Original Study

Domestic Sex Trafficking of Minors: Medical Student and Physician Awareness

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A B S T R A C T

Study Objective: Our aim was to assess: (1) medical trainee and practicing physician awareness about domestic sex trafficking of minors; and (2) whether respondents believe that awareness of trafficking is important to their practice.
Design and Setting: We designed an anonymous electronic survey, and a convenience sample was collected from June through October 2013.
Participants: Voluntary participants were 1648 medical students, residents, and practicing physicians throughout the United States.
Interventions and Main Outcome Measures: Data were analyzed for correlations between study cohort characteristics and: (1) agreement with the statement: "knowing about sex trafficking in my state is important to my profession"; (2) knowledge of national statistics regarding the sex trafficking of minors; and (3) knowledge of appropriate responses to encountering a trafficked victim.
Results: More practicing physicians than residents or medical students: (1) agreed or strongly agreed that knowledge about human trafficking was important to their practice (80.6%, 71.1%, and 69.2%, respectively; $P = .0008$); (2) correctly estimated the number of US trafficked youth according to the US Department of State data (16.1%, 11.7%, and 7.9%, respectively; $P = .0011$); and (3) were more likely to report an appropriate response to a trafficked victim (40.4%, 20.4%, and 8.9%, respectively; $P = .0001$).
Conclusion: Although most medical trainees and physicians place importance on knowing about human trafficking, they lack knowledge about the scope of the problem, and most would not know where to turn if they encountered a trafficking victim. There exists a need for standardized trafficking education for physicians, residents, and medical students.
Key Words: Human trafficking, Sex trafficking, Sexual abuse, Medical education, Commercial sexual exploitation of children, Child prostitution

Introduction

The commercial sexual exploitation of minors represents a significant domestic problem with cases identified in all 50 states and the District of Columbia. The US Congress in 2000 defined human sex trafficking as "the recruitment, harboring, transportation, provision, or obtaining of a person for the purpose of a commercial sex act, in which the commercial sex act is induced by force, fraud, or coercion or in which the person induced to perform such act has not attained 18 years of age."[1] Although there exist limited accurate data concerning the incidence or prevalence of trafficking,[2] modest estimates suggest that 100,000 to 300,000 minors in the United States are at risk for being trafficked annually.[3–6] The Institute of Medicine has advocated for prevention and has addressed the trafficking problem via increased public awareness, strengthened and implementation of laws, and conduction of trafficking research.[7,8] In 2015, the American Academy of Pediatrics (AAP) called for pediatricians to be aware of children who might be victims of commercial sexual exploitation and human sex trafficking and to improve history-taking, medical evaluation, and referrals.[9] Although the average age of entry into sex work is between 15 and 22 years, most adolescent female sex trafficking victims in the United States are recruited at 12 to 14 years old.[3,10–12] Of transnational victims worldwide, 50% are younger than the age of 18 years, and more than 80% are female.[4,13–15] Risk factors include youth homelessness; more than 10% of US minors living in shelters and 28% of US minors living on the streets report exchanging sex for drugs or money.[16] Data regarding the beliefs, knowledge, or training of physicians regarding sex trafficking are scant, and health professional programs to address this topic are few.[17] Consistent with recommendations by the Institute of Medicine,[7] the objective of this study was to assess medical trainee and practicing physician knowledge of child sex trafficking and whether physicians at all levels of training regarded awareness about child sex trafficking as important to their

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practice. We hypothesized that physicians at all levels of training would value knowing about child sex trafficking but would be poorly informed about the scope of the problem, warning signs, and appropriate clinical response to victims.

Materials and Methods

Sample and Data Collection

We conducted an anonymous survey among a convenience sample of practicing physicians, fellows, residents, and medical students. The survey content, methodology of distribution, and all procedures were approved by the Nemours/A.I. duPont Hospital for Children institutional review board. We developed a survey modeled on a previously established survey by Drs Aimee Grace and Kristin Collins of Stanford University.[18] We used the Research Electronic Data Capture, a free, secure, Web-based application to create an electronic 20-item survey that consisted of multiple-choice, true/false, free answer, and Likert scale-style questions. The survey was distributed from June through October 2013 via e-mail to all pediatric residency programs in the United States via the electronic mailing lists of the Association of Pediatric Program Directors (APPD), and to medical students and physicians from various medical specialties via the lists of the American Medical Women's Association (AMWA) for its representation of multiple medical and surgical disciplines and inclusion of medical students and residents, and the author's association with AMWA; and Nemours Children's Health System, and cooperating chapters (DC, CA#3, MD, LA, and KY) of the AAP for their reach to pediatricians and pediatric trainees.

Survey Items

Eleven questions addressed demographic characteristics, including: type of physician/trainee, years and location of practice, type of practice, state, practice environment, gender, race, and sexual orientation. One question on previous personal experience with sexual harassment and/or abuse was included. One item was included on how important knowing about human trafficking is to the respondent's practice. Three items concerned general awareness of trafficking in the respondent's state(s), knowledge of factors that cause suspicion for trafficking, and professional experience with victims of sexual violence and human trafficking. Factors for suspicion of trafficking were presented as a drop-down list, but the question also allowed for free answer. Three items were used to assess knowledge of national trafficking statistics compiled by the United States Department of State and are widely available on a variety of federal government and nongovernmental organization Web sites:

- 100,000 US minors are at risk for trafficking each year,[4,13]
- 28% of US minors younger than 18 years of age who live on the streets reported exchanging sex for drugs or money,[16] and
- 10% of US minors younger than the age of 18 years who live in shelters reported exchanging sex for drugs or money.[16]

To gauge clinical knowledge about how to care for a trafficking victim, we asked respondents to respond to the statement “I know whom to call if I encounter a potential victim of human trafficking.” A “yes” response would prompt a drop-down list of a variety of possible actions: some correct and possibly helpful (eg, call (888) 373-7888 or consult a social worker), and others incorrect and possibly harmful (eg, tell the accompanying adult). A “no” response would move the responder to the next question.

Analyses

Power analysis for a descriptive study determined that 384 respondents per group were needed to represent each of the following US populations: 835,000 practicing physicians, 83,000 medical students, and 100,000 residents. To represent approximately 7500 pediatric residents nationally, 367 pediatric resident participants were needed. We calculated χ^2 analyses and odds ratios (ORs) to test relationships between participant characteristics and: (1) agreement that knowing about sex trafficking is important to physician practice; (2) knowledge of national sex trafficking statistics; and (3) knowledge of whom to call on encountering a victim of human trafficking. Significance for all analyses was set at $P < .05$ and confidence intervals (CIs) at 95%.

Results

Of 1708 respondents, 1694 (99.2%) completed the survey, and 1648 were included in the analysis; the missing responses from the 14 participants who did not complete the survey were assumed to be missing at random (Fig. 1).

Demographic information on the respondents revealed that 386 (22.8%) were practicing physicians, 92 (5.4%) were fellows, 744 (44.0%) were residents (512 [68.8%] pediatric), and 426 (25.1%) were medical students (Table 1). Forty-six (2.7%) “other” respondents included nurses, physician assistants, physical therapists, premedical students, social workers, speech therapists, and researchers; these were excluded from the analysis, because we chose to focus on responses solely from physicians at various stages of training. We approximated the response rate for pediatric residents as 6%, calculated by dividing the number of pediatric residents who completed the survey by the total number of pediatric residents in the United States who received the survey via the APPD listserv (approximately 8500). The response rate of 10% for the remaining respondents was estimated from the number of completed surveys by respondents who were not pediatric residents divided by the number of individuals on the distribution lists of AMWA (9000), Nemours Children's Health System physicians (425), and participating AAP chapters (2500). Survey respondents represented a variety of specialties, including pediatrics (44%), obstetrics and gynecology (3%), surgery (3%), psychiatry (8%), internal medicine (11%),