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Adaptation of the U.S.-oriented evidence-based intervention *TransAction* for transgender women in Vietnam

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ABSTRACT

Background: Trans women in Vietnam are among the most vulnerable groups with high HIV risk and limited access to care. *TransAction* is an evidence-based intervention to reduce trans women's HIV risks and increase social support and access to care.

Aims: The aim of this study was to adapt *TransAction* to the specific needs of trans women in Vietnam.

Methods: This study was conducted in Ho Chi Minh City from November 2020 through June 2021 Using the ADAPT-ITT framework, interviews, focus groups, and community advisory board meetings were conducted with trans women, service providers, and community members to better understand Vietnamese contexts of gender transition, HIV risks, and service gaps. Feedback was solicited on *TransAction* content and format adaptation.

Results: Trans women in Vietnam faced unique challenges related to family norms, policy and regulatory constraints, and limited transgender-specific or gender-inclusive services. *TransAction* was modified to accommodate identified challenges and needs, and intervention components to enhance family support were added. Strategies to cope with stigma and seek support and services were adapted to Vietnamese culture and policies.

Discussion: Post-adaptation interviews and focus groups demonstrated strong feasibility and acceptability for the adapted intervention, which can potentially be used to reduce Vietnamese trans women's HIV risks and increase their social support.

KEYWORDS
Transgender; HIV; Vietnam; implementation science

Introduction

HIV among transgender women (hereafter: trans women) in Vietnam is a serious health concern (APCOM, 2019; Nguyen et al., 2019a). Despite notable success in reducing HIV transmission among key populations such as people who inject drugs (Government of Vietnam, 2014; Windle, 2016), HIV infection among trans women has largely been ignored (Ly et al., 2020). There are an estimated 300,000 to 500,000 trans women living in Vietnam (VN Express, 2020), and their risk behaviors continue to drive Vietnam's HIV epidemic (Goldsamt et al., 2017). The Vietnam Ministry of Health's epidemiological and operational planning captures trans women under the broad category of men who have sex with men (MSM), thereby masking important data estimates and unique vulnerabilities of trans women (Hoang & Oosterhoff, 2016; Ly et al., 2020; PEPFAR, 2020). The limited data that do exist show high rates of HIV (~18.0%), sexually transmitted infections (STI; 17.6% for syphilis), mental health disorders (45% positive screening of depression and 69% for PTSD), substance use (24.7% ever used stimulant), and sexual risk (60.2% consuming alcohol before sex during the past 12 months) among trans women in Vietnam (Colby et al., 2016; Vu et al., 2012; Vi et al., 2020). There is a wide range of barriers to HIV, health care, and social service access among trans women, including stigma in

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medical settings, restricted employment opportunities and health insurance coverage, limited gender transition procedures and social support, and a general and overarching lack of understanding toward trans health issues among healthcare and service providers including structural transphobia whereas trans women are only defined as men who have sex with men (Do et al., 2018; Do & Nguyen, 2020; Hoang & Oosterhoff, 2016; Ly et al., 2020). Furthermore, structural transphobia also manifests trans invisibility as the overwhelming majority of the campaigns for PrEP/PEP and HIV care depict images of men who have sex with men and not trans women (Nguyen & Angelique, 2017; Oldenburg et al., 2016). Consequently, trans women at risk of HIV acquisition or transmission do not relate to these campaigns and do not identify their HIV risks (Vi et al., 2020). Finally, when resources are being allocated to key populations, such as men who have sex with men or injection drug users, policymakers that are aware of the HIV rates among trans women prioritize other key populations with greater population rates (PEPFAR, 2020; Son et al., 2019).

It is worth noting that same-sex relationships, although have never been illegal in Vietnam, has been considered a "social evil" equivalent to drug use and commercial sex (Nguyen, 2016) due to the centuries-long influences of Confucianism, Taoism, and Buddhism on the Vietnamese culture (Le & Yu, 2019). These ideologies shape the hostility and discrimination toward the transgender population, for example, the Confucian belief of patrilineal ancestor worship defines gender roles in the family, where descent is believed to be traced patrilineally through male members. Therefore, sons, in particular the eldest son, bear the responsibility to care for their elderly parents and, more importantly, carry on the family lineage to maintain the connection to the ancestors (Horton, 2014; Jellema, 2007). Failing to produce offspring in a traditional, heterosexual marriage is considered a breach of filial duties, which will bring shame not only to the individual but also to the whole family (Guilmoto, 2012; Le & Yu, 2019). These Confucian values of filial piety and strictly defined gender/family roles are deeply rooted in Vietnamese society and remain a strong influencer behind homonegativity, even after the *Doi Moi* (the revolution in 1986) in Vietnam (Nguyen & Angelique, 2017).

Ho Chi Minh City (HCMC) is the most trans-concentrated city in Vietnam (APCOM, 2019). Internal migration in HCMC enables a more open expression of sexual and gender identity and gender expression (APCOM, 2019). A cross-sectional study of 456 trans women in HCMC showed a 17% HIV prevalence with 25% of HIV-positive participants previously unidentified (Vi et al., 2020). The study further revealed a high rate of having male sexual partners, substance use, stimulant use before sex, and STIs among the trans women participants (Vi et al., 2020). A qualitative study in HCMC highlighted the health hazards associated with trans women's use of unlicensed and medically unmonitored hormones, filler injection, and gender transition procedures in HCMC (Nguyen, 2019b). HIV identification and care among trans women in HCMC fall far below the UNAIDS' 90/90/90 goals, with antiretroviral therapy uptake at 67% of all trans women living with HIV (Cotrel-Gibbons et al., 2018; Do et al., 2019). Although HIV pre-exposure prophylaxis (PrEP) services have been offered in HCMC since 2017, its acceptability is lower among trans women than MSM (Green et al., 2021; Tran & Luong, 2021).

Given the tremendous vulnerabilities and healthcare inequities, there have been repeated calls for behavioral interventions that address the specific health needs of Vietnamese trans women, including general and sexual health services, HIV prevention and care, treatment of substance use and mental health, and social services (APCOM, 2019; Bao et al., 2016; Cotrel-Gibbons et al., 2018). However, despite these inequities, there are no interventions designed to address the unique challenges faced by trans women in Vietnam. Studies targeting transgender populations in Asia are scant and are primarily exploratory (Peng et al., 2019; Yi et al., 2020). Evidence-based interventions (EBI) originating from other countries can be adapted to increase social support, self-efficacy, and HIV and other healthcare utilization among trans women in Vietnam.

TransAction is a U.S.-oriented, theory-based intervention developed in 1995 (Reback et al., 2019) in collaboration with trans women in Los Angeles County, California. It was designed to

increase self-efficacy and social support among trans women experiencing multiple co-occurring health disparities in resource-limited and/or community settings. Findings demonstrated that attendance in *TransAction* was associated with numerous positive health outcomes, including reductions in numbers of male sexual partners, anonymous male sexual partners, and exchange partners, reductions in sex work and sexual activities while high, and reduction in drugs/alcohol use including injection drug use, and medically unmonitored hormones (Reback et al., 2019). Given the absence of an EBI designed for delivery in resource-limited settings, *TransAction* was well suited to serve as a health promotion intervention model for trans women in Vietnam.

In planning and implementing EBIs in a new context, researchers and public health professionals often need to modify interventions to address cultural and contextual differences between the context of origin and that of implementation (Stirman et al., 2013; Escoffery et al., 2018). While some of the health challenges experienced among Vietnamese trans women are similar to those in western countries, there are distinctive challenges in Vietnam, including the culture and gender norms, legislation regarding gender transition procedures, and shortage of resources in the country (Do et al., 2020; Nguyen, 2019b; Tuoi Tre News, 2021; Tran, 2011). This study adapted *TransAction* for trans women in Vietnam to provide a culturally responsive intervention that addresses critical gaps in HIV prevention and care and other health outcomes.

Methods

The U.S.-oriented evidence-based TransAction intervention

TransAction is a peer support, manual-driven intervention based on theoretical principles and techniques of Social Cognitive Theory (Bandura, 1991, 2001), Health Belief Model (Rosenstock et al., 1988), Presentation of Self and Identity Management (Ellemers, 1993; Schlenker, 2012), and Social Support Theory (Shumaker & Brownell, 1984; Thoits, 1986). The multi-tier structure of *TransAction* consists of four core components: 1) outreach (street and venue-based); 2) individual risk reduction peer counseling sessions; 3) peer-facilitated group sessions including skills building, transitional life skills, and support groups (daily); and, 4) social events (quarterly). All intervention components were designed to reduce HIV sexual risk behaviors and increase health care utilization, self-efficacy, social support, and healthy gender expression options. Details of the original U.S.-oriented *TransAction* can be found elsewhere (Reback et al., 2019).

Participants

A community-based participatory approach (Becker et al., 2005) was used to involve local transgender populations and healthcare providers in the adaptation of *TransAction* in Vietnam. Participants (N = 61) were self-identified trans women (n = 53) living in HCMC and service providers (n = 8) that provided health and/or social services to trans women in HCMC. Inclusion criteria for trans women were: 1) self-identified as trans women; 2) 18 years of age or older; and 3) willing to provide informed consent and comply with study requirements. Inclusion criteria for service providers were: 1) 18 years of age or older; 2) current or past year paid or volunteer work at a community-based organization (CBO) or health clinic that provided services to trans women; and, 3) willing to provide informed consent and comply with study requirements.

Trans women participants were recruited using various strategies: 1) online via a Facebook fan page and Zalo (a popular app in Vietnam); 2) long-chain referral whereby enrolled participants were asked to recruit a maximum of three potential new participants; 3) in-reach through direct communication by CBO stakeholders, providers, and trans women representatives; and 4) posters placed throughout the community sites, and postcards distributed at meetings and social events. Service provider participants were recruited from local CBOs, hospitals, and clinics that serve LGBTQ + populations. Both trans women and service provider participants completed an informed consent process involving a detailed verbal description of the study.

Procedure

During the study implementation, there was one Community Advisory Board (CAB) in HCMC specifically charged with overseeing and working with sexual (primarily MSM) and gender (primarily trans women) minority community sites. The CAB was formed by *Life Center*, an umbrella entity that oversees community sites working with sexual and gender minority populations to improve HIV prevention and care and provide policy advocacy. Comprised of CBO stakeholders and service providers, community partners, health educators, and participants, the CAB has long-standing relationships with the research team in HCMC and was utilized to inform and provide feedback on all stages of the cultural adaptation of *TransAction*. Four CAB meetings were convened with approximately 10 members attending each meeting. The first two included discussion on the study design, progress and timeline, participant recruitment, study team training, trans laws and policies in Vietnam, and available local healthcare resources. The final two focused on reviewing and interpreting pre-adaptation interview and focus group findings. During the fourth CAB meeting, members also reviewed all components and proposed modifications of the adapted *TransAction*. Following the fourth CAB meeting, *TransAction* was again revised. CAB members were not study participants.

Guided by the first few stages of the ADAPT-ITT framework (Wingood & DiClemente, 2008), this study included a series of sequential pre- and post-adaptation stages to develop a culturally responsive adaptation of *TransAction* for trans women in Vietnam (Table 1). The pre-adaptation stage included in-depth interviews and focus groups to solicit input on the HIV risk behaviors and health/social service provision gaps and barriers experienced by Vietnamese trans women. Given the stigmas faced by trans women in Vietnam, we opted to conduct exploratory individual interviews to ensure confidentiality, and to better understand individual experiences about sensitive topics of gender expression, substance use, mental illness and sexual risk. Following completion of exploratory individual interviews, we held focus groups that targeted the challenges of specific subgroups based on age, history of sex work, and HIV status. During the interviews and focus groups, the US-oriented *TransAction* intervention was presented to solicit initial feedback. Based on the common themes that emerged from the interviews and focus groups, the research team developed a first version of the adapted *TransAction*. Concurrently, CAB meetings were held to offer input on how to contextualize *TransAction* within the cultural constraints and available local resources. The CAB suggestions and feedback were integrated into the second revised version of *TransAction*. The post-adaptation stage began upon completion of the second version of the adapted *TransAction*. That stage included an additional series of in-depth interviews and focus groups with trans women and service providers to solicit feedback on the perceived feasibility and acceptability of the adapted *TransAction*.

Table 1. ADAPT-ITT model: phases, objectives, and study activities.

Phases	Objectives	Study activities
Assessment	• Explore the cultural and social contexts of HIV risks • Identify the gaps in and barriers to trans women's health (HIV prevention and care, STIs, mental health, substance use) and service-seeking and utilization	• In-depth interviews with trans women (n = 27) • Focus groups with trans women (n = 5; 26 Ps)
Decision	• Select the components of *TransAction* to be adapted • Decide cultural adaptation of the selected intervention adaptable components	• In-depth interviews with service providers (n = 8)
Administration	• Evaluate the trans women's impression, memorability, and persuasion of the adapted *TransAction* intervention	• *TransAction* intervention demonstration and feedback seeking with trans women
Production	• Summarize the formative study findings • Develop the 1st version of the adapted *TransAction* intervention protocol	• Research team meetings • CAB meetings
Topical experts	• Gather local experts' feedback on intervention protocol	• CAB meetings
Integration	• Integrate experts' feedback on the 1st version of *TransAction* • Develop the 2nd version of *TransAction* • Seek feedback to generate a final version of *TransAction*	• Weekly research team meetings • Focus groups with trans women (n = 2; 10 Ps) • In-depth interviews with service providers (n = 4)
Training	• Prepare for implementation of randomized controlled trial	• Deferred for future randomized controlled trial
Testing	• Evaluate efficacy of the adapted *TransAction*	

Each interview, focus group, and CAB meeting took place in private settings, either in an office at the collaborating local CBO or virtually using a password-protected Zoom meeting room. Discussion durations varied from one-to-two hours. With participants' unanimous consent, the interviews and focus groups were audiotaped. The CAB meetings were not audiotaped but recorded by a note-taker. Both trans women and service provider participants earned 273,361 VND (~$10 USD) for their participation in either an in-depth interview or focus group.

The study was approved by the Institutional Review Boards at the University of California, Los Angeles and the University of Medicine and Pharmacy in HCMC, Vietnam.

Data collection

Pre-adaptation

From September 2020 through January 2021, pre-adaptation in-depth interviews and focus groups were conducted with trans women (n = 53; 27 in-depth interviewees and 26 focus group participants). To better understand the specific health challenges experienced by trans women with various social and background characteristics, the focus groups were stratified into subgroups: 1) aged 18–25 years (n = 6); 2) older than 25 years (n = 5); 3) engagement in sex work (n = 5); 4) no history of sex work (n = 5); and 5) at risk for HIV (n = 5). The interviews and focus groups started with general discussions regarding: 1) a trans woman's identity in Vietnamese culture; 2) perceived HIV risks; 3) social vulnerability; 4) legal issues (e.g., name change); 5) gender transition procedures (e.g., hormone therapy); 6) experiences/internalized cultural and social stigma, discrimination, and harassment; 7) barriers to health care utilization; and, 8) gender expression limitations. The in-depth interviews focused on exploring personal experiences living as a trans woman and HIV risks. Sample interview questions included "*What are some of the social, cultural, and legal consequences of expressing your gender,*" and "*Are there social, cultural, and legal conditions that make HIV risk different, unique, or specific to trans women;*" while focus groups sought to understand everyday experiences, HIV risks, and healthcare needs specific to a subgroup, for example, "*In terms of expressing gender identity, what are the differences between younger and older trans women?*" Participants were asked to provide feedback on the core elements, activity content and format, and thoughts about the adaptation of *TransAction* within Vietnamese social and cultural context.

Pre-adaptation in-depth interviews with service providers (n = 8) to solicit their input on: 1) local trans women's service needs and gaps including challenges to service provision for trans women; 2) availability of HIV prevention and care, including PrEP, post-exposure prophylaxis (PEP), and ART; 3) access to safe and healthy gender transition options; 4) access to substance use and/or mental health services; 5) access to social services; 6) trans women's safe sex and personal safety; 7) stigma and mistrust in healthcare settings; 8) components of *TransAction* that can fill gaps in service provision and how to adapt to enhance compatibility within Vietnamese culture, policy, and system capacity; and, 9) providers' training needs.

Post-adaptation

In May and June 2021, post-adaptation in-depth interviews and focus groups were conducted; two focus groups with trans women (n = 11) and in-depth interviews with service providers (n = 4). By design, all post-adaptation participants had previously participated in the pre-adaptation activities. The post-adaptation in-depth interviews focused on confirming that the adapted version of *TransAction* was culturally appropriate and acceptable and seeking final feedback from trans women and service providers.

Data analysis

The audio recordings of interviews and focus groups were transcribed verbatim and translated into English by study investigators who were fluent in both English and Vietnamese. Analyses were conducted on the English translations of in-depth interview/focus group transcripts using rapid qualitative analysis methods (Nevedal et al., 2021) to identify themes and subthemes to drive

the adaptation of *TransAction*. Three Ph.D.-level investigators with training and experience in qualitative research (including the Principal Investigator) developed the first draft of the code list based on the interview and focus group guides. The code list contained broad categories and subcategories including: 1) general issues (e.g., stigma, depression, loneliness, acceptance, financial difficulties, disclosure), 2) specific challenges (e.g., age, family, transition stage, geographic location, employment), 3) HIV risks, 4) service needs (e.g., access and healthcare utilization, PrEP/ART, mental health, substance use treatment, gender transition services, social and legal services), 5) adaptation of *TransAction* (e.g., additions, deletions, revisions of contents, changes of format, other suggestions). The categories/subcategories of the codes were agreed upon by the investigators, the interviewers/focus group facilitators, and the coders. Two coders then performed the coding using Microsoft Excel to organize the text segments of the transcripts into a coded structure (Ose, 2016). The code list was modified based on themes that emerged from the transcripts. During the coding process, the two coders met frequently to review the code list and compare the coded Excel matrix, and arrive at a consensus (Burla et al., 2008). After the coding process was completed, the two coders and three investigator met again to further organize themes and identify quotes for this manuscript. The interviewers and focus group facilitators were not part of the coding team, but they verified the comprehensiveness and accuracy of the identified themes and quotes.

Results

Table 2 details the characteristics of the 53 trans women and 8 service provider participants. The mean age of the trans women participants was 31.8 years. Most had achieved educational attainment of 12 years or less. Fifteen percent were unemployed, 55% self-reported histories of sex work, and 15% self-reported HIV-positive serostatus. The majority (62%) always presented as female, and 45% had either initiated or completed their gender transition medical procedure(s). Service providers were primarily cisgender; only two (25%) identified as trans women. Half (50%) of the service providers had a masters' degree or higher, half (50%) were medical doctors, and half (50%) worked in a community health clinic.

Table 2. Characteristics of trans women and service provider participants, N = 61.

Trans Women (n = 53)	N	%
Age (mean = 31.8 years)		
18–20 years	5	9.4%
21–30 years	30	56.6%
31–40 years	7	13.2%
41 or older	12	22.6%
Educational Attainment (mean = 9.4 years)		
6 or below	7	13.5%
7–9 years	21	40.4%
10–12 years	21	40.4%
13 years or more	3	5.8%
Employment Status		
Unemployed	8	15.1%
Entertainment business (singer, model, makeup artist, etc.)	19	35.8%
Small business owner/self-employed	11	20.8%
Labor worker	5	9.4%
Peer educator	5	9.4%
Others	5	9.4%
Living Situation		
Self	4	7.5%
With friend(s)	19	35.8%
With husband	4	7.5%
With other family member(s)	26	49.1%
Ever engaged in sex work		
Yes	29	54.7%
No or not reported	24	45.3%
HIV Status		
Positive	8	15.1%
Negative	40	75.5%
Unknown/not reported	5	9.4%
Gender Transition Status		
Started or completed medical gender confirmation procedures	24	45.3%
Hormone only	17	34.0%
Had not started medical gender confirmation procedures	11	20.8%
Social Transition		
Always dressed in feminine attire	33	62.3%
Always dressed in masculine attire	17	32.1%
Dressed in both feminine/masculine attire	3	5.7%
Disclosure of Trans Identity		
Fully disclosed	39	73.6%
Partially disclosed	12	22.6%
Not disclosed	2	3.8%
Birthplace		
HCMC	32	64.0%
Other provinces	18	36.0%
Service Provider (n = 8)	N	%
Gender Identity		
Male	3	37.5%
Female	3	37.5%
Transgender	2	25.0%
Educational Attainment		
Master and above	4	50.0%
College graduate	3	37.5%
High school graduate	1	12.5%
Profession		
Medical doctor	3	37.5%
Social worker	4	50.0%
Peer supporter	1	12.5%
Affiliation		
Hospital	1	12.5%
Clinic	4	50.0%
Community-based Organization	2	25.0%

Identified needs, challenges, and gaps

Trans women in Vietnam experienced many similar vulnerabilities to trans women globally including those related to HIV risks, stigma and discrimination, and healthcare and social services disparities. However, through in-depth interviews and focus groups with trans women and service providers, three main themes emerged that are specific to the needs, challenges and gaps of trans women in Vietnam. These themes included: 1) Social and Familial Vulnerabilities, 2) Policy, Legal and Medical Restrictions, and, 3) Health Vulnerabilities and HIV Biomedical Misconceptions.

Social and familial vulnerabilities

There were many intersectional factors that contribute to Vietnamese trans women's social and familial vulnerability. As youth, many trans women experienced discrimination by other students and by teachers. Low educational attainment, coupled with stigma and discrimination, resulted in employment difficulties, and many cited a reliance on sex work to pay for basic needs and gender transition procedures.

> I had experience in sex work because everyone told me that it isn't easy to afford breast surgery. So many transgenders have to work to earn money for breast surgery. (Trans women ID-G)

Unlike Western culture that emphasizes individuality, Vietnamese culture emphasizes family as the essential source of one's identity. Participants shared about the anger and disappointment their parents expressed when they disclosed their transgender identity. Participants identified fearing the loss of the family bloodline as well as the loss of family security during their elder years. Additionally, participants discussed how their trans identity brought disgrace and shame to other family members and their community.

> My family at that time mostly said, "You should try to grow up and get me grandchildren" … At home, the neighbors would discriminate against my parents, and then they would be sad. (Trans woman ID-G)

When disclosing their gender identity to parents, many stated they experienced family pressure, isolation, and exclusion. In some situations, disclosure of gender identity led to family and domestic conflict and violence.

> My father is so strict. When I was a child, he treated me badly. He forced me … at that time I was naked, tied up on a chair … then [he] whipped me, like a stubborn child … [My] father asked me to go to have a haircut but I didn't do it. My mother did everything for her son and then my mom was also whipped. (Trans woman ID-F)

As a result, some participants reported moving away from their provincial home to gain a sense of independence and safety. Yet, leaving home came with new financial and emotional challenges, and concerns about being alone and disconnected.

> They want to save their face, so if they have a child who is gay, transgender, they push their child away. Being discriminated by their own family is more shameful than being discriminated by outsiders. Like my friend, she was dragged home by her brothers and seriously beaten, and she left again, so they started to chain her ankle. Yet it couldn't stop her, she sawed the chain and left and wouldn't come *back. I have no family, no siblings, so if I'm sick, who's going to take care of me? I'm really scared of being sick. (Trans woman ID-U)*

Despite familial difficulties, many participants still held deep-seated desires to be accepted and recognized by their parents and relatives. Additionally, some described bearing the guilt that their family members, especially their parents, were left to deal with blame, ridicule, and alienation that came from neighbors, communities, and extended families. For many participants, familial rejection was an *ongoing source of pain, and they discussed a desire to regain acceptance as a trans woman.*

> They have to try to show their family that they are a good citizen, useful to society …. Later, when they become more beautiful, have a good job, have a stable income, they can help their family or help the youngest sibling or the other in society, their family will have a different view of transgender people. (Trans woman ID-S)

Policy, legal, and medical restrictions

In 2015, Vietnam lawmakers passed civil codes that acknowledge trans individuals who have undergone gender confirmation surgery the right

to change their legal name (Reuters, 2015). However, as of 2021, the bill to enforce that law has been on hold. The participants unanimously cited the inability to legally change their gender on identification papers as a major challenge in various aspects of life. Trans women recounted challenges in accessing healthcare, employment, educational, and financial opportunities, and even basic civil rights (such as proof of marital relationship and assets) when gender identity and gender presentation differed from the gender on legal identity cards. The absence of transgender-inclusive and protective policy encouraged public stigma toward trans women, which brought not only inconveniences but fear into their lives, as illustrated in the following quotes.

> The main thing is still the law … When I apply for a job, I am denied because I am transgender … Legal issues such as marriage, property division, it affects a lot. I also see that papers changed [and will affect] diplomas, house papers, land papers, vehicle papers, and insurance … all kinds of things. Having a female name on paper will make them [trans women] more confident and more welcomed. (Trans woman ID-I)

> They sometimes want to notarize a document, or if they want to do something, they are very afraid to go to places like government offices [because] the officers will not endorse or something. Maybe the officers will ask, "Why you from outside look like this, but in the picture like that?" Because of the discrimination by the officers, most trans people are not comfortable going to those areas. If they lose their national identity card, they will have to make fake papers to apply for another job. (Trans woman ID-G)

Policy restriction has contributed to the already constrained medical services and resources available to trans women. In addition to effects on patient engagement, there were no current regulations covering gender transition medical procedures in Vietnam at the time of the study and, as such, service providers did not have a clear understanding of the clinical guideline to regulate how hormone therapy and/or gender confirmation procedures should be administered and performed. Highlighting the confusion providers experience when trying to deliver care to their trans women patients due to lack of clear regulations and guidelines, one service provider interviewee stated, "*Injections, hospitals, insurance, everything is out of order. The service of transgender people is not well understood. … since they are not included in the so-called policy and law." (Service provider SP-D).*

Furthermore, healthcare agencies did not have ongoing gender transition medical supplies such as feminizing hormones, and providers expressed concerns about inconsistent availability and supply.

> At this moment, we do not have any law to legalize the use of hormones for transgender people …. If this kind [of hormone] is available, they use this kind; if another kind's available, they use that. That means they do not have a safe product as well as specific and scientifically correct medical instructions about the use of hormones. (Service provider SP-E)

Considering accessibility and affordability, some trans women reported using unlicensed, illegal, and medically unmonitored hormones and/or filler injections. Some trans women used birth control pills to substitute hormones, others purchased hormones from international online pharmacies or local illegal markets. Injection of hormones and/or fillers was often performed by uncertified/non licensed personnel without proper training. Discussing the purchasing of unmonitored hormone injections, one trans woman interviewee shared, "*…those hormone sellers know how to inject, they are not doctors but they still give injections. I find it very dangerous." (Trans woman ID-C)*

Few trans women had the financial means to seek gender confirmation surgeries in neighboring countries such as Thailand. Although there were medical tourist companies with trans women peers to assist with travel arrangements and scheduling appointments, it is costly and logistically burdensome, particularly during the COVID-19 pandemic. To add, international travel for surgery presents challenges for pre- and post-operative care.

> Because at present, they do not have the right to do transgender surgery in Vietnam, they have to go to Thailand. If they fly back to Vietnam after surgery and there are some problems, they don't know where to go. No hospital would take them in because of the liability. Some had to fly back to Thailand. (Trans woman ID-Q)

Furthermore, due to structural transphobia including a fundamental denial of trans populations, resource constraints, and lack of awareness

of confidentiality protection, many hospitals in Vietnam did not have gender-neutral or separated exam rooms for trans patients. Thus, trans women had to seek sexual/reproductive care in an urology department, or discuss their medical history with the presence of other cisgender patients, which resulted in discomfort and jeopardized confidentiality. Echoing this sentiment, one trans woman interviewee stated:

> "There are places where they made me feel uncomfortable …The hospital does not have a department for transgender people. The people sitting around wondering why suddenly a woman entered the male examination department." (Trans woman ID-P)

Participants reported widespread mental health symptomology such as depression and anxiety. However, mental health counseling for trans women was extremely limited. Providers' misconceptions, inappropriate communication, and knowledge gaps regarding the specific physical and mental healthcare needs of trans women contributed to medical mistrust of providers and public hospitals. Discussing this concern, one trans woman interviewee commented, "*Public health services are not friendly to the transgender community, especially for trans women who express their appearance. They have no direction to solve the gender sensitivity issue.*" *(Trans woman ID-S)*

In addition to challenges accessing health services, there were additional barriers to accessing basic civil rights. Some participants feared being a target of criminalization by law enforcement.

> Actually, government forces, sometimes it is a double-edged sword. Why? Because we ourselves are also objects of them. Because now there is Decree 221, you get tested for drugs immediately in the ward, no need to say anything if it is positive. Then if they know we do sex work, we are the one to be punished first. (Trans woman ID-X)

Health vulnerabilities and HIV biomedical misconceptions

Trans women perceived difficulty negotiating safer sex with clients, which places them at greater risk of contracting HIV and other STIs. Some who reported engaging in sex work stated that they experienced physical violence and sexual abuse from exchange partners.

> Customers don't use protection, they force… you know we take their money, so we have no other choice. I used to work as a prostitute [sic]. I was torn apart, they forced us to defer to their demand, many times we wanted protection but they didn't, so we had to do what they asked, that's what lead to diseases, you know? There are customers who even beat them up or ask for their money back, or they don't pay, they say they only pay if they have sex without protection. (Trans woman ID-U)

The participants that reported substance use stated that amphetamine-type stimulants, including methamphetamine, were commonly used. They noted an association of stimulant use, impaired judgment, heightened sexual desire, and sexual risk behaviors. Emphasizing the connection between use and sexual risk, one trans woman interviewee shared, "*…most of us use it for sexual purposes with our guy. I no longer have control over my body, maybe [because of] using stimulants and multiple types at the same time.*" *(Trans woman ID-X)*

Although participants reported HIV risk behaviors, their knowledge of biomedical HIV prevention strategies such as PrEP and PEP, was limited. Among those who knew about PrEP/PEP there was a lack of understanding of the means to access these medications. The inadequate PrEP/PEP awareness was particularly striking among the trans women who just migrated from the provinces, as most of the HIV prevention education efforts and resources were concentrated in major cities such as HCMC.

> There are some people who do not spend time participating in PrEP and PEP programs. For example, prostitutes [sic] or drugs users don't want to go to crowded places. Therefore, they won't know about information like medicines or how to prevent HIV or health programs. PrEP and PEP programs are just advertised widely in HCMC … People who just came to the city don't know about the program. It would be too late when they got the problem and then heard about it. (Trans woman ID-M)

Additionally, many participants engaged in sex work to earn a basic living, and many lived in poverty. With a cost of approximately $20 USD per month for daily oral PrEP, some perceived PrEP as not affordable and not necessary, with one trans woman interviewee claiming, "*This PrEP is only used for HIV, not for other diseases?*

If taken daily it's a waste of money. If taken for your whole life then it costs a lot, a lot of money. For those who have a lot of money it's not a problem, but for sex workers, they have no money to buy it." (Trans woman ID-U)

Finally, participants reported hesitancy to use PrEP due to the concern of drug-drug interactions between antiretroviral and hormone therapies. Some trans women prioritized gender transition over HIV prevention, and the myth of drug interaction further hindered PrEP uptake. Reflecting on this, one participant argued that, *"[T]hey do not dare to take PrEP every day" … "[T]ransgender women really like to be beautiful and look like girls."* These participants believed a fear existed that, *"[T]aking it will affect their hormones, they will not be feminine, not beautiful." (Trans woman ID-A)*

In sum, trans women in Vietnam were challenged by low educational attainment and limited employment opportunities, and reported struggling with discrimination, mental illness, and substance use. Many believed they brought disgrace and shame to their families, resulting in isolation and disconnection from family and social supports. Their inability to legally change their gender on identification papers has contributed to healthcare, employment, and basic civil rights challenges. The needs of trans women were not well understood by providers, which has contributed to medical and social service mistrust (Table 3).

Adaptation of TransAction

In the pre-adaptation in-depth interviews and focus groups, the four components of *TransAction* (i.e., outreach; individual risk reduction peer counseling sessions; peer-facilitated group sessions including skills building, transitional life skills, and open discussion support groups; social events) were perceived as valuable and essential. Both the trans women and service provider participants felt that *TransAction* contained highly relevant information and provided skills for learning different decision-making processes. Based on these findings, all four components of the intervention were retained. However, as described in Table 4, there were elements of each component that were modified to enhance the cultural relevance for trans women in Vietnam.

Additions

Both trans women and service providers requested skills-building to accommodate the family-oriented culture in Vietnam and address the specific family-related challenges. Based on the principles of Social Cognitive Theory (Bandura, 1991, 2001) and Social Support Theory (Shumaker & Brownell, 1984; Thoits, 1986), the adapted *TransAction* includes a "family and social support" skills-building group with exercises that explore effective communication techniques for engaging or reengaging with family members. Also included are skills that teach strategies on how to disclose one's gender and/or sexual identity to family members and respond to difficult family encounters.

> Their families don't understand them very well, they are affected by their families a lot. If their families understand more knowledge related to their problem then there will be more sympathetic, and they will be less stressed. (Trans woman ID-V; Post-adaptation interview)

In addition to a new group on family dynamics, specific skills-building techniques were requested to address issues related to the needs of older trans women, and trans women in early gender transition stages.

> We see that each individual will have different needs, each small population in the transgender community also has different needs, so I suggest that we might consider dividing transgender people into relatively small groups, with different priorities. for example, transgender people will have a young transgender group, or a group of transgender people engaging in sex work, or a transgender group infected with HIV, or elderly transgender group. Those groups are more typical, more specific. (Service provider SP-B; Post-adaptation interview)

Deletions

Both trans women and service provider participants indicated that some elements within *TransAction* were perceived as not applicable in Vietnam. Therefore, these were deleted from the adapted intervention. For example, contents related to emergency shelter/food/showers were deleted because the participants did not report

Table 3. Participants' characteristics (N = 61).

Participant ID	Age	Educational attainment	Sex work (ever)	HIV status
Trans women in-depth interview participants (n = 27)				
ID-A	21–25	13 years or above	Yes	Negative
ID-B	21–25	10–12 years	Yes	Positive
ID-C	21–25	7–9 years	Yes	Positive
ID-D	51 and above	7–9 years	Yes	Negative
ID-E	41–45	7–9 years	Yes	Negative
ID-F	18–20	7–9 years	No	Negative
ID-G	21–25	6 years or below	No	Negative
ID-H	26–30	6 years or below	Yes	Negative
ID-I	21–25	Unknown	No	Unknown
ID-J	26–30	7–9 years	Yes	Negative
ID-K	18–20	10–12 years	No	Unknown
ID-L	46–50	10–12 years	No	Negative
ID-M	26–30	10–12 years	No	Positive
ID-N	21–25	13 years or above	Yes	Negative
ID-O	31–35	10–12 years	No	Positive
ID-P	21–25	7–9 years	Yes	Unknown
ID-Q	21–25	7–9 years	Unknown	Unknown
ID-R	26–30	7–9 years	Yes	Negative
ID-S	26–30	10–12 years	No	Negative
ID-T	26–30	6 years or below	No	Negative
ID-U	51 and above	10–12 years	Yes	Negative
ID-V	41–45	10–12 years	Yes	Negative
ID-W	31–35	10–12 years	No	Positive
ID-X	41–45	10–12 years	No	Unknown
ID-Y	41–45	6 years or below	Yes	Positive
ID-Z	36–40	7–9 years	No	Positive
ID-AA	21–25	7–9 years	No	Positive
Trans women focus group participants (n = 26)				
FG-A	41–45	7–9 years	Yes	Negative
FG-B	51 and above	7–9 years	Yes	Negative
FG-C	51 and above	6 years or below	Yes	Negative
FG-D	51 and above	6 years or below	Yes	Negative
FG-E	46–50	7–9 years	Yes	Negative
FG-F	18–20	7–9 years	Yes	Negative
FG-G	21–25	7–9 years	Yes	Unknown
FG-H	21–25	13 years or above	Yes	Unknown
FG-I	18–20	7–9 years	No	Negative
FG-J	18–20	7–9 years	No	Negative
FG-K	21–25	7–9 years	No	Negative
FG-L	26–30	10–12 years	Yes	Negative
FG-M	26–30	7–9 years	Yes	Negative
FG-N	26–30	10–12 years	No	Negative
FG-O	21–25	10–12 years	Yes	Negative
FG-P	21–25	7–9 years	Yes	Negative
FG-Q	31–35	10–12 years	Yes	Negative
FG-R	31–35	10–12 years	No	Negative
FG-S	26–30	7–9 years	Yes	Negative
FG-T	26–30	6 years or below	Yes	Negative
FG-U	31–35	10–12 years	Yes	Negative
FG-V	21–25	10–12 years	No	Negative
FG-W	21–25	10–12 years	No	Negative
FG-X	21–25	10–12 years	No	Negative
FG-Y	26–30	10–12 years	No	Negative
FG-Z	26–30	10–12 years	No	Negative
Service provider in-depth interview participants (n = 27)				
Participant ID	**Age**	**Gender**	**Education**	**Profession**
SP-A	36–40	Cisgender Female	Bachelor	Social worker
SP-B	41–45	Cisgender Female	Bachelor	Doctor
SP-C	36–40	Trans woman	Master	Social worker
SP-D	41–45	Cisgender Male	Master	Doctor
SP-E	41–45	Cisgender Male	Master	Social worker
SP-F	36–40	Cisgender Male	Master	Doctor
SP-G	31–35	Trans woman	Bachelor	Peer supporter
SP-H	51 and above	Cisgender Female	High school	Social worker

homelessness or housing instability as a prevalent issue among trans women in Vietnam. Furthermore, many trans women in Vietnam are in entertainment business so, thus, did not perceive a need to improve cosmetic skills, as such topics related to cosmetics, grooming, and personal hygiene were deleted. Additionally, as clean needles are easily attainable in Vietnam

Table 4. Summary of the *TransAction* adaptation.

Original designed sessions and topics	Additions and rationale	Deletions and rationale	Revision and rationale
		Outreach	
• Street- and venue-based outreach where trans women congregate to establish relationships • Risk assessment and risk reduction supplies (e.g., condoms, bleach) • Gifts (e.g., lotion, shampoo, make-up) to aid with immediate needs • Referrals to assist immediate and long-term needs	N/A	N/A	• Outreach efforts to be conducted through social media (e.g., Facebook groups) given the high Internet penetration in Vietnam and the flexibility to reach broader trans women populations.
		Individual Risk Reduction Counseling Sessions	
• Self-esteem • HIV testing, education, and care • HIV PrEP, treatment as prevention, and ART adherence • STIs and condom discussion/demonstration • Substance use and cleaning needles discussion/demonstration • Mental health, emotional/social support • Sex work safety • Assimilation • Employment/job training • Violence, including intimate partner violence • Sexuality & transphobia • Emergency shelter/food/showers • Cultural diversity issues • Legal issues/documentation • Relationship/family issues • Transgender disclosure • Hormone therapy and gender confirmation surgery • Gender socialization • Cosmetics, grooming, hygiene, and personal care	• In consideration of stigma and mental stress experienced by trans women when seeking HIV and healthcare, new topics were added to build self-esteem in healthcare seeking, address medical mistrust, and cope with stigma in medical settings. • Educational topics regarding drug-drug interactions between hormone and antiretroviral therapy (including PrEP/PEP) were added to refute misconceptions and misinformation.	• Cleaning needles discussion and demonstration were deleted since needle sharing is not a risk behavior among trans women in Vietnam. • Assimilation, gender socialization, and cultural diversity issues were deleted due to non-applicability within the Vietnamese context. • Contents related to emergency shelter/food/showers were deleted since homelessness is not perceived to be a prevalent issue among trans women in Vietnam. • Trans women in Vietnam have outstanding cosmetic and grooming skills (many would in the field); topics related to make-up cosmetics, grooming, hygiene, and personal care were deleted.	• The adapted employment/job training session to include locally available resources to continue education, vocational training, or employment • Topics related to gender transition options were to be adapted by identifying and introducing safe, legal, and affordable hormones and other gender transition procedures that are accessible in Vietnam, and the negative consequences of using illegal and medically unmonitored hormone injection and "fillers" • Topics related to violence against trans women to include negotiation skills for safer sexual encounters (both in-person and virtually via text message, social media, and dating apps) were to be adapted to ensure cultural appropriateness in Vietnam and mitigate violence • Legal issue/documentation session to be modified to fit the current Vietnamese civil law and the potential to legally change one's gender in the future; to learn the name and gender change process that is permitted by the Vietnamese civil law and the use of ID card and health insurance in services seeking
		Group Sessions	
• Changing name and gender • Entering workforce or continuing your education • Gender transition options • HIV and other STIs, and substance use • Safer sex work, safer dating • Self-esteem and transphobia • Violence against trans women • Gender transition life skills • Open discussion and support groups	• Noting the family-oriented culture in Vietnam, a new "family support session" was added. The main contents included: ○ Demonstrating effective communication skills for engaging or reengaging with family members and loved ones ○ Teaching strategies to disclose one's gender identity and/or sexual identity to family members/loved ones ○ Preparing for difficult encounters with family members or loved ones through role-play ○ Inviting family members to a session and facilitate dialogue and mutual understanding between trans women and their family members • Some group content was modified to address certain subgroups' distinctive needs and interests, such as older trans women and those in their early transition stage.	N/A	• Similar to the individual session adaptation, group sessions of changing names and gender, entering the workforce and continuing education, gender transition options, safer sex/safer dating, violence against trans women were all adapted in fit Vietnamese culture, local policy/regulation, and available resources • The adapted HIV/STIs, and substance use group focused on bridging trans-specific and trans-inclusive gender-friendly medical healthcare and social services for HIV/STIs, and substance use that are available and addressing the use of health insurance for medical services ○ Clarify misconceptions and misinformation regarding HIV medications and hormone therapy interactions ○ Link to local PrEP/PEP/ART services • Local safe channels and procedures to report cases of violence or sexual assault and identify resources to seek support in these situations (e.g., legal advice, consultation on legal rights).

(*Continued*)

Table 4. Continued

Original designed sessions and topics	Additions and rationale	Deletions and rationale	Revision and rationale
Social Events • Quarterly social events • Games and prizes • Provide HIV/STI information at every event • Provide a meal	• Suitable event formats for trans women to build connections, have fun, and release stress include: ○ Afternoon tea sessions and gala parties ○ Picnic or camping	N/A	• Advertise social events on trans-specific Internet sites and social networks • Virtual social events to allow flexibility and broader attendance of trans women in the provinces

including discussions and demonstrations of how to properly use a clean needle (Gray, 2012; World Health Organization, 2011), the content related to syringe exchange was deleted. Assimilation, gender socialization, and cultural diversity issues were not applicable in the context of Vietnamese culture; therefore, this content was also removed.

Revisions

A critical outcome of the pre-adaptive stage was the revision of *TransAction* content and delivery mode to be culturally responsive to Vietnamese culture, policy, and resources. For example, the adaptation of the skills-building group, "Self-esteem and Transphobia," to incorporate culturally appropriate strategies to cope with stigma and increase self-esteem while, concurrently, addressing mental health concerns such as depression and anxiety. Similarly, the adaptation of the skills-building group, "Safer Sex Work, Safer Dating," to teach culturally appropriate negotiation skills with both intimate and exchange sexual partners. Revisions included safe channels and procedures to report incidents of violence or sexual assault and resources to seek legal support and protection. Further revisions included locally accessible, trans-specific or trans-inclusive healthcare and social services such as hormone therapy, gender transition procedures, HIV/STI testing and treatment, PrEP/PEP, substance use prevention and treatment, education and vocational training opportunities, and legal services.

In the U.S., where there are specific neighborhoods, venues, and streets where trans women congregate, physical, in-person outreach has been the most successful recruitment strategy, even given the ubiquity of cell phones and social media. However, in Vietnam, given the high degree of social stigma and discrimination, all of which serve to limit safe physical spaces, social media was frequently mentioned as the most successful recruitment strategy to reach broader trans communities including those living in the provinces with scarce resources.

> [W]e can only create … a website, pages, or small groups on Facebook. There are groups on Zalo in which some people take part to find out some information. Some of my friends … on my Facebook (can post) when they need, "Sister, I'm going to open a Thai restaurant. If you know any transgender friends who want a job, please recommend them to me." Then I will post a status and … connect them with others online. (Trans woman ID-T; Post adaptation interview).

Similarly, social events were recommended to meet virtually via social media (e.g., Facebook groups) rather than in-person, to maximize attendance flexibility and privacy protection. In view of the pre-adaptation interview and focus group findings, all recommended adaptations were discussed collectively by and with the CAB members and the U.S. and Vietnam research teams. An adapted *TransAction* outline was reviewed by trans women and service provider participants during the post-adaptation in-depth interviews and focus groups. The trans women and service provider participants, as well as the CAB members, all agreed upon the final *TransAction* adaptation and confirmed that the adaptation addressed the needs and challenges, and would fill in gaps by providing a culturally responsive intervention for trans women in Vietnam.

Discussion

Given the dearth of systematic interventions targeting transgender populations in Asia, this study was among the first to promote the adaptation of an evidence-based, U.S.-oriented intervention for a culturally responsive application for trans women in Vietnam. Guided by the first several stages of the ADAPT-ITT framework, systematic

steps were followed to engage multiple parties in the adaptation process including trans women, service providers, and community stakeholders. Such a community-based participatory approach fosters a sense of local ownership and relevance of the adapted intervention (Becker et al., 2005).

Similar to the experience of trans women in other countries (Bowers et al., 2012; Fauk et al., 2021; Reback & Fletcher, 2014), findings revealed distinctive needs, challenges, and gaps in healthcare and social service provision experienced by trans women in Vietnam, which guided the adaptation of *TranAction* contents. However, a significant difference between Vietnamese trans women and those in the U.S. is the family value shaped by the deeply rooted Confucian culture. Sons bear an additional responsibility to practice filial piety, which is the most important and socially recognized virtue in traditional Vietnamese society (Guilmoto, 2012; Skillman, 1999). By contrast, daughters bear fewer responsibilities to support aged parents when they marry into their husband's family and become an 'outsider' to the natal family (Wong et al., 2016). Similar to other research on trans women in Asia (Do et al., 2018; Do et al., 2020; Goldsamt et al., 2015; Oldenburg et al., 2016; Yan et al., 2019), trans women's family conflict, isolation, and rejection, and their desire for familial approval, impacted their mental health and trust in the medical system.

Thus, contents were added to address effective family communication and disclosure strategies. Previous communication skills-building interventions directly targeting families of marginalized groups in Vietnam were well-accepted and showed promising outcomes in reducing mental health burdens and improving family functioning for family members (Li et al., 2014). Similar approaches can also be trialed on a small scale by including family members in some specific group sessions to foster direct communication and mutual understanding; however, we anticipate challenges of doing so since many trans women have left the city or province of their family home and have limited contact with their natal family. Nonetheless, communication skill training would support those trans women seeking to reestablish familial connections. Other *TransAction* components, such as employment training to assist trans women in gaining financial independence, could also have significant positive implications for enhancing their status and recognition in the family (Wong, 2016).

Several gaps in healthcare and social service utilization were also identified. Although "one-stop-shop" services that integrate HIV care, PrEP, STI testing and treatment, hormone therapy, referrals to gender confirmation procedures, and substance use and mental health assessment and treatment, have been provided in community-based healthcare settings in Vietnam since 2017 (AIDS Map, 2020), these services have not been widely advertised or within reach of trans women communities. Such structural determinants of health contribute to the risk of HIV and STIs as well as limited healthcare utilization. Several components within the adapted *TransAction* aimed to bridge this gap by providing information about HIV/STI testing, antiretroviral therapy, PrEP, safe gender-confirming procedures, and substance use and mental health treatment and services that are available in local hospitals and community-based settings. The adapted *TransAction* will also focus on erasing the myth of PrEP and hormone interaction (Hiransuthikul, 2018) so that trans women can adhere to PrEP regimens without reservations.

The adaptation of a virtual delivery mode was the greatest departure from the U.S.-oriented *TransAction* where in-person meetings (i.e., outreach, counseling sessions, groups, and social events) were consistently preferred. The trans women participants made frequent recommendations to use web-based technologies for intervention delivery. This approach is feasible in Vietnam, as the country ranks 14th worldwide with the highest number of Internet users (Statista, 2021) and has an Internet penetration of approximately 70% among the entire population (Datareportal, 2021). Previous studies among MSM that have been conducted in Vietnam have reported high acceptance and perceived need for online HIV interventions (Nguyen et al., 2019c, 2020). With the high coverage of online technology and acceptability, there is great potential to successfully deliver *TransAction* virtually. This approach is particularly relevant to ensure a continuity of intervention efforts in the era of COVID-19.

These findings should be interpreted in light of the study limitations. First, the study was

conducted in HCMC, a city with a relatively open and accepting culture toward the LGBTQ + populations. Some of the study findings might not be generalizable to other geographic areas within Vietnam. Furthermore, the trans women and social service participants were primarily recruited from a local LGBTQ + CBO and might have better health literacy and general access to services given their established contact with the CBO than trans women living in other cities or provinces. Second, some of the responses may have been prone to social-desirability bias. For example, due to the social stigma ascribed to certain behaviors, it can be expected that service needs related to sex work, substance use, and other HIV risks were under-reported. Lastly, some of the challenges identified by the participants, such as policy restrictions to change one's name and gender on the national identity card and the lack of legal gender confirmation medical procedures, are beyond the scope of this research. Nevertheless, there should be a call-for-action to institute a positive shift of legislation as these policy restrictions impact every aspect of a trans woman's wellbeing, from civil rights, to risk vulnerabilities, to healthcare utilization, to personal safety.

Conclusion

This study describes a systematic approach to adapting *TransAction* to address HIV, other healthcare and social service needs, challenges, and gaps among trans women in Vietnam. However, due to the pilot mechanism of the study, including limited time and resources, only the first six steps of the ADAPT-ITT framework could be implemented. The participating trans women, service providers, and CAB members indicated strong feasibility and acceptability of *TransAction*. The adaptation process focused on ensuring that the adapted intervention fit the local context, was culturally responsive, and adequately addressed the needs, challenges, and gaps experienced by trans women in Vietnam.

The results from this pilot study have laid a solid foundation for continued U.S. and Vietnam collaborative work to evaluate the adapted *TransAction* in a randomized controlled trial (RCT). The partners involved in this pilot including the CBOs, public and private clinics, CAB, and district health departments are all well-poised to continue their collaboration. As proposed by the participants, and reflective of the current service delivery for trans women in Vietnam, a hybrid delivery approach would be the optimal design for the RCT. Major cities, such as HCMC and Hanoi, have the capacity and structure to provide in-person *TransAction* delivery as each city has CBOs and medical clinics that provide HIV/STI testing and treatment services to trans women. However, to reach trans women in other cities and provinces with limited or no trans-specific services, a virtual delivery platform is required. By utilizing a hybrid approach, *TransAction* delivery can reach the greatest number of trans women. Based on the results from the pilot study, coupled with the strong collaborative U.S. and Vietnam teams, and the community collaborative effort within HCMC, the future RCT may prove to have significant public health impact by reducing HIV sexual risk behaviors and improving the physical and mental health of trans women in Vietnam.

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