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Implementing an Interprofessional Human Trafficking Protocol in the Emergency Department: An Evidence-Based Quality Improvement Initiative

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Purpose

- To develop, deliver, and evaluate an interprofessional education program on human trafficking (HT) screening, intervention and referral, and implement an emergency department HT protocol utilizing standards developed by the NHTRC and TJC
- Human trafficking is a type of modern-day slavery and a significant global public health issue with over 40 million victims globally
- The health effects of HT include physical, reproductive, developmental, comprehensive and behavioral
- HT victims present with common "red flag" indicators including environmental, situational, verbal, emotional, psychological, physical, medical and trauma

Evidence-Based Initiative



- Effectiveness of HT Screening and Protocols
 - Victims can be identified using HT screening tools
 - Providers can intervene by interviewing and caring for HT victims
 - Providers can respond by providing interventions and referrals for HT victims
 - The emergency department setting can provide a therapeutic window of opportunity to recognize, treat and refer HT victims
- Theoretical Model
 - Making Sure Grounded Theory of Watching Over and Surveillance
 - RE-AIM: Reach, Efficacy, Adoption, Implementation, Maintenance
- Site Needs/Feasibility
 - Organizational needs assessment revealed practice gap with no current routine HT screening, intervention and referral protocol
 - Key stakeholder support and resources

Project Plan

- Objectives:
 - Revise the electronic health record (EHR) to include HT red flags, screening tool/protocol and documentation for ED staff
 - Develop and implement an interprofessional HT educational module for ED nurses and social workers
 - Evaluate learning outcomes via pretest/posttest and program evaluation
 - Evaluate documentation in the EHR for HT screening completeness and protocol adherence
- Project Type:
 - QI initiative to measure effects of educational module and EHR documentation protocol regarding
 - Setting: 247 bed Community hospital: Level II trauma center with 24,000 visits annually
 - Participants: (single convenience sample, non-randomized cohort)
 - ED nurses and social workers
 - ED patients meeting "red flag" item on HT screening tool
- Sources of Data:
 - HT screening tool embedded into EHR
 - 10-question multiple choice HT knowledge pretest/posttest reviewed by content experts for content validity
 - 10-question Likert scale survey rating perceptions of achievement of objectives and teaching effectiveness
 - Nurse/Social worker EHR documentation (HT victim identification, intervention and referral)
- Budget:
 - EHR revision, protocol, educational module, tests, evaluation development, and statistician work
- Project Timeline:
 - 2019 Educational module/protocol launch; 2020 data collection/evaluation
- Ethics/Human Subjects Protection:
 - Loyola IRB Exempt

Practice Implications

- The team of ED nurses and social workers may be the first & only health care providers to recognize HT victims, intervene and provide referral resources
- Developing/implementing an educational module for ED nurses & social workers is an efficient & effective mechanism to provide education about HT
- Revising the EHR to include a HT protocol provides a standard mechanism for documentation
- Emergency care personnel play a vital role in recognizing and responding to the needs of victims of human trafficking by ensuring their immediate safety and reducing the possibility of further harm

References

Armstrong, S. (2017). Instruments to identify commercially sexually exploited children: Feasibility of use in an emergency department setting. *Pediatric Emergency Care, 33*(12), 794-799. doi:10.1097/PEC.0000000000001020

Brunovskis, A., & Surtees, R. (2013). Coming home: Challenges in family reintegration for trafficked women. *Qualitative Social Work, 12* (4), 454-472. doi:10.1177/1473325011435257

Chisolm-Straker, M., Richardson, L. D. (2012). Combating slavery in the 21st century: the role of emergency medicine. *Journal of Health Care for the Poor and Underserved, 23*, 980-987.

Choi, K. R. (2015). Risk factors for domestic minor sex trafficking in the united states: A literature review. *Journal of Forensic Nursing, 11*(2), 66-76. doi:10.1097/JFN.0000000000000072

Clawson, H. J., Dutch, N., Solomon, A., Grace, L.G. (2017). Human trafficking into and within the United States: A review of the literature. U.S. Department of Health and Human Services, <https://aspe.hhs.gov/report/human-trafficking-and-within-united-states-review-literature>

Cole, J. (2018). Service providers' perspectives on sex trafficking of male minors: comparing background and trafficking situations of male and female victims. *Child and Adolescent Social Work Journal, https://doi.org/10.1007/s10560-018-0530-z*

Confronting commercial sexual exploitation and sex trafficking of minors in the united states. (2013). IOM National Academies: www.nationalacademies.org/hmd/Reports/2013/Confronting-Commercial-Sexual-Exploitation-And-Sex-Trafficking-Of-Minors-In-The-United-States

Countryman-Roswurm, K., & Bolin, B. (2014). Domestic minor sex trafficking: Assessing and reducing risk. *Child and Adolescent Social Work Journal, 31*(6), 521-538. doi:10.1007/s10560-014-0336-6

Egyud, A., Stephens, K., Swanson-Bierman, B., DiCuccio, M., & Whiteman, K. (2017). Implementation of human trafficking education and treatment algorithm in the emergency department. *Journal of Emergency Nursing, 43*(6), 526. doi:10.1016/j.jen.2017.01.008

Glasgow, R. E., Vogt, T., Boles, S. (1999). Evaluating the public health impact of health promotion intervention: the RE-AIM framework. *American Journal of Public Health, 89*(9).

Grace, A. M., Lippert, S., Collins, K., et al. (2014). Educating health care professionals on human trafficking. *Pediatric Emergency Care, 30*(12), 856-861.

Greenbaum, J. & Crawford-Jakubiak, J. (2015). Child sex trafficking and commercial sexual exploitation: Health care needs of victims. *Pediatrics, 135*(3), 566-574. doi:10.1542/peds.2014-4138.

Greenbaum, J. (2016). Identifying victims of human trafficking in the emergency department. *Clinical Pediatric Emergency Medicine, 17*(4), 241-248.

Massachusetts General Hospital Human Trafficking Initiative: Guidebook on identification, assessment, and response in the healthcare setting (2018). Retrieved from www.massmed.org/humantrafficking

Nadejda B., Morgan J. & Coverdale, J. (2016). A Pathway to freedom: An evaluation of screening tools for the identification of trafficking victims. *Academic Psychiatry, 40*, 124-128.

National center for missing and exploited children. Retrieved from www.missingkids.com/home

National human trafficking hotline. (2016). Retrieved from <https://humantraffickinghotline.org/state/illinois>

Polaris project. (2018). Retrieved from www.polarisproject.org

Powell, C., Dickens, K. & Stoklosa, H. (2017). Training US health care professionals on human trafficking: Where do we go from here? (221), 1-11.

Reid, J. A., Piquero, A. R., (2014). Age-graded risks for commercial sexual exploitation of male and female youth. *Journal of Interpersonal Violence, 29*(9), 1747-1777.

Schmidt, L. A. (2010). Making sure Registered Nurses watching over their patients. *Nursing Research, 59*(6), 400-406.

Warf, C., Clark, L.F., Desai, M., Rabinovitz, S., Golnaz, A., Calvo, R., & Hoffmann, J. (2013). Coming of age on the streets: Survival sex among homeless young women in Hollywood. *Journal of Adolescence, 36*(6), 1205-1213. doi:10.1016/j.adolescence. 2013.08.013

Evaluation

- Educational Module Evaluation:
 - 10-multiple choice questions based on educational module content
 - Expert panel for content validity
 - Internal consistency measured using Chronbach's alpha
 - Paired sample t-test for differences between pretest/posttest scores
- Program Evaluation
 - Nonparametric descriptive statistics
 - Likert scale rating achievement of objectives/teaching effectiveness
- HT Protocol/Documentation evaluation
 - Nonparametric descriptive statistics
 - Compliance Monitoring
 - Linked to performance evaluation; work-time allowance; CE credit
 - Stakeholder Support/Sustainability:
 - Team support; HT protocol in EHR; champions identified; online training

Results

Pretest/Posttest Comparison & Program Evaluation

Validity & Reliability
I-CVI/Ave of 1.00 per expert panel
Internal Consistency: Cronbach's alpha coefficient 0.96

Human Trafficking Exam Scores Compared

Pre-Test Mean (95% CI)	Post-Test Mean (95% CI)	Mean Difference † (95% CI)	p
77.06 (71.66, 82.46)	93.53 (91.06, 96.00)	16.47 (11.18, 21.76)	< 0.01 *

* Significant at $\alpha = 0.05$ level
† Mean Difference = (Post-Test Mean - Pre-Test Mean)

Program Evaluation

84.5% Nurses 100% SW 88%-ability to identify @ risk population.
91%-describe health effects of HT
82% & 89% education met personal/professional expectations & would apply to their practice.

Patient Characteristics for Red Flags and Risks

Red Flags Exhibited by Gender

Red Flags	Male	Female
Awareness	10%	20%
Signs of abuse	10%	20%
Exhibits fear	0	30% only
Signs of control	0	0

Diagnostic Risks by Gender

Gender	Percentage Diagnosed
Females	
Alcohol intoxication without complication	30%
HIV	10%
Sexual assault (SANE nurse exam done)	10%
Males	
Alcohol intoxication acute Pancreatitis	10%
Alcohol withdrawal with delirium	10%
Altered mental status with intoxication	10%
Heroin Addiction	10%
Chlamydia, Gonorrhea	10%

Protocol EMR Data

N=16,607 total ED pts. reviewed 9/19->3/20

N=16,562 patients - for red flags on HT screening

N=45 patients + red flags on HT screening

N=10 sample selected for further analysis on inclusion criteria of diagnosis or chief complaint as risk factor for human trafficking.

On further analysis of age, gender, ethnicity & no further provider documentation indicated patient as possible HT victim. ZERO human trafficking victims were found

Nurses' & Social Worker's Documentation

Nursing Documentation	N	%
+ for red flags	45	.27%
Inclusion criteria	10	22.22%
Refer to SW	0	0
Pt disposition	discharged	100%

Social Worker Documentation	N	%
Patients need further Investigation	0	0
Referral for social services	0	0

Age Range 19-93
Ethnicity 1 Black, 2 Hispanic, 2 Non-Hispanic, 1 Other, 4 White