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Human trafficking screening in Saskatoon Emergency Departments: What can be learned from high-risk patient presentations?

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Abstract

Objective Studies have shown that Emergency Department physicians have little to no training in recognizing and supporting victims of human trafficking despite being uniquely situated to identify and intervene on behalf of these patients. We assessed if screening for human trafficking was being completed by emergency physicians in three Saskatoon emergency departments.

Methods We performed a retrospective chart review of patients presenting to three Saskatoon emergency departments deemed to potentially be at risk of human trafficking, based on discharge diagnosis. Of the 223 included charts, data extracted included sex, age, ethnicity, chief complaint, diagnosis, disposition, HT Screening (Y/N), specific quotes relating to HT, time of visit, intimate partner violence (Y/N), and travel history. Both quantitative and qualitative thematic analyses were conducted on this data.

Results None of the charts (0%) included in this study had any documentation around screening for human trafficking. Furthermore, 21.1% of the high-risk patient charts included in this study -- which included many patients with a discharge diagnosis of sexually transmitted disease or pelvic inflammatory disease -- did not contain a documented sexual history. Thematic analysis revealed that the patients included in this study frequently had challenges with sexual health, substance use, and houselessness.

Conclusion This study found that Emergency physicians in Saskatoon were not routinely screening for human trafficking. Implementation of further training is needed to help these physicians recognize and subsequently support potential victims of human trafficking.

Keywords Human trafficking, Screening, Identification, High risk, Emergency medicine

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Clinician's capsule

- *What is known about this topic?*

Victims of human trafficking seek medical care in emergency departments, yet physicians receive little training to identify and support them.

- *What did this study ask?*

Are emergency physicians in an urban Canadian city screening for human trafficking in patients with potential high-risk factors?

- *What did this study find?*

Emergency physicians in this study were not routinely screening for human trafficking in high-risk patients.

- *Why does this study matter to clinicians?*

Implementation of additional training is required to assist physicians with recognizing and supporting victims of human trafficking in emergency departments.

Introduction

Sexual human trafficking (HT) is an abhorrent crime and significant global health crisis. The most up-to-date data from the United Nations Office on Drugs and Crime (UNODC) identified 49,032 victims in 2018, from nearly every country on Earth [1]. Unfortunately, many victims are never identified, with estimates suggesting tens of millions of victims and a multi-billion-dollar criminal industry globally [1]. Predominantly affecting vulnerable populations, sexual HT exploits victims in the sex, entertainment, agriculture, hospitality, and warfare industries, as well as through domestic work and forced marriage [2]. While sexual HT remains a predominantly hidden crime, with numerous victims remaining invisible to society at large [1], healthcare providers are uniquely situated to identify and intervene to assist sexual HT victims as it has been reported that nearly 90% of sexual HT victims had contact with a healthcare provider and around 60% of sexual HT victims had been treated in the Emergency Department (ED) [3].

Those victims being trafficked are unlikely to self-identify, prompting several attempts to improve provider education to screen for sexual HT [4, 5]. However, comfort with the subject remains low and many ED personnel feel poorly equipped to identify and support victims [6]. Recent reports reveal that Saskatchewan's known human trafficking incidence is double the national average (1.8 per 100,000) [7]. As the largest city in Saskatchewan, Saskatoon's EDs hold an important role in screening for HT.

The primary objective of this study was to assess if Saskatoon Emergency Physicians were screening for sexual human trafficking, and if there was a need for increased physician education and training regarding sexual human trafficking and how high-risk patients present to the ED. By painting a more complete picture of high-risk patients, we will be better able to help increase physician education and thereby increase the confidence of Emergency Physicians in broaching the subject of sexual human trafficking with their patients.

Methods

Study design, time period and study setting

This retrospective chart review took place in Saskatoon, Saskatchewan and included patients who had attended any of the three EDs (Royal University Hospital [RUH], St. Paul's Hospital [SPH], and Saskatoon City Hospital [SCH]) between June 2019 and May 2021.

Population

Saskatoon, Saskatchewan is the largest city in the province with a population of around 317,480 as of 2021 [8]. During the Missing and Murdered Indigenous Women and Girls (MMIWG) national inquiry, it was identified that Canada has developed human trafficking patterns known as "city triangles", where victims are transported between cities in close proximity between various provinces [9]. Saskatoon is identified as being a part of at least two such triangles, namely the Edmonton-Calgary-Saskatoon and Regina-Winnipeg-Saskatoon patterns [9].

This study included all patients that were identified as being at higher risk for sexual HT, based on previously established high-risk population characteristics and diagnoses [3, 4]. We included those with discharge diagnoses of chlamydia, gonorrhea, syphilis, genital herpes, pelvic inflammatory disease, sexual assault, physical assault, pregnancy, and/or domestic violence [3, 4]. 323 charts were identified from emergency room visits between June 2019 and May 2021 that fit this inclusion criteria.

Charts were excluded from review if: (a) the patient left against medical advice; (b) patients bypassed the emergency room and were admitted directly under another servicing department; (c) patients not fit the inclusion criteria and/or had no information recorded; (d) patients were classified as confidential persons (identified as confidential due to their status as an inmate at a correctional facility or in police custody); (e) the chart was a duplicate of a previously reviewed chart; or (f) charts representing subsequent visits after a patient's initial assessment by ED physician, where they re-presented for therapeutics and the patient was not being reassessed by an ED physician (information from the initial visit was recorded).

Outcome measures

Ethics approval was obtained from the University of Saskatchewan's Biomedical Research Ethics Board prior to data collection. Information from the charts was collected on a standardized abstraction form that contained the following pre-determined outcome variables: Date of Visit, Sex, Age, Ethnicity, Chief Complaint, Diagnosis, Disposition, Accompanied (Y/N), Accompanied by, Translator present (Y/N), HT Screening (Y/N), specific quotes relating to sexual HT, time of visit, intimate partner violence (Y/N), home location (proximity to Saskatoon), and travel history. The chart reviews were completed by two independent reviewers, and the data extracted was internally validated between them. Disagreements were resolved via consensus discussion.

Data analysis

Descriptive statistics were used to complete the quantitative analysis of the data collected and included percentages and means (\pm standard deviation and standard error). Where appropriate, the "N-1" Chi-squared test was used to compare proportions and test for significance [10].

A qualitative analysis was conducted to examine common themes amongst high-risk presentations. Physician comments, which were present on 202 patient charts, were analyzed for themes using the inductive flexible coding technique of Detering and Waters [11].

Sample size

Given that 323 charts were identified as patients being at high risk for HT using a 95% confidence interval and a 5% margin of error, a total of 176 charts were required as a minimum sample size.

Results

A total of 323 charts were identified that the criteria of diagnoses carrying a high-risk of human trafficking. A comprehensive review of these 323 indicated that none of them contained any notes or notations that referenced HT screening.

Of the above 323 charts, 100 charts were excluded from further analysis based on the following: 2 charts left against medical advice; 21 charts were sent direct to a service; 22 charts did not fit the inclusion criteria and/or had no information recorded; 2 charts were confidential persons; 13 charts were duplicates (same patient and visit as the previous chart; and 40 charts were patients with multiple visits for therapeutics (the reviewer recorded information from the initial visit, but not from subsequent visits as they were not reassessed by an ED physician).

Of the remaining 223 charts that were included, 72.2% were female ($n=161$), 26.5% were male ($n=59$), 0.9% were

Table 1 Mean age of patients at high risk of human trafficking according to gender

Gender	Mean Age (years)	SD	SEM
Female	29	7.77	0.61
Male	31	9.08	1.18
Male to Female	26	11.3	8.00
Female to Male	26	0	0

Table 2 Chief complaint of female patients ($n=161$) at high risk for human trafficking

Chief complaint	<i>n</i>	%
Pain	103	64.0
STI	11	6.8
Vaginal discharge	7	4.3
Vaginal bleeding	5	3.1
Vaginal foreign body	2	1.2
Genital lesions/swelling	7	4.3
Other	26	16.1

transitioning male to female ($n=2$), and 0.4% were transitioning female to male ($n=1$). Females ranged in age from 17 to 54 years with a mean age of 29 years. Males ranged in age from 18 to 57 years with a mean age of 31 years. The two patients transitioning male to female were ages 18 and 34 years while the one patient transitioning female to male was 26 years old (Table 1).

Although 6 categories of ethnicity were reported, 50.2% self-identified as Indigenous and 47.1% did not indicate their ethnicity. The further 4 ethnicities (Arab, Black, Chinese and Japanese) each account for less than 1% of the total 223 charts included in the study. In general, ethnicity is not noted in ED notes in Saskatchewan, but is often included if one self-identifies as Indigenous or if there is a language barrier associated with background ethnicity.

For females, the most prevalent chief complaint was pain (64%; $n=103$) followed by sexually transmitted infection (STI) (6.8%; $n=11$), vaginal discharge (4.3%; $n=7$) and genital lesions/swelling (4.3%; $n=7$), vaginal bleeding (3.1%; $n=5$), vaginal foreign body (1.2%; $n=2$) and other complaints (16.1%; $n=26$) (Table 2). For males, penile/genital/urethral discharge was the most common complaint (22.0%; $n=13$) followed by urinary complaints (16.9%; $n=10$) and genital lesions/swelling (16.9%; $n=10$), pain (15.2%; $n=9$), STI (13.6%; $n=8$) and other complaints (15.2%; $n=9$) (Table 3). Of note, females presented with a chief complaint significantly more often than men ($X^2=40.9$; $p<0.0001$).=40.9; $p<0.0001$).

Of the 223 charts analyzed, no sexual history was recorded on 47 of them (21.1% of all charts). The 47 charts with no sexual history taken include 39 female patients (83%), 7 male patients (14.9%) and 1 transitioning male to female patient (2.1%). All 7 male patients and the transitioning patient in this cohort had a discharge

Table 3 Chief complaint of male patients ($n=59$) at high risk for human trafficking

Chief complaint	<i>n</i>	%
Pain	9	15.2
Penile/Genital/Urethral Discharge	13	22.03
Urinary Complaints	10	16.95
STI	8	13.6
Genital Lesions/Swelling	10	16.95
Other	9	15.2

diagnosis of STI. Females in this cohort had more varied discharge diagnoses of pelvic inflammatory disease (PID) (53.8%; $n=21$), STI (30.8%; $n=12$), PID and STI (2.6%; $n=1$) and other diagnoses (12.8%; $n=5$).

Disposition of the 223 patients/charts were categorized as being against medical advice (AMA), discharged, discharged with follow-up, admit/consult/transfer/other. Most patients in this study were discharged normally (62.7% males; 65.0% females) and a small percentage left AMA (8.5% males; 3.8% females). Patients discharged with follow up were significantly higher ($X^2=10.4$; $p=0.0013$) for males (25.4%) than for females (8.8%). Conversely, female patients were admitted/sent to for consult/transferred to a different unit/other significantly ($X^2=10.9$; $p=0.0009$) more often than males (22.5% versus 3.4%).

Finally, it was determined that the most common months for the patients identified as potentially being at high risk for HT were January (17.0%), November (12.6%) and December (12.6%). The month of May had the fewest visits (2.2%). Each visit was also analyzed based on the time of day the patient visit took place. The most common times for these patient visits were 10:00–11:00 h (6.7%), 17:00–18:00 h (6.3%), 20:00–21:00 h (6.7%) and 23:00–0:00 h (6.3%). The least common times for these patient visits were 03:00–04:00 (1.8%) and 07:00–08:00 h (1.3%).

Thematic analysis

Sexual health was a common theme in the charts reviewed. Current and previous STIs (gonorrhea, syphilis, herpes, and chlamydia), urinary complaints, PID, and other forms of abdominal pain which could be associated with sexual health concerns were noted. Some patient notes reflected requests for STI testing, secondary to recent unprotected sexual events. Some charts reflected a history of non-compliance with prescription antibiotics for past STIs. A few charts reflected participation in sex work, but this was not the norm.

Substance use was a reoccurring theme across charts reviewed, with specific concerns around intravenous drug use without specific reference to a drug of choice. Substances of choice that were noted ranged with crystal methamphetamine, alcohol, and opioids being the

most common. Fewer cases reflected cocaine or the consumption of substances through inhalation. Some patient charts noted past residence at substance use treatment or detox facilities. Mental health concerns were also present in many of the cases, but to a lesser extent than substance use. The primary mental health concerns were psychosis (sometimes drug-induced), anxiety, and depression. Traumatic brain injury, post-traumatic stress disorder (PTSD), and intellectual disabilities were occasionally noted.

Patient charts also provided insights into other challenges the patients were facing. Frequently, patients were housing insecure (couch surfing, motels, half-way houses), or were using shelters as their primary address. A few individuals were noted to have been blacklisted from housing options in the city due to past concerns. Male patients were noted to have more frequent interaction with the criminal justice system when compared to female patients. Female patients would frequently present with injuries related to intimate partner violence and notes did reflect high degrees of violence (physical and sexual) experienced by female patients. Further, many of the presenting female patients had a history of multiple pregnancies.

Discussion

Interpretation of findings

Although the rate of human trafficking in Saskatchewan is higher than the national average, Emergency physicians working within the three Saskatoon EDs during the time of this study did not document screening for sexual human trafficking. Furthermore, despite being pulled and included in our study for the patient being potentially at high-risk of trafficking, approximately one-fifth of the charts had no sexual history documented. A number of factors are likely to contribute to this lack of documentation of trafficking screening and sexual history taking. First, it is possible that Emergency physicians in this area lack training in HT and harbor a level of discomfort with broaching the subject matter with their patients. Second, overcrowding in the EDs has resulted in an environment incompatible with the privacy and time often required to discuss comprehensive sexual history, inter-partner violence and the subject of HT with patients. Finally, there is reasonable implication that, due to the number of patients that each physician sees during their shift, the lack of documentation does not indicate that sexual history or HT were not discussed, but rather that those discussions were simply not documented due to time constraints.

Comparison to previous studies

As previously described, many patients in this study who are at high-risk of human trafficking are women [7].

Although girls are often targets of HT [7], our screening criteria did not identify any persons under the age of majority. Female patients often present with injuries directly attributed to intimate partner violence, and overall faced higher amounts of physical and sexual violence than did male patients. The lack of documentation discussing HT with high-risk patients is, unfortunately, congruent with previous literature concerning ED provider comfort with HT, which reflected a lack of both training and comfort in identifying victims and directing them to appropriate supports [6]. Similarly, Hoot and Aronsky described “a variety of adverse moral consequences of ED crowding, including increased risks of harm to patients, delays in providing needed care, compromised privacy and confidentiality, impaired communication, and diminished access to care” [12]. Finally, while our primary outcome focuses on screening within EDs, there is an important shift in the literature and standard of care from identification to a focus on patient-centered conversation, assessment, education, and provision of resources [13]. It is essential to recognize that identification of these victims is only the beginning of providing appropriate care to them.

Limitations

Our results are exclusively drawn from chart documentation and based on physician discharge diagnosis, which may not accurately identify high-risk patients who had an alternate discharge diagnosis which did not meet out inclusion criteria nor does it encompass the entire patient encounter. Providers may be conducting screening without documenting on such, and due to the significant patient burden within Saskatoon’s emergency departments, it may have been challenging to provide full documentation on these encounters. This is particularly relevant given that the charts were pulled between 2019 and 2021, when the COVID-19 pandemic was significantly straining the system. Further limitations include potential high-risk patients who were not included in our sample charts. One particularly high-risk group are patients who presented due to sexual assault (SA) - in Saskatoon at the time of this study, these patients are directly referred to the SA consultant service, and thus were not included in our study as this was a consultant group of physicians who do not routinely work in the emergency department. These patients could represent a group who are both high-risk and appropriately screened in the ED. Furthermore, other high-risk patients, who could be victims of labor trafficking, indentured servitude, or organ trade, amongst other forms of human trafficking, cannot solely be captured by a single discharge diagnosis, and may have been missed in the process of our chart review.

Clinical implications

These findings implicate the importance training and knowledge development have with respect to identifying ED patients who are at high-risk of being trafficked, including learning trauma-informed and culturally competent approaches to discussing HT with said patients. The introduction of standardized HT screening tools (along with educational tools of when and how to use them) would be a significant step towards potential identification of HT victims within Saskatoon EDs. Though the most common form of HT in EDs is sex trafficking, particular focus should be placed on inclusive training strategies that recognize all forms of HT, including labor trafficking, to avoid further bias and missing these particularly underserved HT victims.

Research implications

Having identified the baseline for ED screening of sexual HT, further research can be done to identify the factors that play a role in the lack of HT documentation. Our findings also lay the groundwork for the future inclusion of HT screening practices for high-risk patients who present to the ED.

Conclusion

By undergoing this retrospective chart review, a clear trend becomes evident – emergency physicians in Saskatoon are not screening for sexual human trafficking, even in cases where patient has a diagnosis which carries increased risk. This study suggests that there is an urgent need to provide further training on human trafficking screening and resources to our frontline care providers. Given the impact identification of a potential victim of human trafficking can have, we suggest further education and guidance on screening within Saskatoon’s EDs be provided to all emergency care providers.

Abbreviations

AMA	Against Medical Advice
ED	Emergency Department
HT	Human Trafficking
PID	Pelvic Inflammatory Disease
RUH	Royal University Hospital
SA	Sexual Assault
SCH	Saskatoon City Hospital
SPH	St. Paul’s Hospital
STI	Sexually transmitted infections

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Author contributions

S.S. completed the chart review and wrote the main manuscript text. T.W. completed the quantitative analysis of the data and prepared Tables 1, 2 and 3. M. G. completed the qualitative thematic analysis. L. M. and J. S. conceptualized and designed the study. All authors reviewed the manuscript, contributed significantly to revisions, and have approved the final text.

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Data availability

The datasets generated and/or analyzed during the current study are available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate

This project received approval from the University of Saskatchewan Biomedical Research Ethics Board. This approval included a waiver of consent in accordance with the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans – TCPS 2 (2022); Article 5.5 A.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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