Original Report

Patients Referred for Domestic Minor Sex Trafficking: A Comparison of Confirmed and Suspected Youth

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A B S T R A C T

Study Objective: To compare characteristics of patients with confirmatory evidence (eg, disclosure, found by law enforcement) of domestic minor sex trafficking (DMST) involvement with those without confirmatory evidence but who were suspected of involvement.
Design: A retrospective chart review was conducted of all patients referred for DMST involvement. Confirmed DMST patients were compared with suspected patients with regard to demographic, psychosocial, medical, and psychiatric variables.
Setting: A child protection program at a children's hospital where patients are evaluated by child abuse pediatricians in outpatient, emergency department, and inpatient settings.
Participants: Patients 11-17 years old referred for concern of DMST involvement between August 1, 2013 and July 1, 2016 were included. Patients self-disclosed, had reported with evidence, and/or had histories that placed them at high risk for DMST involvement.
Interventions and Main Outcome Measures: We collected data on demographic, psychosocial, medical, and psychiatric variables from the medical records of patients referred for evaluation.
Results: A total of 67 patients were included. No statistically significant differences were identified between the confirmed and suspected groups.
Conclusion: Our preliminary data showed that confirmed and suspected patients presented with similar and high rates of concerning medical and psychosocial issues; therefore, medical providers should evaluate and treat all patients referred for DMST. Similar treatment includes referrals for psychological/substance abuse interventions, safety planning, and collaboration with a multidisciplinary team.
Key Words: Domestic minor sex trafficking, DMST, Sexual abuse, Victim, Suspected

Introduction

Domestic minor sex trafficking (DMST) is the sexual exploitation of United States citizens or legal residents victimized on US territory.[1] To be considered a victim, force, fraud, coercion, or deception is not required.[1] Because of the challenge of victim identification, accurate statistics on the incidence and prevalence of this issue are unknown.[2]

Recent empirical research has identified factors that make youth more susceptible to DMST engagement on an individual, relationship, community, and societal level. Children with histories of maltreatment (eg, sexual abuse), experience dysfunctional home environments (eg, parental substance abuse), and have a history of child protective services involvement are at increased risk.[2,3] Moreover, youth who use/abuse substances, identify as lesbian, gay, bisexual, transgender, or queer, engage in runaway behavior, are in group homes, and/or experience homelessness are also vulnerable to DMST.[2,3] Involvement in DMST places an adolescent at risk for acute and chronic physical and mental health consequences due to the sexual, physical, and emotional abuse they have experienced.[2,3] Existing studies indicate that victims experience subsequent traumatic injuries, substance abuse, malnutrition, untreated chronic medical conditions, psychological issues (eg, depression, self-destructive behaviors), and engage in unsafe sexual practices (eg, exposure to sexually transmitted infections [STIs], lack of contraceptive use).[2–5]

As a result of these significant risk factors and consequences, trafficked patients present frequently for medical and psychiatric evaluations.[4] Varma and colleagues documented that 42% of sex-trafficked youth had contact with health care professionals within the past 2 months,[6] and Lederer and Wetzel reported that 88% of adult and adolescent victims sought medical care at some point during their period of exploitation.[4] Screening for sex trafficking should be completed in a variety of health care settings, because adolescents present in multiple contexts (eg, emergency department, adolescent health clinic). A standardized set of 6 screening questions has been established by Greenbaum and colleagues to assist in victim identification in high-risk adolescent populations.[7] Although professionals in various settings might have opportunities for screening, prevention, and intervention, survey studies have shown that many providers have limited knowledge, confidence, training, and awareness of DMST.[8,9]

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Growing literature has identified indicators of DMST engagement to assist with identification and screening efforts.[3,6,7,10] However, previous research has grouped together patients with confirmatory evidence of involvement with patients highly suspected of involvement, precluding potential identifying characteristics specific to these 2 subgroups.[6,10] Moreover, studies have examined victims with confirmed involvement through disclosure and/or evidence, omitting highly vulnerable youth who present without confirmation, but who are suspected of DMST involvement.[11–13] Greenbaum et al reported that patients with confirmatory evidence of sex trafficking differed from patients with allegations of acute sexual abuse/assault with regard to reproductive history, high-risk behavior, STIs, and histories of violence.[7] Analysis is needed to understand a highly vulnerable subset of patients with suspicion raised for DMST, thereby informing research (eg, helping define the patient population) and clinical practice (eg, clinical interventions, prevention, screening).

To define this complex patient population, the objective of the current study was to compare characteristics of patients with confirmatory evidence (eg, disclosure, found by law enforcement) of DMST involvement with those without confirmatory evidence but who were suspected/high risk. These preliminary data might inform a conceptualization of these youth by distinguishing 2 subgroups of patients, and assist in developing standardized questions for evaluating suspected patients and developing prevention strategies in the medical setting.

Materials and Methods

The hospital's institutional review board approved all research protocols. Expanding upon a data set from previous research conducted by Goldberg et al,[10] in the current study we examined patients referred for concern of DMST involvement. Medical records of patients referred to a child protection clinic at our state's only pediatric hospital and level 1 trauma center were retrospectively reviewed.

Inclusion criteria were all patients 11-17 years old referred for concern of DMST involvement between August 1, 2013 and July 1, 2016. Medical records were reviewed from the period of 1 year before and including their initial evaluation for DMST involvement. Goldberg and colleagues previously identified criteria for classifying patients who presented for concern of DMST involvement into confirmed or suspected,[10] which was used in the current study.

Study data were collected and managed using Research Electronic Data Capture (REDCap).

REDCap is a free, secure, Web-based application designed to support data capture for research studies, and was used to develop a database of patients included in this study.[14] Variables were selected from a comprehensive literature review of risk factors and consequences associated with DMST involvement.[2,3,6] Additionally, variables were on the basis of questions routinely asked of all patients evaluated for DMST involvement and developed from clinical practice (eg,. drug use, mental health histories). We also have a set of questions we routinely ask patients about their knowledge of and involvement in DMST. Questions and answers related specifically to DMST are incorporated into patients' medical charts. Historic variables were defined as patient characteristics documented before their initial evaluation for DMST; charts were examined until a year before their initial evaluation date for DMST. Current variables were classified as patient characteristics documented at the initial evaluation for DMST. Variables were categorized as positive on the basis of physician documentation and lab values, regardless of severity. For example, patients were documented with substance use regardless of substance type or frequency of use.

Characteristics of confirmed DMST patients were compared with suspected DMST patients using bivariate analyses, with χ^2 tests when appropriate. A P value of $< .05$ was considered statistically significant. Exploratory analyses were also conducted using multivariable logistic regression through STATA (Version 11.2, StataCorp, College Station, TX).

Results

A total of 67 patients were included. Figure 1 depicts the status of DMST involvement at the initial evaluation visit. Half of our cohort (34/67; 51%) were categorized as confirmed victims; of these patients, most were found with evidence of involvement (21/34; 62%), and 13/34, or 38%, self-disclosed their involvement in DMST. Additionally, half of our patients (33/67; 49%) were suspected, and therefore presented without evidence but had concerns highly suggestive of DMST involvement. Patients were referred for suspected involvement if they had been solicited to engage in DMST but reportedly refused (11/33; 33%). Patients who

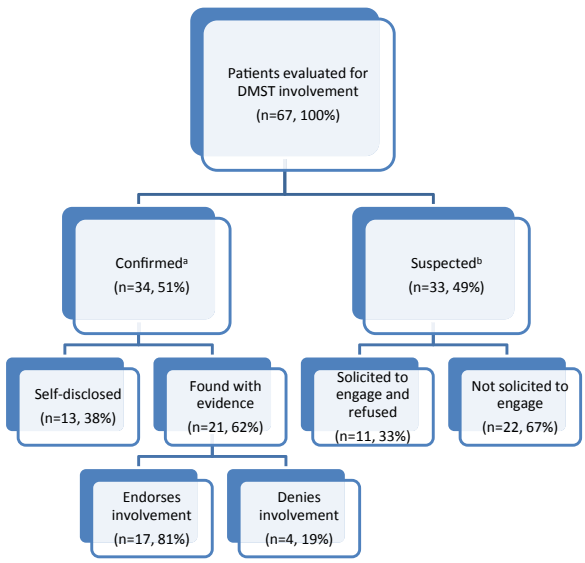

Fig. 1. Categorization of patient involvement in domestic minor sex trafficking (DMST) at initial evaluation. * Patients were categorized as confirmed DMST victims if they disclosed their involvement to a medical professional and/or if evidence that indicated involvement was provided either at the beginning or end of their evaluation (eg, law enforcement sting operations, pictures posted on Backpage.com). † Patients were categorized as suspected of involvement if they had significant concerns highly suggestive of DMST: had friends who were victimized, had been solicited to engage, and/or had histories (eg, frequent running away from home and returning with a change in appearance and/or large sum of money) that placed them at high risk.

Table 1
Demographic Characteristics of Patients

Characteristic	Suspected		Confirmed		*P*
	n	%	n	%	
Age, years					
11-14	10	63	6	38	
15-17	23	45	28	55	
Total	33		34		.224
Race					
White	17	52	16	49	
Black	12	48	13	52	
Other	4	44	5	56	
Total	33		34		1.000
Accompanied to referral visit					
Parent	19	58	18	52	
Group Home	7	21	4	12	
Child Welfare	13	65	9	56	
Police	10	30	17	50	
Total	33		33		.197
Type of insurance					
Public	29	54	25	46	
Private	4	44	5	56	
Uninsured	0	0	3	100	
Total	33		33		.182
Lives at					
Home	16	59	19	68	
Group/foster home	11	41	9	32	
Total	27		34		.508
Lives with					
Parent/guardian	19	45	23	55	
Group home	14	56	11	44	
Total	33		34		.394

Values that do not total 33 for suspected patients and 34 for confirmed patients are the result of missing data, and were not included in the analyses.

were reportedly never asked to engage had a combination of high risk factors indicative of potential involvement (22/33; 67%). For instance, a suspected patient could be referred for frequent running away and substance use accompanied by returning with a change in appearance and/or large sums of money.

Bivariate analyses, comparing patients with confirmatory evidence with those suspected of involvement, showed no statistically significant differences related to the variables in Tables 1–3 (all *P* values $> .05$). Table 1 shows the demographic characteristics of all patients referred for DMST involvement. Most were female (98%) and the average age was 15.5 years old.

Confirmed patients presented to their initial evaluation for DMST with the police more often than suspected patients (50% vs 30%, respectively), and approximately half of confirmed and suspected patients were accompanied by a parent (52% vs 58%). Moreover, more than half of confirmed and suspected patients lived at home at their initial referral for DMST involvement (68% vs 59%).

Social-environmental risk factors of patients are described in Table 2. Confirmed patients less often reported knowing a friend involved in or suspected of DMST involvement than suspected patients (27% vs 42%) and less commonly had a history of domestic violence exposure (20% vs 32%). Confirmed and suspected patients had high rates of other variables, such as substance use, ranging in severity (eg, occasional marijuana use, substance abuse;

Table 2
Social-Environmental Variables of Patients

Variable	Suspected		Confirmed		*P*
	n	%	n	%	
Friend involved or suspected of DMST					
Yes	14	42	9	27	.169
Total	33		33		
Alcohol/substance use					
Yes	29	88	30	88	.964
Total	33		34		
Group home/in CPS custody					
Yes	17	52	15	44	.544
Total	33		34		
Runaway					
Yes	23	70	21	62	.494
Total	33		34		
Exposure to child maltreatment*					
Yes	28	85	30	88	.684
Total	33		34		
Sexual abuse					
Yes	18	64	17	57	.710
Total	28		30		
Physical abuse					
Yes	9	32	9	30	.941
Total	28		30		
Parental substance abuse					
Yes	13	46	19	63	.177
Total	28		30		
Neglect					
Yes	9	32	9	30	.941
Total	28		30		
Exposure to domestic violence					
Yes	9	32	6	20	.345
Total	28		30		

CPS, child protective services; DMST, domestic minor sex trafficking.
* Values that do not total 33 for suspected patients and 34 for confirmed patients are the result of missing data, and were not included in the analyses.

Table 3
Medical/Psychiatric Variables of Patients 1 Year Before Referral for DMST

Variable	Suspected		Confirmed		*P*
	n	%	n	%	
STIs detected					.093
0	27	85	22	65	
≥1	5	16	12	35	
Total	32		34		
Psychiatric diagnosis					.304
Yes	26	79	23	68	
Total	33		34		
Suicidal ideation					
Yes	20	61	22	65	.729
Total	33		34		
Self-injurious behavior					
Yes	18	55	15	44	.393
Total	33		34		

DMST, domestic minor sex trafficking; STI, sexually transmitted infection.

88% vs 88%), group home/child protective services custody (44% vs 52%), and runaway behavior (62% vs 70%).

Historic medical and psychiatric variables of patients are reported in Table 3. Confirmed and suspected patients had similar documented suicidal ideation (65% vs 61%), self-injurious behaviors (eg, cutting, burning; 44% vs 55%), and psychiatric diagnoses (68% vs 79%).

Confirmed patients more commonly had 1 or more historically detected STIs (35%) compared with the suspected group (16%).

The medical and psychiatric features of patients at the time of their initial evaluation for DMST are presented in Table 4. Confirmed patients, less often than suspected patients, reported suicidal ideation (12% vs 27%) and self-injurious behaviors (6% vs 10%). Slightly less than 30% of both patient groups had at least 1 STI detected during their initial evaluation. Fifty-six percent of confirmed patients had a psychiatric admission at the time of their initial evaluation for DMST vs 44% of suspected patients. No differences were statistically significant with regard to all variables.

Discussion

Recent empirical research has identified possible indicators of involvement in DMST[2–7,10]; these data do not distinguish patients who are recognized as suspected from patients confirmed of DMST involvement. Research is needed to specifically describe the characteristics of youth who are suspected of involvement, because these are a highly vulnerable group of patients who need to be screened, rescreened, and provided appropriate prevention and interventions. Barron et al reported that in a survey of 109 Rhode Island pediatric attendings, 83% reported having 0 hours of training on sex trafficking and more than 80% stated insufficient training and inadequate experience as barriers to treating patients.[9] Moreover, in a 2015 study by Titchen and colleagues, 80.6% of attendings reported the importance of having education on human trafficking.[8] Beck et al reported that 63% of attendings never received training on identifying sex trafficking victims, and the lack of training was a reported barrier to identification of victims for 34% of health care professionals.[15] The current investigation sought to provide professionals, who might examine youth referred for involvement (eg, child abuse pediatricians, adolescent medicine, psychiatrists), a more detailed understanding of patient risk factors and medical needs. Our preliminary data begin to suggest that the 2 groups are similar with regard to demographic, psychosocial, medical, and psychiatric features.

Table 4
Medical/Psychiatric Variables of Patients During Their Referral for DMST

Variable	Suspected		Confirmed		*P*
	n	%	n	%	
STIs detected					.908
0	23	72	24	71	
≥1	9	28	10	29	
Total	32		34		
Psychiatric admission					.633
Yes	8	44	10	56	
Total					
Suicidal ideation					.109
Yes	9	27	4	12	
Total	33		34		
Self-injurious behavior					.617
Yes	3	10	2	6	
Total	33		34		

DMST, domestic minor sex trafficking; STI, sexually transmitted infection.

Because of the complexity involved in identification, it is notable that half of our cohort was identified during their initial evaluation (51%; 34/67). Our patients self-disclosed (38%; 13/34) despite potential obstacles like fear of traffickers and authority figures, shame, and aversion to returning to a group home.[10] Physicians can create a safe environment for disclosure through developing a nonjudgemental approach with the patient's health and safety as their priority. Of the 34 confirmed patients, more than half (62%; 21/34) were referred to our clinic by law enforcement with evidence of involvement (Backpage.com, sting operation). Additionally, more than half of confirmed patients were accompanied by child protective services for their evaluation of DMST.

Patient identification is facilitated by collaboration between a team of professionals who have knowledge of DMST and youth's multifaceted needs.

Further, half of our cohort was indicated as suspected victims (49%; 33/67) because of characteristics suggestive of DMST involvement but lacking evidence or patient disclosure. Patients who reported being asked to engage in DMST but denied involvement (33%; 11/67) are at a minimum being exposed to the concept of DMST. Clinical experience suggests that talking with youth about DMST by starting with a general discussion and then asking increasingly proximal questions might decrease discomfort, shame, and guilt for patients. Goldberg and colleagues recently discussed that if the patient knows about sex trafficking but denies personal involvement, there is an opportunity to provide early, preventive education about the consequences of involvement.[16] Engaging the patient in a discussion about sex trafficking, which is potentially viewed by the patient as a stigmatizing and intimidating topic, establishes that the clinician is a safe clinical resource for future discussion. To help facilitate prevention, providers should carefully document these conversations in patients' medical records, flag

concerning patient responses, and raise the topic at a later visit. In high-risk medical settings, a 6-item validated screening tool for sex trafficking should be used.[7] Providers should also screen for risk factors (eg, mental health, substance use) and address these concerns through interventions such as trauma-informed therapy and substance abuse treatment.

Youth with histories of maltreatment, impaired support systems, socioeconomic disadvantage, risk-taking behaviors, and mental health issues are at increased risk for DMST.[2–7,10] In our cohort, no significant differences of abuse histories were found between the confirmed and suspected groups. Previous research has identified similar and high rates of familial dysfunction, alcohol or substance use, and mental health problems in high-risk sexual abuse and confirmed DMST groups.[6,7] The literature has supported the notion that patients who present with these concerning characteristics should be screened for sex trafficking involvement; likewise, patients who present with confirmed DMST involvement should also be screened for other high-risk behaviors (eg, substance abuse).

The generalizability of these data is limited because of the small sample, single data collection site, and inclusion only of patients who presented for medical attention. Moreover, our sample specifically constitutes patients who presented for the concern of DMST; thus, these data might not reflect patients who do not present for medical attention and are not identified as at-risk for DMST involvement. Because of the limitations of our retrospective design, we were unable to report on the severity of symptoms (eg, duration and type of substance use), and there were missing variables in some medical charts reviewed. Statistical nonsignificance could be the result of being underpowered. Studies with larger samples should examine similarities and differences between patient involvement statuses and investigate whether involvement changes upon subsequent medical visits after intervention.

Our preliminary data showed that confirmed and suspected patients presented with similar and high rates of concerning medical and psychosocial issues. Medical providers have the opportunity to screen for risk factors of DMST when adolescent patients present for medical care in a variety of clinical settings (ie, outpatient clinics, inpatients units, emergency departments). Screening will help identify patients who might benefit from referrals to relevant specialty evaluations, regardless of suspicion for DMST. Providers should review any services these patients are receiving, and subsequently make referrals for interventions (eg, psychological/substance abuse) as needed. Our data begin to suggest that when a patient does not disclose involvement or present with evidence, he/she should still be provided mental health-related referrals, safety planning, and collaboration with a multidisciplinary team of professionals who can care for their multifaceted needs. Future longitudinal research is needed to determine whether a parallel approach for these subpopulations will assist in prevention efforts; secondary prevention for suspected youth who might not yet be involved, and tertiary prevention for revictimization for those with confirmed DMST involvement.

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