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JOURNAL OF THE AMERICAN COLLEGE OF EMERGENCY PHYSICIANS
A GLOBAL JOURNAL OF EMERGENCY MEDICINE · Open Access

WILEY

REVIEW ARTICLE

The Practice of Emergency Medicine

Sex trafficking screening and intervention in the emergency department: A scoping review

Bridget Marcinkowski BS[1] | **Amy Caggiula MD**[1] | **Brandon N. Tran MHS**[1] |
Quincy K Tran MD, PhD[2,3] | **Ali Pourmand MD, MPH**[1] ⓘ

[1] Department of Emergency Medicine, The George Washington University School of Medicine and Health Sciences, Washington, District of Columbia, USA

[2] Department of Emergency Medicine, University of Maryland School of Medicine, Baltimore, Maryland, USA

[3] Program in Trauma, The R Adams Cowley Shock Trauma Center, University of Maryland School of Medicine, Baltimore, Maryland, USA

Correspondence
Ali Pourmand, MD, MPH, Department of Emergency Medicine, The George Washington University School of Medicine and Health Sciences, 2120 L St. Washington, DC, 20037, USA.
Email: Pourmand@gwu.edu

Abstract

Introduction: Human sex trafficking is a global public health crisis. Emergency departments (EDs) are important access points for trafficked persons who seek medical care. However, because of victims' hesitancy to disclose their situation and health care practitioners' lack of training and institutional protocols, many trafficked persons go unrecognized.

Methods: We performed a scoping review of current literature. PubMed, SCOPUS, and reference lists were searched to identify articles for inclusion. We aimed to identify gaps in knowledge and shortcomings to assist this vulnerable population. Two reviewers independently screened literature search results and abstracted data from included studies. Descriptive analysis was conducted.

Results: We selected and analyzed 23 studies that focused on adult human sex trafficking identification, screening, interventions, or education in the ED. Eight (35%) of the publications used a survey model to quantitatively assess outcomes. Many of the other publications were descriptive or qualitative in nature, with some using a structured interview approach. We have observed that no validated or consistent screening tool exists for the identification of possible adult trafficked patients in the ED. However, we found that educational interventions and screening tools can improve health care practitioners' confidence, victim identification, and knowledge of "next steps" for victims.

Conclusions: We found that most ED clinicians and staff have little or no formal training in sex trafficking victim identification, support, institutional protocols, or available local resources. Our review demonstrates a paucity of formal training programs, validated adult screening tools, and standardized institutional protocols to aid in the care of trafficked patients in the ED.

KEYWORDS
emergency department, human trafficking, intervention, screening

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Supervising Editor: Marna Rayl Greenberg, DO, MPH.

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1 | INTRODUCTION

1.1 | Background

In 2019, the US National Human Trafficking Hotline (NHTH) identified 22,326 survivors of human trafficking (HT) in every state and the District of Columbia.[1] Most were victims of sex trafficking (ST) and the others were categorized as victims of labor trafficking or unspecified. The US Department of State defines ST as any situation wherein "a person is required to engage in a commercial sex act as the result of force, threats of force, fraud, coercion or any combination of such means".[2]

Victims of ST are at great risk of health consequences.[3] The NHTH found that health services are 1 of 3 important points of access for victims seeking help, along with friends/family and law enforcement. However, survivors of trafficking are often hesitant to disclose their situation to health care practitioners for a variety of reasons such as shame, language barriers, and fear of retribution.[4] Victims who present to health care facilities usually go unrecognized, and reluctance to disclose is a significant contributing factor.[5] Additionally, emergency department staff frequently do not feel prepared or equipped to ask the appropriate questions.[3]

1.2 | Importance

In 2016, the American Board of Emergency Medicine added HT to its inventory of conditions under "Medical Knowledge, Patient Care, and Procedural Skills"—a list representing illnesses, injuries, and situations for which emergency physicians must be prepared to address in practice.[6] In 2020, the American College of Emergency Physicians (ACEP) released a policy statement on HT, stating that "trafficking victims are treated for acute injuries and illnesses in EDs more often than in any other health care facility, and thus emergency physicians are in the best position to assess, intervene, and refer for assistance."[7] This statement signals a growing awareness of the severity and prevalence of HT in the ED and highlights the need for standardized trainings and screening tools to identify and assist these patients.

1.3 | Objective

In this scoping review, we sought to systematically evaluate the literature on ST screening, identification, and intervention in the ED and to identify any existing gaps in knowledge. These findings will promote a better understanding of the current landscape of HT in the ED setting.

2 | METHODS

2.1 | Protocol

The protocol was formulated using the Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols Extension for Scoping Reviews (PRISMA-ScR) guidelines[8] and refined by members of our team and a university librarian.

2.2 | Eligibility criteria

Studies were included in the review if they (1) addressed human ST screening, identification, response, or education; (2) focused on emergency clinicians; (3) involved adult victims only; and (4) were published in the English language. Reviews and quantitative and qualitative original research were eligible. We excluded book chapters, professional society statements, standalone case studies, conference abstracts, and dissertations. Studies that addressed settings outside of the ED, specifically examined pediatric patients, or focused on other forms of HT such as labor trafficking were also excluded.

2.3 | Information sources

To identify potentially relevant documents, the following databases were searched: PubMed, Scopus, Cochrane Central Register of Controlled Trials (CENTRAL), and PsycInfo. Studies published as of June 30, 2021 were included in this review. We used the web-based Covidence system to manage our scoping review (www.covidence.org, Melbourne, Victoria, Australia).

2.4 | Search strategy

An example of the search strategy is as follows: PubMed search was conducted using the following terms: ("Human Trafficking"[Mesh]) AND ("Emergency Medical Services"[Mesh] OR "Emergency Treatment"[Mesh] OR "Emergency Medicine"[Mesh]). English language filter was applied.

2.5 | Selection of sources of evidence

Studies pertaining to human ST identification, screening, interventions, or education in the ED were eligible. All studies were reviewed by 2 members of the research team. Each reviewer independently screened every study by title and abstract. A title needed agreement from 2 reviewers to advance to the full text screening stage. Then a secondary screen of the full text was performed. Article selection required agreement between both reviewers. Disagreements at any stage were resolved through discussion and consultation with other reviewers, if needed. When applicable, papers were assessed for risk of bias using the Newcastle-Ottawa Scale Bias Assessment tool.[9]

2.6 | Data collection

Investigators extracted relevant information from the included studies and entered them into a standardized spreadsheet. The extracted
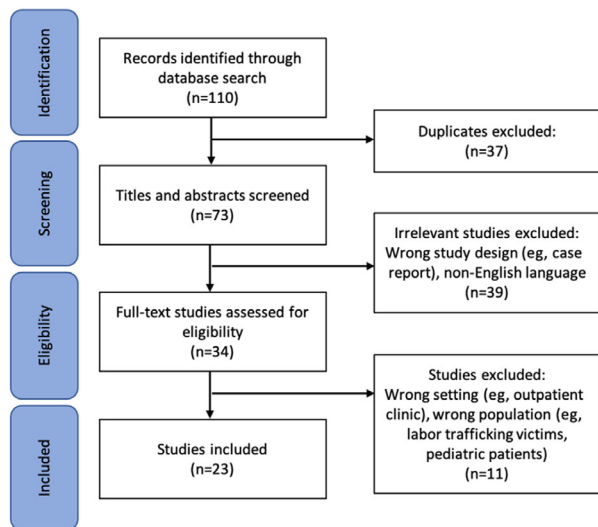
FIGURE 1 PRISMA flow diagram on study selection

data included study design, study aim, patient and/or participant, sample size, study duration, inclusion and exclusion criteria, method of participant recruitment, demographics, geographic location, ED type (eg, urban, suburban, or rural) and volume, study end points and/or outcomes, and study limitations.

3 | RESULTS

3.1 | Selection of sources of evidence

One hundred ten (110) studies met the initial search criteria and were reviewed. After the removal of duplicates, we screened the titles and abstracts of 73 studies. After reviewing 34 full text studies, we included 23 studies in this review. Eleven studies were ineligible for reasons, including incorrect setting (eg, family medicine clinic), or inappropriate study design (eg, case study) (Figure 1).

3.2 | Results of individual sources of evidence

The 23 included articles were summarized according to study characteristics including study type, aim, geographical information, and type of ED (Table 1).[3,10–31]

3.3 | Synthesis of results

3.3.1 | Health care practitioner beliefs about human trafficking and institutional protocols

Several studies examined ED staffs' beliefs regarding HT and knowledge of institutional procedures for addressing HT. Armstrong et al surveyed 18 ED managers and/or directors of South Carolina hospitals about their perceptions of HT in the region as well as their knowledge

of national and institutional HT resources.[10] Thirteen (72.2%) respondents believed that HT was occurring in their geographic area, but 14 (77.8%) believed that they had never cared for a confirmed trafficking victim at their current hospitals. When asked about their knowledge of national resources related to trafficking, most participants (64.3%) conveyed that they were aware of some resources, and 5 respondents (35.7%) were unaware of any resources. When asked whether their EDs had an HT workgroup or task force, the majority responded no (77.8%). One respondent (5.6%) stated that the hospital was currently forming one, and 3 respondents (16.7%) were unsure whether a committee existed at their institution. Thus, although most participants in this study were familiar with national services, such as the NHTH, the majority said their hospitals did not have specific protocols or were unfamiliar with their institutions' policies and resources.

A survey of nurse leaders at 27 hospitals in South Texas by Dols et al revealed that fewer than half (40.7%) of the EDs screened adults for HT, and of those that did screen, most did so by asking about patients' feelings of personal safety during triage.[14] None of the participants reported using a standardized tool or screening method to identify victims. Despite relatively high known rates of HT in the region, none of the ED staff surveyed identified an adult HT victim in 2017.[32]

Ross et al conducted a large cross-sectional survey of 782 National Health Service (NHS) professionals' knowledge about HT and their confidence to respond to HT. The participants were from various clinical disciplines including EM, obstetrics, mental health, and pediatrics.[27] Emergency staff represented 11.3% (n = 89) of those surveyed. Among the respondents, 86.8% (n = 679) answered that they did not know what questions to ask to identify potential victims, and 78.3% (n = 613) said that they lacked sufficient training to assist trafficked people.

Although many clinicians recognize that HT occurs in their regions, they often lack training to identify and assist victims. Lederer and Wetzel found that 87.8% of HT victims sought medical care while in captivity but were not identified by a medical professional.[5] As EDs are often the first point of contact for accessing the health care system, particularly for vulnerable populations, it is important to have procedures in place to identify trafficked or at-risk patients. Standardized screening tools and institutional committees or task forces can better equip ED physicians and non-physician practitioners to care for this vulnerable patient population.

3.3.2 | Utility of educational interventions for health care practitioners

Because multiple studies have demonstrated that ED staff lack both the knowledge and confidence to identify and to manage trafficked patients, it is necessary to examine the utility of specific educational interventions focusing on this topic. We examined the few existing educational interventions that have clinical implications for the identification and management of these patients. For the purposes of this review, retrospective pre-/post-survey models of interventions from 7 different studies were used to determine their efficacy (Table 2).[11,13,15,16,19,23,28]

TABLE 1 Study characteristics including study type, aim, geographical information, and type of emergency department

Author	Article type	Aim of study	Geographic location	ED type
Armstrong et al., 2020[10]	Qualitative descriptive study	To obtain baseline data of preparedness of hospitals to identify and care for trafficked persons	South Carolina	Urban, suburban, and rural EDs
Chisolm-Straker et al., 2012[11]	Retrospective pre-/post-survey study	To assess ED staff knowledge and comfort with identifying and treating HT victims before and after an educational workshop	Northeast United States	Urban and academic EDs
Chisolm-Straker et al., 2020[12]	Randomized, prospective study	To explain Rapid Appraisal for Trafficking design and procedures and describe how to develop a screening tool for use in the ED	Not reported	Not specified
Cole et al., 2018[13]	Retrospective pre-/post-survey study	To train ED staff to both use and teach knowledge and skills necessary to identify and care for trafficked persons in the ED	Varied	Varied
Dols et al., 2019[14]	Survey	To determine if a standard protocol exists to identify, assess, and intervene for HT victims	South Texas	Urban, suburban, and rural areas consisting of EDs
Donahue et al., 2019[15]	Implementation study with pre-/post survey	To integrate HT screening and education into health care professional training	Philadelphia, PA	Suburban, EDs across Main Line Health
Egyud et al., 2017[16]	Retrospective pre-/post-survey study	To improve identification and rescue of HT victims through implementation of a screening tool and treatment algorithm	Southwestern Pennsylvania located near major highways to interstates	Level 2 Trauma Center - Community Hospital
Grace et al., 2014[17]	Group randomized controlled trial	To implement a screening system and treatment approach in the ED to improve identification and rescue of HT victims	San Francisco Bay, CA Area	20 of the largest EDs in the San Francisco Bay Area
Hachey & Philippi, 2017[18]	Review	To explore the roles of APRNs in identifying and managing trafficked persons in the ED	N/A	N/A
Harlow et al., 2019[19]	Retrospective pre-/post-survey study	To improve HT-related awareness and self-efficacy among EMS professionals	Boston, MA Area	N/A
Lamb-Susca et al., 2018[20]	Narrative review	To examine the implications of HT on ED nurses and the health care industry	N/A	N/A
Leslie., 2018[21]	Review	To review the HT victim identification process in health care settings	N/A	N/A
Long et al., 2018[22]	Descriptive study with semistructured interview approach	To examine perceptions of ED nurses on HT, prostitution, and victims of interpersonal violence	Northeast United States	A large, academic, urban ED
Ma et al., 2020[23]	Retrospective pre-/post-survey study	To determine medical residents' baseline HT knowledge and HT knowledge changes after an online training module	Alberta, Canada	N/A
Mumma et al., 2017[24]	Observational cohort study	To determine the feasibility of using a screening survey to identify adult victims of HT in the ED and to determine the most effective question(s) for identifying victims of HT	N/A	Academic ED
Powell et al., 2017[25]	Structured interview and data analysis	To assess the gaps and strengths in HT education of health care practitioners in the United States	Varied	N/A

(Continues)

TABLE 1 (Continued)

Author	Article type	Aim of study	Geographic location	ED type
Richie-Zavaleta et al., 2020[26]	Mixed-methods study with triangulation design model	To empirically delineate where HT victims sought medical care, the reasons for seeking medical care, and the barriers keeping them from disclosing their victimization status	San Diego, CA and Philadelphia, PA	N/A
Ross et al., 2015[27]	Cross-sectional study	To estimate the proportion of NHS professionals who have encountered HT victims and to measure knowledge and confidence for addressing HT	England	Varied
Scannell & Conso, 2020[28]	Retrospective pre-/post-survey study	To improve HT education among emergency staff by using a sexual assault simulation course and to find out if the course could help ED nurses identify victims of HT, especially those who are being trafficked for sex exploitation	N/A	Urban
Schwarz et al., 2016[29]	Descriptive study	To develop a framework addressing the practical challenges of HT victim identification while working to provide resources and services to those victims	Kansas	Urban ED
Shandro et al., 2016[3]	Descriptive review	To outline the clinical approach to the identification and treatment of a potential HT victim in the ED	N/A	N/A
Stevens & Berishaj, 2016[30]	Descriptive review	To explore the scope of the problem of HT, its definitions, and its different types and elements	N/A	N/A
Tiller & Reynolds, 2020[31]	Protocol report	To describe the implementation of an ED response protocol	North Carolina	Academic, urban, county ED

APRNs, advanced practice registered nurses; ED, emergency department; EMS, emergency medical services; HT, human trafficking; NHS, National Health Service.

Chisolm et al conducted a cross-sectional study examining residents, attending physicians, social workers, registered nurses, and medical students at several ED settings across the northeast United States. They showed that nearly all respondents reported that they had never received formal training on the clinical presentation (97.8%, n = 176) or management of trafficking victims (95%).[11] The authors of this student implemented a brief 20-minute didactic training session focused on HT and analyzed participants' confidence after the sessions. They found that participants' confidence to identify and manage a victim of HT increased from 4.8% and 7.7% to 53.8% and 56.7%, respectively.[11]

Similarly, Ross et al described a 50-minute interactive workshop that they implemented at the 2018 Society for Academic Emergency Medicine Annual Meeting and that was designed to teach emergency clinicians the knowledge and skills necessary to recognize and treat HT patients.[13] The learning theory-based program consisted of a brief introduction and overview, followed by 3 interactive role-play scenarios where participants (attending and resident emergency physicians) alternated roles as physician-educator ("teacher") and "learner" for each case. The authors demonstrated a moderate improvement in participants' ability, following the workshop, to describe different types of HT, to identify high-risk signs of trafficking, and to describe effective approaches for assessment and management of trafficked patients.[13]

Donahue et al showed a significantly increased level of confidence identifying and treating HT victims after completion of an online training module from 75 ED nurses, physicians, nurse practitioners (NPs), physician assistants (PAs), registration personnel, and technicians.[15] Egyud et al found that 38 potential trafficked victims were identified within 5 months of mandatory education on HT for all ED staff at a southwestern Pennsylvania community hospital.[16] This training used an algorithm in order to identify HT victims via 2 main mechanisms. The first mechanism involved detection of medical red flags by a risk assessment tool embedded in the electronic health record, and the second mechanism was a silent notification process.

These studies, which examined the impact of educational interventions across varying environments, professions, and levels of training, reliably demonstrated that health care training tools are effective in improving staff confidence in identifying and supporting victims of HT.

3.3.3 | Roles of different ED staff in addressing human trafficking

In this review, we have discussed how gaps in training may be associated with health care practitioners' lack of confidence identifying and treating victims of ST, creating barriers to care for this vulnerable

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TABLE 2 Human trafficking educational interventions

Study	Number of participants	Time/tools	Preintervention findings	Postintervention findings
Chisolm-Straker et al, 2012[11]	- 180 health care practitioners comprised of emergency medicine residents, attending physicians, SWs, RNs, medical students, and PAs filled out the self-report of prior knowledge of HT; 104 health care practitioners participated in educational intervention and postintervention questionnaire	- Duration of study not reported - Participants recruited to fill out a simple questionnaire and/or complete the educational intervention - Intervention was composed of a 20-minute didactic training session on the identification, clinical presentation, and treatment of HT victims in the ED	- Nearly all (97.8%. n = 176) survey respondents reported never receiving formal training on clinical presentation of trafficking victims and 95% reported never receiving formal training on treatment - Before training, only 4.8% and 7.7% of respondents reported having confidence in their ability to identify and treat a victim of HT respectively	- After the training session, the reported proportion of respondents confident in their ability to identify and treat a victim of HT in the ED increased to 53.8% and 56.7%, respectively
Cole et al, 2018[13]	- 19 participants consisting of both attending (28%) and resident (72%) emergency physicians attending the 2018 Society for Academic Emergency Medicine Annual Meeting (SAEM) in Indianapolis, Indiana	- A 50-minute interactive workshop was developed and implemented at the 2018 SAEM - Intervention composed of a 10-minute introduction, a brief overview, and several interactive case-based sessions with HT patients - Participants rated their abilities before and after session on a 4-point Likert scale	N/A	- Significant improvements in self-reported confidence in ability to: 1. Describe different types of HT 2. Identify high risk signs of trafficking 3. Employ interactive learning methods in the clinical environment to instruct others 4. Describe an effective approach for assessment and management of HT patients
Donahue et al, 2019[15]	- 75 ED personnel members consisting of nurses, NPs, physicians, PAs, ED technicians, and registration staff from 2 suburban hospitals located near a Northeast Metropolitan City	- The intervention consisted of an evidence-based online training module (HTEmergency.com) created by the project team - The module contained a PowerPoint presentation, identification, and treatment guidelines, and 2 realistic case studies	- 89% of participants had not received previous HT training - Less than 50% of participants stated having a comprehensive understanding of HT prior - Average confidence level for identification and treatment of HT victims was 4/10	- Number of participants with comprehensive understanding of HT increased from <50% to 93% - Increased levels of confidence for identification and treatment of HT victims to 7/10 and 8/10, respectively - 96% reported the educational module to be useful in their work setting
Egyud et al, 2017[16]	- 102 ED health care practitioners including physicians, nurses, ancillary personnel, and social service workers at a level 2 trauma center in Southwestern Pennsylvania	- ED staff completed mandatory education HT including live training, screening tools, medical red flags of HT, resources for rescue, plans for notification of appropriate agencies - Results of implementation of screening tool and treatment algorithm measured for 5 months after implementation	- N/A	- 97% of participants reported intent to change practice in HT care - 74% of participants reported improved competency and 75% of participants planned to use alternative communication strategies to help identify victims - 38 potential trafficking victims identified 5 months after implementation: 20 identified via medical red flags and 18 via the silent notification system

TABLE 2 (Continued)

Study	Number of participants	Time/tools	Preintervention findings	Postintervention findings
Harlow et al, 2019[19]	- Participants included 57 EMS professionals from the Boston-area - 38 of those participants completed surveys both before the program and again 3 months after	- One 90-minute pilot training program was implemented with aims of teaching participants definitions of trafficking, how to identify, and how to respond to cases of HT - To evaluate the course, surveys were given before and 3 months after the training	- At baseline, only 46% of participants reported encountering a suspected trafficking victim in a professional capacity	- 26% of participants reported encountering at least 1 trafficked person within 3 months of completing the training - Most significant improvements in belief scores for identifying victims of HT and for the avoidance of asking intrusive questions of HT victims
Ma et al, 2020[23]	- 32 residents in family medicine, EM, and general pediatrics at the University of Alberta completed the preintervention survey - Of those who completed an online learning module, 22 residents completed the optional post-intervention survey	- Residents at the University of Alberta were invited to participate in an ≈30-60-minute online learning module either individually (n = 15) or in a facilitated session (n = 17) - Baseline and postintervention scores were measured through self-report and knowledge assessment	- Only 6% self-identified as somewhat knowledgeable on HT - 16% were aware of red flags used to identify HT victims - 81% wanted this topic incorporated in residency training - Only 6% and 25% had previously received education in this topic in residency and medical school, respectively	- Improvements were seen in both self-reported ($P < 0.001$) and tested ($P = 0.005$) knowledge of HT - Residents reported being more prepared to identify victims ($P < 0.001$), more comfortable supporting victims ($P < 0.001$) and more confident in knowing how to support victims ($P < 0.001$)
Scannell & Conso, 2020[28]	- 36 ED nurses of which 28 completed the posttest	- The Sexual Assault Simulation Course for Healthcare Professionals (SASH), was comprised of 4 components: didactics, skills stations, simulated experience with a standard actor, and debriefing	- The pretest group scored a mean average of 64.27	- The posttest group scored 81.60 ($P = 0.00023$), demonstrating a significant increase in baseline knowledge

ED, emergency department; EM, emergency medicine; EMS, emergency medical services; HT, human trafficking; NP, nurse practitioner; PA, physician assistant; RN, registered nurse; SW, social worker.

population. We also acknowledge that each health care worker occupies a unique and necessary role in the management of these patients.

Harlow et al studied how a pilot training program for emergency medical services (EMS) professionals affected their HT awareness and self-efficacy.[19] One of the attitudes that improved after the intervention was the belief that "EMS workers should not probe further if they suspect a victim has been trafficked." An EMS professional's primary goal, as described in this study, was to transport the trafficked person safely to the hospital rather than ask intrusive questions. The study also reported that 26% of participants (n = 38) encountered at least 1 trafficked person in the 3 months following the training and that this education increased their confidence in identifying potential victims. This research highlighted the importance of prehospital professionals as a critical first step in medical encounters with trafficked patients, and training programs for EMS personnel can aid in the initial identification and transport of victims.

These first points of contact with the health care system are critical, and each encounter provides an opportunity to identify and intervene with victims of ST. Hachey and Phillippi suggested that advanced practice registered nurses (APRNs), including certified nurse midwives, clinical nurse specialists, and NPs, play an important role in the care of trafficked patients because of their prolonged contact with them, but that they need additional training to be effective.[18] The authors of this study advocated for continuing education and outreach programs in order to increase the likelihood that APRNs would recognize the constellation of clinical presentations that could represent ST. Additionally, they stressed the importance of APRNs being knowledgeable of federal, state, and local resources for these patients.

Among those who contribute to the identification and support of ST victims in a health care setting are medical residents. Ma et al found that 81% (n = 26) of surveyed medical residents believed that HT should be incorporated into residency education, though only 6% (n = 2) of respondents reported any content in this area.[23] These findings supported ACEP's recommendation that "EMS, medical schools, and emergency medicine residency curricula should include education and training in the recognition, assessment, documentation, and interventions for patients surviving human trafficking."[7]

Thus far, we have discussed how EMS professionals, APRNs, and residents of different specialties play unique roles in treating a victim of ST in a health care setting and how better training might better equip them for these difficult cases. Although these examples do not represent an exhaustive list of all health care professionals who are involved in the care of trafficked patients, these studies illustrated the importance of a well-trained multidisciplinary health care team in identifying and contributing to the care of ST patients.

3.3.4 | Existing tools for screening and identifying victims

Numerous tools exist for screening potential adult victims of ST, although none have been validated for use with adult patients in health care settings. [12,24] These screening tools are summarized in Table 3.[12,24,31,33–37] There is, however, a validated tool for identifying victims of child ST in the ED.[34] Some screening protocols designed for use in non-health care settings have been adapted to meet the time constraints associated with assessing patients in emergent medical scenarios, whereas other entirely new screening tools have been designed with this purpose in mind.[35]

Certain tools provide a framework that allows users to tailor a screening and response protocol to their institutions' specific needs. At the University of Kentucky Hospital, graduate students in the Department of Public Health and Preventative Medicine developed a flow chart model based on the Polaris Project Medical Assessment Tool to help staff in the ED screen for victims of HT.[29] Other tools are less customizable and consist of straightforward algorithms or questionnaires. The majority of these protocols involve a series of "yes" or "no" questions, which can be particularly useful in an ED setting where acuity and time constraints can be significant barriers to adequate screening.[16]

In addition to questions, some tools also highlight warning signs or red flags that alert clinicians to the possibility of ST. Examples include inconsistencies when the patient is asked about his/her injury, someone speaking on behalf of the patient, signs of physical or sexual abuse, medical neglect, untreated sexually transmitted infection, and/or torture.[29] Staff in the ED may benefit from a baseline understanding of the common warning signs and symptoms of ST to determine when to implement the screening tool of choice.

Lastly, certain protocols provide referrals to specific resources based on the patient's responses such as the National Human Trafficking Resource Center Hotline or local services, if available.[3,29] The latter, however, may require that ED staff are knowledgeable about resources and services available to victims of ST in their community. When implementing an ST screening tool, partnering with social work and case management can ensure that proper pathways are in place to assist trafficked individuals identified in the ED. We provide a sample flow chart to highlight an approach to ST victim identification and response in the ED setting adapted from existing protocols (Figure S1).[29,38]

4 | LIMITATIONS

Research on ST has inherent challenges, and much of the relevant literature on this topic is narrative. Studies related to screening tools in the ED frequently lack implementation data, and thus drawing conclusions about their utility is challenging. Similarly, very few quantitative studies exist that examine the number of identified HT victims after educational interventions. As such, it can be difficult to assess outcomes in the ED. Ambiguous terminology regarding ST and unpublished works at the time of this writing may have led to the exclusion of several relevant studies from this review. To mitigate this potential challenge, we adhered to validated processes for conducting scoping reviews in both our search strategy and article selection process.

5 | DISCUSSION

ST is a form of modern-day slavery with profound impacts on a victim's physical, psychological, and social well-being.[3] The ED is often the initial point of access for trafficked victims into the health care system, though most of these patients still go unidentified by medical professionals.[5] We suspect that a great number of victims are being missed at this critical junction of care because of several factors including patients' reluctance to disclose and ED staff lacking the necessary training to identify and aid these victims. In our examination of providers' beliefs about ST and institutional protocols, we found evidence that emergency clinicians, nurses, and NHS professionals felt unprepared to identify and/or support victims of ST, despite being aware that it might be an issue in their communities.[10,14,27]

In this context, we also examined the utility of tested educational interventions for health care professionals in the ED and the unique roles of different practitioners in identifying and supporting ST victims. Although most pre-surveys demonstrated a low level of confidence and a lack of formalized ST training, research suggested that even brief educational interventions focused on identifying and treating victims were effective in improving providers' confidence (Table 2). These studies supported the idea that well-designed ST training programs for health care professionals can significantly improve their knowledge, confidence, and–in some cases–victim identification.[16] Our review also recognized the importance of a multidisciplinary approach to this vulnerable population, and several studies highlighted initiatives aimed to train a variety of health care personnel including nurses, physicians, NPs, PAs, residents, and EMS professionals. Each point of contact in the health care system has the potential to contribute to a safe, nonjudgmental environment conducive to identifying and assisting trafficked victims.

Lastly, our review examined several tools that were used in the identification of potential victims of HT. Although numerous algorithms and processes exist for screening patients for ST across various settings, our research revealed that none of these tools are currently validated for use in an adult patient population (Table 3). Several examples of tools with utility in the ED are discussed here, including flow chart

TABLE 3 Existing human trafficking screening tools used in health care settings

Screening tool	Description	Pros	Cons
Vera Institute's Trafficking Victim Identification Tool (TVIT)[33]	- Questions examine 5 domains of a person's life experience: (1) Force, Fraud, Coercion; (2) Isolation; (3) Labor; (4) Harm; and (5) Sexual Exploitation	- First comprehensive tool for identifying victims of HT - TVIT is available in short (20-item) and long versions	- Only validated for use in social service settings - Takes 40–60 minutes to administer long version - Relies on subjective assessment of client responses
Greenbaum Tool[34]	- Six-item questionnaire to identify victims of child sex trafficking in the pediatric ED	- Only validated trafficking screening tool for use in the health care setting - Sensitivity of 92% and specificity of 73% among those studied - Short and can be easily administered in the ED	- Designed for use only in 13- to 17-year-olds with specific clinical presentations
Rapid Appraisal for Trafficking (RAFT)[12]	- Five questions from the TVIT that had the highest odds ratio of predicting a labor and/or sex trafficking experience	- Designed specifically for use in the ED	- Not validated although currently enrolling patients in validation studies
HEAL Trafficking and Hope for Justice Protocol Toolkit[31]	- 44-page document developed in 2016 by experts in the field of human trafficking to guide health care professionals in developing a human trafficking protocol	- Provides a framework to build a recognition and response protocol customized to the institution's needs	- Each institution must determine how to identify their at-risk Patients
Department of Health and Human Services Adult Human Trafficking Screening Tool (AHTST)[35]	- Eight short, minimally invasive, and closed-ended screening questions - Aim is to obtain only the basic information needed to identify an adult currently or at risk of being trafficked so that appropriate services, including referrals and services can be offered	- Designed for use across various health care, behavioral health, social services, and public health settings	- Not yet validated
Mumma et al (2017) Screening Tool[24]	- 14-question screening survey based on published recommendations - A positive survey screen was defined as answering "yes" to any screening question(s)	- Can be administered in 5–10 minutes - Sensitivity of the screening survey was better than physician concern - Tested on a sample of medically stable female ED patients, aged 18-40 years	- Specificity of physician concern was slightly better than the screening survey - Screening questions were derived from tools designed for other settings and had not been validated in an ED setting
Polaris Project Medical Assessment Tool[36]	- Structured as an algorithm; involves initial warning signs followed by a series of 6 questions - Provides referrals to specific resources based on "yes" or "no" responses to questions	- Low initial time investment - Designed for use in health care settings	- Not yet validated
Kaltiso et al (2021) Screening Tool[37]	- 11-questions "yes/no" format based on many existing screening tools - A positive screen was determined to be a positive answer ("yes") to any of the 11 questions	- Designed for use in a high-volume, urban ED - Tested on a sample of 26,974 patients - Can be easily embedded in the EHR - Positive responses to 8 of the questions were significantly associated with likely sex trafficking status	- High false-positive rate - Anecdotal feedback from nurses surveyed stated the tool was too long

ED, emergency department; EHR, electronic health record; EMS, emergency medical services; HT, human trafficking.

models, algorithms, and questionnaires. However, most tools required background knowledge of the "red flags" for ST and familiarity with local resources for support, whereas most ED staff did not have sufficient training to recognize these red flags or to be aware of local resources.

Nearly all trafficking victims in one study sought medical care during captivity, but very few were either identified or offered assistance by their medical professionals.[5] As such, the value of such tools and trainings cannot be overstated since emergency personnel are uniquely situated to be primary points of contact with these vulnerable patients.

In our scoping review of adult ST in the ED, we found evidence that upwards of 95% of ED personnel felt ill equipped to identify and support a victim of HT.[11]

Most ED clinicians and staff reported that they had little or no formal training in HT victim identification, institutional protocols, or available local resources to support victims. Likewise, no validated or consistent screening tool exists for the identification of possible adult trafficked patients in the ED. However, our review did explore several notable examples of educational interventions focused on ST, as well as ST screening tools with potential utility in the ED.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

ORCID

Ali Pourmand MD, MPH https://orcid.org/0000-0002-8440-8454

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AUTHOR BIOGRAPHY

Bridget Marcinkowski is a medical student at the George Washington School of Medicine and Health Sciences in Washington, DC.

SUPPORTING INFORMATION

Additional supporting information may be found in the online version of the article at the publisher's website.

How to cite this article: Marcinkowski B, Caggiula A, Tran BN, Tran QK, Pourmand A. Sex trafficking screening and intervention in the emergency department: A scoping review. *JACEP Open*. 2022;3:e12638. https://doi.org/10.1002/emp2.12638