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The Impact of a Human Trafficking Educational Module on Nurse Practitioner Students Awareness, Knowledge, and Confidence in Responding to Human Trafficking

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**The Impact of a Human Trafficking Educational Module on Nurse Practitioner Students Awareness,
Knowledge, and Confidence in Responding to Human Trafficking**

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Abstract

Aim: The purpose of this study was to determine if a human trafficking education module increased master level nursing students' awareness, knowledge, and confidence in responding to human trafficking (HT) victims. **Background:** HT in the United States and worldwide is a growing problem. Millions of men, women, and children are victims of HT each year. Victims of human trafficking are often vulnerable due to several factors, including emotional problems, social instability, and economic difficulties. Studies have found up to 88% of victims of HT are seen by a healthcare provider during their captivity. Improving the awareness, knowledge, and confidence of healthcare providers on HT is one of the most important ways to intercede with this vulnerable population. **Method:** This quality improvement project utilized a pre-test/post-test and is a quasi-experimental study design. After IRB-approval, study participants were recruited from women's health, family, or psychiatric mental health Master of Science Nursing programs. This project utilized the logic model to develop an education module by the primary investigator guided by recommendations published by Heal Trafficking Education and Training Committee. Primary data was collected from the adapted PROTECT questionnaire. The questionnaire is a 5-point Likert and contains questions that are "true," "false," or "don't know." Demographic data is included in the questionnaire.

Analysis: Data analysis of pre- and post-tests used descriptive statistics by using a secure statistical software database.

Results: Results indicated that there was significant increase in awareness, knowledge, and confidence levels from pre-test to post-test of the participants

Implications: The AACN should specifically recommend the inclusion of HT education into undergraduate and graduate nursing curricula. Better screening, assessment, and response to victims of HT are key to interrupting the HT cycle and promoting improved psychosocial and physical health outcomes. DNP-prepared APRNs are in an ideal position to lead the effort to implement these tools.

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The Effect of an Educational Module on NP Student's Awareness, Knowledge, and Confidence in Responding to Human Trafficking

Human trafficking (HT) is a public health problem that is present in all 50 states. Healthcare providers have the unique opportunity to help identify and aid with victims (Panda et al., 2021). As a result of the hidden nature of the crime and unreported cases, it is difficult to determine the extent of HT as a healthcare problem. The adverse physical and mental health problems experienced as a result of being victims of HT are detrimental to their quality of life (Stoklosa et al., 2017). Current research shows that there is a lack of knowledge regarding HT by healthcare professionals (Berishaj et al., 2019; Grace et al., 2014; Sousou Coppola et al., 2019; Ramnauth et al., 2018). The number of victims that encountered health care professionals and were not identified ranges from 28%- 87.8% (Sousou Coppola et al., 2019; Grace et al., 2014). Identification of victims is crucial to increasing the opportunity for intervention. Studies indicate that education in HT improves the knowledge of healthcare providers and increases the likelihood of identification of HT victims (Berishaji et al., 2019; Grace et al., 2014; Sousou Coppola et al., 2019; Ramnauth et al., 2018). Although studies show improvement in identifying and referring victims of HT when provided education, many healthcare providers still lack the knowledge due to absence of education and policies by their employer. For healthcare workers to respond properly to the increasing numbers of victims from HT, an increase in education and knowledge is a critical step (Armstrong & Greenbaum, 2019; Greenbaum et al., 2018; Mumma et al., 2017).

Problem Statement

HT is defined as the use of force, fraud, or coercion to obtain some type of labor or commercial sex act and occurs worldwide and in every state of the United States, with an estimated 1.5 million victims identified in the United States alone (Department of Administrative Services, n.d.; U.S. Department of Homeland Security, 2021). HT has infiltrated both urban and rural areas. In 2020 the National Human Trafficking Hotline (2020) reported 955 contacts and 338 HT cases being reported in the

state of Georgia. According to Polaris (2018), 88% of trafficked survivors had accessed healthcare services during their period of being trafficked and went undetected. Currently the state of Georgia does not regulate anti-trafficking education to health care providers, nor does the state mandate health care providers to report suspected HT in patients that are 18 and over. Voluntary anti-trafficking training for continuing education is provided by The Georgia Institute on Healthcare and Human Trafficking (Jones Day, 2021). Therefore, there is a gap in practice of healthcare workers meeting the needs and identifying victims of HT. Currently, there is no educational module in the curriculum of nursing students enrolled in a Master of Science program. As future healthcare providers are unfamiliar with the topic of HT and thus do not know how to properly identify these victims, this shows to be a knowledge focused trigger for this DNP project.

Objectives and Aims

As the convergence of healthcare and HT becomes more widely recognized, more educational options for healthcare providers are becoming available. For this project, the PI developed and implemented a sustainable, educational training module relating to HT for masters level nurse practitioner students at an accredited nursing school in central Georgia to increase awareness, knowledge, and confidence in responding to HT. Long term aims for this project are for the module to be incorporated in to the university-wide curriculum for nursing students to help identify and refer HT victims in their future health care practices. The clinical questions that emerged were:

- Will providing an education module to masters level nursing students increase their awareness of HT?
- Will providing an education module to masters level nursing students increase their knowledge of HT?
- Will providing an education module to masters level nursing students increase their confidence in responding to HT?

The first objective was to complete a comprehensive and integrative literature review to search for evidence of HT education and nursing. Electronic searches were conducted in five databases, including Cumulative Index of Nursing and Allied Health Literature, MEDLINE, PsychINFO, The Cochrane Library, and Google Scholar. The search terms for all databases included human trafficking, human trafficking education, human trafficking health care education, human trafficking healthcare provider, and human trafficking screening. Boolean search words included *and* and *or* in multiple combinations for all search terms. Inclusion criteria consisted of peer-reviewed articles that were between the years of 2017-2021. The geographic location was limited to the United States and English language. Exclusion criteria consisted of non-English language articles, those that did not meet inclusion criteria, and Boolean terms *not* child abuse *or* labor trafficking. The framework for Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) was followed to report findings and is included in Appendix A.

The second objective was to create and execute an evidence-based, comprehensive training for masters level nurse practitioner students to increase their knowledge, awareness, and confidence regarding human trafficking. To complete this objective, key topics were chosen based on guideline recommendations for human trafficking training provided by a network of multidisciplinary professionals who are dedicated to ending human trafficking and supporting survivors from a health perspective. Next, the Logic Model was used as a guiding principle for the formal nursing education module.

The third and final objective was to request and evaluate feedback from participants on their perception of the education module for further improvement. There was an electronic post-education module survey to gather feedback about the module itself and applicability of the information to their clinical work.

By accomplishing these three objectives, it was hopeful that the primary goal of increasing awareness, knowledge, and confidence in responding to HT would be met.

Review of Literature

A limitation in the research identified by the review of literature is a lack of standardization of screening tools used to identify victims of human trafficking. The available research relied heavily on self-reporting descriptive data and research methodology utilized did not address non-response error. Available research naturally includes surveys and interviews of HT survivors or those who have provided care or services to survivors.

The extent of human trafficking as a healthcare problem is difficult to determine, partly due to differing language and terminology but mostly because of underreported cases. The prevalence and incidence of human trafficking cannot be accurately measured due to the hidden nature of the crime.

Health Complications

Survivors of HT report suffering from many different acute and chronic health problems, both physically and mentally. Problems often reported include depression, substance abuse disorders, chronic pain, anxiety, traumatic brain injury, post-traumatic stress disorder (PTSD), broken bones and other injuries due to violence, and sexually transmitted infections (Oram et al., 2016; Ross et al., 2015; Stoklosa et al., 2019). Traffickers use cruel violence and illegal substances to maintain control over their victims, demanding them to work in unsafe situations. A victim of human trafficking may also experience fatigue, exhaustion, malnutrition, unwanted pregnancy, forced abortions, irritable bowel syndrome (IBS), and other stress syndrome (Oram et al., 2016; Shandro et al., 2016). As a result of this magnitude of health problems several studies argue that healthcare providers should be viewed as first responders for HT (Armstrong, 2017; Bick, Howard, Oram & Zimmerman, 2017; Goldberg, Moore, Houch, Kapln, & Barron, 2017; Greenbaum, 2017; Mumma et al., 2017; Oram et al., 2016; Ross et al., 2015).

Unfortunately, evidenced-based practice in relationship to identifying and responding to HT in the healthcare setting has not been entirely established and validated.

Mental Health

Victims of HT clearly suffer tremendous trauma throughout their victimization. However, there is inadequate research on the psychiatric effects of trafficking. Research shows a high prevalence of mental health issues such as depression, anxiety, and PTSD among victims of HT, but the causative factors have not been properly studied (Nguyen et al., 2018). Research has identified the relationship between pre- trafficking involvements of violence among victims of HT and severe mental illnesses such as complex PTSD, dissociative disorders, schizophrenia, and psychotic disorders that necessitate more thorough care (Altun, Abas, Zimmerman, Howard, & Oram, 2017; Hopper & Gonzalez, 2018; Judge, Murphy, Hidalgo, & Macias- Konstantopoulos, 2018; Nguyen et al., 2017). It has been noted that previous abuse is a risk factor for future victimization and could be an indicator of a more traumatic response from the trafficked victim. Hopper and Gonzalez (2018) stated that survivors who identified as transgender suffer more PTSD and complex PTSD symptoms when compared to cisgender survivors. Further research is needed but primary findings show that a history of childhood abuse in a victim is predictive of severity of trauma-related mental health problems.

Human Trafficking and Healthcare Providers

Healthcare provider education and knowledge about human trafficking has been identified as key to appropriate screening and referrals. Surveys in studies showed 80-95% of healthcare providers reported they did not receive formal education or training (Ross et al., 2015; Stoklosa et al., 2017). Sousou Coppola (2019) found more than half the respondents (58.77%) did not have human trafficking education provided to them by their employer. Ramnauth et al., (2018) found after a survey of 166 nurses throughout the United States that 84% had not received any training in human trafficking. Of those 166 nurses, 12% had suspected human trafficking with only 8% reporting their suspicion,

emphasizing the lack of awareness and confidence among healthcare providers and proving a need for further education and training.

For healthcare workers to respond properly to the increasing numbers of victims from human trafficking, education is a critical step (Armstrong & Greenbaum, 2019; Greenbaum et al., 2018; Mumma et al., 2017). Providing educational intervention to healthcare providers is proven to increase level of knowledge and make providers more likely to address human trafficking (Berishaj et al., 2019; Donahue et al., 2019; Egyud et al., 2017; Fraley et al., 2019; Grace et al., 2014; Sousou Coppola et al., 2019). Five studies including a total of 1,243 healthcare providers found greater knowledge regarding human trafficking, greater comfort level in addressing human trafficking, and greater knowledge of how to screen for human trafficking after receiving education (Berishaj et al., 2019; Donahue et al., 2019; Egyud et al., 2017; Grace et al., 2014; Sousou Coppola et al., 2019). Fraley et al., (2019) reviewed seven articles that used surveys as the instrument that measured awareness, attitude, knowledge, and confidence. Four of these studies' posttests compared with pretest intervention group was ($p < .001$) with one study posttest compared with pretest ($p < .05$). These results once again show that after receiving HT education, awareness, knowledge, and confidence of healthcare providers had increased.

Screening Tools

Unsurprisingly, just as there is a lack of uniformity in healthcare provider education, there is also a lack of consistency in screening tools. The review of literature showed mostly meta-analyses of screening instruments, although two original research studies were found. One of the most recent meta-analysis revealed that only six screening tools that met inclusion criteria (Armstrong, 2017). The range of questions in these six instruments varied from six to 97 questions with only two reporting validity measurements (Armstrong, 2017).

Due to the lack of research related to children, Greenbaum et al., (2018) performed a cross-sectional study with the goal of identifying characteristics of commercial sexual exploitation of children

(CSEC) patients. Greenbaum et al., (2018) used a short screening tool across the U.S. at 16 different pediatric sites to identify victims in the healthcare setting. 810 youth were included in this study with an overall prevalence of child sex trafficking (CST) 11.1%. The screen had the ability to identify true positives 84.4% (75.28, 91.23), the capability to identify true negatives 57.50% (53.80,61.11), and a LR+ of 1.99% (1.76, 2.25) (Greenbaum et al., 2018). The six-item screen revealed moderately good sensitivity plus moderately specificity, with a high negative predictive value (Greenbaum, et al., 2018). This study shows a substantial rate of CST among youth coming to healthcare facilities (Greenbaum et al., 2018).

Due to the lack of research and need for additional screening tools, Mumma et al., (2017) completed a study that provided patients a 14-question survey as well as surveying the treating physician regarding their concern for the patient being a victim of human sex trafficking. Mumma et al., (2017) found that using the screening tool the sensitivity was better (100%, 95% CI [12%-74%]) than when the physician alone had concern (40%, 95% CI [12%-74%]) for the patient being a victim of human trafficking. This study proves that identifying victims of HT is increased through the use a screening tool.

The review of literature revealed several factors that influence healthcare providers' likeliness to screen for HT: 1) provider comfort level, 2) provider confidence level, and 3) exposure to education and training of the subject of HT (Berishaj et al., 2019; Donahue et al., 2019; Egyud et al., 2017; Grace et al., 2014; Sousou Coppola et al., 2019). Throughout the reviewed studies the lack of HT education of healthcare providers was prominent. The studies varied as far as different designs, different education provided, and different screening tools used, but the fact that healthcare providers lacked knowledge of HT and how to screen was consistent throughout. For healthcare workers to respond properly to the increasing numbers of victims from HT, education is a critical step (Armstrong & Greenbaum, 2019; Greenbaum et al., 2018; Mumma et al., 2017). Providing educational intervention to healthcare providers is proven to increase level of knowledge and make providers more likely to address human

trafficking (Berishaj et al., 2019; Donahue et al., 2019; Egyud et al., 2017; Fraley et al., 2019; Grace et al., 2014; Sousou Coppola et al., 2019).

Screening rates and what effects it

This review of literature revealed several factors that influence healthcare provider's likeliness to screen for human trafficking: 1) provider comfort level, 2) provider confidence level, and 3) exposure to education and training of the subject of human trafficking. Donahue et al., (2019) found that the 75 employees who participated in the survey and education were more likely to screen for patients after completing the online education module. Self-reported comfort levels increased from 4/10 to a 7/10 (Donahue et al., 2019). Egyud et al., (2017) found that education along with a treatment algorithm was an effective strategy to increase recognition and rescue with (n=99) 97% committed to changing practice. Ramnauth et al., (2018) found that an increase in both training and education among health care providers could increase the number of victims identified with 84% of healthcare providers (n=166) reported no training. Berishaj et al., (2019) found a greater confidence in nurses' abilities to identify trafficked victims and how to assist them after education. Grace et al., (2014) found that baseline ratings about importance of knowledge of human trafficking were high in both study groups. Self-rated knowledge of human trafficking ($p < .001$) percent rating as knowledgeable or very knowledgeable ($p < .001$) know who to call ($p < .005$) and recognition ($p < .003$). Sousou Coppola et al., (2019) found that health care providers who believed that human trafficking was a problem in the community are more likely to screen a patient ($p = .0064$). Sousou Coppola et al., (2019) studied the impact of attending a HT program on addressing the problem. A Chi-Square test showed a strong relationship with 56% addressed the issue all the time while only 36% did of those who did not attend a program ($p = 0.0049$) (Sousou Coppola et al., 2019).

Review of the literature suggests providing human trafficking education to all healthcare providers would result in greater awareness, knowledge, and confidence in identifying victims. With

growing advances in research related to HT in the healthcare setting, eventually recognizing and responding to HT will move from practice- informed to evidence- base.

Theoretical Model

The theoretical framework appropriate for the proposed project is the Logic Model (Appendix B). Logic models are an effective tool to support program planning, implementation, management, evaluation, and reporting (W.K. Kellogg Foundation, 2004). This model helped guide the program's intended impact and goals; the order of intended effects; which actions are to produce which effect; and where to concentrate outcome and process evaluations (W.K. Kellogg Foundation, 2004). Experts in the field agree that there is a link between the success of the program and the use of the logic model.

Project and Study Design

The design for this study was quality improvement quasi-experimental research study. It had an intervention but no randomization or control group. A pretest and posttest design were utilized to assess awareness, knowledge, and confidence of nursing students before and after completion of the HT awareness education module. An adapted version of the PROTECT questionnaire (Appendix F) was the evaluation tool used. The Logic Model was utilized and guided and organized the development of the self- designed education module.

An educational module was developed to educate students that was guided by recommendations published by HEAL Trafficking for essential education components for healthcare training (HEAL Trafficking Education and Training Committee, 2018). The education material included: 1) definition of human trafficking; 2) definition with examples of force, fraud, and coercion; 3) main types of human trafficking; 4) incidence and prevalence of human trafficking; 5) dynamics and examples of human trafficking; 6) behavioral and social determinants of human trafficking; 7) health impact of human trafficking; 8) identification and assessment of human trafficking; 9) response and follow-up; 10) collaboration with local, regional, and national resources; and, 11) engagement and leadership

opportunities. The education module was delivered over two hours and involved a video, voice guided power point, and a case study. The outline of the online education module is included in Appendix E.

Setting and Resources

The project was completed at an accredited nursing school located in middle Georgia. The approximate nurse practitioner nursing student population is 150 and represents only students that are enrolled in a Master of Science Nursing program.

Study population

Study participants were recruited from those who are enrolled in the women's health, family, or psychiatric mental health Master of Science Nursing program. The recruitment strategy included an invitation to the students by the PI. The invite was through the online classroom platform and explained the study and invitation for students to participate on the first day of class during the fall semester of 2022 (Appendix C). Also, a onetime email was sent out to all students seven days after the initial invitation as a reminder invitation to participate in the study. The time spent on the recruitment process was approximately 10 minutes. Inclusion criteria were all nursing students over 18 years of age enrolled in a Master of Science Nursing program (women's health, family, or psychiatric) during fall semester 2022. Exclusion criteria were participants who are not enrolled in a Master of Science Nursing program (women's health, family, or psychiatric) or under the age of 18 years of age.

Sources of Data

Primary data was collected from the adapted PROTECT questionnaire. The questionnaire was on a 5-point Likert scale with a "1" indicating low confidence and "5" indicating "high confidence" and contained 11 questions that were "true" "false" or "don't know". Demographic data was included in the questionnaire as well although participants were asked not to use their names or any factors that would lead to the identification of the participants.

Data Analysis

The PI collected all data from pre and post questionnaires and analyzed in a secure statistical software database (SPSS). Data analysis was completed over a period of five months as follows: completion of education module using frequencies and percentages and changes in provider awareness, knowledge, and confidence in identifying HT victims using an independent sample *t*-test for analysis.

Quality

The PI maintained the master list of codes to each questionnaire in a locked cabinet within the PI's office and separate from other supplies. All data was collected and secured by the PI in a locked cabinet in the PI's office. The PI uploaded data into a password-protected computer.

Ethics and Human Subjects Protection

Ethics approval was obtained from Georgia College and State University Institutional Review Board (GCSU IRB). It was not likely for any participants to experience physical, psychological, social, or legal risks beyond those ordinarily encountered in daily life. If so, there was a Psychiatric Mental Health Nurse Practitioner available for the participant to speak with. The benefits expected from completion of this DNP project were increased awareness, knowledge, and confidence in identifying human trafficking victims.

Timeframes or Timeline

The start date of the DNP project was 05/15/2022 and continued through 10/30/2022. An educational module was uploaded into the online educational learning platform and available to all students who met the inclusion criteria. The education module was delivered with the pre-questionnaire, an introductory video, voice over power point, a case study, and finalized with completion of the post-questionnaire.

Budget

Cost of the project was limited to the time that it takes for the PI, chair, and co-chair to commit to the success of this project. The didactic portion was 100% online, and the questionnaire was administered online.

Strengths and Weaknesses of Study

Several limitations were identified throughout this DNP project. The project weakness is projected to include a small sample size and a limitation on the amount of education provided. Strengths of this project include current, evidence-based education and the module's potential for sustainability and possible integration into other courses.

Conclusion

In conclusion, the opportunity to provide an educational module that increases awareness, knowledge, and confidence to nursing students enrolled in a Master of Science Nursing program is vital as population needs in healthcare are always changing. With the numbers of HT victims increasing and considering the data available suggesting victims are examined but not identified as victims, healthcare providers are in a unique position to impact this issue. HT represents a vulnerable population and providing an education module to healthcare providers is a step in the right direction towards creating awareness of the real situation that is happening in all our communities. By providing the necessary education and tools to assist providers in identifying victims, and being knowledgeable of the correct steps to take for referrals and support resources, healthcare providers can be on the frontlines of the battle against HT.

Results

The results of this HT educational intervention on master level nurse practitioner students are reported here. Initial data screenings were performed before conducting statistical analyses. Data collected using the Qualtrics software were uploaded into SPSS 28 software. The two databases pre-test

and post-test were compared and examined. There were 55 responses for the pre-test and 45 responses for the post-test with a discrepancy of 10 missing responses. Two participants put name or email address as their unique identifier, and these were immediately de-identified so that data was kept private. Ten of the participants' data were manually entered in SPSS. All data were verified by checking the entries for every other participant.

The study's instrument was examined for missing items. Of the 55 participants, only one participant had failed to complete the survey. This participant only completed the demographic information and therefore was removed. Of the 45 participants who completed the post-test, one participant had failed to complete the survey and was removed. After comparing pre-test and post-test unique identifiers only 38 participants matched pre-test and post-test. Every effort was made to identify all 45, but, unfortunately only 38 were matched.

After initial review of the first 4 survey responses, it was noticed that participants were not correctly reading question 4. Therefore, question 4 was reworded after the first 4 participants. Data for questions regarding actual knowledge did not transfer from Qualtrics to SPSS correctly. After verifying using participants original data within Qualtrics the data was changed to reflect what the participant stated. Items 29, 33, 36, and 37 of the Protect Survey required reverse scoring. A new variable was created for the reverse scores. The sum of the scores on the Protect Survey were calculated using SPSS for each participant after the data were screened and discrepancies were reconciled.

Data Analysis

After reviewing all interval and ratio level data for central tendencies, it was found that age was not normally distributed with a Fisher's exact score for skewness of 2.70 and kurtosis of 0.64 (Plichta & Kelvin, 2012). Further examination revealed that one participant's age was greater than three standard deviations above the mean (Tabachnick & Fidell, 2019). After removal of this participant's age, the data was still not normally distributed with a Fisher's exact score of 2.37 for skewness and 0.31 for kurtosis

even though the box plot indicated that all participants were within the expected range (Plichta & Kelvin, 2012). A square root transformation was performed on age and the resultant variable was normally distributed with a Fisher's exact score of 1.91 for skewness and 0.83 for kurtosis (Tabachnick & Fidell, 2019). All remaining data were normally distributed and met the assumptions of all parametric statistical analyses used to answer the clinical research questions.

After reviewing all interval and ratio level data for central tendencies it was found that the pre and post scores for actual knowledge, perceived knowledge, and awareness were all normally distributed. The Fisher's Exact score for the actual knowledge score pre and actual knowledge post 0.73 and 1.23 for skewness and 1.18 and 0.74 for kurtosis respectively (Plichta & Kelvin, 2012). The Fisher's Exact score for perceived knowledge score pre and post was 0.90 and 0.99 for kurtosis and 1.3 and 0.91 for kurtosis, respectively. The Fisher's Exact for awareness score pre and post was 0.27 and 0.88 for kurtosis and 2.03 and 2.43 for kurtosis, respectively.

Participants

All participants targeted for participation were actively enrolled in master's level nurse practitioner programs. All were registered nurses. The participants were recruited by a letter with explanation of the study, requirements to participate, and availability of time to participate in the study. All the information as well as the educational intervention module was loaded into their online learning platform. The educational intervention was offered to a total of 97 students. After cleansing the data 38 participants were able to be used for data collection. Of the 38 participants included in this study, 34 were female (89.5%), 28 were Caucasian (73.7%) with an age range from 23 - 62 with a mean of 34.24 and 13 (34.2%) said they had received prior training on human trafficking. Along with demographics, the participants were surveyed for prior training on human trafficking as well as baseline data on their experience, knowledge, awareness, and confidence in human trafficking. Their responses are displayed in Table 1 and descriptive statistics in Table 2.

Table 1*Characteristics of Participants*

	Characteristics	N	Percent
Gender	Male	4	10.5%
	Female	34	89.5%
Ethnicity	African American	7	18.4%
	White	28	73.7%
	Other	3	7.9%
Age	Total Range 23-63		
	Range 23-30	19	50%
	Range 31-40	11	28.9%
	Range 41-63	8	21.1%
Previous Training	Yes	13	34.2%
	No	25	65.8%

Table 2*Descriptive Statistics for Independent Variables*

Independent Variable	M	SD	N
Age	33.49	9.35	38
Age SQRT	5.74	.778	37
Perceived knowledge Score Pre	19.44	7.21	38
Total Awareness Pre	37.82	5.97	38
Actual Knowledge Pre	6.82	2.01	38
Perceived knowledge Score Post	28.32	5.08	38
Total Awareness Post	43.21	6.12	38
Actual Knowledge Post	7.66	1.28	38

Note. M = Mean; SD = Standard Deviation; Pre = pre- implementation; Post = post-implementation.

Description of Instrument

The PROTECT survey assesses health care professionals' levels of knowledge and attitudes toward human trafficking. The survey is divided into three subscales: awareness, knowledge, and confidence.

Awareness

There were 9 questions on the pre and post survey that examined the awareness in relation to human trafficking. Questions ranged from “what questions to ask to identify potential cases of human trafficking” to “how the participant feels in relation to (their) role in identifying and responding to HT”. Responses were on a scale from 1 - 5 with 1 being “very little” to 5 representing “a lot” with the higher score the greater perceived knowledge.

Actual Knowledge

To assess knowledge of human trafficking, the participants were asked to identify current knowledge on the pre-post survey. The possible responses to these questions were “true”, “false”, and “I don’t know.” The responses will be compared pre to post on the survey using a paired sample t test.

Confidence

Confidence in identifying and responding to human trafficking was the last portion of the pre and post survey and included 10 questions related to confidence level regarding documenting and referring, comfort level when asking a patient about an exploitative situation, and healthcare worker responsibility to respond. The available responses to these questions were on a Likert scale ranging from 1 - 5 with 1 “strongly disagree” to 5 “strongly agree”.

Cronbach’s alpha for each subscale pre and post survey are shown in Table 3. It was noted that the post survey actual knowledge was unacceptable in this sample with a Cronbach’s alpha of only .45. The Cronbach’s alpha that the author reported on the psychometric properties as “good or higher” is shown in Table 3 as well (Ross et al., 2015).

Table 3*Descriptions of Research Instrument*

Variable	M (SD)	Observed Range	Possible Range	Interpretation	α
Current Research					
Protect PRE					
Awareness	19.45 (7.21)	9-35	9-45	Higher scores = greater awareness	.95
Knowledge	12.56 (1.88)	3-10	0-10	Higher scores = greater knowledge	.70
Confidence	37.82 (5.97)	26-50	13-65	Higher scores = greater confidence	.73
Protect POST					
Awareness	32.05	16-36	9-45	Higher scores = greater awareness	.96
Knowledge	8.89	5-10	0-10	Higher scores = greater knowledge	.45
Confidence	43.21	38-65	13-65	Higher scores = greater confidence	.78
Previous Research					
Awareness					.93
Knowledge					.63
Confidence					.64

Multicollinearity

Prior to beginning the analysis, the independent variables age, gender, perceived knowledge scores, actual knowledge scores, and confidence scores were examined for multicollinearity. Several correlations between variables were identified. The highest correlations were actual knowledge pre and post survey ($r = .52$, $p < .01$) and age with confidence pre survey ($r = .49$, $p < .01$). Neither of these correlations were greater than .90 and all other correlations were less than or equal to .52 indicating multicollinearity was not a problem with these variables (Plichta & Kelvin, 2012). Table 4 reports the Pearson correlations between all the main variables in this study.

Table 4*Pearson's Correlations between the Major Variables*

Variable <i>r</i>	1.	2.	3.	4.	5.	6.	7.	8.
1. Gender	<i>r</i> --							
2. Age	<i>r</i> .277	--						
3. Aware Pre	<i>r</i> -.219	.261	--					
4. Conf. Pre	<i>r</i> .062	.487**	.387*	--				
5. Know Pre	<i>r</i> -.075	-.172	.132	.011	--			
6. Aware Post	<i>r</i> .090	.092	.353*	.345*	-.288	--		
7. Conf. Post	<i>r</i> -.244	.277	.053	.318	-.238	.190	--	
8. Know Post	<i>r</i> -.025	-.143	-.129	.048	.521**	-.049	.077	--

* $p < .05$ ** $p < .01$ **Analysis of Clinical Questions:**

The data analyzed were from the pre-test collected before the educational module, and the post-test collected after the educational module. They were compared using the paired samples t- test. The paired samples t- test was used to test the research hypothesis that there would be an increase in the masters level nurse practitioner students' awareness, knowledge, and confidence from pre-education module to post-education module. All assumptions for the paired sample t- test were satisfied.

Results of Clinical Question 1:

Will providing an education module to masters level nursing students increase their awareness of human trafficking? Table 5 reports the findings.

Table 5*Awareness of human trafficking*

Variable		Mean	SD	<i>t</i>	<i>p</i>
Q.9	Pre	2.47	1.06	6.05	<.001
	Post	3.55	.65		
Q.10	Pre	2.58	.98	5.79	<.001
	Post	3.58	.68		
Q.11	Pre	2.21	.91	9.4	<.001
	Post	3.61	.76		
Q.12	Pre	2.08	.94	8.24	<.001
	Post	3.53	.76		
Q.13	Pre	2.47	1.08	6.74	<.001
	Post	3.74	.76		
Q.14	Pre	1.71	.87	9.85	<.001
	Post	3.18	.80		
Q.15	Pre	2.03	.90	9.19	<.001
	Post	3.53	.69		
Q.16	Pre	2.03	.94	11.63	<.001
	Post	3.68	.81		
Q.17	Pre	1.87	.88	11.45	<.001
	Post	3.66	.78		
Total	Awareness Pre	19.45	7.21	7.58	<.001
	Awareness Post	28.32	5.08		

For participants in this study, awareness pertaining to human trafficking was greatly improved by the educational module.

Results of Clinical Question 2:

Will providing an education module to masters level nursing students increase their knowledge of human trafficking?

A dependent samples t-test was used to test the hypothesis that the total knowledge of participants who completed the human trafficking education module would have increased knowledge from prior to educational module. The research hypothesis was supported. A significant increase in total knowledge was demonstrated from baseline (M 6.82, SD 2.01) to post- test educational module (M

7.66, SD 1.28) $t(37) = 2.97, p < .01$. For the masters level nurse practitioner students participating in this study their total knowledge pertaining to human trafficking was increased after the educational module.

Results of Clinical Question 3

Will providing an education module to masters level nursing students increase their confidence in responding to human trafficking? Table 6 reports the findings.

Table 6

Confidence in responding to human trafficking

Variable		Mean	SD	<i>t</i>	<i>p</i>
Q. 29	Pre	4.05	.90	.94	.352
	Post	3.87	1.26		
Q.30	Pre	3.37	.88	3.14	.003
	Post	3.68	.74		
Q.31	Pre	3.66	.85	3.21	.003
	Post	4.11	.61		
Q.32	Pre	2.39	.89	.88	.383
	Post	2.55	1.0		
Q.33	Pre	4.13	.94	1.48	.146
	Post	4.34	1.0		
Q.34	Pre	4.68	.62	.24	.812
	Post	4.66	.53		
Q.35	Pre	3.18	.93	4.81	<.001
	Post	4.03	.75		
Q.36	Pre	2.47	1.00	4.19	<.001
	Post	3.42	1.03		
Q.37	Pre	2.92	.91	1.54	.133
	Post	3.29	1.27		
Q.38	Pre	2.34	1.0	7.89	<.001
	Post	3.45	.90		
Q.39	Pre	2.55	1.03	8.44	<.001
	Post	3.87	.78		
Q.40	Pre	2.55	1.08	7.98	<.001
	Post	3.87	.78		
Q.41	Pre	2.66	1.10	7.19	<.001
	Post	3.92	.78		

A significant increase in total confidence by the masters' level nurse practitioner students was demonstrated from pre- education module (M 37.82, SD 5.97) to post education module (M 43.21, SD 6.12), $t(37) = 4.71, p < .001$. For the masters level nurse practitioner students participating in this study their confidence level in the ability to respond to human trafficking was significantly increased showing the educational module was beneficial.

Conclusion

This section presented the results of this translational project. An educational module was offered to all enrolled masters' level nurse practitioner students. The PI created the education module and used a validated pre- test and post- test to assess awareness, knowledge, and confidence pre and post educational module. 38 students successfully completed the pre- test and post- test. Results indicated that there was significant increase in awareness, knowledge, and confidence levels from pre- test to post- test of the participants suggesting that the education module was beneficial and increased their awareness, knowledge, and confidence in responding to HT.

Discussion

This translational project examined the effectiveness of an educational intervention aimed at increasing awareness, knowledge, and confidence in responding to HT in masters level nurse practitioner students. The purpose of this research project was to answer the following questions:

Clinical Question 1: Will providing an education module to masters level nursing students increase their awareness of human trafficking?

Clinical Question 2: Will providing an education module to masters level nursing students increase their knowledge of human trafficking?

Clinical Question 3: Will providing an education module to masters level nursing students increase their confidence in responding to human trafficking?

The expectation for clinical question 1 was that perceived awareness would increase from pre to post education module. Outcome data revealed statistically significant increase in awareness prior to and after the educational module. This indicated the educational module was beneficial in increasing awareness among masters level nursing students.

The second clinical question explored the effectiveness of the project's educational intervention on the masters level nursing students' knowledge. Outcome data revealed statistically significant increase in knowledge prior to and after the educational module. This indicated the educational module was beneficial in increasing awareness of masters level nursing students.

The expectation for clinical question 3 was that the confidence in responding to HT would increase from pre to post education module. Outcome data revealed statistically significant increase in confidence in responding to HT. This indicated the educational module was beneficial in increasing confidence in responding to HT among masters level nursing students.

Limitations

Several limitations existed in this translational project. One being the small sample size. Not all who started the education module completed it for unknown reasons. The education module was only provided to three classes. Offering to more classes may have resulted in greater numbers of participation. Feedback from some students consisted of not completing the module due to the current work they already have and the education module not being mandatory. A suggestion would be that this education module be worth a grade for future implementations as an effort to increase participation. Another identified limitation was the time period for post survey completion. A better understanding of the educational impact may be better evaluated at longer intervals to assess for sustainability of the program. Assessing outcomes of a program or intervention for sustainability may best be demonstrated at 12 months (Fann, et al., 2010).

Previous Research

The motivation for this translational project was to address the gap in practice of healthcare workers meeting the needs and identifying victims of HT. Previous research shows that there is a lack of knowledge about HT by healthcare professionals (Berishaj et al., 2019; Grace et al., 2014; Sousou Coppola et al., 2019; Ramnauth et al., 2018). The number of victims that encountered healthcare professionals and were not identified ranges from 28%- 87.8% (Sousou Coppola et al., 2019; Grace et al., 2014). For this project a HT education module was offered to masters level nurse practitioner students. These findings are consistent with literature suggesting that education in HT improves the knowledge of healthcare providers and increases the likelihood of identification of HT victims (Berishaji et al., 2019; Grace et al., 2014; Sousou Coppola et al., 2019; Ramnauth et al., 2018).

Perceived knowledge was considered a significant change from pre and post survey results in this project. Ross et al., (2015) reported similar results in a cross-sectional study originally utilized the PROTECT survey with National Health Services Professionals whereas there was a large sample size (n= 782) of healthcare professionals.

The participants from this DNP project whereby only 13/38 (34.2%) reported having had previous training were slightly higher compared to those reported by Ross et al. (2015) whereby only 63/782 (7.8%) of the participants reported having had previous training in relation to human trafficking. Donahue et al., (2019) completed a study and found that 89% of participants working in the ER had not received any prior training on HT. Participants had reported that they were more confident and more likely to screen for trafficking victims after completing the online training module. This information is an indicator that training is needed.

Lessons learned

After the first few surveys results it was noted that participants were answering the question regarding prior training as yes and including the current education module as the prior training. Since

this was not the intended meaning of the question the PI immediately changed the question to provide clarification. Another lesson learned was the demographic section of the survey should have included more detailed questions such as years of practice and area of practice for more in depth review of possible correlations.

Implications for practice

The results of this study show that an online training module for masters level nurse practitioner students was successful in increasing awareness, knowledge, and confidence in responding to HT. These findings were consistent with other research findings that implemented similar or alternate forms of training on HT. This supports the premise that multiple forms of training on HT will increase the knowledge, awareness, and confidence in responding to HT. The statistically significant increase from pre- education to post- education suggests exposure to content is necessary for preparing health care workers to identify and care for victims of HT.

Recommendations for Future Research

While this study provided valuable data for input for the development of future training on HT for health care providers, one recommendation would be to incorporate HT education into all levels of nursing curricula. Another recommendation would be to focus on staff at inpatient facilities especially areas such as emergency departments as well as other facilities that interact with women such as OBGYN offices and provide a similar module to assess current awareness, knowledge, and confidence and identify areas of opportunity. The last recommendation would be to coordinate and collaborate with Sexual Assault Nurse Examiners (SANE) as they have experience with similar situations and may can offer resources and assessment guidance.

Conclusion

While the increase in post- module knowledge was an expected finding, post – module increase in awareness and confidence was a confirmation of the importance of education to our healthcare

professionals. Health policy- makers have recently begun to recognize HT as a fundamental health concern. HT is a widespread health concern, and there is every reason to invest in capacity- building of health care providers as a mean to improve the well- being and safety of trafficked persons. A robust educational resource could include specific content themes and take a standardized approach to instructing healthcare workers. Future research aimed at identifying informal as well as the most effective, curricula is important. Consolidating and standardizing evidence- based curricula for healthcare professionals has the potential to close remaining educational gaps, thus allowing improved identification and treatment of victims of HT.

References

- Altun, S., Abas, M., Zimmerman, C., Howard, L. M., & Oram, S. (2017). Mental health and human trafficking: Responding to survivors' needs. *BJPsych. International*, *14*(1), 21–23. <https://doi.org/10.1192/s205647400000163x>
- Armstrong, S. (2017). Instruments to identify commercially sexually exploited children. *Pediatric Emergency Care*, *33*(12), 794–799. <https://doi.org/10.1097/pec.0000000000001020>
- Armstrong, S., & Greenbaum, V. (2019). Using survivors' voices to guide the identification and care of trafficked persons by u.s. health care professionals. *Advanced Emergency Nursing Journal*, *41*(3), 244–260. <https://doi.org/10.1097/tme.0000000000000257>
- Berishaj, K., Buch, C., & Glembocki, M. M. (2019). The impact of an educational intervention on the knowledge and beliefs of registered nurses regarding human trafficking. *The Journal of Continuing Education in Nursing*, *50*(6), 269–274. <https://doi.org/10.3928/00220124-20190516-07>
- Coverdale, John H., Ed. & Coverdale, John H., Ed. (2020). *Human trafficking: A treatment guide for mental health professionals* (1st ed.). American Psychiatric Association Publishing.
- Donahue, S., Schwien, M., & LaVallee, D. (2019). Educating emergency department staff on the identification and treatment of human trafficking victims. *Journal of Emergency Nursing*, *45*(1), 16–23. <https://doi.org/10.1016/j.jen.2018.03.021>
- 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), 526–531. <https://doi.org/10.1016/j.jen.2017.01.008>
- Fan, E., Laupacis, A., Guyatt, G., & Needham, D. (2010). How to use an article about quality improvement. *JAMA*, *304*(30), 2279–2287.

- Fraley, H. E., Aronowitz, T., & Stoklosa, H. M. (2019). Systematic review of human trafficking educational interventions for health care providers. *Western Journal of Nursing Research*, 42(2), 131–142. <https://doi.org/10.1177/0193945919837366>
- Grace, A. M., Lippert, S., Collins, K., Pineda, N., Tolani, A., Walker, R., Jeong, M., Trounce, M., Graham-Lamberts, C., Bersamin, M., Martinez, J., Dotzler, J., Vanek, J., Storfer-Isser, A., Chamberlain, L. J., & Horwitz, S. M. (2014). Educating health care professionals on human trafficking. *Pediatric Emergency Care*, 30(12), 856–861. <https://doi.org/10.1097/pec.0000000000000287>
- Greenbaum, V., Livings, M. S., Lai, B. S., Edinburgh, L., Baikie, P., Grant, S. R., Kondis, J., Petska, H. W., Bowman, M., Legano, L., Kas-Osoka, O., & Self-Brown, S. (2018). Evaluation of a tool to identify child sex trafficking victims in multiple healthcare settings. *Journal of Adolescent Health*, 63(6), 745–752. <https://doi.org/10.1016/j.jadohealth.2018.06.032>
- Hopper, E. K., & Gonzalez, L. D. (2018). A comparison of psychological symptoms in survivors of sex and labor trafficking. *Behavioral Medicine*, 44(3), 177–188. <https://doi.org/10.1080/08964289.2018.1432551>
- Judge, A. M., Murphy, J. A., Hidalgo, J., & Macias-Konstantopoulos, W. (2018). Engaging survivors of human trafficking: Complex health care needs and scarce resources. *Annals of Internal Medicine*, 168(9), 658–663. <https://doi.org/10.7326/m17-2605>
- Mumma, B., Scofield, M., Mendoza, L., Toofan, Y., Youngyunpipatkul, J., & Hernandez, B. (2017). Screening for victims of sex trafficking in the emergency department: A pilot program. *Western Journal of Emergency Medicine*, 18(4), 616–620. <https://doi.org/10.5811/westjem.2017.2.31924>
- Oram, S., Abas, M., Bick, D., Boyle, A., French, R., Jakobowitz, S., Khondoker, M., Stanley, N., Trevillion, K., Howard, L., & Zimmerman, C. (2016). Human trafficking and health: A survey of male and female survivors in England. *American Journal of Public Health*, 106(6), 1073–1078. <https://doi.org/10.2105/ajph.2016.303095>

- Panda, P., Garg, A., Lee, S., & Sehgal, A. R. (2021). Barriers to the access and utilization of healthcare for trafficked youth in the united states. *Child Abuse & Neglect*, *121*, 105259.
<https://doi.org/10.1016/j.chiabu.2021.105259>
- Plichta, S., Kelvin, E. A., & . (2012). *Munro's statistical methods for health care research* (6th ed.). Wolters Kluwer Health/Lippincott Williams & Wilkins.
- Powell, C., Dickins, K., & Stoklosa, H. (2017). Training us health care professionals on human trafficking: Where do we go from here? *Medical Education Online*, *22*(1), 1267980.
<https://doi.org/10.1080/10872981.2017.1267980>
- Ramnauth, T., Benitez, M., Logan, B., Abraham, S. P., & Gillum, D. (2018). Nurses' awareness regarding human trafficking. *International Journal of Studies in Nursing*, *3*(2), 76.
<https://doi.org/10.20849/ijsn.v3i2.389>
- Ross, C., Dimitrova, S., Howard, L. M., Dewey, M., Zimmerman, C., & Oram, S. (2015). Human trafficking and health: A cross-sectional survey of nhs professionals' contact with victims of human trafficking. *BMJ Open*, *5*(8), e008682. <https://doi.org/10.1136/bmjopen-2015-008682>
- Shandro, J., Chisolm-Straker, M., Duber, H. C., Findlay, S., Munoz, J., Schmitz, G., Stanzer, M., Stoklosa, H., Wiener, D. E., & Wingkun, N. (2016). Human trafficking: A guide to identification and approach for the emergency physician. *Annals of Emergency Medicine*, *68*(4), 501–508.e1.
<https://doi.org/10.1016/j.annemergmed.2016.03.049>
- Sousou Coppola, J., Cantwell, E., Kushary, D., & Ayres, C. (2019). Human trafficking: Knowledge and awareness in nursing practice. *Journal of Nursing Practice Applications and Reviews of Research*.
<https://doi.org/10.13178/jnparr.2019.0901.0907>
- Stoklosa, H., Lyman, M., Bohnert, C., & Mittel, O. (2017). Medical education and human trafficking: Using simulation. *Medical Education Online*, *22*(1), 1412746.
<https://doi.org/10.1080/10872981.2017.1412746>

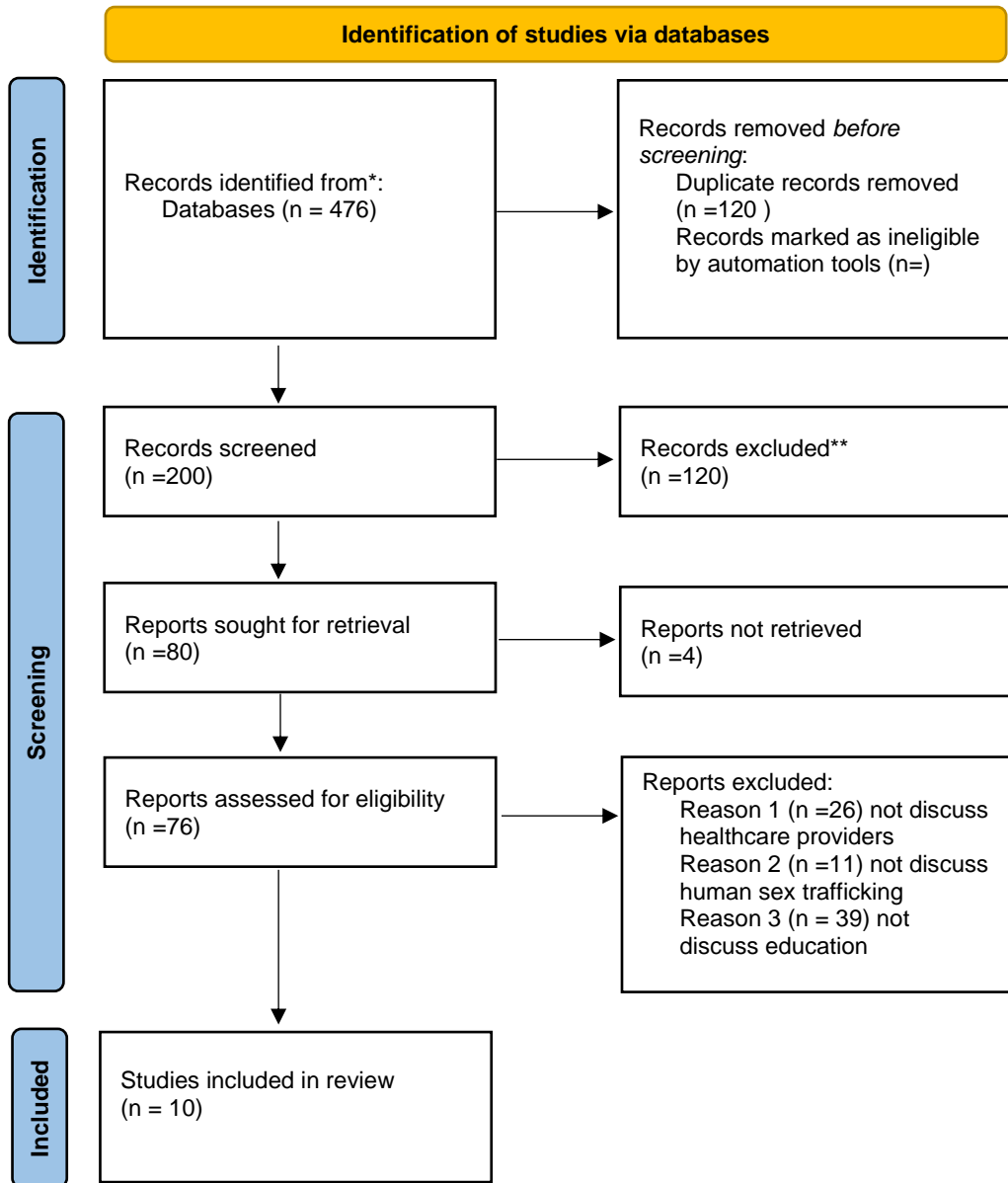
Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics*. Pearson.

W.K. Kellogg Foundation. (2004, January). *Logic model development guide* [PDF]. Purdue University.

Retrieved March 31, 2022, from

<https://ag.purdue.edu/extension/pdehs/Documents/Pub3669.pdf>

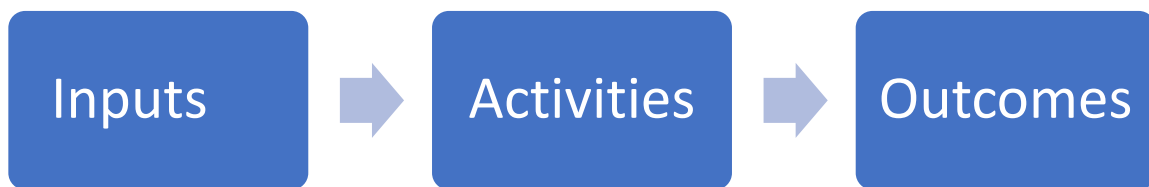
Appendix A



From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71. doi: 10.1136/bmj.n71

Appendix B

Logic Model



- **Inputs** are the various resources available to support the program (e.g., staff, materials, curricula, funding, equipment)
- **Activities** are the action components of the program (e.g. develop or select a curriculum, write a plan, implement a curriculum, train educators, pull together a coalition). These are sometimes referred to as *process objectives*.
- **Outcomes** are the intended accomplishments of the program. They include short-term, intermediate, and long-term or distal outcomes.

Appendix C

INTRODUCTION AND EMAIL

I am a DNP student at Georgia College and State University. I would like to invite you to consider participating in a research study to evaluate the effectiveness of an introduction to human trafficking for healthcare providers education module. Your participation is 100% voluntary and in no way factors into your grade for the current class or program.

The attached Informed Consent outlines the study details. You may keep this copy for your records. If you choose to participate, click on the link and complete the Informed Consent online prior to returning your pre-survey.

Thank you for taking the time to consider participating in my DNP project. I look forward to working with you. If you have any questions or concerns, feel free to call or email me at the resources below.

Casey Elliott MSN, FNP-C

678-993-8779

Casey.elliott@bobcats.gcsu.edu

Appendix D

Informed Consent

INFORMED CONSENT

Does implementing an introduction to human trafficking for healthcare providers education module increase knowledge, awareness, and confidence in students enrolled in a Master of Science Nursing program?

I, _____, agree to participate in the research Human Trafficking Education Module Evaluation Study, which is being conducted by Casey Elliott, who can be reached at 678-993-8779 and/or casey.elliott@bobcats.gcsu.edu I understand that my participation is voluntary; I can withdraw my consent at any time. If I withdraw my consent, my data will not be used as part of the study and will be destroyed.

The following points have been explained to me:

1. The purpose of this study is to evaluate the effectiveness of an introduction to human trafficking for healthcare providers education module
2. The procedures are as follows: you will be asked to complete a questionnaire at two points in the study. Once before viewing the education module and once immediately following the education module.
3. Your name will not be connected to your data. Therefore, the information gathered will be confidential.
4. You will be asked to sign two identical consent forms. You must return one form to the investigator before the study begins, and you may keep the other consent form for your records.
5. You may find that some questions are invasive or personal. If you become uncomfortable answering any questions, you may cease participation at that time.
6. This research project is being conducted because of its potential benefits, either to individuals or to humans in general. The expected benefits of this study include increased awareness, knowledge, and confidence in responding to human trafficking victims.
7. You are not likely to experience physical, psychological, social, or legal risks beyond those ordinarily encountered in daily life or during the performance of routine examinations or tests by participating in this study.
8. Your individual responses will be confidential and will not be released in any individually identifiable form without your prior consent unless required by law.
9. The investigator will answer any further questions about the research should you have them now or in the future (see above contact information).
10. In addition to the above, further information, including a full explanation of the purpose of this research, will be provided at the completion of the research project on request.
11. By signing and returning this form, you are acknowledging that you are 18 years of age or older.

Signature of Investigator

Date

Signature of Participant

Date

.....
Research at Georgia College involving human participants is carried out under the oversight of the Institutional Review Board. Address questions or problems regarding these activities to the GC IRB Chair, email: irb@gcsu.edu.

Appendix E

Objectives and Program Outline

Presentation Objectives

The objectives of this presentation are:

1. To describe the scope, presentation(s), and health effects of human trafficking
2. To outline strategies for identification and response
3. To introduce ways to facilitate collaboration between health care and other sectors of society to prevent and address human trafficking

Anticipated Learning Outcomes

At the conclusion of this presentation, attendees will be able to:

1. Articulate the scope, presentation(s), and health effects of human trafficking
2. Describe strategies for identification and response
3. Explain ways to facilitate collaboration between health care and other sectors of society

Definitions

CSEC- Commercial Sexual Exploitation of Children

HIPAA- Health Insurance Portability and Accountability Act

HT- Human Trafficking

TIP- Trafficking in Persons

TVPA- Trafficking Victims Protection Act

+/- Elective items, to be mentioned briefly if time permits

DISCUSSION TOPICS**VIDEO- THE SILENCE BY CLEO TELLIER****I. OVERVIEW: DEFINITIONS, TYPES OF TRAFFICKING
INCIDENCE/PREVALENCE, DYNAMICS, BEHAVIORAL AND SOCIAL
DETERMINANTS****A. DEFINITIONS**

1. Trafficking Victims Protection Act (TVPA)
2. Acts, Means, Purpose (AMP) Model
 - a) Describe the central 'means' concept of human trafficking using force, fraud, coercion
 - b) No need to demonstrate force/fraud/coercion in sex trafficking if victim <18 years old per U.S. law (under international law, this exemption applies to sex and labor trafficking)

B. SPECTRUM

1. List main types of trafficking
 - a) Labor
 - b) Sex
 - c) Forced marriage (+/-)
 - d) Organ (+/-)
2. Differences: International vs domestic
3. Differences between trafficking and smuggling

C. INCIDENCE/PREVALENCE

1. United States overview
2. State of Georgia overview, with special note on limitations of data

D. DYNAMICS

1. Dynamics and examples of labor trafficking
2. Dynamics and examples of sex trafficking

E. BEHAVIORAL AND SOCIAL DETERMINANTS

1. Risk and protective factors, organized according to the social ecological model Framework
 - a) Individual
 - b) Relationship/Family
 - c) Community/institutional
 - d) Societal/ Cultural

II. HEALTH IMPACT**A. ACUTE INJURIES****B. CHRONIC MEDICAL PROBLEMS****C. MENTAL HEALTH****D. SUBSTANCE USE****E. REPRODUCTIVE AND SEXUAL HEALTH****F. DENTAL AND ORAL HEALTH +/-****G. IMPACT ON QUALITY OF LIFE, AUTONOMY, AND INDEPENDENCE****I. IMPACT OF TRAUMA/THE TRAUMA RESPONSE**

III. IDENTIFICATION AND ASSESSMENT**A. INTERFACE WITH HEALTH CARE WHILE TRAFFICKED**

1. Venues
2. Challenges and opportunities
3. Range of findings from studies of victims' interactions in health care settings

B. SURVIVOR BARRIERS TO DISCLOSURE**C. PROVIDER CHALLENGES TO IDENTIFICATION AND RESPONSE****D. TRAUMA INFORMED CARE GUIDING PRINCIPLES****E. INDICATORS BASED ASSESSMENT VS. UNIVERSAL INQUIRY**

1. Components (all conducted in trauma-informed manner)
 - a. Observation/red flag indicators, including those that are subtle
 - b. Trust-building and communication
 - c. Relevant history/identification, including subtle clues short of frank disclosure
 - d. Physical exam and evaluation

F. SPECIFIC QUESTIONS TO GUIDE IDENTIFICATION**IV. RESPONSE AND FOLLOW-UP****A. VALUE OF HEALTHCARE RESPONSE****B. IMPORTANCE OF COMMUNITY PARTNERSHIPS AND UNDERSTANDING****ROLES AND LIMITATIONS OF LAW ENFORCEMENT RESPONDERS****V. COLLABORATION WITH LOCAL, REGIONAL AND NATIONAL****RESOURCES**

- A. How to identify
- B. Examples
- C. Provide National Human Trafficking Hotline number and text along with any local hotlines

VI. ENGAGEMENT AND LEADERSHIP OPPORTUNITIES**A. FOR HEALTHCARE PROVIDERS**

1. Improve clinical knowledge and skill
2. Develop trauma-informed clinical practice protocols
3. Liaise with local or national officials
4. Pursue scholarly efforts (research, publication)
5. Policy advocacy
6. Public health prevention in collaboration with inter-sectoral partners

B. FOR ADMINISTRATORS AND SYSTEM WIDE OPINION LEADERS

1. Educate starts through case conferences, grand rounds, institutional publications, etc.
2. Develop advisory boards and working groups that include providers, staff, survivors, community representatives
3. Create trauma-informed organizational protocols

VII. QUESTIONS/DISCUSSION

Appendix F

Q1 What gender do you identify with?

- Female (1)
- Male (2)
- Trans- male (3)
- Trans-female (4)
- Non- binary (5)
- Other (6)

Q2 Ethnicity

Q3 Age

Page Break

Q4a Have you ever received PREVIOUS (before current module) training on human trafficking within your role?

- Yes (1)
- No (2)

Display This Question:

If Have you ever received PREVIOUS (before current module) training on human trafficking within your... = Yes

Q4b Approximately how many hours of training have you received?

Display This Question:

If Have you ever received PREVIOUS (before current module) training on human trafficking within your... = Yes

Q4c Who provided the training on human trafficking?

Display This Question:

If Have you ever received PREVIOUS (before current module) training on human trafficking within your... = Yes

Q4d How long ago did you last receive this training?

Page Break

Q5 Which of the following areas were covered during the PREVIOUS (before current module) training on human trafficking? (Mark as many as apply)

	Yes (1)	No (2)	I don't know (3)
General information: definition and case studies (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Why people are trafficked, types of trafficking (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health problems associated with trafficking (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indicators of human trafficking (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Care approaches (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Making referrals, giving information on national/local services (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local or international legislation on trafficking (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q6 Have you ever received training on violence against women in your role?

- Yes (1)
- No (2)

Q7 Have you ever received training on working with vulnerable migrants (e.g. asylum seekers, refugees) within your role?

- Yes (1)
- No (2)
-

Q8 Have you ever been in contact with a patient whom you knew or suspected had been trafficked?

- Yes (1)
- No (2)
-

Display This Question:

If Have you ever been in contact with a patient whom you knew or suspected had been trafficked? = Yes

Q8b What caused you to know or suspect that the patient(s) had been trafficked?

- Disclosure by patient (1)
- Disclosure by another professional (2)
- Patient displayed signs that indicated they had been trafficked (3)
- Other (4)
-

Display This Question:

If What caused you to know or suspect that the patient(s) had been trafficked? = Other

Q8c If you chose other please explain

Page Break

Q9-17 Please indicate how much you feel you know about the following

	Very Little (1)	A Little (2)	Some (3)	Quiet a bit (4)	A lot (5)
Your role in identifying and responding to human trafficking (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indicators of human trafficking (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What questions to ask to identify potential cases of human trafficking (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What to say/not to say to a patient who has experience human trafficking (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health problems commonly experienced by people who have been trafficked (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to document human trafficking in a medical record (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Addressing danger for a patient who may have been trafficked (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Local and/or national support services for people who have been trafficked (8)

Local and/or national policies on responding to human trafficking (9)

Page Break

Q18-27 Please answer True or False if you think you know the answer

	True (1)	False (2)	Don't know (3)
The definition of human trafficking is restricted to women and girls who have been forced into prostitution. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In 2020 there were 955 contacts made to the state of Georgia National Trafficking Hotline. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The majority of women who are trafficked for prostitution were sex workers before being trafficked. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trafficking is associated with post-traumatic symptoms (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trafficking is associated with chronic headaches. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are usually evident signs that a person is in a trafficking situation. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People who are being exploited often have difficulty reporting these situations to outsiders, especially professionals. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health practitioners should not ask trafficked people about violence that they might have suffered, as it is too traumatic for them. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Calling the police if I suspect a patient has been trafficked could put the patient in more danger. (9)



Page Break

Q28 Which of the following health problems are likely to be related to situations of human trafficking? (select all that apply)

- Depression (1)
 - Chemical burns and pesticide poisoning (2)
 - Memory Problems (3)
 - Hypothermia or dehydration (4)
 - Sexually transmitted infections (5)
 - Headaches (6)
 - Post- traumatic stress disorder (7)
-

Q29-41 Please indicate how much you agree with the following

	Strongly Disagree (1)	Disagree (2)	Neither (3)	Agree (4)	Strongly agree (5)
It is very unlikely that I will encounter a trafficked person in my role (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My workplace allows me enough time to ask about trafficking if I suspected a person might have been trafficked (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be comfortable asking a person if they were in danger from an employer (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asking about experiences of exploitative situations is offensive to most patients (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A patient's friend can interpret for him or her if I think that a person has been trafficked (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Healthcare workers have responsibility to respond to suspected cases of human trafficking (6)

I am aware of the precautions I need to take to protect my safety when caring for trafficked people (7)

I do not have sufficient training to assist individuals in situations on human trafficking (8)

I should call the police immediately if I suspect that a person has been trafficked. (9)

I am confident I can document human trafficking accurately and confidentially (10)

I am confident I can make referrals for women who have been trafficked or exploited (11)

I am confident that I can make the appropriate referrals for men who have been trafficked or exploited (12)

I am confident that I can make the appropriate referrals for children who have been trafficked or exploited (13)

Q42 Interest

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)
On a scale of 1 to 5, where 1 is "not at all" and 5 is "very", how interested are you in learning about providing care in cases of human trafficking? (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q43 Which do you think would be the most useful format for you to receive information or training on caring for people who may have been trafficked

- Online information and training (live), facilitated, at set times (1)
- Online information and training (recorded), self-directed, to watch/listen anytime (2)
- Two hour training session (facilitated) (3)
- Half- day training session (4)
- Full day training session (5)

Appendix G

Permission to use



Human trafficking and health: a cross-sectional survey of NHS professionals' contact with victims of human trafficking

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