Original Article

An Analysis of Human Trafficking Medical Clinics' Practices in the United States

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Abstract
Background. Comprehensive programs that address the complex needs of survivors of human trafficking (HT) remain rare nationwide despite demonstrable remaining need. Non-profit clinics have proliferated to fill this gulf and provide care, services, and resources to this population. No existing research has explored success and challenges of such clinics.
Objectives. To outline operational characteristics and provider experiences of several nonprofit medical clinics serving survivors of human trafficking (HT) that proliferated due to a lack of comprehensive integrated care serving this population.
Methodology. We interviewed eight nonprofit medical clinics caring for survivors of HT across the U.S. Clinics were identified using a network sampling snowball approach. Semi-structured, conversational Zoom interviews were performed from May-August 2021 using SCORE analysis; subsequent thematic analysis established an interview codebook.
Results. All clinics incorporated trauma-informed care and patient advocates, many offered primary care, and fewer offered partnerships with multidisciplinary services that provided mental health, pregnancy, or substance use treatments. Most clinics expressed challenges with funding, patient continuity due to mistrust or unstable circumstances, and patient identification due to legislative heterogeneity around HT.
Conclusions. Nationwide efforts to standardize medical care for survivors of HT should learn from care models such as those demonstrated in this study. More healthcare systems with should provide comprehensive, integrated health care for trafficking survivors supported by line-item funding that sustains vital components such as patient advocates, mental health services, and substance use treatment support.

Key Words. human trafficking, survivors, medical clinics, nonprofit, mental health services

Introduction

Human trafficking (HT) refers to the commercial exploitation of individuals for labor and/or sex, both of which affect millions of people worldwide (US Department of State 2020). Despite national efforts since the early 2000s to address HT using the 3Ps framework (prosecution, prevention, and protection), the practice remains prevalent in the United States: in 2019 alone, the U.S. National Human Trafficking Hotline identified 63,380 trafficked individuals (Polaris 2019). Health consequences of HT can be tremendous for survivors, who may work in perilous conditions without protection and suffer physical and sexual abuse, malnutrition, and lack of access to medical care, for associated physical injuries, sexually transmitted infections (STIs), chronic illnesses, and physical, psychological, and emotional trauma resulting in mental health disorders (DeCicco et al. 2023) (Ottisova et al. 2016; Stoklosa et al. 2020; US Department of Health & Human Services [n.d.]).

Given the extensiveness of these health concerns, research demonstrates a need for longitudinal, specialized, and coordinated care for members of this unique patient population. This includes trauma-informed physical examinations for acute and chronic medical conditions, sexual and reproductive health care, and mental health counseling for survivors while implementing prevention measures and raising awareness among healthcare professionals. Beyond the health system, survivors may require social services, support with legal advocacy, housing, employment, and educational opportunities to contribute to their long-term recovery (Macias Konstantopoulos et al. 2013; Hemmings et al. 2016; ACOG 2019; Menon et al. 2020).

Despite these needs, most healthcare systems nationwide lack established pathways in place to do so (Clawson and Dutch 2008). Several non-profit medical clinics have emerged to address this gap nationwide (Recknor et al. 2020). It remains unclear exactly how many such clinics exist in the US, and so far, only a handful of case studies have explored how such clinics operate. Many utilize qualified training for medical staff to reduce judgment and stigma, support trauma-intuitive medical services, and initiate coordinated social support to meet unique challenges inherent to effective care for survivors of HT (Chambers, Cox, & Gibbs 2019). For instance, clinics can collaborate with other medical and non-medical providers (e.g., legal aid, shelters, social workers, mental health professionals, etc.) to establish comprehensive care networks; this was exemplified through Project THRIVE of Miami, FL's medical home model (George et al. 2020). In addition, nonprofits such as the Hope Through Health clinic in Texas enhance the organization's capacity to provide trauma-informed care (TIC) through training programs, academic institution partnerships, and professional development opportunities (McNiel, Held, & Busch-Armendariz 2014; Jain et al. 2022).

Objectives

While such case studies show that many of these organizations laid fruitful groundwork for establishing best practices for comprehensive care in this population, a continued lack of coordinated national data on standards of practice has contributed to little coordination between such organizations to share such important practice knowledge (Recknor et al. 2020). This ongoing gap in coordination is likely because those doing the frontline work lack the resources or capacity to publish on best practices because all of their efforts are spent delivering direct services. This study uses an exploratory framework to understand what works well in providing services for survivors of HT and under what circumstances. Studying the structures, successes, and challenges of these existing nonprofit clinics is crucial for understanding these patients' unique healthcare needs, enhancing service delivery, advocating for policy reform, and promoting collaboration moving forward. We expect that funding for mental health services and institutional barriers to the implementation of comprehensive services for survivors will prove the biggest remaining challenges for the organizations we interview. We hope that sharing clinics' expertise may affect legislative reform, increase

funding allocation, and offer perspectives that would inform operational changes.

Methodology

Data Collection: To assess the organization's successes and challenges of nonprofit medical clinics providing care for survivors of HT, this study utilized a semi-structured interview approach. Interviews with leaders of nine different clinics across the United States that provide medical care to trafficked individuals were conducted. Due to technical issues with recording, one clinic was removed from the analysis. Clinics were identified using a snowball approach to sampling, and recruitment was performed via an initial email that explained the aims of the study. Participants included clinician leaders of clinics that self-identified as focusing specifically on providing care to survivors of human trafficking via a medical home model for interpersonal violence, where the services needed by patients occurred in close proximity to each other. Clinics were excluded if they did not routinely care for individuals who had experienced HT. Within each clinic, the director or their self-identified designee was contacted to participate in the interview. Clinician leaders or organization directors were chosen due to greater familiarity with each organization's broad operational characteristics. Participation in this study was voluntary, and interviewees were not compensated. Participants provided verbal consent to be recorded during the interview, and all interviews were conducted via video and audio recording on Zoom. Prior to the interview, each participant provided background information about their clinic via completion of a REDCap survey with details about their program, such as ages served, insurance, and aspects of resource use. Three authors of this study are experts on medical care of trafficked individuals through work and research in the field and led the development of a semi-structured interview guide, which has been reproduced in the Appendix. All interviews were conducted in 2021 by two or three research team members. Interviews were open-ended per a typical semi-structured framework and SCORE analysis in which participants were asked about factors that contributed to success, challenges of operations, barriers, outcomes, and lessons learned from clinic operations (Kallio et al. 2016).

Data Analysis: All interviews were audio-recorded and transcribed verbatim by the TranscribeME online transcription software. Interview transcripts were then added to the qualitative data software NVivo (Version 15) for storage and coding analysis by two authors. A codebook was developed by two authors by establishing a set of a priori codes informed by the senior author's experiences, current literature, and interview guide. Coders convened to discuss their interpretations of the interviews and applications of the codes using a thematic analysis framework, reaching consensus about any coding differences (Gale et al. 2013).

Ethical Considerations: This qualitative study was approved by the Mass General-Brigham & Women's Hospital Institutional Review Board and it was determined that this project did not meet the criteria for Human Subjects Research per NHSR determination #530, 4/4/2023.

Results

Leadership from eight nonprofit clinics serving survivors of HT in several states, including NY, FL, MD, CA, and NM, were interviewed during this qualitative study. We report our study using the EQUATOR Guidelines for Qualitative Research. Results from these interviews are presented as they pertain to three general realms of organizational practice, including 1) services offered by clinics, 2) organizational clinic structure and operating characteristics, and 3) funding and data collection. Interviewees expressed successes, challenges, and opportunities for growth in each of these realms, respectively. Results are presented in two ways: first, Figure 1 displays summarized information about each clinic including their medical, mental health, and other service provisions, aspects of their organizational structure, and information on their funding and data/research development. Blank areas in Figure 1 indicate that the clinic does not offer the listed service.

This information has been condensed from interviews with participating clinics' leadership

and can be referenced throughout each section. In addition, Tables 1-3 present relevant information more directly via representative quotes for each section.

Services Offered by Clinics

Table 1 provides illustrative quotes on the strengths and challenges faced by clinics pertaining to the services they provide. Findings indicated that there was an overwhelming need for comprehensive care services for survivors of HT. Specifically, many clinics identified primary care as a basic need; Figure 1 shows that five clinics provided this care. Several clinics also focused specifically on pregnancy and STI treatment. Five clinics extended this goal into a comprehensive operational medical care model that provided wraparound services directly; others incorporated funding carve-outs addressing more specific patient medical needs.

In addition, psychiatric or therapy services were identified as a predominant need for these patients, and three clinics integrated this into their clinics. Several participants pointed to the need for more readily available mental health services and for more specialized therapy from providers experienced in complex trauma. Others expressed frustration at the logistical landscape surrounding mental health services, citing a lack of available providers and high costs. In the setting of this ongoing need, many clinics were found to offer mental health services, though this varied in terms of how care was operationalized (e.g., directly versus collaborations).

Clinics further expressed there was a need for substance use treatment and housing among patients, and access to in-house or community partnership substance use disorder programs and housing advocacy initiatives was critical. Tangential to these needs, two clinics also identified coverage of substance use disorder services offered to clients for the purpose of offloading financial burdens from accessing care/services.

Clinic Structure & Operating Characteristics

Table 2 provides interview quotes on the strengths and challenges faced by clinics pertaining to their organizational structure and operating characteristics. Many clinics in this study endorsed the application of TIC frameworks' six guiding principles of safety, trustworthiness and transparency, empowerment of voice and choice, peer support, collaboration, and acknowledgment of cultural, historical, and gender identity (SAMHSA 2023). Most participants described how they focused on TIC in their new employee training and several elaborated on tangible benefits they have seen from the TIC practice implementation. However, providers expressed challenges with fully implementing TIC. These included practicing in settings that made TIC difficult due to lack of space or privacy, staff burnout due to vicarious negative mental health effects on providers, and issues around appropriate patient-provider boundaries.

Many clinics operationalized peer support and collaboration efforts by employing patient advocates with lived experience of HT who accompanied patients to appointments and kept in contact with them. As shown in Figure 1, almost all clinic teams offered such advocates to their clients. Participants described the strong effectiveness of this role, and many desired increased funding or resources to hire more patient advocates.

Regarding patient referrals and identification in the wider healthcare system, clinics described different avenues for this operationally. These included close collaboration with hospital systems, law enforcement, government agencies, and other organizations that focus on interpersonal violence. Several clinics noted the importance of education and training to enhance identification of survivors using TIC approaches. Some clinics reported that their focus on HT had been effective overall in obtaining referrals, while other clinics cited this as an ongoing challenge in this work.

Most clinics reported needing increased time with patients due to their case complexity. While many endorsed having carved out increased time for patient visits, others shared that this dimension remained a challenge. Among those who endorsed having increased time and availability, many directly linked this to the ability to build rapport and trust, leading to improved patient engagement and outcomes. A minority even cited having 24/7 availability, which was a major strength. In contrast, others felt limited and rushed in their availability to spend the needed time with patients. Other barriers expressed by all the clinics were a lack of care continuity and inconsistent follow-up that limited patient-provider relationships.

Finally, clinics often endorsed their location as a strength. Close geographic proximity to additional resources from collaborating hospitals or organizations was useful. In contrast, a few participants noted that having a separate location from these facilities was important to allow safe space for survivors. In cases where location was a challenge, some participants discussed using telehealth; however, there was variability in its implementation success among clinics. Per Figure 1, almost all clinics endorsed having adopted telehealth during the pandemic, but some expressed logistical challenges specific to this population. Clinics also varied to what extent their practice planned to continue telehealth operations, with some expressing positive views towards its effects and others saying that it was not sufficient to meet all the needs of their highly transient patient population. Strengths of telehealth operations included convenience for patients and providers, increased flexibility, and being a positive option for those who experienced a lot of fear or anxiety about presenting to a clinic. Challenges around clinics using telehealth for visits with these patients included logistical barriers for patients that might not have mainstream access to internet, computers, or quiet spaces, and the sentiment that due to the sensitive nature or content of these patient visits, telehealth might not be the safest platform for their care.

Funding & Data Collection

Table 3 provides interview quotes on funding sources and methods of data collection performed by interviewed clinics in this study. Funding was discussed as a barrier for the vast majority of clinic operations. Figure 1 demonstrates the funding sources utilized by these clinics: these involved a unique mix of government funds, grants, and donations. Some participants described data collection and research efforts as required components of their financial support. However, many clinics had difficulties establishing and sustaining data collection and sharing: many clinics stated that they had not been regularly sharing de-identified data or involved in any research in the field.

Discussion

Whole person care informed by Caring Science methodology takes into account a patient's physical, emotional, social, and financial needs in order to promote healing for survivors of human trafficking. Despite over a decade of research that indicates this need for Caring Science-based care via comprehensive service networks for HT survivors (Macias Konstantopoulos et al. 2013; Hemmings et al. 2016; ACOG 2019; Menon et al. 2020), health systems nationwide still have minimal capacity to implement effective strategic plans delivering comprehensive, longitudinal care to any population that exists outside of traditional fee-for-service funding structures.

In the absence of such capacity, nonprofit HT clinics have arisen nationwide to fill this gap. Some of these clinics have successfully implemented comprehensive models of care, which have been explored in a few case studies as well as in Dignity Health's published resources on comprehensive care models proven effective for survivors of HT (McNiel, Held, & Busch-Armendariz 2014; Chambers, Cox, & Gibbs 2019; George et al. 2020; Recknor et al. 2020; Dignity Health Foundation 2021; Chambers et al. 2022; Jain et al. 2022). However, this study represents the first attempt to our knowledge to synthesize insights gained from the experience of several different nonprofit HT clinics across the United States.

This work echoes the early history of HIV care in the 1980s, during which time several multidisciplinary clinics proliferated in the absence of a coordinated national health system response (Heard 1989; Hirschhorn et al. 2009). Such sharing of information from important early clinics such as University of California at San Francisco (UCSF)'s General Hospital Ward 86 contributed to a more streamlined system of multidisciplinary care nationwide (Cook 2011). Similarly, it is important to communicate knowledge of best practices across HT clinics to the larger public health community so that such practices and standards of care may be considered when developing blueprints for other healthcare systems to improve care for survivors of HT.

Figure 1: Clinic Characteristics

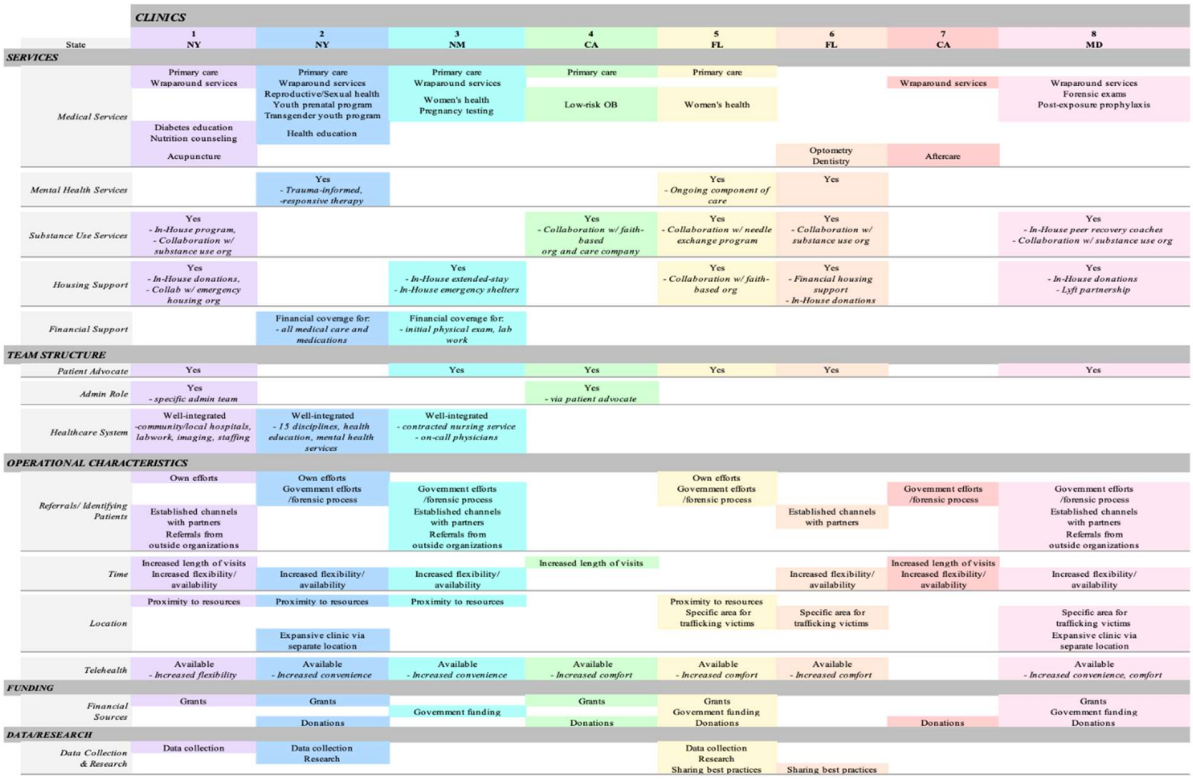

Table 1: Representative Quotes on Services Offered by Clinics

SERVICES	REPRESENTATIVE QUOTES		
	Strengths and Opportunities		***Challenges and Needs***
Medical Services	"We also have a transgender program...[we] transition more than 600 youth. We give them the puberty block of those sex hormones. And those youth, LGBTQI, they are much more likely to be also exploited."		"So, we don't have medical directors or physicians that are onsite directly and are able to do any kind of medical clearance or provide that kind of medical component"

	I felt like we needed access to all the subspecialties and all the diagnostics from neurology to orthopedics to just everything, as you all know. But what really emerged as the core component for [*clinic*] was primary care…because they hadn't had any kind of health care, some of them for 10, 15 years, right?.		"So, once they have an HMO, they come for lab, they come for a medical visit, they come for psychiatry once a week. That's $20, $30, $40 copay for every single visit. It's unaffordable and unattainable. So, the challenge is healthcare is not free"
Pregnancy Care	"So now we have a woman who's pregnant and looks low-risk enough that we can see her for her pregnancy. So that's where my direct service area is seeing OB patient patients and plugging her into that world."		"I need doulas"
	"we also had a prenatal, a youth prenatal program about three years ago. That was the most recent addition because we needed to negotiate with OB¬GYN at the hospital		
STI Care	"We typically offer our patients a follow-up visit...just to see how they're doing with their prophylaxis, especially if we give them PEP. We want them to come back and follow up with us just to make sure they're in touch with their primary care or making sure they have a primary care"		"one of our biggest barriers is access to prophylaxis, specifically like HIV prophylaxis. We don't have medications on site, so we are able to order those medication..."the biggest thing is not having access to this expensive medication."
	"We can also prescribe medications to prevent the three most common STI, so Gonorrhea, Chlamydia, and Trich, as well as pregnancy prophylaxis."		
Mental Health Care	"We have three different type of mental health services. Most of our kids have trauma, one trauma or another. I mean, more than 70% complex trauma…[l]ife has not been nice to them. So, our lens is trauma-informed, trauma-responsive, and then we have trauma-specific intervention, like, cognitive behavioral therapy, by electrical behavioral therapy"		"For us, it would be the mental health and primary care healthcare model that these patients need...I think psychiatry is a core piece that must be included but most health insurances don't cover behavioral health under the medical piece. We have to change that for this population"
	"I have a couple of psychiatrists that know me well and know what our mission is, and they've been exquisitely helpful in that. I can call them at any reasonable hour and manage the medicines with their help"		"it's really hard to get good mental healthcare…I can get [medication] covered, but they're just a band aid for the real thing that needs healing and the real psychological trauma and scars. And things like EMDR is not covered by most insurances out here, and it is out-of-pocket, and there's not many people volunteering to do it"
	"They need healthcare at least for two years…the psychiatry and cognitive behavioral therapy, probably for the rest of their lives"		
Substance Use Services	"We do have an addiction and substance use fellowship...so if we want concentrated care around substance use, we tend to have specialty appointments with those providers and discuss the case beforehand"		"The problem is that once the baby is born, a lot of rehab facilities don't take the babies too. Very few limited beds."
	"We provide some education about substance abuse in our support group as well…. there are a few different organizations that we can work with and refer to.....we definitely see [substance abuse] a lot in our clients either as a result of the sexual assault or there is maybe some substance user abuse that put them in a position to be more vulnerable"		

Other Services	"Our on-site shelter has 44 beds…every client gets their own room, their own kitchen, and that's been wonderful. At one point, we had over 200 people in our shelter at that site"		"We looked at last year, just the number of people that we could not place in our shelter and had to place them in other shelters or out of county…we had over 1,000 people that we were not able to shelter."
	"We also can provide just basic necessities. We have a huge storage locker full of brand-new clothing, toys for children, coloring books, toiletries, getaway bags if a patient needs those. We have a stock of Walmart gift cards to give to patients if they're needed, [and] cell phones"		
	"We pay for everything that they need, all the medicine we buy, all the family planning methods, the IUD… asthma meds, the antibiotic for the STIs."		

Table 2: Representative Quotes on Clinic Structure & Operational Characteristics

CLINIC STRUCTURE	**REPRESENTATIVE QUOTES**		
	Strengths and Opportunities		***Challenges and Needs***
Trauma-Informed Care Approach	"It's really about getting to know them as people, not as patient. And what I have found was that when we talk with them, when we connect with them in an empathic, thoughtful way that they know we are doing that because we really are interested in their lives, they're an open book". Sometimes they tell me more than what I want to hear, and I have to be ready to take it in".. And between what we find from what they share with us and if we find anything in the physical, then we develop an individualized plan based on their needs I find when you lead with these checklist-like questions, it doesn't get us there"		"The rest of our clinic is an extremely busy clinic...you can imagine our waiting room has 100 people in it. It's super crowded; it's noisy. And so those types of things can be triggering for patients. It can be not a calm, inviting environment that we'd love for a [*clinic name*] to be all the time. As much as we try to work with the same staff members, like medical assistants who are rooming patients and nurses and things like that, sometimes the schedule is the way it is, and we have a medical assistant who doesn't have a background in trauma-informed care and things like that. And there's definitely been incidents where people have gotten upset or didn't know protocols, and that affected patient care"
	"Our aim is to train people who are interested in going into trauma-informed care and to provide this type of care in the future."." They have to be motivated and interested in this type of work and do the other components of training"		"We have staffing issues. I worry about staff burnout because it is a 24/7 job. When these patients have panic attacks, it's usually at night, right? It gets dark, they get in bed, the nightmares come. This is part of the problem, is the intensity that it takes, right? …most of my patients are recently recovered, and the trafficker goes to jail. They go to the shelter, and my team gets involved. And so over time, they're their friend and contact. They don't have anybody else."
	"[T]he victim advocates are the big strong link to keep them coming back. And then the care that they receive, the quality of care, the understanding that they can reschedule, or that people are going to take their time with them explaining. So, I think it's that whole victim-centered approach that we try to infuse in every step that keeps them coming back. We got some very good feedback from some survivors that the care was really good, and they didn't feel threatened, and they felt heard"		
Patient Advocate Role	"The magic is in the embedded advocate. She just personally has this patchwork of experiences that all sort of feed together, which has worked really well as a first choice. And she'll disclose, too some personal domestic violence experiences that all sort of feed into what she does"		

	"We also have a patient navigator who's a peer navigator. It's somebody...used to perform things like going to visits with patients to be an advocate for them and help with transportation....they're able to reach out to somebody directly as needed and bypass the phone tree service that is the greater clinic and get direct access to somebody that can help them with stuff like that"		
Administrative Role and Clinic Staffing	"She does a lot of the back-end things, so she processes referrals for outside specialists. She gets the referrals from the community organizations that we coordinate with...she's not as patient-facing, but she does a ton of back-end work in making the clinic flow and all that kind of stuff"		"I think anecdotally having nurses that are on an on-call basis…I don't think that's necessarily the best model. There's definitely some disconnect that can occur. There's I think more burnout that can occur. Having nurses that are able to invest in this fulltime I think would just lead to better job satisfaction and just not feeling so alone and siloed when they are going into this work by themselves"
			"We need core faculty who also want to be a physician champion for this"
Collaboration Efforts	"We're affiliated with the [*hospital system*], so the resources from the greater clinic are definitely extremely helpful. One of the big strengths of the clinic is just the number of people that we have involved to support from a lot of different perspectives, which is really amazing. So, there are three clinicians that provide primary care and GYN care"		"You have to be accepted as the patient here, sometimes seen as not a good fit for a training clinic because it really is all residents with supervision for those patients"
	"We have a team of nurses that are all contractors, and we work off of standing orders that we received from our volunteer medical directors. So, we don't have medical directors or physicians that are onsite directly and are able to do any kind of medical clearance or provide that kind of medical component. If the patient does need any sort of medical clearance, we would have that done in the emergency department. But with our standing orders, as long as the patient is stable, they're able to receive that nursing care"Our physicians are on call and available 24/7, which is fantastic. So, we're able to call them anytime if we have questions about medications or any specific healthcare issues that might come up"		
Referral Practices	"There are so many of those patients coming forward now because we're all aware and helping them and helping identify and responding to the red flags."		." I know I've jumped on the phone multiple times with [*collaborator*] and I'm like, "This is the situation. I don't know how to best keep this client engaged or to even bring up the conversation." So definitely reaching out, trying not to practice in a silo because we're not the experts on everything. We need a lot of help from our community, too."
	"We have an anti-trafficking program at our hospital and we kind of incorporated it into our existing [*clinic name*]. So, we have been for many, many years treating sexual assault, domestic violence, and child abuse. We started seeing more human trafficking patients come in and we wanted to actually have something specific for human trafficking patients and not just treat them the same as a sexual assault victim because we know that they're not always the same situation and sometimes		"Another big challenge is that a lot of people don't see it as an issue. So, I have tried to offer training to different hospitals, and they don't accept it. So that's a big challenge just to get the word out and get the awareness out there that it is a big problem, and it… comes into all the hospitals in our county." " once we actually got in and did our training, it's like, "Oh my gosh, how many patients have I missed over the

	they need more specialized care. So, we were able to get our entire hospital on board. We have a community hospital and they've been amazing with allowing us to kind of do what we thought was best and being very, very supportive. Even the president of our hospital is very involved with the work that we do and has been supportive of not only being able to expand our services and our program, but really educate the staff about what we do, why we do it"		years?" Once we started doing some, we've started receiving a lot of calls from other hospitals, mainly emergency rooms where they're calling and saying, "I have this and I don't really know what to do, can you please help me?"
	"[T]here's other community collaboratives where we talk about it and give out the numbers and the contact information. A couple of things have come from there. And talking with the substance abuse places. So that kind of community outreach has yielded a couple of folks"		
Time for Patients	"[W]e probably spend at least an hour a visit unless it's a patient I've seen just last week and came for a follow-up and checkup on how things are doing with a med titration or, I don't know...a simple cellulitis I'm treating as an outpatient, something like that. We're not constrained by the necessity to pump through numbers. It's beautiful."		"We can't offer in office visits for nights and weekends because the office simply isn't open. And so, patients who want to be seen in person who work during the day are not able to get an in person visit right now. So that's been a barrier"
			"What I realized was that usually the way that mental health services are designed, even when they are youth friendly like ours, the youth have to make an appointment, they have to come for an intake, they get assigned a therapist, they have to come every time, let's say on Tuesday at 2PM. So, there's an organizational structure that I feel that not every kid could maintain." And then you say, "Oh, they don't come." How can they come if what you created doesn't work for them?
	"The [*clinic identifying detail*] clinics rule, if a patient doesn't come on time or show up two times and they're no longer going to see them. They have been so flexible with [*clinic name*] patients...the patience of the providers. We just spoke with [*clinic name*] faculty and the resident about a particular individual and just their understanding and acceptance and patience with this individual…then the question is, can we reschedule?"		"We schedule appointments, and sometimes the survivors don't come…the continuity of care that is necessary in mental health but also in [*clinic identifying detail*]
Location/Space	"We have a lot of offices and 21 examining rooms. We have a baby room where we do work with the children. We have psychologists that do attachment and work with the babies and their parents. We have something that we call the gym. It's not a true gym but it's a place with the largest space that we have with a floor where the youth can dance. It's a dance floor."		"We're physically separated from the hospital, I mean, just by a few blocks but we are a department of the hospital. And so, what that also means is we don't have the wraparound services and staff that [*other hospital system*] do[es]. We don't have case managers, we don't have advocates…I'm one person halftime who's a behavioral science person and a psychologist who does some specific things but not any patient care"
	"The strength is that it's a model of care that is multidisciplinary in one space, one clinic. All of the providers come to the same space, that same room... "		
	"I see the location of our clinic as a strength. We are in a county that is known for a lot of trafficking that's been going on…we do see a large number of foster care kids, a large number of runaways, and I think that has a lot to do with our location"		

Telehealth	"We went full telehealth at the beginning of COVID with the exception of urgent walk-ins, and we've slowly gone back to being an in-person clinic. Right now, we're only open Monday through Friday…for in-person visits, and all of our evening and weekend visits continue to be telemedicine. We do offer telemedicine during the day, but it's limited"		"Sometimes people got too comfortable with telephone visits and maybe were resistant to coming in when they just really need to come in"
	"Patients were really afraid and untrusting, but over time, we got them to do [Zoom]. And now those patients prefer Zoom because they realize that they trust the system and they don't have to go anywhere if they have a private place to talk and do the Zoom…[now] the majority like Zoom better than in person, at least for the psychiatry piece"		
	"Since a lot of our patients are younger, younger adults, they really have taken advantage of the opportunities for telehealth. So, it even makes it easier to have, say, a visit with a provider over the phone or via some sort of telemedicine device"		

Table 3: Representative Quotes on Funding & Data Collection

FUNDING/ RESEARCH	**REPRESENTATIVE QUOTES**		
	Strengths and Opportunities		***Challenges and Needs***
Funding	"The majority of the money comes from philanthropy and grants. And you name it; we do it. We are very entrepreneurial"		"[Y]ou raise money to cover these copays in your philanthropy, but it's really hard to do. So, the challenge is healthcare is not free"
	"It's all donations right now. Grants, we're not opposed to grants…But, yeah, our funding sources are purely grassroots donations right now, which is super cool and exciting"		"[A] huge challenge is having funders understand that when we talk about [*specialty*] services, we are talking up to $5,000 for one individual"
	"Every forensic exam that we do gets reimbursed through our rape victim assistance program in [*state*]. So, if that doesn't happen, we don't receive that funding"		
Data	"[W]e do research. So, we are funded by [*funding organization*]…my research program is about infectious disease, human papillomavirus, even though I have data there about abuse and depression and sexual behavior. They are the funders. And those things when we write the papers is data driven…[s]o, I understand the issue with data"		"[W]e could publish as a large network of groups instead of just individual sites. I mean, we have very specific protocols about how we share data outside of the institute, and there's layers of it"
	"REDcap is starting to be useful. And for me, it's a way to meet the academic mission, meet the scholarship mission, without exploiting my patients by having them sign an informed consent, which you know we wouldn't do. We're surveying those patients now, so we have a little bit of data...we have a paper we've been trying to get published"		"[W]e don't have a research database at the tertiary care center"
	"We presented at the [*specialty association meeting*] of our collaborative model of care, between our college and the [*specialty college*] in providing care for traffic survivors. And that was really well received, my idea"		

Discussion cont.

The results from our interviews of a diverse cohort of clinics caring for survivors of HT across the United States demonstrate that innovative nonprofit clinics have successfully adapted to meet some of the needs of this vulnerable patient population, but that the need for collaboration and growth remains substantial. Health complications related to HT are extensive, and research has demonstrated a need for coordinated services ranging from comprehensive TIC services, sexual and reproductive health care, mental health services, legal services, and housing services, among others, to adequately meet survivors of HT's needs (Macias Konstantopoulos et al. 2013; Clawson and Dutch 2008; ACOG 2019; Menon et al. 2020). These services have also been shown to prevent trafficking recurrence in the future, one of the Department of Health and Human Services' listed core competencies in HT responses (Rothman et al. 2017; US Department of Health & Human Services 2021). Interviews of HT clinics included in this qualitative analysis demonstrated that in this country, only some of these needs are being met within the current infrastructure available to survivors. Several clinics expressed having integrated models for wrap-around medical services and primary care; the advantages of this were being able to plug patients into numerous diverse services to accommodate individual needs.

However, fewer clinics offered mental health care services, pregnancy care, STI prevention, substance abuse treatment, or services outside of medical needs, such as housing and financial support. Numerous studies have demonstrated the centrality of mental health services in supporting survivors of HT, indicating that trafficked individuals have often been subject to complex trauma because of their experiences (Prakash et al. 2023). This can lead to numerous mental health conditions that can further exacerbate job security, housing security, and willingness to interact with the healthcare system consistently (Dovydaitis 2010; Powell et al. 2018; Costa et al. 2019; Mumey et al. 2021). These trends were echoed by numerous clinics interviewed in our study, who expressed struggling with providing medical services when faced with inconsistent appointment attendance due to a deep mistrust of institutions and healthcare providers because of their exploitative experiences, financial instability, or housing instability.

Given the extent of trauma experienced by individuals subjected to HT, clinics also faced the challenge of training their staff to understand the unique dynamics of trafficking, recognizing signs of trauma, and creating safe environments that promote healing. Integrating different service providers trained to deliver this level of care on a single team can be difficult, which then runs the risk of fragmenting survivors' care. This need has been identified in the literature, and most clinics interviewed expressed having integrated formalized TIC training programs for all involved providers (Scott et al. 2019). Another way that almost all interviewed clinics expressed meeting this need effectively was through the use of a patient advocate. Through provider narratives in the interviews, it became clear that this advocate served to help bridge a gap that often arose between patients and providers regarding trust and transparency. Patient advocates, who often had experienced some form of HT themselves, were often key players in developing trust between these patients and the participating clinics. This finding underscores the need to formalize funding programs for such roles; other initiatives, such as the University of Arizona's HT Advocate Toolkit Program, have started to attempt this (University of Arizona James E. Rogers School of Law & the University of San Diego School of Law [n.d.]). Overall, clinics aiming to help survivors of HT must operate with specialized roles for patient advocates and must have strong connections to mental health facilities, therapist practices, and psychiatry services: this must be a top operational priority for HT clinics nationwide.

Other challenges commonly expressed by clinics interviewed in our study centered around funding, patient recruitment and identification, and data sharing. Several interviewed clinics operated with limited funding, impacting the sustainability of their care models or directly affecting their capacity to provide the

comprehensive services to survivors that they aspire to give. These deficits sometimes resulted in long wait times, insufficient staffing, and a lack of specialized expertise. Interviewed clinics described receiving funding from a variety of sources and lamented that this was often the limiting factor in their operations. Given the variability and lack of reliability of funding in the nonprofit sphere, efforts should be made to incorporate care models such as those demonstrated in this study into wider healthcare systems through special carve-outs for HT medical homes or federal funding brackets similar to the Ryan White program, as the return on investment long-term would likely be higher in this population that has high demand for acute care services. Federal funding agencies increasingly require formalized data collection mechanisms on HT to obtain funding for clinics (Zhang 2022); some participants expressed utilizing RedCap or other programs to start capturing this data. HT clinic programs should increasingly utilize programs such as this to document their care service volume and patient-centered outcome data so to inform quality improvement efforts and obtain funding that will allow their care models to be more sustainable.

Limitations

This study has several limitations. Our study exclusively interviewed clinician leaders or organization directors due to presumed broader knowledge of the varied operational characteristics of each clinic. However, it is likely even richer insights could be drawn from the experiences of other support staff due to their proximity to patients using their services. In addition, all interviewed clinics were located in urban settings with close proximity to healthcare systems that can bolster a multidisciplinary model of care more easily than providers who operate in rural settings, where specialty resources may be more limited. As noted earlier, it remains unclear how many clinics dedicated to HT currently exist in the United States due to a lack of coordinated data collection (Nemeth and Rizo 2019); thus, it remains difficult to estimate how representative our largely urban HT clinic sample is compared to the wider reality of HT clinics nationwide, and thus how applicable their recommendations and experiences can be for other clinics. While there is growing awareness of HT in rural America, especially among migrant workers and Native Americans, our study did not capture the unique challenges faced in these settings (Aguirre et al. 2017). Our study aimed to collate the experiences of several clinics known to have implemented HT healthcare models successfully in an attempt to share such practices, but our findings must be interpreted in the socio-geographically urban contexts in which they operate. Further studies and recommendations for care practices in the future should incorporate experiences of clinics and services in rural communities.

Conclusions: Clinics serving survivors of human trafficking (HT) need increased funding for mental health services and patient advocates.

- Healthcare systems need to integrate both mental health services and funding carve-outs for patient advocates into clinics designed for survivors of HT.
- Disseminating these findings that call for increased integration of services is essential to providing evidence-based care for survivors of HT in the United States.
- Nationwide efforts to improve care for survivors of HT should standardize medical care using an equity-focused lens.

Acknowledgements: This research was carried out as a collaborative effort of the HEAL Trafficking Human Trafficking Clinic Leadership Committee.

References

Aguirre R., Harris K., Hilgenberg M., Soper M. & Bowers P. (2017) Sex Trafficking Rural Communities: A Review of the Literature. Contemporary Rural Social Work Journal. 9(1).

American Congress of Obstetricians and Gynecologists (ACOG). (2019) Human Trafficking: ACOG Committee Opinion, Number 787. Obstetrics & Gynecology. 134(3):e90-e95.

Chambers R., Cox J. & Gibbs H.A. (2019) *Mercy Family Health Center Human Trafficking Medical Safe Haven Program and Shared Learnings Manual*. Available at: https://www.

dignityhealth.org/content/dam/dignity-health/pdfs/sacramento/sac-ht-msh-program-manual-word-97-2003-190318-new.pdf (Accessed 12/01/2023).

Chambers R., Greenbaum J., Cox J. & Galvan T. (2022) Trauma Informed Care: Trafficking Out-Comes (TIC TOC Study). Journal of Primary Care & Community Health. 13:215013192210931.

Clawson H. & Dutch N. (2008) Addressing the Needs of Victims of Human Trafficking: Challenges, Barriers, and Promising Practices, ASPE. Available at: https://aspe.hhs.gov/reports/addressing-needs-victims-human-trafficking-challenges-barriers-promising-practices-0 (Accessed 12/01/2023).

Cook T. (2011) *SFGH's Ward 86: Pioneering HIV/AIDS Care for 30 Years | UC San Francisco*. Available at: www.ucsf.edu/news/2011/06/104005/sfghs-ward-86-pioneering-hivaids-care-30-years (Accessed 12/01/2023).

Costa C.B., McCoy K.T., Early G.J. & Deckers C.M. (2019) Evidence-based Care of the Human Trafficking Patient. The Nursing Clinics of North America. 54(4):569-584.

DeCicco P., Prakash J., Rapkin M., Brown K. & Stoklosa H. (2023) Understanding Health Care Utilization and Occupational Exposures of Labor-Trafficked People. Journal of Health Care for the Poor and Underserved. 34(3):845-862.

Dignity Health Foundation. (2021) *Safe Haven for Mental Health Services Project: Final Evaluation Report 2021*. Available at: www.dignityhealth.org/content/dam/dignity-health/ sacramento/pdfs/medical-safe-haven/final-eval-report-2021.pdf (Accessed 12/01/2023).

Dovydaitis T. (2010) Human Trafficking: The Role of the Health Care Provider. Journal of Midwifery & Women's Health. 55(5):462-467.

Heard S.E. (1989) Multidisciplinary response of San Francisco General Hospital to the AIDS epidemic. American Journal of Hospital Pharmacy. 46(12):S7-S10.

Kallio H., Pietilä A.M., Johnson M. & Kangasniemi M. (2016) Systematic methodological review: developing a framework for a qualitative semi-structured interview guide. Journal of Advanced Nursing. 72(12):2954-2965.

Gale N.K., Heath G., Cameron E., Rashid S. & Redwood S. (2013) Using the framework method for the analysis of qualitative data in multi-disciplinary health research. BMC Medical Research Methodology. 13(1):117.

George J.S., Malik S., Symes S., Caralis P., Newport D.J., Godur A., Mills G., Karmin I., Menon B. & Potter J.E. (2020) Trafficking Healthcare Resources and Intra-disciplinary Victim Services and Education (THRIVE) Clinic: A Multidisciplinary One-stop Shop Model of Healthcare for Survivors of Human Trafficking. Journal of Human Trafficking. 6(1):50-60.

Hemmings S., Jakobowitz S., Abas M., Bick, D., Howard L.M., Stanley N., Zimmerman C. & Oram S. (2016) Responding to the health needs of survivors of human trafficking: a systematic review. BMC Health Services Research. 16:320.

Hirschhorn L.R., Landers S., Mcinnes D.K., Malitz F., Ding L., Joyce R. & Cleary P.D. (2009) Reported care quality in federal Ryan White HIV/AIDS Program supported networks of HIV/AIDS care. AIDS Care. 21(6):799-807.

Jain J., Bennett M., Bailey M.D., Liaou D., Kaltiso S.A.O., Greenbaum J., Williams K., Gordon, M., Torres, M.I.M., Nguyen, P.T., Coverdale, J.H., Williams, V., Hari, C., Rodriguez, S., Salami, T. & Potter J.E. (2022) Creating a Collaborative Trauma-Informed Interdisciplinary Citywide Victim Services Model Focused on Health Care for Survivors of Human Trafficking. Public Health Reports (Washington, DC: 1974). 137(1suppl):30S-37S.

Macias Konstantopoulos W., Ahn R., Alpert E.J., Cafferty E., McGahan A., Williams T.P., Palmer Castor J., Wolferstan N., Purcell G. & Burke T.F. (2013) An International Comparative Public Health Analysis of Sex Trafficking of Women and Girls in Eight Cities: Achieving a More Effective Health Sector Response. Journal of Urban Health. 90(6):1194-1204.

McNiel M., Held T. & Busch-Armendariz N. (2014) Creating an interdisciplinary medical home for survivors of human trafficking. Obstetrics and Gynecology. 124(3):611-615.

Menon B., Stoklosa H., Van Dommelen K., Awerbuch A., Caddell L., Roberts K. & Potter J. (2020) Informing Human Trafficking Clinical Care Through Two Systematic Reviews on Sexual Assault and Intimate Partner Violence. Trauma, Violence & Abuse. 21(5):932-945.

Mumey A., Sardana S., Richardson-Vejlgaard R. & Akinsulure-Smith A.M. (2021) Mental health needs of sex trafficking survivors in New York City: Reflections on exploitation, coping, and recovery. *Psychological Trauma: Theory, Research, Practice, and Policy*. 13(2):185-192.

Nemeth J.M. & Rizo C.F. (2019) Estimating the Prevalence of Human Trafficking: Progress Made and Future Directions. American Journal of Public Health. 109(10):1318-1319.

Ottisova L., Hemmings S., Howard L.M., Zimmerman C. & Oram S. (2016) Prevalence and risk of violence and the mental, physical and sexual health problems associated with human trafficking: an updated systematic review. Epidemiology and Psychiatric Sciences. 25(4): 317-341.

Polaris. (2019) *The Polaris Project's 2019 Data Report: The U.S. National Human Trafficking Hotline*. Available at: https://humantraffickinghotline.org/sites/default/files/ 2022-12/Polaris-2019-US-National-Human-Trafficking-Hotline-Data-Report.pdf (Accessed 12/01/2023).

Powell C., Asbill M., Louis E. & Stoklosa H. (2018) Identifying Gaps in Human Trafficking Mental Health Service Provision. Journal of Human Trafficking. 4(3):256-269.

Prakash J., Markert T., Bain P.A. & Stoklosa H. (2023) Maternal Health Concerns for Pregnant Labor-Trafficked People: A Scoping Review. Journal of Immigrant and Minority Health. 25(4):899-905.

Recknor F., Gordon M., Coverdale J., Gardezi M. & Nguyen P.T. (2020) A Descriptive Study of United States-Based Human Trafficking Specialty Clinics. The Psychiatric Quarterly. 91(1):1-10.

Rothman E.F., Stoklosa H., Baldwin S.B., Chisolm-Straker M., Kato Price R. & Atkinson H.G. (2017) Public Health Research Priorities to Address US Human Trafficking. American Journal of Public Health. 107(7):1045-1047.

Scott J.T., Ingram A.M., Nemer S.L. & Crowley D.M. (2019) Evidence-Based Human Trafficking Policy: Opportunities to Invest in Trauma-Informed Strategies. American Journal of Community Psychology. 64(3-4):348-358.

Stoklosa H., Kunzler N., Ma Z.B., Luna J.C.J., de Vedia G.M. & Erickson T.B. (2020) Pesticide Exposure and Heat Exhaustion in a Migrant Agricultural Worker: A Case of Labor Trafficking. Annals of Emergency Medicine. 76(2):215-218.

Substance Abuse and Mental Health Services Administration (SAMHSA). (2023) *Practical Guide for Implementing a Trauma-Informed Approach: Publication No. PEP23-06-05-005*. Rockville, MD: National Mental Health and Substance Use Policy Laboratory: Substance Abuse and Mental Health Services Administration. Available at: https://store.samhsa.gov/ sites/default/files/pep23-06-05-005.pdf (Accessed 12/01/2023).

United States Department of State. (2020) *U.S. Department of State's Federal Response on Human Trafficking: About Human Trafficking*. Available at: https://www.state.gov/ humantrafficking-about-human-trafficking/ (Accessed 12/01/2023).

U.S. Department of Health & Human Services. (no date available) *Resources: Common Health Issues Seen in Victims of Human Trafficking*. Available at: https://www.acf.hhs.gov/sites/default/files/documents/orr/health_problems_seen_in_traffick_victims.pdf (Accessed 12/01/2023).

U.S. Department of Health & Human Services. (2021) *Core Competencies for Human Trafficking Response in Health Care and Behavioral Health Systems*. Available at: https://nhttac.acf.hhs.gov/sites/default/files/202102/Core%20Competencies%20Report%20%282%29.pdf (Accessed 12/01/2023).

University of Arizona James E. Rogers School of Law & The University of San Diego School of Law. (no date) *Toolkit for Human Trafficking Survivor Advocates. Toolkit for Human Trafficking Survivor Advocates*. Available at: https://www.supporthtsurvivors.org (Accessed 12/01/2023).

Zhang S.X. (2022) Progress and Challenges in Human Trafficking Research: Two Decades after the Palermo Protocol. Journal of Human Trafficking. 8(1):4-12.

Appendix: Interview Guide

1. **Strengths/services/support***: Provides an inventory of what is available to opportunities, and to support any desired change. Existing capabilities and resources, potential for synergies)*

   a. Can you tell me about what you feel are the strengths of your clinic? **Follow-up question:** Do you see the location of your clinic as a strength?
   b. What support resources do you have available that are advantageous for your clinic/organization? **Follow-up question:** Do you have any formal or informal relationships with domestic violence agencies? Do you have a formal or informal relationship with any human trafficking NGOs or agencies? Do you and other NGOs meet formally or informally?
   a. Do your patients see providers one-on-one or are they integrated into a care team?
2. **Challenges***: defines the content for change and identifies internal project-risks*
   a. Can you tell me about the challenges you face in your clinic? **Follow-up question:** What are some major threats?
   b. What are the challenges around substance use treatment?
   a. What are the challenges around behavioral health services?
   b. What resources do you think your clinic needs?
3. **Options/opportunities and risks***: Identifies the reasons for change, the priorities in change, and external project risks arising directly from those opportunities.*
   a. Telehealth is becoming increasingly relevant. How does your clinic seek to expand on this?
   b. Do you see an opportunity for using aggregate national data?
   c. What are the opportunities for partnership in caring for patients?
4. **Responses/returns/rewards:** *Probable/emergent consequences of action or inaction*
   a. Has your clinic program created innovative care paths? If so, what are they?
   b. What are significant components of your clinic that keep patients engaged in your services?
5. **Effectiveness:** *Identify services that are efficient, reliable, appropriate, integrated.*
   a. How is your clinic seeking to fill gaps that impact effective delivery of your services?
   b. What are the best practices of your clinic? How are they reliable, efficient, and integrated? **Follow-up question:** How are you sharing your best practices with other clinics?
   c. Have you participated in research regarding the efficacy of this model of care? **Follow-up question:** Would you be willing to further share about this model?
   d. What are some of the best practice outcomes you have observed anecdotally or through research?
6. **Other**
   a. What are the *self-care practices* you have implemented in your clinic? If none, do you believe they would be helpful? *Example: Staff uses grounding techniques or peer debriefing after difficult HT patient visits.*

Is there anything that hasn't been shared that you would like to say more about