

Qualitative Assessment of a Human Trafficking Module Intervention in Pharmacy Education

Lucas Kosobuski, PharmD student¹; Jungeun Lee, PharmD²; Sarah M. Westberg, PharmD²; Nathaniel Shin-Yun Chen, PharmD student¹; Sherry Le, PharmD student¹; Amy Van Loon, PharmD student¹; Laura Palombi, PharmD, MPH, MAT¹

¹Department of Pharmacy Practice and Pharmaceutical Science, University of Minnesota College of Pharmacy, Duluth, 232 Life Science, 1110 Kirby Drive, Duluth, Minnesota 55812, United States

²Department of Pharmaceutical Care and Health Systems, University of Minnesota College of Pharmacy, 7-159 Weaver-Densford Hall, 308 Harvard St. SE, Minneapolis, Minnesota 55455, United States

Abstract

Description of the Problem: Human trafficking is a critical public health threat in the United States, yet education on human trafficking for pharmacy students has not been evaluated despite pharmacists being the most accessible health care professionals.

Description of the Innovation: To evaluate the most valuable aspects of an introductory module on human trafficking, pharmacy students participated in a human trafficking module, and their perception of human trafficking was evaluated after the module. Content on human trafficking was delivered through an asynchronous online presentation followed by a synchronous Zoom class discussion. Fifty-three third-year pharmacy students from the Women's Health elective in the fall semester of 2020 at the University of Minnesota - College of Pharmacy were included. Consensual Qualitative Research methodology was used for qualitative data analysis.

Critical Analysis: Students' perceptions of the value of this learning module was evaluated through consensual qualitative research. The findings suggest the module held significant value for students to better understand human trafficking and the role of pharmacists.

Implications: A hybrid model on human trafficking involving discussions, case examples, and questions posed by students was found to have a positive impact on their knowledge on human trafficking. The results of this study will provide direction for future modules, classes, or adaptations to the curriculum on human trafficking for pharmacy students and may prove beneficial for other health care professionals.

Keywords: trafficking, intervention, education, pharmacy, community

Description of the Problem

The prevalence of human trafficking (HT) in the United States and the world make it a critical public health threat.¹ The United States Department of Justice defines HT as "a crime that involves compelling or coercing a person for labor or services, or to engage in commercial sex acts."² Missed opportunities to support trafficked individuals are known to occur frequently within the healthcare system. Research conducted with survivors has shown that half of those interviewed reported having visited a physician while being trafficked and 28% of trafficked women interviewed saw a healthcare professional while still in captivity.^{4,5} Sex trafficking victims' medical visits are often triggered by need for sexually transmitted infection treatments or abortions,^{6,7} and it is estimated that between 30-87.8% of trafficked individuals accessed medical services during their exploitation.^{8,9}

Corresponding author: Laura Palombi, PharmD, MPH, MAT
University of Minnesota College of Pharmacy, Department of Pharmacy Practice and Pharmaceutical Sciences
232 Life Science, 1110 Kirby Drive, Duluth, MN 55812
Email: lpalombi@d.umn.edu

Pharmacists are the most accessible and frequently visited healthcare provider, with 90% of Americans living within five miles of a community pharmacy.^{3,4} Because of the nature of HT, understanding patterns through prescription fills⁵ and building a trusting relationship with the victim to provide timely and effective help is critical. Signs of HT, such as fearful body language or markers of physical abuse, can be observed by pharmacists and subsequently lead to pharmacists privately consulting with victims and connecting them to help.¹⁰ Pharmacists have the potential to play a key role in supporting trafficked individuals as an important linkage between them and law enforcement or support services.^{10,11} This potential has been recognized in Michigan and Texas where all healthcare professionals are required to complete a training about identifying a trafficking situation.^{12,13}

Limited peer-reviewed published literature and inadequate education for health care professionals leave gaps in knowledge, poor guidance, and a lack of confidence in the ability to identify and provide proper help to trafficking victims.^{14,15} Experts in the field of HT have illuminated a critical need for improvement in education of health care professional students and practicing clinicians.¹⁵ Tichen and colleagues reported that medical trainees and physicians were unaware of resources for trafficking patients and underestimated how

prevalent trafficking was in the United States.¹⁶ This lack of knowledge is echoed in other studies with different health professions,^{16,17} which underscores the need for further education and training in this area.

A review of published curriculum on sex trafficking for undergraduate medical trainees from 2020 found limited publications, with 11 resources meeting inclusion criteria. Their review found that published curricula demonstrated a “wide variability in delivery method, length, and scope.”¹⁸ The profession of nursing has developed educational interventions for both students and professionals which improve nurses’ knowledge and beliefs regarding HT after training.¹⁹

This study sought to determine the aspects of an introductory module that students found most valuable, and if a hybrid approach that provided both asynchronous and synchronous learning material utilizing Zoom technology was effective in delivering HT content.

Description of the Innovation

A Human Trafficking (HT) Module was created and incorporated into a Women’s Health elective in the fall semester of 2020 at the University of Minnesota - College of Pharmacy. The learning objectives of the module included: Identify the warning signs that may indicate someone is a victim of HT; List important questions that healthcare providers can ask victims of HT; Explain what the key assumptions are in a trauma-informed approach and how they relate to pharmacy practice; List resources that can be utilized for victims of HT.

The HT Module was delivered in two parts by two pharmacist faculty who were content experts in women’s health, HT and public health. It consisted of an asynchronous online presentation (thirty minutes), followed by a synchronous Zoom class discussion focused on two case examples, one rural and one urban, and any remaining questions students had about HT (fifty minutes). Content presented to students was peer-reviewed by a local expert in HT, and presented to pharmacist audiences prior to the pharmacy student audience. This content expert served as the safe harbor regional navigator for the project area, where she is a point of contact for five counties and three tribal reservations for individuals and families impacted by commercial sexual exploitation and HT.

The presentation included an overview of HT, detailing how it is operated, and how pharmacists and healthcare providers can intervene. An approach based on the model of *identify, question, and intervene* to identify and assist trafficking victims was used as a framework in the presentations and case examples.¹⁰ Guiding questions about how to handle the case situations were discussed among small groups and the entire class. A total of fifty-three third-year (PD3) PharmD students from the Duluth and Twin Cities campuses were enrolled in the course. This project was determined to be Not Human

Research by the University of Minnesota Institutional Review Board.

Data Collection

After the completion of the Module, all students were required to complete a reflection for a completion grade. Guiding questions for reflection were provided, prompting them to consider what they learned, which aspects of the learning activity they found most helpful, and feedback on methods to improve teaching this topic in the future. There were no restrictions on length. All reflection submissions were de-identified prior to data analysis.

Data Analysis

Using the principles of Consensual Qualitative Research (CQR), three pharmacy student coders and one graduate student coder reached consensus among domains and subdomains based on the study aims. Two faculty auditors, both knowledgeable about CQR, but not directly involved in collecting or analyzing the data, provided feedback throughout the process. Table 1 summarizes the CQR process.²⁰

Prior to data analysis, the research team gathered to discuss their knowledge of and experience with HT and to share any potential biases they may have brought to the data analysis. A bias self-check worksheet was created prior to this meeting to allow the coders to reflect on potential biases from their own experiences.²¹

Once final approval for the common codebook was received, the researchers recorded the number of times a subdomain appeared in student reflections. A subdomain was only counted once for each reflection since each reflection was from a different student (i.e. if a subdomain appeared three times in a single reflection, it was only counted as one). Researchers came to a consensus of which subdomains were evident in each reflection. The total number of appearances for each subdomain was recorded. Subdomains with a low count (appeared less than 5 times) were integrated into other subdomains. The number of appearances of each subdomain was then shared with auditors and researchers discussed the process of gathering representative quotes for each subdomain.

Findings

After reviewing the fifty-two student reflections, five domains were identified. Table 2 provides a more detailed analysis of domains and subdomains, along with example quotes.

Individuals Impacted by Trafficking

Students recognized HT impacts everyone involved, from perpetrators to victims, while also including community members, law enforcement, and medical professionals. One student stated “You don’t know if the man with her is armed or otherwise liable to physically harm you, your coworkers, or the victim inside the pharmacy,” underscoring the difficulty of

intervening. Other students detailed how these predatory relationships can affect victims' body language and reluctance to seek help. Victims "could be restricted on phone usage and unable to call the hotline in a safe way."

The Pharmacist's Role

Students described how pharmacists could identify victims and emphasized the need for protocols and education regarding HT situations. One student shared "how easy it is to miss the signs of trafficking and why as pharmacists who have direct contact with patients and the community need to always have this possibility in the back of our minds."

Although pharmacists can provide pivotal help, the difficulty in addressing complex HT situations was noted by students. These situations pose moral and ethical dilemmas such as "how to get the patient alone without tipping off the trafficker and putting the patient in danger" and "how I'm going to appropriately report a suspected victim, even though in my initial contact with them, they may have refused my help." Students requested more guidance and experience.

The Role of Pharmacy Education

A need for further integration of this material within the curriculum was called for, citing a prior lack of knowledge. One student recalled that HT was "something that you always hear about in the news or see online, but it wasn't anything that I was familiar with." This sentiment was similarly echoed among other students. Curricular changes to include more information about HT were suggested, albeit without specificity.

Impact of the Trafficking Module Content

Students described the personal and professional impact the module had, and reception was positive. One student stated, "Although it may be difficult to have a private conversation with the patient alone, the discussions we had helped me understand where to start with such a situation." Students were appreciative that this information was being presented to them with one saying "...It really made me realize how little I knew on this topic and how much I needed this lecture." Students were more aware of possible resources for victims and the intricacies of the patient-pharmacist relationship during HT situations. Also, students reported that the content changed misconceptions students had about HT. Finally, students had suggestions on improving the module, such as more speakers that work within the field and role play scenarios.

Impact of Trafficking Module Delivery

Students called the lecture "very informative" and found the "trauma informed care model presented...really helpful..." Students found the discussion useful to understand how pharmacists should approach HT situations. One student stated: "I feel that I have a better grasp on the appropriate steps to take if I ever find myself in that type of situation." Lastly, students reflected about the importance of addressing HT as

some had personal connections to the material and others recognized that "this is something that is very real..."

Critical Analysis

An 80 minute HT module composed of asynchronous and case-based synchronous learning material utilizing Zoom technology, taught by pharmacy faculty with expertise in women's health, public health, and HT, allowed pharmacy student learners to increase their knowledge of HT and feel more prepared to intervene in a trafficking situation.

As illustrated in Table 2, the first two domains identified - 'Individuals impacted by trafficking' and 'the pharmacist's role' - are aligned with the session learning outcomes, and reflect material taught in the learning module and acquisition of new knowledge. Reflections on how the content facilitated reflection on roles in patient care and population health, how the module changed students' beliefs and values, and how students struggled with the psychological difficulty of the content were also evident. Participants reported a need to learn more about the topic, with many voicing the need for the content to be expanded and centered in the core curricula. However, given that this was delivered in an elective, it is unknown how teaching this material as part of the general curriculum would affect student knowledge and perceptions.

Despite the recognition that HT is a critical public health crisis, the profession of pharmacy has been slow to embrace its role in identifying and supporting victims of trafficking.¹⁰ This module served as a modest, yet positive, step by providing pharmacy students with foundational knowledge in this area. Students appreciated learning this content, with 87% of students mentioning this in their reflections. Reflections indicated that a key takeaway for students was to have a basic understanding of methods for approaching an individual who may be a trafficking victim and the multiple resources available for victims.

The content of this module was well-suited to online delivery. A modified version of this module has remained in the curricula at the University of Minnesota for three years, with minor updates and adaptations being made to the content every year.

Conclusions

Given the significant, long-term impacts of HT on individual health, pharmacists have a responsibility to understand how to appropriately respond to and care for trafficking victims. Additional research should be focused on optimizing teaching methods as well as application to practice. Schools and colleges of pharmacy may choose to integrate this topic into public health curricula, or create case-based learning opportunities in clinical, applications-based courses. HT continues as a public health crisis, and pharmacists have the potential to have a meaningful impact in serving individuals being trafficked; competency in this area is critical.

Conflicts of Interest: None

Funding/support: None

Disclaimer: The statements, opinions, and data contained in all publications are those of the author(s).

References

- Greenbaum VJ, Titchen K, Walker-Descartes I, Feifer A, Rood CJ, Fong HF. Multi-level prevention of human trafficking: The role of health care professionals. *Prev Med*. 2018;114:164-167. doi:10.1016/j.ypmed.2018.07.006
- The United States Department of Justice. Human trafficking: What is human trafficking Published September 28, 2022. Accessed May 23, 2023. <https://www.justice.gov/humantrafficking/what-is-human-trafficking>
- Kelling S. Exploring accessibility of community pharmacy services. *Innov Pharm*. 2015;6(3): 210. doi:10.24926/iip.v6i3.392
- Manolakis PG, Skelton JB. Pharmacists' contributions to primary care in the United States collaborating to address unmet patient care needs: the emerging role for pharmacists to address the shortage of primary care providers. *Am J Pharm Educ*. 2010;74(10):S7-S7. doi:10.5688/aj7410s7
- Ravi A, Pfeiffer MR, Rosner Z, Shea JA. Identifying health experiences of domestically sex-trafficked women in the USA: A qualitative study in Rikers Island Jail. *J Urban Health*. 2017;94(3):408-416. doi:10.1007/s11524-016-0128-8
- Baldwin SB, Eisenman DP, Sayles JN, Ryan G, Chuang KS. Identification of human trafficking victims in health care settings. *Health Hum Rights*. 2011;13(1):E36-49.
- Dovydaitis T. Human trafficking: the role of the health care provider. *J Midwifery Womens Health*. 2010;55(5):462-467. doi:10.1016/j.jmwh.2009.12.017
- Schwarz C, Unruh E, Cronin K, Evans-Simpson S, Britton H, Ramaswamy M. Human Trafficking identification and service provision in the medical and social service sectors. *Health Hum Rights*. 2016;18(1):181-192.
- Farella C. Hidden in plain sight: identifying and responding to human trafficking in your ED. *ENA Connect*. 2016;40(4):4-22.
- Palombi L, Van Ochten H, Patz C. The pharmacists' role in identifying and supporting victims of human trafficking. *J Hum Traffick*. 2018;5:1-12. doi:10.1080/23322705.2018.1494486
- Richie-Zavaleta AC, Villanueva A, Martinez-Donate A, Turchi RM, Ataiants J, Rhodes SM. Sex trafficking victims at their junction with the healthcare setting-A mixed-methods inquiry. *J Hum Traffick*. 2020;6(1):1-29. doi:10.1080/23322705.2018.1501257
- Texas Board of Pharmacy. Human Trafficking Prevention Course FAQ. Accessed May 23, 2023. <https://www.pharmacy.texas.gov/licensees/ce-human-trafficking-faq.asp>
- Michigan Pharmacists Association. Pharmacists. Accessed May 23, 2023. <https://www.michiganpharmacists.org/faq-items/pharmacists/>
- Lutz RM. Human trafficking education for nurse practitioners: integration into standard curriculum. *Nurse Educ Today*. 2018;61:66-69. doi:10.1016/j.nedt.2017.11.015
- Stoklosa H, Lyman M, Bohnert C, Mittel O. Medical education and human trafficking: using simulation. *Med Educ Online*. 2017;22(1):1412746-1412746. doi:10.1080/10872981.2017.1412746
- Titchen KE, Loo D, Berdan E, Rysavy MB, Ng JJ, Sharif I. Domestic sex trafficking of minors: medical student and physician awareness. *J Pediatr Adolesc Gynecol*. 2017;30(1):102-108. doi:10.1016/j.jpag.2015.05.006
- Grace AM, Lippert S, Collins K, et al. Educating health care professionals on human trafficking. *Pediatr Emerg Care*. 2014;30(12):856-861. doi:10.1097/PEC.0000000000000287
- Talbott JMV, Dutcher JS, Pougner CA, Calvin SL, Roe-Sepowitz D, Kling JM. Review of published curriculum on sex trafficking for undergraduate medical trainees. *Am J Prev Med*. 2020;58(4):604-611. doi:10.1016/j.amepre.2019.11.013
- Berishaj K, Buch C, Glembocki MM. The impact of an educational intervention on the knowledge and beliefs of registered nurses regarding human trafficking. *J Contin Educ Nurs*. 2019;50(6):269-274. doi:10.3928/00220124-20190516-07
- Hill CE, Knox S, Thompson BJ, Williams EN, Hess SA, Ladany N. Consensual qualitative research: An update. *J Couns Psychol*. 2005;52(2):196-205. doi:10.1037/0022-0167.52.2.196

Table 1. Consensual Qualitative Research (CQR) Process²⁰

Coding Cycle	Step in CQR Process and Description of Step
First cycle	<p>Individual Coding</p> <ul style="list-style-type: none"> ● Read reflections ● Identify and indicate main themes and subthemes of reflections individually <p>Meeting #1</p> <ul style="list-style-type: none"> ● Discuss domains and subdomains between coders ● Reach consensus on domains and subdomains for coding ● Compile domains and subdomains into a table format with descriptions <p>Code mapping (first iteration)</p> <ul style="list-style-type: none"> ● Auditors review list and provide revisions for first iteration of domains and subdomains
Second cycle	<p>Meeting #2</p> <ul style="list-style-type: none"> ● Coders review first iteration of domains/subdomains, proposing changes based on core ideas ● Auditors review changes <p>Code mapping (second iteration)</p> <ul style="list-style-type: none"> ● Second iteration of domains and subdomains finalized <p>Individual coding</p> <ul style="list-style-type: none"> ● Review reflections and identify domains and subdomains for each reflection individually
Third cycle	<p>Meeting #3</p> <ul style="list-style-type: none"> ● Coders discuss and review identified domains and subdomains of each article ● Coders come to a consensus on frequency of each domain and subdomain and compile into a table ● Discuss, then extract quotes that best represent each domain

Table 2. Domain and subdomain analysis of responses to reflections

Domains and Subdomains	Frequency (%)	Selected Example Quotes
Domain I. Individuals impacted by trafficking		
No subdomains	11 (21)	“That close relationship between the trafficker and the victim makes it very hard to help victims and separate them from traffickers, even if they are being treated poorly.”
Domain II. The pharmacist’s role		
Identifying victims of trafficking	25 (48)	“..It is important to know how to ask questions delicately....as well as being able to recognize the signs of a trafficking victim, including body language, signs of physical abuse and neglect, mental health issues, and strange prescription filling patterns”
Accessibility in the community and potential interaction with victims	17 (33)	“As someone who wants to work in a community pharmacy, I will be an easy health care access point for many people, so I want to be able to provide the best care that I can -including the ability to recognize situations like human trafficking,”
Importance of education (urgency to the situation)	22 (42)	“I think it’s important for more students to learn this because the way you should approach a possible trafficking situation is almost the opposite of what you think.”
Challenges with gray areas	19 (36)	“It’s a little scary to think about the grey area in dealing with how to help someone you believe is a victim, especially when thinking about how much harm could occur if you do too much too fast.”
Other roles	5 (10)	“I feel that this is a call to action to team up with organizations aimed at targeting human trafficking and working with them to come up with guidelines and resources to give to pharmacists to help them be a part of the solution.”
Domain III. Role of pharmacy education		
Lack of prior experience / exposure to information	32 (62)	“Prior to this class, I think if I had been put in a situation where I was to respond to a victim of human trafficking, I likely would’ve done poorly as I was unaware of what the appropriate response would be.”
Need for more content in the curriculum	11 (21)	“I really think this should be taught more broadly - especially in the P1 year prior to community rotations.”
Domain IV. Impact of the trafficking module content		
Awareness of resources	27 (52)	“ I also thought it was beneficial to review local and national resources during class since it is important to know how to act once you’ve identified a potential human trafficking victim”

Awareness of importance of trust, privacy, and patient-pharmacist relationship	19 (37)	The patient/victim may visit the pharmacy multiple times before disclosing any information... Trust is key in these scenarios, and just being that trusted person to the patient/victim can go a long way especially when it comes to providing resources for them... saying that they can call the pharmacy at any time is also a simple gesture that may help the patient/victim feel more at ease and provide a way to continue to open about the situation over a period of time.”
Appreciation for the content	45 (87)	“...I realized just how little I knew about human trafficking. I feel more comfortable in being able to recognize the common signs that an individual may be a human trafficking victim, but furthermore, and more importantly, knowing what steps to take in order to keep these patients safe and to offer my support, help, and guidance.”
Discomfort / difficulty of the module	12 (23)	“I don’t know how I would react in a situation where I think I noticed the signs that an individual is being trafficked. I would like to think that I would be able to figure out a way to get them away from the trafficker, but I truly don’t know. I think that’s the hardest part about this material, other than the nature of it, because we have very little experience of what to say and/or do and that is the part that worries me.”
Changed stereotypes	14 (27)	“I realized just how little I knew about trafficking...While I was aware that victims are more often women, I was shocked to learn how common human trafficking was taking place in urban areas such as the Twin Cities.”
Ways to improve (e.g., role-playing, bringing in speakers)	12 (23)	“In the future, I would love to have a speaker from one of the Safe Harbor programs, or a regional navigator, to come speak to us more about the process of victims in detail.”
Domain V. Impact of the trafficking module delivery		
Lecture	21 (40)	“Overall this lecture on human trafficking was very informative and is very unique content for pharmacy school.”
Case Examples	12 (23)	“I also really appreciated the small group discussions that we did on cases because it gave us the opportunity to really think through what we would do in this situation.”
Discussion	16 (23)	“Following today's content and our group discussions, I feel that I am better aware of what to look for in my role as a pharmacy intern and my future role as a pharmacist to help me identify patients who may be victims of human trafficking”
Reflection	25 (48)	“Growing up- human trafficking wasn’t talked about more than, “don’t go places with strangers even if you want to help them... Reflecting now on it- this is something that is very real and that pharmacists can play a huge role in.”