial sex slavery utilizes coercion through manipulation, fraud, force, and threats. Countries around the world fall into categories of destination, origin, or transit (Stevens & Barishaj, 2016). America is considered a destination, source, and transit country of human trafficking (HT).

**Estimates and Profits.** The human trafficking industry is the fastest growing criminal enterprise in the world next to drug trafficking. According to the International Labor Organization ([ILO], 2014), forced labor generates approximately 150 billion dollars worldwide every year. Of this 150 billion, the U.S. and other developed countries generate an estimated 46.9 billion (ILO, 2014). Sex trafficking accounts for 99 billion dollars of the 150 generated annually and labor trafficking accounts for the other 51 billion. For each victim within developed countries, there is an estimated annual 34,800-dollar profit.

Global figures from 2016 estimate 24.9 million people were trapped in forced labor (ILO, 2017). Of this population, females account for 71% of victims and children make up 25% of victims. In 2016, the National Center for Missing and Exploited Children found one in six endangered runaway children were likely sex trafficking victims (National Human Trafficking Resource Center, 2018). Exact U.S. estimates are difficult, but the National Human Trafficking
Hotline identified 7,255 victims of sex trafficking, 1,979 victims of labor trafficking, 542 victims of both, and 838 victim of unidentified trafficking in 2017 (National Human Trafficking Resource Center, 2018).

**Types.** The top three forms of trafficking in 2017 included escort services, residential, and outdoor solicitation (National Human Trafficking Resource Center, 2018). Forms of trafficking include one or a combination of labor, organ, and sex trafficking. Sex trafficking endures in varied and unique industries including prostitution, motels, hotels, fake massage venues, escort services, hostess clubs, strip clubs, truck stops, and residential brothels. Sex trafficking victims are more likely to be Black or White while labor trafficking is more often Hispanic or Asian.

Victims suffer a wide range of health issues due to physical violence and psychological manipulation. Human trafficking (HT) victims often encounter repeated abusive actions including coercion, sexual violence, economic subjugation, physical assault, economic controls, and other power enforcing actions (Ross et al., 2015). Traffickers use many forms of control such as identification document confiscation, threats to report the victim to authorities for illegal immigration, threats to the person’s family, forced or coerced drug use, confinement, or a combination of these.

Three major processes lead to isolation and subjugation of victims (Barrows, & Finger, 2008). During the first stage, the trafficker may remove or coerce the individual from their home or source of protection. Through this stage, the person may be deprived of food, fluids, sleep and exposed to extreme stress, violence, and travel hazards. During the second stage, victims are forced into prostitution and exposed to violence, unprotected sex with high risks for sexually transmitted diseases, and undesired pregnancies. During the third stage, proper treatment is
withheld from victims, acute and chronic conditions worsen, and the ignored health issues lead to profound complications.

Traffickers target vulnerable groups such as persons with a history of child abuse, adolescents, those involved in the welfare system, and those involved in child protection system (Macias-Konstantopoulos, 2016). Additionally, individuals who are homeless and those who identify as gay, bisexual, transgender, or lesbian are considered more vulnerable to trafficking. Other high-risk groups include migrant workers, immigrants, racial minorities, ethnic minorities, persons with disabilities, and those with limited financial means.

**Challenges and Opportunities**

Several factors lead to missed victim identification. Some features include victims’ fear of harm, language barriers, and lack of knowledge regarding the extent of trafficking (CdeBaca and Sigmon, 2014). Other issues involve traffickers’ control, time limitations of the providers, and insufficient information on standard victim clinical presentation. Furthermore, trafficking victims’ traumatic experiences can create a distrust of healthcare personnel and systems (Zimmerman & Pocock, 2013).

**Barriers.** Human trafficking victims suffer from a wide range of issues preventing access to assistance and freedom (Institute of Medicine, 2014; Stevens & Barishaj, 2016). Traffickers closely monitor a victim’s activities, exerting manipulative control through physical and psychological means. Barriers involve illegal immigration status, restricting a person from access to healthcare, lack of access to identification documents, and frequent movement of the victim from city to city, or state to state. Other barriers include stigmatization, marginalization, poverty, insufficient education, and variations within human trafficking types.
Local resources or lack thereof, inadequate training for healthcare staff, the multidimensional needs of the victim and future survivor, and the safety risks for those assisting HT persons also hinders victims from access to help. The victim may feel shame or guilt due to a sense of complicity, may have a general distrust of authority, will fear a loved one may be harmed, and minors may fear being returned to an abusive home (Macias-Konstantopoulos, 2016). Health providers face the challenge to build trust and rapport with a patient who will be fearful and guarded.

**Opportunities.** While HT victims face many issues, several support systems have been set up to aid the victim’s escape and safety. For instance, the Department of Homeland Security has set up three avenues for immigration relief assistance available for victims in the U.S. illegally and working with U.S. law enforcement (Department of Homeland Security [DHS], n.d.). These include the T visa, the U visa, and the Continued Presence visa. When victims are identified, law enforcement applies for a certification with the U.S. Citizen and Immigration Services for immigrant relief and the victim will not be prosecuted or forced to leave the country.

In Virginia, many resources are available for further HT victim assistance (Polaris, 2017). Non-government organizations (NGOs), safe houses, and support services available include Latisha’s House Foundation, Gray Haven, Sexual Assault Victims Advocacy Services, Alamance for Freedom, Freedom 4/24, Richmond Justice Initiative, Virginia Beach Justice Initiative, Samaritan House, and The Arbor Charlottesville. Additionally, the National Human Trafficking Hotline is available 24 hours a day to provide assistance to trafficked persons. The hotline can be contacted through an easy to memorize phone number or a text messaging system for both trafficked persons and to report suspicions of trafficking.
Health Impact

Human trafficking victims suffer extensive health issues demonstrating a need for health staff to identify these individuals and intervene as quickly as possible (Barrows, & Finger, 2008). The varied injuries associated with trafficking stem from the type environment, confinement, violence, or forced drug use encountered with labor and sex trafficking. Organ trafficking is a less prevalent but significant health issue. This will result in a specific surgical scar and resulting organ dysfunction. Health problems associated with human trafficking fall under three categories; physical, reproductive, and mental (Macias-Konstantopoulos, 2016).

Physical health problems can include chemical or thermal burns and intentional traumatic injuries such as fractures, disfigurement, or cuts (Macias-Konstantopoulos, 2016). A trafficked person may have disc herniation, joint sprains, eye strain, muscle tears, and other overuse or accidental traumatic injuries. Environmental and chemical exposures lead to industrial chemical exposure, heat exhaustion, vision impairment, and hearing impairment. Persons may have communicable diseases such as tuberculosis, intestinal parasites, hepatitis A virus, or typhoid. Untreated chronic diseases, poor oral health, oral injuries, eating disorders, dehydration, and malnutrition may be noted. The person may have tattooing or branding on the skin and suffer from scabies, lice, or mycoses.

Reproductive health is especially problematic for sex trafficking victims. Specific complications related to sex trafficking include human immunodeficiency virus exposure, unwanted pregnancies with complications, unsafe termination of those pregnancies, painful intercourse, and damage to the vagina or rectum (Zimmerman, Hossain, & Watts, 2011). Other conditions include forced sterilization, sexually transmitted diseases leading to systemic
complications such as cervical cancer, acquired immune deficiency syndrome, infertility, and pelvic inflammatory disease (Macias-Konstantopoulou, 2016).

The last category of mental health issues presents with an extremely high number of trafficking victims (Macias-Konstantopoulou, 2016; Ross et al., 2015). These include posttraumatic stress disorder (PTSD), affective disorders, psychosomatic syndromes, and dissociative disorders. PTSD symptoms include memory difficulties, flashbacks, hypervigilance, and intrusive thoughts. Also important to note, PTSD severity is higher among trafficked persons and resembles conditions seen in torture survivors. Another frequent mental and physical health issue associated with trafficking is drug or alcohol addiction. One study found 94% of domestically trafficked women were addicted to drugs or alcohol and 100% had one or more mental health issues (Muftic & Finn, 2013).

Persons with affective disorders may demonstrate depression, anxiety, and panic attacks (Macias-Konstantopoulou, 2016). Those with psychosomatic syndromes have symptoms of fatigue, headaches, gastrointestinal distress, chronic pain, and dizziness (Ross et al., 2015). Trafficked persons may also demonstrate sleep disorders such as insomnia or nightmares. Dissociative disorders may present with varying degrees of detachment from reality or self. Other mental health issues include guilt, shame, hopelessness, self-loathing, low self-esteem, self-injurious behaviors, and high-risk behaviors. Lastly, trafficked persons may present for a drug overdose or suicidal attempts.

Other essential clinical presentation factors include persons who cannot speak English and are dependent on others for communication (Barrows & Finger, 2008). Patients will also demonstrate heightened anxiety, act fearful of the staff and situation, act fearful of revealing too much information, or may stay on the phone constantly texting a trafficker. The trafficked person
may be accompanied by a controlling person who insists on answering for the patient and staying with the person throughout the visit. The patient may also lack proper legal documentation such as a driver’s license, green card, or passport.

**Implications for Practice**

Individuals, who are currently or have been victims of human trafficking, suffer serious health risks including physical and psychological issues. One particularly prevalent form of human trafficking is sex trafficking. Studies demonstrate victims for sex trafficking often encounter the industry as a child, leading to years of neglect and abuse. This requires an extensive multi-professional approach to intervene from a range of experts (Konstantopoulos et al., 2013). These health issues imply a need for health care and practice change to improve long-term outcomes for survivors.

Interactions between health systems and trafficked persons occur daily. However, studies and post-trafficked persons report low rates of trafficking situation recognition and intervention (Patient Safety Monitor Journal, 2017). Consequently, interventional strategies and quality focused improvement within health systems are needed to identify and assist victims (Barrows, & Finger, 2008). Informational program implementation provides health practitioners education on structures and techniques to identify potential and established trafficking victims. In turn, increased comprehension improves clinical understanding and care. By focusing on this educational need, health staff will recognize victims quicker, and support survivor exit from these illegal and immense health risks.

**Incentives for Further Study**

Studies of health-care provider knowledge show low levels of comfort with clinical care and unawareness for the scope of trafficking (CdeBaca & Sigmon, 2014). The proposed
scholarly project will address this missed clinical opportunity for improved clinical interventions (Viergever, West, Borland, & Zimmerman, 2015). Protocols and a framework for clinical encounters of trafficking are lacking in many sites of practice (Chaffee & English, 2015). This project aims to improve four specific problems (Viergever et al., 2015). Issues identified were improved knowledge for statistics and evidence surrounding trafficking, signs and symptoms to flag, assessment techniques ensuring minimal trafficked person risk, and local and national resources to assist the individual. Goals involve provider knowledge improvement, trafficked person intervention protocol, and health-system practice implementation.

Trafficking within the U.S. calls for health staff human trafficking knowledge evolution, understanding potential clinical presentations of victims, and appropriate resource support. One study found 28% of European survivors reported encountering a healthcare practitioner while in captivity (Barrows, & Finger, 2008). However, none of these encounters led to the person’s freedom. Specific education utilizing a structured framework needs to be established for health staff to increase awareness and confidence (Chaffee & English, 2015). Another study examined staff experiences in an emergency room setting (Barrows, & Finger, 2008). While 29% believed HT was a problem, only 13% had confidence in victim identification and only three% of personnel ever received training on victim recognition.

One study by Ross et al. (2015), examined 180 employees in emergency departments in the United States showing 79% had knowledge of human trafficking. However, only 27% of practitioners believed the problem affected their population of patients and 6% of staff believed they had treated a trafficking victim. Of these employees studied, 95% never received structured training for a human trafficking response and most reported hesitancy or decreased confidence in human trafficking victim identification.
Project Aim and Purpose

Healthcare staff hold a unique position in the fight against human trafficking, often functioning on the front lines of trafficked person encounters. This study conducted an educational intervention providing healthcare workers with essential knowledge on human trafficking and health. Victims often have a mistrust of emergency department health personnel making recognition of underlying trauma and positive communication with the patient essential (Zimmerman & Pocock, 2013). However, health support and training on communication techniques for most health organizations is in the development stages and was a focus of the project. Insight was supported by best health recommendations through an advocacy network, mental health professionals, and experts in the field. Gathering expert information and providing education to practitioners also provided project aims.

Interviewing techniques served the next process of improvement. Regardless of the professional function, any health person encountering a patient intakes information. This information relates to an overall clinical picture that addresses and supports accurate clinical interventions. However, strictly adhering to baseline evaluation processes may cause staff to miss clues identifying victims (Greenbaum, 2014). In addition to missing significant clues, an unaware provider may conduct interviews that lead victims to shut down. This leads to an increased risk for physical harm and can further traumatize the individual. Staff were educated on trafficking issues to understand that traffickers control every aspect of their victim’s life, both physically and mentally. Psychological manipulation manifests through disorders like memory loss, irritability, depression, cognitive difficulties, insomnia, aggression, post-traumatic stress disorder, and suicidal ideation (Zimmerman et al., 2011). As a result, sensitive interviewing training was paramount and supplied the second aim of the project.
Careful interventional strategies connect trafficked persons to appropriate resources, and strategic follow-up gives power to survivors against this illegal practice. One of the riskiest times for trafficked patients occurs during extraction out of the industry. For instance, contacting the appropriate authorities must be handled carefully, because notifying state or federal authorities puts victims at a high risk for violent repercussions (Ross et al., 2015). Setting up safe contacts and a system for linking HT victims to support services improves the individual’s chances for liberation. Research recommends patient consent prior to contacting state or national support organizations unless the person is a minor. This last aim helped set up strategies that decrease patient risk and improve links to support services.

**Clinical Question**

This project addressed the clinical question: Will health care staff in an emergency department who have participated in an education intervention have improved awareness and referrals for trafficked person encounters?

The project’s clinical question involved a population and problem of interest, the educational intervention, the comparison, and the clinical outcome (Hall & Roussel, 2014). The problem focus involved misinformation and trafficking unawareness in the Virginia area. The focus explored HT prevalence as well as victim interactions among healthcare practitioners. Practitioners most likely to encounter this population include those working mental health, emergency medicine, maternity, and pediatric services (Ross et al., 2015). Considering the plethora of personnel required for emergency services, this area was the most appropriate site of intervention. Staff participation was voluntary and included anyone who agreed to the study and encounters patients in any form.
Education supplied the project’s intervention strategy (Hall & Roussel, 2014). Specifically, does establishing sex trafficking knowledge and then providing education on the issue improve healthcare staff expertise? By using a pre-intervention and post-intervention test, information for positive or negative changes demonstrate comparisons of staff knowledge before and after the education seminar. The beginning focus established the work force HT knowledge level base. Specific outcomes of interest included healthcare awareness, identifying strategies, confidence level when interacting with victims, appropriate interviewing techniques, and intervention strategies.

**PICO**

**P:** Healthcare personnel at a local emergency department in a four-hospital system.

**I:** Implement an education seminar to increase staff awareness, incorporate screening questions for potential victims, identify appropriate persons, and support interviewing techniques.

**C:** Pre-test and post-test measuring awareness, confidence, and ability to identify a suspected trafficked person in a clinical setting.

**O:** Increased awareness, confidence, attention to signs and symptoms within clinical encounters, and increased number of hotline and support service referrals for potential victims.

**PICO Question:** Does an educational intervention for health staff at a local emergency department with a pre and post-test measurement of outcomes increase awareness, confidence, screening, and referrals for potential human trafficking victims?
SECTION TWO: LITERATURE REVIEW AND SYNTHESIS

Database and Other Sources

The database review for the literature search started with the search engine CINHAL. A broad search initiated the review utilizing all databases, selected English only, dates from 2010 to 2018 with key words sex trafficking, and results of 19,935. Another search selected the database CINHAL only, dates from 2010 to 2018, English only, full text available with key words human trafficking in healthcare showing 49 results. Further expansion involved selecting all available databases with CINHAL, changing key words to human trafficking and healthcare, and increased results to 125. Another search selected human trafficking and health outcomes with 5 results.

ProQuest was the next database search engine selected because this has access to different material from CINHAL. Criteria included key words human trafficking, healthcare, dates 2010 to 2018, full text, and had 25,233 results. Another search utilized human trafficking and nursing, dates 2010 to 2018, full text, English only, and had 6,997 results. In order to narrow down results, the search was changed to “human trafficking and health” with the same previous parameters and results down to 63. A different search involved key words human trafficking and health interventions, 2010 to 2019, English only, and U.S. only with 1,436 results. Many different studies were selected for review including qualitative studies, analysis of current practices, health intervention studies, and expert reports.

Other research involved examination of current legal options for human trafficking victims, government agencies, and non-profit agencies. For instance, the American Medical Women’s Association founded physicians against the trafficking of humans or PATH. This will be helpful in the research forward because the organization supports healthcare provider awareness and education in HT recognition. U.S. citizenship and immigration services also helps
victims of HT with specialized visas. Other government agencies and law enforcement sectors support HT victim identification and interventions (Department of Homeland Security [DHS]. (n.d.). This information will be vital to developing a partnership with the health system and community.

**Exclusionary Criteria**

Studies were narrowed down with attention to health care and human trafficking interventions, specific studies with comparisons of results, studies completed in America, and clear connections to the problem trigger. Many studies focused on sex trafficking and information mainly pertained to this sub-type of illegal activity. A variety of studies and reports focus on international human trafficking issues, legal implications, and government agendas to combat HT. However, the project focuses on a hospital ED and American staff making international studies less impactful for the literature review.

Along with the international focus, journal articles providing basic information on human trafficking and health were used as review. However, these articles were not added into the finalized portion of supporting literature due to the lower level of evidence and insufficient independently validating information. Studies on other professions were also reviewed, but are not part of supporting literature. These include those targeting law enforcement interventions, social work specialties, and dentistry. Any studies related to immigration of non-U.S. citizens and trafficking within America were reviewed as part of the literature search.

**Study Results**

As demonstrated in the literature search, a plethora of research and experiences exists on human trafficking. Categories include labor trafficking, sex trafficking, child trafficking, child exploitation, trafficking related to specific countries, and international implications (Zimmerman
et al., 2011). Most study areas relate to social work, mental health counseling, or law enforcement. Additionally, many of the studies were conducted in various countries such as India, Nepal, the United Kingdom, or France. One broad study of eight cities demonstrated certain factors facilitate trafficking. These factors included social components such as child sexual abuse, cultural female objectification, and economic features like low income (Konstantopoulos et al., 2013).

Healthcare studies overwhelmingly cite a need for increased healthcare provider education and awareness. Furthermore, studies demonstrate the need for healthcare system coordination and involvement in HT victim policy and framework for care. One study by Becker and Bechtel (2015) examined providers in the pediatric population. Results demonstrated insufficient awareness, confidence, and knowledge of child sex trafficking (Beck et al., 2015). While pediatric providers often have limited knowledge and experience with potential HT victims, estimations show children comprise 25% of the trafficked population. This study demonstrates the need for both pediatric and adult HT focused education for healthcare providers.

A broader research article examined eight major cities with a substantial sex trafficking trade (Konstantopoulos et al., 2013). The results revealed poorly coordinated and erratic health care services for all of the health systems without a set framework for care. Additionally, the study noted numerous opportunities for each health system to participate in anti-human trafficking practices and provide better support for potential victims. This study supports a two-part approach with staff education and system coordination. Literature also notes high reports of post-human trafficked victims reporting at least one encounter with a healthcare professional.
One particular study demonstrates a quantitative analysis approach with a survey to survivors (Chisolm-Straker, Baldwin, Gaïgbé-Togbé, Ndukwe, Johnson, & Richardson, 2016).

Some studies are controversial and propose anti-human trafficking efforts infringe on sex worker’s independent rights and impede sexually transmitted disease (STD) programs (Ahmed, & Seshu, 2012). Only two studies proposed issues for sex worker independence and freedom with anti-trafficking activities. This alternative thought contradicts legal and health support for increased awareness and interventions of trafficking victims in the sex industry.

The other study examined ethnographic interviews with Columbian women, and argues labor and sex trafficking as more subjective encompassing both licit and illicit activities (Warren, 2012). A third study did not connect health and anti-trafficking efforts, but details an argument against law enforcement raid effectiveness (Ditmore, & Thukral, 2012). In this article, a case against anti-trafficking efforts without oversight and accountability is made.

**Studies of the Emergency Department**

While human trafficking victims may encounter many specialties in the health system, one of the highest points of contact is the emergency department (Chisolm-Straker, Richardson, & Cossio, 2012; Coppola, & Cantwell, 2016). Five core studies examined links to emergency department interventions at some level. Several of these scrutinized health practitioner knowledge and comfort responding to HT in the emergency room (Barrows, & Finger, 2008; Ross et al., 2015). These studies examined identification, awareness, and strategies for intervention within this department while noting the important role that healthcare providers have in fighting sex trafficking. Some departments where an educational intervention took place had never recognized a human trafficking victim and coordinated care (Newswire, 2017).
Literature Evaluation

Results demonstrate extensive provider discomfort to provide care, inadequate issue awareness, and lack of knowledge for referral and support protocols. One educational intervention actually increased recognition of other forms of abuse including domestic violence and sexual assault (Newswire, 2017). Other studies support training for pediatric department care and specialties. Most studies support at least a basic educational intervention for emergency department personnel and many suggest a need for continued education and training. Some challenges noted in the literature include reticence of the victim to reveal HT status, lack of specific numbers for local HT activities, and dangers posed to victims. Further training, particularly where healthcare providers are most likely to encounter victims, is recommended and will improve overall health system responses.

Conceptual Framework

**Iowa Model.** Evidenced-based projects are best formulated within a conceptual or theoretical framework that guides project initiation, formation, and integration (Hall & Roussel, 2014). In order to utilize research, the Iowa Model of Evidence-Based Practice to Promote Quality Care will be applied (Zaccagnini & White, 2014). This model separates two concepts into problem-focused triggers and knowledge-focused triggers that initiate project configuration.

Data is gathered for the problem-focused area and examined for clinical issues with potential interventions (Zaccagnini & White, 2014). This includes internal and external benchmarking data, clinical problem identification, financial data, risk management data, and process improvement data. By applying this problem-focused process to the research question, several triggers are noted. For example, long-term health problems occur when victims have clinical problems that are missed and the person is not identified as a trafficked person. Missed
clinical indicators also put victims at high risk for continued or increased trauma and relates to risk management data. Some continued areas for continued data collection due to a lack of specific information includes process improvement for HT encounters, financial data related to clinical encounter costs, and benchmarking data.

Knowledge-focused triggers essentially drive the research trigger due to national and international support for increased clinical responses to HT (Zaccagnini & White, 2014). Four elements create this section incorporating new literature, philosophies of care, national agencies and organizational standards, and institutional standards committee. Several government and professional organizations can help the research inquiry such as the Department of Homeland Security, Physicians Against the Trafficking of Humans, the Institute of Medicine, and the National Human Trafficking Resource Center (AMWA, 2017; Institute of Medicine, 2017; National Research Council, 2014). While many institutions are still in the process of forming standards of care for HT victims, basic ethical and practitioner standards support this research initiation and intervention.

The Iowa model guiding the project contains eight key factors for success (Lloyd, D'Errico, & Bristol, 2016). The first success factor is the knowledge-focused trigger (Brown, 2014). This comes from national recognition of a clinical knowledge gap and literature studies demonstrating a need for educational intervention of emergency department personnel. In this case, the knowledge gap triggered the project’s development and the local Emergency Department’s interest. The second factor focuses on organizational priorities and adapting to the specific health system process in order to best assimilate the study.

The others include gathering research, team development, the problem intervention compared to outcomes, an evaluation plan or research critique, the concrete research project, and
a dissemination and implementation blueprint (Lloyd et al., 2016). Both the emergency
department site and all participating health personnel will be impacted through this educational
intervention process (Tabak, Reis, Wilson, & Brownson, 2015). Through a carefully coordinated
implementation plan, the intervention will impact not only those who attend, but improve system
processes for the ED as a whole and prioritize HT care as new staff are on-boarded.

Once knowledge-focused triggers or problem-focused triggers are identified, the model
presents one vital question: “Is this Topic a Priority for the Organization?” (Zaccagnini & White,
2014). Without the health organization’s support, the project will not be successful and other
triggers must be considered. The organization must recognize the need for the intervention,
support process improvement, and be willing to change current practice habits. This study’s
purpose aligns with emergency department care, forensic nursing, community activism, and staff
knowledge improvement. On both the micro and macrosystem level, this intervention will
improve health interventions and outcomes for emergency department staff as well as meet
organizational priorities for quality care (Hall & Roussel, 2014).

Once organizational priorities are addressed, a team will be formed to coordinate and
support project integration (Hall & Roussel, 2014). Personnel includes the director for the
emergency department, the nursing manager for the unit, and department chair for Liberty
University. While the student was responsible for the project, the team provided insights into the
unit and research knowledge support for the project.

Following the next step in the Iowa Model, relevant research and related literature was
assembled (Iowa Model Collaborative, 2017). This supported the literature review process
outlined above in conducting a systematic search. Evidence was pondered for quantity, quality,
consistency, and risk. Sufficient, quality material was established in order to support the project.
Types of pertinent research included case reports, qualitative articles, systematic reviews, national guidelines, and theoretical frameworks. One main drawback to the issue of HT lies in a lack of randomized control trials and other higher levels of evidence. However, considering the nature of HT, this type of study was not feasible. Numerous well-designed studies created sufficient evidence to support practice change.

**Design.** The design and practice change provided the next step in the Iowa Model with nine formulation aspects (Iowa Model Collaborative, 2017). The first entailed engaging patients and verifying preferences in order to create a patient-centered versus an institution centered approach. For the proposed study, the patients consisted of emergency room department personnel who participated in the intervention. The second aspect involved resources, constraints, and approval considerations. Study design resources included committees, financial support, limitations for time and staff expectations, and Institutional Review Board (IRB) approval by the university and hospital system.

A third aspect to design involved localized protocol development (Iowa Model Collaborative, 2017). For the area, processes mainly support abused persons and victims of trauma, but do not specifically address HT protocol. The design will integrate previously set-up care with best HT intervention practice information. Creating an evaluation plan creates the fourth part. One aim for the design and project related to simplifying education and evaluation process in order to decrease confusion. The evaluation plan supported this with a post-test and post-intervention examination of outcome changes.

A fifth aspect for study design was baseline data collection (Iowa Model Collaborative, 2017). For the project, data included pre-test information on baseline knowledge and current referral estimates. Implementation plan development created the sixth part with a need for a
phased approach. Implementation continued to develop and the four-implementation phases supported the process. The seventh partition involved preparing clinicians and materials. For this section, the PATH process of education and the HEAL network information were utilized (AMWA, 2017). The eighth and ninth factors for design involve practice change adoption promotion, collection of data, and reporting post-pilot data (Iowa Model Collaborative, 2017).

**Final Process.** Following design formation, the model reiterated the question “Is change appropriate for adoption in practice?” (Iowa Model Collaborative, 2017). Once affirmed, integration and sustained practice change were examined through four elements. These included identifying and engaging key personnel, hardwiring alterations into the system, watching key indicators through quality improvement, and reinfusion where needed. Once these were completed, the process of dissemination occurred. Within the ED, this involved support of continued awareness for other clinical practices such as other emergency departments in the health system and the local health department clinic. Organizational backing supported continued process improvement, staff awareness, and educational consistency. Through this activation, dissemination and implementation occurred in the hospitals and clinics around the areas of Bedford. The educational intervention must positively improve provider human trafficking knowledge and translate to appropriate clinical practice.

**SECTION THREE: METHODOLOGY**

**Design**

This project utilized evidence based practice to perform an educational intervention in an emergency department education conference setting. The project was a quasi-experimental designed practice improvement study (Mateo & Foreman, 2014). The format included a pre-questionnaire, an education presentation on human trafficking factors in healthcare, post-
questionnaire, and a post-education intervention information gathering form. Relationships of the independent and dependent variables were examined to inform the impact of the education intervention on healthcare staff knowledge.

The pre-questionnaire measured baseline staff knowledge and included four key information pieces when encountering trafficked persons. Several clinically established resources and research articles supported the educational content (Baldwin, Barrows, & Stoklosa, 2017; International Labor Organization, 2014; Zimmerman et al., 2011). Additionally, project outcomes assisted with each portion of the educational PowerPoint. The post-questionnaire measured staff knowledge following the education utilizing the same four key information pieces. Following the two education sessions, forms were provided to staff with options to check mark any interventions provided to patients. Information on post-education forms were analyzed for long term impact of the education intervention.

**Measurable Outcomes**

Four outcomes appraised within this study following the education intervention included:

1. Awareness for human trafficked person encounters will increase for healthcare staff within the emergency department setting.

2. Healthcare staff will have increased confidence in recognizing potentially trafficked person’s clinical signs and symptoms.

3. Healthcare staff will have increased confidence utilizing interviewing and intervention techniques for potentially trafficked persons.

4. Healthcare staff will have increased confidence when referring trafficked persons to resources or utilizing new ICD-10 coding.
Human trafficking awareness measured the understanding of healthcare staff for the scope of the issue, connection to the community, and problem impact for health. Awareness sub-categories included the definition for HT, likelihood of contact with a trafficked person, types of trafficking, gender based influences, and projected life expectancies. The second outcome focused on common and subtle signs and symptoms for a trafficked person’s clinical presentation. Presentations can be varied with many combinations of physical and psychological presentations. Health variances include mental health, gynecological, infectious disease, traumas, and dental abnormalities (Zimmerman et al., 2011). Presentations are extremely nuanced and patients commonly do not understand or acknowledge a human trafficking status. Education on the clinical presentation nuances was critical to human trafficking education for healthcare staff.

Interviewing and intervention techniques comprise the third outcome and involve improved communication techniques specific for trafficked person situations. Sensitive interviewing offers an essential cornerstone to any interaction development and intervention (Barrows & Finger, 2008). This requires obtaining pertinent information while creating a positive rapport with the patient. A trafficked person’s fears and preconditioning by the trafficker further challenges health staff to provide sensitive interviewing. As a result, staff communication and interaction techniques with trafficked persons were essential education aspects to address.

The last outcome to be examined focuses on resource support and new ICD-10 coding guidelines by the Center for Medicaid and Medicare (U.S. Department of Health and Human Services, 2018). Resource support requires specific hospital and community-focused information. Steps for resource utilization depend on the willingness of the trafficked person. Potential referrals include a forensic nurse examination, physician examination and coding for current or past trafficking experiences, social workers or case managers, and criminal justice
operators. Depending on the patient’s needs, criminal justice may involve local police, federal officials, immigration officials, or defense attorneys (Barrows & Finger, 2008).

Any forensic nurse examination requires patient consent and becomes part of documentation. This has been very challenging for past trafficked person encounters within the health system. Any time a person chooses to escape from the trafficker, the person or person’s family are at a higher risk for violent reprisals (Ross et al., 2015). The higher risks must be considered for the patient and the decision cannot be forced unless the person is a minor. Several support places were recommended within a one to two-hour drive of the emergency department. One key recommendation involved utilizing the phone and texting information for the National Trafficking Hotline. This last outcome will continue to evolve over the coming years as new resources and systems are integrated. These four outcomes address project purpose through improved health interventions for HT.

**Setting**

The chosen clinical location was an emergency department at a local rural hospital. The setting for the education seminar was in two different conference rooms with appropriate setup for the PowerPoint presentation and comfort level for the subjects. The education intervention was followed by a four-week evaluation period. According to research previously outlined, emergency rooms are one of the most frequently used healthcare places for those in trafficking cases seeking healthcare interventions (Stevens & Berishaj, 2016; Barrows, & Finger, 2008; Ross et al., 2015). Several different reasons for this selection includes lack of health insurance, degree of injuries, and lack of awareness for other resources.

A specific setup must be considered, given the nature of the health protocol and correlating changes. The hospital’s ER has 50 inpatient beds, 14 outpatient beds, all exam rooms...
are private, allow two visitors per patient, and have security available. While exam rooms are 
private, any staff asking screening questions were counseled about maintaining a quiet voice and 
not discuss any results within earshot of other patients, visitors, or staff not involved in the 
patient’s care. This includes hallways, open nursing stations, near visiting rooms, and restrooms. 
Staff were also instructed to refrain from questions until the person could be interviewed without the accompanying visitor.

The difficulty in privately interviewing a trafficked person was recognized in preparation and reviewed during the education intervention. Utilizing the intervention process from one ED study, a room in the radiology department was recommended as a private place when needed to conduct an interview (Egyud et al., 2017). One specific instance mentioned for use included when a visitor resists leaving the patient alone. The radiology room was also advised if a staff member recognized the need for enhanced privacy and information security. Radiographs were recommended by the HEAL network and are broadly considered common places to privately interview patients at risk for harm. Staff were also encouraged to evaluate the patient and staff area settings for any other risks.

Subjects

The subject sample was determined by the number of persons willing to participate and support the study. This was a convenience sampling with the inclusion criteria of a current staff member in a professional capacity who interacts with patients on a regular basis. The goal sample was at least five to 10 people who work in the emergency department in a clinical capacity (Hall & Roussel, 2014). The actual number exceeded this with 20 people attending, but only 19 completed all of the portions of the form. In order to adhere to project guidelines and maintain statistical accuracy, information from one subject was discarded.
Exclusionary and inclusionary criteria was a consideration with project development and implementation. Any staff members including nursing staff, social workers, nursing assistants, physicians, physician assistants, nurse practitioners and security personnel were allowed to attend. Participant requirements included a minimum of conversational English, a current hospital employee, and planning to work for at least the following four weeks in the emergency department. Level of education and years of experience in the ED were the only attributes collected. Attributes such as race, age, gender, marital status, and socioeconomic status were not collected. The primary professions of the participants were registered nurses and nursing assistants. Persons agreeing to the study completed a short pre-and post-intervention questionnaire, attended the educational session, and filled in the post-intervention forms as appropriate.

Informed Consent

Each participant’s right was protected and a consent form was printed then attached to the front of the questionnaires. Consent was reviewed prior to directing the subjects to complete the pre-questionnaire. This review also included information on the inclusionary and exclusionary criteria. Both the consent form and verbal directions clearly demonstrate the subject had the right to decline or withdraw from the process at any time without risk of any repercussions.

Once IRB approval was received from both the university and hospital system, a recruitment email was also sent to ED providers inviting their participation. IRB from both of these institutions also approved the consent form and questionnaires. No written signatures were required for the consents. Clearly written instructions informed the participant on information content, purpose, and utilization for the project. The project supported ethical considerations including subject autonomy, respect for human dignity, and the right to privacy (Hall & Roussel,
While there was not a stipend attached to completing the questionnaire, the staff were reimbursed by Centra Health for conference time through education pay hours.

**Tool**

Leaders in nursing have called for victim screening implementation in every emergency department throughout the nation (Egyud, et al., 2017). Healthcare’s role in anti-human trafficking efforts is newly forged with increasing awareness on health staff interactions with victims and pathways for intervention. As a result, a national guideline addressing the screening process, interventions, and expected outcomes has not been established. Research shows an improvement in victim recognition through staff education and intervention planning (Egyud, et al., 2017). The measurement tool for gathering participant knowledge and information utilization consisted of a questionnaire that measured baseline and post-intervention knowledge (Moran, Burson, & Conrad, 2017).

A current questionnaire does not exist for gathering information of health staff human trafficking knowledge. As a result, the project tool utilized a Likert scale questionnaire and created each question according to project goals. The questionnaire was selected for this tool’s simplicity, efficiency, and feasibility of data collection (Leggett, 2017). This format supported baseline information collection and provided a format to comparatively evaluate data. Some underpinning concepts for the questions include avoiding loaded questions, avoiding two-part questions, refraining from using absolutes within the questions, refraining from leading questions, and clear terminology within each question.

Likert scale questionnaires assist testing feasibility, effectiveness, and reproducibility of the education (Leggett, 2017). The questionnaire supported the project through addressing four primary educational targets. These included HT awareness and confidence issues. A fifth
question was created to gage staff perception of education and implementation benefit as well as understand readiness for change. The questionnaire was reviewed by five people for clarity of thought and question simplicity. Following the review, the last question was changed to a yes or no answer, and reworded although the purpose of the question remained the same. The limit of five questions supported efficiency and simplicity. Review by the committee chair and clinical site coordinator further assisted validity and reliability confirmation.

**Data and Analysis**

Data collection points included number of persons attending the conference, number of participants starting the intervention, and the number of participants who completed the intervention (Moran et al., 2017). These data points were collected at the beginning of the conference and measured against non-responders and those who declined during the process. A Wilcoxon test was used to measure and determine a statistically significant difference between the mean values of the two data sets (Moran et al., 2017). The SPSS software assist data coding and analysis with the pre-questionnaire categorized as test one and the post-questionnaire categorized as test two.

**Feasibility Analysis**

**Personnel.** Supporting team personnel included the project chair, the site leadership contact, a measurement consultant, and an editor. The project chair assisted with laying out the project plan, supported and coordinated with site planning, and functioned as a significant scholarly framework resource. The site leadership supported through site consent, clear and quick communication, as a resource of information, and encouraged the project throughout the entire process. The measurement consultant provided expertise for data entry, excel statistical formulas, data applications such as graphs and figures, and information analysis. The editor
supported the project through formatting and grammatical analysis as well as preparation for publication submission.

**Technology.** The technology required included MS Word, MS PowerPoint, Excel for data, a computer with a connector to a projector for the presentation. This did not require any purchases and did not add any cost to the project. The Microsoft Word assisted information write up and the appropriate template for publication submission. The Microsoft PowerPoint software assisted with the proposal, education for the intervention, and final defense preparation. Excel software supported data entry, data organization, and data analysis. SPSS software was used in conjunction with Excel to improve organization and structure for data analysis. The projector was required for the education presentation and allowed all persons attending to clearly see important information.

**Budget.** Planned budget included potential technology purchasing cost, printing costs, and light snacks during the presentation. Pre-supported costs from the facility included reimbursement to all staff for the planned staff meeting hours. The meeting was scheduled prior to securing the date for the educational intervention and would have been completed regardless of the education. Actual cost included printing questionnaires, printing forms for post-intervention data collection, purchasing of a file box to place on the ED unit, and printing of a ICD-10 coding poster reminder for providers. The project was cost neutral to the organization because the team leader incurred all expenses.

**Cost and Benefit Analysis**

**Cost.** Student cost requirements included printing expenses, time with the project, program purchasing such as poster costs, and editor review of final research. As described in the above section, the emergency department was responsible for reimbursement of educational
work hours according to staffing current compensation rates. Technology needs included a computer system able to create a PowerPoint, access to Microsoft word, excel, SPSS, and a projector for the presentation. The location and conference space was provided by the organization and did not add any cost to the project. The chosen site demonstrated financial support of the education through time allowance during the staff meeting and conference room availability.

**Benefit for ICD 10 codes.** The new ICD 10 codes started in October 2018 support healthcare systems, health care providers, and healthcare support staff (Macias-Konstantopoulos, 2018). These diagnosis codes capture persons at risk for trafficking, currently in a trafficked situation, or report a historical trafficking incidence. Furthermore, the codes distinguish other types of abuse patients from specifically trafficked abuse situations. The changes support improved data collection involving risk factors, incidence rates, injury burden and comorbid illnesses, and information gathering on necessary resources for quality care.

Currently, financial reimbursement is not associated with trafficking awareness changes and the new coding system. Monetary value associated with the project and coding system includes improved awareness and recognition by healthcare providers and systems (Macias-Konstantopoulos, 2018). This leads to increased diagnostic accuracy as well as support services referrals thereby saving time and unnecessary use of resources. Long-term, this improved accuracy would support resource allocation, grant applications, and social program support for trafficked persons with improved, targeted, clearly outlined methods for interventions.

These new codes benefit primary diagnosis accuracy for the various abuse situations involved in trafficking (Macias-Konstantopoulos, 2018). Primary diagnostic accuracy improves population health data collection, prevention strategies, best treatment practices, services
rendered, mechanisms for reimbursement, and research funding. Similarly, the ICD 10 Z codes assist documentation for social factors, psychological factors, and individual factors associated with the trafficking situation. This improves health-related social needs data collection, social support program needs, unnecessary and unhelpful interventions, and psychological data related to trafficking situations. Over time, this data collection will support improved health systems, health policy, and resource utilization.

Significance and Implications for Practice

Human trafficking has become a public health issue and health staff education targets one improvement goal (Baldwin, Barrows, & Stoklosa, 2017). This education and human trafficking person encounter support provided quality improvement in healthcare practice. By focusing on ED staff, more effective and focused training occurred. Lack of knowledge, confidence with interactions, and misunderstanding of trafficked person issues creates barriers for all healthcare personnel. Specifically targeting these issues created an avenue for the entire department to improve care.

Responsibility for anti-human trafficking activities goes beyond law makers, law enforcement, and health leaders. Nurses, particularly emergency room nurses, must acquire recognition and interviewing skills for trafficked persons (Long & Dowdell, 2018). Through interactive learning, practical feedback, and situational discussions, nursing staff were able to improve HT knowledge. Nursing understanding supports broader initiatives such as the Hospitals Against Violence Initiative (American Hospital Association, 2018). Nursing training cultivates organizational improvements, community awareness and activism, and national initiative improvements.
SECTION FOUR: RESULTS

Demographics

Three basic points of interest were included in the demographic portion of the questionnaire. This included any history of human trafficking education, years of experience in the emergency department, and type of professional capacity in the ED. While other types of professionals were originally anticipated to attend, all of the staff who completed the questionnaires were a nursing or nursing support staff member. Providers were given the information through an emailed PowerPoint, but not included within the project data collection. Over half of the subjects reported no previous education on trafficking, 15% reported at least some previous education, and 30% declined to answer (See Figure 1). Lastly, the ranges of emergency department staff experience were collected. This involved 20% with less than one year of experience, 30% with one to three years of experience, 15% with four to six years of experience, 5% with seven to ten years of experience, 25% with more than ten years of experience, and 5% who did not complete this question (See Figure 2).

![Previous Educational Seminar or Conference on Human Trafficking?](image)

*Figure 1. Percentages of persons with history of education on human trafficking.*
Main Findings

Pre-Education Findings. Five key elements were examined through the education intervention pre and post-questionnaire forms. These included awareness, confidence level for recognizing signs and symptoms of trafficking, confidence level for interviewing potentially trafficked persons, confidence level for providing resources to trafficked persons, and likeliness of the person to recommend the education. A total of 19 people completed the pre and post-questionnaires. All persons remained in the room for the education and an opportunity for questions was provided during the seminar.

The first question results ranged from five to 40% with all respondents completing this question. Specifically, 15% responded not aware, 15% responded somewhat aware, 40% responded mildly aware, 25% responded moderately aware, and 5% responded very aware (see
Figure 3). The second question results ranged between 5 to 35% with all respondents completing the question. Results included 10% responded not aware, 25% responded somewhat aware, 35% responded mildly aware, 25% responded moderately aware, and 5% responded very aware (See Figure 4). The third question results ranged from 0 to 35% and all respondents answered the question. Specific results included 35% who responded not aware, 30% who responded somewhat aware, 25% who responded mildly aware, 10% who responded moderately aware, and 0% who responded very aware (See Figure 5).

![Pie chart](image)

*Figure 3. Pre-education level of human trafficking awareness*
The fourth question results ranged between 0 to 45% with all respondents completing the question. Results included 45% responded not aware, 10% responded somewhat aware, 40% responded mildly aware, 0% responded moderately aware, and 5% responded very aware (See Figure 6). The fifth question results varied between 0 to 50% with all questions answered by the
respondents. Results included 0% responded not likely, 0% responded somewhat likely, 10% responded mildly likely, 50% responded moderately likely, and 40% responded very likely (See Figure 7).

**Figure 6.** Pre-education confidence level for providing resources and interventions.

**Figure 7.** Likelihood to recommend education.
**Post-Education Findings.** Immediately following the education on human trafficking, a post-education questionnaire was collected. This questionnaire matched the pre-education form with each of the five questions and demographic collection. Both forms were collected together and compared for changes as well as completion. One person did not complete the post-questionnaire form. Although the sample was small, this form was excluded for statistical analysis accuracy.

The first question results ranged from five to 60% with 5% who left the question blank. Specifically, 0% responded not aware, 5% responded somewhat aware, 10% responded mildly aware, 60% responded moderately aware, and 20% responded very aware (See Figure 8). The second question results ranged between 0 and 60% with 5% who left the question blank. Results included 0% responded not aware, 5% responded somewhat aware, 15% responded mildly aware, 60% responded moderately aware, and 15% responded very aware (See Figure 9).

![Figure 8. Post-education level of human trafficking awareness.](image)
Figure 9. Post-education confidence level for human trafficking signs and symptoms recognition.

The third question results ranged from zero to 35% with 5% who left the question blank. Specific results included 0% who responded not aware, 20% who responded somewhat aware, 35% who responded mildly aware, 30% who responded moderately aware, and 10% who responded very aware (See Figure 10). The fourth question results ranged between 0 to 40% with 5% who left the question blank. Results included 0% responded not aware, 10% responded somewhat aware, 25% responded mildly aware, 40% responded moderately aware, and 20% responded very aware (See Figure 11). The fifth question results varied between 0 to 60% with 5% leaving the question blank. Results included 0% responding not likely, 10% responded somewhat likely, 5% responded mildly likely, 20% responded moderately likely, and 60% responded very likely (See Figure 12).
3. What is your confidence level on interviewing human trafficking persons?

![Pie chart showing confidence levels]

*Figure 10.* Pre-education confidence level for human trafficking encounter interviewing.

4. What is your confidence level on providing resources and information to potential human trafficking persons?

![Pie chart showing confidence levels]

*Figure 11.* Pre-education confidence level for providing resources and interventions.
Post-Intervention Data-Collection. The post-intervention collection of data was completed over four weeks. This involved emergency department personnel, who attended the information seminar, to fill out a patient HT intervention form for any selected interventions utilized during the set time-frame. Results with this portion were difficult to obtain with a total of fifteen forms completed. Of these forms, potential human trafficking persons were noted without any intervention completed. Almost all noted instance were associated with a psychiatric issue. None of the persons who completed the form noted an ICD 10 code or suggestion.

Descriptive Statistics

Wilcoxon Test. The Wilcoxon test is a signed-rank test and functions as the nonparametric equivalent test to the dependent t-test (Laerd Statistics, 2018). This test is specifically used for comparison of two sets of scores arising from the same subjects. While a z-test and paired t-test were initially considered for data analysis and comparison, the Wilcoxon test was determined as the most appropriate because of the type of study and available data. The
Wilcoxon test accounts for ties and cancels them out creating the ability to see the differences in scores. This test focuses on values that changed rather than values that stayed the same.

Certain parameters were met in order to utilize this test (Laerd Statistics, 2018). The dependent variable was measured at the ordinal level using a Likert scale for the questions. The independent variable was measured with two categorical related groups. Related groups equaled the same subjects present in both groups of data. This was met with each subject filling information for the pre and post-test thereby measuring the same dependent variable on two occasions.

**Ranks.** The ranks data allows more detailed interpretation of the pre and post-questionnaire scores (Laerd Statistics, 2018). Negative ranks were 14 for question one, 16 for question two, 15 for question three, 15 for question four, and seven for question five. The positive ranks for question one equaled zero, question two equaled zero, question three equaled one, question four equaled one, and question five equaled five. Ties calculated included five for question one, three for question two through four, and seven for question five. The total equals the number of subjects counted within the ranked scores or the total number of people who completed both the pre and post-questionnaire forms. One form was not included due to lack of questionnaire completion.
<table>
<thead>
<tr>
<th>Pre_Q - Post_Q</th>
<th>Negative Ranks</th>
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<tr>
<td>Pre_Q1 - Post_Q1</td>
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<td></td>
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<tr>
<td>Positive Ranks</td>
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<td>.00</td>
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<td>Total</td>
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<td></td>
<td></td>
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<tr>
<td>Pre_Q2 - Post_Q2</td>
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<td>136.00</td>
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<td>Positive Ranks</td>
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<td>.00</td>
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<td>Ties</td>
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<tr>
<td>Total</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Pre_Q3 - Post_Q3</td>
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<td>4.00</td>
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</tr>
<tr>
<td>Total</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**Clinical Significance.** Pre and post question results for each question were calculated based on the Wilcoxon signed ranks test. The standard normal distributed z value tests significance. Results for questions one through five are provided below and values ranged between negative three-point-three-seven-four to negative point five-seven-seven. The greatest outlier for the observed results is question five. Questions one through four also showed values less than 0.05 demonstrating statistical significance. When asymptomatic significance is less than 0.05, there is a statically significant relationship between the two values. In other words, a high likelihood exists that the education intervention changed scores between the pre and post-questionnaires. The Wilcoxon test results demonstrate sufficient evidence for improvements through education on human trafficking encounters in healthcare based on the pre and post education survey.
Table 2.

*Statistical results with the Wilcoxon Test*

a. Wilcoxon Signed Ranks Test
b. Based on positive ranks.

<table>
<thead>
<tr>
<th>Test Statistics</th>
<th>Pre_Q1 - Post_Q1</th>
<th>Pre_Q2 - Post_Q2</th>
<th>Pre_Q3 - Post_Q3</th>
<th>Pre_Q4 - Post_Q4</th>
<th>Pre_Q5 - Post_Q5</th>
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</thead>
<tbody>
<tr>
<td>Z</td>
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<td>-3.666&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-3.374&lt;sup&gt;b&lt;/sup&gt;</td>
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<td>-5.77&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
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<td>.000</td>
<td>.001</td>
<td>.001</td>
<td>.564</td>
</tr>
</tbody>
</table>

**Summary of Results**

*Figure 13.* Summary of pre and post-questions with median answer results.
SECTION FIVE: DISCUSSION

Improvements

Interactions with emergency department persons and statistical analysis demonstrated that education was informative and productive. Statistical significance applies, but the research’s main purpose lay in evidence-based practice intervention supported by the Iowa Model’s problem-focused trigger (Moran et al., 2017). Several people described scenarios throughout their career in which HT interviewing skills and resource support knowledge would have changed patient interaction and care. Furthermore, participants noted improved knowledge regarding statistical data of trafficked person encounters in healthcare, social issues and complications for trafficked persons, and national guidelines for care.

Questions one through four showed improvements in awareness, signs and symptom recognition, interviewing, and intervention information. This was demonstrated by increased ratings for each question using the Likert scale. The median improvement involved at least one level increase and question four had a two level median increase. Discussion on human trafficking, research support for educational information, and detailing practical improvements for patient care support were positive advances of the intervention.

Limitations

Missing Data. Twenty questionnaires were completed for both days the education intervention was offered. Those declining to participate were not counted or singled out in any way, and therefore the number cannot be determined. Additionally, one form was discarded because the post-questionnaire was not completed. While the Wilcoxon test accounts for data that is equal, the test cannot account for extensive missing information.
Professionals in Attendance. Creating HT encounter quality improvement within the emergency department was highly challenging due to comfort with the sensitive issue and responsibility constraints for providers. Persons attending the education were exclusively nursing, nursing support, and ancillary staff. Some limitations for staff included low confidence for discussions with patients as well as a disconnect between nursing responsibilities and ICD 10 coding.

A low number of emergency department providers employed and employment responsibilities creating tight time constraints. In order to create a cohesive quality improvement in care, providers were given the material for human trafficking encounters. However, this limited the ability to comprehensively gather data and educate the entire emergency department. Additionally, lack of provider participation limits quality improvement effectiveness because providers would have the most incentive for HT specific ICD 10 coding utilization.

Post-Intervention Data Collection. The post-intervention data collection is limited due to the shortened time-frame and lack of forms completed. Although the informational seminar demonstrated improvement in understanding of human trafficking encounters, participants demonstrated difficulty with application of the knowledge. This situational discomfort is similar to other study results where healthcare personnel fail to recognize and understand how to intervene for these vulnerable persons. Through discussions with leaders in the emergency department, key issues were highlighted. These issues included difficulty during the interviewing process, continued discomfort with intervention efforts, fear of labeling persons as trafficked, and lack of understanding regarding age and drug abuse vulnerabilities. Persons were also unlikely to understand the necessity, various applications, importance, and future use for ICD 10 code selection.
Practice Implications

This project impacted the emergency room at the hospital through increased care quality, improved patient support, and benefit for the surrounding community (Moran et al., 2017). Improved recognition and intervention included any pediatric, adolescent, or adult patient and across varying cultural and racial backgrounds. Benefits involved gaining human trafficking knowledge, understanding of red flags for trafficked persons, necessary steps for a safe environment, and interviewing skills. Other improvements included information distribution on new national ICD 10 codes, support services within the hospital system, national support centers, resources available, and best practice methods for providing resource information to trafficked persons.

Changing staff perceptions and clarifying trafficking encounter facts aided overall practice improvements within the unit. Some of false beliefs involved perceptions of trafficked person age ranges, likelihood to ask for help, dangers faced, and abuses inflicted. Specific improvements for the ED included enhanced nursing ownership for trafficked person encounters, new awareness for the ICD coding, and support for communication with providers and other staff about at risk individuals. Future practice improvements should involve support for health staff interviewing skill confidence and ICD 10 coding utilization.

On a larger scale, continuous education, awareness, and improved interventions impacts patient health on the community, state, and national level (Zimmerman et al., 2011). Targeted education within the emergency department modified staff perspective. This improvement allowed staff to proactively change the approach to patient care and increase understanding of that patient’s needs (Barrows & Finger, 2008). While the patient to clinician interaction impacted the micro level, the changes hospital-wide and in the surrounding community improved health
outcomes on a macro level. Education supported state and national goals to improve the quality of care by improving victim identification and addressing department quality of care measures.

**Research Implications**

The next steps for research include ICD 10 coding comprehension and utilization and increased communication within units and clinic settings (Macias-Konstantopoulos, 2018). Considering the recent confirmation and implementation of ICD 10 coding specific to human trafficking persons, healthcare staff understanding and use should be evaluated. This project assisted with education and support for coding specifically designed to gather data and improve research as well as intervention capabilities. The changes provide comprehensive coding for minors, persons with a history of trafficking, and those currently being trafficked. The next potential research step involves evaluating if and how these codes are used.

Nursing in relation to ICD 10 code comprehension and utilization should also be evaluated. Nurses often spend more face-to-face time with patients leading to an increased ability to recognize HT encounters. Nurses can also function as the link between HT persons and providers as well as consults for other resources. This would be a challenging endeavor because nurses are unlikely to link coding and billing with primary nursing responsibilities and care.

The project reflects previous studies and quality improvement measures regarding health staff comprehension of HT encounters. Information from the questionnaires and personal reports confirmed a discomfort and lack of knowledge regarding encounters. However, similar to other studies, clarification of accurate HT statistics and best practice methods improved clinical knowledge and patient care techniques. Further studies can be completed on communication between ancillary staff, nursing, and providers regarding these vulnerable patients and the best plan of care.
Future analysis and research will help establish long-term expertise retention. Potential studies include increased educational interventions for free clinical care areas, community settings, nursing education areas, physician education areas, women’s health, and pediatric clinics (Barrows & Finger, 2008). An additional research project involves a study on survivors of trafficking and verifiable insights regarding interactions with healthcare personnel as well as health systems.

Although extensive information was found regarding the health impact of human trafficking on an individual, further research into post-trafficked persons’ health outcomes is indicated (Macias-Konstantopoulos, 2016). Research should involve an evaluation on links to healthcare, the biggest health challenges for the trafficked individual, and the varied health sources needed for quality of life. Strides in HT reduction and improved interventions will occur through continued data collection and research around many levels of healthcare.

**Dissemination and Integration**

The next steps for dissemination and integration involve continued training on ICD 10 codes for providers, a large team integration approach to quality HT interventions and care, and dissemination of final project paper results to digital commons. The new ICD 10 coding system specific to human trafficking persons was only implemented in October 2018 for fiscal year 2019 (U.S. Department of Health and Human Services, 2018). Considering the recent coding changes, lack of confidence as well as training on HT, a project focusing on understanding and use of the codes by providers is in order. Furthermore, training on this available measurement tool should be given to leaders, administrators, and coding specialist within the hospital system. This coding system has the potential to enhance HT population statistics, collect historical information for
former HT persons related to acute and chronic medical conditions, improve data analytic accuracy, and guide future health policies (Macias-Konstantopoulos, 2018).

The next step for the health organization should be a broader based approach with a team of informed persons. The larger team-based approach has been used in many hospital systems with success including one in the midwestern United States that utilized a medical legal partnership (Schwarz, Unruh, Cronin, Evans-Simpson, Britton, & Ramaswamy, 2016; Zimmerman et al., 2011). This requires commitment and input from providers, security personnel, nursing staff at all levels, forensic nurse specialists, administrators, and support staff. Best practice for fighting human trafficking through interventions for trafficked persons encountered in the health system involves a multi-layered team approach.

Lastly, the dissemination plan includes submitting the project paper to digital commons, submission to a health journal, potential research conferences, podium presentation, and a poster presentation. Two specific conferences include the Virginia Henderson Research Symposium and Liberty Research Week. Further dissemination comes through reflection and discussion of current anti-trafficking projects. Through conversations, continued education, and support for colleagues throughout the HT learning process, the goals of health staff involvement and improved intervention will continue. As healthcare personnel learn these essential aspects, interaction, intervention, and post-care methodology quality will improve.

**Conclusion**

Human trafficking impacts a range of enterprises and victims often intersect with healthcare staff. By examining the issue, researching background information, preparing and implementing a methodology for change, analyzing and evaluating that change, an evidence-based study was established (DNP Handbook, 2017). Increasing awareness, changing clinical
evaluation, cultivating interactions with patients, and improving interventions, aided health staff who directly care for human trafficking victims.

Nursing provides a vital role to recognize and intervene in trafficked person situations, link patients to resources, communicate concerns with providers, and improve emergency department protocols. Similarly, providers perform essential services relating to HT encounters including improved ICD 10 coding, patient interviewing, assist with quality outcome improvement, and link patients to follow-up care. Human trafficking issues impact both professions as well as every emergency department specialty and supporting staff, system administrators, coding and billing, and community support services. Through current education, future research, and quality improvement projects, health system responses will improve.

REFERENCES


Konstantopoulos, W. M. (2016). Human trafficking: The role of medicine in interrupting the cycle of abuse and violence. *Annals of Internal Medicine, 165*(8), 582-588. doi:10.7326/M16-0094


### Article 1

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Study Purpose</td>
<td>Provide information on statistics of Human Trafficking and ways for healthcare providers to help</td>
</tr>
<tr>
<td>Sample (characteristics of the sample: demographics etc)</td>
<td>No study setting. Demographic addressed are any healthcare professionals.</td>
</tr>
<tr>
<td>Methods</td>
<td>A non-experimental, descriptive article.</td>
</tr>
<tr>
<td>Study Results</td>
<td>Information provides human trafficking statistics. Article also outlines how healthcare professionals can help, signs and symptoms of a trafficking victim, and questions to ask when facing a potential victim.</td>
</tr>
<tr>
<td>Level of Evidence (use Melnyk Framework)</td>
<td>Level 7: Expert Opinion</td>
</tr>
<tr>
<td>Study Limitations</td>
<td>Only an opinion from a clinician without an actual study, intervention, or results to examine.</td>
</tr>
<tr>
<td>Would use as evidence to support a change (yes or no) provide rationale</td>
<td>Has a limited potential to support change because of the level of evidence. However, the article does support practical interventions to a complicated issue.</td>
</tr>
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</table>

### Article 2

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<tbody>
<tr>
<td>Study Purpose</td>
<td>Examine the public health system and response for women and girls in sex trafficking in eight cities across the globe</td>
</tr>
<tr>
<td>Sample (characteristics of the sample: demographics)</td>
<td>Subjects were 277 respondents from health and non-health sectors. Subjects were located in eight cities across the globe and each city had a public health infrastructure focus with a significant sex trafficking trade. Cities selected included New York, Mumbai, Kolkata,</td>
</tr>
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<td><strong>etc.)</strong></td>
<td>Manila, Los Angeles, Rio de Janeiro, Salvador, and London.</td>
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<tr>
<td><strong>Methods</strong></td>
<td>This was a qualitative study conducted through interviews with an inductive exploratory approach. Research took 12 months with a focus on 8 specific case studies within the cities selected. Researchers were paired up and conducted interviews by a semi-structured interview guide. Information gleaned in these studies focused on the current response to trafficking in the health system, city specific determinants to the regions human trafficking issue, opportunities for improvement in the current response strategy, and barriers to participation in anti-trafficking activities. Interpreters were necessary in two cases in Brazil and the amount of time for interviews averaged to 60 minutes. Information was obtained through audio-recordings and researcher notes. The audio files were translated and transcribed into English as well.</td>
</tr>
<tr>
<td><strong>Study Results</strong></td>
<td>Results were gathered through respondent’s perceptions. A theme of uncertainty in trafficking prevalence within the correspondent’s city was found. Results also showed respondent’s understanding for key trafficking determinants. These include child sexual abuse, family dysfunction, low self-esteem, desire for affection, inappropriate boundaries for sex, insufficient formal education, economic insecurity, and insufficient economic opportunities. Other factors included gender inequalities in a social and cultural context and female sexual objectification. A weak health system response was cited by respondents for each city studied.</td>
</tr>
<tr>
<td><strong>Level of Evidence (use Melnyk Framework)</strong></td>
<td>Level 6: Qualitative study</td>
</tr>
<tr>
<td><strong>Study Limitations</strong></td>
<td>The study could not be examined on a longitudinal basis because of the cross-sectional nature of research. Important groups were not included such as males. Anyone considered still being trafficked were excluded. While the illegal industry makes quantitative studies difficult, more concrete statistics and data would decrease information limitations and improve the study. This study also has lower external validity and while the information is helpful for larger city public health systems, changes to a small practice or emergency department could be problematic.</td>
</tr>
<tr>
<td><strong>Would use as evidence to support a change (yes or no) provide rationale</strong></td>
<td>This study provides significantly supportive evidence for increased education and health system set-up for the proposed study. The research will be used to support the project.</td>
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### Article 3

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<tbody>
<tr>
<td>Study Purpose</td>
<td>This study had an investigative focus examining opinions and second-hand knowledge of authorities in the field.</td>
</tr>
<tr>
<td>Sample (characteristics of the sample; demographics etc)</td>
<td>Sample selected included six people who operated as front-line service staff for human trafficking victims. Type of informants included nurses, clinical directors, social workers, anti-trafficking program developers and directors</td>
</tr>
<tr>
<td>Methods</td>
<td>This research was a qualitative study that used thematic analysis to research front-line service provider stories.</td>
</tr>
<tr>
<td>Study Results</td>
<td>Results showed three overall themes. This includes pimp manipulation and enculturation, trauma aftereffects, and personal healing. Sub-themes included trafficking world entry, daily life within the trafficking world, triggering mechanisms, survivor engagement, trauma processing, and holistic healing factors.</td>
</tr>
<tr>
<td>Level of Evidence (use Melnyk Framework)</td>
<td>Level 7 evidence: Expert opinion</td>
</tr>
<tr>
<td>Study Limitations</td>
<td>Limitations for the study includes small sample size, information gleaned from second-hand knowledge only, and limited understanding of trauma worker’s mindset and influenced perceptions. Other limitations involve inability to validate findings, inadequate translation into practice. Most front-line services staff encounter adult women which does not address understanding of minors within the trafficking world.</td>
</tr>
<tr>
<td>Would use as evidence to support a change (yes or no) provide rationale</td>
<td>This article is useful for the project change because it supports provider and multi-professional staff understanding for victims within the trafficking process</td>
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### Article 4

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<tbody>
<tr>
<td>Study Purpose</td>
<td>This study aimed to provide training on human trafficking for persons working in an ED at one of the 20 largest San Francisco Bay Area hospitals.</td>
</tr>
<tr>
<td>Sample (characteristics)</td>
<td>For this study, 20 emergency departments (ED) in the San Francisco Bay Area were randomly separated into a delayed and</td>
</tr>
</tbody>
</table>
of the sample: demographics, etc | immediate intervention comparison group. A total of 258 people participated in the study, 141 of which were in the immediate intervention group and 117 of which were in the delayed intervention group.

Methods | This study used a randomly controlled trial by randomizing the EDs selected for each intervention. The intervention consisted of a standardized educational presentation that involved information on relevance of human trafficking (HT) to healthcare, background of human trafficking, potential victims clinical signs to know and screen for trafficking, and a potential victim's referral options. Additionally, each participant completed a pre-test and post-test. The intervention was then compared by examining the pre- and post-test change.

Study Results | For pre-test ratings of knowledge importance, both groups reported a high importance to the profession and no interventional effect was found. For information on available resources, an increase from 7.2% to 59% was found in the intervention group, but did not change in the delayed intervention comparison group at 15%. Subjects in the intervention group who suspected a patient as a HT victim changed from 17% to 38%. However, the delayed intervention group did not change at 10%. Lastly, those who participated in the intervention group reported increases in level of HT knowledge at higher rates compared to persons in the delayed group.

Level of Evidence | Level 2 randomized control trial

Study Limitations | The main limitation for the study relates to a difficulty to utilize and propel other research studies not in the San Francisco Bay Area. For instance, the scope of human trafficking is difficult to determine for other areas of the country making policy and system change difficult. Another limitation is the specific age group for pediatrics and lack of ability to apply this information for adult victims. Lastly, there may be unique factors that separate a young child victim from an adolescent one and this needs to be further explored.

Would use as evidence to support a change (yes or no) | This study will be useful for the practice change because it is a larger scale study on an educational intervention for staff in different hospital emergency departments.
### Article 5

| **Article title, author etc. (APA format)** | Ahmed, A., & Seshu, M. (2012). "We have the right not to be 'rescued'...": When anti-trafficking programmes undermine the health and well-being of sex workers. *Anti-Trafficking Review*, (1), 149-165. |
| **Study Purpose** | This study examined the experience of one case worker in India and the impact of anti-human trafficking efforts on HIV prevention. |
| **Sample (characteristics of the sample: demographics etc)** | The sample characteristics involve persons in a sex worker collective, Veshya Anyay Mukti Parishad, to provide information. Interviews involved lawyers, police officers, and members of the collective. Further information on sample characteristics was not detailed |
| **Methods** | The methodology used interviews and focus group discussions. This was often in partnership with communities affected by human rights violations |
| **Study Results** | Interview results show an impact of raid and rescue practices on HIV prevention programs for sex workers |
| **Level of Evidence (use Melnyk Framework)** | Level 6: Descriptive design |
| **Study Limitations** | This study is greatly limited not only because of the lower level of evidence, but also for the presuppositions, lack of methodological detail on interviews, and clear results of answers. Conclusions are very difficult because of the lack of detail in the study. |
| **Would use as evidence to support a change (yes or no) provide rationale** | This does not support a change in practice but is a useful comparison article for better insight into the human trafficking issues. |

### Article 6

| **Study Purpose** | The study purpose involved building evidence for human trafficking and health in the U.S. This study also aimed to describe the |
### Sample

**Characteristics of the sample:** The sample 173 participants who were survivors, included all genders and ages, resided in the U.S. and were able to participate in the survey.

### Methods

This was an anonymous retrospective study through a survey method. Surveys were online and some paper surveys were printed and distributed through anti-trafficking organizations.

### Study Results

117 participants reported seeing a healthcare provider while being trafficked. 56% reported visiting the ER or an urgent care practitioner. The others reported visits to a primary care provider, dentists, and obstetrics and gynecologist.

### Level of Evidence (use Melnyk Framework)

Level 4: Correlational design

### Study Limitations

Limitations include insufficient details on health interactions between the victim and provider, type of care needed and received, and lack of information on trafficking barriers for the victim to seek help.

### Would use as evidence to support a change (yes or no) provide rationale

This study is greatly beneficial to support a change because of the supporting evidence for interactions between healthcare and human trafficking victims.

### Article 7

**Article title, author etc. (APA format)**


**Study Purpose**

A pilot training intervention for emergency department providers on human trafficking, how to identify it, and how to treat these patients.

**Sample**

Sample included 104 staff from the emergency department. Professions involved emergency medicine residents, ED attending, ED nurses, and hospital social workers.

**Methods**

This is a cross-sectional study with two parts. The first has a random sample of health care providers in four institutions fill out a simple questionnaire. The second has an intervention with a 20-minute didactic training session. The pre and post questionnaire provided data for analysis of the intervention.

**Study Results**

Responses to knowledge of what human trafficking was equalled...
79.4%, only 6.1% affirmed ever encountering a human trafficking victim, almost all of the subjects reported never receiving information on the clinical picture of a HT victim, and 95% reported never receiving instruction on treating a HT victim. 26.7% also reported HT does affect their population, 7.2% reported that it does not, and 59.4% reported unsure.

<table>
<thead>
<tr>
<th>Level of Evidence (use Melnyk Framework)</th>
<th>Level 3 Quasi-Experimental because of the intervention used.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Limitations</td>
<td>Limitations include information on differences between staff perception and professional level. Other potentially pertinent information includes subject background of knowledge on HT, differences in gender, and differences in ages.</td>
</tr>
<tr>
<td>Would use as evidence to support a change (yes or no) provide rationale</td>
<td>This provides a solid foundation for a change in practice because of the knowledge deficit for emergency department staff and the lack of clear interventions for the practice.</td>
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### Article 8

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<tbody>
<tr>
<td>Study Purpose</td>
<td>This study was designed to estimate the proportion of National Health Service (NHS) professionals in England who have come into contact with HT victims and measure the professionals knowledge and confidence to respond to these victims.</td>
</tr>
<tr>
<td>Sample (characteristics of the sample: demographics etc)</td>
<td>NHS professionals included maternity, pediatrics, emergency medicine, mental health and other disciplines. Total participant number equaled 782.</td>
</tr>
<tr>
<td>Methods</td>
<td>This study used a cross-sectional survey method and a questionnaire that was developed by an independent panel. This questionnaire asked about prior training and contact with an HT victim, perception and actual knowledge, confidence in the professionals response to HT, and interest in future training.</td>
</tr>
<tr>
<td>Study Results</td>
<td>Results showed 13% believed they had previous contact with a HT victim, 86% reported lacking knowledge on questions to ask, and 78% reported insufficient training. 53-71% reported lacking confidence</td>
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</table>
for referrals with attention to gender and adult versus child. 95% were unaware of the scale of HT and 76% were unaware that calling the police put the HT person at greater risk.

<table>
<thead>
<tr>
<th>Level of Evidence (use Melnyk Framework)</th>
<th>Level 4 Correlational design.</th>
</tr>
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<tbody>
<tr>
<td>Study Limitations</td>
<td>The survey was conducted in secondary care only and may not be applicable to non NHS settings or to primary care. Staff and institutions may not represent other settings because the sites chosen were in higher reported trafficking areas.</td>
</tr>
<tr>
<td>Would use as evidence to support a change (yes or no) provide rationale</td>
<td>This article supports a change in practice through education of health services personnel. Although the study was conducted in England, similarities and information supports further changes within the U.S. health system.</td>
</tr>
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### Article 9

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<tbody>
<tr>
<td>Study Purpose</td>
<td>The study aims to identify relationship of risk factors to physical, sexual, and mental health outcomes in three categories of women who were exploited for sex in the U.S.</td>
</tr>
<tr>
<td>Sample (characteristics of the sample; demographics etc)</td>
<td>The sample includes international trafficking victims, domestic trafficking victims, and non-trafficked sex workers. Total number of participants was 38. Variables of demographic background and general experiences were also noted.</td>
</tr>
<tr>
<td>Methods</td>
<td>The method involved semi structured qualitative interviews with themes of initiation, methods of recruitment, personal information, control, movement, coping, resistance, experiences with others in the sex industry, experiences with outside agencies, and future goals.</td>
</tr>
<tr>
<td>Study Results</td>
<td>American women in human sex trafficking demonstrated the worst health outcomes. Domestic trafficking victims reported the highest percentage for physical health issues and most women being trafficked for sex reported mental health issues.</td>
</tr>
<tr>
<td>Level of Evidence (use Melnyk Framework)</td>
<td>Level 4 cohort study</td>
</tr>
<tr>
<td>Study</td>
<td>This study has some limitations because of the smaller sample</td>
</tr>
<tr>
<td>Limitations</td>
<td>size of non-representative cases retrieved using convenience sampling. Another issue is the inability to obtain incidence information on the number of times a woman experienced a particular health outcome.</td>
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<tr>
<td>Would use as evidence to support a change (yes or no) provide rationale</td>
<td>This study supports a change in practice because it demonstrates the short and long-term health outcomes of persons in human trafficking and impact on the health system.</td>
</tr>
</tbody>
</table>

### Article 10

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<tbody>
<tr>
<td>Study Purpose</td>
<td>This is a study involving a survey of male and female human trafficking factors and health implications.</td>
</tr>
<tr>
<td>Sample (characteristics of the sample; demographics etc)</td>
<td>Organizations were recruited to participate in the study included 10 healthcare organizations, 15 social services departments, and 19 voluntary-sector organizations. Of these, 10 social service departments, 10 voluntary-sector organizations, and 10 healthcare departments agreed. Sample size equalled 150 people, 52 men and 98 women. Sample criteria excluded those under 18 years of age, statutory or voluntary agencies that did not identify the individual as a victim of human trafficking, persons without primary experience with human trafficking, and those not currently receiving assistance from an agency.</td>
</tr>
<tr>
<td>Methods</td>
<td>The method involved a cross-sectional study. Validated instrument surveys were utilized to gather information. Research took place over 18 months. The survey method was the English Adult Psychiatric Morbidity Survey. Additionally, the Miller Abuse Physical Symptoms and Injury Survey assessed physical symptoms. A patient health questionnaire helped assess subjects for psychological health and suicidality was assessed with the Revised Clinical Review Schedule. Additional assessments examined alcohol use, sexual attitudes, lifestyle, reproductive, and sexual health.</td>
</tr>
<tr>
<td>Study Results</td>
<td>Findings for this study show a high rate of assault on the person either physical, mental or both. Specific factors found included sexually transmitted infections, violent injuries, anxiety, depression, and post-traumatic stress disorder. The subjects also had a high level of violence on their person and continued to live in fear because of those assaults. Furthermore, 75% of the subjects continued to live in fear of harm and possible death from the traffickers. Most females specifically trafficked for domestic servitude purposes also experienced sexual violence by their captors.</td>
</tr>
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</table>
Lastly, a large number of STIs were reported by both genders demonstrating sexual assault risks across the many types of human trafficking.

<table>
<thead>
<tr>
<th>Level of Evidence (use Melnyk Framework)</th>
<th>Level 4 Correlational design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Limitations</td>
<td>Limitations for this study include an inability to validate survey instruments for populations in traumatic or trafficking positions. Although these methods are verified through established research, human trafficking is a relatively new field of study which makes predicting and verifying instrument validity challenging. Due to this limitation, there is a potential for underreporting and inability to verify information. Considering the scope of the issue, the sample size was relatively small and did not include children. Persons under 18 years of age are often the primary targets for human trafficking and more studies are needed for the mental and physical health impact on this specific population.</td>
</tr>
<tr>
<td>Would use as evidence to support a change (yes or no) provide rationale</td>
<td>This study will benefit understanding of human trafficking factors, stressors, and health outcomes. This also supports a practice change through clearly detailed population characteristics and health risks.</td>
</tr>
</tbody>
</table>

**Article 11**

<p>| Study Purpose | This research is aimed at assessing medical students awareness of HT and attitudes towards learning about HT. |
| Sample (characteristics of the sample; demographics etc) | The sample size was 262 medical students in Canada. |
| Methods | A questionnaire which asked demographic information, student’s self-perceived awareness, and student’s interest in learning was distributed. This was an anonymous questionnaire distributed in a classroom to first and second year medical students. |
| Study Results | 48% of students reported they were knowledgeable about HT and 88% were not familiar with the signs and symptoms. 76% of students thought HT was important to learn about in medical school. |</p>
<table>
<thead>
<tr>
<th>Level of Evidence (use Melnyk Framework)</th>
<th>Level 6 Qualitative study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Limitations</td>
<td>While it is beneficial to know the importance that medical students place on HT knowledge, this has difficulty impacting current health practice. Information on medical students, current residents, and practicing attendings would be more helpful for future studies.</td>
</tr>
<tr>
<td>Would use as evidence to support a change (yes or no) provide rationale</td>
<td>This information supports an educational intervention along with other studies and material but does not meet criteria for an independent trigger to change practice.</td>
</tr>
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</table>
Appendix B

CITI certificate

This is to certify that:

Stacey Alderman

Has completed the following CITI Program course:

- **Human subject - Basic** (Curriculum Group)
- **Nursing** (Course Learner Group)
- **1 - Basic Course** (Stage)

Under requirements set by:

- **Liberty University**

Verify at [www.citiprogram.org/verify/?wad02098e-1773-4fa9-bd6a-9136e5b80407-17523403](http://www.citiprogram.org/verify/?wad02098e-1773-4fa9-bd6a-9136e5b80407-17523403)
Appendix C

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Please contact [contact information] with questions.
September 24, 2018

Stacey Alderman  IRB Exemption 3429.092418: An Education Implementation Project in an Emergency Department to Increase Awareness and Referral for Trafficked Person Encounters

Dear Stacey Alderman,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under exemption categories 46.101(b)(1,2), which identify specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

(1) Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at irb@liberty.edu.
Sincerely,

[Redacted]

*Administrative Chair of Institutional Research*

**The Graduate School**

*Liberty University | Training Champions for Christ since 1971*
Appendix E

Site IRB Permission Letter

Institutional Review Board

EXEMPT RESEARCH CHECKLIST
Version 5, 19DEC2017

Date: 9/7/2018
IRB #: CHIRB0434e IRB of Record CHIRB0434e
Facility: 
Principal Investigator: Stacey Alderman
Email address: 
Phone number: 

Title of Research Project/Study Title: An Education Implementation Project in an Emergency Department to Increase Awareness and Referral for Trafficked Person Encounters

Signature of Principal Investigator: Stacey Alderman

Typing my name on the line above constitutes an electronic signature.

Printed Name Stacey Alderman
Date 9/7/2018

FOR THE IRB REVIEWER ONLY:

Is the activity exempt? YES [ ] NO [ ]

Does the research meet the standards of ethical conduct? YES [ ] NO [ ]

Which exemption category or categories apply to the activity? C2

Approved by IRB Exempt Committee (date): 9/18/2018

Signature of IRB Reviewer: 

Typing my name on the line above constitutes an electronic signature.

Printed Name 
Date 9/18/2018
Appendix F

HEAL Organization Permission Letter

Your confidential copy of the HEAL Trafficking/HFJ toolkit!

Protocol Toolkit for Developing a Response to Victims of Human Trafficking in Health Care Settings

Reply all
Tue 11/7/2017, 12:40 PM
Alderman, Stacey
Action Items

Dear Colleague,

Below you will find a link to our Protocol Toolkit for Developing a Response to Victims of Human Trafficking Victims in Health Care Settings. HEAL Trafficking and Hope for Justice have developed this Toolkit to enable health care facilities to mobilize interdisciplinary, trauma-informed responses to human trafficking. We hope that the principles and processes we have outlined will enable diverse agencies to develop safe, respectful approaches to patients who have been trafficked or who are at risk for trafficking.

We ask that you NOT share the toolkit by forwarding to others, but instead, direct them to HEAL Trafficking's website, https://healtrafficking.org to obtain a copy of the Toolkit.

Link to toolkit: [Redacted]

Please contact us at [Redacted] with your questions and feedback.

Respectfully,

[Redacted]
HEAL Trafficking

This automatic message was sent to you via the Form Notifications add-on for Google Forms. Form Notifications was created as an sample add-on, and is meant for demonstration purposes only. It should not be used for complex or important workflows. The number of notifications this add-on produces are limited by the owner's available email quota; it will not send email notifications if the owner's daily email quota has been exceeded. Collaborators using this add-on on the same form will be able to adjust the notification settings, but will not be able to disable the notification triggers set by other collaborators.
Appendix G

Recruitment Email Inviting Providers to Attend

Dear [BMH] Emergency Department provider:

As a graduate student in the Doctorate of Nursing Practice (DNP) program at Liberty University, I am conducting research as part of the requirements for a DNP degree. The purpose of my study is to provide an education seminar on the health factors of human trafficking and encounters within the emergency department. Education will include overall trafficking data, clinical signs and symptoms, new coding for the 2019 fiscal year, and referral opportunities. I am writing to invite you to participate in my study by attending the staff meeting at the [BMH] board room on the second floor on September 25th at 7:15 pm or September 26th at 7:15 am.

If you are a provider (physician, physician assistant, or nurse practitioner) in the emergency department setting and are willing to participate, you will be asked to attend this educational feedback presentation and complete a pre- and post-intervention survey. There will also be an opportunity throughout the following 4 weeks to highlight the support provided to patients. This will consist of filling in the appropriate circle for each supported resource provided or if any were refused. Food will be provided to those attending and the session should take approximately 30 minutes. Your participation is completely voluntary, and participating/not participating does not impact employment. Data that is collected will be anonymous. No individual performance metrics will be analyzed or published.

To participate in this research, please reply to [Crystal Walker], ED shift manager, to confirm your attendance.

During the staff meeting, a consent document provided prior to the questionnaire and education. The consent document contains additional information about my research, but you will not be required to sign and return it.

Sincerely,

Stacey Alderman
RN, BSN, DNP/FNP student with Liberty University
Appendix H

Site Approval and Support Letter

June 12th, 2018

Attn: IRB
Liberty University
Lynchburg, Virginia

Dr. Cynthia Goodrich, EdD, MSN, RN, CNE, Professor of Nursing, RN, and DNP Scholarly
Project Chair (Principal Investigator) and Ms. Stacey Alderman, RN, Liberty University Doctor
of Nursing Practice Student (Co-Investigator) have proposed to conduct Ms. Alderman’s Doctor
of Nursing Practice Scholarly Project: An Education Implementation Project in an Emergency
Department to Increase Awareness and Referral for Trafficked Person Encounters.

The Emergency Department is committed to providing comprehensive,
advanced care for people seriously injured or ill and requiring immediate care. This care is
facilitated by the pursuit of quality improvement. Ms. Alderman’s Scholarly Project aligns with
our commitment that each patient receives the ultimate quality health care.

The Emergency Department is pleased to support Ms. Alderman’s
Scholarly Project: An Education Implementation Project in an Emergency Department to
Increase Awareness and Referral for Trafficked Person Encounters.

Please feel free to contact me if I can be of further assistance.

Respectfully,
Appendix I

Pre-Intervention Questionnaire

Previous Educational Seminar or Conference on Human Trafficking? Y/N

Type of Profession
A) Physician, Physician Assistant, Nurse Practitioner
B) Registration, Administration, Security
C) Caseworker, Social Worker
D) Nurse, Certified Nurse Assistant, Other nurse staff support
E) Other

Years of Experience in the Emergency Department
A) Less than 1 year
B) 1-3 years
C) 4-6 years
D) 7-10 years
E) Greater than 10 years

Date:

Pre-Education Questionnaire

1. What is your awareness of human trafficking in healthcare?

<table>
<thead>
<tr>
<th>Not Aware</th>
<th>Somewhat Aware</th>
<th>Mildly Aware</th>
<th>Moderately Aware</th>
<th>Very Aware</th>
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2. What is your confidence level in recognizing signs and symptoms of a human trafficking persons?

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<th>None</th>
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3. What is your confidence level on interviewing human trafficking persons?

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<tr>
<th>None</th>
<th>Somewhat</th>
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</table>
4. What is your confidence level on providing resources and information to potential human trafficking persons?

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<tr>
<th>None</th>
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5. How likely are you to recommend this education to colleagues?

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Appendix J

Post-Intervention Questionnaire

Previous Educational Seminar or Conference on Human Trafficking? Y/N

Type of Profession
- A) Physician, Physician Assistant, Nurse Practitioner
- B) Registration, Administration, Security
- C) Caseworker, Social Worker
- F) Nurse, Certified Nurse Assistant, Other nurse staff support
- G) Other

Years of Experience in the Emergency Department
- F) Less than 1 year
- G) 1-3 years
- H) 4-6 years
- I) 7-10 years
- J) Greater than 10 years

Pre-Education Questionnaire

1. What is your awareness of human trafficking in healthcare?

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4. **What is your confidence level on providing resources and information to potential human trafficking persons?**

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5. **How likely are you to recommend this education to colleagues?**

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Appendix K

Post Education Data Collection Form

Do Not Include Any Identifying Patient Information

Date: _______________

Patient HT Interventions

○ Human Trafficking Hotline Number Referral Provided: 1-888-373-7888

○ Human Trafficking Hotline Texting Referral Provided: BEFREE-233733

○ Social Worker Referral Provided

○ Gray Haven Information Provided: 804-344-4400

○ Refused All Referral Types

○ Other (Clarify under comments): Include ICD-10 codes if provided

Comments: ________________________________

______________________________