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The Implementation of a Validated CSEC Screening Tool for Youth Age 11 - 17 in a Pediatric Emergency Room

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Abstract

Youth are a vulnerable population due to their age, developmental level, and dependability on others. Child abuse is a public health issue that addresses a broad range of inflicted harm ranging from neglect to physical and sexual maltreatment. A severe form of child sexual abuse is the Commercial Exploitation of Children (CSEC), also known as Child Sex Trafficking (CST), and Human Minor Sex Trafficking (HMST). For purposes of this paper, CSEC is used for CSEC, CST, and HMST. Commercial sexual exploitation of children includes sexual crimes involving children and adolescents for gain. Due to the child being less than 18 years old, no evidence of force must be proven. The prevalence of CSEC is unknown due to the absence of tracking, multiple definitions, lack of awareness and education, and the covert nature of the exploitation. There are risk factors associated with CSEC and residual sequela resulting in physical and mental health disabilities. Due to the health consequences experienced with exploitation, these victims seek out healthcare but are not identified by the healthcare provider. Healthcare providers are in pivotal roles in recognizing these victims with adequate education and an effective screening tool. This translational project aims to increase confidence levels in the pediatric emergency room nurses at the Beverly Knight Olsen Children's Hospital by educating on CSEC and the utilization of a validated screening tool to assist in identifying potential high–risk youth 11 – 17 years, referring them, and connecting them with essential resources.

Keywords: commercially sexual exploitation of children (CSEC), domestic minor sex trafficking (DMST), child sex trafficking (CST), screening tool, assessment tool, characteristics, risk factors, treatment, education

The Implementation and Evaluation of a CSEC screening tool for Youth Age 11- 17 in a Pediatric Emergency Room

Chapter I

Commercial sexual exploitation of children (CSEC) is a global public health concern. High-risk indicators are noted throughout the literature to aid in identification. The social-ecological model illustrates how influences from multiple sources increase the child's vulnerability and susceptibility to CSEC involvement (Edwards & Mika, 2017; Franchino–Olsen, 2019). Perpetrators are usually known to the children and can be family, friends, or acquaintances. They choose potential victims by identifying certain traits that make the child more vulnerable. Social media platforms are a popular way of meeting and forming a relationship with children. Recruitment of youth can happen at school, in neighborhoods, or popular places teens frequent. After recruiting youth, perpetrators use techniques to form secure bonds, build trust and dependence over time by the grooming process (Greenbaum & Crawford–Jakubiak, 2015). Inevitable physical and mental health consequences are associated with CSEC involvement, and therefore, seek out healthcare at various times but do not self-identify or are not identified as victims by healthcare providers (Greenbaum et al., 2018a; Le et al. 2019; Leopardi et al. 2020). Few validated screening tools for identifying potential CSEC victims are found in the literature. Armstrong (2017) evaluated six tools identified in the literature and found only two acceptable tools to use in a fast-paced setting like the emergency room. This translational project will focus on the use of Greenbaum's validated short screening tool to identify potential youth aged 11–17 years in a pediatric emergency room setting (Greenbaum et al., 2018a).

Background and Significance

Abuse of children is a significant public health issue covering a broad range of inflicted harm ranging from neglect to physical to sexual abuse. Commercial sexual exploitation of children (CSEC) is a severe form of child sexual abuse. (Greenbaum et al., 2018a). This type of abuse occurs worldwide, including the United States, occurring in all 50 states (Armstrong, 2017). CSEC involves sexual crimes against children and adolescents, including exploitation for gain (Barnert et al., 2017). Because children less than 18 years cannot legally consent to sexual activity, force, fraud, or coercion is not required (Kaltiso et al., 2018). The prevalence is unknown due to the absence of a tracking system, multiple definitions, the hidden nature, and lack of experience and training of healthcare workers (Leopardi et al., 2020). A typical age for entry into sex trafficking is around puberty, but no reliable statistics exist. Many risk factors are associated with these youths, such as previous abuse (emotional, physical, or sexual), involvement with child protective agencies or law enforcement, classifying as lesbian, gay, bisexual, transgender, queer, or questioning (LGBTQ); and being a runaway (Choi, 2015; Moore et al., 2017; Hornor et al., 2019). However, some children have no previous risk factors but are vulnerable because of their immaturity, lack of life experiences, impulsive nature, and curiosity. These factors prevent these youths from fully recognizing the potential dangers or consequences of being involved with CSEC (Greenbaum & Crawford-Jakubiak, 2015). Many health issues are associated with CSEC involvement, including physical and mental problems and misuse of illegal substances (Greenbaum et al., 2018a). Health-related issues include exacerbation of chronic conditions and reproductive complaints such as sexually transmitted infections (STI's),

pregnancy, and pelvic inflammatory disease. Mental-related sequela involves anxiety, depression, suicidal ideation, and self-harm (Landers et al., 2019; Le et al., 2018; Leopardi et al., 2020). Misuse of illegal substances may be voluntary or involuntary to numb the senses or increase cooperation. Due to the health issues associated with CSEC, these victims seek out healthcare during their exploitation (Greenbaum et al., 2018a, 2018b; Kaltiso et al., 2018). These youth show up in various settings, including emergency rooms, child advocacy centers, teen clinics, and primary care offices. Healthcare providers in these environments are in vital positions to identify these victims. However, Greenbaum et al. (2018a) indicate that these victims are not identified at these entry points and do not self-identify because they do not consider themselves victims.

Healthcare workers may benefit from training to be able to identify CSEC victims or high-risk youth that have the potential for becoming CSEC victims. Training should be standardized and include high-risk indicators, mental and physical consequences, and the use of a validated screening tool. The use of a trauma-informed approach and being culturally sensitive is the best practice for the approach and care of these complex individuals (Powell et al., 2017).

Chapter II

Literature Review

An advanced systematic search was conducted using Galileo that accesses over 100 databases. Articles were peer-reviewed from the years 2015 to 2020 and in the English language. Keywords searched were commercially sexual exploitation of children (CSEC), domestic minor sex trafficking (DMST), child sex trafficking (CST), screening tool, assessment tool, characteristics, risk factors, treatment, and education.

Risk Factors and Characteristics

Miller-Perrin and Wurtele (2017), Goldberg and Moore (2018), Finigan-Carr et al. (2018), and Barnett et al. (2017) used the social-ecological framework for addressing possible contributors to the vulnerability of this population. They found that influencers at the individual level may be experiencing abuse, homelessness, identifying as LGBTQ, or interactions with law enforcement or child protective services. Within the family, contributors may be family dysfunction or witness to family violence. A child may experience peer pressure or bullying in schools, gang involvement in neighborhoods, or poverty in the community. At the societal level, lack of awareness, education, sexualization of females, and gender-based discrimination significantly impact the child.

Goldberg and Moore (2018), Finigan-Carr et al. (2018), and Barnett et al. (2017) suggested that vulnerability for CSEC may have no contributing factors except the child being young, innocent, immature, impulsive, and a risk-taker. Greenbaum and Crawford-Jakubiak (2015) expressed how youth lack life experience, do not think about consequences, and lack pre-frontal lobe development that controls impulsivity. Their immature developmental age prevents these youths from acknowledging the dangers of being involved with CSEC.

Risk factors associated with these youths are previous abuse (emotional, physical, or sexual); involvement with child protective agencies, law enforcement, or foster care; family dysfunction (domestic violence, drug abuse); identifying as lesbian, gay, bisexual, transgender, queer or questioning (LGBTQ); and runaways or being forced out of the home (Leopardi et al., 2020; Gonzalez-Pons et al., 2020; Varma et al., 2015; Hornor et al., 2019; Choi, 2015; Greenbaum & Crawford-Jakubiak, 2015).

Consequences of CSEC

CSEC involvement can have developmental, physical, mental, and societal ramifications. Sprang and Cole (2018) suggest involvement in CSEC negatively impacts a youth's development citing difficulty with emotional self-regulation and social interactions. Physical consequences may include untreated or exacerbated chronic conditions, substance misuse, sexually transmitted infections (STI), unplanned or unwanted pregnancy, inflicted injuries, signs of deprivation, poor dentition, or various psychosomatic complaints (Greenbaum et al., 2018a; Moore et al., 2017; Hornor et al., 2019; Miller-Perrin & Wurtele, 2017). Barnett et al. (2017), Goldberg and Moore (2018), Landers et al. (2017), and Le et al. (2018) discuss the mental consequences such as post-traumatic stress disorder (PTSD), anxiety, depression, self-harm, and suicidal tendencies. Miller-Perrin and Wurtele (2017) reveal societal impacts such as increased criminal behavior, rejection or stigmatization, or unjust incarceration by law enforcement for crimes committed while being exploited.

Recruitment

Leopardi et al. (2020) explain how youth are more accessible due to social media, interactive video games, and cell phone applications. These platforms, paired with the need to belong, feel accepted, and the youths' developmental immaturity, are a combination that provides the perfect opportunity for recruitment. Greenbaum and Crawford-Jakubiack (2015) detail the victimization of youth. Perpetrators can be friends, acquaintances, or family. The process of grooming involves initiating contact and gaining trust, followed by promises of love and attention. Perpetrators give positive feedback in different and manipulative ways repeatedly until they build a trusting relationship.

Perpetrators also entice youth by offering opportunities for jobs or ideas to make money. After recruiting youth, the perpetrator maintains control by vacillating between violence and kindness, forming strong bonds. Two conditions exist with trauma bonding, including a power imbalance and repeated abuse interspersed with positive interactions (Greenbaum & Crawford-Jakubiack 2015). This trauma bond assures the trafficker that the victim will remain subservient and not reveal the abuse.

Barriers in Identification

Self-Disclosure

Many barriers exist in the identification of potential victims of CSEC. Greenbaum and Crawford-Jakubiack (2015) discuss that victims consider their role in their exploitation as voluntary and not victimized. Barnett et al. (2017), Leopardi et al. (2020), and Varma et al. (2015) identified reasons victims do not self-disclose, including mistrust of authority figures, fear of incarceration by law enforcement, stigma and shame, sexual orientation, and prior negative experience. Goldberg and Moore (2018) refer to trauma bonding and grooming as barriers to disclosure.

Healthcare Barriers

Macais–Konstantopoulos (2016), Gonzalez et al. (2020), and Moore et al. (2019) explain the lack of awareness, training, and experience by healthcare providers, as well as biases and beliefs in myths about trafficking affect identification. The literature also reveals that most healthcare providers have never had education regarding the identification and care of CSEC victims and therefore do not feel confident in dealing with this population (Coughlin et al., 2020). Powell et al. (2017) indicate that time is a barrier, implying identification requires extra time by the healthcare provider. Hemmings

et al. (2016) identify a lack of policies and protocols, a lack of internal resources and infrastructure, poor communication, and information sharing between agencies, are all barriers in identifying victims. Leopardi et al. (2020) acknowledge CSEC victims are under-recognized and under-reported.

Another barrier is the lack of a standard screening tool for identifying CSEC victims (Greenbaum et al., 2018a; Leopardi et al., 2020). Although there are screening tools in the literature, most have numerous questions, require substantial training to administer, are difficult to score, and lack validity in healthcare settings (Armstrong, 2017).

Screening tools

Armstrong (2017) performed a narrative review of the electronic databases for CSEC screening tools and reviewed six instruments. Variables considered were feasibility of use in the emergency department, number of questions, ease of scoring, places where information was obtained and established validity and reliability. Two screening tools met the criteria: The Asian Health Services and Banteay Srei's CSEC Screening Protocol and Greenbaum's 6-item CSEC screening tool. Both instruments had a low number of questions, used multiple information sources, and established predictive validity. Greenbaum's tool also rated ease of use, but neither had demonstrated reliability. (Armstrong, 2017). Further research with the screening tools is needed to establish reliability.

Greenbaum' Short Screening Tool

The literature revealed three studies examining specific characteristics of a CSEC screening tool: 1) validity; 2) succinctness; 3) ease of administration; 4) good sensitivity

and specificity for identifying CSEC victims (Greenbaum et al., 2018a; Greenbaum et al., 2018b; Kaltiso et al., 2018). These three studies encompass the most current information regarding screening tools to identify CSEC victims seeking healthcare. Three studies evaluated Greenbaum's 6-item screening tool for CSEC victims (Greenbaum et al., 2018a; Greenbaum et al., 2018b; Kaltiso et al., 2018). The studies were performed in emergency departments, child advocacy centers, or teen clinics. The number of participants and settings varied from n = 108, multicenter (same institution) (Greenbaum et al., 2018a), to n=203, one site (Kaltiso et al., 2018), to n =810, multisite across the United States (Greenbaum et al., 2018b). Greenbaum (2018b) compared CSEC victims to a control group that included acute sexual assault victims with similar demographics. This study demonstrated that sixteen variables were more common in CSEC than acute sexual assault (ASA) victims (Greenbaum et al., 2018b). Two studies calculated the sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV) for Greenbaum's 6-item screening tool. Measurements resulted in high sensitivity, moderate specificity, and high negative predictive value (Greenbaum et al., 2018a; Kaltiso et al., 2018).

Psychometric Properties. This CSEC screening tool was created in the original study by Greenbaum et al. 2018a and used as the measurement tool in two subsequent studies (Greenbaum et al., 2018b; Kaltiso et al., 2018). No study to date has established reliability. Armstrong (2017) suggests that further research is needed using this short screening tool to establish reliability.

Greenbaum (2018a) validated the six items in the screening tool through a cross-sectional study of 12–18-year-olds presented to one of three emergency rooms in a

metropolitan area in the southeastern United States. In this study by Greenbaum (2018a), the study participants identified as CSEC or acute sexual assault (ASA) without CSEC evidence. Statistics on variables of interest and those found to be at the 99% confidence interval (CI) were significant and included in the screening tool. The predictive validity of screening items, the area under the receiving operating curve (AUROC) was 0.97, indicating a high ability to distinguish CSEC from ASA. This study receives a rating of 2b on the evidence scale, revealing results are from a well-designed cohort study (Armstrong, 2017).

There are currently only six CSEC screening tools in existence. Armstrong (2017) suggests this short screening tool is feasible in a fast-paced setting such as an emergency room. The features that make this tool feasible are the low number of items, ease of administration, minimal training needed, and positive screen determined and scored quickly.

This CSEC screening tool is validated and appropriate for an initial screening to identify high-risk youth for CSEC (See Appendix A). The screening tool is succinct and easily administered, which is ideal for emergency rooms. Sustainability of use is likely due to ease of administration, scoring of the tool, and increased identification of potential victims.

CSEC Treatment

Treatment and care for victims of CSEC can be multifaceted and complicated. Macais-Konstantopoulous (2016) and Greenbaum and Crawford-Jakubiak (2015) maintain that one must build trust and create a safe environment before obtaining a medical history. Along with establishing trust, transparency is of utmost importance. The

provider needs to review the limits of confidentiality and their obligation as mandated reporters before the screening. Recommendations to obtain assent for all testing and procedures allows the victim to maintain some sense of control. Barnert et al. (2017) and Goldberg and Moore (2018) suggest that culturally sensitive trauma-informed care is the best practice for caring for this complicated population. Trauma-informed care acknowledges that individuals have experienced trauma in their lives and have residual effects of this trauma. This approach with patients recognizes their vulnerabilities and triggers and decreases re-traumatization while fostering emotional and physical wellbeing. This type of care is compassionate, empathetic, and non-judgmental.

Culturally sensitive care is attention to diversity and appropriately responsive to different attitudes, feelings, and beliefs of other ethnicities or origins (Hemmings et al., 2016). Communication in the individual's native language and the individual's literacy level is essential. Landers et al. (2017) emphasize focusing on strengths such as resiliency and resourcefulness when caring for these individuals. Macais - Konstantopoulos (2016) and Leopardi et al. (2020) indicate that healthcare providers should always show respect, compassion, and empathy while being patient, using active listening, and employing shared decision-making. A multidisciplinary approach, including collaboration, information sharing, and coordination between community and governmental agencies, are necessary to provide care for this population's immediate and long-term complex needs.

Healthcare Provider Education

Barnert et al. (2017) expressed that most healthcare providers have little to no education or training on CSEC. Greenbaum and Crawford-Jakubiak (2016), Leopardi et

al. (2020), Varma et al. (2015), and Coughlin et al. (2020) proposed CSEC curricula include information on risk factors, characteristics, indicators, common health problems, and recruitment techniques. Powell et al. (2017) indicate CSEC education should be standardized and include prevention strategies. Education should review public health impact, and all forms of trafficking. Care should be victim-centered, culturally and gender-sensitive, trauma-informed, and evidence-based. Varma et al. (2015) proposed including anticipatory guidance to address safe sex, sexually transmitted infections, safety tips and resources available when homeless, and CSEC prevention.

Several different ways to deliver the education include didactic, simulation, role-playing, and modeling. However, in the presence of the COVID 19 pandemic, Coughlin et al. (2020) suggested online education to increase access to all health care providers.

Recognizing biases and addressing societal attitudes and misconceptions is also vital to this education (Leopardi et al., 2020). Healthcare providers should acknowledge their own biases and attitudes towards trafficking victims to provide compassionate, empathetic, and non-judgmental care.

Resources

Barnert et al. (2017) pointed out the lack of community resources for this vulnerable population. Mental health providers trained in trauma-informed care and inpatient facilities are limited. Several laws passed, such as The Safe Harbor Law, disallowed the incarceration of CSEC victims for any crime committed during the exploitation (Greenbaum et al., 2018a).

Future Research

Hemmings et al. (2016) and Macais-Konstanotopoulos (2016) suggest future research to evaluate screening tools, educational strategies for healthcare providers, intervention strategies for victims, and referral processes. Le et al. (2018) declared that further research is needed to evaluate care modalities to meet complex short and long-term health needs and avoid re-traumatization.

Gaps in literature

Barnert et al. (2017), Leopardi et al. (2020), and Miller-Perrin and Wurtele (2017) identified gaps in the literature consisting of prevalence rates, studies with LGBTQ, cisgender males, and effective prevention and intervention strategies. Greenbaum and Crawford-Jakubiak (2015) expressed a standardized screening tool is lacking. Le et al. (2018) stated the literature overlooked health consequences such as malnutrition, eating disorders, post-trauma growth, and long-term healing and prosperity. Powell et al. (2017) indicated a void in studies evaluating healthcare provider education. Sprang and Cole (2018) identified an absence of studies related to familial trafficking. These gaps in the literature indicate more research is needed to effectively identify CSEC victims, successfully educate healthcare providers, and create more resources for this population to care for their complex needs adequately.

Purpose

The purpose of this translational research project was two-fold and to explore the following clinical questions:

Clinical Question 1: Will an educational intervention regarding CSEC and the implementation of a validated CSEC short screening tool increase the confidence

levels of licensed healthcare providers in a Pediatric Emergency in identifying high-risk youth age 11-17 over baseline confidence levels?

Clinical Question 2: Will the implementation of a validated CSEC short screening tool in a Pediatric Emergency Room increase the rate of referrals of high-risk youth age 11-17 over pre-implementation rate of referrals as determined by retrospective chart review?

Theoretical Model

This paper's theoretical framework on this vulnerable population is a modified version of the General Ecological Framework suggested by Edwards and Mika (2017). This framework is a holistic framework that allows for assessing an individual within a more extensive system. This framework makes several assumptions: 1) no single factor can explain why some people or groups of people are more vulnerable to specific issues while others are more protected; 2) there are multiple factors influencing behaviors; 3) these behaviors are influenced by interactions within and amongst the individual and surrounding circles. Based on these assumptions, this model helps organize the complex and interacting factors that place minors at risk for CSEC (Franchino-Olsen, 2019).

This model organizes many CSEC risk factors using the primary circle of an individual and surrounding the individual by larger circles of relationships, including family, community, and society. In the individual circle, experiences directly affect the individual. These experiences may include adverse child experiences such child abuse and neglect, difficulty in school, running away, early involvement with substance abuse or sex, and early involvement in child protection or law enforcement agencies. In the family circle, personal relationships with family and friends may influence the risk of

becoming a victim or vulnerable to CSEC. These may include conflicts, witnessing violence, or misuse of drugs. Social relationships may consist of interactions within schools and neighborhoods within the community circle, including peer pressure, gangs, and violence. In the societal circle, poverty, disparities, and discrimination may influence the individual (Franchino-Olsen, 2019). Interactions within the circles affect the individual to increase or decrease the risk of becoming vulnerable to or a victim of CSEC. This framework's concepts focus on the interactions and adaptations between individuals and their environment (Edwards & Mika, 2017).

Change Theory

The Transtheoretical Model (TTM) by Proshaska and Diclemente (1984) is the basis for the change process. Several assumptions exist: 1) behavior change is a process occurring over time; 2) levels are open for movement; 3) better health outcomes can influence change; 4) more pros than cons can motivate individuals to change; 5) inherently populations do not like change; 6) encouragement with change principles at different levels can facilitate the change process. This process can be linear, moving through the levels progressively, or nonlinear, vacillating between levels before moving forward. Powell et al. (2017) adapted the TTM using human trafficking education for behavior change in healthcare providers. Based on principles that awareness and knowledge precede behavior change, successful education can change healthcare providers' care delivery to better overall health.

The schematic is a triangle with six levels. The bottom level starts with the healthcare provider participating in trafficking education. Moving up the triangle levels are healthcare providers' satisfaction with education, the understanding of information

presented, and healthcare providers' use of information to recognize and care for trafficking victims. At the triangle's pinnacle, the last two levels are improved trafficking victims' care, with better outcomes (Powell et al., 2017).

Chapter III

Methodology

Clinical Questions

1. Will an educational intervention on CSEC and a validated CSEC screening tool increase pediatric emergency room healthcare providers' confidence in identifying high-risk youth aged 11-17 years over baseline confidence levels?
2. Will implementing a validated CSEC screening tool in ta pediatric emergency room increase the rate of referrals of high-risk youth aged 11-17 over the pre-implementation rate of referrals?

Setting

The project setting was an urban pediatric emergency room located within a Level One Trauma Center adult hospital. The pediatric emergency room is located approximately 70 miles from a major airport that is among the busiest airports in the world. The pediatric emergency room is in a city that has approximately 150,000 residents. This pediatric emergency room employs eight physicians, 22 nurses, and four clinical technicians. They have access to a Child Life Specialist and two social workers who work with other areas in the pediatric hospital. It is the only dedicated pediatric facility located between two major cities to the north and south and serves approximately

15,000 children annually. Roughly forty percent of the children served are between the ages of 11 – 17 years.

The pediatric emergency room is an 18-bed facility located on the first floor of the pediatric hospital. In the waiting area, there is a low-sensory room for patients that need decreased stimulation. This area is separated from the general waiting area and has reduced lighting and sound. There is a Chapel which is a separate room for those who may need a quiet space to pray, meditate, or process information. There is a snack bar where people who are waiting can find nourishment without having to leave their children. The 18 beds include a 4-pod area for suicidal, homicidal, flight risk, or have violent behavior and need constant observation. A nurse triages all patients in a separate room off the waiting area using a fast-track assessment. The nature of the patient's chief complaint and activity in the pediatric emergency department determines how quickly the healthcare provider evaluates the patient. The current process in the pediatric emergency room does not include screening for potential CSEC victims. However, the nurses do ask a question relating to feelings of safety. The nurses currently document in the electronic medical record.

Participants

The participants who received education on CSEC and the validated CSEC screening tool were the pediatric emergency room licensed healthcare providers. Participation was voluntary, with no repercussions for those who chose not to participate. Written consent was obtained from participants using the guidelines for approval to participate in a research study. No unusual distress was expected besides learning and incorporating a new tool into the routine assessment. However, healthcare providers

performing the screening could have experienced secondary trauma listening to the abuse experienced by the youth. No incentives were offered.

Inclusion criteria for CSEC screening were youth 11 – 17 years seeking healthcare at the pediatric emergency room. The emergency room healthcare providers screened the youth using the validated CSEC screening tool as an enhanced assessment. Exclusion criteria included age < 11 years; >17 years; developmentally delayed; non-English speaking; mentally unstable; physically unstable; or those unwilling to answer questions. No unusual distress was expected besides what is usual with answering personal and sensitive questions. If the youth showed signs of distress, the healthcare provider stopped the screening and contacted the social or crisis worker to intervene.

Ethical Considerations

Due to CSEC's nature, there were considerations for ethical concerns. These youth were voluntarily seeking healthcare at the pediatric emergency room, where healthcare providers routinely completed assessments. This validated screening tool was used as an enhanced assessment. Since CSEC is a form of child sexual abuse, it was ethical to screen for this type of child abuse, as was the current process for other forms of child abuse. The protection of this vulnerable population was of utmost importance.

There were several reasons for the possible collection of incorrect data. Rothman et al. (2018) discussed reasons data may be compromised, such as the youth's age, excessive questioning, and obtaining assent. An ethical concern for the patient was re-traumatization, thereby increasing distress.

Interventions

The healthcare providers working in the pediatric emergency room participated in CSEC education provided by the Primary Investigator. The education was offered several different times in person taking into consideration shift times so that all staff were able to attend the education. The education included CSEC indicators, characteristics, physical and mental health consequences, the validated CSEC screening tool, trauma-informed care, culturally sensitive care, resources available, and the reporting process.

The healthcare providers in the pediatric emergency room administered the validated short screening tool to all youth 11- 17 years seeking healthcare in the pediatric emergency room who met inclusion criteria. Discussion of limits of confidentiality and healthcare providers' role as mandated reporters occurred before the screening. The healthcare providers performed the screening in a private area away from the accompanying person, asking questions in a culturally sensitive and trauma-informed way. No additional distress accompanied answering the screening tool questions other than normal distress experienced when answering questions of a sensitive nature.

Instrument and Analysis

A confidence scale created by the Primary Investigator was administered to all healthcare providers participating before and after the education. (See Appendix B). Demographics of the healthcare providers participating was also collected (See Appendix C). This translational project implemented Greenbaum's validated short CSEC screening tool as an enhanced assessment (Greenbaum et al., 2018a). Along with scoring of the validated screening tool, demographic information, as well as documented high-risk indicators, was collected through retrospective chart reviews. Two positive answers on

the screening tool suggested a positive screen indicating further investigation was warranted. Youth with a positive screen may be referred to social services, a CSEC Advocate, reported to the CSEC hotline 1-866-END-HTGA, or another agency as indicated. This hotline is the referral for human trafficking and is managed by the Children's Advocacy Centers of Georgia (CACGA) who assumed the role of statewide provider for human trafficking intervention and support.

Analysis of demographic data was done using descriptive statistics such as percentages, means, and correlations. Pre and post confidence scores was analyzed using a Paired t-test, and pre and post referral rates was analyzed using a Pearson Correlation.

Budget

The budget was low for this translational project. The PI collected all data from the medical record and created and provided the education. The only cost was attributed to the printing of the CSEC screening tools, confidence scales, demographic forms and resource flyers used for the project.

Limitations

There were several limitations for this project. It was assumed that most youth have experienced some sort of trauma in their life. Some patients were uncooperative, hostile, or refused to answer questions. Some did not answer questions honestly due to the barriers listed previously in this paper. Another limitation was this population typically does not consider themselves as victims and do not self-identify. Identifying potential CSEC victims is also a high-impact, low frequency event. Negative screens will be the normal occurrence and positive screens will occur in a manner that is not predictable or with any regularity. However, when a positive screen does occur, the

healthcare providers in the Pediatric Emergency Room will be knowledgeable of the reporting process and aware of the available community resources. If one youth is identified and connected with available resources, the tool is worth implementing. This project is only in one geographical area and one pediatric emergency room, limiting generalization.

Chapter IV

Results

The results of this cross-sectional, clinical project on "The Implementation of a Validated CSEC Screening Tool in a Pediatric Emergency Room" are reported here. One hundred fifty-six charts were reviewed retrospectively prior to educational intervention. Thirty-seven licensed healthcare providers (HCP) in the Pediatric Emergency Room participated in the confidence pretest, with 36 completing the educational intervention, and the confidence post-test. Fifty-seven completed CSEC screening tools were evaluated post educational intervention. Findings reported include descriptive information concerning the confidence level of the licensed HCPs in screening of and caring for youth age 11 – 17 at risk for Commercial Sexual Exploitation.

Data screening was conducted prior to statistical analysis. Data were verified using random verification or proofing with random data verified for input accuracy. No discrepancies were identified. Examination of all variables was conducted to assess data for missing and out of range values using descriptive statistics. One

missing data point was identified. Participant number fifteen did not answer age on the Employee Demographic Survey. Sample means for age was calculated and substituted (33.7 years).

Data Analysis

After reviewing all interval and ratio level data for central tendencies, it was found that The Confidence Scale Total T1, The Confidence Scale Total T2, the Referral Rate Total T1 and the Referral Rate Total T2 were normally distributed. The Fisher's Exact score for The Confidence Scale Total T1 and The Confidence Scale Total T2 was 0.40 and 0.90 for skewness and 1.06 for and 0.27 for kurtosis respectively (Plichta & Kelvin, 2013). The Fisher's Exact score for the Referral Rate Total T1 and the Referral Rate Total T2 was 0.36 and 1.77 for skewness and 1.10 and 1.35 for kurtosis, respectively.

Other interval/ratio variables analyzed for normality were employee's age, number of years practicing in their profession, and number of years practicing in a Pediatric Emergency Room. Central Tendencies including means, standard deviations, and Fisher's Exact for skewness and kurtosis were calculated. Initially, none were normally distributed. Further examination of data revealed outliers in each set of variables. Employee's age variable had five outliers three standard deviations above the mean. After removing all five outliers, employee age was normally distributed with a mean of 30.58 (SD 3.71) and a Fisher's Exact of 1.83 for skewness and 1.30 for kurtosis. Although the five outliers were only 14% of the total sample, elimination of these outliers would have removed the most experienced

providers and their data. Therefore, statistical analysis involving employee's age in the clinical questions will be done using nonparametric tests.

Number of years practiced in profession revealed three outliers three standard deviations above the mean. After removal of the three outliers, the data remained not normally distributed with a Fisher's Exact of 4.05 for skewness and 1.85 for kurtosis. Further examination revealed no further outliers above or below three standard deviations from the mean. Therefore, a statistical correction using an inverse natural logarithm was performed on the variable recommended by Tabachnick and Fidell (2019) but unsuccessful. Any clinical question involving number of years practicing in profession was done using nonparametric tests.

Number of years practicing in a Pediatric Emergency Room revealed an outlier, three standard deviations above the mean. When this outlier was removed it was normally distributed with a mean of 1.98 (SD 1.31) and a Fisher's Exact of 1.52 for skewness and 1.25 for kurtosis (Plichta & Kelvin, 2013). Any clinical question involving this variable will be done using parametric tests.

Participants

Two groups were targeted for participation in this study based on their roles in the Pediatric Emergency Room. The Pediatric Residents who rotate through the Pediatric Emergency Room and take night call, and the licensed healthcare providers working in the Pediatric Emergency Room. The participants were recruited by email with an explanation of the study, requirements to participate, and dates and times of the educational interventions. Due to the nature of shift work

and resident requirements, seven different dates for the education were offered at times conducive with their work roles. Thirteen out of seventeen Pediatric Residents participated. The four who did not participate were out of town doing required rotations at different hospitals. Eighteen of the twenty-two of the Pediatric Emergency Room licensed healthcare providers participated. Four nurses did not participate due to two nurses working only one day a month, one nurse was out on maternity leave, and one nurse resigned from her position. Four out of six Pediatric Emergency Room physicians participated. The physicians who did not participate only worked minimal shifts and lived out of town. The educational sessions were refined down to 30 – 40 minutes being cognizant of the time taken away from work.

Of the 37 participants in this study, 32 were female (86.5%). The majority practicing professions consisted of 18 RN/LPNs (46.8%) and 18 MD/DOs (46.8%). The age of participants ranged from 23 to 68 years with the majority in the age group 23 – 30 years (48.6 %). The number of years in their profession ranged from one-half year to 37 years with 86.5% having less than or equal to 10. Total years in the Pediatric Emergency Room ranged from zero to 10 years with the majority having less than or equal to two years (72.9%). For more demographics on participants, see Table 1. Along with demographics, the licensed healthcare providers were surveyed for baseline data on their experience, interest in, and belief in the necessity for CSEC screening. Their responses to the questions are displayed in Table 2.

Table 1

Characteristics of Healthcare Providers (Participants)

Characteristics	N	Percent
Gender		
Male	5	13.5%
Female	32	86.5%
Profession		
MD/DO	18	48.6%
NP	1	2.8%
RN/LPN	18	48.6%
Age (Years)		
Total Range 23 - 68		
Range 23 - 30	18	48.6%
31 - 40	13	35.2%
41 - 68	6	16.2%
Years Practicing in Profession (Years)		
Total Range .5 - 37		
Range .5 - 10	33	86.5%
11 - 20	3	8.1%
21 - 37	2	5.4%
Years Practicing in Pediatric Emergency Room (Years)		
Total Range 0 - 10		
Range 1 - 2	27	72.9%
3 - 4	8	21.6%
6 - 10	2	5.4%

Note. MD = Medical Doctor; DO = Doctor of Osteopathy; NP = Nurse Practitioner; RN = Registered Nurse; LPN = Licensed Practical Nurse.

Table 2

Pediatric Emergency Room Employees' Responses to Questionnaire

Questions	Responses	
	N	Percent
Believe CSEC prevalent in our community?		
No	2	5.4%
Yes	34	91.9%
I Don't Know	1	2.7%
Ever provided care to a CSEC child/adolescent?		
No	12	32.4%
Yes	24	64.9%
I Don't Know	1	2.7%
Believe in screening for Child Abuse in Pediatric Emergency Room?		
No	0	0%
Yes	36	100%
I Don't Know	0	0%
Believe in screening for CSEC in Pediatric Emergency Room?		
No	1	2.7%
Yes	36	97.3%
I Don't Know	0	0%
Interested in learning more about CSEC?		
No	0	0%
Yes	20	100%
I Don't Know	0	0%

Note. CSEC = Commercial Sexual Exploitation of Children.

Description of Instrument

Confidence Scale. Confidence of the licensed healthcare providers was measured using a Confidence Scale created by the Primary Investigator (PI). The Confidence Scale was a 10-item Likert-type scale with possible scores for each item from one to five with a possible range of 10 to 50. The Confidence Scale statements coincided with the educational intervention provided by the PI. The Confidence

Scale was given as a pre-test before the educational intervention and then as a post-test after the educational intervention. Participants were asked to rate each statement based on the five response choices according to their perceived confidence level with each statement. The five response choices ranged from one = Not Confident to five = Extremely Confident. Since the Confidence Scale was not an established instrument and measured changes in confidence levels over time (T1 and T2), Cronbach's Alpha was not performed for reliability. Improvement in the healthcare providers' confidence level was expected to improve from the pre-test to the post-test. Therefore, confidence level will be analyzed as an outcome variable by comparing the differences between the healthcare providers' confidence level at two different points in time using a Paired Samples t-test.

The total scores of the pre-test and post-test Confidence Scale were analyzed for normality. Both scores were normally distributed with the reported Fishers Exact Scores for skewness and kurtosis previously listed.

Analysis of the Independent Variables

Prior to beginning the analysis, the independent variables (age, years practicing in profession, years in the Pediatric Emergency Room, Confidence Scale total T1, Confidence Scale total T2, referral total T1, and referral total T2) were examined for multicollinearity. Descriptive statistics for the variables are shown in Table 3.

Table 3

Descriptive Statistics for Independent Variables

Independent Variable	M	SD	N
Employee Age	33.67	9.14	37
Years Practicing in Profession	5.34	7.30	37
Years in Pediatric Emergency Room	2.20	1.85	37
Confidence Scale T1 Total	26.59	5.00	37
Confidence Scale T2 Total	38.19	5.48	36
Referral Rate T1 Total	0.73	0.57	156
Referral Rate T2 Total	1.30	0.79	50

Note. M = Mean; SD = Standard Deviation; T1 = time one (pre-implementation); T2 = time two (post-implementation).

Referral rate T1 and T2 refer to the number of referrals made from pre-implementation of the CSEC screening tool to post-implementation of the CSEC screening tool. The referrals were noted as: yes, a referral was made, no, a referral was not made, or no referral was documented. Referrals could be made to one or a combination of different agencies or organizations such as Department of Family and Children Services, law enforcement, CSEC hotline, or social or crisis worker. Referrals also could be made to an inpatient facility for medical, surgical, or mental admission or to a specialist such as a surgeon, pediatrician, or a neurologist. Descriptive statistics for the referrals made pre and post implementation of the CSEC screening tool are shown in Table 4.

Table 4

Descriptive Statistics of Referrals Pre and Post Implementation of CSEC Screening Tool

	Pre-Implementation		Post-Implementation	
Referral?	N	Percent	N	Percent
No	52	33.3%	10	20%
Yes	94	60.3%	15	30%
Not Documented	10	6.4%	25	50%
Referral to what organization?				
DFCS	0	0%	1	2%
DFCS and LE	0	0%	1	2%
Social worker/Crisis worker	6	3.8%	1	2%
CSEC Hotline	0	0%	0	0%
CSEC Hotline and DFCS	0	0%	0	0%
CSEC Hotline and DFCS and LE	0	0%	0	0%
Inpatient facility	22	14.1%	3	6%
None	61	39.1%	10	20%
Other	67	42.9%	10	20%
Not Documented	0	0%	24	48%

Note. DFCS = Department of Family and Children Services; LE = Law Enforcement; CSEC = Commercial Sexual Exploitation of Children.

Multicollinearity

A Pearson's correlation was performed on the normally distributed variables and several significant correlations between the variables were identified. The highest correlations were number of years practicing in the Pediatric Emergency Room with years practicing in profession ($r = .77$, $p < .01$) and employee age ($r = .54$, $p < .05$). Indications from these correlations are with increasing number of years practicing in the Pediatric Emergency Room, employee age and number of years practicing in profession also increases. Neither of these correlations > .90 and all

other correlations were less than or equal to .43 indicating multicollinearity was not a problem (Plichta & Kelvin, 2013). A non-parametric test Spearman's rho was performed with the non-normally distributed variables of employee age and years practicing in the profession. The only correlation was between years practicing in profession with employee age (r .33, p < .05), indicating as number of years practicing in profession increases so does employee age. This correlation was not > .90 indicating multicollinearity was not a problem (Plichta & Kelvin, 2013). See Table 5 for multicollinearity for independent variables and dependent variables.

Table 5

Multicollinearity for Independent Variables and Dependent Variables

Variable	*r/rs* *n*	Ref Total (T1)	Emp Age	Yrs in Prof	Yrs in Ped ER	Conf Total (T1)	Conf Total (T2)	Ref Total (T2)
Ref Total (T1)	*r*	-------						
	n	156						
Emp Age	*rs*	.132	-------					
	n	37	37					
Yrs in Prof	*rs*	-.206	.327*	-------				
	n	37	37	37				
Yrs in Ped ER	*r*	-.163	.535**	.765**	-------			
	n	37	37	37	37			
Conf Total (T1)	*r*	-.325*	.018	-.021	-.239	-------		
	n	37	37	37	37	37		
Conf Total (T2)	*r*	-.313	-.092	-.171	-.178	.434**	-------	
	n	36	36	36	36	36	36	
Ref Total (T2)	*r*	-.067	.219	.224	.324	.070	.103	-------
	n	50	30	30	30	30	29	50

Note. Ref = referral; Emp = employee; Yrs = years; Prof = profession; Conf = confidence; Ped = pediatric; ER = Emergency Room; (T1) = time 1; (T2) = time 2.

* $p < .05$ level. ** $p < .01$ level.

Analysis of Clinical Questions

Clinical Question 1: Will an educational intervention regarding CSEC and the implementation of a validated CSEC short screening tool increase the confidence levels of licensed healthcare providers in a Pediatric Emergency in identifying high-risk youth age 11-17 years over baseline confidence levels?

The data analyzed were from the pre-test Confidence Scale (T1) collected before the educational intervention, and the post-test Confidence Scale (T2) collected after the educational intervention. They were compared using the Paired Samples t-test.

The Paired Samples t –test was used to test the research hypothesis that there would be an increase in the healthcare providers' perceived confidence level from pre-education (T1) to post-education (T2). All assumptions for the paired sample t-test were satisfied. A significant increase in perceived confidence by the healthcare providers was demonstrated from pre-education (T1) (M 26.62, SD 5.07) to post education (T2) (M 38.19, SD 5.48) t (35) = -12.36, $p < .001$. This indicated that the participants found the education and the CSEC screening tool beneficial and increased their perceived confidence level.

Clinical Question 2: Will the implementation of a validated CSEC short screening tool in a Pediatric Emergency Room increase the rate of referrals of high-risk youth age 11-17 over pre-implementation rate of referrals as determined by retrospective chart review?

One hundred and fifty-six charts were reviewed pre-implementation of the CSEC education, and the screening tool and 50 charts were reviewed post-implementation

of CSEC education and the screening tool. See Table 6 for descriptive statistics for age and gender and Table 7 for descriptive statistics of contributory history documented from pre- and post-implementation chart reviews.

Table 6

Descriptive Statistics of Chart Review Pre and Post Implementation for Age and Gender

Characteristic	Chart Review Pre-Implementation		Chart Review Post- Implementation	
	N	Percent	N	Percent
Total	156	100%	50	100%
Gender				
Male	73	46.8%	27	17.3%
Female	82	52.6%	23	14.7%
Binary	1	0.6%	0	0%
Age (Years)	N	Percent	N	Percent
Range 11(Pre), 10 (Post)-– 12	48	30.8%	13	26%
13 – 15	62	39.7%	23	46%
16 – 17(Pre), 18 (Post)	46	29.7%	14	28%

Note. 11(Pre) = 11 years was youngest age in pre-implementation group; 10(Post) = Ten years was the youngest age in the post-implementation group; 17(Pre) = 17 years was the oldest age in the pre-implementation group; 18 (Post) = 18 was the oldest age in the post-implementation group.

Table 7

Descriptive Statistics of the Chart Review Pre- and Post-Implementation of Questions

Questions	Responses			
	Chart Review Pre-Implementation		Chart Review Post-Implementation	
	N	Percent	N	Percent
Do you feel safe? (Pre-implementation only)				
No	0	0%	-----	-----
Yes	5	3.2%	-----	-----
Not Documented	151	96.8%	-----	-----
History of being knocked unconscious?				
No	0	0%	24	24%
Yes	0	0%	1	2%
Not Documented	156	100%	37	74%
History of DFCS or Foster Care?				
No	0	0%	12	24%
Yes	2	1.3%	1	2%
Not Documented	154	98.7%	37	74%
History of runaway?				
No	0	0%	12	24%
Yes	0	0%	3	6%
Not Documented	156	100%	35	70%
History of drug or alcohol misuse?				
No	26	16.7%	20	40%
Yes	10	6.4%	4	8%
Not Documented	120	76.91%	26	52%
Number of sexual partners?				
0	0	0%	12	24%
1 - 5	0	0%	2	4%
6 – 10	0	0%	2	4%
> 10	0	0%	0	0%
Not Documented	156	100%	34	68%
History of STI?				
No	1	0.6%	13	26%
Yes	1	0.6%	1	2%
Not Documented	154	98.7%	36	72%

Note. DFCS = Department of Family and Children Services; STI = Sexually transmitted infection.

To obtain the number of charts to review, the director of the Pediatric Emergency Room ran a report of all youth 11 – 17 years seen in the Pediatric Emergency Room from September 15 to September 30, 2022. All youth seen between these dates were included in the retrospective chart review done by the PI.

The implementation phase lasted from December 1 to December 31, 2022. During the implementation phase, a paper copy of the CSEC screening tool was placed on the chart by the front desk staff of all youth 11- 17 years seen in the Pediatric Emergency Room. A paper copy of the screening tool was used due to the tool not being available in the Electronic Medical Record. The first 10 days after implementing the tool, the PI noticed that some tools were being left blank, not being returned to the designated file, or no patient ID sticker for chart review. The PI added a choice of refused to answer questions and emailed the director of the pediatric Emergency Room with noted problems. The director sent an email to all staff indicating even if youth refused to answer questions, place identification sticker on form, and return to designated file so PI could retrieve and do a retrospective chart review. There was a significant difference in the number of charts reviewed for T1 (156) and T2 (50). As previously stated, during pre-implementation, there was no screening tool in use, and therefore all charts of youth 11 to 17 years seen in the Pediatric Emergency Room were reviewed (N = 156). Post-implementation of the screening tool, only those charts of youth between 11 – 17 years seen and screened with the tool in the Pediatric Emergency Room were reviewed. Therefore, the data was analyzed using the referral rate (T1) collected

before the educational intervention and implementation of the CSEC Screening Tool, and the referral rate (T2) collected after the educational intervention and implementation of the CSEC screening tool using a Pearson's Correlation. The results were not significant ($r = .07$, $p = .645$) indicating that the referral rate from pre-implementation to post-implementation did not increase meaning the education and the use of the tool did not prompt the licensed healthcare providers to make more referrals.

Conclusion

This chapter presented the results of this translational project entitled, "The Implementation of a Validated CSEC Screening Tool in a Pediatric Emergency Room". A retrospective chart review was performed on 156 charts of youth 11 – 17 years seeking healthcare in a Pediatric Emergency Room to determine if there was documentation of feelings of safety, involvement with law enforcement or Department of Family and Children Services (DFCS), use of drugs or alcohol, sexual activity, history of sexual transmitted infections (STI's) and referrals made. The PI performed all retrospective chart reviews pre- and post-implementation to maintain consistency.

Thirty-six licensed healthcare providers from the Pediatric Emergency Room were recruited to participate in this study, completing a pre-test Confidence scale in identifying and treating potential victims of CSEC, participating in an educational in-service, and completing the same Confidence Scale after the education. After implementation of the CSEC Screening Tool, the PI performed a retrospective chart

review on 50 charts. Results indicated that there was significant increase in confidence levels from pre-test to post-test of the licensed healthcare providers suggesting that the education and the screening tool were beneficial and increased their perceived confidence. However, results also indicated that there was no significant increase in referral rate before and after implementing the CSEC Screening Tool implying that the education and screening tool did not prompt the licensed healthcare providers to make more referrals.

Chapter V

Discussion

"The Implementation of a Validated CSEC Screening Tool for Youth Age 11 – 17 in a Pediatric Emergency Room" is a translational project. The participants were healthcare providers in a Pediatric Emergency Room who were mostly female coinciding with the professions of pediatric nursing and pediatric medicine in which females predominate. Most participants were relatively young (23 – 30 years) with few years of experience (.5 - 10 years). According to the questionnaire included with the demographic form, most participants believed that CSEC existed in their community, felt that CSEC screening was necessary in the Pediatric Emergency Room, and wanted to learn more regarding this high-risk population.

The purpose of this translational research project was two-fold to explore the following clinical questions:

Clinical Question 1: Will an educational intervention regarding CSEC and the implementation of a validated CSEC short screening tool increase the confidence levels of licensed healthcare providers in a Pediatric Emergency in identifying high-risk youth age 11-17 over baseline confidence levels?

Clinical Question 2: Will the implementation of a validated CSEC short screening tool in a Pediatric Emergency Room increase the rate of referrals of high-risk youth age 11-17 over pre-implementation rate of referrals as determined by retrospective chart review?

The expectation for clinical question one was that perceived confidence levels of the HCP would increase from pre-implementation to post-implementation. The educational intervention included CSEC education and the use of a validated CSEC screening tool. Outcome data revealed a statistically significant increase in perceived confidence levels prior to and after the educational intervention. This indicated the CSEC educational intervention was beneficial in assessing and caring for high-risk youth.

The expectation for clinical question 2 was that the referral rate would increase from pre-implementation to post-implementation. The data were collected over approximately a two-week period before and after the CSEC education. There was a difference in the number of charts reviewed pre-implementation (156) and post-implementation (50). Pre-implementation charts of all 11 – 17 years seen in the Pediatric Emergency Room were reviewed when no CSEC screening tool was in use. Post-implementation only those youth 11-17 years seen in the Pediatric

Emergency Room and screened with the CSEC screening tool were reviewed. In this small sample, the referral rate did not increase from pre to post education and implementation of the CSEC screening tool. This could be due to the CSEC screen was scored as negative and therefore there was no referral needed, or that the needed agencies were already involved in the youth's care.

The retrospective chart reviews were performed with the intention of examining the charts to find any documentation of information relating to the questions on the CSEC screening tool or the question of safety. Before implementation, the practice in the Pediatric Emergency Room was to generically ask the youth about feeling safety to assess risk. Since this practice was known as routine in the Pediatric Emergency Room, the expectation was to find documentation about the youth's safety. However, documentation regarding safety was only found in 3.2% of chart reviews indicating that although to ask about safety was said practice, documentation in the chart was not being done routinely.

Pre-implementation chart reviews were not expected to reveal documentation relating in general to the screening questions on the CSEC tool and very little documentation was found. An unexpected finding was the documentation of alcohol use by the youth because there was a screening tool in use to assess the misuse of alcohol and was routinely completed. Drugs were not included in that screening tool, and therefore not documented.

Another unexpected finding on retrospective chart review was that documentation of characteristics and factors contributing to increase in the risk of

the youth being sexually exploited increased from pre to post implementation. Being knocked unconscious was not documented pre-implementation, but post implementation was documented 26% of the time. Documentation of whether the youth was a runaway increased from 0% pre implementation to 30% post-implementation. Documentation of involvement with DFCS or law enforcement increased from 1.3% pre-implementation to 26% post-implementation. Drug and alcohol use was documented 23.1% pre-implementation and increased to 48% documentation post-implementation. Documentation of number of sexual partners increased from 0% pre-implementation to 32% post-implementation. Finally, documentation of sexually transmitted infection rose from .06% pre-implementation to 28% post-implementation. The increased documentation of contributory characteristics, whether they existed or not, indicated the HCPs' awareness and realization of the importance of assessing risk factors in this population for the possible opportunity to intervene early.

Limitations

Several limitations existed in this translational project. Over the study period, the COVID Pandemic significantly affected the educational intervention with the hospital discouraging face-to-face meetings, and recommending all meetings be virtual or small groups. The educational intervention was scheduled with respect to shift change to facilitate involvement. Although the physicians and advanced providers shift change was at 6am and 6pm, and the nurses at 7am and 7pm, times were established to accommodate all healthcare providers. Impromptu educational

offerings were available, when necessary, as determined by the Pediatric Emergency Room manager.

Another limitation was that the validated CSEC screening tool was not in the electronic medical record (EMR) and instead had to be in a paper format, which was an additional step of documentation for the HCP. Along with the screening tool not being embedded into the EMR, the hospital was in the process of changing from one EMR to another, adding additional educational components for the participants.

The PI conducted all retrospective chart reviews to maintain consistency. The chart reviews were labor and time intensive extending the time needed to conduct and complete the project. A Confidence Scale was created to align with the education provided and to measure perceived confidence of the HCP before and after the educational intervention. Due to the specific nature of the education and confidence regarding that education, no instrument was found in the literature and therefore reliability and validity could not be established.

A limitation relating to the number of referrals made pre and post implementation was also evident. All referrals documented, whether CSEC related or not, were included in the referral numbers. These included referrals that were made for other reasons such as an in-patient admission for medical care, consulting specialists or surgeons.

Previous Research

The motivation for this translational project was to address some of the gaps found in the literature regarding the identification of high-risk youth for CSEC to

intervene early and provide needed resources. Previous research (Greenbaum et al. 2018a; Kaltiso et al. 2018) screened youth by certain chief complaints such as suicide ideation or genital complaints for an indication for CSEC screening. Le et al. (2018) indicated that certain health conditions were being overlooked in the identification of high-risk youth for CSEC including malnutrition, eating disorders, and symptoms relating to experiencing trauma. For this project all youth aged 11 – 17 seeking out healthcare in a Pediatric Emergency Room were screened with the validated CSEC screening tool to decrease any missed opportunities.

Original research by Greenbaum et al. (2018b) compared CSEC victims to a control group of acute sexually assaulted victims and determined differences in characteristics of the two groups from which the CSEC screening tool was created. The screening tool was utilized and validated in other research by Greenbaum et al. (2018a) and Kaltiso et al. (2018). This validated CSEC screening tool was chosen for this project due to the ease of use and scoring, little training needed to administer, good sensitivity and specificity, and feasibility for use in a fast-paced setting (Armstrong, 2017).

Powell et al. (2017) discussed possible reasons for not identifying potential CSEC victims. Primary was lack of awareness and CSEC education for HCP that may intersect with these youth. The Pediatric Emergency Room was chosen for the site of the project because youth often seek out healthcare during their exploitation but are not identified for previously stated reasons. An educational component regarding CSEC and the use of a validated CSEC screening tool was the educational

intervention provided for the HCP in the Pediatric Emergency Room. At present CSEC is not addressed in any formal or informal education to HCPs.

Lessons Learned

Several lessons were learned during this translation project. During the first 10 days of data collection, the PI realized that the HCPs were not completing the CSEC screening tools. When the PI inquired about the reason for the blank forms, the HCPs stated that the youth exercised their right of refusal to answer the questions. The PI then added a line on the form to indicate if the youth refused and instructed the HCPs to place the youth's identification sticker on the form so a retrospective chart review could be performed to gather needed data from documentation in the chart.

Another lesson the PI learned was that the HCPs were not comfortable asking questions that were sensitive in nature to these youth. By the end of data collection, it seemed the HCPs were becoming more comfortable with the tool and therefore more screening tools were being completed. The HCPs also received resistance from parents that indicated they did not understand the necessity for the screening tool. The HCPs were supposed to ask the CSEC screening tool questions in private with the youth, but some parents refused to leave the bedside. Confidentiality rights for youth include the right to be interviewed in private by the HCP and in some instances to be tested and treated without parental consent. Due to the sensitive nature of essential questions needed for the HCP to adequately assess, treat, and provide anticipatory guidance for these youth, privacy is recommended.

Implications for Practice

CSEC can occur in any geographic location and to any youth no matter socio-economic status. CSEC is a severe form of child sexual abuse and screening needs to become routine in facilities that care for and treat youth. This is not limited to the Emergency Room but includes primary care offices, teen clinics, Child Advocacy Centers, Crisis Centers, and any other place youth seek out healthcare. Screening these youth and providing needed resources may prevent CSEC involvement. However, for this to happen, HCPs need to be aware of that CSEC occurs, to be educated on CSEC and the use of the screening tool, and to be aware of community resources available.

Future Research

Due to the recent increase in awareness and education regarding CSEC in the last decade, the literature is filled with articles regarding CSEC characteristics, risk factors, health consequences, and treatment modalities. More research is needed in the use of validated screening tools to establish reliability and generalizability. More research is also needed on the most effective approach to educate HCPs. With more information regarding the benefits of interprofessional collaboration and education to increase quality of care in complex patients, CSEC would be ideal for this type of research. Interdisciplinary education could be taught in higher education institutions as modules or as simulations involving the multidisciplinary team.

Summary

CSEC is a severe form of child sexual abuse. CSEC is complex and multifaceted and is considered a low volume, high-risk event. HCPs need to have awareness of the occurrence of CSEC in all communities, knowledge of the risk factors, health consequences, treatment modalities, and use of validated screening tools to incorporate into their routine assessments. This translational project, "The Implementation of a Validated CSEC Screening Tool for Youth age 11 – 17 in a Pediatric Emergency", was initiated to address some of the gaps in the literature. Screening of youth where and when they seek out healthcare is an ideal opportunity for HCPs to identify high-risk youth, make needed referrals, and provide resources. Identifying these youth before they become involved in CSEC is one way to stop the vicious cycle of this severe form of child sexual abuse.

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Appendix A

Short Child Sex Trafficking (CST) Screen for the Healthcare Setting

This screen was developed and validated on English-speaking adolescents (majority females) seeking healthcare in the United States. It has not been validated for patients who are non-English-speaking or living in countries outside of the US.

Prior validation research has included screening of patients ranging in age from 11 through 17 years of age, presenting:

- To a teen clinic with any chief complaint
- To a child advocacy center with a chief complaint related to physical or sexual abuse or neglect
- To a pediatric emergency department with a chief complaint related to sexual violence (e.g. sexual abuse/assault, suspected CST)
- To a pediatric emergency department with one of the following high-risk chief complaints, which are a priori defined as potentially associated with CST:
    - vaginal/penile discharge,
    - pelvic/genital pain,
    - request for STI testing,
    - request for pregnancy testing,
    - intoxication/ingestion,
    - suicide attempt,
    - suicidal ideation,
    - homicidal ideation,
    - acute sexual assault,
    - traumatic assault,
    - clearance examination for social services,
    - behavioral complaints
    - any patient for whom the attending physician was concerned about high-risk sexual or social behavior regardless of the chief complaint.

Short Child Sex Trafficking (CST) Screen for the Healthcare Setting

Suggested introduction: "Hello. We often ask teens some questions to find out a little more about what is going on in their lives. It helps us understand more about how we might be able to offer help. Some of the questions are sensitive and may make you feel uncomfortable, so it is important to know that *you do not have to*

answer the questions if you do not want to. If you decide to answer them, it will help us with your evaluation. Answers to some of the questions may be included in your general medical record. I am generally able to keep what you tell me private (or confidential). There are two exceptions to this. The first is if you tell me there is a threat to your safety or the safety of someone else. The second is we are required by law to share information in our medical record such of any physical, emotional, or sexual abuse. Do you understand these exceptions? If not, please ask us and we are happy to explain."
Give child the questionnaire or ask the questions outside the presence of the person(s) accompanying the child if possible.

Screening Questions:

1) Have you ever been knocked unconscious? __ No __ Yes

2) Some kids have a hard time living at home and feel that they need to run away. Have you ever run away from home? __ No __ Yes

3) Kids often use drugs or drink alcohol, and different kids use different drugs. Have you used drugs or alcohol in the last 12 months? __ No __ Yes

4) Sometimes kids have been involved with the police. Maybe for running away, for breaking curfew, for shoplifting. There can be lots of different reasons. Have you ever had any problems with the police? __ No __ Yes

5) If you have had sex before, how many sexual partners have you had?

   __ 0 partners __ 1-5 partners __6-10 partners __ >10 partners

6) Have you ever had a sexually transmitted disease (STD), like herpes or gonorrhea or chlamydia or trichomonas?

   __ No __ Yes

Scoring the Questionnaire
Question 5 is considered 'positive' if child reports >5 sexual partners. Positive answers to 2 or more questions are considered a 'positive screen' (e.g., high risk). ***However, further information will be needed to determine whether a child is being trafficked*****.** Additional information may be obtained by the provider or by a designated staff member with trauma training. Keep in mind that the goal of the healthcare provider is <u>not</u> to obtain a disclosure of trafficking, but to determine level of risk and patient needs so that appropriate resources can be offered, based on the information available to you. A trauma-informed approach and careful monitoring of the patient (including body language) is necessary so that signs of discomfort can be identified and addressed promptly if they should occur. Below is a sample of questions to consider in assessing level of risk, although other

questions may be used. For example, asking if the patient would feel comfortable telling you about the experience leading to a positive survey response may open the door to further discussion of risk factors, or to reassurance that the risk is relatively low. (Ex. If child endorsed running away from home, the provider could ask, "Do you feel comfortable telling me a bit about the last time you ran?") Additional information about risk may be available from other sources (patient record, other staff). It is important to use the information obtained from your questions to determine potential resources and referrals that may benefit the patient, improve safety, and lower risk of exploitation (for example, homeless shelters, LGBTQ resources, food pantries, mental health services). Depending on your level of concern for trafficking, and whether you are a mandated reporter, you may need to contact authorities in addition to offering resources. Mandatory reporting laws do NOT require the provider to be certain the child is being trafficked, but typically require a 'reasonable' degree of suspicion. Therefore, assessment of risk level is important whereas a disclosure of trafficking is not necessary. Know your mandatory reporting laws. Again, all interactions with the patient should be trauma-informed, victim-centered, and culturally sensitive.

<u>Sample</u> follow-up questions to help assess level of risk:

Follow up on any screening question that was answered in the affirmative. When possible, use open-ended questions such as, "Do you feel comfortable telling me about it?"

Has a boyfriend, a girlfriend or anyone else ever asked you to do something sexual with ***another*** person (including oral sex, vaginal sex, or anal sex with someone else)?

__ No __ Yes

Do you feel comfortable telling me about it? _____

Has anyone ever asked you to do some sexual act in public, like dance at a bar or a strip club?

__ No __ Yes

Do you feel comfortable telling me about it? _____

Sometimes kids are in a position where they really need food, clothing, a place to stay, or they want to buy something for themselves or someone else. But they do not have money, so they have to exchange sex for what they need. Have you ever been faced with a situation like that?

__ No __ Yes

Do you feel comfortable telling me about it? _____

Has anyone ever asked you to pose in a sexy way for a photo or a video?

__ No __ Yes

Do you feel comfortable telling me about it? _____

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Appendix B

_____ **Pre/Post Confidence Likert Scale**

How confident do you feel with the following questions?

1. I am confident in my ability to recognize characteristics of potential at-risk youth for CSEC age 11 – 17 seeking healthcare at the Pediatric Emergency Room?

1	**2**	**3**	**4**	**5**
Not Confident	***Hardly Confident***	***Confident***	***Very Confident***	***Extremely Confident***

2. I am confident in my ability to recognize common health problems associated with potential at-risk youth for CSEC age 11 – 17 seeking healthcare in the Pediatric Emergency Room?

1	**2**	**3**	**4**	**5**
Not Confident	***Hardly Confident***	***Confident***	***Very Confident***	***Extremely Confident***

3. I am confident in my knowledge of the barriers to identification of CSEC youth age 11 – 17 seeking healthcare at the Pediatric Emergency Room?

1	**2**	**3**	**4**	**5**
Not Confident	***Hardly Confident***	***Confident***	***Very Confident***	***Extremely Confident***

4. I am confident explaining my limits of confidentiality as a healthcare provider with youth age 11 – 17 seeking healthcare at the Pediatric Emergency Room?

1	**2**	**3**	**4**	**5**
Not Confident	***Hardly Confident***	***Confident***	***Very Confident***	***Extremely Confident***

5. I am confident in using the validated CSEC short screening tool as an enhanced assessment with youth age 11 – 17 seeking healthcare at the Pediatric Emergency Room?

1	**2**	**3**	**4**	**5**
Not Confident	***Hardly Confident***	***Confident***	***Very Confident***	***Extremely Confident***

6. I am confident in my knowledge about the CSEC referral process?

1	**2**	**3**	**4**	**5**
Not Confident	***Hardly Confident***	***Confident***	***Very Confident***	***Extremely Confident***

7. I am confident in my ability to provide trauma- informed care with youth age 11 – 17 seeking healthcare at the Pediatric Emergency Room?

1	**2**	**3**	**4**	**5**
Not Confident	***Hardly Confident***	***Confident***	***Very Confident***	***Extremely Confident***

8. I am confident in my ability to provide culturally sensitive care with youth age 11 – 17 seeking healthcare at the Pediatric Emergency Room?

1	**2**	**3**	**4**	**5**
Not Confident	***Hardly Confident***	***Confident***	***Very Confident***	***Extremely Confident***

9. I am confident in recognizing my own biases towards victims of CSEC?

1	**2**	**3**	**4**	**5**
Not Confident	***Hardly Confident***	***Confident***	***Very Confident***	***Extremely Confident***

10. I am confident in my knowledge of societal attitudes towards victims of CSEC?

1	**2**	**3**	**4**	**5**
Not Confident	***Hardly Confident***	***Confident***	***Very Confident***	***Extremely Confident***

Appendix C

 # _____ Demographic Form for Healthcare Providers in The Pediatric Emergency Room

1. **Age _____**
2. **Gender: Male _____ Female _____**
3. **Profession: MD____ DO ____ Advanced Practice Provider ____**

   RN ____ LPN____ Other _____
4. **Number of years practicing in Profession _____**
5. **Number of years practicing in a Pediatric Emergency Room _____**
6. **Do you believe Commercial Sexual Exploitation of Children is prevalent in our community? YES_____ NO _____ Other _____**
7. **In your practice, have you ever cared for a child/adolescent that you thought was being sexually exploited? YES _____ NO_____ Other_____**
8. **Do you believe screening for Child Abuse is needed in the Pediatric Emergency Room? YES _____ No _____ Other _____**
9. **Do you believe screening for Commercial Exploitation of Children is needed in the Pediatric Emergency Room? YES_____ NO_____ Other _____**
10. **Are you interested in learning more about the Commercial Exploitation of Children? YES _____ NO _____Other _____**