SEX TRAFFICKING ASSESSMENT PROTOCOL FOR MEDICAL PROFESSIONALS IN THE EMERGENCY DEPARTMENT

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Dedication

To my parents - thank you for showing me the true meaning of unconditional love and support. Without you, none of this would have been possible.

Acknowledgement

A special thank you to my project chairperson, Dr. Maureen Shannon, my external advisor, Dr. Robert Pantell, my research consultant, Dr. Amy Collins, and committee members, Susan Driscoll and Dr. Pualani Gandall Yamamoto. Your guidance, support, and feedback were invaluable and it was an honor to work with all of you. Dr. Pantell, thank you for your persistence and dedication in advocating for the implementation of this project and bringing it to fruition -- you are phenomenal. I would also like to thank Dr. Ronda Franke, Anson Hokama, Matthew Pantell, and the Emergency Department team at Kapi'olani Medical Center for Women and Children for their hard work, time, and commitment to this project.

Abstract

Background: An estimated 17,500 to 20,000 victims are trafficked annually into the United States (U.S.) (Ernewein & Nieves, 2015). In a global study conducted by the United Nations, a majority of trafficked victims are women and girls, with 28% of them being children (Banks & Kyckelhahn, 2011). Recent studies have shown that in the U.S., approximately 28% to 50% of trafficked victims interacted with medical professionals during their captivity, but remained unidentified (Grace et al., 2014). The objective of this project was to determine whether an educational session and screening tool increased clinician knowledge, identification, and reporting of human sex trafficking (HST) victims in the emergency department (ED). **Methods**: A review of evidence-based literature indicated a lack of provider knowledge and skills in the identification of HST victims. Three educational sessions were provided to all ED personnel at Kapi'olani Medical Center for Women and Children (KMCWC) from August to December 2017. The training focused on national and local statistics on the incidence of HST, HST risk factors, potential indicators, common assessment findings, approaching the victim, reporting procedures, and referral options. A screening tool consisting of six questions was provided during the session. Participants' baseline knowledge was assessed prior to the educational training (pre-session). All ED professionals were sent a post-session survey via SurveyMonkey four months after the last educational session. Comparing the pre- and postsession results assessed the efficacy of the educational training and screening tool. **Results**: A total of 48 participants were surveyed for this project. Thirty-eight participants attended the educational sessions and completed the pre-session survey. Twenty post-session surveys were returned from those who did and did not attend the sessions. The initial analysis included those who attended the training sessions and showed an increase in the levels of HST

knowledge (32.7%), suspicion of sexual exploitation (41.1%), and identification and reporting of trafficked victims (12.1%) by ED physicians and nurses. The final analysis included all responders to the survey sent to all ED staff and showed only 25% of clinicians reported childhood sex trafficking when encountering a patient they suspected.

Conclusion: An educational session and screening tool has the potential to increase ED clinicians' knowledge, identification, and reporting of sex trafficked youth.

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Chapter 1. Executive Summary

Throughout the United States (U.S.), commercial sexual exploitation – especially of women and children -- has gained the attention of legislators, social services, law enforcement, healthcare providers, and the general public. Although all 50 states have banned sex trafficking, only New Jersey has adopted a statute requiring healthcare workers to complete a human trafficking training course (Lederer & Wetzel, 2014). As a result, 28% to 87% of trafficked victims who interact with healthcare personnel go unidentified (Grace et al., 2014; Lederer & Wetzel, 2014).

The problem is twofold: medical providers lack the appropriate training to identify sex trafficking victims, and even if these victims are identified, they do not receive the trauma-informed care that they require. This project was designed to identify potential victims by establishing and implementing an educational session and a standardized screening process for use in emergency departments. The Iowa Model was used to guide this evidence-based change at Kapi'olani Medical Center for Women and Children (KMCWC).

The relevance of this project is supported by literature reviews that have emphasized the importance of educating healthcare providers and increasing their knowledge about and recognition of sex trafficking victims, as well as how to conduct appropriate interventions (Green, 2016; Greenbaum & Crawford-Jakubiak, 2015; Hornor, 2015; Grace et al., 2014; Vera Institute of Justice, 2014; Belles, 2012; Macy & Graham, 2012).

For the practice change, an educational presentation was held three times for emergency department (ED) providers at KMCWC during the months of August and December 2017. The accessible sample was emergency medicine providers, nurses, and non-clinicians at KMCWC who were eligible and willing to participate in the intervention. During this presentation,

providers received a set of six questions to use as the screening tool to assess patients possibly being a victim of sex trafficking.

Two survey phases for the ED providers were employed for data collection. Questions for both phases were compiled from the literature along with those designed by the DNP student and content expert. Participants were asked to use a set of six screening questions during patient visits. Phase one consisted of two surveys (the pre- and post-session surveys) and assessed the participant's knowledge about, and recognition and reporting of sex trafficking victims. Phase two consisted of an informal survey conducted at the monthly "Standards of Excellence" meeting of the KMCWC Emergency Department on May 16, 2018. The phase two survey evaluated the efficacy of the educational session and proposed screening questions in the identification of sex trafficking victims. Project improvements were also discussed. Process and outcome variables were used to determine whether the educational sessions and screening tool were effective.

A total of 48 participants were surveyed for this project: 38 participants for the presession survey and an additional 10 for the post-session survey. Thirty-eight participants attended the educational sessions and completed the pre-session survey. Twenty post-session surveys were returned from those who did and did not attend the sessions. Two trend analyses were conducted: 1) an initial analysis; and 2) a final analysis. The initial analysis only included those who attended the educational training session and completed the pre-session survey (n = 38). The final analysis included all responders to the post-session survey, which was distributed to all ED physicians and nurses, to determine the percentage of providers who suspected a patient of being a victim of HST and reported the victims to Child Welfare Services. The initial analysis included those who attended the training sessions and showed an increase in the levels of HST knowledge (32.7%), suspicion of sexual exploitation (41.1%), and identification and

reporting of trafficked victims (12.1%) by ED physicians and nurses. The final analysis, which included all 48 responders, showed that only 25% of clinicians reported childhood sex trafficking when encountering a patient they suspected.

This project determined that an educational session and screening tool has the potential to increase emergency professionals' recognition and reporting of sexually exploited youth. The project results led to a consensus for embarking on a process to improve the detection and reporting of HST victims. In addition, plans are underway to have a "System Phrase" incorporated in the electronic medical system for use by all ED departments within the Hawai'i Pacific Health system.

Chapter 2. Problem

Introduction

The effects of human sex trafficking (HST) on its victims are intense, and long lasting. Those affected – mostly women and underage girls – are at risk for severe mental and physical ailments (Ernewein & Nieves, 2015). Institutions in Hawai'i and around the United States (U.S.) are using proven methods of trauma-informed treatment to help heal these victims and reintegrate them into their families and society (Hoʻōla Nā Pua, 2015). However, one of the largest obstacles for these organizations is simply being able to identify those whom they seek to help (Hoʻōla Nā Pua, 2015).

In many instances, these victims are treated at medical facilities and make contact with medical providers and social workers, but because they are not properly identified as trafficking victims, the appropriate authorities are not notified and the victims do not receive the treatment or the assistance that they need. This is primarily a result of medical and social workers lacking the training to identify telltale symptoms of sex trafficking and therefore, do not ask pertinent questions. As a result, these victims fall through the cracks of the system, only to end up in the custody of their abusers (Hoʻōla Nā Pua, 2015). This project was designed to help increase the identification of potential victims by implementing educational sessions and a standardized screening process for use by emergency departments (EDs).

The following chapter provides background information on the sex trafficking of minors, reviews literature on the subject, and offers educational sessions and a screening protocol that will assist with the identification of potential victims.

Background/Problem

International, National, and State Statistics on Sex Trafficking

Human sex trafficking (HST) is defined as "sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such an act has not attained 18 years of age" (Ernewein & Nieves, 2015, p. 797).

According to the United Nations Children's Fund, approximately 1.2 million minors are sex trafficked worldwide (Ernewein & Nieves, 2015). An estimated 17,500 to 20,000 victims are trafficked annually into the U.S. (Ernewein & Nieves, 2015). While these numbers are large, studies are finding that more U.S. citizens and permanent legal residents (84%) are victims of sex trafficking than foreign nationals (Ernewein & Nieves, 2015; Banks & Kyckelhahn, 2011). The majority of these trafficked victims are female, with more than one-third of them being minors (Banks & Kyckelhahn, 2011). More than 200,000 American children are at risk of being trafficked due to factors such as being homeless or being a runaway (Ernewein & Nieves, 2015; Tracy & Konstantopoulous, 2012). The average age for entrance into HST is 12 to 14 years (Ernewein & Nieves, 2015).

There are no available statistics on the sex trafficking of minors in Hawai'i, primarily because there are no anti-sex trafficking statutes in place. However, many indicators point to Hawai'i being a viable site for sex trafficking. High-risk criteria prevalent in Hawai'i include: a high rate of teen suicide [ranking third in the nation according to the Hawai'i State Department of Health (2015)], "extremely limited aftercare for underage victims of sexual exploitation, and a high occurrence of runaways and missing children" (Ho'ōla Nā Pua, 2015, para. 7). Runaways comprise 35% of incarcerated juvenile girls, and between 100 and 200 juveniles are reported missing per month in Hawai'i (Crime Prevention and Justice Assistance Division, 2015).

Physical and Mental Health Issues

Human sex trafficking victims suffer from serious physical and mental health issues. Health risks may begin when victims are recruited into trafficking, and endure beyond their time of release. Sex trafficking of minors is increasing annually and these youth have a greater need for trauma-informed treatment of their medical, dental, and mental health conditions (Ernewein & Nieves, 2015). Common physical health problems include headache (82.3%), fatigue (81.3%), dizziness (70.3%), back pain (68.8%), memory problems (62.0%), stomach pain (61%), pelvic pain (59%), and gynecological infections (58%) (Ernewein & Nieves, 2015; Rafferty, 2013). Recent studies reported that trafficked juveniles were subjected to more frequent and unprotected sexual violence -- including gang rape -- than non-trafficked peers (Rafferty, 2013). As a result, child sex trafficking victims were identified as having higher rates of sexually transmitted infections (STIs) including human immunodeficiency virus (HIV), tuberculosis (TB), direct physical injury, infertility, unwanted pregnancy, unsafe abortions, and poor reproductive health (Rafferty, 2013).

According to a study by Silverman, Decker, McCauley, & Mack (2009), girls who were trafficked were three times more likely to experience anal sex than their non-trafficked peers, which increases their HIV risk significantly. Physical injuries resulting from violence include bone fractures, intracranial bleeding, lacerations, and burns (Finkel & Finkel, 2015; Rafferty, 2013). Human sex trafficking victims also suffer from malnutrition, weight loss, dental problems, and generalized poor health (Rafferty, 2013; Mitchell, Finkelhor, & Wolak, 2010).

From a public health perspective, HST poses a potential harm for men who engage in unprotected sexual interactions with trafficked girls. They run the risk of contracting STIs, TB,

and other communicable diseases, as well as spreading these infections to their families and the public (Finkel & Finkel, 2015).

Juvenile victims of sex trafficking may develop extensive psychological and interpersonal problems. Common psychological problems include depression, low self-esteem, anxiety/panic disorders, disorders of extreme stress or complex post-traumatic stress disorder, suicidal ideation, shock, disorientation, and substance abuse addiction (Levine, 2017; Ernewein & Nieves, 2015; Rafferty, 2013). They also experience social reactions such as feelings of isolation, loneliness, and hostility (Rafferty, 2013). Research has shown that children who were exposed to complex trauma have an increased risk for behavioral characteristics such as attachment and eating disorders, dissociative adaptations, and sleep disturbances (Rafferty, 2013).

According to a study by Clawson, Small, Go, and Myles (2003), providers reported that trafficking victims had more severe trauma, elevated levels of fear, and greater health requirements than other crime victims. The consensus opinion among providers was that "victims would need long-term treatment from an interdisciplinary team of health professionals working together to address the multitude of health problems including treatment of physical and psychiatric trauma, sexually transmitted infections, and gynecological problems" (Finkel & Finkel, 2015, p. 19).

Failure to Identify Trafficked Victims

Recent studies have shown that in the U.S., approximately 28% to 50% of trafficked victims interacted with medical professionals during their captivity, but remained unidentified (Grace et al., 2014). In one study, 87.8% of trafficking survivors reported contact with a healthcare provider during captivity (Lederer & Wetzel, 2014). The most frequently reported

treatment facility was a hospital/emergency room (63.3%) (Lederer & Wetzel, 2014). According to Chisolm-Straker and Richardson (2007), although 29% of ED personnel viewed human trafficking (HT) as a problem, only 13% were confident in identifying a trafficked victim and less than 3% had received training on victim recognition. In another study involving 168 medical providers and social workers from multiple hospitals, 63% reported never having received sex trafficking identification training (Beck et al., 2015). In addition, only 42% of participants correctly distinguished a sex trafficking victim from a victim of child abuse (Beck et al., 2015).

Current Practice Following Victim Identification

Juvenile victims of sexual exploitation are often treated as delinquents. Sex trafficked victims who are not identified as such by law enforcement are placed in detention facilities where they receive little to no rehabilitative care. After they are released, they frequently return as repeat offenders. Victims who are identified as sex trafficking victims are either placed into foster care, in safe houses with domestic abuse victims, or returned to their family homes where they may or may not receive appropriate trauma-informed care. Without consistent, long-term, and specialized treatment, HST victims are inclined to runaway or return to their traffickers to be re-victimized (Hoʻōla Nā Pua, 2015).

Conceptual Framework

The Iowa Model (illustration below) focuses on the implementation of best evidence into clinical practice in order to improve patient outcomes (Titler et al., 2001). The model is an algorithm consisting of distinct decision points and feedback loops (Schaffer, Sandau, & Diedrick, 2013). The first step is to identify either a problem-focused trigger or a knowledge-focused trigger that warranted an evidence-based practice (EBP) change (Titler et al., 2001).

Problem-focused triggers are problems that derive from the identification of a clinical issue, financial or risk management data, process improvement, or internal/external benchmarking data (Titler et al., 2001). Knowledge-focused triggers result from the presentation of new research findings and new practice guidelines or philosophies of patient care (Titler et al., 2001).

The second step is to decide whether the issue was an organizational priority. This is important because it assists with maintaining organizational interest and support. Once a priority topic is determined, the third step is to form a team, which helps to develop, evaluate, and implement the EBP change. The topic then directs the composition of the team, which consists of interested interdisciplinary stakeholders. The fourth step is to form a question using the PICOT method and then gather pertinent research and other literature related to the new practice change (Titler et al., 2001).

The fifth step is having the team critique the available studies to determine if the evidence is scientifically sound. This requires teams to evaluate the validity of the research by ensuring a reasonable sample size and reliable measuring tools were used. At that point, the team also decides whether there is sufficient evidence to warrant implementing the practice change. Once the team decides that a majority of the criteria was met, a plan to implement the intervention into a practice change is the last step. The team continues to evaluate the change in practice to observe for achieving the desired outcome(s) or determine the need for implementation of a modified plan (Titler et al., 2001).

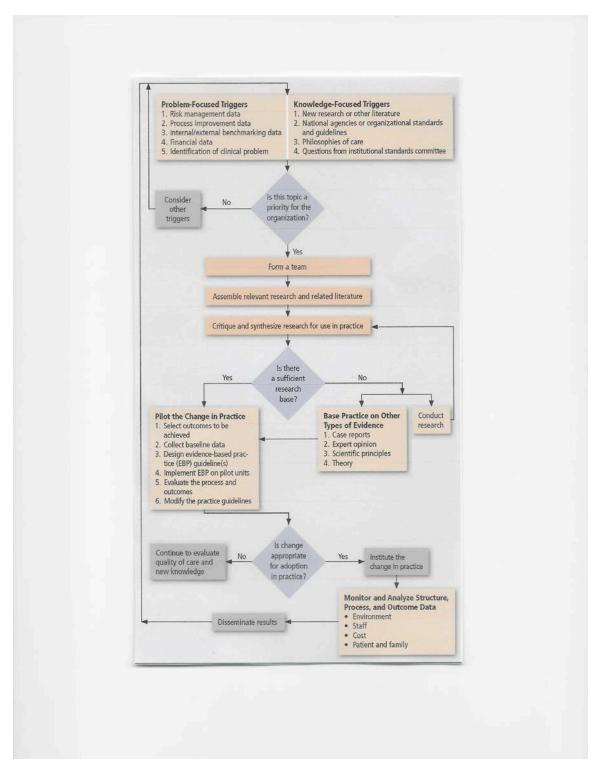


Figure 1. The Iowa Model of Evidence-Based Practice to Promote Quality Care. Reprinted from "The Iowa Model of Evidence-Based Practice to Promote Quality Care: An Illustrated Example in Oncology Nursing," by C. G. Brown (2014), Clinical Journal of Oncology Nursing, 18(2), 158. Copyright 2015 by the Oncology Nursing Society. Reprinted without permission.

Knowledge-Focused Triggers

The knowledge-focused triggers of this DNP project were national guidelines and philosophies of care, as identified by the Iowa Model of Evidence-Based Practice (Titler et al., 2001). Since 2011, the Child and Family Services Improvement and Innovation Act has required states to include a descriptive plan for screening and treating emotional trauma related to maltreatment in their healthcare documents. This statute established an opportunity for improving the identification of human trafficking victims (U.S. Department of Health and Human Services [USDHHS], Administration for Children, Youth and Families, 2013).

The Administration on Children, Youth, and Families recommended that "providers working directly with trafficked youth should participate in training to meet the needs of this population" (USDHHS, Administration for Children, Youth and Families, 2013, p. 11). Training may include identification, risk factors, best practice guidelines for working with trafficked victims, and coordinated community assistance (USDHHS, Administration for Children, Youth and Families, 2013).

According to evidence-based research, routine screening for sexual assault is important to incorporate in clinical settings for three key reasons: 1) knowledge of sexual abuse history will reduce the amount of unidentified victims; 2) awareness of abuse can assist providers in conducting focused assessments and in making accurate diagnoses, selecting treatments, and referring victims to the appropriate services; and 3) treatment effectiveness is dependent on treating the underlying problem rather than the presenting symptoms (Probst, Turchik, Zimak, & Huckins, 2011).

These triggers were an organizational priority for the Sex Abuse Treatment Center as their mission is to provide sexual assault services for adolescent and adult victims of human trafficking.

Assembling Relevant Research

Computerized searches in PubMed, CINAHL, and the Cochrane Library were conducted using search terms such as "sex trafficking," "domestic sex trafficking," "commercial sexual exploitation," as well as "sexual abuse," "sexual assault," "child abuse, sexual," "sex trafficking and screening," "sexual assault and screening," "sexual abuse and questions," "sexual assault and forensic examination," "sexual abuse and screening," and "sex assault and questions." A total of 14 articles were reviewed and seven articles were synthesized for the purpose of this project (illustrated in Figure A1). The publication dates range from 2007 to 2016. Melnyk's Hierarchy of Evidence (2010) was used as a critiquing tool for the literature reviews, which includes seven levels of evidence as described in Table 1.

Table 1

Melnyk's Hierarchy of Evidence for Intervention Studies and Synthesized Articles

Type of Evidence	Level of Evidence	Description	Therapy Articles
Systematic review or meta-analysis	Ι	A synthesis of evidence from all relevant randomized controlled trials.	
Randomized controlled trial	II	An experiment in which subjects are randomized to a treatment group or control group.	1
Controlled trial without randomization	Ш	An experiment in which subjects are nonrandomly assigned to a treatment group or control group.	1
Case-control or cohort study	IV	Case-control study: a comparison of subjects with a condition (case) with those who don't have the condition (control) to determine characteristics that might predict the condition. Cohort study: an observation of a group(s) (cohort[s]) to determine the development of an outcome(s) such as a disease.	3
Systematic review of qualitative or descriptive studies	V	A synthesis of evidence from qualitative or descriptive studies to answer a clinical question.	2
Qualitative or descriptive study	VI	Qualitative study : gathers data on human behavior to understand <i>why</i> and <i>how</i> decisions are made. Descriptive study : provides background information on the what, where, and when of a topic of interest.	1
Expert opinion or consensus	VII	Authoritative opinion of expert committee.	6

Critiquing Research for Use in Practice

All of the selected articles met the following inclusion criteria: 1) the article focused on the identification of sex trafficking victims, both domestically and internationally; 2) the article provided practice recommendations for the identification of trafficked victims, including risk factors, potential indicators, screening questions, intervention strategies and community resources, or educational sessions, that may be used by human service and healthcare providers; and 3) the article was written in English. All studies were conducted in the U.S.

Seven articles were synthesized for the promotion of human trafficking education for community service and healthcare workers. Five of the articles were expert opinion or consensus papers that focused on educating healthcare professionals, social workers, law enforcement, or shelter workers. The Vera Institute of Justice (2014) developed a manual that included a Trafficking Victim Identification Tool that assists with identifying human trafficking victims and providing them with the protection and services they need. The manual and the validated screening tool were based on research results conducted by Vera Institute of Justice in collaboration with experienced legal and victim service agencies (Vera Institute of Justice, 2014).

Data were collected via structured interviews using the full screening tool on 180 potential trafficking victims. Data analysis revealed that the screening tool was effective in distinguishing between sex and labor trafficking victims. Of the 180 participants, 53% were identified as HT victims (60% were labor trafficking victims and 40% were sex trafficking victims). Statistical analysis indicated that, the majority of questions on the screening tool were shown to be significant predictors of trafficking. Interviewers determined that the following three questions were strong predictors of sex trafficking: 1) Did anyone you worked for or lived with trick or force you into doing anything you did not want to do?; 2) Did anyone ever pressure you to touch another person or have any unwanted physical or sexual contact with another person?; and 3) Did you ever have sex for things of value (for example money, housing, food, gifts, or favors)? (Simich, 2014). A review of the screening questions for potential sex trafficking victims is provided in Table 2.

The second article aimed to define domestic minor sex trafficking (DMST) and provide education to pediatric nurse practitioners in terms of its prevalence, risk factors, identification,

and treatment of victims. Risk factors for DMST include youth who are from dysfunctional families (i.e., parental alcohol or drug abuse, parental mental illness, interpersonal violence and social isolation), have a pre-existing diagnosis of mental health issues, and have a history of sexual abuse. Runaways and youth who are living in group homes, foster care, or shelters also have an increased risk for DMST. Potential indicators may include branding, such as tattoos, a teen that is vague, submissive, or withdrawn, and who is inconsistent with his/her history of injuries. The most obvious indicator is a teen that is accompanied by a controlling older boyfriend who answers a majority of the medical questions and insists on staying with the victim. The screening questions for domestic minor sex trafficking are also provided in Table 2 (Hornor, 2015).

The third article focused on educating pediatricians about the risk factors, potential indicators, and common medical health problems of child victims of commercial sex exploitation so they may recognize and treat this population appropriately. Children who are runaways, throwaways (those who are forced to leave home), homeless, or from countries with political corruption are at higher risk of being trafficked, as are lesbian, gay, bisexual, transgender, or questioning youth. Children with a history of sexual or physical abuse, substance abuse, behavioral, mental health issues, or learning disabilities are also at an increased risk of trafficking (Greenbaum & Crawford-Jakubiak, 2015). Direct screening questions are provided in Table 2.

The medical examination and diagnostic evaluation should include: 1) assessment and treatment of acute and chronic diseases; 2) assessment of dental care; 3) overall health assessment, nutritional status, and hydration; 4) assessment of mental health problems; 5) documentation of injuries, genital and extragenital; 6) testing for HIV, STIs, and pregnancy; 7)

urine and/or serum testing for drug and alcohol use if indicated; and 8) offering prophylaxis for STIs and contraceptives. With the patient's assent, an anogenital examination with magnification and video documentation are recommended as well as a sexual assault evidence kit (if last contact was less than 72 hours) (Greenbaum & Crawford-Jakubiak, 2015).

Pediatricians are encouraged to take all appropriate and mandated actions to prevent further harm to the child, and they must comply with mandatory child abuse reporting laws.

Pediatricians should contact national trafficking organizations (i.e., National Human Trafficking Resource Center Hotline, Polaris Project, Shared Hope International, National Center for Missing and Exploited Children) if they need assistance about how to proceed with a potential trafficking case (Greenbaum & Crawford-Jakubiak, 2015).

The fourth and fifth articles focused on educating healthcare professionals on recognizing, approaching, and assessing suspected victims of human trafficking and how to help them. Trafficked victims usually fear multiple abusers and authority figures and are more prone to substance abuse. He/she may not know his or her geographical location and may appear anxious, withdrawn, or depressed. In terms of approaching the suspected victim, it is crucial to separate the victim and companion. This may be achieved by referring to hospital policy, which requires privacy when conducting a physical assessment; if necessary, hospital security should be called. A staff member should always stay with the victim in case the companion forces the victim to leave (Green, 2016; Belles, 2012).

A head-to-toe assessment should be conducted. Common assessment findings include infectious diseases (i.e., lice or scabies infestations, tuberculosis), tattoos or brands of gang symbols or barcodes, scarring, burns, lacerations, a blackened eye, bald spots, positive STI history, botched medical procedures by nonprofessionals, poorly healed fractures, malnutrition,

dehydration, and vaginal or anal trauma. Questions for screening potential trafficked victims are provided in Table 2. Under the Trafficking Victims Protection Act, medical personnel are mandated to report suspected victims of human trafficking. Law enforcement or hospital security should be contacted if there is an immediate threat. If the victim is safe, providers should first contact the National Human Trafficking Hotline for further assistance at (888) 373-7888 (Green, 2016; Belles, 2012).

The sixth article was a randomized controlled trial that included 258 study participants from 14 hospitals with the highest number of emergency department discharges in the San Francisco Bay Area. The aim of the study was to determine whether there was an increased recognition of human trafficking victims and increased knowledge of resources for HT victims by emergency department providers following an educational presentation. The EDs were randomized to an intervention or delayed intervention comparison group (Grace et al., 2014). A survey assessing "changes in the participants' attitudes, knowledge, and recognition of human trafficking victims" (Grace et al., 2014, p. 858) was administered to participants before the intervention presentation and at the end of the presentation.

The results revealed a greater increase in the level of HT knowledge by the intervention group compared to the delayed intervention group (1.42 vs. -0.15; adjusted difference of 1.57; 95% Confidence Interval 1.02-2.12; P < 0.001). Knowing whom to contact when the staff identified potential HT victims increased 76% (from 24% to 100%) in the intervention group versus an increase of 15% (from 20% to 35%) in the delayed intervention group. Suspected HT victims increased in the intervention group from 17% to 38% and remained the same (10%) in the comparison group (P < 0.03). Investigators concluded that a brief educational intervention

increased knowledge and self-reported recognition of HT victims among ED providers. (Grace et al., 2014).

The seventh article was a systematic review of descriptive studies that included 20 documents. The aim of the study was to research and synthesize identification recommendations from various literature and reports produced by those who work with sex trafficking victims to increase awareness among human service providers. Of the 20 documents reviewed, 12 presented indicators of sex trafficking that were in alignment with the list put forth by the U.S. DHHS. The DHHS list included: 1) signs that the accompanying individual controls the person; 2) evidence of physical abuse such as bruises, injuries, or scars; 3) signs that the person lacks the freedom to exit a job or relocate; and 4) exhibition of fear or depression (Macy & Graham, 2012).

Victim interaction strategies included: 1) building a trusting relationship with the potential victim; 2) questioning the potential victim alone and in a safe environment; 3) explaining confidentiality policies and how the provider will use the information; 4) using indirect questioning; 5) providing culturally and linguistically competent services; and 6) focusing on the needs of the potential victim. The response strategies collected from 14 documents recommended that providers immediately call the National Human Trafficking Resource Center's hotline to report the suspected trafficking case, while other documents recommended calling local law enforcement. A review of the screening questions (refer to Table 2) addressed information regarding the safety, employment, living conditions, and travels or immigration of the victim (Macy & Graham, 2012).

Terry Corkins, the program coordinator of Hoʻōla Nā Pua, provided a tailored version of the Short Screen for Child Sex Trafficking by the Children's Healthcare of Atlanta (2015) that

the center uses for identifying sex trafficking victims. These screening questions are a part of the clinical practice guidelines for the assessment and treatment of potential victims of child sex trafficking and commercial sexual exploitation, and are supported by the American Academy of Pediatrics, Washington DC Chapter. The screening questions are provided in Table 2.

Table 2

Review of Screening Questions for Potential Sex Trafficking Victims

Author	Screening Questions for Suspected Sex Trafficking Victims
	Where are you from?
Belles	How did you get here?
	Where do you eat/sleep?
	What type of work do you do?
	What is your schedule?
	Are you paid for your work? How much?
	Are you free to leave your job?
	Have you been threatened with violence or harm if you try to leave?
	Have your loved ones ever been threatened?
	How much or what kind of food/water/medical care is available to you?
	Who decides when you eat/sleep?
	Where do you live? Who lives in your home? Are there locks on the doors or
	windows to prevent you from leaving?
	Are you free to connect with your family?
	Do you have to ask permission to go to the bathroom or talk with others?
	Are you allowed to go out on your own?
	When you are not working, are you free to come and go as you please?
	Where do you sleep? Is this place clean?
	Do you get enough food to eat?
	Have you been physically harmed or threatened? Has your family been
	threatened?
	Are you free to talk to anyone you wish, including people outside your home or
	job?
Green	Can you come and go as you please?
	Are you ever forced to perform sex acts or to work?
	Where are you from? How did you arrive here? Do you know where you are
	right now?
	Do you keep all the money you earn?
	Do you keep your own identification papers?
	Has anyone ever asked you to have sex in exchange for something you wanted
	or needed such as money, food, shelter, or other items?
Greenbaum	Has anyone ever asked you to have sex with another person?
	Has anyone ever taken sexual pictures of you or posted such pictures on the
	Internet?
	Have you ever broken any bones, been knocked unconscious or had any injuries that required stitches? (If yes, "Can you tell me about those times?"—determine
Hoʻōla Nā Pua	if abuse, peer violence, dating violence, or CSEC)
	Have you ever run away from home? (If yes, "have you stayed out all night, or
	longer?" "How many times have you run away?" "How long is the longest time
	you've been gone from home?" When you were gone, how did you get money
	for food? Where did you stay? etc.)
	Do you use drugs or drink alcohol? (and follow up with specificsfrequency of
	use, type of drug, reason for using drugs/alcoholrecreation, self-medication)
	Have you ever had any problems with the police? Do you feel comfortable
	telling me about them?
	Have you been sexually active in the past, and by that I mean having oral,
	vaginal or anal sex?" If child answers, Yes, then ask, "Have you had more than
	5 sexual partners?"
	Have you ever had any sexually transmitted infections, like gonorrhea, or
	chlamydia or trichomonas? (If yes, ask if received treatment)

Table 2

Review of Screening Questions for Potential Sex Trafficking Victims (Continued)

Author	uthor Screening Questions for Suspected Sex Trafficking Victims		
	Safety		
	 What might happen if you went back home/to home country? 		
	Has anyone threatened you with deportation?		
	 Have you been deprived of food, water, sleep, or medical care? Made you ask permission to have any of these things? 		
	 Do you have to ask permission to eat, sleep, or use the bathroom? 		
	Were you (or anyone you work with) ever raped or assaulted for working at a slow pace or		
	for trying to leave?		
	Were you (or anyone you work with) ever beaten, hit, yelled at, or made to f eel physical pain		
	for working slowly or for trying to leave?		
	Have you been physically harmed in any way? Note: The second of th		
	Were you (or was anyone you work with) ever told that they would be physically harmed or you do not not be a second or working allowly?		
	raped for trying to leave or for working slowly?		
	Have you been threatened if you try to leave? Have you been threatened a your familie?		
	 Has anyone threatened your family? Can you remember a time you wanted to leave, but you felt that you could not? What might 		
	have happened if you left without permission?		
	Is anything going on in your life that makes you feel stressed and/or uncomfortable?		
	Is anyone forcing you to do anything that you do not want to do?		
	Employment		
	How did you first hear about your job?		
	Did someone make you sign a contract? What did that contract say?		
	Do you owe your employer money? How did this debt come about?		
	What do you think might happen if this debt is not paid?		
	 Does anyone force you to have sexual intercourse for your work? 		
	Are there people who guard your workplace/place you live or video cameras that monitor		
	your workplace/place you live to make sure no one working there leaves?		
Macy and Graham	What kind of work did you expect to do once you arrived in this country?		
Macy and Granam	 Did anyone tell you that you would have to pay money before beginning work if you wanted employment? 		
	Does your employer permit you to take breaks from working when you want or need to?		
	Has anything been said or done to make you afraid to leave your job?		
	Do you feel like you were lied to about your job before you began work?		
	Do you receive payment for your work? Is this pay the same as what you were promised?		
	How did you come to know your boyfriend/boss?		
	Has your employer ever offered you drugs or medications?		
	Can you leave your job if you want?		
	Living Environment		
	 Do you sleep in a bed, on a cot, or on the floor? 		
	Do you have to pay rent where you are living? How much do you have to pay in rent (per		
	month, week, or day)? • Are you permitted to purchase food and/or clothes by yourself?		
	Can you come and go as you please?		
	Are you allowed to contact your friends and/or family whenever you would like?		
	In the place you live, are there windows with bars on them?		
	What are your working or living conditions like?		
	Where do you sleep and eat?		
	Are there locks on your doors/windows, so you cannot get out?		
	Travel and Immigration Issues		
	Do you have access to identification documents, passports, birth certificate, and other personal		
	papers? If not, who has them?		
	Were you in control of arrangements for your travel to this country and your identification		
	documents? If not, who was?		

Table 2

Review of Screening Questions for Potential Sex Trafficking Victims (Continued)

Author	Screening Questions for Suspected Sex Trafficking Victims	
Macy and Graham	 Child- and Youth-Specific: For what reason did you come to this country? Do you have identification papers? Who has your papers? Do you attend school? Do you have a job? Can you leave your job if you want to leave? Where is your home? Do other people live with you? Who? Are you too afraid to leave this place? Have you ever been told something bad may happen and/or has your family ever been told something bad may happen to stop you from running away? Has anyone ever touched you or hurt you in anyway? Do you have any concerns about your health or any injuries that need the attention of a nurse or doctor? 	
Vera Institute of Justice	 Did anyone ever pressure you to touch another person or have any unwanted physical or sexual contact with another person? Did you ever have sex for things of value (for example money, housing, food, gifts, or favors)? Did anyone you worked for or lived with trick or force you into doing anything you did not want to do? 	

Summary of Literature Review

The synthesized articles demonstrated that educating community service and healthcare workers on the prevalence of sex trafficking – including potential indicators, common assessment findings, and the use of screening tools – can be effective in increasing the identification of sex trafficking victims. The body of evidence also indicated that these victims require specialized, trauma-informed care.

Implementation of the Evidence-Based Practice Change

The project team determined that the standardized screening tool consisted of six primary questions, to accommodate the limited time providers have with their patients. These questions were selected based on the validity and reliability of the screening tools. The Children's Healthcare of Atlanta (2015), Hoʻōla Nā Pua (2015), and Vera Institute of Justice (2014) were the only organizations whose screening tools were proven to be effective in identifying sex trafficking victims. Therefore, all questions selected for the HST screening tool were gathered from these sources.

The six questions for screening for HST and subsequent questions to clarify the patient's situation were:

- 1) Have you ever run away from home? (If yes, how many times have you run away? How long is the longest time you've been gone from home? How did you get money for food and where did you sleep).
- 2) Have you ever broken any bones, been knocked unconscious, or had any injuries that required stitches? (If yes, can you tell me about those times? Follow-up questions need to be asked to determine if this was a result of abuse, peer violence, dating violence, or CSEC).
- 3) Are you sexually active? This means have you ever had oral, vaginal or anal sex? (If yes, have you had more than five sexual partners? Have you ever had sexually transmitted infections like gonorrhea, chlamydia, or trichomonas If yes, did you receive treatment?).
- 4) Did anyone ever pressure you to touch another person or have any unwanted physical or sexual contact with another person? (If yes, do you feel comfortable telling me about those times?).

- 5) Did you ever have sex for things of value (for example money, housing, food, gifts, or favors)?.
- 6) Kids can occasionally have run-ins with police maybe for running away, breaking curfew, or shoplifting. There can be lots of different reasons. Have you ever had any problems with the police? (If yes, do you feel comfortable telling me about them?) (Children's Healthcare of Atlanta, 2015; Hoʻōla Nā Pua, 2015; Vera Institute of Justice, 2014).

Summary

The purpose of this project was to improve the identification and treatment of sex trafficking victims by establishing a standardized screening protocol. The literature supported the need to educate healthcare providers and community service workers on the prevalence of sex trafficking, the risk factors and potential indicators of sex trafficking, common assessment findings, the use of a screening tool, and the process for reporting sex trafficking cases.

However, due to limited time and resources, implementation of the protocol focused on educating healthcare providers at KMCWC's ED. The long-term goal was to equip emergency departments and community health clinics throughout Hawai'i with the appropriate tools to improve the identification and treatment of sex trafficking victims. An additional benefit that will come with the increased awareness will be the establishment of more anti-sex trafficking laws in the State of Hawai'i, which will be discussed in the next chapter.

Chapter 3. Methods

Introduction

Chapter 3 details the methodology that was used to implement and evaluate the project, presents the project's design and practice change description, and outlines the data collection procedures. A program evaluation plan was formulated to ensure a systematic collection of information regarding activities and outcome measures in order to improve the efficacy and future development of the program (Centers for Disease Control and Prevention [CDC], 2012). Human subject considerations of the project are also presented. The framework for the project was based on the Iowa Model of Evidence-Based Practice to Improve Quality Care (Titler et al., 2001).

PICO and Purpose Statement

The purpose of this project was to provide a standardized sex trafficking education and assessment protocol for medical professionals in the ED at the KMCWC in order to increase the identification of youth who are sex trafficking victims.

According to the Iowa Model, the PICO method was critical for developing a quality improvement plan for the project (Titler et al., 2001). The PICO elements included: 1) problem / population; 2) intervention / indicator; 3) comparison; and 4) outcome (Center for Evidence-Based Medicine, 2016). The specific elements as they pertained to the project were:

PROBLEM: Healthcare providers, specifically ED personnel, need to be educated on the identification of sex trafficking victims; because this population lacks healthcare access, and they are more likely to end up in an ED than a general practitioner's or primary care office.

INTERVENTION: This involved educating ED providers and personnel about common risk factors and assessment findings that are potential indicators of HST. It also identified who

to contact and where to refer sex trafficking victims, as well as established a standardized sex trafficking screening protocol as an integral part of patient assessments.

COMPARISON: Currently, local organizations provide educational sessions on sex trafficking identification to those who request their assistance; however, this does not ensure that all EDs are properly educated in this regard.

OUTCOME: This project piloted a training approach (which included face-to-face training sessions, and a PowerPoint educational module) to identify potential juvenile HST victims who accessed KMCWC's ED care.

Goals and Objectives

The goal of the project was to provide ED clinicians at KMCWC with an educational session and screening tool in order to increase the identification of sex trafficking victims. The project objectives were that ED providers would: 1) improve their knowledge and self-reported recognition of sex trafficking victims; 2) use the screening tool to assess potential victims; and 3) report and contact the proper resources when a HST victim is identified.

Design

The project used an evidence-based practice (EBP) design, which is a systematic problem-solving approach that is driven by relevant and critically appraised evidence. This approach was used to answer clinical and educational questions. The purpose of an EBP approach is to provide a basis for high-quality patient care services, which involves the incorporation of the best scientific evidence to date. Based on this, a decision can be made as to whether a practice change is warranted (Shirey et al., 2011). The process also takes into consideration clinical expertise and patient preferences in the evaluation of the effectiveness of a practice change implementation (Conner, 2014).

Practice Change Description

The relevance of this project was supported by the current scientific literature reviews, which highlighted the importance of educating healthcare providers about the recognition of HST victims, as well as how to conduct appropriate interventions and referrals (Green, 2016; Greenbaum & Crawford-Jakubiak, 2015; Hornor, 2015; Grace et al., 2014; Vera Institute of Justice, 2014; Belles, 2012; Macy & Graham, 2012). The medical director of the KMCWC Child Abuse Treatment Center (CATC) facilitated the implementation of the educational sessions, which were held in a conference room at KMCWC during the months of August through December 2017.

The educational presentations were held on August 9, December 18, and December 19, 2017 in order to accommodate all ED providers. Subsequently, presentation participants were asked to use a set of six HST screening questions during their encounters with ED patients. Phase one had two surveys: the first survey was administered to participants before the educational session (pre-session); the second survey was conducted four months after the last educational session (post-session). The phase one surveys assessed the participant's knowledge about and recognition of sex trafficking victims. Phase two consisted of an informal survey conducted on May 16, 2018 during the monthly ED "Standards of Excellence" meeting. The phase two survey assessed the effectiveness of the educational session and the screening tool that was implemented, as well as ED staff satisfaction with the HST education and screening tool provided. Project improvements were also discussed.

Relative Advantage

Relative advantage is defined as the expected benefits in relation to the cost of implementing the innovation and is directly related to the rate of adoption of the innovation. The

three main sub-dimensions of relative advantage for the DNP project were: 1) social prestige; 2) low initial cost; and 3) immediacy of reward (Rogers, 2003).

PRESTIGE: With the passing of Senate Bill 265 on July 6, 2016, Hawai'i became the last state to make sex trafficking a violent crime and class A felony (Star Advertiser, 2017). This project aimed to implement an educational session and standardized sex trafficking protocol that would build on the legislation, taking the necessary next step beyond simply criminalizing an act, specifically to explore a viable option to combat that act. In this regard, Hawai'i can be a pioneering model for other states that are trying to be proactive about sex trafficking reform (Lederer & Wetzel, 2014).

COST: The educational interventions were in collaboration with the Child Abuse

Treatment Center (CATC), a program at KMCWC. Because of this, overhead costs were low.

Also, the DNP project team members volunteered their time and services to present the educational session, so there were no labor costs. There were also no costs for materials.

REWARD: Participants of the intervention played a key role in the identification and assistance of sex trafficking victims, who then had access to various resources that provided them with specialized, trauma-informed care (Hoʻōla Nā Pua, 2016). As a result, it is anticipated that survivors would eventually be able to recover from their HST experiences and return to their families and communities at a faster rate.

Compatibility

Makse and Volden (2011) stated that higher levels of compatibility would encourage the diffusion of policies within an organization. This aspect was vital to the success of the project, because it was closely affiliated with an existing program at KMCWC.

Fortunately, the implementation of an educational session and a standardized sex

trafficking screening protocol for healthcare providers was a priority for the CATC of the KMCWC. The project's educational sessions and screening tool aligned with the CATC's values, specifically to increase awareness of sex trafficking and help reduce repeated sexual assault. The project's interventions served as an adjunct to the CATC's current programs (R. Pantell, personal communication, June 15, 2018).

The adoption and diffusion of these interventions within the community occurred rapidly because the DNP project team had already gained the support of a local organization that had agreed to serve as a resource to assist with rehabilitating identified survivors. In 2014, President Obama released the Federal Strategic Action Plan on Services for Victims of Human Trafficking in the United States 2013-2017. While the plan focused primarily on victim services, trafficking outreach, awareness, and training were heavily emphasized (Departments of Justice [DOJ], Health and Human Services [DHHS], Department of Homeland Security [DHS], and the President's Interagency Task Force to Monitor and Combat Trafficking in Persons, 2014). This provided support for the educational intervention on a national level.

Complexity

Complexity is "the degree to which an innovation is perceived as relatively difficult to understand and use" (Rogers, 2003, p. 257). The complexity of an innovation is inversely related to its rate of adoption (Rogers, 2003).

From the participants' perspective, the educational session and screening tool were fairly simple to understand. Medical providers were previously trained to assess for risk factors and indicators of abuse or neglect per the Joint Commission Standard PC.3.10, and are familiar with using screening tools (HealthStream, 2007). The incorporation of a sex trafficking screening protocol was seamless.

Trialability

Trialability is "the degree to which an innovation may be experimented with on a limited basis" (Rogers, 2003, p. 258). The trialability of an innovation is directly proportional to its rate of adoption (Rogers, 2003).

The project's high trialability was attributed to its low cost. Under normal circumstances, the cost of an educational session may increase depending on the organization providing the services. Although supplies are affordable, hiring a speaker can be costly. In this situation, however, the speaker was a member from the project team and incurred no cost. The overhead for the project was also reduced by the use of KMCWC's facilities. Although the rate of adoption within KMCWC was fast, internal factors may slow the rate of adoption for other hospitals and organizations.

Observability

Observability is "the degree to which the results of an innovation are visible to others" (Rogers, 2003, p. 259). The observability of an innovation is directly proportional to its rate of adoption (Rogers, 2003).

The project team utilized data collection tools to make the educational intervention quantifiable (Rogers, 2003). Participants completed pre- and post-education session surveys to evaluate their knowledge and recognition of sex trafficking victims, the efficacy of the screening tool, and to determine the need for any modifications of the project.

Of the five attributes of innovations, the relative advantage, compatibility, and complexity were the least challenging factors of the project. Trialability and observability were the most challenging to overcome because they were the most difficult to duplicate and quantify.

Gaining approval for the implementation of this project at KMCWC was somewhat seamless, but may not be so at another facility that is not already committed to combatting sex trafficking. The observability of the project may not be easily quantifiable, due to the inaccurate measure of exactly how many victims of HST exist. The observable factors of the project may rely more on the increase in ED providers' knowledge of the situation, rather than a measurable figure of how many more trafficking victims are helped, compared to years past. Data collection tools were used to make the results quantifiable and visible.

Plan for Sustainment

According to Hunter, Han, Slaughter, Godley, and Garner (2015), important factors to long-term program sustainment are: 1) the organization's focus; 2) funding stability and political support for the intervention; 3) quality implementation during the initial funding period; and 4) positive staff perceptions of the intervention.

FOCUS: Researchers discovered that "organizational support and program 'fit' were related to one- to three-year program sustainment" (Hunter, Han, Slaughter, Godley, & Garner, 2015, p. 7). The educational sessions and implementation of the screening tool increased the identification of sex trafficking victims and prevented further sexual abuse. Therefore, these interventions were aligned with the CATC's mission statement.

FUNDING: Funding stability was found to be the primary indicator of program longevity (Hunter et al., 2015). Attorney General Loretta E. Lynch allocated over \$44 million in grants to support human trafficking survivors, with more than \$8.1 million total allotted to 12 grantees "to provide comprehensive services to any human trafficking victim identified within the target geographic region" (U.S. DOJ, 2015, para. 3). Although President Donald Trump has recently replaced Attorney General Lynch, he has vowed to combat the epidemic of HT and has

ordered the departments of Justice and Homeland Security to assess the resources devoted to this issue (Associated Press, 2017). This bodes well for organizations such as the CATC, who will continue to provide training to healthcare personnel on sex trafficking and who may be in prime position to receive future funding to support their initiatives (Hunter et al., 2015).

IMPLEMENTATION: The level of implementation was determined by the number of certified clinicians employed and the number of participants served during the grant period (Hunter et al., 2015). The project was the first of its kind in the state of Hawai'i; therefore, there was no way to measure the level of implementation against prior data. Clinicians were instructed to use the screening tool for patients who are suspected sex trafficking victims, and not as a part of routine screening, to prevent providers from being overtaxed. Maintaining a manageable workload for the ED providers will assist with the screening protocol's longevity.

PERCEPTION: Staff perceptions of the interventions in terms of complexity and difficulty of implementation were also factors associated with program sustainment. For the educational sessions and use of the screening tool, the complexity of the interventions was relatively low since the participants did not need to acquire new skills, but to expand upon existing ones (Hunter et al., 2015).

Definitions

For the purpose of this project, *sex trafficking* was defined as any form of commercial sexual exploitation. The commercial sexual exploitation of children (CSEC) involves "crimes of a sexual nature committed against juvenile victims for financial or other economic reasons.

These crimes included trafficking for sexual purposes, prostitution, sex tourism, mail-order-bride trade and early marriage, pornography, stripping, and performing in sexual venues such as peep shows or clubs" (Institute of Medicine and National Research Council, 2013, p. 401). In this

situation, commercial sexual exploitation included child pornography, child sex tourism, prostitution, and survival sex (engaging in sexual acts in exchange for shelter, food, money, or other basic necessities) (Children's Healthcare of Atlanta, 2015).

Emergency department provider educational session/ presentation was defined as a comprehensive training on sex trafficking targeting physicians, physician assistants (PA), nurse practitioners (NP), and nurses.

Screening tool was defined as the six questions obtained from the literature review, which are:

- 1) Have you ever run away from home? (If yes, how many times have you run away? How long is the longest time you've been gone from home? How did you get money for food and where did you sleep?
- 2) Have you ever broken any bones, been knocked unconscious, or had any injuries that required stitches? (If yes, can you tell me about those times? determine if abuse, peer violence, dating violence, or CSEC).
- 3) Are you sexually active? This means have you ever had oral, vaginal or anal sex? (If yes, have you had more than 5 sexual partners? Have you ever had sexually transmitted infections like gonorrhea, chlamydia, or trichomonas? (If yes, did you receive treatment?)
- 4) Did anyone ever pressure you to touch another person or have any unwanted physical or sexual contact with another person? (If yes, do you feel comfortable telling me about those times?)
- 5) Did you ever have sex for things of value (for example money, housing, food, gifts, or favors)?

6) Kids can occasionally have run-ins with police - maybe for running away, breaking curfew, or shoplifting. There can be lots of different reasons. Have you ever had any problems with the police? (If yes, do you feel comfortable telling me about them?) (Children's Healthcare of Atlanta, 2015; Hoʻōla Nā Pua, 2015; Vera Institute of Justice, 2014).

The aim of the project was to provide educational training and a standardized sex trafficking assessment protocol for medical professionals in the ED in order to increase the identification of sex trafficking victims.

Sampling Plan

Setting

The educational sessions and implementation of the sex trafficking screening protocol took place at the emergency department of KMCWC. The treatment facility has 17 rooms, including two trauma rooms. The department is open 24 hours a day, seven days per week (KMCWC ED personnel, personal communication, March 16, 2017). The KMCWC is a nationally recognized, non-profit hospital that is known for providing exceptional care to Hawai'i's women and children. It is also the only ED on the island with specialists trained in pediatric emergency medicine (KMCWC, 2016). It is anticipated that ED clinicians that frequently provide women's health and reproductive health services would be more likely to encounter sex trafficking victims.

Sample

The target population and convenience sample for the project was medical professionals in the ED who were eligible and willing to participate in the intervention.

Sample Size

The KMCWC ED physicians, nurses, and non-clinicians were invited to participate in the educational training and implementation of the screening tool for this project (KMCWC ED personnel, personal communication, March 16, 2017). A survey designed by the project team was utilized for the pre- and post-intervention assessments of participants. Pre-intervention data were collected immediately before the start of the educational sessions to establish a baseline. The post-intervention assessment was done four months following the session.

Selection Criteria

Characteristics of Participants

The inclusion criteria of the participants for this project's face-to-face educational session were as follows: 1) employed by KMCWC as emergency medicine providers, nurses, or non-clinicians; and 2) willing to make a four-month commitment to the implementation of the screening and reporting procedures. Participants completed one of the three training sessions that were held from August to December 2017. In addition, all KMCWC ED providers and nurses were asked to review and respond to a PowerPoint presentation that provided information about the identification and referral of suspected HST victims.

Users of the Innovation

Roger's (2003) five adopter categories included: 1) innovators; 2) early adopters; 3) early majority; 4) late majority; and 5) laggards.

Innovators are usually individuals outside of the system who introduce new ideas to the organization. For this project, the DNP student served as the innovator. Early adopters are integrated in the local social system and respected by their peers. They have the highest degree

of opinion leadership and decrease uncertainty by adopting, evaluating, and dispersing the information about the innovation to their peers using interpersonal networks. The medical director of Kapi'olani Child Protection Center was the early adopter (Rogers, 2003).

The early majority "adopts new ideas just before the average member of a system" (Rogers, 2003, p. 283). They frequently connect with peers and occasionally hold opinion leadership positions within the system. The ED providers and nurses were the early majority because they made up more than one-third of the membership within the system and were willing to follow the early adopters in incorporating the innovation (Rogers, 2003).

The late majority "adopts new ideas just after the average member of a system" (Rogers, 2003, p. 284). Innovations are approached with caution and skepticism and adoption may result from increasing peer pressure. The sex trafficking victims were the late majority because they were cautious and apprehensive to answer the screening questions due to fear and mistrust (Rogers, 2003).

Laggards are the last group to adopt the innovation. They are suspicious of new ideas and make decisions based on past experiences and uphold their traditional values. There were no laggards for this project. (Rogers, 2003).

Two strategies that were used to engage the early majority were: 1) providing educational sessions for the early majority; 2) dissemination of the HST PowerPoint presentation to all KMCWC ED providers and nurses following the training; and 3) creating a "SmartPhrase" in the Epic (electronic health record [EHR]) software (Sharma, 2008).

Training sessions were used to engage the early majority. The ED providers, nurses, and non-clinicians received educational training sessions on sex trafficking. To reinforce the information discussed, the PowerPoint presentation used for the sessions was electronically

mailed to the ED providers and nurses at KMCWC. Their engagement in trauma-informed training emphasized the importance of their roles in the innovation's success and increased its rate of adoption (Sharma, 2008).

For convenience, a "SmartPhrase" was initially created in Epic, the KMCWC's electronic health record system, for the project's sex trafficking screening tool. In the drop down menu, providers selected ".CSECSCREEN" and the following two questions were generated: 1) Did you ever have sex for things of value (for example money, housing, food, gifts, or favors)?; and 2) Did anyone ever pressure you to touch another person or have any unwanted physical or sexual contact with another person? If they answered "yes" to any of these questions, providers were advised to call the Child Welfare Services Sex Trafficking Hotline at (808) 832-1999. Currently, a "System Phrase" is being developed that will include risk factors and additional questions (see Appendix C, Figure C1).

Rogers (2003) stated that interpersonal channels are the most effective when dealing with resistant or apathetic individuals. Therefore, peer communication is essential to engage the laggard group. Although a laggard group was not identified with this project, there have been protocols established to deal with potential members of this group in other trial runs. Interpersonal channels involve a face-to-face meeting with two or more individuals that allow a "two-way exchange of information" (Rogers, 2003, p. 205) and persuade an individual to form or change an attitude. In order to achieve this, the following strategies will be implemented should a laggard group occur: 1) progress/ performance communications; and 2) involving the laggards in the innovation process (Essen & Ostlund, 2011; Sharma, 2008; Rogers, 2003).

The implementation of performance communications will engage laggards by keeping them up-to-date on the progress of the interventions (Sharma, 2008). The collected data may be

used to provide progress reports using metrics that are simple to measure, so laggards can monitor and quantify the success of the interventions (Sharma, 2008).

The last plan of engagement includes the involvement of the laggards throughout the innovation process and developing a plan that will reduce their concerns. According to Essen and Ostlund (2011), it is wise to involve laggards in the design process because including laggards can contribute to generating better ideas by identifying unsatisfied needs and market solutions. It is also more beneficial to "engage 'ordinary' consumers who lack an interest in the 'new' innovation" because it provides insight into whether the innovation will work (Essen & Ostlund, 2011, para. 4). Allowing the laggards to be a part of the decision-making process increases the probability that these users will eventually adopt the innovation (Essen & Ostlund, 2011).

Marketing /Recruitment Plan

Systematic communications strategies were used to promote and sustain the educational session and standardized sex trafficking screening tool. Systematic strategies for this project included interpersonal channels, training sessions, and written materials.

The project team scheduled three educational presentations for the KMCWC ED team meetings throughout the months of August and December 2017 at KMCWC. All attendees were asked to complete an anonymous survey before the start of the training session. At the end of the presentation, providers and nurses were invited to participate in the project's protocol that was intended to identify and refer HST youth presenting at the KMCWC ED. The medical director of the CATC supervised all face-to-face sessions. In addition, two months after the face-to-face educational sessions, all ED providers and nurses received a copy of a PowerPoint presentation via electronic mail with information covered in the face-to-face educational sessions. This was

done based on the recommendation of the project team in order to disseminate HST information to the ED staff.

Data Collection Procedures

Two phases for the completion of project surveys by the participants were employed. Survey questions for both phases were compiled from the literature by the DNP student and the project team in order to assess the ED staff's HST knowledge, identification, and referral of suspected HST victims.

Phase One

Two surveys (pre- and post-session surveys) were used for phase one and consisted of questions relating to occupation, years in practice at the ED, previous HST training, confidence in HST knowledge, identification and referral of patients suspected of being HST victims, and the number of victims identified using the screening tool (Beck et al., 2015; Grace et al., 2014). The pre- and post-session surveys are provided in Appendix B, Figure B1. Participants took the pre-session survey immediately before the start of the educational presentation.

In January, a PowerPoint presentation link was electronically mailed to all 85 ED providers and nurses, which contained the screening questions. The content expert and project team requested that the link be sent to all ED clinicians in order to obtain a more complete picture of the ED staffs' sex trafficking knowledge regardless if they participated in the educational session. In April, post-session surveys were electronically mailed using SurveyMonkey software to all ED providers and nurses after four months of implementation of HST screening. Participants were asked to respond within one week (Miller, 2014).

Phase Two

Phase two consisted of one informal survey that was conducted on May 16, 2018 at the monthly "Standards of Excellence" meeting. This survey evaluated the efficacy of the educational session and proposed screening questions, as well as participant satisfaction and suggestions for project improvement (see Appendix B, Figure B2). No validated measuring instruments were used.

Required Resources

The project required human and budgetary resources. Human resources included participants, the medical director, project team members, hospital security, Child Welfare Services, and hospital social workers. Budgetary resources consisted of supplies for the educational training sessions and evaluations, such as the Statistical Program for the Social Sciences (SPSS ®) version 25.0 software, SurveyMonkey software, questionnaires, and other presentation materials.

Process and Outcome Variables

Process and outcome variables were used to determine whether the educational sessions and screening tool were effective. The process measures for the project included: 1) knowledge pre-implementation; 2) knowledge post-implementation; and 3) barriers to implementation. The outcome measures consisted of: 1) participant satisfaction; 2) number of referrals; and 3) number of HST victims identified post-training session (shown in Table 3). Based on these activities, the following outcomes were expected: 1) increased knowledge about HST; 2) increased confidence about HST identification and reporting; and 3) increased identification and reporting of HST victims.

Measuring Instruments

The surveys were used to measure the participants' general knowledge about sex trafficking, the effects of training on sex trafficking knowledge and awareness, and responses to victims' identification (Beck et al., 2015). Four of the questions were developed by a researcher experienced with survey design and was revised for clarity following a pilot test (Grace et al., 2014). One question was reviewed by several physician experts in sex trafficking and an expert survey developer, and the question was determined valid (Beck et al., 2015). The initial assessment was given immediately before the educational session to establish a baseline. A post-session survey was electronically emailed via Survey Monkey to participants at the end of four months. Trend analysis was used to compare the pre- and post-session results. Table 3 summarizes the details of the process and outcome measures of the project as well as the measuring instruments used.

Table 3.

Process and Outcome Measures for Sex Trafficking Screening Protocol

Who	What	Data Collection Point (When)	Instruments (How)	References	Psychometrics					
Process Measures										
Investigator	Knowledge pre- implementation	Immediately before educational session	Investigator- designed tool	(Beck et al., 2015; Grace et al., 2014)	Five questions of the survey were determined to be valid and reliable					
Investigator	Knowledge post- implementation	At four months post-implementation	Investigator- designed tool	-	-					
Investigator	Barriers to implementation	At four months post-implementation	Meeting with participants	(Khammarnia et al., 2015)	-					
Medical Director/Investigator	Compliance with screening protocol	Every month	Patient Notes	-	-					

Table 3.

Process and Outcome Measures for Sex Trafficking Screening Protocol (Continued)

Who	What	Data Collection Point (When)	Instruments (How)	References	Psychometrics					
Outcome Measures										
Investigator	Participant satisfaction and usefulness of the screening tool	At four months	Investigator- designed tool	-	-					
Investigator	Reporting of HST cases and victim referrals	At four months	Investigator- designed tool	-	-					
Investigator	Number of sex trafficking victims identified post- session	At four months	Investigator- designed tool	-	-					

Project Timeline

The project timeline is outlined in Table 4 and includes activities starting from the time of the Proposal Defense to the submission of dissemination products.

Table 4.

Project Timeline

TASK		2017					2018														
		J	J	A	S	О	N	D		J	F	M	A	M	J	J	A	S	О	N	D
Successful Proposal Defense																					
Brief Key Leaders & Staff																					
Educational Training Sessions																					
Collect Data																					
Analyze Data																					
Interpret Data																					
Oral Presentation of Project															X						
Graduation																	X				
Dissemination of DNP Project Results																					

Program Evaluation Plan

This project used a one-group pretest-posttest implementation design to evaluate the project's short-term outcomes (NAEP-Howard Statistics and Evaluation Institute, n.d.). These outcomes included: 1) by the end of one month, providers are sufficiently trained about the identification of sex trafficking victims; 2) within two months, providers are actively engaged with the project's procedures and are implementing the sex trafficking screening tool; 3) within three months, providers will have increased the number of sex trafficking victims screened and identified; and 4) within four months, providers will have referred victims to the appropriate services.

For the process measures, descriptive and content analyses were conducted to evaluate the providers' sex trafficking knowledge, confidence in identification and reporting of HST victims, and barriers encountered. Surveys were used to collect data before and four months after the last educational session occurred.

For the outcome measures, descriptive analysis was used to evaluate the effectiveness of the educational sessions and screening tool. Given the small sample size, the SPSS version 25.0 was used by the DNP student to conduct an initial and final trend analysis with the results from the pre- and post-session questionnaires.

The program evaluation and data management plan is outlined in Table 5.

Table 5.

Evaluation and Data Management Plan

Evaluation Question	Evaluation Method	Type of Data Collected	Variable(s)	Level of Measurement	Analysis	Person(s) Responsible	Timeline (When)			
	Process Measures									
How many people received previous sex trafficking training? How confident are they in HST knowledge?	Phase One Pre-session and Post- session Survey	Knowledge pre- implementation	Participants' knowledge before training session	Interval	Descriptive Analysis	DNP student	Immediately before educational session			
How confident are they in identifying and reporting HST victims after training?	Phase One Post-session Survey	Knowledge post- implementation	Participants' knowledge after training session	Interval	Descriptive Analysis	DNP student	Four months after December session			
What were the barriers to implementation? Were they organizational or individual aspects?	Project Meeting	Barriers to implementation	Barriers encountered	Interval	Descriptive Analysis	DNP student	Four months after December session			

Table 5.

Evaluation and Data Management Plan (continued)

Evaluation Question	Evaluation Method	Type of Data Collected	Variable(s)	Level of Measurement	Analysis	Person(s) Responsible	Timeline (When)			
Outcome Measures										
Did providers identify any HST victims since training? If so, how many?	Phase One Post- Session Survey	Number of sex trafficking victims identified post- session	Identified sex trafficking victims	Interval	Descriptive Analysis	DNP student	Four months after December session			
Who did the providers contact when an HST victim was identified?	Phase One Post- Session Survey	Reported HST cases/Victim referrals	Point of contact	Interval	Descriptive Analysis	DNP student	Four months after December session			
Did providers find the training sessions and screening tool helpful? Suggestions for improvement?	Phase Two: Standards of Excellence Meeting	Participant satisfaction	Independent variable: Providers Dependent variable: Likert Scale	Interval	Descriptive Analysis	Medical Director	Five months after December session			

Human Subject Considerations

This project was designed to uphold the rights of human subjects involved in the project. As a quality improvement initiative: 1) reporting procedures were in compliance with Chapter 350, Hawai'i Revised Statutes for child abuse reporting requirements (Department of Human Services, 2015); 2) there was no additional risks beyond the standard practice; 3) standard, evidence-based, non-pharmacologic interventions were implemented; and 4) person-identifiable information was not collected.

To ensure adequate protection for the human subjects, a committee of faculty and clinical experts reviewed this proposal. In addition, the DNP student completed the Collaborative Institutional Training Initiative (CITI) course in Human Subjects Protection required by the University of Hawai'i.

Four of the medical ethical tenets employed were: 1) autonomy; 2) non-maleficence; 3) beneficence; and 4) justice.

AUTONOMY: Respect for autonomy implies that the participant has "the capacity to act intentionally, with understanding, and without controlling influences that would mitigate against a free and voluntary act" (McCormick, 2013, para. 6). Participants gave verbal consent before the screening tool was implemented. All procedures were compliant with the UH Institutional Review Board's guidelines.

NON-MALEFICENCE is the principle of not intentionally creating harm or injury to the participants, "either through acts of commission or omission" (McCormick, 2013, para. 9). Participants underwent training sessions to promote compliance with project goals and guidelines. The project was structured to provide participants and their patients with a safe and private environment. Participants were trained to take precautions before questioning a potential

victim and instructed never to confront a suspected trafficker. Providers were instructed to call Child Welfare Services and the Police Department immediately following identification (Department of Human Services, 2015). Hospital security was also contacted to protect the staff and victim until Child Welfare Services or law enforcement arrived. With these safeguards, there was no additional harm beyond standard practice by participating in the project.

BENEFICENCE is defined as acting in accordance with the participants' and/or organization's welfare (McCormick, 2013). The CATC of the KMCWC objectives were to: 1) support the emotional healing process of sexual assault victims; and 2) reduce the incidence of all forms of sexual assault (The SATC, 2017). The project assisted the CATC in achieving these objectives by educating ED providers about sex trafficking and implementing a standardized screening protocol for potential victims. Sex trafficking survivors benefitted from these interventions by exiting the sex industry and receiving trauma-informed care.

The project presented minimal risk according to the Common Rule definition because "the probability and magnitude of harm or discomfort anticipated in the [project were] not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical examinations or tests" (National Bioethics Advisory Commission, 1998, para. 3).

JUSTICE pertains to the "fair and equal treatment" (McCormick, 2013, para. 17) of all participants. Those who met the eligibility criteria were invited to participate. Participants were not excluded due to their ethnicity, gender, or age.

Summary

The purpose of this project was to increase the identification of commercial sexual exploitation and domestic sex trafficking victims through the development and implementation of educational training sessions and a screening tool for KMCWC ED personnel.

Chapter 3 detailed the methodology that was used to implement and evaluate the educational session and screening tool. The chapter provided a description of the project design and practice change, as well as the operational definitions. The practice change section included the relative advantage, compatibility, complexity, trialability, and observability of the project along with a plan for its sustainment. The sampling plan section included the setting, sample size, inclusion and exclusion criteria, and the marketing/recruitment strategies. The data collection procedures were also discussed in terms of the required resources, process and outcome variables, measurement tools, and were logged in a timeline. The program evaluation included a description of the data analysis and management plan. Human subject considerations were also discussed.

Chapter 4. Results

The purpose of this DNP project was to increase the identification of potential HST victims by implementing a pilot educational session and screening tool for use by ED staff at KMCWC. The KMCWC is the only children's hospital in Hawai'i; the ED has 44,000 annual visits with approximately 25 physicians and 60 nurses working full- and part-time. A HST educational session was given on three separate dates - August 9, December 18, and December 19, 2017 at KMCWC. In January, the PowerPoint presentation developed for the face-to-face educational session was electronically mailed to all 85 ED physicians and nurses. The session focused on national and Hawai'i data on the incidence of sex trafficking, sex trafficking risk factors, potential indicators, common assessment findings, approaching the victim, use of a HST screening tool, reporting procedures, and referrals/resources.

The process measures used to evaluate this project were as follows: 1) number of ED staff who had received previous HST training; 2) ED staff confidence level in HST knowledge, identification, and reporting of HST victims after training; and 3) barriers to implementation. The outcome measures were: 1) number of HST victims identified post-session; 2) point of contact for reporting HST cases; and 3) ED staff satisfaction with the HST education and screening questions provided.

The following outcomes were expected: 1) increased knowledge about HST; 2) increased confidence in HST identification and reporting; 3) increased identification and reporting of HST victims; and 4) ongoing efforts at quality improvement based on the findings.

Data were collected from pre- and post-session questionnaires anonymously. A total of 48 participants were surveyed for this project: 38 participants for the pre-session survey and an additional 10 for the post-session survey. Thirty-eight ED providers, nurses, and non-clinicians

attended one of the three educational sessions and completed the pre-session questionnaire (100% response rate). Of the participants who completed the pre-session survey, 36.8% identified as a pediatric nurse, 21.1% as a pediatric physician, 15.8% as a pediatric and adult nurse, 13.2% as an adult physician, and 13.2% as a non-clinician (Table 6). The median category for the number of years worked in the ED was six to 10 years (Table 7).

In April, following the implementation of the intervention, a post-session questionnaire was distributed to all ED physicians and nurses via SurveyMonkey. Ten responses were returned from the 38 participants who attended one of the face-to-face educational sessions (26% response rate); an additional 10 responses were received from ED staff who indicated that they did not take part in a face-to-face educational session. Two trend analyses were conducted: 1) an initial analysis; and 2) a final analysis. The initial analysis only included survey responses from those who had attended the face-to-face educational training and completed the pre-session survey (n = 38). A final analysis included all 48 responders to the post-session survey sent by electronic mail in April to determine the percentage of providers who suspected a patient of being a victim of HST and reported the victims to Child Welfare Services (CWS). The initial analysis showed an increase in the levels of sex trafficking knowledge (32.7%), suspicion of sexual exploitation (41.1%), and identification and reporting of trafficked victims (12.1%) by ED physicians and nurses. The final analysis showed that only 25% of clinicians reported childhood sex trafficking when encountering a patient they suspected.

Table 6.

Occupation of Respondents Who Participated in Training

	Frequency	Percent
Pediatric Nurse	14	36.8
Pediatric and Adult Nurse	6	15.8
Pediatric Physician	8	21.1
Adult Physician	5	13.2
Non-clinician	5	13.2
Total	38	100.0

Table 7.

Years Worked in the Emergency Department

	Frequency	Percent
30 years or more	1	2.6
30 years or less	2	5.3
16 to 20 years	4	10.5
11 to 15 years	4	10.5
6 years to 10 years	7	18.4
2 to 5 years	10	26.3
1 year or less	3	7.9
Unanswered	6	15.8
None	1	2.6
Total	38	100.0

Prior Human Sex Trafficking Training

The pre-session responses showed that 31.6% of the attendees had prior HST training in the past two years. In addition, only one of the 10 survey respondents who did not participate in educational session had prior HST training in the past two years. For the entire sample, 13 out of 48 (27%) respondents had attended HST training during the previous two years.

Impact of the Educational Session

Participants reported an increase in their levels of HST knowledge in the post-session responses. The proportion of participants who rated themselves as "somewhat knowledgeable" or greater increased from 47.3% to 80% in the post-session surveys (Figure 2).

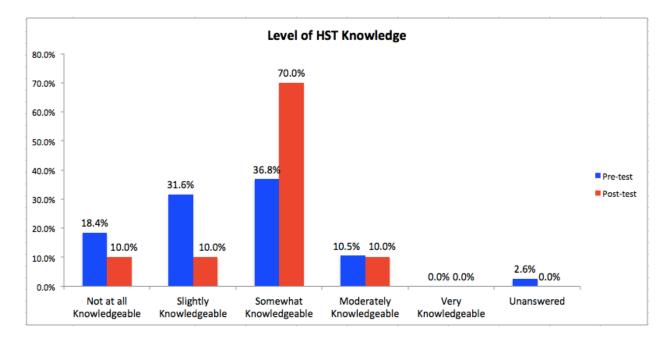


Figure 2. Trend analysis of participants' level of HST knowledge

Suspicion that a patient was a HST victim more than doubled in post-session responses obtained four months after the last educational session was offered; specifically, 28.9% to 70% (Figure 3).

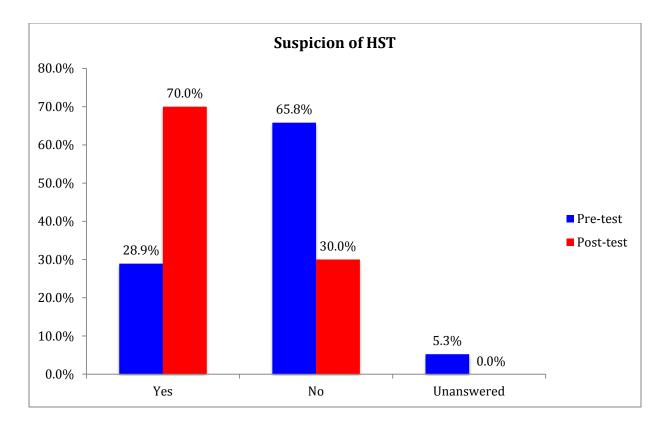


Figure 3. Trend analysis of participants' suspicion of HST among patients

Identification of HST Victims

Clinicians lacked moderate or higher levels of confidence in identifying victims of HST before and after the educational session. There was a slight increase in respondents who rated themselves as "somewhat confident" (from 39.5% to 50%) in the post-session surveys. The preand post-session responses for clinicians who received training are documented in Figure 4.

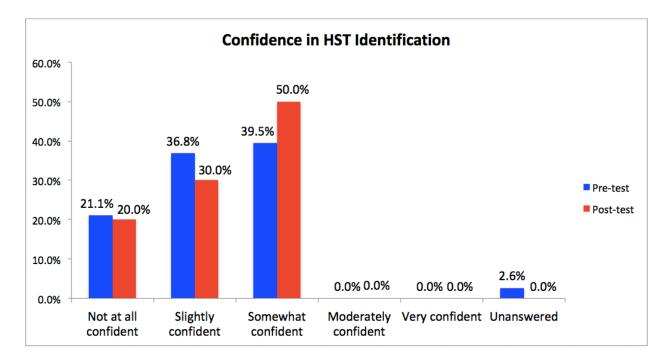


Figure 4. Trend analysis of participants' confidence level in identifying HST victims

Reporting of HST Victims

Self-rated confidence in reporting a case of HST increased somewhat in the post-session responses in the category of "moderately confident" (from 5.3% to 30%). Those who rated themselves as "slightly confident," "somewhat confident," and "very confident" in the post-session surveys decreased by 8.4% (from 18.4% to 10%), 20% (from 50% to 30%), and 7.9% (from 7.9% to 0%), respectively (Figure 5).

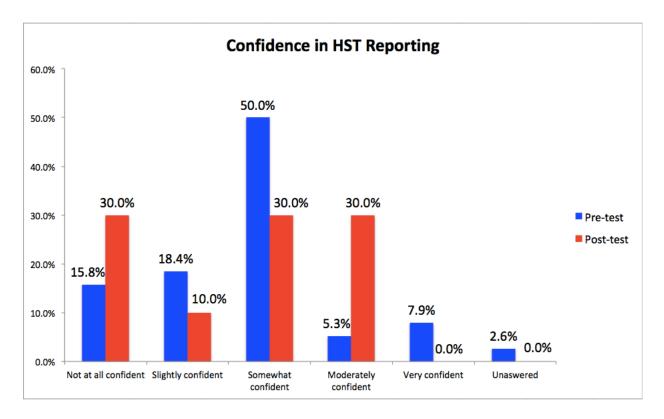


Figure 5. Trend analysis of participants' confidence level in reporting HST victims

Number of HST Victims Reported

According to the pre-session responses of the 38 participants, only three individuals filed reports, whereas 13 respondents had suspected trafficking. These three individuals reported 10 HST cases to CWS; two had received prior HST training. Thus, there were 10 reports submitted from more than 300 years of clinical experience, or one report every 10 years. The post-session responses showed that of the 10 respondents who did not participate in the educational training, only one individual filed a report, whereas three respondents had suspected trafficking. The final analysis results indicated that clinicians did not report 75% of suspected HST cases. However, in less than a year since the training of ED staff through this pilot project, two CWS reports of suspected HST have occurred.

Impact of the HST Screening Project

A project presentation was given at the monthly "Standards of Excellence" meeting of the KMCWC ED on May 16, 2018. A total of 12 physicians and nurses attended the session, including the ED Director, Pediatrics ED Director, and the Service Line Director for ED and Trauma. Of the attendees, six had participated in the HST educational training; all reported that the educational session and proposed screening questions were helpful in assisting with the identification of HST victims. There was a consensus by this group to embark on a process to improve the detection and reporting of HST victims by KMCWC ED personnel.

Summary of Results

A total of 38 physicians, nurses, and non-clinicians attended a face-to-face HST educational session at KMCWC, and subsequently, all 85 ED physicians and nurses received the PowerPoint presentation via electronic mail. The training addressed sex trafficking risk factors, potential indicators, common assessment findings, approaching the victim, use of a screening tool, reporting procedures, and resources. The trend analyses showed the following outcomes: 1) increased HST knowledge among providers and nurses; 2) increased suspicion of HST in patients seen by ED staff; and 3) increased identification and reporting of trafficked victims by ED physicians and nurses.

Chapter 5. Discussion

Interpretation of Findings

An educational session on HST and a screening protocol to identify HST victims were implemented at KMCWC's emergency department (ED). The low level of HST knowledge, lack of suspicion, and failure to report suspected cases by clinicians with decades of experience in the pre-educational session results indicated a knowledge gap and need for educational training among ED professionals. The initial trend analysis showed that the brief educational sessions increased providers' HST knowledge. The project's results supported a previous study that indicated "a short, single-session educational presentation increased ED physicians' knowledge and awareness of HST" and "sensitized" them to the potential indicators (Grace et al., 2014, p. 859).

Post-HST educational session responses of participants documented a minimal increase (from 39.5% to 50%) in being "somewhat confident" in identifying HST victims. Moreover, no provider acknowledged moderate to high levels of confidence in HST victim identification before and after the training.

Self-rated confidence in reporting potential HST victims remained unchanged with 40% of ED clinicians feeling less than "somewhat confident." The overall low level of provider confidence in the identification and reporting of sexually exploited youth pre- and post-intervention indicate a need for ongoing education about this issue. Furthermore, initial analysis results showed that only three of the 13 clinicians who suspected child sex trafficking filed a report with CWS; there were only 10 reports. Three additional respondents, who had not received training, responded they had suspected cases of HST, with only one individual reporting to CWS. The overall reporting rate for our sample was four out of 16 (25%) clinicians. These

findings highlighted that clinicians did not report 75% of suspected trafficking cases, which resulted in missed opportunities to help these victims.

Prior to the project, only five reports of HST were ever documented from three clinicians. Since completion of the educational sessions, two clinicians reported one case each. These findings suggest that the educational training and screening questions were effective in increasing the identification and reporting of sexually exploited adolescents.

The phase two informal survey conducted during the "Standards of Excellence" meeting showed that the educational session and proposed screening questions were helpful in assisting with the identification of sex trafficked youth. There was consensus to embark on a process to improve the detection and reporting of HST victims in the KMCWC ED. It was decided to incorporate a "System Phrase," which is a type of "SmartPhrase," into Epic, the electronic medical record used by all Hawai'i Pacific Health hospitals and many of its community partners. The "System Phrase" is in development and will be visible under the heading "sexual exploitation." The phrase will provide clinicians with a list of HST risk factors, screening questions, and referral numbers (including the number for the State of Hawai'i, Department of Human Services sex trafficking reporting hotline) used for this project. It will also have the ability to track cases of suspected sexual exploitation.

It is critical to note that although the incorporation of a HST "System Phrase" into the electronic medical record system was not the original goal, it was put into effect as a result of the medical director and project team's efforts. In addition, plastic information cards containing the HST risk factors, screening questions, and referral numbers will be ordered and distributed to all EDs in the State of Hawai'i via the Hawai'i trauma system (see Appendix C, Figure C1).

A subcommittee consisting of the Pediatric ED Director, KMCWC Director of Social Work, and KMCWC Medical Director for Child Advocacy and Neglect will be finalizing the process in the next few weeks. In all likelihood, all adolescents meeting high-risk criteria for HST will be screened during nursing triage in the ED. This will allow for the tracking of HST high-risk patients to assure that those who are positively identified receive the appropriate referrals and follow-up.

Barriers in Screening, Identifying, and Reporting CSEC

Sexually exploited children are a small demographic compared to the volume of patients seen at KMCWC; therefore, providers may not feel the need to screen all ED patients for HST. Instead, a system is being developed to screen high-risk patients. The second barrier to improved identification of HST victims was that many ED staff did not attend the educational sessions, and therefore, were not aware of the knowledge or techniques that form the basis for recognizing and detecting sexually exploited youth. The third barrier to eventual implementation was the length of the educational sessions. Due to time constraints, and the lack of a regularly scheduled meeting for ED nurses, the educational trainings in December were limited to five to 10 minutes per session, which was not enough time to allow for sufficient training. In addition to implementing a screening process, the subcommittee will also review and recommend educational strategies for improving awareness of identification and policies for referral of sexually exploited children.

Recommendations

The current standard of care at KMCWC's ED is to screen all patients for domestic violence during triage. However, no policy exists for the screening of sexually exploited youth.

The results of this project indicate a need for the establishment of a statewide hospital policy that

enforces mandatory sex trafficking training for all clinicians and staff, as well as the implementation of a screening and referral to trauma-informed care protocol in the ED. In addition, the results of the project suggest further consideration of the timing and format of the educational sessions and other system changes that need to be in place. It is unlikely a five-to-10 minute session allotted for training is sufficient. Similarly, a one-hour session without other system enhancements is unlikely to have sustainable effects on identifying a relatively uncommon problem. Project results also showed the importance of utilizing the electronic health records for addressing sex trafficking. There is a need for refinement in this area in terms of providing 24-hour access to qualified sex trafficking counselors.

There are other emerging approaches. An online module granting continuing medical education (CME) credit has recently become available (American Medical Women's Association [AMWA], 2018). Also, hospitals have the ability to mandate annual training for all employees on topics such as safety and blood borne pathogens (R. Pantell, personal communication, June 15, 2018). Finally, on June 11, 2018, the Center for Disease Control and Prevention's National Center for Health Statistics added new ICD-10-CM codes for patients experiencing human trafficking to be used by clinicians beginning October 1, 2018 (U.S. Department of Health and Human Services, 2018). This will also contribute to increasing awareness of the problem.

The incidence of HST is substantially less than domestic violence making routine mandatory screening unlikely. Nevertheless, a combination of education along with helpful electronic health record phrases and prompts has the potential to improve on the current low levels of identification and reporting of HST victims.

Limitations

Several limitations of the project should be noted. Since the project was implemented in a fluid environment where variables were not controlled, it may be difficult to replicate the conditions of the project, and results may not be generalized. Additionally, the limited data collection time reduced the ability to assess the long-term impact of the sex trafficking educational session and screening tool. Collecting data for at least one year and from the same participants may yield more significant results. However, analysis focusing on trend patterns, and not statistically significant results, are important and appropriate for quality improvement projects.

Another limitation of the project findings was that many ED providers and nurses did not attend the educational sessions, and therefore, were not aware of the knowledge and techniques that form the basis for recognizing and detecting sexually exploited youth. Also, due to the relatively small number of participants, the results may not be representative of the ED clinician population, and therefore may not be generalized to other hospitals (Schutt, 2008). Additionally, the project used a self-report measure of confidence in HST knowledge, identification, and reporting, which can be flawed by biases; a risk adjustment was not used.

Although it is advantageous that all ED participants involved with the project were trained according to protocol, there may have been differences in the clinicians' experiences due to the nature of their patient encounters. This may have affected questionnaire results regarding participant assessment of the educational session and screening questions. Furthermore, since this was a quality improvement project, a control group was not included.

Essentials of Doctoral Education for Advanced Nursing Practice

The American Association of Colleges of Nursing Essentials of Doctoral Education for Advanced Nursing Practice are outlined in Table 8. The table also provides documentation of the activities that the DNP student engaged in and completed to meet each of the Essentials during the program of study and the development, implementation, and evaluation of this DNP project. A brief summary about this process is provided in the following section.

Table 8.

Essentials of Doctoral Education for Advanced Nursing Practice

ESSENTIALS	ACTIVITIES
Essential I: Scientific Underpinnings for	Establishment of a HST educational session and screening
Practice	tool for ED providers and staff
Essential II: Organizational and Systems	N750 Leadership and management of healthcare systems
Leadership for Quality Improvement	Implementation of HST screening protocol
Essential III: Clinical Scholarship and	N730 Principles of evidence-based practice for advanced
Analytical Methods for Evidence-Based	nursing
Practice	N746 Program evaluation
Essential IV: Information	ICS 614 Medical Informatics
Systems/Technology and Patient Care	"SmartPhrase" created in the EHR for HST Project
Technology for the Improvement and	
Transformation of Healthcare	
Essential V: Healthcare Policy for Advocacy	 Law 532 Health Law: Bioethics
in Healthcare	
Essential VI: Inter-professional	 N750 Leadership and management of healthcare systems
Collaboration for Improving Patient and	 Project required a multi-disciplinary team to provide
Population Health Outcomes	trauma-informed care to HST victims
Essential VII: Clinical Prevention and	Early identification of HST victims in order to provide
Population Health for Improving the Nation's	trauma-informed treatment.
Health	
Essential VIII: Advanced Nursing Practice	 Project educated ED medical professionals in the
	identification and reporting of sex trafficked minors

Essential I: Scientific Underpinnings for Practice. In the U.S., about 28% to 50% of trafficked victims interacted with healthcare professionals during their captivity, but remained unidentified (Grace et al., 2014). The most frequently reported treatment facility was an emergency room (Lederer & Wetzel, 2014). The results from this project showed a need for the education of ED providers and personnel on the identification and reporting of HST victims. The implementation of the educational sessions and screening tool proved to be beneficial as it increased HST knowledge and awareness.

Essential II: Organizational and Systems Leadership for Quality Improvement. The leadership and management of healthcare systems course assisted the DNP student with: 1) organizational theory and behavior; 2) leading teams as a change agent and facilitator; 3) innovation, change and advocacy in the political and policy arena; and 4) management tools that support leadership action (Lovett-Floom, 2015). With these acquired skills, this quality improvement project was supported by the board members and implemented at KMCWC. The results showed that this project was effective in increasing the identification and reporting rate of HST victims and emphasized the importance of future educational sessions.

Essential III: Clinical Scholarship and Analytical Methods for Evidence-Based Practice. The principles of evidence-based practice for advanced nursing course emphasized the importance of: 1) "comparing and contrasting conceptual models for application to the development of a quality improvement project; 2) developing a PICO statement; 3) locating, synthesizing, and evaluating a body of literature and its application to the development of a clinical practice guideline" (Mark, 2015, p. 2). The DNP student utilized these skills in designing the HST educational session and screening protocol.

Essential IV: Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Healthcare. The medical informatics course assisted the DNP student with understanding: 1) meaningful use of the electronic health record (EHR); 2) EHR complications and communication, workflow, and quality; and 3) cost-effectiveness, benefits, and issues related to computerized physician order entry and clinical decision support systems (CDSS) (Baker, 2017). This project created a "System Phrase" in the EHR, which provided clinicians in all departments easy access to the HST screening tool. The CDSS was used to assist providers in assessing and reporting suspected victims. This feature will continue to serve as a resource for KMCWC healthcare providers.

Essential V: Healthcare Policy for Advocacy in Healthcare. The health law course provided "a basic understanding of the relationships between bioethics, healthcare, scientific experimentation and the law" (Pietsch & Lee, 2016, p. 2). As a quality improvement initiative, the reporting procedures of this project were in compliance with Chapter 350, Hawai'i Revised Statutes for child abuse reporting requirements (Hawai'i Department of Human Services, 2015). The Health Insurance Portability and Accountability Act Privacy Rule was abided by in order to protect the suspected victim's identity, medical records, and personal health information (US DHHS, 2018).

Essential VI: Inter-Professional Collaboration for Improving Patient and Population Health Outcomes. The leadership and management of healthcare systems course also taught the DNP student to "analyze the impact of communication and relationship-building skills on leadership effectiveness for improving quality care, including a focus on intra- and inter-professional collaboration and teamwork" (Lovett-Floom, 2015, p. 2). This project employed a multi-disciplinary team approach for the purpose of screening and delivering

comprehensive, trauma-informed care to HST victims. The team consisted of CATC staff, ED physicians, nurses, and non-clinicians as well as social workers and anti-trafficking organizations.

Essential VII: Clinical Prevention and Population Health for Improving the Nation's Health. Clinical prevention focuses on "health promotion and risk reduction and/or illness prevention for individuals and families" (Allan et al., 2004, p. 471). A majority of HST victims lack immediate access to healthcare, which results in progressive physical and mental health issues (Dovydaitis, 2010). This project focused on early identification of HST victims with the sole purpose of providing trafficked survivors with access to the appropriate traumainformed treatment necessary for successful reintegration (Hoʻōla Nā Pua, 2015).

Essential VIII: Advanced Nursing Practice. This project served to educate and guide emergency medical professionals in the identification and reporting of sex trafficked minors. As a result of this project, it is anticipated that all adolescents meeting high-risk criteria for HST will be automatically screened during nursing triage in KMCWC's ED.

Conclusion

Trafficking for sexual exploitation is a prominent issue worldwide; more than a quarter of the reported victims are children (United Nations Office on Drugs and Crime, 2016). Healthcare professionals play a significant role in the identification and reporting of sex trafficked victims; however, healthcare professionals often lack the appropriate training about HST to recognize youth at risk for or experiencing sexual exploitation. This project determined that an educational session and screening tool has the potential to increase emergency professionals' recognition and reporting of sexually exploited youth. The project results led to a consensus for embarking on a process to improve the detection and reporting of HST victims in the EDs at KMCWC and all

Hawai'i Pacific Health hospitals, as well as EDs throughout the State of Hawai'i. A "System Phrase" is being developed and will be available in the electronic medical system for use by all Hawai'i Pacific Health hospitals and their affiliates in the near future.

References

- Allan, J., Barwick, T. A., Cashman, S., Cawley, J. F., Day, C., Douglass, C. W., ... Wood, D. (2004). Clinical prevention and population health: Curriculum framework for health professions. *American Journal of Preventive Medicine*, 27(5), 471-476. http://dx.doi.org/10.1016/j.amepre.2004.08.010
- American Medical Women's Association. (2018). Free continuing medical education:

 Introduction to sex trafficking in 15 minutes. Retrieved from https://www.amwa-doc.org/our-work/initiatives/human-trafficking/free-webinar-intro-to-sex-trafficking/
- Associated Press. (2017). Trump vows to fight 'epidemic' of human trafficking. Retrieved

 March 20, 2017, from

 http://bigstory.ap.org/article/9517fb5ec44e4e93a275cc0722abd6a1/trump-vows-fight-epidemic-human-trafficking
- Baker, M. (2017). ICS 614 syllabus. In Medical informatics (pp. 1-6).: University of Hawai'i.
- Banks, D., & Kyckelhahn, T. (2011). Characteristics of suspected human trafficking incidents, 2008–2010. Retrieved from https://www.bjs.gov/content/pub/pdf/cshti0810.pdf
- Beck, M. E., Lineer, M. M., Melzer-Lange, M., Simpson, P., Nugent, M., & Rabbitt, A. (2015).

 Medical providers' understanding of sex trafficking and their experience with at-risk patients. *Pediatrics*, *135*(4), e895-e902. http://dx.doi.org/10.1542/peds.2014-2814
- Belles, N. (2012). Helping human trafficking victims. *Journal of Christian Nursing*, 29(1), 30-35. http://dx.doi.org/10.1097/CNJ.0b013e3182396557
- Brown, C. (2014). The Iowa model of evidence-based practice to promote quality care: An illustrated example in oncology nursing. *Clinical Journal of Oncology Nursing*, 18, 157-

- 159. Retrieved from https://cjon.ons.org/cjon/18/2/iowa-model-evidence-based-practice-promote-quality-care-illustrated-example-oncology
- Center for Evidence-Based Medicine. (2016). Asking focused questions. Retrieved from http://www.cebm.net/asking-focused-questions/
- Centers for Disease Control and Prevention. (2012). Introduction to program evaluation for public health programs: A self-study guide. Retrieved from http://www.cdc.gov/eval/guide/introduction/
- Children's Healthcare of Atlanta. (2015). Clinical practice guideline for assessment and treatment of potential victims of child sex trafficking and commercial sexual exploitation (CSEC) ≥ 11yrs old. *American Academy of Pediatrics*, 1-25. Retrieved from http://aapdc.org/wp-content/uploads/2013/12/Child-Sex-Trafficking-FINAL-published-guideline-may-28-2015.pdf
- Chisolm-Straker, M., & Richardson, L. (2007). Assessment of emergency department (ED) provider knowledge about human trafficking victims in the ED. *Academic Emergency Medicine*, *14*. http://dx.doi.org/10.1197/j.aem.2007.03.1078
- Clawson, H., Small, K., Go, E., & Myles, B. (2003). Needs assessment for service providers of trafficking victims. Retrieved from https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=202469
- Conner, B. T. (2014). Differentiating research, evidence-based practice, and quality improvement. Retrieved from http://www.americannursetoday.com/differentiating-research-evidence-based-practice-and-quality-improvement/
- Crime Prevention and Justice Assistance Division. (2015). JJIS research and reports. Retrieved from http://ag.Hawai'i.gov/cpja/jjis/jjis-research-reports/

- Department of Human Services. (2015). A guide for mandated reporters. Retrieved from http://humanservices.Hawai'i .gov/ssd/files/2015/04/Guide_2015.pdf
- Departments of Justice, Health and Human Services, Homeland Security, and the President's

 Interagency Task Force to Monitor and Combat Trafficking in Persons . (2014). Federal strategic action plan on services for victims of human trafficking in the United States

 2013-2017 . Retrieved from

 http://www.ovc.gov/pubs/FederalHumanTraffickingStrategicPlan.pdf
- Ernewein, C., & Nieves, R. (2015). Human sex trafficking: Recognition, treatment, and referral of pediatric victims. *The Journal for Nurse Practitioners*, *11*, 797-803. Retrieved from http://www.npjournal.org/article/S1555-4155%2815%2900660-1/abstract
- Essen, A., & Ostlund, B. (2011). Laggards as innovators? Old users as designers of new services & service systems. *International Journal of Design*, 5(3). Retrieved from http://www.ijdesign.org/ojs/index.php/IJDesign/article/view/915/368
- Finkel, R., & Finkel, M. L. (2015). The 'dirty downside' of global sporting events: Focus on human trafficking for sexual exploitation. *Public Health*, *129*, 17-22. http://dx.doi.org/10.1016/j.puhe.2014.11.006
- Grace, A. M., Lippert, S., Collins, K., Pineda, N., Tolani, A., Walker, R., ... Horwitz, S. M. (2014). Educating health care professionals on human trafficking. *Pediatric Emergency Care*, *30*(12), 856-861. http://dx.doi.org/10.1097/PEC.00000000000000287
- Green, C. (2016). Human trafficking: Preparing for a unique patient population. *American Nurse Today*, 11(1), 9-12. Retrieved from http://www.americannursetoday.com/wp-content/uploads/2015/12/ant1-Human-Trafficking-1221a.pdf

- Greenbaum, J., & Crawford-Jakubiak, J. E. (2015). Child sex trafficking and commercial sexual exploitation: Health care needs of victims. *American Academy of Pediatrics*, *135*(3), 566-574. http://dx.doi.org/10.1542/peds.2014-4138
- Hawai'i State Department of Health. (2015). Data and Statistics. Retrieved from http://health.Hawai'i.gov/
- HealthStream. (2007). Identifying and assessing victims of abuse and neglect. Retrieved from http://www.healthstream.com/hlchelp/Administrator/200705IdentifyingandAssessingVict imsofAbuseandNeglect.pdf
- Ho'ōla Nā Pua. (2015). Ho'ōla Nā Pua. Retrieved from http://Ho'ōla Nā Pua.org/
- Hornor, G. (2015). Domestic minor sex trafficking: What the PNP needs to know. *Journal of Pediatric Health Care*, 29(1), 88-94. http://dx.doi.org/10.1016/j.pedhc.2014.08.016.
- Hunter, S. B., Han, B., Slaughter, M. E., Godley, S. H., & Garner, B. R. (2015). Associations between implementation characteristics and evidence-based practice sustainment: a study of the Adolescent Community Reinforcement Approach. *Implementation Science*, 10(173), 1-11. http://dx.doi.org/10.1186/s13012-015-0364-4
- Institute of Medicine and National Research Council. (2013). Confronting commercial sexual exploitation and sex trafficking of minors in the United States . *The National Academy of Sciences*, 1-461. Retrieved from http://www.ojjdp.gov/pubs/243838.pdf
- Kapi'olani Medical Center for Women and Children. (2016). Pediatrics. Retrieved from https://www.Hawai'i pacifichealth.org/Kapi'olani/services/pediatrics/
- Kermanshahi, S., & Parvinian, A. M. (2012). Barriers to implementation of evidence-based care:

 Viewpoints of nursing staff. *Iranian Journal of Medical Education*, 12(2), 84-92.

 Retrieved from http://ijme.mui.ac.ir/article-1-1720-en.html

- Khammarnia, M., Haj Mohammadi, M., Amani, Z., Rezaeian, S., & Setoodehzadeh, F. (2015).
 Barriers to implementation of evidence based practice in Zahedan teaching hospitals,
 Iran, 2014. Nursing Research and Practice, 2015, 1-5.
 http://dx.doi.org/10.1155/2015/357140
- Lederer, L. J., & Wetzel, C. A. (2014). The health consequences of sex trafficking and their implications for identifying victims in healthcare facilities. *Annals of Health Law*, 23, 61-91. Retrieved from http://www.annalsofhealthlaw.com/annalsofhealthlaw/vol_23_issue_1?pg=69#pg69
- Levine, J. A. (2017). Mental health issues in survivors of sex trafficking. *Cogent Medicine*, 4(1), 1-13. http://dx.doi.org/10.1080/2331205X.2017.1278841
- Lovett-Floom, L. (2015). N750 syllabus. In *Leadership and management of healthcare systems* (pp. 1-8). : University of Hawai'i.
- Lund Research. (2013). Wilcoxon signed-rank test using SPSS statistics. Retrieved from https://statistics.laerd.com/spss-tutorials/wilcoxon-signed-rank-test-using-spss-statistics.php
- Macy, R. J., & Graham, L. M. (2012). Identifying domestic and international sex-trafficking victims during human service provision. *Trauma, Violence, and Abuse*, 13(2), 59-76. http://dx.doi.org/10.1177/1524838012440340
- Makse, T., & Volden, C. (2011). The role of policy attributes in the diffusion of innovations. *The Journal of Politics*, 73(1), 108-124. http://dx.doi.org/10.1017/S0022381610000903
- Mark, D. D. (2015). NURS 730 syllabus. In *Principles of evidence-based practice for advanced nursing* (pp. 1-8). : University of Hawai'i.

- McCormick, T. R. (2013). The place of principles in bioethics. Retrieved from https://depts.washington.edu/bioethx/tools/princpl.html
- Melnyk, B., Fineout-Overholt, E., Gallagher-Ford, L., & Kaplan, L. (2012). The State of Evidence-Based Practice in US Nurses: Critical Implications for Nurse Leaders and Educators. *The Journal Of Nursing Administration*, 42, 410-17.
- Miller, C. L. (2014). *Child sex trafficking-recognition, intervention, and referral: An educational* framework to guide health care provider practice (Doctoral dissertation, University of Texas at Tyler). Retrieved from https://apha.confex.com/apha/143am/webprogram/Paper327500.html
- Mitchell, K., Finkelhor, D., & Wolak, J. (2010). Conceptualizing juvenile prostitution as child maltreatment: Findings from the national juvenile prostitution study. *Child Maltreatment*, 15, 18-36. http://dx.doi.org/10.1177/1077559509349443
- NAEP-Howard Statistics and Evaluation Institute. (n.d.). Quasi-experimental designs. Retrieved from http://howardsei.org/uploads/QuasiExperimental.pdf
- National Bioethics Advisory Commission. (1998). Research involving persons with mental disorders that may affect decision-making capacity. Retrieved from https://bioethicsarchive.georgetown.edu/nbac/capacity/TOC.htm
- Pietsch, J. H., & Lee, L. H. (2016). Law 532 syllabus. In *Health law: Bioethics* (pp. 1-11). : University of Hawai'i.
- Probst, D. R., Turchik, J. A., Zimak, E. H., & Huckins, J. L. (2011). Assessment of sexual assault in clinical practice: Available screening tools for use with different adult populations. *Journal of Aggression, Maltreatment, & Trauma*, 20, 199-226. http://dx.doi.org/10.1080/10926771.2011.546754

- Rafferty, Y. (2013). Child trafficking and commercial sexual exploitation: A review of promising prevention policies and programs. *American Journal of Orthopsychiatry*, 83, 559-575. http://dx.doi.org/10.1111/ajop.12056
- Rogers, E. M. (2003). Diffusion of innovations (5th ed.). New York: Free Press.
- Schaffer, M., Sandau, K., & Diedrick, L. (2013). Evidence-based practice models for organizational change: Overview and practical applications. *Journal of Advanced Nursing*, 69, 1197–1209. http://dx.doi.org/10.1111/j.1365-2648.2012.06122.x
- Schutt, R. K. (2008). Sampling. In *Investigating the social world: The process & practice of research* (6th ed., pp. 148-189). Retrieved from http://www.sagepub.com/sites/default/files/upm-binaries/24480_Ch5.pdf
- Sharma, R. (2008). The 6 principles of stakeholder engagement. *Supply Chain Management Review*, 1-8. Retrieved from http://www.censeoconsulting.com/media/pnc/2/media.12.pdf
- Shirey, M., Hauck, S., Embree, J., Kinner, T., Schaar, G., Phillips, L., ... McCool, I. (2011).

 Showcasing Differences Between Quality Improvement, Evidence-Based Practice, and Research. *The Journal of Continuing Education in Nursing*, 42, 57-69.
- Silverman, J. G., Decker, M. R., McCauley, H. L., & Mack, K. P. (2009). A regional assessment of sex trafficking and STI/HIV in Southeast Asia: Connections between sexual exploitation, violence and sexual risk. Retrieved from http://www.undp.org/content/dam/undp/library/hivaids/English/SexTrafficking.pdf
- Simich, L. (2014). Out of the shadows: A tool for the identification of victims of human trafficking. Retrieved from https://www.vera.org/publications/out-of-the-shadows-identification-of-victims-of-human-trafficking

- Star Advertiser. (2017). Hawai'i becomes last state to ban sex trafficking. Retrieved from http://www.staradvertiser.com/2016/07/05/breaking-news/gov-david-ige-signed-the-bill-into-law-tuesday-it-makes-sex-trafficking-a-violent-crime-and-class-a-felony-expands-the-statewide-witness-protection-program-to-include-sex-trafficking-and-provides-v/
- The Sex Abuse Treatment Center. (2017). About us. Retrieved from http://satcHawai'i .com/about.aspx
- Titler, M., Kleiber, C., Steelman, V., Rakel, B., Budreau, G., Everett, L., ... Goode, C. (2001).

 The Iowa model of evidence-based practice to promote quality care. *Critical Care Nursing Clinics of North America*, 13, 497-509.
- Tracy, E. E., & Konstantopoulous, W. M. (2012). Human trafficking: A call for heightened awareness and advocacy by obstetrician–gynecologists. *American College of Obstetricians and Gynecologists*, 1045-1047. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/22525917
- United Nations Office on Drugs and Crime. (2016). Global report on trafficking in persons.

 Retrieved from http://www.unodc.org/documents/data-and-analysis/glotip/2016_Global_Report_on_Trafficking_in_Persons.pdf
- United States Department of Justice. (2015). Attorney General Lynch announces \$44 million in grant funding to combat human trafficking and support survivors. Retrieved from http://www.justice.gov/opa/pr/attorney-general-lynch-announces-44-million-grant-funding-combat-human-trafficking-and
- U.S. Department of Health and Human Services. (2018). CDC adds new human trafficking data collection fields for health care providers. Retrieved from https://www.acf.hhs.gov/otip/news/icd-10

U.S. Department of Health and Human Services, Administration for Children, Youth and Families. (2013). Guidance to states and services on addressing human trafficking of children and youth in the United States. Retrieved from http://www.nrcpfc.org/is/trafficked-and-exploited-children-and-youth.html

Vera Institute of Justice. (2014). Screening for human trafficking: Guidelines for administering the Trafficking Victim Identification Tool (TVIT). *National Institute of Justice Journal*, 1-36. Retrieved from https://www.nij.gov/topics/crime/human-

trafficking/Pages/screening-tool-for-identifying-human-trafficking-vicitms.aspx

Appendix A

Figure A1. *Literature Matrix*

Author	Used in Synthesis	Title	Journal	Year	Aim/Question	Study Design	Country	Sample	Data Collection	Findings	Limitations	Melnyk's Level of Evidence	Conclusions
Belles	x	Helping human trafficking victims	Journal of Christian Nursing	2012	To educate healthcare professionals on the problem of human trafficking, red flags, common ailments, and screening questions.	Expert Opinion	United States	None	None	None	None	VII	Healthcare professionals have the power to assist in the identification of HT victims and provide the appropriate help and resources for this population.
Countryman-Roswurm and Bolin		Domestic minor sex trafficking: Assessing and reducing risk	Child and Adolescent Social Work Journal	2014	To examine the risk factors of domestic minor sex trafficking (DMST) among youth and to develop a risk and resiliency assessment for this demographic.	Qualitative Study	United States	23 participants ages 14 to 21 years attending Street Outreach Services Adolescent Safety and Prevention Project.	Questionnaire given pre- and post-psychoeducational group intervention relating to risk and vulnerability factors; Rosenberg Self- Esteem Scale	Eight risk factors were experienced by youth: Parents not married (B79½); Been in State custody (61%); Stayed in shelter or group home (70%); Grabbed or pushed by caregiver in anger (61%); Slapped in the face or head (83%); Thought about harming themselves (57%); Used alcohol (74%) and drugs (70%). When provided psychoeducational intervention in a safe and encouraging environment, runaway, homeless, and street youth are able to develop barriers against sex trafficking. 88% reported knowing what to do if in an abusive relationship and/or sex trafficked.	Small sample size and lack of randomization reduces the external validity and generalizability of the study results. Some youth had access to other services reducing the study's internal validity. Instruments used to gather risk and resiliency are questionable.	VI	Useful information regarding risk factors and impact of interventions were provided by youth participants. These finding will serve as the foundation for developing a scientific basis for making decisions for at-risk youth of DMST. Peer psycho-educational groups improved the lives of the participants.
Floyed, Hirsh, Greenbaum, and Simon		Development of a screening tool for pediatric sexual assault may reduce emergency- department visits	Pediatrics	2011	To determine the characteristics of a screening tool for identifying prepubertal children who potentially need an evaluation for alleged sexual assault in a nonemergent setting.	Cohort Study	United States	Visits from January 2007 to December 2008 with a chief complaint or diagnosis of alleged sexual assault for patients 12 years of age or older were identified from the electronic medical records from Children's Healthcare of Atlanta. 163 cases met the study criteria.	Data were collected from all sources within the medical record. The screening tool was used during review of the records. A positive screen was defined as an affirmative response to any of the screening questions. Physical examination findings of trauma or anogenital infections were a positive screen.	Of the 163 cases, 90 (55%) patients had positive screens and 73 had negative screens. 56 patients were classified as high risk, none of which had a negative screen. The screening tool had a sensitivity of 100% (Confidence interval: 93.5-10.0) and specificity of 68% (Confidence interval: 58.9-76.3).	Results may have been influenced by missing documentation; It was not conclusive whether all patients included in the study were prepubescent; Study was unable to identify confounding variables; Skill level needed to administer the screen was difficult to determine;	IV	The screening tool may be effective for determining which prepubertal children who were allegedly assaulted do not need immediate emergency department evaluation given there is an adequate timely followup.

Figure A1.

Literature Matrix (Continued)

Gi	irardet et al		Collection of forensic evidence from pediatric victims of sexual assault	Pediatrics	2011	To determine the time period following the sexual assaul of a child that specimens provide evidence using DNA amplification.	Controlled trial without randomization	United States	277 evidence-collection kits were analyzed from children aged 13 years and younger from kits processed between January 1, 2007 to December 31, 2008.	Body swabs were tested using acid phosphatase assay for semen; Microscopy and/or prostate-specific antigen assay were used to confirm presence of sperm/semen; Standard color tests were used for blood specimens.	222 kits (80%) had 1 or more lab screening tests that were positive, with 56 testing positive for DNA.	Retrospective design limits ability to draw conclusions; For 45% of cases, the time interval from assault to evidence collection was not known. Data collection and recording in regards to bathing and changing clothes prior to examination was inconsistent and therefore its effect on specimen yield cannot be determined.	Ш	Beyond 24 hours following an assault, body samples should be considered for children even if the yield is limited.
C	Grace et al	х	Educating health care professionals on human trafficking	Pediatric Emergency Care	2014	To determine whether there was an increased recognition of human trafficking (HT) victims by emergency department providers and knowledge of resources for HT victims following an educational presentation.	Randomized Controlled Trial	United States	There were 258 study participants (141 in the intervention group and 117 in the delayed intervention group) from 4E Ebs between April 2011 and August 2011. Participants were in their 30s. Characteristics of participants were similar between the comparison groups, although the intervention group included more nonphysicians than the delayed intervention group.	The survey was administered to participants before the intervention presentation and at the end of the presentation. Research assistants entered the survey data.	Greater increase in the level of HT knowledge reported by the intervention group versus the delayed intervention group (1.42 vs -0.15; adjusted difference of 1.57; 95% Confidence Interval 1.02-2.12; P < 0.001). Knowing who to contact for potential HT victims increased from 24% to 100% in the intervention group and from 20% to 35% in the delayed intervention group from 17% to 38% and remained the same (10%) in the comparison group (9 < 0.03).	Study was not blinded, therefore self-report data may be biased. Comparison results may not be representative due to IRB restrictions. Study was conducted in an area that had increased awareness of HT before the intervention, therefore intervention may have a larger impact in other regions in U.S.	II	A brief educational intervention increased knowledge and self- reported recognition of HT victims among ED providers.
	Green	х	Human trafficking: Preparing for a unique patient population	American Nurse Today	2016	To educate healthcare professionals on recognizing, approaching, and assessing suspect victims of human trafficking and how to rescue them.	Expert Opinion	United States	None	None	None	None	VII	In-depth knowledge of how trafficked victims present to healthcare facilities can help providers identify, approach, and advocate for these vulnerable patients.

Figure A1.

Literature Matrix (Continued)

Greenbaum and Crawford-Jakubiak	х	Child sex trafficking and commercial sexual exploitation: Health care needs of victims	American Academy of Pediatrics	2015	To educate pediatricians on the risk factors, potential indicators, and common medical health problems experienced by victims of commercial sexual exploitation of children (CSEC) so they may recognize and treat this population appropriately.	Expert Opinion or Consensus	United States	None	None	None	None	VII	Pediatricians have the opportunity to increase recognition of CSEC by collaborating with other medical and nonmedical colleagues in order to provide CSEC victims with the appropriate and unique care they require.
Hodge		Assisting victims of human trafficking: Strategies to facilitate identification, exit from trafficking, and the restoration of wellness	Social Work	2014	To educate readers on the topics of human trafficking, victim identification, exit from trafficking, and restoration of psychological wellness.	Expert Opinion	United States	None	None	None	None	VII	Education on human trafficking can equip social workers with the appropriate knowledge to assist with the identification of trafficked victims and facilitate their exit from slavery.
Hornar	х	Domestic minor sex trafficking: What the PNP needs to know	Journal of Pediatric Health Care	2015	To define domestic minor sex trafficking (DMST) and provide education to pediatric nurse practitioners in terms of its prevalence, risk factors, identification and treatment of victims.	Expert Opinion	United States	None	None	None	None	VII	Pediatric health care providers can prevent DMST by identifying potential at risk children and teens and intervening.
Larkin, Cosby, Kelly, and Paolinetti		A pilot study to test the differential validity of a gentlal injury severity scale, in development for use in forensic sexual assault examinations	Journal of Forensic Nursing	2012	To perform an initial test of a gential injury severity scale [GISS] using a standardized examination method to contrast the external genital findings of women after sexual assault [SA] versus consensual intercourse (CI).	Cohort Study	United States	185 SA patients and 59 CI volunteers were examined using the GISS. The participants were women, aged 18 to 46 years old, who were sexually active for more than 6 months.	Cl and SA participants: Within 72 hours of Cl or SA, participants underwent a genital examination. Toluidine blue (TB) dye was applied to the labia minora and posterior fourchette. Colposcopic images were taken before and after the application of the dye. Results were recorded and a GISS was completed for each case.	90% of CI participants' exams were classified as Class A (none or less severe injury: Mild erythema, nonspecific TB uptake, superficial skin disruption); 60% of SA survivors' exams were classified as Class A. For Class B injuries (more severe: Identifiable tears, redness, and/or specific TB uptake), SA survivors (40%) had a significantly higher proportion as compared to CI survivors (10%).	Researchers assumed that police-authorized examinations were sexual assault patient; The study cannot be generalized to adolescent or post-menopausal women; Study cannot be generalized to results obtained without use obtained without use obtained without use of both magnification and TB for staining tissues. GISS needs to be tested on various populations using different forensic examiners to establish validity and reliability of scale.	IV	Magnification and TB along with a standardized examination method and GISS are effective in describing external genital injury after sexual intercourse for women.

Figure A1.

Literature Matrix (Continued)

Macy and Graham	х	Identifying domestic and international sex- trafficking victims during human service provision	Trauma, Violence, and Abuse	2012	To research and synthesize identification recommendations from various literature and reports produced by those who work with sex trafficking victims to increase awareness among human service providers.	Systematic Review of Descriptive Studies	United States	20 documents that included strategies for identifying sex trafficking victims and specific screening questions for victim identification.	PsyciNFO, Pubmed, Web of Science, Social Work Abstracts, Social Services Abstracts, Sociological Abstracts, and Public Affairs Information Service International	The review revealed recommended strategies for identifying sex trafficking victims including trafficking indicators, victim interaction, immediate response, and child-specific information. The review also reveals screening questions that address five categories: victim's safety, employment, living environment, travel or immigration, and child-specific questions.	All pertinent documents may not have been included in the research; Information from the review may have been misinterpreted; The recommended identification and screening strategies should be empirically tested before used.	v	The review results afford human service providers with screening strategies and questions for the identification of sex trafficking victims.
Probst, Turchik, Zimak, and Huckins		Assessment of sexual assault in clinical practice: Available screening tools for use with different adult populations.	Journal of Aggression, Maltreatment, and Trauma	2011	To guide practitioners in adequately assessing sexual assault among men, women, the elderly, and the disabled.	Systematic Review of Descriptive Studies	United States	18 assessment and screening tools for sexual trauma and abuse	None	None	Five of the screening tools did not provide psychometric data.	v	The review identified several screening and assessment tools, but it is the responsibility of the provider to decide which screening tool is appropriate for their practice.
Straight and Heaton		Emergency department care for victims of sexual offense	American Journal of Health-System Pharmacy	2007	To compare emergency department (ED) care for sexual offense victims with national treatment guidelines.	Cohort Study	United States	Data was retrieved from the National Hospital Ambularoty Medical Care Survey (NHAMCS) in 2003. Out of the 251,762 ED visits, 179,149 visits were accounted for as sexual assault and rape and 72, 613 for molestation and other sexual offense.	Data was collected for four weeks from a random sample of patient record forms. Data were analyzed to determine whether certain screening procedures were used. Data on medications prescribed or dispensed during the patient's visit was collected. SPSS 13.0 was used to analyze the data.	Approximately 70% of visits (n=175,111) did not have antibiotics prescribed and appropriate antibiotic prophylaxis was prescribed for 16,625 visits according to the CDC guidelines. During 846 visits for rape victims, HIV prophylaxis was administered. For females aged 12 years and older, emergency contraceptives were given to 13,560 cases. 205, 008 victims were referred to a physician for follow-up care. Only 20.4% of sexual assault victims received sufficient care.	Small sample size; Unavailable timeline between the assault and patient's ED visit; if a majority of the sexual assaults occurred outside of the timeline for prophylatic treatment, results for appropriate care were underestimated; Misclassification bias.	īv	In accordance with the CDC treatment guidelines, the majority of sexual offense victims did not receive sufficient care.
Vera institute of Justice	х	Screening for human trafficking: Guidelines for administering the trafficking victim identification tool	National Institute of Justice Journal	2014	The manual is intended for victim service agencies, social service providers, law enforcement, healthcare, and shelter workers who will implement the Trafficking Victim Identification Tool to assist with improving trafficking victim identification.	Expert Opinion or Consensus	United States	None	None	None	Caution must be used when using the screening tool alone; negative responses to questions does not rule out the possibility of victimization.	VII	The Trafficking Victim Identification Tool has been found to be reliable and valid in the Identification of sex and labor trafficking victims.

Appendix B

Figure B1.

Phase One Sex Trafficking Survey

Sex Trafficking	Questionnaire	(Pre-session)
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1.	What is your occ	upation?	(free text)						
1.	What is your occ	upation:	(fice text)						
2.	Number of years	working in the emergency	department	_ (free text)					
3.	In the past 2 years, have you received any previous sex trafficking training? (Yes or No)								
4.	Please rate your level of knowledge about sex trafficking (5-pt Likert scale ranging from 1=not at all knowledgeable to 5= very knowledgeable)								
5.	I estimate the number of children <18 years old trafficked in the United States to be about (please circle one):								
	<10,000	10,000 to 50,000	50,000 to 100,000	100,000 to 200,000	>200,00				
6.	I estimate the number of children < 18 years old trafficked in Hawaii to be about (please circle one):								
	<100	100 to 200	200 to 300	300 to 400	>400				
7.	I estimate the percent of trafficked children having medical encounters in a given year to be (please circle one):								
	<25%	25 to 50%	50 to 75%	>75%					
8.	I estimate the per (please circle one		approached by sex trafficke	rs within a week of arrival	to be				
	<25%	25 to 50%	50 to 75%	>75%					
9.	I have suspected	that a patient of mine was	a victim of sex trafficking (Yes or No)					
10.		el of confidence in identify confident to 5=Very conf	ing victims of sex traffickir ident)	ng at this time? (5-pt Likert	ranging				
11.		el of confidence in reportin confident to 5=Very conf	g a case of sex trafficking a ident)	nt this time? (5-pt Likert rar	nging				
12.	Have you reporte	ed a suspected sex trafficki	ng victim in Hawaii? (Yes	or No) If so, how many? (f	ree text)				

Figure B1.

Phase One Sex Trafficking Survey (Continued)

Sex	Trafficking	Questionnaire	(Post-session))
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1.	What is your occupation? (free text)
2.	Did you participate in any of the sex trafficking educational sessions given by the project team? (Yes or No)
3.	Please rate your level of knowledge about sex trafficking (5-pt Likert scale ranging from 1=Not at all knowledgeable to 5= Very knowledgeable)
4.	I have suspected that a patient of mine was a victim of sex trafficking (Yes or No)
5.	What is your level of confidence in identifying victims of sex trafficking at this time? (5-pt Likert scale ranging from 1=Not at all confident to 5=Very confident)
6.	What is your level of confidence in reporting a case of sex trafficking at this time? (5-pt Likert scale ranging from 1=Not at all confident to 5=Very confident)
7.	Have you reported to either a hospital social worker or Childe Welfare Services a suspected sex trafficking victim in the past year? (Yes or No).

Figure 1	B2.
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Phase Two Sex Trafficking Survey

Project Evaluation Survey

1.	How many people thought this training session was helpful in assisting with the identification of sex
	trafficking victims?
2.	How many people thought the screening tool was helpful in assisting with the identification of sex
	trafficking victims?
3.	What type of changes would you recommend to this project to make it more effective or easier to
	navigate?(free text)

Appendix C

Figure C1.

Tentative System Phrase/Information Cards for Emergency Department Personnel

Sexual Abuse/Exploitation or Trafficking

High Risk Indicators (also, trust your instincts)

- Runaway or Homeless
- Multiple Sexual Partners
- Current/Past STI
- Vaginal/genital/anal pain especially if delayed care
- Multiple Bruises/suspicious fractures
- Recent Police Contact

Some Potential Screening Questions

- Has anyone you know ever been approached or pressured to exchange sex for anything of value (like food, shelter, clothes, money)?
- Is an adult hurting you?
- Have you ever been touched in a sexual way that was not ok with you?

If answer to any of these questions is yes:

• Contact CWS trafficking hotline: CWS Intake 808-832-1999 (Oʻahu); 1-888-398-1188 (Neighbor Islands) or 911