12-4-2021

Interventions for Clinicians in a Mobile Health Clinic for Underserved Populations Improving Screening, Identification, and Intervention of Trafficking in Persons: A Quality Improvement Project

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Interventions for Clinicians in a Mobile Health Clinic for Underserved Populations

Improving Screening, Identification, and Intervention of Trafficking in Persons: A Quality Improvement Project

A Scholarly Project Presented to the Faculty of

Nicole Wertheim College of Nursing and Health Sciences

Florida International University

In partial fulfillment of the requirements

For the Degree of Nursing Practice

By

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Acknowledgements

I would like to express my gratitude and appreciation for Dr. Goldin and Dr. Sherman whose guidance, support, and encouragement has been invaluable throughout this study. Finally, I would like to thank my family and close friends and my emotional companion pup, Mimi for supporting me during the compilation of this quality improvement project. Their support and encouragement during difficult times is greatly appreciated and duly noted.
Abstract

Human trafficking (HT) is an ongoing human rights violation with a global impact. It is one of the major social problems that affect individuals from all socioeconomic backgrounds. Severe health consequences are linked with the traumatic experiences associated with HT. Despite its health effects, research has shown that screening patients for HT remains a challenge across healthcare settings for different reasons. Part of United Nations Global Initiative to combat HT is to improve screening, identification, and treatment of trafficking in persons (TIPs) in healthcare. Yet, despite those suggestions, lack of perception, knowledge, attitudes, and behavior regarding HT indicators and communication strategies continue to hamper this process. Clinicians play a critical role in detecting signs of trafficking in their patients. Therefore, it is imperative for clinicians to understand concepts that can guide them to identification of TIPs and ensure that they are being provided with the appropriate assistance. Following the completion of a literature review, twenty-three studies were selected. The studies emphasized the seriousness of HT and the increasing need to identifying TIPs, particularly in the healthcare setting. The literature indicates that clinicians have a decreased understanding on HT.

The findings of the literature review were used to create a quality improvement (QI) project to improve clinician’s ability to identify and treat persons who are victims of HT. An evidence-based educational seminar was designed and delivered in person via PowerPoint Presentation. The Human Trafficking for Clinicians Survey scores were compared, and the results showed that following the educational intervention, overall scores were statistically significant. Moreover, it was supported that with a targeted educational intervention, clinician’s perception, knowledge, attitudes, and behavior related to HT indicators and communication strategies to identify TIPs can be enhanced significantly.

Keywords: nurse practitioner, clinicians, human trafficking, trafficking in persons, perception, knowledge, attitudes, behavior
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Chapter I.

Introduction

Human trafficking (HT) is considered a form of modern-day slavery where men, women, and children are exploited. The act of HT is not a new phenomenon, with many predicting its existence to have been since the Roman-Empire period (Litam, 2017). Trafficking in persons (TIPs) are frequently lured from their homes by false promises of well-paying jobs. Rather, they are forced or coerced into prostitution, domestic servitude, farm or factory labor, or other forms of servitude.

HT is regarded as one of the most heinous crimes in the world, devastating millions of people’s lives and stripping them of their dignity (Anthony, 2018; Bassil, 2019; Dearnley, n.d.; Grozdanova, 2016; Mittel & Toney-Butler, 2020). Despite the legal and formative frameworks that are in place to prevent, protect, and prosecute HT, including the United Nations Convention against Transnational Organized Crime and its protocol against the Illicit Manufacturing and Trafficking in Firearm, 21 million TIPs in 106 countries still faced forced labor and extreme exploitation while the perpetrators reaped an estimated annual profit of $150 billion (United Nations, 2017). Surprisingly, only about .04% of TIPs are discovered globally, implying that the great majority of incidents of HT go unnoticed (White, 2019). Everyone, including community organizations and professionals from different sectors, can play a role in identifying TIPs. Therefore, it is critical to be watchful of evidence-based signs that signal HT and further investigate when HT is suspected. One encounter could be a victim’s best chance of survival.

TIPs are a hard-to-find and hard-to-reach population. Throughout TIP’s exploitation, medical assistance may be sought. According to Tortolero (2020), multiple contributing factors exist today that make it difficult to identify such victims in the healthcare settings including: a
screening tool has not been validated; training of clinicians in the identification of TIPs is lacking; and the victim’s decision to disclose is influenced by guilt, shame, threats, and fear of imprisonment.

Clinicians are a first point of contact for patients and are also a part of a safety net of professionals who may be able to identify and assist TIPs. While some TIPs are unable to self-identify themselves, it has been recognized that clinicians are ill-equipped to recognize victims and communicate with them which contributed to the misidentification of these victims (Stoklosa et al., 2017). Clinicians’ awareness of HT indicators and the trauma-informed communication strategies are essential to apply in the clinician-patient relationship. This quality improvement (QI) project will address barriers in identifying TIPs and target the barriers in an interactive training to increase clinician’s ability to successfully identify TIPs. Exploring these barriers will not only help develop interventions and identify what is effective but will also identify factors that interfere with TIPs recognition, reinforce the need to promote HT awareness, and initiate new improvements to improve TIPs detection.

Human Trafficking Initiatives

Considering HT is the second-largest source of income amongst all organized crimes (Joint Commission, 2018), many agencies and nations provide many resources to facilitate efforts to combat HT. Several initiatives are founded on creating awareness on sex-trafficking and strengthening anti-trafficking movements (Polaris Project, 2019).

Federal Strategic Action Plan

Prompted by the rising cases, the U.S. Health and Human Services, developed an initiative in 2014 to reinforce the Federal Strategic Action Plan (FSAP) in addressing HT. The initiative intended to emphasize the FSAP’s core values to improve the support offered to the
victims of the same. (Office on Trafficking in Persons, 2017). The FSAP developed a proposal to aid in raising awareness and facilitate the application of a public health approach that enables clinicians to identify TIPs.

As of 2017, the FSAP has met some of its objectives but is still pending funding and grant approvals for its initiatives. The FSAP did not: (1) integrate survivor experiences and perspectives into training materials for professionals; (2) develop meetings where allied professionals (law enforcement and clinicians) share their perspectives on efforts to combat HT; nor (3) identify regional and local offices and points of contact for HT (Homeland Security, n.d.). Based on this information, a possible contribution to the rising case of HT may be due to FSAP’s incomplete efforts.

**The Stop-Observe-Ask-Respond (SOAR) Program**

The SOAR program, designed by Administration for Children and Families (ACF) and the Office on Women’s Health (OWH), was developed to equip clinicians with the expertise to identify and respond appropriately to HT cases (Office on Trafficking in Persons, 2019). The Polaris Project currently supports the SOAR program and is aligned with the Health and Wellness Act (2018), as it recommends the training of clinicians on trafficking. This initiative focused on training clinicians to identify potential TIPs, collaborate with law enforcement to facilitate communication with such victims, refer TIPs to social service agencies, provide coordinated care tailored to TIP’s circumstances, and integrate with other existing training programs (Track Bill, n.d.).

The SOAR training program incorporated these objectives and was launched in 2014 as a pilot program. This project was designed to test whether clinician’s knowledge and skills on HT improved after completing this training. It has been available to over two million clinicians as an
online training module, making it to be considered one of the U.S. government’s most potential efforts to addressing HT through the health system (United States Department of State, 2020). The SOAR program is still considered a pilot program today and has not been recognized to be the gold standard to effectively identify, screen, treat, and respond to TIPs. Currently, there is no evidence-based screening tool that is available for clinicians.

**Health, Education, Advocacy, Linkage (HEAL) Trafficking**

HEAL Trafficking was developed in 2013 as an international group of multidisciplinary professionals and survivors devoted to building health care’s capability in response to HT (HEAL Trafficking, n.d.). A global initiative was developed to create HT scenarios for clinicians to practice in simulated and controlled environments. The stimulation-education-based program was intended to counter future missed opportunities by providing an interactive environment for clinicians to improve their skills in identifying and treating trafficked patients (Stoklosa et al., 2017). Stoklosa et al. (2017) implemented a study to evaluate the effectiveness of using simulation for medical students. Results showed that the students did not report a substantial behavior change after completing the training program and that it was time-consuming. This initiative was not as impactful and is being modified to improve its simulation curriculum.

According to the Florida Health Department (n.d.), Chapter 2019 of the Human Trafficking Bill prompts each state board licensed health care professional to complete a training course on HT once. This includes all physicians (MD/DO), physician assistants, nurse practitioners, and nurses. Despite the fact that the efforts made through these awareness creation initiatives, very little have been done to evaluate the patient-based outcomes of the same. Many clinicians still report a skills/knowledge-based unpreparedness to handle TIPs (Chambers et al., 2019).
Background

HT, or modern slavery, is an old problem. Given its associated implications, HT is widely considered a crime in many parts of the globe as it is a violation of human rights. Factors that lead to HT include regional conflicts, economic suffering, and cultural acceptance. Assessing the full scale of HT is complex because so many cases often go undetected, which the United Nations refers to as “the hidden figure of crime” (United Nations Office on Drugs and Crime, 2016). In the United States alone, approximately 400,000 individuals are living in conditions of modern-day slavery (American College of Obstetricians and Gynecologists Committee Opinion, 2019). Although TIPs can be found in a wide range of legitimate and illicit business settings, the commercial sex industry, agriculture, hotels, and restaurants are the most common places where they are exploited.

The fact that HT is a covert crime presents the greatest barrier to identifying TIPs (Grozdanova, 2016). Despite the statistics on TIPs, it is estimated that many cases go underreported (National Institute of Justice, 2020). When the covert nature is combined with a widespread lack of knowledge and comprehension of the issue, finding TIPs is challenging at best (Grozdanova, 2016). HT is a major issue and it is unclear why TIPs are not being identified by clinicians; therefore, further investigation of this matter is necessary.

If TIPs are to come in contact with anyone who has the potential to help them, a likely source would be a clinician and it serves as an opportunity for TIPs to obtain help. According to the Polaris Project (2018), 69% of HT survivors reported having had access to health services at some point during their exploitation. In addition, clinicians are ranked as the 7th most frequent identifier of HT among the National Hotline’s list since 2007 (Polaris Project, 2018). Identifying
TIPs is not an easy task and requires numerous skills, such as patience, reasoning, the ability to establish rapport, and much more.

Clinicians must consider the varied ways in which TIPs might present in the clinical setting. According to Katsanis et al. (2019), who studied the general preparedness of clinicians in meeting the needs of TIPs based on a sample of 972 respondents, their findings were that clinicians are misunderstanding the concept and are lacking the skills and confidence to identify TIPs. Furthermore, understanding of barriers, such as clinician’s perception, knowledge level, attitudes, and behavior will possibly help to identify why TIPs are being misidentified in the healthcare setting. These challenging factors are further examined and discussed.

Problem Statement

TIPs are trafficked into the international sex trade and forced labor situations throughout the world. As identified in the study by Grace et al. (2014), 28% to 50% of TIPs in captivity are usually not identified upon their encounter with a clinician. It is undeniable that clinicians are having encounters with TIPs. However, clinicians may not be fully aware of the HT indicators or the steps to addressing HT when it is suspected. This QI project examined clinicians' perception, knowledge, attitudes, and behavior when assessing patients for HT, as well as their abilities to communicate with TIPs. Exploring these concepts will allow the researcher to better understand clinician’s beliefs and confidence in identifying TIPs.

Misperceptions

Although the lack of clinician’s knowledge, attitudes, and behavior has been attributed as significant contributing factors to HT prevalence, misperceptions by clinicians serve as a factor as well. A common misperception from clinicians is that TIPs have to cross a geographic border to fit the definition of HT. The National Human Trafficking Hotline (n.d.) clarifies that this is
being confused with human smuggling and that the crime of HT does not require movement. Victims can be trafficked in their homes within their country’s borders. Language barriers and cultural misconceptions also contribute to the missed opportunities in identifying TIPs. If clinicians do not evaluate patients in a culturally sensitive manner, inconsistencies in patient’s reported history can be unrecognized.

**Knowledge Gaps**

Identifying and providing care for TIPs can be complicated for clinicians. However, decreased knowledge can make it even more challenging. Hachey and Phillippi (2017) argue that clinician’s lack of knowledge regarding their role in identifying and responding to HT is cited as the primary reason for not intervening. Understanding HT includes being aware of the common identifiers of TIPs, how to assess and respond to an HT situation, and how to create a plan of care that is specific for the patient. Lutz (2018) evaluated nurse practitioner’s knowledge level on HT and reported that 94.5% of the participants reported no previous HT education (Lutz, 2018). Without appropriate knowledge, clinicians are limited in their ability to identify TIPs and subsequently unable to treat these individuals effectively.

**Attitudes**

A lack of knowledge in the screening process may discourage clinicians from actually screening prospective TIPs. Clinician’s attitudes may shift as their proficiency in screening patients improve. According to a recent study where nurse practitioners were evaluated on their knowledge and attitudes on HT, only 24% reported confidence in their ability to identify a victim of HT (Peck & Meadows-Oliver, 2019). Lacking confidence will result in clinicians missing their opportunity to identify TIPs as this contributes to their readiness to do so. Educating
Clinicians about HT signs on a routine basis will most likely prepare them and increase their confidence in identifying TIPs.

**Behavior**

There is a strong connection between knowledge, attitudes, and behavior, as they can influence one another. In a study where 500 physicians completed a survey on whether they knew what to do when encountering TIPs, only 20% of the participants reported they were able to do so (Henry, 2016). With that being said, to better screen and identify such victims, a change that will raise clinicians' knowledge, attitudes, or behavior on TIPs signs is necessary.

**Communication**

Clinicians must be able to communicate effectively with TIPs and survivors, especially for those who may be in crisis and in a hypersensitive state. Using strategic communication skills will allow clinicians to assess their situation and respond efficiently to their needs. TIPs do not present with clear signs of HT and they often prefer to conceal their situation for fears instigated by their perpetrators (Blue Campaign, n.d.). Poor communication can further traumatize and possibly revictimize TIPs. Other than these fears, many factors tend to limit their ability to express themselves to clinicians and reveal their situation such as language barriers, fear of their traffickers, and fear of law enforcement (Blue Campaign, n.d.).

Ineffective communication by clinicians may also contribute to the misidentification of TIPs. While it is challenging to communicate with TIPs, one way to overcome this issue is to educate clinicians on strategies to facilitate a conversation. During interactions with TIPs, especially those with Stockholm syndrome, clinicians need to be active listeners without judgment and avoid close-ended questions. Considering this, clinicians need to be open-minded to not miss out subtle indicators of HT. Clinicians ought to create a safe and judgment-free
environment in their professional work settings. If clinicians consider these precautions when interacting with TIPs, it will enable TIPs to express themselves and obtain assistance.

**Significance**

Primary care clinicians are well-positioned to identify TIPs. HT is an unrecognized phenomenon by many clinicians because of a lack of knowledge regarding HT behaviors and effective ways in communicating with TIPs. Addressing the issue of HT is extremely important because of the economic costs, the cost to the TIPs in terms of physical and psychological well-being, and relevance to healthcare, as the likelihood of healthcare professionals interacting with TIPs is potentially high.

**Economic Costs**

With an approximated value of 150-billion-dollars, HT as a business will continue to grow and infiltrate our communities unless there are definitive strategies to identify and protect TIPs (American College of Obstetricians and Gynecologists Committee Opinion, 2019). It is estimated that traffickers can earn up to $21,800 for the sale of one sexually exploited victim (The Dunken Law Firm, 2020). Traffickers have little fear of the legal consequences compared to the profits gained. Other reasons include that there is a worldwide issue of not recognizing the signs of HT and there is a global demand for illegal labor and prostitution (The Dunken Law Firm, 2020).

The U.S. government has spent an abundant amount of money in efforts to help raise awareness and support TIPs. The United States Department of Justice (2019) was recently awarded 101-million-dollars in funding, through the Office of Justice Programs, to combat HT and provide services for TIPs. Part of public health expenditures for HT includes care that covers sexually transmitted infections, injuries from assault, and post-traumatic stress disorder (PTSD).
Identifying TIPs can potentially save lives by disrupting the chain of command in the HT industry.

**Physical/Emotional Costs**

TIPs often are faced with physical and mental injuries. According to Napolitano (2016), the World Health Organization (WHO) reported the most commonly reported physical health symptoms TIPs experience are constant fatigue, headaches, reproductive health issues, back pain, and significant weight loss. Research has also shown that TIPs experience high rates of depression, suicidal idealizations, PTSD, chronic pain, sleep deprivation, substance abuse, and much more (Stoklosa et al., 2017). Psychological effects of HT are influenced by multiple factors including history of trauma/abuse, duration of exploitation, violence, and lack of support and resources after being identified (Stoklosa et al., 2017). Each potentially trafficked person is unique, therefore, knowing the potential effects of HT can facilitate proper interventions that are tailored for TIPs.

**Human Trafficking in Healthcare**

TIPs are often hidden away, but it is possible for clinicians to encounter individuals or situations of concern. According to Waugh (2018), it is estimated that 50% of TIPs seek medical attention amid the course of their exploitation. Sexual abuse, which is the main encountered form of exploitation, is associated with numerous health consequences such as physical and mental injuries, sexually transmitted diseases (STDs), and abortions (Stoklosa et al., 2017). With that being said, TIPs with traumatic injuries may obtain medical services at some point and this serves as an opportunity for clinicians to potentially identify them in efforts to combat HT. It is important for clinicians to be alert to potential red flag chief-complaints and warning signs during health care appointments.
TIPs may not identify themselves because of intense fears of punitive retaliation from perpetrators and shame. Psychosocial challenges by TIPs also contribute greatly to their limited ability to self-express. For instance, the Stockholm Syndrome interferes with TIP’s thought process while being held captive (Karen & Hansen, 2018). The Stockholm Syndrome is a coping mechanism in which TIP build bonds with their perpetrators (Karan & Hansen, 2018). It is especially common amongst females who are sexually exploited (Karen & Hansen, 2018). They are coerced into situations where they must share a love relationship with their trafficker, marry, or risk assault or torture. As a survival or coping tactic, women try to maintain a favorable relationship with their trafficker. Eventually, they accept their romantic relationship and try to fill it with love and compassion. Common symptoms of Stockholm syndrome are perceived compassion from their captor, a sense of pity toward their captors, negative perceptions of legal authorities, similar ideologies as their captors, and refusal to reveal themselves in professional settings (Eske, 2020).

**Prevalence of Human Trafficking**

HT has been a global issue in past and recent decades. Globalization has created a larger gap between developing and developed countries with poverty and marginalization being major facilitators for TIPs. It is a complicated phenomenon that is impacted by a variety of social, cultural, economic, and other variables. In 2017, about forty million people worldwide were identified as TIPs (Migration Data Portal, 2020). According to the United States (U.S.) National Human Trafficking Hotline Statistics, 22,326 victims were recognized in 2019 in the U.S. (Polaris, 2019). As of 2019, the top 3 states with the highest rates of HT are California, Texas, and Florida (World Population Review, 2021).
HT, more than often, predisposes individuals, who are of diverse ages, cultural, and ethnic backgrounds, to varying forms of endangerments. However, there are some characteristics that may make someone more vulnerable. TIPs are typically runaways, the homeless, individuals of peculiar sexual orientations, such as the Lesbian- Gay- Bisexual- Transexual- Queer (LGBTQ) populations, and migrant workers (The United States Department of Justice, n.d.). Undocumented immigrants, members of minority populations, the poor, the disabled, and those with substance abuse are often victims of HT (Joint Commission, 2018). Out of the 40,200 HT cases in the U.S. reported to the National Human Trafficking Resource Center between 2007 and 2017, the more significant fraction of TIPs belonged to the presumed vulnerable population (Joint Commission, 2018).

**Underserved Population**

The underserved population also upholds some of the mentioned characteristics that make them susceptible to HT. This represents the poor, uninsured individuals, immigrants, and many others (Murphy et al., 2017). Most of these vulnerabilities, which culminate in little social and legal protection, place these communities’ members at risk, making them frequent targets for human traffickers. Anthony (2018) conducted a study that examined how homelessness predisposes individuals to the likelihood of being recruited for HT. The findings identified 64% of survivors of HT lacked proper housing conditions during their capture by traffickers (Anthony, 2018).

**Mental Illness**

Although traumatic experiences while being trafficked may induce or exacerbate mental disorders, factors associated with poor mental health may also increase vulnerability to trafficking, such as reduced decision-making capacity and increased dependence on others.
(Ottisova, et al., 2016). Trafficked individuals’ risk of worsening mental health appears to be influenced by multiple factors, including pre-trafficking abuse, duration of exploitation, violence and restrictions on movement while trafficked, greater numbers of unmet needs, and lower levels of social support following trafficking (Ottisova, et al., 2016).

**Women and Children**

Women and children are trafficked into many different forms including forced labor, debt bondage, and sexual servitude, placing them at higher risk for sex trafficking. As supported by the Global Estimates of Modern Slavery (2017), it was estimated that women and children account for 99% of victims of forced labor in the commercial sex industry and 84% of victims of forced marriage (Larsen, 2018). In foreign countries, women are disproportionally represented among men living in poverty due to their subordinate status economically, socially, and culturally. In addition, there are a lack of government controls in place for women and they do not have equal access to education and property as do men. Women also have higher rates of illiteracy, as well as living in poverty (Larsen, 2018). The lack of resources is what traffickers use to control women and children and ultimately convince them to be part of the trafficking world. Traffickers place women and young girls in a position where they must choose to partake in an arranged marriage or prostitution in exchange for escaping poverty, generate income, and family protection. By exploiting and removing women’s independence, traffickers continue to make them feel powerless. As a result, women are trapped in the HT world, and it is quite difficult for them to escape.

Not every trafficking situation is where women are forced to participate in HT. There are situations where women are taught that this is the norm and they may not feel the need to report their trafficking situation. In some West African countries, HT is considered a cultural practice
In Ghana and Nigeria, women and young girls are taught that it is normal to become a laborer and offer sex to their owner. They are brought to countries that are unknown to them like the U. S. and are unaware of the laws related to HT. In India, widespread poverty and lack of proper education exists, resulting in a myriad of human rights violations, especially against women and girls (Dianova, 2019). As part of the Devadasis culture, women are raised to be sex slaves and prostitutes for the priests of the temple and local landlords (Kumar, Mishra, & Mishra, 2020). Women are raised to be subservient and obedient in their family as a cultural norm in order to be trafficked, and they may not realize what is going on (Kumar, Mishra, & Mishra, 2020). Due to examples like this, it is important for clinicians to be mindful of the different cultural and behavioral presentations.

Men

Men are considered the silent victims of trafficking because they don’t fit the typical picture of a trafficking scenario often conveyed in the media (McMahan, 2019). Men are typically targeted in the commercial sex industry and forced labor. Male victims are found in different kinds of work sectors such as mining, forestry, construction, factories, fishing vessels, and agriculture (United States Department of State, 2017). In the United States alone, 3,003 men were identified as TIPs in 2019 (Polaris Project, 2019). Traffickers target men with a history of complex trauma such as poverty, sexual abuse, violence, or living in a home where substance abuse occurs. They are placed in horrid conditions where they experience loss of freedom, deprived of basic nutrition, and are physically and sexually abused (McMahan, 2019)

Action-Means-Purpose Model

HT is an insidious and intricate practice, and its complexity serves as an additional barrier to helping TIPs. After the Trafficking Victim Protection Act (TVPA) of 2000 went into
effect to address HT, the Polaris Project (2012) developed the Actions–Means–Purpose Model as a guide to help comprehend HT and to determine whether a situation fits the federal definition of HT. Understanding the process behind HT plays a crucial role because this process guides the development of measures to reduce the rampancy of HT. The Actions–Means–Purpose Model divides HT into three key components (Polaris Project, 2012). The first component is known as actions. This component refers to the action of the recruitment, transportation, and harboring of individuals. Recruitment includes proactive targeting of vulnerability and grooming behaviors (Office on Trafficking in Persons, n.d.); for example, traffickers often prey on personal situations and offer support. TIPs are then persuaded to leave their home country and be transported to regions they are unfamiliar with. TIPs can even be relocated inside the confines of their own country. Throughout this process, traffickers confine TIPs in an area where they cannot be found and gain their trust with tempting promises such as support, stability, or well-paid jobs with good working conditions.

The second component is referred to as the means. This component refers to where traffickers employ the means of force, fraud, or coercion to remain in control of TIPs. Traffickers use different tactics such as physical restraints, sexual assault, and physical harm to force TIPs to participate in illegal services (Office on Trafficking in Persons, n.d.). TIPs are typically promised a work visa or employment contract; however, instead, TIPs are deceived and placed in a situation of debt bondage to their trafficker. Debt bondages are where TIPs borrow money from their trafficker to pay for their work visa and travel expenses and are then expected to pay the money back at a higher interest rate as soon as possible. Unfortunately, this results in TIPs living in an unknown area while being jobless, homeless, and in debt, leaving TIPS to submit to their
perpetrator to survive. This tactic keeps TIPs silent, psychologically broken, and enslaved (Polaris Project, 2016).

Traffickers use coercion tactics such as threats, lies, blackmail, intimidation, and humiliation to persuade TIPs to participate in illegal services (Eick, 2016). Most often, traffickers threaten to hurt TIPs or their families if they refuse to follow their orders. Traffickers will also develop romantic relationships with TIPS to manipulate and coerce TIPs into doing what the trafficker wants (Eick, 2016). TIPs are treated with varying degrees of politeness and violence by traffickers. As a result of this conduct, fear and psychological distress are instilled and TIPs are then forced to be grateful for being allowed to live, thus accepting to participate in sexual and labor services (Eick, 2016).

The third component is referred to as the purpose. Traffickers engage in HT to subject others to commercial sexual acts, pornography, prostitution, slavery, and forced labor. HT can be conducted in any setting or type of industry, including restaurants, hotels, massage parlors, private homes, drug operations, and the internet (U.S. Department of State, 2021). The fundamental goal of HT is to exploit other individuals to produce financial gain for traffickers; thus, both males and females across the wider globe are victims of HT.

**Human Trafficking Stages**

HT, as a process, has a psychosocial significance ordinarily represented in stages. Zimmerman et al. (2011) developed a theoretical approach that conceptualized HT and its health effects as a multi-staged process of cumulative harm. These stages are the Pre-Departure Stage, Travel and Transit Stage, Destination Stage, Detention-Deportation-Criminal Evidence Stage, and Integration and Reintegration Stage, each of which is characterized by different events. According to Gezie et al. (2019), the prevalence of sexual and domestic violence increases at
each stage of trafficking and being aware of the different stages will help clinicians better understand the health conditions of TIPs and develop relevant interventions.

The Pre-Departure Stage

The Pre-Departure Stage is initiated by the migration of TIPs to the trafficking world. Traffickers often lure them with their past and present circumstances making them vulnerable targets. Local livelihood challenges such as market-driven land exhaustion, humanitarian crises, and weak social assistance have pushed TIPs away from their homes towards high-income opportunities that are too good to refuse (Zimmerman & Kiss, 2017). Traffickers also create a romantic relationship to gain their trust and make unrelenting promises to help TIPs and their families escape their personal problems in exchange for leaving their homes.

The Travel and Transit Stage

The next phase is the Travel and Transit Stage where TIPs are ferried to the intended destination which may be local or distant travel after successful recruitment (Barath et al., 2004). This stage is often marked with physical and mental abuse, which usually continues through the Destination stage. TIPs experience entrapment, dangerous modes of transportation, threats, intimidation, sexual abuse, and much more (Greenbaum et al., 2017). TIPs develop increasing anxiety that is also heightened by the realization that the trafficker is holding their identification documents and personal belongings (Greenbaum et al., 2017). TIPs are aware that they are in trouble at this time, but they are either unaware of the degree of the problem or lack the resources to seek assistance.

The Destination Stage

Oftentimes, TIPs are brought to a location that is unknown to them and the language that is spoken is different from their native language. They lack work documents and are not
equipped with proper employment arrangements. During the Destination stage, TIPs are subjected to encounters such as involuntary commercial sexual acts and forced labor. TIPs are faced with a combination of coercion, violence, exploitation, debt-bondage, and other forms of abuse (Greenbaum et al., 2017). The Destination stage is usually characterized by different responsive reactions by TIPs that include apathy, submissiveness, maladaptation, loss of personal autonomy, self-harm, secrecy, and resilience (Barath et al., 2004).

The Detention-Deportation-Criminal Evidence Stage

This is the stage where TIPs are identified and rescued from their perpetrators and may be returned to their country of origin. During this stage, TIPs can voluntarily refuse to leave and may voluntarily opt to return to their perpetrators. According to Zimmerman and Kiss (2017), certain vulnerabilities may contribute to the later decision to stay such as intense false beliefs that they are in debited to their perpetrators and feel obligated to stay.

The Integration and Reintegration Stage

The Integration and Reintegration stage, which is the last in this sequela, is characterized by a physical and psychological recovery by TIPs who attempt to undergo social reintegration (Barath et al., 2004). Throughout this stage, TIPs are often faced with emotional challenges such as anxiety, depression, isolation, self-stigmatization, and aggressive feelings (Zimmerman & Kiss, 2017). They often require medical and mental health interventions to help them rebuild their lives.
Chapter II.

Summary of the Literature

A literature review was conducted using PubMed, Medline Plus, The Cumulative Index to Nursing and Allied Health Literature (CINAHL), and Elton B. Stephens Company (EBSCO) host database. This review aims to explore the current literature on individuals who are vulnerable to HT, health effects of HT, health variations as HT indicators, clinician’s barriers to identifying HT, clinician’s knowledge, attitudes, and behavior on HT, TIP’s barriers to seeking help, and the intervention tools used to increase TIPs screening and identification. The keywords used to search databases were HT, HT identifiers or indicators, HT screening tools, HT health effects, TIPs, clinician’s barriers, TIPs barriers, communication strategies, trauma-informed care, and interpersonal communication.

Inclusion Criteria

For the inclusion criteria, research articles that were primary and peer-reviewed were considered. In primary articles, a research question is formulated, and this helps provide clinically relevant, reliable, and convincing evidence related to the objective. Inclusion criteria consisted of articles published between 2016-2021 and study participants of all ages. The articles had to include TIPs, the implications of HT in healthcare, and the role of clinicians in identifying HT in healthcare.

Exclusion Criteria

In this literature review, articles were excluded if they did not include information specific to the HT population or they were not in English. Publications that were not full-text were excluded. Duplicate articles and articles that were reviews, editorials, opinionated, and presentations were also excluded.
The search generated 130 articles: PubMed (n=30); Medline Plus (n=35); CINAHL (n=40); and EBSCOhost (n=25). After inclusion and exclusion criteria were met, 23 full-text articles were examined in the literature review, specifically 11 quantitative studies, 6 qualitative studies, and 6 systematic reviews.

**Individuals Who Are Vulnerable to HT**

Due to the diversity of TIPs, it is difficult to target specific groups. Some characteristics may make certain groups more vulnerable such as low socioeconomic status, family abuse/neglect, poverty, mental and behavior problems, and substance abuse (McBride, 2020). Hynes et al. (2018) examined common characteristics among 22 TIPs and 55 possible TIPs each of whom are from Albania and identified several elements that made them vulnerable. Hynes et al. (2018) organized them into five different levels: 1) individual; 2) household and family; 3) community; 4) structural; and 5) situational. At the individual level, the participants had limited formal education and had a background of poverty (Hynes et al., 2018). At the household and family level, one participant was recruited and exploited by their family members (Hynes et al., 2018). At the community level, the participants lived in communities where gender-based and domestic violence was prevalent (Hynes et al., 2018). Lastly, the participants had personal situations (mental problems and substance abuse) that placed them in their trafficking situation (Hynes et al., 2018).

The vulnerabilities Hynes et al. (2018) mention are what traffickers use to influence the individual’s decision to become TIPs. Traffickers make alluring offers such as employment, better life opportunities, and higher income in exchange for sex and labor services. TIPs are often found in restaurants or food service industries where they are forced to work as waiters, bussers, and kitchen staff with little to no pay (Godoy, 2017). Exploited individuals also become
labor workers in agricultural fields where they are forced to harvest crops and raise animals. If TIPs refuse to work, they are faced with threats of deportation or harm to themselves or their families (Godoy, 2017). In local restaurants, bars, and hotels, women and girls are coerced to have intercourse with customers in exchange for room and board (Dausi, 2020). It is challenging to pinpoint who is being trafficked and where they can be found. This also contributes to the difficulty in establishing a screening tool that is appropriate for TIPs.

In attempts to identify who is being trafficked, Chohaney (2016) used a Life-course Theory to survey direct risk factors of HT on minor and adult HT survivors in Ohio. It was found that the main factors that place minors at a higher risk for HT include poor school performance, family dysfunction, homelessness, having family or friends in the sex trade business, juvenile detention, childhood abuse, early drug and alcohol use, and placement in foster care (Chohaney, 2016). Prior to the participant’s involvement in HT, 44% of survivors spent time in juvenile detention, 42% were homeless, 26% were previously diagnosed with depression, 32% struggled with school, and 31% had ongoing conflicts with their parents (Chohaney, 2016). Adult TIPs also reported having similar negative childhood experiences that served as reasons to be involved with HT. These survey findings indicate there is a close relationship between HT, substance abuse, homelessness, and history of mental disorders, however, it is still difficult to clarify which risk factors are directly associated with HT.

Chohaney (2016) also mentioned the ethnicity of those being trafficked. Of the 328 participants who are HT survivors, Chohaney (2016) states the odds of a Caucasian adult being trafficked is 2.46 times greater than the odds for an African American, and 3.75 times greater for Hispanics than African Americans. These statistics are worthy information for the healthcare
community. Understanding the targeted ethnicities for TIPs allows clinicians to know that Caucasians and Hispanics could possibly be additional risk factors for HT screening.

**Health Effects of HT**

TIPs are placed in horrid conditions that affect their health negatively. Further, TIPS are deprived of basic human rights, freedom, autonomy, self-esteem, ownership of their body, and a sense of safety (Hachey & Phillippi, 2017). As a result, various health conditions might occur as a result of this crime and may also be useful indicators for identifying TIPs.

**Physical and Psychological Consequences of HT**

Oram et al. (2016) investigated the physical and mental health of 150 TIPs and found that symptoms related to physical and sexual abuse were a commonly reported indicator. TIPs experienced broken bones, chronic pelvic pain, burns, miscarriages, and sexually transmitted infections and diseases such as human immunodeficiency virus (HIV), pelvic inflammatory disease (PID), chlamydia, gonorrhea, and much more (Oram et al., 2016). TIPs may also present as malnourished and have scars from domestic violence.

There is a high prevalence of drug and alcohol abuse among TIPs (Ottisova et al., 2016). Traffickers tend to use drugs and alcohol as means to control their victims and can increase TIP’s risk for substance abuse. The use of drugs impairs an individual’s mental capacity, and this can decrease the likelihood of TIPs practicing safe sex. They also increase their risk of contracting infections like HIV, Hepatitis B, and Hepatitis C through the use of unclean needles. TIPs with HIV contribute to the spread of HIV therefore early identification and recognition are necessary.

Iglesias-Rios et al. (2018) examined the association between violence, coercion, and mental illness in 1015 HT survivors in Cambodia, Thailand, and Vietnam. The physical and sexual violence the participants experienced was measured using validated questions from the
World Health Organization International Study on Women’s Health and Domestic Violence. Approximately 49.2% of males experienced physical violence only, whereas 12.9% of females, experienced physical violence, 15.7% experienced sexual violence, and 19.3% experienced both physical and sexual violence (Iglesias-Rios et al., 2018). Receiving personal threats was more common in males (46.2%) than females (24.8%); however, females (14.6%) received more family threats than males (10.8%; Iglesias-Rios et al., 2018).

In addition, Iglesias-Rios et al. (2018) used the modified Poisson regression model to obtain prevalence ratios. Females exposed to physical and sexual violence had a 68% greater prevalence of anxiety, 57% greater prevalence of depression, and 50% greater prevalence of PTSD (Iglesias-Rios et al., 2018, p. 7). Females who received personal and family threats had a 93% greater prevalence of anxiety, 46% greater prevalence of depression, and 49% greater prevalence of PTSD (Iglesias-Rios et al., 2018). Males subjected to physical violence had a 30% higher prevalence of anxiety, 33% greater prevalence of depression, and 60% greater prevalence of PTSD (Iglesias-Rios et al., 2018). Males who received personal threats had a 70% higher prevalence of anxiety, 46% greater prevalence of depression, and 75% greater prevalence of PTSD (Iglesias-Rios et al., 2018). As a result of these assessments, Iglesias-Rios et al. (2018) concluded that violence and coercion experiences are independently associated with poor mental health. Iglesias-Rios et al. (2018) also highlighted the importance of mental health treatment as an integral part of service provision, recovery, and reintegration for trafficking survivors.

Ottisova et al. (2016) conducted a systematic review of the risk of violence and its impact on mental health among TIPs. Due to the high levels of violence, studies reported general symptoms: 81% complained of fatigue; 83% experienced headaches; 61% had stomach pain; and 69% reported back pain (Ottisova, et al., 2016). Similar to Ottisova et al. (2016), Palines et al.
(2020) also assessed the prevalence of mental health disorders among 143 TIPs who were under the age of 18 and had been medically evaluated at a Health Maintenance Organization that provides mental health services. Oram et al. (2016), Iglesias-Rios et al. (2018), Ottisova et al. (2016), and Palines et al. (2020) all reported the most commonly reported mental health problems were depression, anxiety, and PTSD. Additionally, Palines et al. (2020) found that 52.4% of their participants were diagnosed with ADHD, 26.6% were diagnosed with bipolar disorder, 19.6% were diagnosed with conduct disorder, and 14% were diagnosed with psychosis.

Based on these findings, Palines et al. (2020) suggested that healthcare professionals be trained on HT to support safe and appropriate responses and an approach that takes both social and psychological factors into account when responding to the mental needs of TIPs. Even though HT is associated with a variety of medical conditions, it is important for clinicians to not assume that every patient with a mental, physical, or sexual problem is trafficked. Instead, it should be used as a guide to identify high-risk patients and rule them out.

**HT Indicators**

Clinicians are typically educated on HT to potentially identify TIPs and provide them with the services they need to help escape their trafficking situation. Education includes HT identifiers and screening tools. Certain physical and mental affects can indicate HT, and clinicians should observe these affects and conduct further assessment and evaluation. Egyud et al. (2017) conducted a study to improve the identification of TIPs by implementing the Department of Health and Human Services HT screening tool and treatment algorithm in the ED. In Egyud et al.’s (2017) study, indicators that potentially signaled HT were included in the screening tool. The indicators were *accompanying partner, offering to pay cash, odd stories of guardianship, the patient having no identification document or insurance, the patient is reluctant*
to explain his/her injuries, and the patient avoids eye contact (Egyud et al., 2017). The HT screening tool has not been validated yet; however, it draws from evidence-based practices from available screening tools used by clinicians in the fields of HT, domestic violence, sexual assault, and HIV screening (Office on Trafficking in Persons, n.d.). After implementing the screening tool for 5 months, 38 patients were targeted as potential TIPs (Egyud et al., 2017). The red flag indicators identified 53% of those patients. These results imply that clinicians must understand that not all TIPs have the classic signs of HT, however, it is important to recognize the vast signs of HT to assist in identifying TIPs.

Paraskevas and Brookes (2018) developed a study to identify the warning signs of HT in the hotel sector in the United Kingdom, Romania, and Finland. Paraskevas and Brookes (2018) conducted 29 interviews with key informant stakeholders on their experience with TIPs and the warning signs that helped identify them. The warning signs were divided into two categories: physical appearance and behaviors. The authors revealed multiple physical appearance indicators of HT, such as malnourishment, exhaustion, and physical abuse (bruises, cuts, grip markings, and burns (Paraskevas & Brookes, 2018). Additionally, participants mentioned certain behaviors that served as potential warning signs, such as TIPs displaying anxiety and submissive behavior, unable to speak the common language, requests for isolated rooms, advance payment in cash, and lack of formal identification (Paraskevas & Brookes, 2018). Based on these findings, Paraskevas and Brookes recommended future researchers to identify the different sectors where TIPs may possibly be found, especially in the clinical setting. Doing so will also help identify where barriers may be established to disrupt HT opportunities.
Markings

TIPs are usually marked to indicate a trafficker’s property. Traffickers also use this technique to keep track of TIPs, especially if they own a large number of TIPs. While burns are a common method of marking TIPs, tattoos may be used as a less conspicuous alternative (Fang et al., 2018). Fang et al. (2018) conducted a systematic review in observing tattoos on trafficked patients. It was found that children who were trafficked commonly had tattoos of names and explicit content (Fang et al., 2018). It was also suggested that tattoos of male names, barcodes, or gang symbols found on the neck, inner thigh, or around the genitals were likely associated with HT (Fang et al., 2018). Fang et al. (2018) analyzed photographs of tattoos found on TIPs from the Tattoo Transformation Organization and found common features of the tattoos. In many photographs, names of traffickers were used to indicate ownership and traffickers used symbols of wealth to show that the TIP’s value was tied to the income they could potentially generate (Fang et al., 2018). Fang et al. (2018) also discussed the quality of the tattoos. While TIPs may have professional-grade tattoos, many of the tattoos examined were unelaborate and of poor quality due to their homemade nature (Fang et al., 2018). Based on these findings, branding is a probable indicator of HT and can help identify TIPs in the healthcare setting. The potential physical features of HT should raise the clinician’s suspicion to investigate further.

Clinician Barriers to Identifying HT

The trauma caused by traffickers can be so great that many TIPs do not see themselves as a victim, which makes discovering this crime difficult (Garg et al., 2020). However, clinicians can employ efforts to identify TIPs and provide them with necessary services. The majority of the research articles discussed the barriers and challenges that limit clinicians’ ability to identify TIPs.
Clinician’s Knowledge

Due to deficits in training, clinicians may lack the knowledge and confidence to recognize TIPs (Chisolm-Straker et al., 2016; Garg et al., 2020; Powell et al., 2017; Williamson et al., 2019). Lumpkin and Taboada (2017) conducted a study to determine if TIPs are accessing healthcare services and are being identified as TIPs. Of the 55 participants who were HT survivors, 54% of the survivors were sex trafficked and 42% of the survivors were labor trafficked (Lumpkin & Taboada, 2017). Findings showed that 64% of the participants obtained healthcare services at the emergency department (ED), local health departments, and community health clinics (Lumpkin & Taboada, 2017). Of the 64% of participants who obtained healthcare services, 96.7% reported never being identified as TIPs and not being provided with information and resources related to HT (Lumpkin & Taboada, 2017). Lumpkin and Taboada’s study indicated that clinicians are in a position to assist TIPs through identification and providing resources. Furthermore, knowing how to identify TIPs will contribute to the United States’ efforts to address HT.

Garg et al. (2020) argued that lack of training opportunities or resources for clinicians contributes to the under-recognition of TIPs in healthcare. Garg et al.’s assertion was reinforced by Sinha et al. (2019), who surveyed healthcare professional to assess their knowledge and awareness of HT. Of the participants who completed the survey, 96.88% exhibited at least low to moderate knowledge of HT and 47.51% did not feel confident in identifying TIPs (Sinha et al., 2019). Several similar studies supported the need for policies that require clinicians to receive additional training to be equipped with the skills to identify TIPs (Garg et al., 2020; Lumpkin & Taboada, 2017; Powell et al., 2017).
The findings from the previous studies align with another study that discussed the clinician’s knowledge of HT. Williamson et al. (2019) interviewed 23 healthcare professionals to identify factors that hinder the identification, referral, and care for TIPs. Four themes arose from the study: 1) widespread uncertainty about the services available for TIPs; 2) lack of access to healthcare resources; 3) lack of knowledge regarding signs of trafficking and trafficked individual’s needs; and 4) extensive efforts to secure TIP’s access to physical and mental healthcare (Williamson et al., 2019). The majority of the healthcare professionals reported not receiving a specific class dedicated to HT and had a lack of clarity regarding which organization to contact when they suspected TIPs (Williamson et al., 2019). Based on these findings, it would be beneficial for clinicians to receive further educational training on how to communicate with TIPs and HT indicators.

**Clinician's Attitudes**

Lack of confidence impacts clinicians’ attitudes and serves as a barrier in clinicians’ ability to assess and recognize TIPs (Liverseed, 2018). Fraley et al. (2020) conducted a systematic review that identified gaps in educational interventions aimed at increasing provider’s awareness and attitudes towards HT. It was found that low awareness of HT indicators and clinician’s negative attitudes towards TIPs was leading barriers in primary care settings (Fraley et al., 2020). The authors emphasized that the educational interventions implemented in the examined studies did not make an impact on the clinician’s attitudes. Despite the educational interventions the participants received on HT, participants continued to believe that trafficking only involves movement, only happens to people with little education and that TIPs will have obvious signs of HT (Fraley et al., 2020). Based on these results, Fraley et al. (2020) discussed the connection between the attitudes and beliefs toward HT and clinician’s perception and
misjudgments. Fraley et al. (2020) express the need for future studies to evaluate how clinicians use information from educational interventions in their practice.

Liverseed (2018) argued that clinicians are reluctant to actively pursue identification and intervene in trafficking situations due to lack of confidence. Specifically, Liverseed (2018) evaluated the impact of implementing an HT response protocol on clinician preparedness of 17 clinicians. The preintervention survey revealed that 21.7% of respondents felt confident enough to identify HT indicators based on patient history and physical examination, 8.6% felt prepared to ask questions about HT and appropriately respond to disclosures of HT, and no respondents felt confident enough to make an appropriate referral for TIPs (Liverseed, 2018). One month after the implementation of the HT response protocol, 82.4% of respondents reported that they had adequate training on HT referral resources and felt confident enough to use the resources in their clinic (Liverseed, 2018). Liverseed’s findings indicated that although clinicians are receiving training about HT, they still do not feel prepared to screen or respond to TIPs. Therefore, further guidance is needed for clinicians to promote safe and appropriate identification and referral of TIPs.

**Clinician’s Behavior**

Clinician’s behavior are based on having knowledge, therefore, given the lack of policy and education on HT, assessment and treatment of TIPs is limited. The literature has shown that clinicians are in a unique position to disrupt the HT cycle; however, clinicians are not adequately educated and trained with the skills to recognize and treat TIPs (Egyud et al., 2017). Testa (2020) developed a qualitative study to examine the experiences of clinicians with TIPs. The participants completed a questionnaire that focused on their understanding of HT and if they knew what to do when encountering TIPs. While the participants understood the definition of
HT, the majority of the participants formed their views by reading news articles and the media (Testa, 2020). A small proportion of the participants stated they suspected a trafficking situation due to abnormal incidents that signal HT such as patients disclosing large debts overseas, working in fields in the sun for long hours with few breaks, and having no paperwork (Testa, 2020). Even though the participants were able to identify TIPs, they expressed they did not have the strategy or skills to further investigate or act on suspicion of HT (Testa, 2020). A lack of clarity around the hospital’s policy and procedures on HT created a reluctance for the participants to question patients about HT because they did not know follow-up procedures (Testa, 2020). According to these findings, improving clinician’s skills and knowledge that focus on the identification and needs of TIPs will most likely contribute to their readiness to act and intervene.

Donahue et al. (2019) studied the impact of providing education on HT identifiers for clinicians. The participants completed a survey on whether they knew what to do when encountering TIPs, and 89% of the participants reported not receiving any training related to HT while working, and less than 50% of the participants had a comprehensive understanding of HT and expressed they did not have the strategy or skills to further investigate or act on suspicion of HT. After completing the training, the participants’ confidence in HT identification increased from 4/10 to 7/10, and 93% reported an increase in knowledge (Donahue et al., 2019).

Similarly, Egyud et al. (2017) implemented an HT screening tool as a teaching strategy for 102 clinicians. The participants completed educational training on HT indicators and the Department of Health and Human Services Screening tool for Human Trafficking (Egyud et al., 2017). After 5 months, results showed that 97% of the participants reported that they would change their practice in identifying TIPs, 75% planned to use alternative communication
strategies to identify TIPs, and 74% believed the education improved their competence (Egyud et al., 2017). With that being said, the value of providing education on HT for clinicians is high because it will prepare clinicians to identify more TIPs and provide TIPs with the services they need.

**TIPs Barriers to Seeking Help**

Due to TIP’s traumatic experiences, it is difficult for them to disclose their trafficking situation to professionals. A systematic review conducted by Garg et al. (2020) searched for the barriers to care access for TIPs. The findings revealed multiple intrinsic barriers such as: 1) TIP’s perception of discrimination or judgments; 2) confidentiality; 3) unfamiliarity with the healthcare system; and 4) reluctance to disclosing information. The researchers also found that HT survivors reported feeling intense emotions when being questioned about their HT experience and were not emotionally ready to share their involvement (Garg et al., 2020). In situations like this, it is understood that TIPs are displaying protective mechanisms and it is recommended for the clinician to maintain a composed, unprejudiced, open-minded, and culturally sensitive attitude (Greenbaum et al., 2016).

**Difficulty in Communication**

In order to address some of the above challenges in efforts to curb HT, when caring for TIPs in healthcare settings, clinicians need to be mindful of empathetic communication styles. TIPs are faced with repeated trauma and can cause significant impacts on the personal development and well-being of survivors. Developing agency and empowerment are key tools to overcoming the negative impacts of trafficking. Trauma-informed care has proven to do so by building an organizational culture that emphasizes understanding, respecting, suitably
responding to the effects of trauma at all levels, and engaging survivors as active participants in accessing services (Santos et al., 2019).

Communication is the main emphasis in trauma-informed care, a victim-centered approach that can be characterized as an understanding of the physical, social, and emotional impact of trauma on the individual, as well as on the professionals who help them (Santos et al., 2019). Hemmings et al. (2016) conducted a systematic review on the guidance of care for individuals who are trafficked. Out of the 44 studies reviewed, 7 studies emphasized the importance of utilizing trauma-informed care when caring for TIPs as it promotes empowerment and victim safety and 10 studies emphasized the importance of providing culturally sensitive care (Hemmings et al., 2016). TIPs come from diverse backgrounds, speak different languages, and may express their illness differently. With that being said, clinicians should be aware of the different techniques to fulfill TIP’s needs.

Considering that TIPs are a complex issue both technically and culturally, the best approach for discussing all those issues is through the interpersonal communication (Dausi, 2020). Interpersonal communication is a process of exchanging information through verbal and nonverbal messages (Chichirez & Purcarea, 2018). The main components of interpersonal communication include active listening and showing interest, understanding, and empathy. This type of communication style can be incorporated in TIP interactions as it plays a crucial role in influencing individuals and small groups in the context of behavior change. The ultimate goals of effective communication with TIPs are to identify TIP’s needs and attempt to fulfill them, protect their safety, obtain and provide valuable information, maintain sensitivity to their concerns, and help TIPs understand and exercise their statutory and constitutional rights in accordance with the law.
Hopper et al. (2018) analyzed a group intervention to address complex trauma in 17 TIPs. Clinicians with expertise in complex trauma and HT guided the intervention and incorporated interpersonal communication (Hopper et al., 2018). After engaging in nonverbal activities, the participants felt they could take risks to share aspects of themselves which helped develop a sense of trust (Hopper et al., 2018). Through engagement, participants felt in control and came into contact with experiences of personal empowerment (Hopper et al., 2018). TIPs are faced with repetitive interpersonal trauma during their trafficking situation, therefore interpersonal triggers may occur during relations. Participants reacted negatively to different interpersonal interactions during the group session. For example, participants were triggered by dirty looks from others, not having enough space, and by the varying levels of engagement of other students (Hopper et al., 2018). Interpersonal communication has the potential to recognize and overcome these triggers. Hopper et al. (2018) highlighted the unique role of verbal and non-verbal approaches to help identify dysregulated states, practice new relational patterns, and develop resource parts of self.

**Trafficker and TIP Relationship**

There is limited research available that explores the relationship between TIPs and their perpetrators. It is understood that traffickers use different tactics of psychological abuse, manipulation, and coercion to gain control of TIPs, however, it is much more complex. Oftentimes, traffickers strip TIPs of contact from others, isolate them from social support, and reinforce the TIP’s dependency upon the abuser (Bassil, 2019). This technique along with aggressive behavior heightens the TIP’s sense of fear and anxiety. Bassil (2019) studied 4 TIPs and 2 traffickers to assess for patterns of control between TIPs and their trafficker. The phone conversations between the TIPs and their trafficker were wiretapped and were transcribed and
coded for coercive control tactics (Bassil, 2019). One significant finding from this study showed that TIPs complied with the demands of their trafficker and did not seek help due to the enforcement of constant monitoring and surveillance. This type of treatment places TIPs in a difficult position where they are living in constant fear, anxiety, shame, and stress and ultimately contributes to the TIP’s reason to not seek professional help.

Traffickers also develop an affectionate relationship with TIPs to manufacture control. De Kock (2019) conducted a systematic review that examined the nature of the relationship between traffickers and TIPs. Intimate relationships between the trafficker and TIPs were most prevalent (De Kock, 2019). TIPs described their relationship by using phrases such as “roommate,” “partner,” “husband,” and “best friend” (De Kock, 2019). This type of bond does not make TIPs feel they are victims of HT. Instead, TIPs feel a sense of belonging and that they are willing participants to someone who gains financially (De Kock, 2019). Love and intimacy are successful techniques to exercise control. TIPs manifest signs of Stockholm Syndrome and as a result, they are more willing to be subjected to sexual exploitation without self-reporting as being TIPs. De Kock (2019) recommends more research on the nature of this relationship because the psychological well-being of TIP plays a big impact in escaping the HT world.

**Intervention Tools Used to Increase TIP Screening and Identification**

Even though efforts are put in place at both local and national levels in developing screening protocols that identify TIPs in healthcare settings, there is a deficit in clinician’s knowledge, attitudes, and behaviors related to identification of TIPs.

**Screening Tools and Efficacy**

Screening tools have been developed based on evidence from the literature and lessons acquired from existing screening instruments used by public health professionals in the sectors of
HT and HT prevention. Mumma et al. (2017) created a 14-question screening survey based on published recommendations to identify TIPs and evaluated its effectiveness on 143 patients. Of the 143 patients, 39 screened positive for HT; however, 29 participants were “false positive” and 10 participants were “true positive” (Mumma et al., 2017, p. 616). The 10 participants who were involved in HT answered yes to the following questions: Has anyone threatened your family? and Were you (or anyone you work with) ever beaten, hit, yelled at, raped, threatened, or made to feel physical pain for working slowly or trying to leave? (Mumma et al., 2017, p. 617). Mumma et al.’s study findings indicate that TIPs exist in the healthcare setting and can be identified with proper screening techniques.

Besaplova et al. (2016) conducted a systematic review to identify HT assessment tools for clinicians. Of the nine selected tools, four focused on screening adults, four were designed to screen both adults and children, and one focused on screening children only (Besaplova et al., 2016). The selected tools were: Comprehensive Human Trafficking Assessment (Polaris Project, 2011); Human Trafficking of Children Indicator (State of Florida Department of Children and Families, 2009); Indiana Protection for Abused and Trafficked Humans Task Force Screening Tool (State of Indiana, 2005); Identify and Assist a Trafficking Victim (U.S. Department of State, n.d.); Medical Assessment Tool (Polaris Project, 2010); Vera Institute of Justice Trafficking Victim Identification Tool (TVIT; Vera Institute of Justice, 2014); Screening Tool for Human Trafficking Victims (Kentucky Rescue and Restore Coalition, 2010); Screening Tool for Victims of Human Trafficking (U.S. Department of Health and Human Services, n.d.); and How to Identify a Human Trafficking Victim? (United States Conference of Catholic Bishops, 2014).
Besaplova et al. (2016) discussed the benefits and drawbacks of each tool. The TVIT is the only tool that formally assessed validity (Besaplova et al., 2016). The remaining assessed tools lacked validity and reliability. Results revealed that the Medical Assessment Tool and the Screening Tool for Victims of Human Trafficking were most useful for clinicians (Besaplova et al., 2016). Developed by the Polaris Project, the Medical Assessment Tool is most notable for its reasonable length, easy flowchart to follow, and supportive information (Besaplova et al., 2016). The U.S. Department of Health and Human Services (2018) developed the Screening Tool for Victims of Human Trafficking and upholds similar qualities as the Medical Assessment Tool; however, it is used for adults only and does not ask questions specific to sex trafficking (Besaplova et al., 2016).

**Summary**

This literature review of clinicians’ knowledge, attitudes, and behaviors regarding HT indicated that clinicians exhibited limited knowledge on HT, which reflects in their attitudes and behaviors when identifying TIPs. Although it is recommended that healthcare organizations implement a training program for clinicians, several researchers have found that clinicians report a lack of training and experience that contributed to their inability to identify TIPs (Chisolm-Straker et al., 2016; Garg et al., 2020; Powell et al., 2017; Williamson et al., 2019). Educating clinicians on HT indicators and interventions will raise the importance of the ongoing HT issue and empower clinicians to be vigilant. Considering HT and its complexities, improving clinicians’ knowledge on HT and its impact on TIPs will possibly prepare clinicians to facilitate consultive and collaborative interactions between key TIPs stakeholders.
Chapter III.
Purpose, PICO Question, Objectives

Purpose

Since clinicians are one of the few professionals to interact with TIPs who are still in captivity, they need to be prepared to identify and screen such victims. The purpose of this QI project is to determine whether an educational seminar on evidence-based HT indicators and communication strategies can improve clinician’s perception, knowledge, attitudes, and behavior in identifying and intervening TIPs in a mobile health clinic that serves the underserved population.

PICO Question

If clinicians (P) working in a mobile health clinic for undeserved populations are provided an educational intervention on human trafficking identifiers and communication strategies (I), will change occur in their perception, knowledge, attitudes, and behavior in identifying and intervening trafficking in persons (O)?

Objectives

The primary objective of this project is to improve clinician’s perception, knowledge, attitudes, and behavior in identifying and intervening TIPs.

Organizational Assessment and SWOT Analysis

Organizational Assessment

This QI project was implemented in a mobile health clinic. The mobile health clinic is a federally qualified health center that strives to provide quality healthcare for the community by providing STD screenings and treatment. Additionally, the mobile health clinic contributes to the efforts in decreasing the incidence of HIVs.
While all patients are accepted, the mobile health clinic targets vulnerable populations such as the economically disadvantaged, the uninsured, and those who live in unstable housing situations. These particular patients may not seek medical care for multiple reasons including problems with transportation, coverage and financial barriers, and lack of knowledge on healthcare services (Bathija & Bhatt, 2018). Due to these reasons, the mobile health clinic is conveniently located in underserved areas where the most vulnerable populations are found. In order to increase access, field staff are actively driving around underserved areas and offer transportation for the community. By doing this, individuals can obtain healthcare services without the burden of finding transportation and its additional costs. Their vision is to meet the medical needs of the community by providing a comprehensive panel of medical services that aid in the prevention and treatment of services at little to no cost.

The mobile health clinic serves the underserved population with risk factors that are similar to HT vulnerabilities and are in a suitable position where patients may be trafficked. Even though HT can affect all populations, the review of the literature revealed the vulnerabilities that place individuals at a higher risk of being trafficked. During the organizational assessment, clinicians of the clinic expressed an interest in the topic HT, but they did not consider how much more vulnerable the underserved population is to being trafficked. Furthermore, there is a need to educate clinicians on HT in order to improve the identification of TIPs.

SWOT Analysis

To achieve the QI project goal and objectives, a Strength, Weakness, Opportunities, and Threats (SWOT) analysis was conducted. A SWOT analysis has become one of the primary sources of information for strategic planning (Benzaghta et al., 2021). According to Benzaghta et al. (2021), a SWOT analysis is a fundamental tool for organizations to attain their goals by
analyzing internal and external environments. Table 1 displays a SWOT analysis of the organization where the QI project is being implemented.

**Strengths**

Strengths of the organization include the clinic sustaining an environment that is open to ideas for change. In efforts to improve the organization, the clinic allows staff to share ideas and recommendations. The DNP candidate appreciates that the clinic supports the idea that HT education should be provided for clinicians. The clinic is equipped with highly skilled staff and are willing to participate in research projects. The administrative team also values and supports evidence-based practices. The clinic is located in an area that strengthens the project idea. The majority of the patients who seek healthcare services in the clinic represent the underserved population and they also have similar vulnerabilities that place them at risk for HT. With that being said, it supports the project as to why it is being conducted for clinicians.

**Weaknesses**

Weaknesses of the organization include scheduling staff participation in educational training. Staff members have different schedules and are constantly changing. It will be difficult to arrange a date that is convenient for all staff members. Another weakness noted is the clinic’s daily routine, which is to obtain patient’s labs, conduct an STD and wellness screening, and plan a follow-up. This type of culture needs to slow down and allow clinicians to provide more thoughtful assessments and screenings for patients.

**Opportunities**

The clinic has an opportunity to develop a reliable process to identify TIPs and build on this scholarly project to implement additional HT training for clinicians. Also, the clinic can
create collaborative partnerships with community resources to create a program that helps identify and intervene TIPs.

**Threats**

Possible threats are clinicians not believing HT is an issue in their community and not understanding why this project is being implemented. Staff turnover also serve as a threat. If clinicians resign from their position, this can negatively impact the sample size and the ability to arrange a convenient day to schedule the educational intervention for the staff.

**Table 1**

*SWOT Analysis*

<table>
<thead>
<tr>
<th>SWOT Analysis of the Mobile STD Clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strengths</strong></td>
</tr>
<tr>
<td>• Support from staff</td>
</tr>
<tr>
<td>• Mobile health clinic encourages</td>
</tr>
<tr>
<td>education and improvement for</td>
</tr>
<tr>
<td>organization</td>
</tr>
<tr>
<td>• Values and supports evidence-based</td>
</tr>
<tr>
<td>practices</td>
</tr>
<tr>
<td>• Mobile health clinic located in an</td>
</tr>
<tr>
<td>area that strengthens the quality</td>
</tr>
<tr>
<td>improvement project.</td>
</tr>
<tr>
<td><strong>Opportunities</strong></td>
</tr>
<tr>
<td>• Develop a reliable process to identify TIPs</td>
</tr>
<tr>
<td>• Implement additional HT training for clinicians</td>
</tr>
<tr>
<td>• Create collaborative partnerships with community resources</td>
</tr>
</tbody>
</table>
Chapter IV.

Definition of Terms

The following terms for definition in the QI project include:

- **Human Trafficking (HT):** An act that involves exploiting a person by force, fraud, or coercion for labor, services, or commercial sex (The United States Department of Justice, n.d.).

- **Trafficking in Persons (TIPs):** The victims that are subjected to involuntary servitude, peonage, debt bondage, or slavery (United States Department of State, 2021).

- **Human Trafficking (HT) Indicators:** Signs that could potentially identify a trafficking situation (U.S. Department of State, 2021).

- **Participatory communication:** The dynamic dialog between people, groups, and organizations that empowers stakeholders to share and exchange information, knowledge, and experience (Musakophas & Polnigongit, 2017). It is a two-way communication technique that offers a perspective on how to articulate decision-making processes and social processes.

- **Screening tools:** An important aspect of preventive medicine and are designed as a guide for clinicians to identify the potential presence of a particular problem, provide early treatment, and avoid or reduce worsening consequences (Iragorri & Spackman, 2018). For example, HT screening tools are equipped with questions and indicators specific to HT to assess patients for possible HT victimization.

- **A clinician:** A healthcare professional qualified in the clinical practice of medicine (Centers for Medicare & Medicaid Services, 2019). Clinicians can be nurses, physicians, pharmacists, or other allied health professionals.
Chapter V.

Conceptual Model

The Iceberg Theory developed by American writer Ernest Hemingway in 1923 has been chosen to frame the development of this QI project to broaden clinician’s perception, knowledge, attitudes, and behaviors in identifying and intervening TIPs. The Iceberg Theory is best understood by envisioning an iceberg. Icebergs exist above and below sea level, however, the only visible part of the iceberg is the top. Ironically, the largest and strongest part of the iceberg is underwater and is not visible. Numerous analogous interpretations can be drawn from the Iceberg Theory. For example, not everything or everyone can be judged on looks alone and there is a lot hidden that is not visible to the naked eye.

Applying the Iceberg Theory in this QI project may enhance the clinician’s understanding of why this QI project is being done and raise its importance. Learning HT indicators are only the tip of the iceberg and additional learning skills are needed to increase TIPs identification and intervention. TIPs are faced with multiple traumatic experiences such as being abused, separated by their families, and working in horrid conditions. In healthcare, TIPs have inconsistent presentations and it is unknown the severity of trauma TIPs are dealt with during initial encounters, therefore, clinicians should be aware of the approach to take when interacting with possible TIPs.

Using the Iceberg Theory, spotting potential TIPs can be difficult, requiring far more information than simply knowing their indicators. Most of the time, TIPs are reserved, nervous, hesitant to answer questions, and do not speak the common language (Lukens, 2020). These barriers may be unknown to clinicians which can make communicating with TIPs challenging. The DNP candidate developed a conceptual model below in Figure 1 that highlights the hidden
techniques that are needed to aid in the identification of TIPs. While clinicians must be aware of the physical and mental HT indicators to identify TIPs, they must also be aware of other methods that will affect the identification and intervention process. Methods include non-verbal cues, participatory communication, environmental stimuli, and self-concept. Participatory communication is a type of communication that is known for facilitating empowerment, especially for those who are vulnerable and marginalized. These different influences are interlinked with each other and have the potential to affect a TIP's decision to disclose their true reality.

It is noted that self-concept is at the bottom of the iceberg. Social relationships contribute to the development of self-concept and as individuals participate in experiences, they tend to learn more about themselves through these connections (Meshelemiah & Lynch, 2019). It is difficult to understand how TIPs make sense of their experiences during their exploitation and manage their self-esteem and personal identity. In some cases, TIPs may believe prostitution is compatible with their identity thus accepting the stereotypes and labels that are associated with HT, while some may feel unworthy and are detached from society. Part of the clinician’s role when interacting with TIPs is to help them organize their perception of themselves. Doing this will potentially help clinicians understand their self-awareness and determine what kind of assistance they will need.

According to the research findings, heightening clinician’s knowledge and skills to identify and intervene TIPs is warranted. While clinicians are aware of the superficial signs of HT, much more is needed. Part of this QI project is to encourage clinicians to go deeper into the iceberg and learn the unseen and underlying techniques to assist in identifying TIPs and provide them with the services they need. A QI intervention aimed at educating clinicians on HT signs
and the communication techniques while interacting with TIPs is particularly important, as it may have a favorable impact on their knowledge, attitudes, and behaviors when it comes to detecting TIPs. Furthermore, a QI intervention may also affect clinician’s perceptions of HT because they will feel more prepared and confident when they are interacting with this particular population.

**Figure 1**

*Conceptual Model*
Chapter VI.

Methodology

This study is a QI project that follows the Plan Do Study Act (PDSA) methodology (Deming, 1993). The PDSA approach is a four-step problem-solving model that can be used to improve a process or implement change (Prentiss & Butler, 2018). The four phases of the PDSA model are Plan, Do, Study, and Act.

- **Plan**: A change targeted at improvement is recognized in the ‘plan’ stage. The plan consists of the design of the study, setting, sample, instruments, intervention, data collection, and data analysis.
- **Do**: The ‘do’ phase represents putting the plan into action and implementing the study.
- **Study**: The ‘study’ phase is the analysis of the data.
- **Act**: The ‘act’ phase represents whether the study needs modification or should be conducted on a larger scale or should be terminated.

**Plan Phase**

**Study Design**

This QI project assessed the value of an educational seminar using evidence-based HT indicators and communication strategies in the care of TIPs. The Human Trafficking for Clinicians Surveys were completed to understand if there was a change in clinician’s perception, knowledge, attitudes, and behavior. The intervention educated clinicians on: 1) recognizing physical indicators of TIPs; 2) identifying different forms of HT; 3) learning about the different HT screening tools; 4) learning assessment and interviewing strategies; 5) utilizing participatory communication as a communication style when interacting with TIPs; and 6) utilizing the LISTEN mnemonic: Lack of eye-contact, Inconsistent details, Sexually transmitted infections,
Tattoos or branding, Emotional detachment, and Nutritional deprivation and the SIMPLE mnemonic: Socio-cultural sensitivity, Intuitive listening, Maintain consistency, Participatory communication, Limit distractions, and Empowering language, developed by the DNP candidate. The mnemonics served as memory aids to facilitate the recall of screening indicators, facilitate a stepwise approach to assessment, and assist in identifying high-risk patients.

**Setting**

This QI project was conducted at a mobile health clinic that offers health and wellness screenings. STD prevention services such as STD testing and treatment are available at the mobile health clinic. While all patients are welcome, the mobile health clinic focuses on serving vulnerable groups.

**Participants**

The participants included clinicians and support staff from the clinic, specifically nurse practitioners (n=7), medical assistants (n=9), pharmacy technicians (n=3), and front desk assistants (n=3). It was anticipated that 80% of clinicians from the mobile health clinic would participate in the QI project.

**Intervention**

Over two days, an evidence-based educational seminar was delivered by the DNP candidate in an interactive classroom-style format where the participants engaged and participated in activities to maintain their attention. The DNP candidate developed an educational seminar in the form of an online PowerPoint (PPT) presentation for the participants. The PPT presentation included text, graphics, charts, animation, and an activity for the participants. It was delivered as a 45 to 60 minutes educational seminar that included common HT identifiers amongst men and women. This QI project provided essentials elements and
communication strategies for identifying and intervening TIPs. Followed by this, the participants were introduced to various screening tools to assist in identifying TIPs in primary care. The DNP candidate developed mnemonics for HT identifiers and the communication approach as a memory technique as this promoted better retention of the material learned. By doing this, participants were more prepared during such encounters. All information related to HT was collected from evidence-based literature. Additional resources were also provided to the participants for more information related to HT.

The immersion site’s faculty were all in agreement to conduct an in-person educational session and follow Centers for Disease Control and Prevention (CDC) guidelines and Coronavirus Disease (COVID) precaution protocols. The interactive lecture was conducted in the main clinic’s conference room. Chairs were 6 feet apart and extra masks were available for the participants. Coffee, orange juice, and breakfast snacks that are finger foods were provided to the participants along with disposable plates, napkins, and hand sanitizers. If any of the participants were unable to attend on the selected dates, the DNP candidate conducted a one-on-one educational session. Two weeks after the educational seminar, the DNP candidate emailed the participants, who attended the seminar, the post-intervention survey and reminders to complete it.

**Instruments**

A demographic form assessed the clinician’s characteristics. Demographic questions included age, gender, ethnicity, position at the facility, and years of medical experience. To maintain confidentiality, all demographic forms were coded with a unique code identifier to facilitate data analysis.
The Human Trafficking for Clinicians Survey was developed by the DNP candidate. All of the survey questions were collected from evidence-based literature. The Human Trafficking for Clinicians Survey questions were divided into two categories: HT Indicators and Communication Strategies. The HT Indicators category was further divided into four domains: Perception, Knowledge, Attitudes, and Behaviors. The Communication Strategies category was further divided in three domains: Knowledge, Attitudes, and Behaviors. The surveys consisted of Likert-style questions and multiple-choice style questions. Each question had either four or five response options. The surveys were scored by the DNP candidate.

Data Collection

Initial email invitations were sent to all eligible participants by the DNP candidate. The invitations included information about the QI project and consent forms. The DNP candidate obtained informed consents electronically. Recruitment occurred via email with an electronic flyer and the DNP candidate also posted flyers in common areas of the clinic for the staff. The participants were notified in the email that there was no monetary incentive to join, however snacks and beverages were provided during the educational seminar.

The DNP candidate emailed reminders about the QI project and the due date for consent form submission. Once consent forms were received, the participants were emailed the Human Trafficking for Clinicians Survey online and reminders to complete it. Given the current situation regarding COVID-19, the surveys were delivered via SurveyMonkey via an email link or by direct access to the link by smartphone or computer. The participant’s identity remained confidential through the use of a unique code identifier (the month the participant was born and the first three letters of their father’s name). By doing this, no personal identifying information was on the pre- and post-intervention survey.
The pre-intervention Human Trafficking for Clinicians Survey assessed the participant’s current perception, knowledge, attitudes, and behaviors in identifying and intervening TIPs. Two weeks after the intervention, the participants were asked to complete a post-intervention Human Trafficking for Clinicians Survey to assess whether there was a change using the same questions. The DNP candidate used the surveys as the instrument to analyze and measure the changes in clinician’s perception, knowledge, attitudes, and behaviors in identifying TIPs, and used percentages to reflect the results.

**Data Analysis**

The survey data was uploaded to GraphPad Prism version 8.0.0 in a password computer of the DNP candidate for data analysis. For both of the surveys, the DNP candidate scored the data with a percentage and a mean score was calculated. The scores were organized according to a topic domain and compared for improvement. Descriptive statistics were used to analyze demographic data. Scores on the Human Trafficking for Clinicians Survey were analyzed using a paired $t$-test to compare mean perception, knowledge, attitudes, and behavior values for each category before and after the intervention. Using the paired $t$-test, $p$-values were also obtained. An alpha level of 0.05 was used for all statistical tests.

**Protection of Human Subjects**

All investigators in this QI project completed the Collaborative Institutional Training Initiative (CITI) program training in the protection of human research subjects. Institutional Review Board (IRB) approval was sought before the implementation of the QI project. These participants were informed that this QI project was voluntary and that they have the right to withdraw from this project at any time without any consequences. The participants were encouraged to participate in the classroom-style lecture and complete a demographic form and
pre- and post-intervention survey. The participants were informed that the educational seminar and completion of both surveys would take approximately 90 to 120 minutes. The educational seminar was approximately 45 to 60 minutes, including time for questions, comments, and suggestions and each survey could be completed within 15 minutes. By using unique code identifiers, the participants remained confidential. The data collected from this QI project were kept private and protected by a laptop password and spyware which was kept in a locked file cabinet in the DNP candidate’s locked office. Only the members of the research team had access to the data and all data will be destroyed within 3 years of study completion. No identifying information data will be presented in publications and presentations. The DNP candidate was the only individual with password access to the survey site, SurveyMonkey. According to SurveyMonkey, survey data is encrypted using secure TLS cryptographic protocols.

Benefits

The main benefit of this QI project was to increase the participant’s perception, knowledge, attitudes, and behaviors in identifying and intervening TIPs. Clinicians adopted learning skills to implement communication techniques to help identify TIPs and facilitate the establishment of a trusting relationship. It was expected that this QI project will benefit society by guiding clinicians in the accurate identification and intervention of TIPs.

Risks

The likelihood of participants experiencing any physical, psychological, social, or economic harm from this QI project was minimal. HT is a delicate topic and discussing this subject matter may be uncomfortable to others and trigger a negative emotional, psychological, or cultural reaction, especially to those who have been negatively affected by HT. The DNP candidate has taken this risk into consideration and presented the project in a culturally
responsive and sensitive manner. The DNP candidate only surveyed current perception, knowledge, attitudes, and behaviors and then offered an educational intervention to increase knowledge. The participants were notified on the consent form and surveys that while this QI project is voluntary and there are no known alternatives other than not taking part in this QI project. There were no costs associated with participation.

Chapter VII.

Results

The purpose of this quality improvement project was to evaluate the impact of providing education on HT indicators and communication strategies for clinicians. Specifically, if it will enhance clinician’s perception, knowledge, attitudes, and behaviors in identifying and treating TIPs. Twenty-eight potential participants were invited to participate in the QI project. Twenty-one clinicians attended the educational seminar; of these clinicians, 21 completed the pre- and post-intervention surveys

Demographics

Table 1

*Pre-Intervention Participant Demographic Data*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Count (n=21)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>6</td>
<td>28.57%</td>
</tr>
<tr>
<td>Female</td>
<td>14</td>
<td>66.67%</td>
</tr>
<tr>
<td>Unsure</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>I choose not to disclose</td>
<td>1</td>
<td>4.76%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Count (n=21)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 – 30</td>
<td>10</td>
<td>47.62%</td>
</tr>
<tr>
<td>31 – 40</td>
<td>5</td>
<td>23.81%</td>
</tr>
<tr>
<td>41 – 50</td>
<td>6</td>
<td>28.57%</td>
</tr>
<tr>
<td>50+</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>
Pre-Intervention Sample

The participant’s demographic data are illustrated in Table 1. Of the 21 participants in the pre-intervention sample, 14 (66.7%) participants were female, 6 (28.57%) were male, and 1 (4.76%) preferred not to disclose. Of these participants, 10 (47.62%) were 20 to 30 years old, 5 (23.81%) were 31 to 40 years old, and 6 (28.57%) were 41 to 50 years old. Thirteen (61.90%) respondents identified their ethnicity as Black or African American, 2 (9.52%) identified as Asian or Pacific Islander, and 6 (28.57%) identified as Hispanic or Latino.

The sample consisted of 6 (28.57%) nurse practitioners, 1 (4.67%) pharmacy technician, 6 (28.57%) medical assistants, 2 (9.52%) front desk assistants, and 6 (28.57%) other. Other positions in the facility included field staff and patient registration. The participant’s medical experience ranged from less than one year to more than 20 years. Particularly, 6 (28.57%) participants had less than one year of experience, 8 (38.10%) had 5 to 10 years, 2 (9.52%) had 10 to 20 years, and 5 (23.81%) had more than 20 years.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian or Alaskan Native</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>2</td>
<td>9.52%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>13</td>
<td>61.90%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>6</td>
<td>28.57%</td>
</tr>
<tr>
<td>White or Caucasian</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Position at the Facility</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse Practitioner</td>
<td>6</td>
<td>28.57%</td>
</tr>
<tr>
<td>Pharmacy Technician</td>
<td>1</td>
<td>4.76%</td>
</tr>
<tr>
<td>Medical Assistant</td>
<td>6</td>
<td>28.57%</td>
</tr>
<tr>
<td>Front Desk Assistant</td>
<td>2</td>
<td>9.52%</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>28.57%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years in the Medical Field</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>6</td>
<td>28.57%</td>
</tr>
<tr>
<td>5 to 10 years</td>
<td>8</td>
<td>38.10%</td>
</tr>
<tr>
<td>10 to 20 years</td>
<td>2</td>
<td>9.52%</td>
</tr>
<tr>
<td>More than 20 years</td>
<td>5</td>
<td>23.81%</td>
</tr>
</tbody>
</table>
100% of the original participants completed the educational intervention and post-intervention survey. When comparing the demographic data between the pre- and post-intervention surveys, majority of the data was the same. However, one participant changed their years of medical experience in the post-intervention survey from 10 to 20 years to having more than 20 years of medical experience.

**Pre- and Post-Intervention Results of HT Indicators**

**Perception**

The percentage of participants' responses to each question about their perception of HT are illustrated in Table 2.

**Table 2**

*Participant’s Perception of Human Trafficking Pre- and Post-Intervention Scores*

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-Intervention</th>
<th>Post-Intervention</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many training programs on human trafficking have you attended throughout your medical experience?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>10 (47.62%)</td>
<td>0</td>
<td>47.62 ↓</td>
</tr>
<tr>
<td>1*</td>
<td>6 (28.57%)</td>
<td>16 (76.19%)</td>
<td>47.62 ↑</td>
</tr>
<tr>
<td>3*</td>
<td>3 (14.29%)</td>
<td>3 (14.29%)</td>
<td>0</td>
</tr>
<tr>
<td>More than 3*</td>
<td>1 (4.76%)</td>
<td>2 (9.52%)</td>
<td>4.76 ↑</td>
</tr>
<tr>
<td>I don’t know</td>
<td>1 (4.76%)</td>
<td>0</td>
<td>4.76 ↓</td>
</tr>
<tr>
<td>Which population group is at risk for human trafficking?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Everyone *</td>
<td>19 (90.48%)</td>
<td>21 (100%)</td>
<td>9.52 ↑</td>
</tr>
<tr>
<td>Caucasian</td>
<td>2 (9.52%)</td>
<td>0</td>
<td>9.52 ↓</td>
</tr>
<tr>
<td>Blacks</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Asian</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
I know how to identify and screen for human trafficking when it is suspected:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree *</th>
<th>Agree *</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 (9.52%)</td>
<td>11 (52.38%)</td>
<td>6 (28.57%)</td>
<td>2 (9.52%)</td>
<td>0</td>
</tr>
</tbody>
</table>

To fit the definition of human trafficking, victims must cross a border:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree *</th>
<th>Strongly Disagree *</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 (4.76%)</td>
<td>2 (9.52%)</td>
<td>1 (4.76%)</td>
<td>10 (47.62%)</td>
<td>7 (33.33%)</td>
</tr>
</tbody>
</table>

There is an available human trafficking screening tool for me to use when trafficking in persons is suspected:

<table>
<thead>
<tr>
<th></th>
<th>True *</th>
<th>False</th>
<th>Maybe</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10 (47.62%)</td>
<td>3 (14.29%)</td>
<td>0</td>
<td>8 (38.10%)</td>
</tr>
</tbody>
</table>

|                | 21 (100%) | 0     | 0     | 38.10 ↓ |

Note: % Change= Percent Change, *= Correct answer, ↑= Increase in percent change, ↓= Decrease in percent change

Two-Tailed Paired Samples t-Test

A two-tailed paired samples t-test was conducted to examine whether the mean difference of perception of HT pre- and post-intervention scores was significantly different from zero. The result of the two-tailed paired samples t-test was significant based on an alpha value of 0.05, 

\[ t(20) = 7.1075, p < .0001 \], indicating the null hypothesis can be rejected. This finding suggests
the difference in the mean scores of pre- and post-interventions was significantly different from zero. The mean score of pre-intervention was significantly lower than the mean score of post-intervention. The results are presented in Table 3. A bar graph of the means is presented in Figure 2.

Table 3

Two-Tailed Paired Samples t-Test for the Difference Between Perception of HT Pre-Intervention and Post-Intervention Scores

<table>
<thead>
<tr>
<th></th>
<th>Pre-Intervention</th>
<th>Post-Intervention</th>
<th>t</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>64.76</td>
<td>100</td>
<td>7.1075</td>
<td>&lt; .0001</td>
<td>2.19</td>
</tr>
<tr>
<td>SD</td>
<td>22.72</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Figure 2

Perception Pre- and Post-Mean Scores

Note: Comparison of the pre-test and post-test mean scores, 64.76% and 100% respectively.
Knowledge

The percentage of participants' responses to each question about their knowledge of HT indicators are illustrated in Table 4.

Table 4

Knowledge of HT Indicators Pre- and Post-Intervention Scores

<table>
<thead>
<tr>
<th>Question</th>
<th>Pretest</th>
<th>Posttest</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I think of the term ‘trafficking in persons’:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I’m not sure what this means</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>This term is unclear and confusing to me</td>
<td>2 (9.52%)</td>
<td>0</td>
<td>9.52 ↓</td>
</tr>
<tr>
<td>I don’t know the difference between victim of HT and trafficking in persons</td>
<td>4 (19.05%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Trafficking in persons is the same as human smuggling</td>
<td>10 (47.62%)</td>
<td>0</td>
<td>47.62 ↓</td>
</tr>
<tr>
<td>I understand that the term describes the act *</td>
<td>5 (23.81%)</td>
<td>21 (100%)</td>
<td>76.19 ↑</td>
</tr>
<tr>
<td>Self-rated level of knowledge about human trafficking indicators:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent *</td>
<td>19 (90.48%)</td>
<td>21 (100%)</td>
<td>9.52 ↑</td>
</tr>
<tr>
<td>Good *</td>
<td>2 (9.52%)</td>
<td>0</td>
<td>9.52 ↓</td>
</tr>
<tr>
<td>Fair</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Poor</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I’m not sure</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
The different forms of human trafficking are:

<table>
<thead>
<tr>
<th>Form</th>
<th>Participants</th>
<th>Total Percentage</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don’t know the different forms</td>
<td>2 (9.52%)</td>
<td>0</td>
<td>38.10 ↓</td>
</tr>
<tr>
<td>Sex-trafficking only</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Labor-trafficking, sex-trafficking, debt-bondage *</td>
<td>9 (42.86%)</td>
<td>21 (100%)</td>
<td>57.14 ↑</td>
</tr>
<tr>
<td>Sex-trafficking and labor-trafficking</td>
<td>10 (47.62%)</td>
<td>0</td>
<td>47.62 ↓</td>
</tr>
<tr>
<td>I’m not sure what these mean</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Physical indicators of human trafficking include: (Circle all that apply)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Participants</th>
<th>Total Percentage</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tattoos *</td>
<td>6 (28.57%)</td>
<td>21 (100%)</td>
<td>71.43 ↑</td>
</tr>
<tr>
<td>Bruising *</td>
<td>16 (76.19%)</td>
<td>21 (100%)</td>
<td>23.81 ↑</td>
</tr>
<tr>
<td>Avoiding eye contact *</td>
<td>16 (76.19%)</td>
<td>21 (100%)</td>
<td>23.81 ↑</td>
</tr>
<tr>
<td>Rehearsed responses *</td>
<td>15 (71.43%)</td>
<td>21 (100%)</td>
<td>28.57 ↑</td>
</tr>
<tr>
<td>Sexually transmitted infections *</td>
<td>12 (57.14%)</td>
<td>21 (100%)</td>
<td>42.86 ↑</td>
</tr>
<tr>
<td>Fractures *</td>
<td>9 (42.86%)</td>
<td>21 (100%)</td>
<td>57.14 ↑</td>
</tr>
<tr>
<td>Poor living conditions *</td>
<td>13 (61.90%)</td>
<td>21 (100%)</td>
<td>38.10 ↑</td>
</tr>
<tr>
<td>Old scars *</td>
<td>11 (52.38%)</td>
<td>21 (100%)</td>
<td>71.43 ↑</td>
</tr>
<tr>
<td>Lacking identity documents *</td>
<td>11 (52.38%)</td>
<td>21 (100%)</td>
<td>71.43 ↑</td>
</tr>
<tr>
<td>I don’t know the indicators</td>
<td>2 (9.52%)</td>
<td>0</td>
<td>9.52 ↓</td>
</tr>
</tbody>
</table>
Human trafficking is defined as:

- I don’t know the definition: 0 (0%) 0 (0%) 0 (0%)
- Commercial sex act with a person who is not 18 yet: 0 (0%) 0 (0%) 0 (0%)
- Recruitment of a person for labor and services without force, fraud, or coercion: 2 (9.52%) 0 (0%) 9.52 ↓
- Forcing women to be involved with commercial sex acts: 1 (4.76%) 0 (0%) 4.76 ↓
- Exploiting a person by force, fraud, or coercion for labor, services, or commercial sex: 18 (85.71%) 21 (100%) 14.29 ↑

Note: % Change = Percent Change, * = The correct answer choice, ↑ = Increase in percent change, ↓ = Decrease in percent change

Two-Tailed Paired Samples t-Test

A two-tailed paired samples t-test was conducted to examine whether the mean difference of knowledge of HT indicators pre- and post-intervention scores was significantly different from zero. The result of the two-tailed paired samples t-test was significant based on an alpha value of 0.05, \( t(20) = 13.0084, p < .0001 \), indicating the null hypothesis can be rejected. This finding suggests the difference in the mean scores of pre- and post-interventions was significantly different from zero. The mean of pre-intervention was significantly lower than the mean of post-intervention. The results are presented in Table 5. A bar graph of the means is presented in Figure 3.
Table 5

Two-Tailed Paired Samples t-Test for the Difference Between Pre-Intervention and Post-Intervention Knowledge of HT Indicators Scores

<table>
<thead>
<tr>
<th></th>
<th>Pre-Intervention</th>
<th>Post-Intervention</th>
<th>t</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>45.71</td>
<td>100</td>
<td></td>
<td>&lt; .0001</td>
<td>4.01</td>
</tr>
<tr>
<td>SD</td>
<td>19.12</td>
<td>0</td>
<td>13.0084</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Figure 3

The Means of Knowledge of HT Indicators Pre- and Post-Intervention

Note: Comparison of the pre-test and post-test mean scores, 45.71% and 100% respectively.
**Attitudes**

The percentage of participants' responses to each question about their attitudes of HT indicators are illustrated in Table 6.

**Table 6**

*Attitudes of Human Trafficking Indicators Pre- and Post-Test Scores*

<table>
<thead>
<tr>
<th>Question</th>
<th>Pretest</th>
<th>Posttest</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-rated level of confidence and readiness to identify a trafficking in persons</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent *</td>
<td>6 (28.57%)</td>
<td>11 (52.38%)</td>
<td>23.81 ↑</td>
</tr>
<tr>
<td>Good *</td>
<td>3 (14.29%)</td>
<td>10 (47.62%)</td>
<td>33.33 ↑</td>
</tr>
<tr>
<td>Fair</td>
<td>9 (42.86%)</td>
<td>0</td>
<td>42.86 ↓</td>
</tr>
<tr>
<td>Poor</td>
<td>2 (9.52%)</td>
<td>0</td>
<td>9.52 ↓</td>
</tr>
<tr>
<td>I’m not sure</td>
<td>1 (4.76%)</td>
<td>0</td>
<td>4.76 ↓</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am comfortable with assessing a person with possible indicators of human trafficking:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Agree *</td>
<td>5 (23.81%)</td>
<td>11 (52.38%)</td>
<td>28.57 ↑</td>
</tr>
<tr>
<td>Agree *</td>
<td>9 (42.86%)</td>
<td>10 (47.62%)</td>
<td>4.76 ↑</td>
</tr>
<tr>
<td>Undecided</td>
<td>4 (19.05%)</td>
<td>0</td>
<td>19.05 ↓</td>
</tr>
<tr>
<td>Disagree</td>
<td>3 (14.29%)</td>
<td>0</td>
<td>14.29 ↓</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is worthwhile to screen patients for human trafficking when it is suspected:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Agree *</td>
<td>13 (61.90%)</td>
<td>17 (80.95%)</td>
<td>19.05 ↑</td>
</tr>
<tr>
<td>Agree *</td>
<td>7 (33.33%)</td>
<td>4 (19.05%)</td>
<td>14.28 ↓</td>
</tr>
<tr>
<td>Undecided</td>
<td>1 (4.76%)</td>
<td>0</td>
<td>4.76 ↓</td>
</tr>
<tr>
<td>Disagree</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
I feel prepared to ask questions about human trafficking to patients:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree *</th>
<th>Agree *</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>8 (38.10%)</td>
<td>5 (23.81%)</td>
<td>6 (28.57%)</td>
<td>1 (4.76%)</td>
<td>1 (4.76%)</td>
</tr>
<tr>
<td>Change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I am more sympathetic towards women of domestic servitude than women who are assaulted during prostitution:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>4 (19.05%)</td>
<td>3 (14.29%)</td>
<td>2 (9.52%)</td>
<td>9 (42.86%)</td>
<td>3 (14.29%)</td>
</tr>
<tr>
<td>Change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: % Change= Percent Change, *= The correct answer choice, ↑= Increase in percent change, ↓= Decrease in percent change

**Two-Tailed Paired Samples t-Test**

A two-tailed paired samples t-test was conducted to examine whether the mean difference of attitudes of HT indicators pre- and post-intervention scores was significantly different from zero. The result of the two-tailed paired samples t-test was significant based on an alpha value of 0.05, $t(20) = 5.5842$, $p < .0001$, indicating the null hypothesis can be rejected. This finding suggests the difference in the mean scores of pre- and post-interventions was significantly different from zero. The mean of pre-intervention was significantly lower than the mean of post-intervention. The results are presented in Table 7. A bar graph of the means is presented in Figure 4.
Table 7

Two-Tailed Paired Samples t-Test for the Difference Between Pre-Intervention and Post-Intervention Attitudes of HT Indicators Scores

<table>
<thead>
<tr>
<th></th>
<th>Pre-Intervention</th>
<th>Post-Intervention</th>
<th>t</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>64.76</td>
<td>100</td>
<td></td>
<td>&lt; .0001</td>
<td>1.72</td>
</tr>
<tr>
<td>SD</td>
<td>28.92</td>
<td>0</td>
<td>5.5842</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Figure 4

The Means of Attitudes of HT Indicators Pre- and Post-Intervention

Note: Comparison of the pre-test and post-test mean scores, 64.76% and 100% respectively.
**Behavior**

The percentage of participants' responses to each question about their behavior of HT indicators are illustrated in Table 8.

**Table 8**

*Behavior of Human Trafficking Indicators Pre- and Post-Test Scores*

<table>
<thead>
<tr>
<th>Question</th>
<th>Pretest</th>
<th>Posttest</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have the strategy or skills to further investigate or act on suspicion of human trafficking?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes *</td>
<td>8 (38.10%)</td>
<td>20 (95.24%)</td>
<td>57.14 ↑</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Maybe</td>
<td>8 (38.10%)</td>
<td>1 (4.76%)</td>
<td>33.34 ↓</td>
</tr>
<tr>
<td>Unsure</td>
<td>5 (23.81%)</td>
<td>0</td>
<td>23.81 ↓</td>
</tr>
<tr>
<td>I have enough time to ask about human trafficking if I suspect a person?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes *</td>
<td>13 (61.90%)</td>
<td>21 (100.00%)</td>
<td>38.10 ↑</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Maybe</td>
<td>6 (28.57%)</td>
<td>0</td>
<td>28.57 ↓</td>
</tr>
<tr>
<td>Unsure</td>
<td>2 (9.52%)</td>
<td>0</td>
<td>9.52 ↓</td>
</tr>
<tr>
<td>I should call the police immediately if I suspect a person is being trafficked?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes*</td>
<td>15 (71.43%)</td>
<td>1 (4.76%)</td>
<td>66.67 ↓</td>
</tr>
<tr>
<td>No</td>
<td>1 (4.76%)</td>
<td>4 (19.05%)</td>
<td>14.29 ↑</td>
</tr>
<tr>
<td>Maybe</td>
<td>3 (14.29%)</td>
<td>16 (76.19%)</td>
<td>61.90 ↑</td>
</tr>
<tr>
<td>Unsure</td>
<td>2 (9.52%)</td>
<td>0</td>
<td>9.52 ↓</td>
</tr>
</tbody>
</table>
I have suspected that a patient of mine was being trafficked:

<table>
<thead>
<tr>
<th></th>
<th>Yes*</th>
<th>No</th>
<th>Maybe*</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>4 (19.05%)</td>
<td>9 (42.86%)</td>
<td>2 (9.52%)</td>
<td>6 (28.57%)</td>
</tr>
<tr>
<td></td>
<td>4 (36.36%)</td>
<td>3 (23.08%)</td>
<td>3 (27.27%)</td>
<td>1 (9.09%)</td>
</tr>
</tbody>
</table>

(Answer question 5 if you answered ‘Yes’ to question 4) I responded appropriately and alerted the authorities:

<table>
<thead>
<tr>
<th></th>
<th>Yes*</th>
<th>No</th>
<th>Maybe*</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>4 (36.36%)</td>
<td>3 (23.08%)</td>
<td>3 (27.27%)</td>
<td>1 (9.09%)</td>
</tr>
</tbody>
</table>

**Note:** % Change= Percent Change, * = The correct answer choice, ↑ = Increase in percent change, ↓ = Decrease in percent change.

**Two-Tailed Paired Samples t-Test**

A two-tailed paired samples t-test was conducted to examine whether the mean difference of behavior of HT indicators pre- and post-intervention scores was significantly different from zero. The result of the two-tailed paired samples t-test was significant based on an alpha value of 0.05, $t(20) = -6.34$, $p < .001$, indicating the null hypothesis can be rejected. This finding suggests the difference in the mean scores of pre- and post-interventions was significantly different from zero. The mean of pre-intervention was significantly lower than the mean of post-intervention. The results are presented in Table 9. A bar graph of the means is presented in Figure 5.
Table 9

Two-Tailed Paired Samples t-Test for the Difference Between Pre-Intervention and Post-Intervention Behavior of HT Indicators Scores

<table>
<thead>
<tr>
<th>Pre-Intervention</th>
<th>Post-Intervention</th>
<th>$t$</th>
<th>$p$</th>
<th>$d$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
<td></td>
</tr>
<tr>
<td>36.19</td>
<td>29.41</td>
<td>78.10</td>
<td>18.87</td>
<td>-6.34</td>
</tr>
</tbody>
</table>


Figure 5

The Means of Behavior of HT Indicators Pre- and Post-Intervention

*Note:* Comparison of the pre-test and post-test mean scores, 36.19% and 78.10% respectively.
Pre- and Post-Intervention Results of Communication Strategies

Knowledge

The percentage of participants' responses to each question about their knowledge of communication strategies are illustrated in Table 10.

Table 10

Knowledge of Communication Strategies Pre- and Post-Test Scores

<table>
<thead>
<tr>
<th>Question</th>
<th>Pretest</th>
<th>Posttest</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>I attended a communication skills course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes*</td>
<td>6 (28.57%)</td>
<td>21 (100.00%)</td>
<td>71.43 ↑</td>
</tr>
<tr>
<td>No</td>
<td>12 (57.14%)</td>
<td>0</td>
<td>57.14 ↓</td>
</tr>
<tr>
<td>Maybe</td>
<td>2 (9.52%)</td>
<td>0</td>
<td>9.52 ↓</td>
</tr>
<tr>
<td>Unsure</td>
<td>1 (4.76%)</td>
<td>0</td>
<td>4.76 ↓</td>
</tr>
<tr>
<td>I have received training on communication skills to use when interacting with a trafficking in persons:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes*</td>
<td>6 (28.57%)</td>
<td>21 (100.00%)</td>
<td>71.43 ↑</td>
</tr>
<tr>
<td>No</td>
<td>9 (42.86%)</td>
<td>0</td>
<td>42.86 ↓</td>
</tr>
<tr>
<td>Maybe</td>
<td>4 (19.05%)</td>
<td>0</td>
<td>19.05 ↓</td>
</tr>
<tr>
<td>Unsure</td>
<td>2 (9.52%)</td>
<td>0</td>
<td>9.52 ↓</td>
</tr>
<tr>
<td>Effective communication can be achieved by actively listening and taking turns talking:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>True*</td>
<td>19 (90.48%)</td>
<td>21 (100.00%)</td>
<td>9.52 ↑</td>
</tr>
<tr>
<td>False</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Maybe</td>
<td>2 (9.52%)</td>
<td>0</td>
<td>9.52 ↓</td>
</tr>
<tr>
<td>Unsure</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
When human trafficking is suspected, body language plays a big impact in effective communication.

<table>
<thead>
<tr>
<th></th>
<th>True*</th>
<th>False</th>
<th>Maybe</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20 (95.24%)</td>
<td>21 (100.00%)</td>
<td>4.76 ↑</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 (4.76%)</td>
<td>0</td>
<td>4.76 ↓</td>
<td>0</td>
</tr>
</tbody>
</table>

Trafficking in persons are easy to speak with and will reveal their true living situation directly.

<table>
<thead>
<tr>
<th></th>
<th>True</th>
<th>False*</th>
<th>Maybe</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8 (38.10 %)</td>
<td>0</td>
<td>38.10 ↓</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>5 (23.81%)</td>
<td>17 (80.95%)</td>
<td>57.14 ↑</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>6 (28.57%)</td>
<td>4 (19.05%)</td>
<td>9.52 ↓</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2 (9.52%)</td>
<td>0</td>
<td>9.52 ↓</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: % Change= Percent Change, * = The correct answer choice, ↑ = Increase in percent change, ↓ = Decrease in percent change

**Two-Tailed Paired Samples t-Test**

A two-tailed paired samples t-test was conducted to examine whether the mean difference of knowledge of communication strategies pre- and post-intervention scores was significantly different from zero. The result of the two-tailed paired samples t-test was significant based on an alpha value of 0.05, $t(20) = -7.94$, $p < .001$, indicating the null hypothesis can be rejected. This finding suggests the difference in the mean scores of pre- and post-interventions was significantly different from zero. The mean of pre-intervention was significantly lower than the mean of post-intervention. The results are presented in Table 1. A bar graph of the means is presented in Figure 6.
Table 11

Two-Tailed Paired Samples t-Test for the Difference Between Pre-Intervention and Post-Intervention Knowledge of Communication Strategies Scores

<table>
<thead>
<tr>
<th>Pre-Intervention</th>
<th>Post-Intervention</th>
<th>t</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
<td>$t$</td>
</tr>
<tr>
<td>53.33</td>
<td>24.77</td>
<td>96.19</td>
<td>8.05</td>
<td>-7.94</td>
</tr>
</tbody>
</table>


Figure 6

The Means of Knowledge of Communication Strategies Pre- and Post-Intervention

*Note: Comparison of the pre-test and post-test mean scores, 53.33% and 96.19% respectively.*
**Attitudes**

The percentage of participants' responses to each question about their attitudes of communication strategies are illustrated in Table 12.

**Table 12**

*Attitudes of Communication Strategies Pre- and Post-Test Scores*

<table>
<thead>
<tr>
<th>Question</th>
<th>Pretest</th>
<th>Posttest</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am comfortable asking a person if they were in danger from an employer:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes*</td>
<td>15 (71.43%)</td>
<td>21 (100.00%)</td>
<td>28.57 ↑</td>
</tr>
<tr>
<td>No</td>
<td>1 (4.76%)</td>
<td>0</td>
<td>4.76 ↓</td>
</tr>
<tr>
<td>Maybe</td>
<td>5 (23.81%)</td>
<td>0</td>
<td>23.81 ↓</td>
</tr>
<tr>
<td>Unsure</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I am more comfortable assessing patients who speak English or my native language:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>16 (76.19%)</td>
<td>3 (14.29%)</td>
<td>61.90 ↓</td>
</tr>
<tr>
<td>No*</td>
<td>1 (4.76%)</td>
<td>5 (23.81%)</td>
<td>19.05 ↑</td>
</tr>
<tr>
<td>Maybe</td>
<td>2 (9.52%)</td>
<td>13 (61.90%)</td>
<td>52.38 ↑</td>
</tr>
<tr>
<td>Unsure</td>
<td>2 (9.52%)</td>
<td>0</td>
<td>9.52 ↓</td>
</tr>
<tr>
<td>I feel certain communication skills is needed to interact with a possible trafficking in persons:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>True*</td>
<td>18 (85.71%)</td>
<td>21 (100.00%)</td>
<td>14.29 ↑</td>
</tr>
<tr>
<td>False</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Maybe</td>
<td>1 (4.76%)</td>
<td>0</td>
<td>4.76 ↓</td>
</tr>
<tr>
<td>Unsure</td>
<td>2 (9.52%)</td>
<td>0</td>
<td>9.52 ↓</td>
</tr>
</tbody>
</table>
Body language can affect a patient’s response:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Not Often</th>
<th>Sometimes</th>
<th>Often*</th>
<th>Always*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>3 (14.29%)</td>
<td>6 (28.57%)</td>
<td>9 (42.86%)</td>
<td>3 (14.29%)</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>19 (90.48%)</td>
<td>2 (9.52%)</td>
</tr>
</tbody>
</table>

Learning how to communicate with a trafficking in persons is important:

<table>
<thead>
<tr>
<th></th>
<th>Yes*</th>
<th>No</th>
<th>Maybe</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21 (100.00%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>21 (100.00%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: % Change= Percent Change, *= The correct answer choice, ↑ = Increase in percent change, ↓ = Decrease in percent change

**Two-Tailed Paired Samples t-Test**

A two-tailed paired samples t-test was conducted to examine whether the mean difference of attitudes of communication strategies pre- and post-intervention scores was significantly different from zero. The result of the two-tailed paired samples t-test was significant based on an alpha value of 0.05, \( t(20) = -6.49, p < .001 \), indicating the null hypothesis can be rejected. This finding suggests the difference in the mean scores of pre- and post-interventions was significantly different from zero. The mean of pre-intervention was significantly lower than the mean of post-intervention. The results are presented in Table 13. A bar graph of the means is presented in Figure 7.
Table 13

Two-Tailed Paired Samples t-Test for the Difference Between Pre-Intervention and Post-Intervention Attitudes of Communication Strategies Scores

<table>
<thead>
<tr>
<th></th>
<th>Pre-Intervention</th>
<th>Post-Intervention</th>
<th>t</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>63.81</td>
<td>84.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>13.59</td>
<td>8.73</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Figure 7

The Means of Attitudes of Communication Strategies Pre- and Post-Intervention

Note: Comparison of the pre-test and post-test mean scores, 63.81% and 84.76% respectively.
Behavior

The percentage of participants' responses to each question about their behavior of communication strategies are illustrated in Table 14.

Table 14

Behavior of Communication Strategies Pre- and Post-Test Scores

<table>
<thead>
<tr>
<th>Question</th>
<th>Pretest</th>
<th>Posttest</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I listen to what a patient is saying, I predict what their conclusion will be:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never*</td>
<td>4 (19.05%)</td>
<td>8 (38.10%)</td>
<td>19.05 ↑</td>
</tr>
<tr>
<td>Not Often*</td>
<td>4 (19.05%)</td>
<td>13 (61.90%)</td>
<td>42.85 ↑</td>
</tr>
<tr>
<td>Sometimes</td>
<td>10 (47.62%)</td>
<td>0</td>
<td>47.62 ↓</td>
</tr>
<tr>
<td>Often</td>
<td>3 (14.29%)</td>
<td>0</td>
<td>14.29 ↓</td>
</tr>
<tr>
<td>Always</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>When I am not sure what someone is saying to me, I stop asking questions:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never*</td>
<td>9 (42.86%)</td>
<td>14 (66.67%)</td>
<td>23.81 ↑</td>
</tr>
<tr>
<td>Not Often*</td>
<td>6 (28.57%)</td>
<td>7 (33.33%)</td>
<td>4.76 ↑</td>
</tr>
<tr>
<td>Sometimes</td>
<td>2 (9.52%)</td>
<td>0</td>
<td>9.52 ↓</td>
</tr>
<tr>
<td>Often</td>
<td>3 (14.29%)</td>
<td>0</td>
<td>14.29 ↓</td>
</tr>
<tr>
<td>Always</td>
<td>1 (4.76%)</td>
<td>0</td>
<td>4.76 ↓</td>
</tr>
<tr>
<td>I become impatient with patients who do not express their thoughts clearly:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never*</td>
<td>11 (52.38%)</td>
<td>12 (71.43%)</td>
<td>19.05 ↑</td>
</tr>
<tr>
<td>Not Often*</td>
<td>4 (19.05%)</td>
<td>6 (28.57%)</td>
<td>9.52 ↑</td>
</tr>
<tr>
<td>Sometimes</td>
<td>3 (14.29%)</td>
<td>0</td>
<td>14.29 ↓</td>
</tr>
<tr>
<td>Often</td>
<td>3 (14.29%)</td>
<td>0</td>
<td>14.29 ↓</td>
</tr>
<tr>
<td>Always</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
When I ask questions, they are open-ended and cannot be answered with a ‘yes’ or ‘no’ response:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Count</th>
<th>Percentage</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>3</td>
<td>14.29%</td>
<td>14.29 ↓</td>
</tr>
<tr>
<td>Not Often</td>
<td>2</td>
<td>9.52%</td>
<td>4.76 ↓</td>
</tr>
<tr>
<td>Sometimes</td>
<td>8</td>
<td>38.10%</td>
<td>38.10 ↓</td>
</tr>
<tr>
<td>Often*</td>
<td>7</td>
<td>33.33%</td>
<td>47.63 ↑</td>
</tr>
<tr>
<td>Always*</td>
<td>1</td>
<td>4.76%</td>
<td>4.53 ↑</td>
</tr>
</tbody>
</table>

When I suspect a trafficking in persons, I know the communication strategies needed to interact with one:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Count</th>
<th>Percentage</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes*</td>
<td>10</td>
<td>47.62%</td>
<td>52.38 ↑</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>9.52%</td>
<td>9.52 ↓</td>
</tr>
<tr>
<td>Maybe</td>
<td>6</td>
<td>28.57%</td>
<td>28.57 ↓</td>
</tr>
<tr>
<td>Unsure</td>
<td>3</td>
<td>14.29%</td>
<td>14.29 ↓</td>
</tr>
</tbody>
</table>

*Note: % Change= Percent Change, *= The correct answer choice, ↑= Increase in percent change, ↓= Decrease in percent change

Two-Tailed Paired Samples t-Test

A two-tailed paired samples t-test was conducted to examine whether the mean difference of behavior of communication strategies pre- and post-intervention scores was significantly different from zero. The result of the two-tailed paired samples t-test was significant based on an alpha value of 0.05, \( t(20) = 8.50, \ p < .0001 \), indicating the null hypothesis can be rejected. This finding suggests the difference in the mean scores of pre- and post-interventions was significantly different from zero. The mean of pre-intervention was significantly lower than the mean of post-intervention. The results are presented in Table 15. A bar graph of the means is presented in Figure 8.
Table 15

Two-Tailed Paired Samples t-Test for the Difference Between Pre-Intervention and Post-Intervention Behavior of Communication Strategies Scores

<table>
<thead>
<tr>
<th>Pre-Intervention</th>
<th>Post-Intervention</th>
<th>t</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>52.38</td>
<td>25.67</td>
<td>100</td>
<td>0</td>
<td>8.50</td>
</tr>
</tbody>
</table>


Figure 8

The Means of Behavior of Communication Strategies Pre- and Post-Intervention

Note: Comparison of the pre-test and post-test mean scores, 52.38% and 100% respectively.
Chapter VIII.

Discussion

HT Indicators

Perception

The participant’s pre-test means score for the perception of HT was 64.76 (SD 22.72). The educational training significantly changed the post-test means score to 100 (SD 0). Table 3 indicates that the p-value was < 0.0001, meaning that the null hypothesis was rejected. Pre- and post-intervention perception questions regarding HT are illustrated in Table 2. In this QI project, 47.62% of participants reported they did not receive HT training throughout their clinical experience and 52.38% were not aware of an available HT screening tool to use when it is suspected. Despite the participant’s clinical practice experience, 61.90% of participants either ‘agreed’ or ‘strongly agreed’ that they understood how to identify and screen patients for HT. These findings were similar to Lutz's (2018) and Williamson et al’s (2019) study. Williamson et al (2019) reported that a majority of clinicians did not receive formal HT training and did not know the steps to properly identify, screen, and treat suspected TIPs. Lutz (2018) also reported that 94.5% of participants did not have previous HT education. These findings indicate that clinicians are not receiving adequate training on HT and they are not aware of the resources that are available to assist them in identifying TIPs when it is suspected. Lack of HT education can further lead to misconceptions made by clinicians which can make it even more difficult to identify TIPs. 19.05% of participants did not understand that victims do not need to cross a geographic border to fit the definition of HT. The National Human Trafficking Hotline (n.d.) clarifies that this preconception is a common myth and is being confused with human smuggling.
Knowledge

The pre-test means score for knowledge of HT indicators was 45.71 (SD 19.12) and the post-test means score was 100 (SD 0). Table 5 indicates that the p-value was < 0.0001, meaning that the null hypothesis was rejected. Pre- and post-intervention knowledge questions regarding HT indicators are illustrated in Table 4. Although 100% of participants in the QI project self-rated their knowledge about HT indicators either ‘good’ or ‘excellent’ before and after the intervention, only 19% of participants selected all ten possible indicators of HT in the pre-intervention. Additionally, only 23.81% of participants understood the term TIPs, 85.71% understood the definition of HT, and 42.86% of participants were aware of the different forms of HT. While the self-rated knowledge on HT indicators was high, the overall participant’s mean score for knowledge on HT indicators was 45.71 (SD 19.12). Sinha et al.’s (2019) and Williamson et al.’s (2019) study also exhibited limited knowledge of HT amongst their participants and supported the need to improve clinician’s knowledge on HT indicators. Post-intervention scores in this QI project were significant, 100% of the participants answered each knowledge question correctly after the intervention. These findings indicate that clinicians would benefit from training on HT indicators, as well as clear guidance on referral and support options for TIPs.

Attitudes

This QI project averaged the participant’s pre- and post-attitudes scores on HT indicators. The pre-test means score was 64.76 (SD 28.92), however after the educational intervention, the post-test means score improved to 100 (SD 0). Table 7 indicates that the p-value was < 0.0001, meaning that the null hypothesis was rejected. Pre- and post-intervention questions on attitudes of HT indicators are illustrated in Table 6. The findings from Donahue et al’s (2019) and Fraley
et al.’s (2020) study of clinician’s attitudes toward TIPs were similar to the findings from this QI project. According to Fraley et al. (2020), participants in the pre-intervention sample exhibited moderate levels of attitudes on HT indicators. There was also an increased confidence in HT identification from 4/10 to 7/10 (Donahue et al., 2019). Likewise, 42.86% of participants from this QI project rated their confidence and readiness to identify TIPs as either ‘good’ or ‘excellent’. Also, 66.67% of participants either ‘agreed’ or ‘strongly agreed’ that they were comfortable with assessing a person with possible indicators of HT. However, 100% of participants reported the same after the intervention, which shows a 33.33 positive change. The results from this QI project indicate that the participants displayed positive attitudes and are more prepared to identify and intervene possible TIPs. Ironically, these findings did not align with Liverseed’s (2018) study. Although the participants in Liverseed’s (2018) study had adequate training on HT referral resources and felt confident enough to use the resources in their clinic, they still did not feel prepared to screen or respond to TIPs. Furthermore, additional research is needed, specifically implementing guidelines in primary care settings to positively impact clinician’s attitudes and ability to identify and screen TIPs.

**Behavior**

In this QI project, the participant’s pre-test behavior means score regarding HT indicators was 36.19 (SD 29.41). Following the educational intervention, there was a statistically significant change in the behavior means score to 78.10 (SD 18.87). Table 9 indicates that the p-value was < 0.001, meaning that the null hypothesis was rejected. Furthermore, this supports the idea that educating clinicians on HT indicators was statistically significant in increasing clinician’s behavior in identifying TIPs. Pre- and post-intervention behavior questions regarding HT indicators are illustrated in Table 8. Approximately 50% of participants indicated that they
had received HT training in the past and having the skills to act on suspicion of HT. These findings suggest that clinicians may not be equipped with the strategies or tools necessary to identify TIPs. After the intervention, 95.24% of participants reported an improvement in having the strategies or tools to act on suspicion. Powell et al. (2017) also evaluated clinician’s behavior change after receiving HT training; however, the authors analyzed clinician behavior change by measuring the clinician’s call data from the National Human Trafficking Resource Center (NHTRC). Powell et al. (2017) reported comparable results to this QI project, showing a statistically significant increase (p < 0.001) in clinician calls to the NHTRC after clinicians received HT training. Furthermore, these trends from Powell et al.’s (2017) and this QI project indicate that clinicians are increasingly aware of HT after receiving HT education and may indicate some level of behavior change.

**Communication Strategies**

**Knowledge**

In this QI project, the participant’s pre-test knowledge means score regarding communication strategies was 53.33% (SD 24.77). Following the educational intervention, there was a statistically significant change in the behavior means score to 96.19% (SD 8.05). Table 11 indicates that the p-value was < 0.001, meaning that the null hypothesis was rejected. Pre- and post-intervention knowledge questions regarding communication strategies are illustrated in Table 10. Only 28.57% of participants reported they had received communication skills training to use while engaging with TIPs. However, after the intervention, 95.24% of participants understood the strategies for effective communication with TIPs. Similarly, Egyud et al.’s (2017) study found that clinicians' knowledge of HT symptoms and communication tactics for identifying TIPs improved. The outcomes of the participant’s knowledge regarding
communication strategies are congruent with the literature that suggests clinicians require a baseline understanding of communication styles and trauma-informed care when interacting with TIPs (Santos et al., 2019; Dausi, 2020; Hopper et al., 2018).

**Attitudes**

In this QI project, the participant’s pre-test attitudes mean score regarding communication strategies was 63.81 (SD 13.59). Following the educational intervention, there was a statistically significant change in the attitudes means score to 84.76 (SD 8.73). Table 13 indicates that the p-value was < 0.001, meaning that the null hypothesis was rejected. Pre- and post-intervention attitudes questions regarding communication strategies while interacting with TIPs are illustrated in Table 12. While there was a high percentage of participants feeling comfortable asking a person if they were in danger from an employer, only 4.76% of participants were comfortable assessing patients who do not speak English or their native language. Based on this finding, clinicians who are uncomfortable communicating to non-English speaking patients may not be completing a comprehensive and thoughtful HT evaluation for patients of the same. Furthermore, clinicians are missing the opportunities that serve as HT red-flag indicators and are not properly identifying TIPs. Participant’s attitudes about body language affecting a patient’s response already existed prior to the intervention, however, the post-intervention percentage of participants answering correctly increased from 57.15% to 100%, which shows a 42.85 positive change compared to the pre-intervention scores. The educational intervention improved the participant’s score significantly, however, there have been no other QI studies that have evaluated changes in attitudes on HT communication strategies.
**Behavior**

Pre- and post-intervention behavior questions regarding communication strategies while interacting with TIPs are illustrated in Table 14. The clinicians' pre- and post-behavior scores on communication strategies were averaged in this QI project. The pre-test mean score was 52.38 (SD 25.67), following the educational intervention, there was a statistically significant change in the behavior means score to 100 (SD 0). Table 15 indicates that the p-value was < 0.0001, meaning that the null hypothesis was rejected.

Prior to the intervention, 47.62% of participants were familiar with the communication strategies needed to interact with TIPs and 38.09% of participants ask open-ended questions that cannot be answered with a ‘yes’ or ‘no’ response. After the intervention, 100% of participants understood the communication strategies and 95.24% of participants reported a changed behavior in asking open-ended questions to patients. Comparably, Egyud et al. (2017) reported although 97% of its participants were committed to change practice in identifying and screening TIPs, 75% of those participants indicated an actual change in their behavior (Egyud et al., 2017). These findings suggest that providing clinicians with HT training, specifically, the communication methods to utilize when interacting with potential TIPs will better prepare them to recognize TIPs and complete the important interventions required to screen or respond to victims. While there were no other studies found to support these findings, future research on this matter should be conducted.
Chapter IX.

Limitations

Several limitations have been identified that may have influenced the QI project findings. The project consisted of a small and convenient sample of clinicians from a single healthcare clinic which limits generalizability to other healthcare groups or settings. Although all participants reported their perception, knowledge, attitudes, and behavior on HT in their surveys, the impact of researcher and participant factors (e.g. social desirability) on the data collected is impossible to eliminate. The one-group, pre-test post-test design provided minimal support for casual inference as it was subjected to multiple internal validity threats. Since the project lacked a control group, the DNP candidate was unsure if any impact on clinician’s perception, knowledge, attitudes, and behavior in identifying TIPs was due to the educational intervention or other factors (e.g. additional training). Also, during the pre-test, the participants may have been uninterested and less careful in considering their responses, but after attending the educational intervention, they may have taken the post-test more seriously.

The DNP candidate developed the surveys from evidence-based literature. The data for this project was gathered with an instrument that has not been thoroughly evaluated for reliability or validity which may distort data analysis. Finally, the educational intervention was time limited. It's probable that if more time had been provided during the educational intervention to deliver more extensive content, the participants might have exhibited greater results in terms of actual knowledge of HT.
Chapter X.

Implications for Practice

Clinicians are in a unique position to intervene on behalf of TIPs while they are still being held captive. In some cases, TIPs may not self-identify themselves as victims, therefore, it is imperative for clinicians to embrace their role in observing for signs and symptoms of HT (Donahue et al., 2019). Seven previous studies were identified in the literature that supported this QI project’s findings. There was a sufficient amount of research that examined the impact of HT training for clinicians in healthcare practice (Lutz's, 2019; Williamson et al., 2019; Sinha et al., 2019; Donahue et al., 2019; Fraley et al., 2020; Powell et al., 2017; and Egyud et al., 2017). With that being said, this project adds to the growth of this knowledge base by providing valuable information. Not only did the participants in the QI project demonstrate an increase in their perception, knowledge, attitudes, and behavior in identifying and assisting TIPs after receiving education on HT indicators, but they also showed a significant improvement in their knowledge, attitudes, and behavior in using communication strategies.

This project was conducted at a single healthcare facility over a one-month time frame. Further research on a larger scale over a longer period should be conducted to determine the efficacy of providing HT education, specifically on HT indicators and communication strategies to utilize when interacting with TIPs. By adapting the internal processes and external resources, the framework of this project could be duplicated for use in larger healthcare facilities such as hospitals and primary, pediatric, and urgent care clinics. Additional research on the impact of providing clinicians HT training on HT indicators and communication strategies in a variety of healthcare settings and populations could also help researchers understand the facilitators and barriers to identifying TIPs, as well as develop and validate training content for general use.
Although there were numerous articles that supported clinicians benefiting from educational training on HT indicators, there were a limited number of articles that supported clinicians benefiting from an educational training on communication strategies to use when interacting with TIPs. There was only one study (Egyud et al., 2017) that stressed the need of combining communication strategies within HT training in order to increase TIPs identification and intervention. The goal of communication style training is to equip clinicians with the skills necessary to build a trusting connection with TIPs that encourages them to reveal their trafficking situation. Additional research is needed to examine how communication training affects clinician’s knowledge, attitudes, and behavior when it comes to identifying TIPs. This will also help to enhance the findings of this project.

Given the influence of HT on TIPs and public health, future policy initiatives should include providing research funding into the most effective approaches for clinicians to identify TIPs. Based on the findings of this QI project, HT training significantly improves clinician’s perception, knowledge, attitudes, and behavior, which could lead to better identification and screening of TIPs. As a result, future interventions should focus on more research to establish, refine, and distribute evidence-based trainings to healthcare systems. State legislatures and accrediting bodies (e.g. American Association of Nurse Practitioners) could also adopt regulations that require healthcare organizations to have more HT trainings in place.

**Proposed Training Approach**

The findings of this QI project demonstrated that clinicians would benefit from additional HT training in order to improve their ability to confidently and accurately identify TIPs in clinical settings. To meet these challenges and deliver patient-centered care, agencies and accreditation bodies should build a set of core competencies related to perception, knowledge,
attitudes, and behavior in HT indicators and communication strategies with TIPs, as well as cultural aspects. Advanced practice nurses (APNs) are in an ideal position to lead these efforts. Training approaches can be comprised of workshops and clinical trainings and can be tailored to include the core competencies required for clinicians to achieve TIP’s needs. APNs can contribute to the efforts in breaking the HT cycle by advocating for policies that support HT research and training and guide the development of evidence-based practices within health care and educational settings. The following recommendations are being made based on the review of literature and the findings of the QI project:

- Implement trauma-informed and participatory communication methods to TIPs identification and outreach. Clinicians should be kept up to date on the development of these methods. Enhancing TIP’s agency and empowering them may open up new possibilities that recognizes and accommodates the impact of trauma on TIP’s lives.
- There is no single profile that identifies TIPs, therefore it is important to be kept updated on TIP’s key indicators.
- Identify resources in the community. Collaborating with multidisciplinary teams and community-based organizations can help improve the identification and treatment of TIPs by sharing strategies, recommendations, and promising practices.
- Because HT victims come from a diverse range of cultures, cultural concerns must be considered when assisting them. TIP’s thought, communication, language, beliefs, values, practices, customs, rituals, roles, and connections should all be taken into account.
Chapter XI.

Conclusion

TIPs are a vulnerable population who frequently interact with clinicians for healthcare needs, thus it is critical to raise awareness on this particular topic. Better screening, evaluation, and response to TIPs are required to disrupt the HT cycle and foster improved mental and physical health outcomes in this vulnerable population. By providing routine educational training on HT, informed practitioners can be well-equipped to identify and screen TIPs, resulting in a positive impact on this population.

It is not known if one or multiple approaches or interventions would be most effective to improve clinicians’ perception, knowledge, attitudes, and behavior when identifying TIPs and intervening in primary care settings. The U.S. Department of Health and Human Services (2019) recommends using comprehensive prevention strategies rather than just raising awareness on HT. Primary and secondary prevention efforts can be used to overcome key vulnerabilities for HT victims. In addition, community stakeholders can potentially reduce trafficking by collaborating with other stakeholders to foster community resistance and resilience (Long et al., 2018). In healthcare, prevention strategies include preparing clinicians to identify patients at risk for HT and using effective communication strategies to facilitate an open discussion.

In conclusion, clinicians play a critical role in the holistic care of persons in the healthcare division and are likely to come into contact with TIPs. Identifying and providing care for TIPs can be complicated for clinicians. Based on the findings from this project, combining this complication with clinician’s limited knowledge on HT indicators, the HT screening process, and communication strategies can lead to clinicians being discouraged from actually screening prospective TIPs and misidentifying them. While there are multiple approaches that can be taken
to heighten clinician’s perception, knowledge, attitudes, and behavior to identify and intervene TIPs, it is supported that educational programs are to be one of the efficient ways to alert clinicians to the likelihood of seeing a trafficked individual, as well as how to securely refer a suspected victim. Succinct guidance documents on possible "red flags" and key HT indicators for identifying TIPs, steps to take in cases of suspicion, and referral information would also be useful in sensitizing the broader health care provider community to HT.
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FACTS and SNACKS

A Quality Improvement Study on Human Trafficking

Date: June 23, 2021 & June 30, 2021
Time: 9:00 AM
Location: Main Clinic Conference Room
Please contact Sharda Ram for more information
Email: sram003@fiu.edu
Phone: 352-445-6491
Appendix B

Human Trafficking for Clinicians Survey

Unique Code Identifier (day of the month you are born and the first three letters of your father’s name) _______________

Demographics

1. Male  Female

2. Age
   20-30____
   31-40____
   41-50____
   51+____

3. Ethnicity:
   Hispanic  Caucasian  Other
   Black     Asian

4. Position at the Facility:
   A) Nurse Practitioner
   B) Pharmacy Technician
   C) Medical Assistant
   D) Front Desk Assistant
   E) Other

5. Years in Medical Field:
   Less than 1 year  5 to 10 years
   10 to 20 years    More than 20 years
Perception

1. How many training programs on human trafficking have you attended throughout your medical experience?
   None  1  3  More than 3  I don’t know

2. Which population group is at risk for human trafficking?
   Everyone  Caucasian  Blacks
   Hispanic  Asian

3. I know how to identify and screen for human trafficking when it is suspected:
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree

4. To fit the definition of Human trafficking, victims must cross a border:
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree

5. There is an available Human trafficking screening tool for me to use when trafficking in persons is suspected:
   True  False  Maybe  Unsure
**Human Trafficking Indicators**

**Knowledge**

1. When I think of the term ‘trafficking in persons’:
   A) I’m not sure what this means
   B) This term is unclear and confusing to me
   C) I don’t know the difference between victim of HT and trafficking in persons
   D) Trafficking in persons is the same as human smuggling
   E) I understand that the term describes the act

2. Self-rated level of knowledge about human trafficking indicators

   Excellent   Good   Fair   Poor   I’m not sure

3. The different forms of human trafficking are:
   A) I don’t know the different forms
   B) Sex-trafficking only
   C) Labor-trafficking, sex-trafficking, debt-bondage
   D) Sex-trafficking and labor-trafficking
   E) I’m not sure what these mean

4. Physical indicators of human trafficking include: (Circle all that apply)

   Tattoos   Bruising   Avoiding eye contact   Rehearsed Responses
   Sexually Transmitted Infections   Fractures   Poor living conditions
   Old scars   Lacking identity documents   I don’t know the indicators

5. Human trafficking is defined as:
   A) I don’t know the definition
   B) Commercial sex act with a person who is not 18 yet
C) Recruitment of a person for labor and services without force, fraud, or coercion

D) Forcing women to be involved with commercial sex acts

E) Exploiting a person by force, fraud, or coercion for labor, services, or commercial sex

Attitude

1. Self-rated level of confidence and readiness to identify a trafficking in persons:
   Excellent      Good      Fair      Poor      I’m not sure

2. I am comfortable with assessing a person with possible indicators of human trafficking:
   Strongly Agree     Agree     Undecided     Disagree     Strongly Disagree

3. It is worthwhile to screen patients for human trafficking when it is suspected:
   Strongly Agree     Agree     Undecided     Disagree     Strongly Disagree

4. I feel prepared to ask questions about human trafficking to patients:
   Strongly Agree     Agree     Undecided     Disagree     Strongly Disagree

5. I am more sympathetic towards women of domestic servitude than women who are assaulted during prostitution:
   Strongly Agree     Agree     Undecided     Disagree     Strongly Disagree

Behavior

1. I have the strategy or skills to further investigate or act on suspicion of human trafficking?
   Yes       No       Maybe       Unsure

2. I have enough time to ask about human trafficking if I suspect a person?
   Yes       No       Maybe       Unsure

3. I should call the police immediately if I suspect a person is being trafficked?
   Yes       No       Maybe       Unsure

4. I have suspected that a patient of mine was being trafficked:
5. (Answer question 5 if you answered ‘Yes’ to question 4) I responded appropriately and alerted the authorities:

Yes  No  Maybe  Unsure

Communication Strategies

Knowledge

1. I attended a communication skills course

Yes  No  Maybe  Unsure

2. I have received training on communication skills to use when interacting with a trafficking in persons:

Yes  No  Maybe  Unsure

3. Effective communication can be achieved by actively listening and taking turns talking:

True  False  Maybe  Unsure

4. When human trafficking is suspected, body language plays a big impact in effective communication

True  False  Maybe  Unsure

5. Trafficking in persons are easy to speak with and will reveal with true living situation directly

True  False  Maybe  Unsure

Attitude

1. I am comfortable asking a person if they were in danger from an employer:

Yes  No  Maybe  Unsure

2. I am more comfortable assessing patients who speak English or my native language:
3. I feel certain communication skills is needed to interact with a possible trafficking in persons:

   Yes    No    Maybe    Unsure

4. Body language can affect a patient’s response:

   Never    Not Often    Sometimes    Often    Always

5. Learning how to communicate with a trafficking in persons is important:

   True    False    Maybe    Unsure

Behavior

1. When I listen to what a patient is saying, I predict what their conclusion will be:

   Never    Not Often    Sometimes    Often    Always

2. When I am not sure what someone is saying to me, I stop asking questions:

   Never    Not Often    Sometimes    Often    Always

3. I become impatient with patients who do not express their thoughts clearly:

   Never    Not Often    Sometimes    Often    Always

4. When I ask questions, they are open-ended and cannot be answered with a ‘yes’ or ‘no’ response:

   Never    Not Often    Sometimes    Often    Always

5. When I suspect a trafficking in persons, I know the communication strategies needed to interact with one:

   Yes    No    Maybe    Unsure

Comments?

Suggestions?
Appendix C

Invitation Email

Hello,

You have been chosen to be participate in a quality improvement (QI) project for Continuous Care Center.

The title of this QI project is: **Interventions for Clinicians in a Mobile Health Clinic on Improving Screening and Identification of Trafficking in Persons: A Quality Improvement Project**

Things you should know about this study:

- **Purpose:** The purpose of this study is to determine whether an educational presentation on human trafficking can improve clinician’s perception, knowledge, attitudes, and behavior in identifying trafficking in persons in a mobile health clinic.

- **Procedures:** If you choose to participate in the project, you will be asked to (1) complete the pre-test questionnaire, (2) attend an online educational intervention via Zoom, and (3) complete the post-test questionnaire two weeks after participation in the intervention.

- **Duration:** This will take about 90 minutes of your time.

- **Risks:** Discussing human trafficking may trigger a negative emotional, psychological, or cultural reaction, especially to those who have been negatively affected by human trafficking. This is the main risk or discomfort from this research.

- **Benefits:** There are various foreseeable benefits for participation including improvement of clinician’s perception, knowledge, attitudes, and behavior in identifying trafficking in persons.

- **Alternatives:** There are no known alternatives available to you other than not taking part in this study.

- **Participation:** Taking part in this research project is voluntary.

A flyer is attached to this email with more information about the study including when and where it is taking place.

If you choose to participate in this study, please read the informed consent form that is also attached to this email and electronically sign the document via Adobe format. Once completed, please email the signed consent form back to this email and complete the pre-intervention email with the link below.

https://www.surveymonkey.com/r/T33Q6KZ

Thank you for your time and consideration. It is greatly appreciated.
Appendix D

Letter of Support

Date: 04/20/2021
Deana Goldin, PhD, DNP, APRN
Clinical Assistant Professor
Nicole Wertheim College of Nursing & Health Sciences
Florida International University

Dear Dr. Goldin:

Thank you for inviting Continuous Care Center to participate in the DNP Project of Sharda Ram. I understand that this student will be conducting this project as part of the requirements for the Doctor of Nursing Practice program at FIU. After reviewing the proposal of the project titled “Interventions for Clinicians in a Mobile Health Clinic on Improving Screening and Identification of Trafficking in Persons: A Quality Improvement Project” I have warranted her permission to conduct the project in this company.

Education of clinicians has been shown to be one of the most effective strategies to improve the screening and diagnosis of various conditions and illnesses. This proposed quality improvement project seeks to investigate and synthesize the latest evidence on educational interventions for clinicians to improve and increase the identification of trafficking in persons. There is clearly a need for a quality improvement that will consolidate all the available information on strategies to effectively identify trafficking in persons.

We are understanding that the project will be develop in our setting and will occur for about 4 months. We are also aware of our department participation in supporting the student to complete this project, including warrant the student access to our Primary Care Offices, give written consent, deliver the pre-test questionnaire, provide the educational intervention and two weeks after providing the posttest to the recruited participants. We will provide a peaceful environment to safeguard our participant privacy as well as adequate area to conduct the educational teaching. The educational intervention will be classroom format and will last 45 to 60 minutes. Any data collected by Sharda Ram will be kept confidential.

We expect that Sharda Ram will not interfere with the normal office performance, behaving in a professional manner and following the office standards of care. As the Office Manager of Continuous Care Center, I support the participation of our primary care department in this project and look forward to work with you.

Sincerely,

____________________________
Tonya Singh; Office Manager
Continuous Care Center
Appendix E

Institutional Review Board Approval Letter

MEMORANDUM

To: Dr. Deana Goldin
CC: Sharda Ram
From: Elizabeth Juhasz, Ph.D., IRB Coordinator
Date: May 21, 2021

Protocol Title: "Interventions for Clinicians in a Mobile Health Clinic on Improving Screening and Identification of Trafficking in Persons: A Quality Improvement Project"

The Florida International University Office of Research Integrity has reviewed your research study for the use of human subjects and deemed it Exempt via the Exempt Review process.

IRB Protocol Exemption #: IRB-21-0181    IRB Exemption Date: 05/21/21
TOPAZ Reference #: 110410

As a requirement of IRB Exemption you are required to:

1) Submit an IRB Exempt Amendment Form for all proposed additions or changes in the procedures involving human subjects. All additions and changes must be reviewed and approved prior to implementation.

2) Promptly submit an IRB Exempt Event Report Form for every serious or unusual or unanticipated adverse event, problems with the rights or welfare of the human subjects, and/or deviations from the approved protocol.

3) Submit an IRB Exempt Project Completion Report Form when the study is finished or discontinued.

Special Conditions: N/A

For further information, you may visit the IRB website at http://research.fiu.edu/irb.

EJ