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Prevention of Child Sex Trafficking Among Vulnerable Youth in the United States: Addressing Domestic Violence as a Critical Social Determinant and Risk Factor

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Abstract

Child sex trafficking represents a severe public health crisis in the United States. Thousands of children and adolescents fall victim to commercial sexual exploitation annually. Domestic violence exposure emerges as a critical yet often overlooked risk factor that significantly increases trafficking vulnerability. However, a comprehensive understanding of this relationship and effective prevention strategies remains limited. This study examines the intersection between domestic violence exposure and child sex trafficking vulnerability among youth in the United States. The study also evaluated current legislative frameworks, healthcare system responses and identified gaps in policy implementation and service delivery. A comprehensive systematic literature review was conducted across multiple databases, including PubMed/MEDLINE, PsycINFO, CINAHL, ERIC, Google Scholar, Cochrane Library and Web of Science. The search yielded 1,847 sources, which were screened for relevance, resulting in 287 sources retained for final analysis. Federal and state legislative documents were systematically reviewed alongside peer-reviewed empirical studies. The findings revealed that domestic violence exposure significantly increases trafficking vulnerability through multiple pathways, including family instability leading to homelessness, mental health disorders and substance abuse. The results also showed significant gaps in prevention infrastructure despite existing federal and state legislation. Policy implementation remained inconsistent across jurisdictions, with inadequate access to trauma-informed care services. Healthcare professionals demonstrated variable capacity in identifying at-risk youth due to insufficient training and a lack of standardized screening protocols. The findings further revealed pronounced research gaps for underrepresented populations, including LGBTQ+ youth, male survivors, migrant children and Indigenous youth. The study, therefore, concludes that effective prevention requires integrated, equity-focused strategies to address domestic violence as a foundational risk factor through universal trauma-informed screening.

Keywords: Child sex trafficking; Domestic violence; Vulnerable youth; Trauma-informed care; Safe Harbor laws; Prevention strategies

1. Introduction

Child sex trafficking is one of the worst forms of exploitation and abuse that is now a curse affecting vulnerable youths in the United States. Although the country is wealthy and all the systems that protect children have already been developed, thousands of children and teenagers fall victims of sexual exploitation in the commercial industry annually (Greenbaum, 2014). The National Center of Missing and Exploited Children also reported in 2019 that one out of every six missing or exploited children who contacted the organization in 2019 had been a victim of child sex trafficking (Franchino-Olsen et al., 2022). Such statistics shed some light on a crisis going across socioeconomic lines but impacting marginalized populations disproportionately. The consequences of trafficking go further than physical injuries and they include deep psychological traumas, destabilized learning paths, poor health consequences and permanent social and

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economic exclusion. It is crucial to examine the factors and causes that leave some young people vulnerable to trafficking to come up with effective prevention methods. Domestic violence is one of the risk factors that has been yet another critical but most often ignored social determinant, which significantly raises the risk of becoming a victim of trafficking.

According to Franchino-Olsen (2021), domestic violence promotes a complex spectrum of vulnerabilities that the traffickers systematically exploit to approach and dominate young victims. Children who observe or experience domestic violence later display trauma reactions that encroach on their cognitive, emotional and social growth. These experiences are often triggers of homesickness, which places young people in situations that lack support structures, budget, or any adult mentoring. Empirical studies have determined that 40-90 percent of victims of sex trafficking have a history of child sexual abuse or domestic-violence exposure (Walsh, 2016). The instability created by domestic violence weakens the processes of family protection and forces children to survival conditions where traffickers appear to be the providers of security, love, and material support (Rafferty, 2021). The youth who are leaving violent homes usually face the problem of homelessness, hence making them open targets of exploitation. The mental consequences of domestic violence, which are reflected in low self-esteem, disruptions of attachment and internalization of the abusive personalities, also increase susceptibility to recruitment methods used by the traffickers (Dang & Leyden, 2021). The value of an understanding of this nexus between domestic violence and vulnerability to trafficking to inform the development of effective interventions and evidence-based policy is hard to overestimate.

Currently, the federal and state legislative framework, including the most notable Trafficking Victims Protection Act and a multiplicity of Safe Harbor laws, has already established considerable legal protections for victims trapped in the world of trafficking (Anchan, 2016). Conceptually, these laws are an important milestone in supporting the restructuring of child sex trafficking as a terrible instance of abuse that should be met with a comprehensive victim-centered response, but not only criminal prosecution. The Trafficking Victims Protection Act of 2000, along with its renewals, provides specific definitions, codifies protective services and imposes an obligation to provide services to survivors. In line with this, State-based versions of the Safe Harbor legislation, which have been implemented in an incredible number of jurisdictions, require that minors who are found in a commercial sex context be treated as victims, not as perpetrators (Richie-Zavaleta et al., 2021).

However, significant gaps exist between the establishment of such policies and their effective implementation. Many jurisdictions still face the lack of adequate funding for victim services, the lack of qualified professionals who would be able to identify and assist the victims of trafficking and the inadequate structures that would unite legal, social, health and education services (Hodge, 2014). Trafficking indicators are often ignored, or very few responses to known cases are made, by child-welfare agencies. Similarly, medical practitioners tend to have limited training on the detection of trafficking, even though they are in a strategically good location to expose abuse in the process of conducting normal consultations (Macias-Konstantopoulos, 2016). Such an imbalance between the legislative intent and what is occurring on the ground leads to the eventual loss of the protections and help provided to many at-risk youths contained in the statutes.

Health workers, especially those who work in the fields of pediatric and adolescent medicine, do play a central role in the prevention and early detection of child sex trafficking (Greenbaum et al., 2023). In clinical practices, there exists confidential contact with young people who reveal abuse or show physical and behavioral signs of trafficking. However, most healthcare professionals do not have adequate training on how to identify the signs of trafficking or feel unprepared to take the necessary actions when the exploitation is suspected. Such indicators as inconsistent accounts of injuries, the existence of controlling friends, signs of substance misuse, sexually transmitted infections in young adolescents, and signs of psychological trauma are typical (Konstantinidis et al., 2022). Introduction of universal screening procedures in emergency services, primary care practice and school-based health centres has the potential to significantly increase the rate of identification. In addition to initial identification, health systems need to develop clear referral pathways to interface identified victims with specialised services such as trauma-informed mental health care, case management, legal advocacy and safe housing to ensure comprehensive recovery (van der Schoor et al., 2023). Pediatric professionals also play critical roles in meeting the upstream risk factors, including responding to domestic violence exposure, connecting families with supportive services and promoting policies that strengthen family stability and child protection systems.

Although nowadays more attention to child sex trafficking as an urgent public health issue has been given, significant gaps in the research remain when it comes to the less represented and marginalized groups (Cook et al., 2022). The LGBTQ+ youth experience significantly high rates of familial rejection, homelessness, and trafficking victimization, but minimal systematic studies on their unique vulnerabilities and how to address them have been conducted (Xian et al., 2017). Male survivors often go undetected and remain untreated and are not provided with specialized services due to the existing gender stereotypes and lack of male-specific programming. Migrant and refugee children are facing unique

vulnerabilities associated with immigration status, language, and cultural isolation; however, there is a lack of evidence-based interventions in these populations (Fazel & Betancourt, 2018).

The American Indian, Alaska Native and other tribal communities where the indigenous youth live face some of the worst violence and exploitation rates in the United States. This is further aggravated by the historical trauma, the complications of jurisdiction and the insufficiency of the resources available in tribal jurisdictions (Rolnick & Sekaquaptewa, 2022). Further, the crossroads of labor trafficking and sexual exploitation, especially in the youth hired to work in agricultural, domestic and hospitality fields, should be examined. These research gaps can only be resolved by applying culturally responsive, community-engaging approaches that will facilitate the development of holistic prevention interventions to protect all at-risk youth. This paper addresses the intersection between domestic violence and child sex trafficking. The paper assesses modern prevention models, outlines failures of the system and describes empirically driven solutions aimed at reducing a state of vulnerability and improving the outcomes of at-risk youth in diverse groups of the population of the United States.

2. Methods and Procedures

This study employed a comprehensive systematic literature review methodology to examine the relationship between domestic violence exposure and child sex trafficking vulnerability among youth in the United States. A multi-database search was conducted across PubMed/MEDLINE, PsycINFO, CINAHL, ERIC, Social Work Abstracts, Google Scholar, Cochrane Library and Web of Science covering recent publications. Search terms included combinations of "child sex trafficking," "commercial sexual exploitation of children," "domestic violence," "intimate partner violence," "child abuse," "risk factors," "vulnerable youth," "prevention," and "intervention" using Boolean operators to capture relevant literature. Inclusion criteria encompassed peer-reviewed journal articles, government reports, policy documents and gray literature that addressed child sex trafficking in the United States, which examined domestic violence as a risk factor, discussed prevention strategies, or evaluated intervention programs for at-risk youth. Exclusion criteria eliminated studies focusing exclusively on adult trafficking, international contexts without U.S. relevance, or publications not available in English. The initial search yielded 1,847 sources, which were screened by title and abstract for relevance, resulting in 523 articles for full-text review. Following detailed assessment against inclusion criteria and quality appraisal using the Critical Appraisal Skills Programme checklist for various study designs, 287 sources were retained for final analysis. Federal and state legislative documents, including the Trafficking Victims Protection Act, Safe Harbor statutes and related policy frameworks, were systematically reviewed to evaluate legal protections and implementation gaps. Data extraction focused on identifying domestic violence as a risk factor, which documented vulnerability pathways, examined current prevention and intervention models, assessed healthcare provider roles, evaluated policy implementation and identified research gaps for underrepresented populations. Thematic analysis was conducted to synthesize findings across sources, identify patterns and gaps in existing literature and develop evidence-based recommendations for comprehensive prevention strategies addressing domestic violence as a critical social determinant of child sex trafficking vulnerability.

3. Literature Review

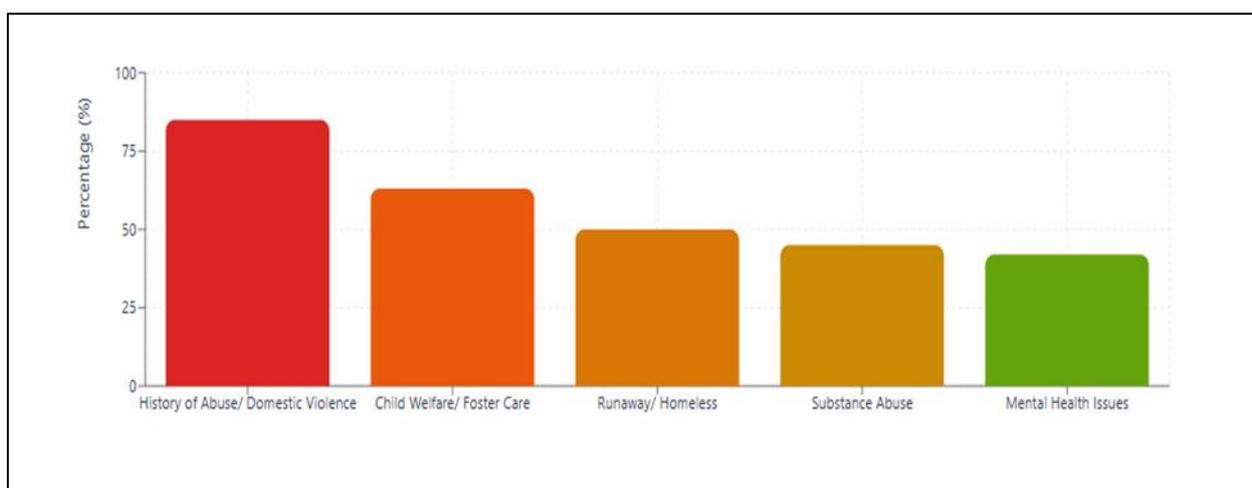
This literature review synthesizes current research examining the intersection of domestic violence and child sex trafficking among vulnerable youth in the United States, highlighting critical risk pathways, prevention frameworks, and system responses. The review addresses five key domains: domestic violence as a primary trafficking risk factor, legislative and policy frameworks, healthcare system roles, disparities among underrepresented populations, and evidence-based prevention strategies for comprehensive intervention.

3.1. Domestic Violence as a Primary Risk Factor for Child Sex Trafficking in the United States: Understanding Vulnerability Pathways

Domestic violence is one of the most salient and enduring antecedent variables that are linked with child sex trafficking victimization in the United States (Franchino-Olsen, 2021). Empirical research found that children who have been exposed to intimate-partner violence, or who were subjected to blatant physical, sexual, or emotional abuse in the home, display severe imbalances in their perceived security, affiliative relationships and self-esteem (MacMillan & Wathen, 2014). In addition, a significant percentage, that is, 40 to 90 percent of those sex-trafficking victims who are reported have experienced childhood abuse or exposure to domestic violence before being exploited (Moore et al., 2020). The statistics provided by the National Human Trafficking Hotline identify family instability and domestic violence as some of the most common risk factors reported in cases of minors (Twis, 2020). The victims who grew up in violent families are likely to apply maladaptive coping mechanisms like escape, substance abuse and validation by outsiders, which only increase their vulnerability to traffickers. The normalization of violence and the forcefulness of the control in the family

settings lead to the development of the psychological condition that traffickers capitalize on by emulating the common schemes of abuse and manipulation (Rafferty, 2021). As a result, the valuation of domestic violence as the correlational factor rather than the underlying susceptibility determinant of developmental patterns is inseparable in developing all-inclusive prevention programs.

The pathway between the exposure to domestic violence and the victimization later in life as a trafficked victim takes place within a network of interconnected processes that increase vulnerability over time (Turanovic, 2023). According to Osian & Miller (2020), teenagers who escape violent homes often become homeless or experience chronic, unstable housing situations, which significantly increase their vulnerability to trafficking. The empirical data show that in the course of two days after their homelessness, about a third of the runaway youth are approached by traffickers or exploiters who offer to address their urgent needs of shelter, food and safety (Morewitz et al., 2016). Lack of the stable protection and guidance of adults gives predatory players the chance to create relations that eventually transform into exploitative manipulation out of what initially seemed like a goodwill act of assistance. Besides, intimate partner violence exposure demonstrates a strong association with mental health problems, that is, depression, anxiety, post-traumatic stress disorder and complicated trauma, which impairs decision-making abilities and increases vulnerability to manipulation (Karakurt et al., 2014). The young people who struggle to cope with these psychiatric sequelae, therefore, turn to high-risk behaviors such as substance abuse, school dropouts and early sexual experiences, which present even more vectors to trafficking recruiters. Inferences from the literature indicated that the psychological burden of family violence, especially the loss of self-esteem and the struggle of attachment patterns, makes many youths seek their connection and loving support from apparently innocent people, only to discover them exploitative. These complex vulnerability trajectories explain why the prevention of trafficking must involve intervention at the structural roots of family instability and violence and not simply in post-exploitation interventions.



Source: National Human Trafficking Hotline Statistics

Figure 1 Primary Risk Factors Among Child Sex Trafficking Victims in the United States Percentage of victims reporting each risk factor

Figure 1. Risk factors among identified child sex trafficking victims in the United States. Data compiled from multiple sources, including the National Human Trafficking Hotline (Polaris Project, 2019-2020), U.S. Department of Justice reports, and peer-reviewed studies. The chart demonstrates that a history of abuse and domestic violence exposure represents the most prevalent risk factor, present in approximately 85% of cases (representing the 40-90% range commonly cited in literature). Note: Percentages represent prevalence among identified victims and may overlap as individuals often experience multiple risk factors.

3.2. Federal and State Legislative Frameworks in the United States: Evaluating the Trafficking Victims Protection Act, Safe Harbor Laws and Implementation Gaps

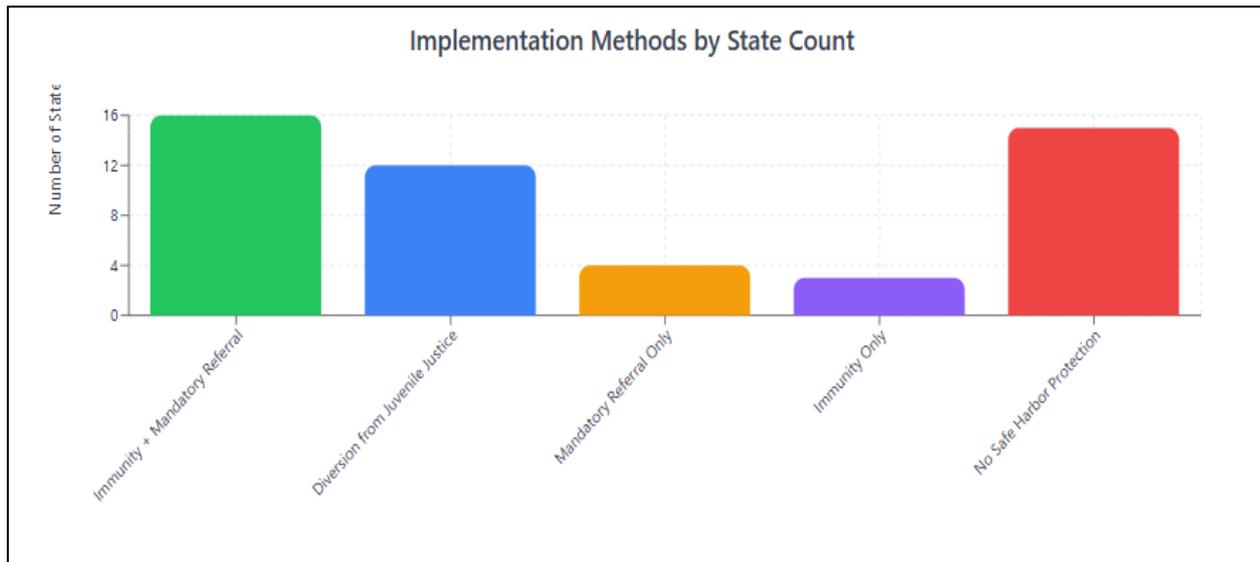
The Trafficking Victims Protection Act of 2000 is the cornerstone of federal anti-trafficking legislation in the United States, having since been re-enacted a number of times to improve the safeguards of persons who have been victims of trafficking (Beer, 2018). This Act was the first comprehensive federal system enacted in the United States that defines the legal meaning of human trafficking, introduces criminal penalties against perpetrators and mandates survivors to receive services (Branscum & Fallik, 2021). The Act, in its statutory wording, provides the severe indications of trafficking, that is, including sex trafficking of minors regardless of the use of force, fraud, or coercion and hence, the

legal inability of a minor to consent to entering into a commercial sexual exploitation. The later revisions of 2003, 2005, 2008, 2013 and 2019 broadened the range of protections granted to victims as well as funding distributions to provide services, strengthened the arsenal of law-enforcement tools and deepened prevention programs (Levine & Russell, 2023). The Act introduced the so-called three P paradigms, a prosecution, protection, and prevention paradigm, as the paradigm of responding to trafficking. It has created special grant programs that are administered through the Office for Victims of Crime and the Office of Juvenile Justice and Delinquency Prevention that are aimed at funding a comprehensive set of services, including emergency shelter, trauma-based mental-health care, case management, legal advocacy and permanent housing services (Levine & Russell, 2023). In addition, the law established the Interagency Task Force to Monitor and Combat Trafficking and required the publication of yearly reports on Trafficking in Persons that measure international and national measures in combating trafficking (Saner et al., 2018). Despite its effective federal protection embodied in the Act, though, its application is conducted unevenly across jurisdictions; many communities continue to have gaps in funding, workforce training and integrated systems required to both locate victims and provide the mandated services effectively.

The State-level Safe Harbor laws represent a legislative turn in a shift in the criminalization paradigm, to protect the minors involved in commercial sexual exploitation (Gies et al., 2020). In 2008, New York was the first jurisdiction to pass a Safe Harbour law, thus acknowledging that minors involved in prostitution must be considered victims and not perpetrators and must be provided with special services as an alternative to entering the juvenile justice system (Gies et al., 2018). Detailed Safe Harbor laws usually include a variety of measures: barring the arrest and prosecution of minor offenders who have committed acts of prostitution; the diversion of such offenders to specialized services; the provision of civil recourse by victims against exploiters; a special docket in the court; and training of law-enforcement officers, judges and child-welfare workers.

However, there are still gaps in most state systems. Some jurisdictions have offered partial versions of the Safe Harbor laws, such as age-specific protections or requiring clear evidence of force or coercion, which effectively negate federal statements that all minors in commercial sex are victims of trafficking (Thurman, 2023). In addition, most of the states do not have specific funding provisions to address the specialized services required by the laws created to implement the Safe Harbor, which results in the lack of trauma-based care, secure housing services as alternatives to incarceration and post-release programs. Empirical research indicates that despite the existence of the most elaborate Safe Harbor laws, large numbers of minors continue to be arrested and taken through the juvenile justice system (Cole & Sprang, 2020). This observation is explained by the fact that frontline responders are not aware of it, there are no adequate procedures on how to recognize the victims of trafficking and a shortage of service alternatives based in the community to ensure the provision of appropriate detention.

The gap that exists between the intentions enacted into law on the federal and state levels and the realities on the ground can be viewed as one of the most daunting challenges facing the modern attempts to fight sex trafficking of minors on the territory of the United States. Although child welfare agencies are tasked with caring for populations that are probably at high risk, routine screening of cases of youth involved in child sex-trafficking amongst children under their care and protection has never been successful. The empirical research has shown that around sixty to seventy-five percent of child sex-trafficking victims had a history of previous engagement in child welfare systems (Schlecht et al., 2022). There is a significant variance of law-enforcement agencies in their ability to differentiate between bona fide trafficking victims and adolescents who are assumed to be willing participants in prostitution, specifically in the context of older minors, continuing to criminalize a group of people whose existence is, in theory, safeguarded by the Safe Harbor laws.



Source: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention (OJJDP). (2018).

Figure 2 Safe Harbor Law Implementation Across U.S. States (2017 Data). Protection status and implementation methods for child sex trafficking victims

Figure 2 illustrates Safe Harbor law implementation status across U.S. states as of 2017. The data is sourced from the U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention's three-phase evaluation study. The study found that by the end of 2017, 35 states had enacted Safe Harbor statutes to remove punitive sanctions for child sex trafficking victims, while 15 states still allowed the arrest and prosecution of minors. The most common implementation method combines immunity from prosecution with mandatory referral to services (16 states). Notwithstanding the legislative progress, implementation gaps persist, including continued arrests, inadequate funding, limited training, and fragmented interagency coordination.

3.3. The Role of Healthcare Systems and Pediatric Professionals in Identifying and Preventing Child Sex Trafficking Among U.S. Youth Exposed to Domestic Violence

In the article by Greenbaum et al. (2015), the authors have conducted an extensive study of the role of pediatricians and allied health professionals in addressing the acute community-health crisis of child sex trafficking and commercial sexual exploitation in the United States. Their investigation also contained their exploration of the knowledge gaps that exist among the pediatric practitioners regarding the complex nature of human trafficking and, in the same breath, defines the competencies that are required to protect the vulnerable youths. The authors shed light on the disturbing paradox that, despite the vast amount of American and international children caught in trafficking and the ensuing plethora of serious physical and psychological morbidities inherent in commercial sexual exploitation, there is an apparent lack of practical advice that can be offered to inform pediatric practice. Their study also highlighted the fact that a close understanding of the risk factors, the recruitment mechanisms, the possible trafficking stigmas and the typical medical and behavioral consequences that plague the victims prepares the pediatricians to identify potential victims and implement necessary and timely actions to address the problem.

Another study conducted by Greenbaum and Dodd (2018) focused on the development and testing of a brief screening tool needed to identify the victims of child sex trafficking in the healthcare setting. Their cross-sectional investigation evaluated 108 patients between 12 and 18 years of age, who attended three urban pediatric emergency departments or one child-protection clinic and compared these results with 25 confirmed victims of trafficking and with 83 children who had been alleged to have been the victims of acute sexual assault, but were not found to have been victims of trafficking. The researchers assessed variables related to medical and reproductive history, high-risk behaviours, psychiatric symptoms and injury history so as to develop an effective screening instrument. Their findings showed that victims of trafficking and non-trafficked assault victims differed significantly on 16 variables of reproductive history, high-risk behaviours, sexually transmitted infections and previous experiences of violence. The six-item scale obtained had a sensitivity of 92 percent, specificity of 73 percent, positive predictive value of 51 percent and negative predictive value of 97 percent with a cut-off score of two affirmative answers. The authors concluded that adolescent victims of trafficking have characteristic patterns of various clinical areas that can be accurately determined when subjected to specialized screening in both emergency and clinical practice.

Miller et al. (2016) conducted a consequential study to investigate the expert consensus about the necessary elements of thorough, interdisciplinary educational programs to be established to make healthcare professionals aware, intervene and refer cases of child sex-trafficking victims and their survivors. Their Delphi methodology involved two rounds of iteration and used the services of an international panel of twenty-three subject-matter experts, who were identified through clinical practice, law enforcement, academia and community support organisations. Equally, ten trafficking survivors were asked to determine the most relevant educational material. The scores of content-validity indices were calculated to measure the consensus and to provide the relative significance of the proposed educational aspects. The findings found eight key content areas, which included sixty-three sub-areas, as critical in provider training, and those suggested by survivors were three areas with nineteen sub-areas as essential. With the heterogeneous stakeholders, there was a large overlap with regard to the core competencies that the providers should be able to identify and act upon trafficking incidents.

Equally, Greenbaum et al. (2023) examined the problem of exploitation and trafficking of children and adolescents, including unaccompanied immigrant youth, by presenting it as an urgent social problem that requires increased awareness and sensitivity among healthcare professionals. Their research project estimated the range of extreme somatic and psychological morbidities that accompany human trafficking and exploitation, as experienced by the U.S.-born and foreign-born youth who present to the medical facilities. Their research also analyzed risk factors, patient recruitment patterns, possible signs manifested by trafficking and common physical, mental and emotional conditions, thus guiding the clinician's recognition and response measures. The observed evidence showed that a significant group of susceptible adolescents, especially those with the experiences of domestic violence and family instability, are affected by the issue of trafficking and exploitation, but are still mostly unknown to the healthcare system due to limited provider knowledge and insufficient screening methods. The authors emphasized that rights-preserving, culturally sensitive and trauma-informed approaches qualify healthcare professionals to recognize and adequately address people who have already experienced or are under threat because of trafficking and exploitation. Their study also recorded that clinicians are well positioned to identify at-risk youth in routine visits, emergency department visits and follow-ups thus creating several points of intervention before exploitive conditions take root. They concluded that pediatricians, along with interdisciplinary healthcare teams, should work closely with the community stakeholders to deliver evidence-based screening, full treatment and holistic support to victims of trafficking and, at the same time, assist patients and their families in learning to identify the early warning signs.

3.4. Developing Comprehensive Trauma-Informed Interventions to Address Domestic Violence and Reduce Child Sex Trafficking in the United States

This section examined the relationship between domestic violence exposure and child sex trafficking vulnerability among youth in the United States. The section also evaluates current legislative frameworks, healthcare system responses and evidence-based prevention strategies through a systematic review of empirical literature and policy documents.

Marburger & Pickover (2020) explored trauma-informed care of survivors of human trafficking. Their study noted that the multifaceted and extensive psychological consequences of sexual and labor exploitation require mental-health exhaustion. Their investigation assessed dominant clinical modalities used when working with survivors of trafficking, which empirically proven therapies that treat fundamental psychiatric sequelae, in addition to evidence-based or innovative practices that are supplemented by adjunctive modalities that meet the needs of heterogeneous clients. Seeking to understand the interaction and artistic retention obstacles before the victims of trafficking, their study examined factors that trigger decreased service utilization during a time when victims are most urgently in need of therapy to overcome trauma. Their findings emphasized the fact that engagement and treatment completion remain formidable across all modalities and typologies of trafficking, which makes survivors disproportionately less likely to receive necessary services to reduce trafficking-inflicted and comorbid trauma. Their paper has reported numerous impediments to long-term therapeutic participation: mistrust in institutional structures, fear of legal consequences, repeated coercion by traffickers, housing instability and psychiatric symptoms that erode sustained engagement. The authors proposed that culturally sensitive trauma-informed approaches must declare the value of cultural sensitivity, adhere to rights-based approaches and be customized to the idiosyncratic setting of the individual survivor.

Similarly, Heffernan & Blythe (2014) examined the use of trauma-informed care principles in criminal justice system responses to human trafficking. Their study conducted a systematic review of the available empirical research. Their study involved the investigation of the degree to which the authors of the study provided recommendations regarding the application of trauma-informed care in the policing, prosecution and court proceedings involving the human trafficking victims and determined the strength of the evidence provided to support their recommendations. The systematic review assessed 11 peer-reviewed articles that were included in the research as they satisfied the inclusion

criteria to consider the concept of trauma-informed care, human trafficking and interaction with the criminal justice system in the United States context. Their results demonstrated that there are gross research gaps in the effects of trauma-informed care on survivor outcomes in justice subsystems that address trafficking victims. Their research report noted that there is some evidence of possible advantages of trauma-informed care, such as an increase in trust of the survivor, a higher rate of prosecution consequences and better detection of trafficking, but rigorously reviewed evidence to support the integration of trauma-informed care is limited in the law enforcement, prosecution and court systems. Their study found that criminal justice professionals are usually poorly trained on the use of trauma-informed methods, which have the effect of retraumatizing survivors when interviewing them about the crime, hearing the case at court and prosecuting the case. Their paper found that trauma-informed criminal justice responses are especially essential for young people who have suffered domestic violence and have entered the trafficking scenarios. Since the historic adversarial positions can reflect family violence dynamics and only exacerbate the existing traumas, which require special procedures that take into account the vulnerabilities of the development, adapt to the trauma-related pattern of memories and behavior and focus on the safety and well-being of the victims and the case prosecution objectives.

Another study conducted by Jain et al. (2022) examined two city-wide collaborative victim services models focused on trauma-informed healthcare delivery for human trafficking victims. Their investigation used an interdisciplinary prism to provide a spectrum of care to victims of trafficking and determined the effectiveness of interventions implemented in the process of recovery. The THRIVE Clinic, which served 214 patients, with a median age of 28.7 years in the intake and the PATH Collaborative, which served 560 suspects of trafficking, 400 of them screened positive for labor or sex exploitation, were aggregated with service-delivery data (June 2015 to September 2021). These outcomes highlighted the importance of strong, trauma-informed paradigms, which relied on municipal-wide needs assessments, implementation of specific patient navigators, multidisciplinary clinical consortia and long-term community partnerships to achieve safe accommodation, transportation, identification, health insurance, vocational services, survivor-led feedback, peer mentoring and medico-legal support. Medical sequelae were identified as chronic or acute, including physical trauma and sexually transmitted infections, reproductive morbidity, chronic pain, substance-use disorders, PTSD, mood and anxiety disorders, among other psychiatric morbidities and required a multidisciplinary approach. The authors emphasized the irreplaceable role of patient navigators in building rapport, facilitating cross-sector interaction, breaking down pragmatic encumbrances and providing unrelenting assistance throughout the period of recovery.

4. Conclusion

This paper presented an in-depth examination of the nexus between exposure to domestic violence and susceptibility to child sex-trafficking, among youths in the United States. The study assessed domestic violence as a social determinant that significantly increases the likelihood of falling victim to trafficking due to a series of interrelated mechanisms of family instability, homelessness, mental illnesses and substance abuse. The study has indicated that, even though federal and state legislations addressing trafficking and providing protection to victims are robust, including the Trafficking Victims Protection Act and the Safe Harbor laws in the 50 states, there are still significant gaps in the implementation due to the lack of funding, training of frontline professionals, standardized screening procedures and alignment between the child welfare, healthcare, law enforcement, and social service systems. The results established a strategic role of healthcare providers, especially of pediatric professionals, in identifying and intervening with at-risk youth. The research also indicated that underrepresented populations, such as LGBTQ+ youth, male survivors, migrant and refugee children and American Indian/Alaska Native/Indigenous youth, have disproportionately higher rates of the trafficked population, but are not given the necessary attention in prevention and service provision. These findings demonstrate the need to implement and adopt comprehensive, trauma-informed, equity-based prevention approaches that target domestic violence as a main risk factor by developing universal screening in healthcare and educational settings and training that is mandatory across sectors. There should be culturally responsive services, which strengthen interagency coordination, increase specialized service funding and reform policies that protect and support all vulnerable youth. This will also decrease the risk of trafficking and improve health, safety and well-being in the long run across different populations in the United States.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

References

- [1] Anchan, C. (2016). Protecting the imperfect victim: Expanding safe harbors to adult victims of sex trafficking. *Wm. & Mary J. Women & L.*, 23, 117.
- [2] Beer, S. (2018). The Sex Worker Rights Movement in Canada: Challenging Legislation. *Moving the Social*, 59, 71-96.
- [3] Branscum, C., & Fallik, S. W. (2021). A content analysis on state human trafficking statutes: how does the legal system acknowledge survivors in the United States (US)? *Crime, Law and Social Change*, 76(3), 253-275.
- [4] Castagno, K. A., Bowden, A. A., Roberts, E. J., Burns, S. E., Harlan, S. L., Senier, L., & Scyphers, S. B. (2021). Conservation practice insights from a comparative case study of two shoreline stabilization projects in Boston Harbor, MA. *Conservation Science and Practice*, 3(8), e465.
- [5] Cole, J., & Sprang, G. (2020). Post-implementation of a Safe Harbor law in the US: Review of state administrative data. *Child abuse & neglect*, 101, 104320.
- [6] Cook, M. C., Le, P. D., & García, J. J. (2022). Addressing racism in the domestic minor sex trafficking of Black girls: the role of public health critical race praxis. *Public Health Reports*, 137(1_suppl), 10S-16S.
- [7] Fazel, M., & Betancourt, T. S. (2018). Preventive mental health interventions for refugee children and adolescents in high-income settings. *The Lancet Child & Adolescent Health*, 2(2), 121-132.
- [8] Franchino-Olsen, H. (2021). Frameworks and theories relevant for organizing commercial sexual exploitation of children/domestic minor sex trafficking risk factors: A systematic review of proposed frameworks to conceptualize vulnerabilities. *Trauma, Violence, & Abuse*, 22(2), 306-317.
- [9] Franchino-Olsen, H. (2021). Frameworks and theories relevant for organizing commercial sexual exploitation of children/domestic minor sex trafficking risk factors: A systematic review of proposed frameworks to conceptualize vulnerabilities. *Trauma, Violence, & Abuse*, 22(2), 306-317.
- [10] Franchino-Olsen, H., Chesworth, B. R., Boyle, C., Rizo, C. F., Martin, S. L., Jordan, B., ... & Stevens, L. (2022). The prevalence of sex trafficking of children and adolescents in the United States: A scoping review. *Trauma, Violence, & Abuse*, 23(1), 182-195.
- [11] Gies, S. V., Healy, E., Green, B., & Bobnis, A. (2020). From villain to victim: The impact of safe harbor laws on minors involved in commercial sexual exploitation. *Criminology & Public Policy*, 19(2), 389-408.
- [12] Gies, S., Bobnis, A., Cohen, M., & Malamud, M. (2018). Safe harbor laws: Changing the legal response to minors involved in commercial sex. *Development Services Group, Inc.* <https://www.ncjrs.gov/pdffiles1/ojdp/grants/253146.pdf>.
- [13] Greenbaum, J., Crawford-Jakubiak, J. E., Committee on Child Abuse and Neglect, Christian, C. W., Crawford-Jakubiak, J. E., Flaherty, E. G., ... & Sege, R. D. (2015). Child sex trafficking and commercial sexual exploitation: Health care needs of victims. *Pediatrics*, 135(3), 566-574.
- [14] Greenbaum, J., Kaplan, D., Young, J., COUNCIL, O. C. A., Haney, S. B., Sirotnak, A. P., ... & Shapiro, A. (2023). Exploitation, labor and sex trafficking of children and adolescents: health care needs of patients. *Pediatrics*, 151(1).
- [15] Greenbaum, J., Kaplan, D., Young, J., COUNCIL, O. C. A., Haney, S. B., Sirotnak, A. P., ... & Shapiro, A. (2023). Exploitation, labor and sex trafficking of children and adolescents: health care needs of patients. *Pediatrics*, 151(1).
- [16] Greenbaum, V. J. (2014). Commercial sexual exploitation and sex trafficking of children in the United States. *Current problems in pediatric and adolescent health care*, 44(9), 245-269.
- [17] Greenbaum, V. J., Dodd, M., & McCracken, C. (2018). A short screening tool to identify victims of child sex trafficking in the health care setting. *Pediatric emergency care*, 34(1), 33-37.
- [18] Schlecht, C., Griffin, A. M., Kull, M., & Dworsky, A. (2022). A Research-Based Question and Answer Resource on Sex Trafficking for Youth-Supporting Professionals.
- [19] Hodge, D. R. (2014). Assisting victims of human trafficking: Strategies to facilitate identification, exit from trafficking, and the restoration of wellness. *Social work*, 59(2), 111-118.

- [20] Jain, J., Bennett, M., Bailey, M. D., Liaou, D., Kaltiso, S. A. O., Greenbaum, J., ... & Potter, J. E. (2022). Creating a collaborative trauma-informed interdisciplinary citywide victim services model focused on health care for survivors of human trafficking. *Public Health Reports*, 137(1_suppl), 30S-37S.
- [21] Karakurt, G., Smith, D., & Whiting, J. (2014). Impact of intimate partner violence on women's mental health. *Journal of family violence*, 29(7), 693-702.
- [22] Marburger, K., & Pickover, S. (2020). A Comprehensive Perspective on Treating Victims of Human Trafficking. *Professional Counselor*, 10(1), 13-24.
- [23] Konstantinidis, K., Apostolakis, I., & Karaiskos, P. (2022). A narrative review of e-learning in professional education of healthcare professionals in medical imaging and radiation therapy. *Radiography*, 28(2), 565-570.
- [24] Rafferty, Y. (2021). The identification, recovery, and reintegration of victims of child trafficking within ASEAN: An exploratory study of knowledge gaps and emerging challenges. *Journal of human trafficking*, 7(2), 145-167.
- [25] Levine, J. R., & Russell, K. L. (2023). Crime pays the victim: Criminal fines, the state, and victim compensation law 1964-1984. *American Journal of sociology*, 128(4), 1158-1205.
- [26] Macias-Konstantopoulos, W. (2016). Human trafficking: the role of medicine in interrupting the cycle of abuse and violence. *Annals of internal medicine*, 165(8), 582-588.
- [27] MacMillan, H. L., & Wathen, C. N. (2014). Children's exposure to intimate partner violence. *Child and Adolescent Psychiatric Clinics*, 23(2), 295-308.
- [28] Miller, C. L., Duke, G., & Northam, S. (2016). Child sex-trafficking recognition, intervention, and referral: an educational framework for the development of health-care-provider education programs. *Journal of Human Trafficking*, 2(3), 177-200.
- [29] Moore, J. L., Houck, C., Hirway, P., Barron, C. E., & Goldberg, A. P. (2020). Trafficking experiences and psychosocial features of domestic minor sex trafficking victims. *Journal of interpersonal violence*, 35(15-16), 3148-3163.
- [30] Morewitz, S. J., Morewitz, & Morewitz, S. J. (2016). *Runaway and homeless youth*. Switzerland: Springer.
- [31] Osian, N., & Miller, E. (2020). Homelessness, unstable housing, and the adolescent patient. In *Medical Perspectives on Human Trafficking in Adolescents: A Case-Based Guide* (pp. 197-206). Cham: Springer International Publishing.
- [32] Richie-Zavaleta, A. C., Baranik, S., Mersch, S., Ataiants, J., & Rhodes, S. M. (2021). From victimization to restoration: Multi-disciplinary collaborative approaches to care and support victims and survivors of human trafficking. *Journal of human trafficking*, 7(3), 291-307.
- [33] Rolnick, A. C., & Sekaquaptewa, P. (2022). Trauma Informed Delinquency Interventions for Native Children. *Journal of Law, Medicine & Ethics*, 50(4), 745-757.
- [34] Saner, R., Yiu, L., & Rush, L. (2018). The measuring and monitoring of human trafficking. *Public Administration and Policy*, 21(2), 94-106.
- [35] Dang, M., & Leyden, S. H. (2021). Psychological Well-Being for Survivors: Creating a New Legacy. In *The Historical Roots of Human Trafficking: Informing Primary Prevention of Commercialized Violence* (pp. 305-327). Cham: Springer International Publishing.
- [36] Thurman, T. (2023). *Exploring the Relationship Between Human Trafficking and Prostitution and Human Trafficking Through an Analysis of State Statutes and Human Trafficking Initiatives* (Doctoral dissertation, George Mason University).
- [37] Turanovic, J. J. (2023). Victimization and its consequences over the life course. *Crime and Justice*, 52(1), 265-342.
- [38] Twis, M. K. (2020). Risk factor patterns in domestic minor sex trafficking relationships. *Journal of Human Trafficking*, 6(3), 309-326.
- [39] Heffernan, K., & Blythe, B. (2014). Evidence-based practice: Developing a trauma-informed lens to case management for victims of human trafficking. *Global Social Welfare*, 1(4), 169-177.
- [40] van der Schoor, A. S., Severin, J. A., Klaassen, C. H., van den Akker, J. P., Bruno, M. J., Hendriks, J. M., ... & Voor in 't holt, A. F. (2023). Universal screening or a universal risk assessment combined with risk-based screening for multidrug-resistant microorganisms upon admission: Comparing strategies. *PloS one*, 18(7), e0289163.
- [41] Walsh, S. D. (2016). Sex trafficking and the state: Applying domestic abuse interventions to serve victims of sex trafficking. *Human Rights Review*, 17(2), 221-245.

- [42] Xian, K., Chock, S., & Dwiggins, D. (2017). LGBTQ youth and vulnerability to sex trafficking. In *Human trafficking is a public health issue: A paradigm expansion in the United States* (pp. 141-152). Cham: Springer International Publishing.