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Intersecting Stigma and the HIV Care Cascade: Qualitative Insights from Sex Workers, Men who have Sex with Men, and Transgender Women Living with HIV in Jamaica

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Abstract

In Jamaica, stigma experiences of sex workers (SW), gay men and other men who have sex with men (MSM), and transgender women living with HIV remain understudied. To address this gap, we explored experiences of stigma and linkages with the HIV care cascade among key populations living with HIV in Jamaica, including cisgender women SW, MSM, and transgender women. This qualitative study involved n=9 focus groups (FG), n=1 FG per population living with HIV (SW, MSM, transgender women) in each of three sites (Kingston, St. Ann, Montego Bay). We also conducted key informant (KI) interviews. We applied thematic analysis informed by the Health Stigma and Discrimination (HSD) Framework. FG participants (n=67) included SW (n=18), MSM (n=28), and trans women (n=21); we interviewed n=10 KI (n=5)cisgender women, n=5 cisgender men). Participant discussions revealed that stigma drivers included low HIV treatment literacy, notably misinformation about antiretroviral therapy (ART) benefits and HIV acquisition risks, and a lack of legal protection from discrimination. Stigma targets health (HIV) and intersecting social identities (sex work, LGBTQ identities, gender non-conformity, low socio-economic status). Stigma manifestations included enacted stigma in communities and families, and internalized stigma—including lateral violence. HIV care cascade impacts included reduced and/or delayed HIV care engagement and ART adherence challenges/disruptions. Participants discussed strategies to live positively with HIV, including ART adherence as stigma resistance; social support and solidarity; and accessing affirming institutional support. In addition to addressing intersecting stigma, future research and programing should bolster multi-level stigmaresistance strategies to live positively with HIV.

Keywords Jamaica · HIV · Men who have sex with men · Sex Workers · Transgender · Stigma

Introduction

Across global settings, gay men and other men who have sex with men (MSM), transgender women, and cisgender women sex workers are disproportionately affected by HIV in part due to stigma, criminalization and social marginalization that elevate HIV exposure while reducing access to services [1–4]. A systematic review of HIV prevalence among young (<25 years) MSM in 17 Latin American and Caribbean countries reported high and increasing HIV incidence [5]. In Jamaica, where same-sex sexual practices and sex work are criminalized, the 2022 general adult population

HIV prevalence was 1.3% yet twofold higher among cisgender women sex workers (2.9%) [6], and more than twenty-fold higher among MSM (29.8%) and transgender women (51.0%) [7]. Critically, only 50% of people living with HIV overall in Jamaica were taking antiretroviral therapy (ART) and 45% overall were virally suppressed [7]; this was even lower among MSM (38% on ART, 31% virally suppressed) and sex workers (34% on ART, 14% virally suppressed) (data not provided for transgender persons) [8]. Despite documented HIV-related and lesbian, gay, bisexual, transgender and queer (LGBTQ) stigma in Jamaica [9–14], little remains documented of the lived experiences of HIV

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stigma and other intersecting stigma among MSM, transgender women, and sex workers living with HIV, particularly regarding impacts on the HIV care cascade.

Within Jamaica, HIV testing and treatment is free and publicly available through the Jamaican Government and the National Family Planning Board [15]. Despite this, Jamaica is falling behind in reaching the UNAIDS 95-95-95 targets [16]. A number of factors may hinder the realization of optimal HIV care cascade goals, including discrimination at home and in public facilities [9], food scarcity, and fear of HIV-positive serostatus disclosure through taking ART [17]. Further, Jamaica has adopted an index testing model to contact individuals who have engaged in sexual practices with people living with HIV, yet affected populations may feel uncomfortable discussing their sexual partner history for fear of stigma [18].

Importantly, criminalization exacerbates stigma and poorer HIV outcomes yet is understudied with key populations living with HIV in Jamaica. Globally, the criminalization of sex work elevates risks of violence and constrains sex workers' sexual agency [2], and is associated with lower knowledge of one's HIV status and reduced viral suppression [19]. Research with HIV-negative sex workers in Jamaica documented violence from police, clients and intimate partners, and stigma in community and familial contexts [13, 14]. Poverty, limited social support, and child abuse histories among sex workers were also linked with HIV vulnerabilities [20]. A conceptual framework on sexual decision-making developed with sex workers in Jamaica documented how the sex work environment, including criminalization, plays a role in shaping sexual risk practices [10]. A 2017 qualitative study with sex workers in Jamaica, both those living with and not living with HIV, described multifold stigma in workplaces, public health facilities, families, and communities that posed challenges to ART adherence [8]. Conversely, social support, including from organizations and peers, facilitated adherence [8]. Pervasive stigma and the low rates of ART adherence and viral suppression among sex workers in Jamaica [6] require urgent attention.

Similarly, the criminalization of same-sex sexual practices is associated with higher HIV prevalence among MSM [3] and lower HIV status knowledge and reduced viral suppression [19] across global settings. Transgender persons also face criminalization and intersecting stigma that elevates HIV acquisition risks [1, 21]. In Jamaica, young MSM and transgender women report police harassment [22] and lived experiences of intersecting stigma in family, healthcare, education, and employment settings that elevate exposure to violence and poverty, ultimately increasing HIV vulnerabilities [12, 23].

An intersectional stigma lens that considers multiple axes of marginalization [24, 25] is key to understanding HIV

vulnerabilities in Jamaica, as sexual stigma, forced sex, and resource scarcity (food, housing) among young MSM [26], and transgender stigma, forced sex, and unemployment among young transgender women [27], are associated with sex work involvement. Several studies have also documented associations between HIV prevalence among MSM in Jamaica and social vulnerabilities (e.g., violence, adverse life events, sex work) [28], including sexual stigma [29]. While syndemic factors, including childhood and adulthood abuse, were linked with HIV vulnerabilities among young MSM in Jamaica, social support and resilient coping partly mediated this association [30], underscoring the importance of strengths-focused research that looks at protective factors among LGBTQ persons in Jamaica [11]. However, there is a dearth of studies on the impacts of stigma or strengths-based approaches with MSM or transgender women living with HIV in Jamaica.

The HIV care cascade conceptualizes that among populations living with HIV, successful care includes the following steps: receiving an HIV diagnosis, linkage to HIV care, retention in HIV care, receiving ART, and realizing viral suppression [31]. The lack of research on stigma experiences among key populations living with HIV in Jamaica is a barrier to understanding and addressing specific HIV care cascade needs. In other settings, for instance, stigma experiences can act as a profound barrier to HIV care engagement along the cascade for key populations. As an example, in the Dominican Republic, among cisgender women living with HIV, sex workers reported higher HIV-related harassment, healthcare stigma, and internalized stigma compared to their non-sex working counterparts [32]. Further, internalized stigma among sex workers was associated with missing ART. Among MSM living with HIV in the Dominican Republic, increased stigma experiences in HIV services were associated with a lower likelihood of reporting an undetectable viral load [32]. As intersectional stigma shapes HIV care cascade uptake and implementation of services, better understanding social-ecological contexts of intersectional stigma can identify opportunities for stigma reduction [33]. For instance, this understanding of how stigma may affect HIV care engagement can inform differentiated care that includes "a rights-based approach that can act as a modality of stigma and discrimination reduction irrespective of whether or not those rights are formally recognized in laws" (p. 1) [34] as well as guidance for communitybased multi-level intersectional stigma reduction interventions [35].

This study aimed to address these critical knowledge gaps regarding stigma experiences with key populations living with HIV in Jamaica. Specifically, our study aimed to understand experiences regarding HIV-related stigma, intersecting stigma, and the HIV care cascade among cisgender



women sex workers, MSM, and transgender women living with HIV in Kingston, Montego Bay, and St. Ann, Jamaica.

Methods

Study Design and Data Collection

We conducted a qualitative study between 2020 and 2021 in collaboration with Jamaica AIDS Support for Life (JASL), a community-based AIDS Service Organization (ASO) that provides both clinic-based care and outreach and support programs to people living with HIV and key populations affected by HIV, including sex workers and LGBTQ persons in three sites in Jamaica (Kingston, Montego Bay, St. Ann). We conducted nine focus groups; three were conducted in each site, including one per site with each of the following populations of people living with HIV: cisgender women sex workers, MSM, and transgender women. We also conducted ten in-depth individual interviews with key informants (KI), including people providing health and social support services to key populations living with HIV in each site. Focus group data were collected at JASL in each site, and KI data were collected virtually (on Zoom). We received Research Ethics Board approval from the University of Toronto and the Jamaican Ministry of Health. Participants provided verbal informed consent.

This community-based study is a collaboration between community-based ASOs, researchers, and academics. Some members of our team have been collaborating on community-based HIV research for a decade together in Jamaica, and our team includes: cisgender men and women; diverse sexual orientations (heterosexual, lesbian, queer, gay); diverse career stages in academia (from full professor to trainee); persons with current and former clinical and practice experience working in HIV; persons with current and former clinical and practice experience working with sex workers and lesbian, gay, bisexual, transgender and queer (LGBTQ) persons; persons living and working in Jamaica and others living and working in Canada and the United States; persons with lived experience of various intersecting stigmas, including LGBTQ stigma, sexism, racism, sexual and gender-based violence, and im/migration stigma. Our team is also multidisciplinary, including medicine, social work, public health, and psychology. Our community-based research approach is extended to co-authorship to include diverse authors, lived experiences, and perspectives, and together including these social positionalities in data collection, analysis, and interpretation facilitates reflection on power, voice, meaning, and presentation of findings, and helps to provide multiple and different insights regarding the data and this in turn minimizes bias and increase the validity of findings.

Participants were recruited using peer-driven and venuebased convenience sampling, whereby peer facilitators for each target community (MSM, transgender women, cisgender women sex workers) were hired to facilitate recruitment. JASL advertised the focus groups at support groups and drop-in services for each population as well as through word-of-mouth to other HIV, sex work, and LGBTQ agencies, organizations, and support groups in each study site. Unique guides for both the focus groups and KI interviews were developed collaboratively with community partners, pilot-tested and subsequently adapted for length and clarity with the local research team. Focus group and KI guides were largely informed by a social ecological approach to understanding contexts of HIV care, that considers larger public policy contexts (e.g., criminalization, sexual stigma), community contexts (e.g., values, norms, beliefs), social networks (e.g., social support), and individual level contexts (e.g., mental health, substance use, economic insecurity) [36]. Interview guides asked about stigma, including questions such as "What do people in the community think about people living with HIV?" as well as "What do people in the community think about (tailored for each group: sex workers, MSM, transgender women) living with HIV?" and "How are sex workers, MSM, and/or transgender women treated who are living with HIV?" We also asked about the HIV care cascade, including: "What things keep people living with HIV healthy?", "What are some of the things that come to mind when you go to the doctor?", "What helps people to take their ART meds? What are some challenges taking ART meds?", and "What would you consider is a good life living with HIV?". If not previously raised by participants, interviewers inquired about food security: "What role might having enough food every day play in taking meds with people in your community?", mental health: "How might depression or anxiety affect your ability to take meds?" and substance use: "What role might using substances such as alcohol play in taking ART meds?"

Focus groups and KI interviews were conducted by trained researchers, including local researchers and academic partners working in collaboration. Participants were made aware that anything shared would remain confidential and would not affect any care being received. Focus groups and interviews were audio recorded and transcribed verbatim by local researchers. Focus groups were approximately 60 min and KI interviews were approximately 30 min in duration.



Data Analysis

All data were uploaded to Dedoose [37] for data management and organization of the analysis. Analysts (n=5)were extensively trained on thematic analysis and thoroughly reviewed the transcripts multiple times to become deeply familiar with the data. We applied thematic analysis approaches [38, 39] to explore inductive and deductive themes regarding stigma and the HIV care cascade. Deductive analysis was guided by the Health Stigma and Discrimination (HSD) Framework [40], which cuts across health issues and social identities to show stigma processes that include: stigma drivers; stigma marking on health and social issues/identities; stigma manifestations; and stigma outcomes, including treatment adherence. For instance, stigma drivers include structural, community, and individual level factors that may produce and reproduce stigma, including misinformation, cultural norms and the legal environment [40]. Stigma is conceptualized as intersectional and linked with reduced access to power and resources [24, 25], and marked onto health issues (e.g., HIV) and/or social identities (e.g. gender, sexual orientation) [40]. Several rounds of coding were conducted, including deductive coding that organized chunks of data into codes relating to stigma and social relations, followed by a second, inductive round of coding to capture further nuance in the data that may not have been identified in the initial codebook. A third round of coding was conducted to identify and organize codes that aligned with the HSD Framework [40]. We followed approaches to thematic analysis, including discussion of codes among multiple team members to develop themes and sub-themes, and reviewing, refining, and reassembling themes [38, 39]. Our analyses focused on narratives that discussed stigma and/or HIV care engagement (e.g., ART adherence, clinic attendance). We developed a conceptual map of findings that provide insight into intersecting stigma and HIV care. Finally, as part of the process of analyses, we conducted member checking with collaborators, including peer workers and HIV service providers at JASL in each study site, including study co-authors.

Results

Participant demographics across the 9 focus groups are reported in Table 1; there were n=67 participants that included sex workers (n=18, mean age: 31.0, standard deviation [SD]: 10.5, median: 29.5), MSM (n=28, mean age: 28.4, SD: 5.5, median: 29.5), and transgender women (n=21, mean age: 31.3, SD: 14.6, median: 24.5). There were n=24 participants in Kingston, n=23 in St. Ann, and n=20 in Montego Bay. There were diverse sexual orientations reported (50.7% gay, 22.8% bisexual, 5.9% queer, 23.9% heterosexual).

Key informants (KI) (n=10) included n=5 cisgender women, n=5 cisgender men; of these, n=8 worked in Kingston, n=1 in St. Ann, and n=1 in Montego Bay. KI included: 6 HIV care providers working with sex workers

Table 1 Socio-demographic characteristics of focus group participants (n = 67) with key populations living with HIV in Kingston, Montego Bay, and St. Ann, Jamaica

	Sex workers $(n=18)$ (fre-	Men who have sex with men	Transgender women	Overall (n=67)
	quency, %)	(n=28)	(n=21)	
Mean age (SD), median Mean: 31.00, SD: 10.48 median: 29.5		Mean: 28.43, SD: 5.49, median: 29.5	Mean: 31.29, SD: 14.57, median: 24.5	
Location				
Kingston	3 (16.7%)	14 (50.0%)	7 (33.3%)	24 (35.8%)
St Ann	8 (44.4%)	10 (35.7%)	5 (23.8%)	23 (34.3%)
Montego	7 (38.9%)	4 (14.3%)	9 (42.9%)	20 (29.9%)
Education				
Completed college/university	0	2 (7.1%)	0	2 (3.0%)
Completed high school	5 (27.8%)	23 (82.1%)	12 (57.1%)	39 (14.9%)
Less than high school	13 (72.2%)	3 (10.7%)	9 (42.9%)	25 (37.3%)
Employment				
Self-employed	6 (33.3%)	1 (3.6%)	0	7 (10.4%)
Part-time employed	5 (27.8%)	8 (28.6%)	5 (23.8%)	18 (26.9%)
Full-time employed	0	8 (28.6%)	2 (9.5%)	10 (14.9%)
unemployed	7 (38.9%)	11 (39.3%)	14 (66.7%)	32 (47.8%)
Sexual orientation				
Gay	0	16 (57.1%)	18 (85.7%)	34 (50.7%)
Bisexual	3 (16.7%)	10 (35.7%)	0	13 (22.8%)
Queer	2 (11.1%)	0	2 (9.5%)	4 (5.9%)
Heterosexual	13 (72.2%)	2 (7.1%)	1 (4.8%)	16 (23.9%)



and LGBTQ persons; 2 social providers of support and advocacy services for people with HIV; a social provider of support and advocacy for LGBTQ persons; and a social provider of support for survivors of violence.

Participant discussions identified social processes of stigma aligned with HSD domains that are presented in Fig. 1. This includes *stigma drivers* at both the individual level (low treatment literacy) and at the structural level (lack of legal and instutional protection from discrimination). These were marked onto intersecting *health* (HIV) and *social* (sex work, LGBTQ identities, gender non-conformity, low socio-economic status) identities. Participants described how stigma was manifested as *enacted stigma* in communities and families, as well as *internalized. Impacts on the HIV care cascade* included reduced/delayed HIV care engagement and ART adherence challenges. Participants also discussed strategies to live positively with HIV, including ART adherence as stigma resistance; social support and solidarity; and accessing affirming institutional support.

Findings are detailed below with illustrative quotations also provided in Table 2.

Stigma Drivers

Low HIV Treatment Literacy

Low treatment literacy was a driver of stigma and included believing that an HIV diagnosis would lead to a quick death, and misinformation about HIV transmission risks. For instance, a sex worker participant described the situation that unfolded when her sister found her ART bottles:

By the time I looked at what she was doing, she was googling it, and she saw that it was for that cause (HIV), so she went outside and called my mother, and told her that I have a secret that I am hiding. She said: 'She has the big A (AIDS), we're going to have to bury her soon.' (Sex worker FG, St. Ann).

This belief in imminent death was also evidenced within MSM and transgender communities: "for our community, the MSM community and the trans (transgender) community, whenever they find out that you have HIV, they begin to discriminate against you, meaning that they will tell you you're dead." (MSM FG, Montego Bay).

This fear of death intersected with misinformation about how HIV could be transmitted. For instance, participants described myths regarding casual HIV transmission: "Everybody just says that you have it so you're going to die and if they touch you they will catch it, so they have to leave." (Transgender [trans] FG, Montego Bay). Others described discrimination that could result from such

misinformation about HIV transmission. For instance, a key informant reported: "It's more of misinformation because a person who is living with HIV and coming in contact with food- it can't be transferred like that. So persons will think that because you have HIV I can't allow you to be working in my restaurant, I can't afford to be working around you." (KI #1).

This misinformation regarding HIV transmission was also shared by health workers. For instance, a sex worker participant described a distressing interaction with a nurse after learning she was HIV-positive:

[Nurse] said my daughter can't use the same sheets and towels that I use, she can't use the same bar soap that I use to bathe with, and the plates and utensils I use she isn't supposed to use it either. I said what am I living for then? It doesn't make sense for me to live then, so I should just go to the beach and dive off, and so I went to the beach and dived off, because trust me I'm not telling you a lie. (Sex worker FG, St. Ann)

Lack of Legal and Institutional Protection from Discrimination

Participants discussed a lack of legal and/or institutional protection from discrimination related to HIV and sex work. For instance, regarding HIV-related stigma, a KI described that even in cases of mistreatment there was no legal recourse:

There's no legislative framework to back up or support when someone is in fact wronged, so

persons continuously get away with these things, whether it's from an institutional standpoint, where (in) facilities persons are rejected from basic services, or treated harshly when they go to- or whether they're thrown out of their home, whether they're expelled from work. (KI, #1).

This was corroborated by a transgender participant who reported emotional distress after experiencing HIV-related employment discrimination:

In order to get a job, you have to get a permit, so when I went in and did the (HIV) test and they found out I have HIV, they said I can't get the job anymore.... In my mind I wanted to kill myself... because it's as if your life is over... how am I going to survive and what am I going to do?" (Trans FG, St. Ann).



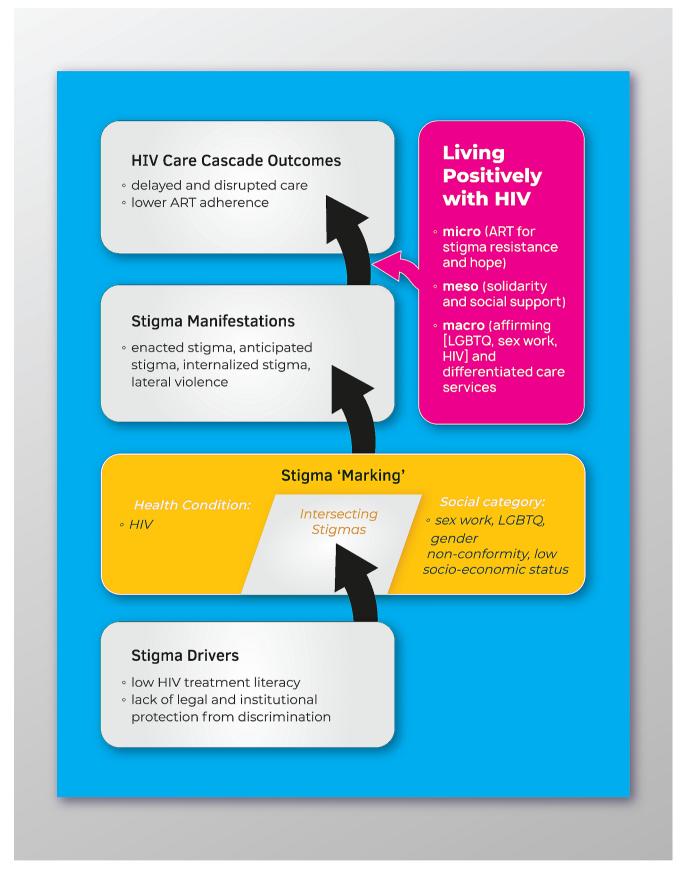


Fig. 1 Applying the Health Stigma and Discrimination Framework to understand intersecting stigma and the HIV care cascade among cisgender women sex workers, men who have sex with men, and transgender women living with HIV in Kingston, Montego Bay, and St. Ann, Jamaica



Table 2 Illustrative quotations on stigma and the HIV care cascade among focus group participants (n = 67) with key populations living with HIV in Kingston, Montego Bay, and St. Ann, Jamaica

Theme	Sub-theme	Illustrative quotation
Stigma drivers	Low HIV treat- ment literacy	"It has been a struggle for the community in many ways, as you have heard some terminology that is used in Jamaica- you're dead, you're a cemetery, or a parlour- you name all the negative thoughts." (Transgender [trans] focus group [FG], Montego Bay) "You are dead, I don't want you around me, you're sick. All these disgusting things." (gay, bisexual or other men who has sex with men [MSM] FG, St. Ann) "They will curse you, and they don't say you have HIV. They say you have AIDS, and that you are
	Lack of legal and institutional protection from discrimination	gone. They say they know you are dead, and I'm not going to lie. It's awful." (MSM FG, Montego Bay) "Some who are working in certain industries, they have to tone down their lifestyle or sexuality if some restaurants know that they're HIV positive, they will let them go." (KI #1) "In the public, at your workplace, or the health centre, whichever, once it has come to recognition that you are (HIV-positive), then you will be treated likely less than everyone else, and you won't get a good treatment. They will even scorn you." (Trans FG, Montego Bay) "I know this sex worker that has HIV, and everywhere she goes, they talk about her, and ban her from
	HIV-related stigma	being there, because the other girls are afraid so nobody wants to work with her." (Sex worker FG, Kingston) "I know persons used to discriminate against persons with HIV and bring them down in the worst way that you can ever think of—try to talk everything that is negative about them, and another thing is
	мени	they try to block every part that is successful for them and if that person begins to go out with another person they will out the person and try to tell everyone that 'listen this person is sick and they're still walking around and littering themselves with other people'." (MSM FG, St. Ann) "My father was that lady's (person living with HIV) personal barber, and he doesn't trim her anymore, so imagine if something was wrong with me. I couldn't live in the house." (Trans FG, Montego Bay)
	Intersecting social identity stigma	"They don't see homosexuals, or trans persons as human beingsthey see a heterosexual as a human being because that's the culture that's rightonce you're homosexual, it's like you're not a human—like you don't have any rights to anything." (KI #10) "If they (trans women) haven't fully done the [gender reassignment] surgeryit's really risky, you have to be careful as to where you go, different crowds that you choose to dress in that particular way in." (KI #10) "I've seen a case where someone was being discriminated against because of their HIV status plus because of their sexuality." (KI #2)
Stigma manifestations	Enacted and anticipated stigma	"They won't have anything to do with you. They throw you aside, they walk pass you, and discriminate against you." (MSM FG, Montego Bay) "When it comes to my family like my father and sister, who I would like to share it with, I can't, so I just keep it to myself, and it's not really healthy, because sometimes you want to open up to someone, but at the end of the day, for your safety, just keep it." (Sex worker FG, St. Ann) "In my community nobody knows, because I don't expose that to them. Even your own family would bash you, forsake you like you committed a crime. The way you hear people talk, it's like you can't live with them, or they would scorn you." (Trans FG, St Ann)
	Internalized stigma	"They have the self-stigma, internalized stigma sometimes about themself." (KI #2) "We try to stigmatize them (other sex workers) because who are you to be selling sex? Or why are you HIV positive? Why didn't you protect yourself?" (FG, St. Ann). "The LGBTQ community struggles with self-worth issues." (Transgender FG, Montego Bay)
HIV care cascade impacts	Delayed and dis- rupted HIV care engagement	"Clients would live across one parish (region), and they'd want to come into a different parish because of the same stigma and discrimination and sometimes they can't get to travel in a quick enough time to get the medication and so on, so that's a barrier to (viral) suppression." (KI #5) "The community will also cause them to go into hiding, because they don't want anyone to know about their status, so I don't want 'Miss Jane' to see me down at the hospital" (KI #3) "When they come to the clinic, they are uncomfortable in the space because they feel like if someone looks at them too long they are thinking 'oh this person has HIV', so there's a lot of internal stigma." (KI #9)



Table 2 (continued)

Theme	Sub-theme	Illustrative quotation
	ART adherence challenges	"I'm afraid because I don't want anybody to know my business, and staring at me while they're serving me [at a pharmacy]. Because you look good, and you're fixing up yourself so they're wondering 'oh she's really purchasing this (ART) for herself?' So I really don't like the idea of going to purchase it." (Sex worker FG, St. Ann) "For those that are struggling with food insecurity [and say] 'I can't take it (ART) without having something to eat'. So I've been trying to tell them that two crackers is good enough. You don't need a big meal." (KI #7) "Providing those basic needs—food, shelter, clothing would actually put them at a better place of accepting their HIV status, at a better place to actually want to keep their clinic appointmentsand tackling acceptance of their HIV status." (KI #10) "They're just fed up, giving up is the only optionand they decide to stop taking their meds." (Sex worker FG, Kingston)
Living positively with HIV	ART adherence for stigma resis- tance and hope	"Take your meds so you can live as long as you want" (Sex worker FG, Kingston) "It's not the end of the road, there is still hope and life, every day I see a brand new me" (MSM FG, Montego Bay) "You have to know who you are So going out, having a high self-esteem, thinking highly of yourself no matter what people want to say about you. You don't think less of yourself because you can live the same life they're living. So if they want to talk, let them talk." (MSM FG, St. Ann)
	Social support and solidarity	
	Affirming health and social support services	"I never knew love before I went to X clinic, I felt everything there, the staff was great, the doctors were excellent, and I am still with X clinic. I have no regrets." (Sex worker FG, St. Ann) "We don't do (HIV) branding on our building because of the stigma that is attached to that." (KI #8) "We do the food packages, we assist with transportation that you know you can always reach the clinic and you can always get back homeI also assist in doing resumes, (job) applications." (KI #7)

Participants also discussed mistreatment in health facilities. For instance, a transgender participant reported a lack of confidentiality when given an HIV-positive diagnosis as well as a lack of compassionate care:

The guy that was reading the (HIV) results didn't even call me into a room or say it nicely. He just said: 'Do you know why you're here?' and I said: 'No. That's why I came to find out the problem.' He said 'How come you are here and you don't even know why you're here? Don't you see you have AIDS?' and right there I can't even remember his name, face, or anything. I was just there standing for about twenty minutes just in silence. Where I was standing, everyone comes there to collect their medication, so you know when they heard everything; they turned around to see who it was. I was going there for about one year straight and ... I could tell who found out that they were positive, based on their faces when they were told, and how they would separate the people...that side is for HIV positive people, and the other side is not.' (Trans FG, St. Ann).

Work-related HIV-related stigma was particularly common among sex workers, whereby job loss was widespread when HIV positive serostatus was disclosed or suspected. This extended to presumed HIV infection:

If a sex worker is of the opinion that another sex worker has HIV, they don't need proof to stigmatize ... They tend to want to block you from doing business, because they tell the other persons that you have HIV and that they shouldn't do business with you.... It causes a lot of stigma and discrimination on the road. (Sex worker FG, St. Ann)

Stigma Marking: HIV-related Stigma and Intersecting Social Identity Stigma

Stigma was directed toward HIV and other social categories, including sex work and LGBTQ identities. The stigma toward people with HIV was described as widespread: "I knew that as a PLHIV (person living with HIV) you are now stigmatized because people don't take it well, whether in your family, your peers, your community, or at your



workplace." (Trans FG, Kingston) HIV-related stigma was spread through community gossip and included HIV status disclosure. Others described how HIV-related stigma within LGBTQ communities could exacerbate wider community stigma toward LGBTQ persons:

We as MSMs use (stigma) to categorize other MSMs living with HIV. It has brought a stigma to the straight population...I hear straight people say if someone has AIDS they are poisoned and gay, and they can't come around them again, and they will say they're happy they never took any food from you. (MSM FG, Montego Bay)

Another KI described this blame of gay persons for living with HIV as part of the way that stigma "intensifies when it's compounded, for example if you're a gay man, it's because you're gay that you have HIV." (KI #9) Participants explained that stigma was in part driven by cultural values that dehumanize LGBTQ persons that in turn are used to justify a lack of human rights.

Stigma was exacerbated based on gender presentation. For example, a key informant explained that stigma can be increased for gender non-conforming MSM when "their attitude is more on the feminine side, and because of that, they would face a lot of discrimination. Some of them will even lose their job." (KI #7) For transgender women, they can experience heightened stigma and even violence if not considered 'passing' as cisgender. A KI described: "a trans woman who is not female 'passing' will face some amount of stigma and discrimination, from even the same community." (KI #9).

Low treatment literacy and HIV-related stigma were described as exacerbating stigma toward MSM and sex workers: "Jamaicans have this thing where they scorn people with HIV really badly. They don't know that HIV is not a killer like cancer. Being an MSM in Jamaica...that is the first stigmatization; sex workers—they 'class' (judge) those people." (MSM FG, Montego Bay) This intersecting stigma resulted in people hiding one or more identities to reduce stigma exposure due to the automatic conflation of gay or transgender identity and having HIV, and this in turn was described as disrupting HIV care. For instance, a transgender participant described:

Everybody on my mother's side of family knows that I'm HIV positive, but they don't know that I'm gay [sometime in FG, participants referred to themselves or other trans persons as gay]. Everybody on my father's side knows that I'm gay but not that I'm HIV positive. They are two parishes (regions) apart, so the biggest challenge is when I am at my mom's house, I

have no issue taking my (ART) pills, whereas if I am at my father's side of family- the other day I actually threw them out. (Trans FG, St. Ann)

Stigma is also exacerbated based on income and neighbourhood, whereby those of higher socio-economic status can afford accessing private clinics while those in lower-income inner city neighbourhoods may only be able to afford public clinics. A KI described that there are: "two different realities; you have many MSM who live in a gated community and they are free to access whatever healthcare. For the person that lives in the inner city, if they're seen at a particular place, automatically it means this person has HIV, which means they can't go back to their community." (KI#9) This was corroborated by another KI discussing transgender communities: "I wouldn't go in (X area) where that is a gang area that has a lot of violence and so forth...I would probably go to a place that's probably classified as an 'uptown' (wealthy) area." (KI #10).

Stigma Manifestations

Stigma experiences were described as manifesting in enacted and anticipated stigma, including verbal and physical mistreatment and social exclusion in families and communities, and in internalized stigma toward oneself and one's own community.

Enacted and Anticipated Stigma

Enacted stigma in communities included social rejection and verbal abuse, and was identified as one of the major barriers to realizing health: "It's not the virus kill you, it's the community kill you. They die from neglect and stress and feeling abandoned." (Trans FG, Montego Bay) Community stigma was also enacted through social media, which in turn could result in rejection and isolation: "They go on social media and spread things if they know or think you're sick and bring you down ... you end up wanting to isolate from people, and people want to isolate from you." (MSM FG, St. Ann) This stigma and abuse could result in having to leave one's community: "For some, they would have lived in a community, but because the community may know of their status plus their background as being an MSM or a TG [transgender], they may at times bully them, try to beat them, and so they may have to flee." (KI #3).

Other participants highlighted the harms of such stigma to self-esteem among people living with HIV, and the newfound power of its being enacted via social media: "No matter how high the person's self-esteem is, they try to lower it by discriminating against them. Back then you didn't have social media platforms to bring down people like now."



(MSM FG, St. Ann) This multifaceted social rejection was further linked with suicidality: "they would stop talking to you, they wouldn't eat from you, they wouldn't party with you. Nothing of the sort. They would spread it [personal HIV serostatus information] so eventually you would feel depressed and out of place and want to feel suicidal." (Sex worker FG, St. Ann).

Participants also discussed enacted stigma within families. This included extreme verbal mistreatment; for instance, a transgender woman (Trans FG, St. Ann) described: "I remember when I turned to my family and I was looking for them to say motivating words, but instead they (mom) said, 'Lord Jesus, if I were you I would go and hang myself.'" Others provided examples of being treated differently based on their HIV serostatus: "Discrimination for me was at my home; when I lived with my mom, after she found out she separated the utensils, and I was in a room with my little brother and she took him out the room." (MSM FG, Kingston) Others discussed anticipating stigma by knowing they would be unwelcome living at home openly with HIV so they chose not to disclose their status. For instance, a participant described:

If your family finds out that you have it (HIV), in the house everyone starts to scorn you and separate themselves from you, so you realize that people aren't saying that they are (HIV) positive to other people because they are scared of what people will say about them. They rather keep it a secret and that secret will carry them to their grave. (MSM FG, St. Ann)

Internalized Stigma

Stigma was also internalized and linked with intersecting identities. For instance, participants described co-occurring enacted and internalized intersecting stigma. Others discussed the importance of accessing counselling to manage internalized HIV-related stigma:

You have internal stigma, because if they don't accept that they're HIV positive, they cannot move on from where they are, and that's where the psychologist would come in and have this sit-down counselling session with them... trying to get them to be at peace with themselves knowing about their (HIV) status. (KI #3).

Internalized stigma was also discussed as being directed toward other members of one's own community. For instance, a sex worker (FG, St. Ann) described: "We always look down on each other, we always tend to look down on other sex workers who come out as positive." Another sex

worker described only wanting to be seen with persons living with HIV who looked healthy: "If they look ok, then that's ok but if they're not taking the medication, their skin looks weird...then I don't want to stay around them." (Sex worker FG, Montego Bay).

This theme of stigma internalized within one's own communities was also raised by other populations. For instance, a participant discussed: "Because gay men- we are our own enemies. Secondly, whenever you have HIV, persons start to look down on you." (MSM FG, Montego Bay) A transgender participant explained this stigma caused people to leave HIV care:

It is not so much the persons who are not in the community that are the problem. It's the people who are in the community. We are so quick to kill each other because we learned about a person from the community's HIV status, and that is the reason we have a lot of people not adhering... It is heart rendering to know that we are not supportive when it comes to learning about somebody's HIV status, and I think that's where we lost most of our peers. (Trans FG, Montego Bay)

HIV Care Cascade Impacts

Participants discussed how stigma resulted in delayed and disrupted HIV care engagement as well as ART adherence barriers.

Delayed and Disrupted HIV Care Engagement

The fear of stigma from an HIV diagnosis, alongside a lack of information about HIV treatment benefits, resulted in many participants struggling to accept their diagnosis and at times delaying treatment access. Intersecting stigmatized identities presented barriers to engaging in care due to fear of HIV status disclosure:

We had somebody who is newly diagnosed and because of the HIV status, plus the sexual orientation, they are afraid to come and access care. Fear of persons who they might know...and so because of that they sometimes withdraw and don't want to access care at the healthcare centers. (KI #4).

A participant described the years-long process of accepting his diagnosis: "for me when I found out that I was HIV positive, I took it really hard. I considered it a lot, and I didn't want to believe that I was HIV positive, until three years after I did another test and it confirmed that I was". (MSM FG, Montego Bay). Another participant described how a



lack of support can present barriers to care engagement: "Imagine a person even in their young age finding out that they are HIV positive ... they don't have anyone that cares, so they aren't going to care either. So when you call them to come to a (HIV support) session that's going to uplift them... they aren't going to look at it." (Trans FG, Montego Bay).

Findings also revealed care disruptions due to anticipated, enacted, and internalized stigma associated with accessing clinics. For instance, participants described that travelling to different regions to access HIV care could result in missing appointments and in turn missing ART. Others discussed clients having insufficient funds to pay for transport to the clinic where they: "don't have the transportation fare to get from point A to point B whether its 10 minutes away, or whether its 30 minutes away...especially among the transgender population, one of the most marginalized, vulnerable groups in the country." (KI #8).

Community stigma and fear of status disclosure presented barriers to accessing HIV care. Fear that attending HIV care would result in status disclosure to families was another barrier. A participant described challenges as her father did not know her HIV serostatus: "sometimes it's a little hard to go to the doctor or to get to my appointments... at my father's, they are always saying it's because I found a man that I'm leaving the house, and I can't really say anything to them." (Trans FG, St. Ann) As a KI explained "there's a difficulty in terms of them coming in to access service because their family or friends may realize a pattern... they don't want anyone to know, so that poses a major, major problem." (KI #5).

Participants may also experience enacted stigma in communities that reduces willingness to attend future care. This enacted stigma involved public status disclosure:

When you call me, I'm going to say that I'm coming, but as soon as it comes down to it, I'm not going to come because I know that when I come I'm going to see some people that as soon as we come out of the session and go on the road are going to start shouting about my (HIV) status. That's how they are. (Trans FG, Montego Bay)

Community-level violence was also reported in transit to clinics. A KI described enacted stigma in cases where MSM clients were waiting for, or riding on, a bus to an HIV clinic:

The whole community stigma, because sometimes even to travel to the site here, to being at the clinic, some may have the problem of getting a ride, a bus, transport to come to the clinic. I can remember one point in time when one was attacked on the road and he could not come, he had to stay home, we had to do

over the phone with him and go to the house. So it's just all about actually being free. (KI #3)

This quote, while not differentiating whether the stigma and transportation challenges going to the HIV clinic were due to HIV-related stigma and/or MSM-specific stigma, paints the picture of how stigma and violence can be experienced in public spaces and pose barriers to HIV care engagement, and ultimately reduce freedom of movement. Finally, internalized stigma was also attributed as a reason for missing clinic visits. For instance, a KI described: "Because of what they face outside, a lot of them become victims of self-stigmatization and internalized stigma, and that causes them to not really come to their appointments." (KI #4).

ART Adherence Challenges

Stigma contributed to ART adherence challenges in multi-faceted ways. Hiding one's medication due to fear of status disclosure was commonly described as an adherence barrier. For instance, a KI described: "They're not going to take the pills or go in (to the clinic) because they don't want anybody to know and they want to live freely...so that will cause them to go into hiding and not want to take their medication, so stigma is a big barrier". (KI #3) This fear of status disclosure also extended to picking ART up from a pharmacy.

Participant narratives also revealed the interlinkages between resource insecurity (housing, food) and HIVrelated stigma that resulted in ART adherence barriers. For instance, fear of disclosure was associated with losing one's housing:

I used to live at a family yard, and ... as soon as night would come, everybody would gather because they wanted to see if I'm taking medication. So, I would say that I'm going to the bathroom, and I would slip out my medication and go to the bathroom and take it. One of my brothers would say 'aren't you going to take your pills? 'and I would say 'which pills? I'm not taking any pills. I'm not sick so I'm not taking any pills. I don't have any medication to take.' At times I had to say I have a headache, so I could take it. When they got used to that excuse, I had to stop taking it because I couldn't let them know. Based on what I heard them saying about HIV positive people- they don't even say 'HIV positive,' they say 'AIDS people.'...I can't let them know that I am like that, because trust me I wouldn't have had anywhere to live." (Sex worker FG, St. Ann).

When participants were reliant on partners for housing and in abusive relationships, this also reduced adherence. For



instance, a KI described the situation of a client who was a transgender woman who could not disclose her status to an abusive partner she lived with: "every time she would come to the clinic, she had to sneak out of the house; and then her adherence was very poor, because if she tried to take the medication she would get some kind of beating." (KI #9).

Another KI described a risk assessment whereby people weighed pros and cons of taking ART linked with stigma and housing:

Someone will say to you 'Yes we do understand that the medication is so powerful, but I'm telling you if I come there and someone finds out about this, the chance of me being thrown out of my house is extremely high, so I rather just not come. I rather live out my life as long as I can more than to be known to be living with this virus, thrown out of my house, my entire life is uprooted and destroyed.' (KI #5).

This could also lead to hiding ART in other bottles:

If they're staying with a friend and they did not disclose to their friend about their status, they may hide the medication, they may not want to take it because the friend is always around... we try to go through to see what's the problem, try to come up with a solution... You might not keep it in the regular bottle, but even in a vitamin bottle and store it somewhere you know they wouldn't look...So being stigmatized by friends also sometimes will make them not want to take their medication. (KI #3)

Food insecurity was another ART barrier: "You cannot take medication on hungry belly" (Sex worker FG, Montego Bay) and "right now there is no food in my house. One night all I had was a cup of coffee alone so I could not take my medication that night." (Sex worker FG, St. Ann) Food insecurity may also be exacerbated by stigma. For instance, a KI described linkages between employment discrimination and pervasive unemployment, that in turn contributed to food insecurity: "most of them are unemployed, the MSM and the TGs [transgender persons], so unemployment can be a major issue in their care and treatment... they're going to need food...The whole discrimination and stigma, it continues to pose a major problem." (KI #4).

Giving up hope due to stigma was another ART barrier. For instance, a participant described a friend who died after not taking ART as a result of stigma: "The main reason she gave up on taking the meds was the community, because they have an issue with her having HIV... She stopped taking it [meds].... She just wanted out because of the community." (Sex worker FG, Kingston) Giving up hope may also

be an outcome of internalized stigma: "they start to believe what the public has to say about them, instead of believing what they know is true about themself ...and it impacts their adherence". (KI #2)

Living Positively with HIV

Participant narratives also revealed living positively with HIV and challenging stigma through individual practices of ART adherence; relational practices of accessing and offering social support and solidarity; and accessing affirming social and health care.

ART Adherence for Stigma Resistance and Hope

Many participants shared that they adhered to their medication to maintain their health and live a long life, while others shared that the stigma was a motivating factor as they did not want any visible effects from HIV, such as weight loss. For instance, a participant described that some individuals took ART to stay healthy and defy the narrative that people with HIV are 'dead':

Even in arguments you will hear sometimes they say, 'I know I'm dead and I'm taking my medication until death because they will make me fat and look good.' People are actually defending the medication and saying they have to take their medication because they don't want to look bad, and they don't want anyone to have anything over them. They are telling you that they're sick but they're getting help, so you can't harm them in any way. (MSM FG, St. Ann)

Others described that ART benefits of preventing weight loss helped to boost self-esteem and avoid stigma. For instance, a participant reported taking ART because: "I was losing weight fast, so I just wanted something to boost my self-esteem." (Trans FG, St. Ann) Another participant similarly described self-acceptance with maintaining her regular weight with ART:

I told myself that it wasn't worth living like this, and I should just die, and based on what the doctor or the adherence counsellor would say, it's your medication that's making you live, and I didn't want to live anymore so I just stopped taking the medication because I just wanted to die. However now I don't want to die anymore because I see that life goes on, and I am fat and I meet a lot of pretty people, and I have to say life can be lived being HIV positive. (Sex worker FG, St. Ann)



This assertion of self-worth and wanting to live was a motivation to take ART: "I can take my medication anywhere, you must have self-worth. You have to know the reason you are taking it and continue despite obstacles." (Trans FG, Montego Bay) Taking ART for survival was reinforced by other participants: "I take it because it's a medium of survival." (Trans FG, Kingston) A KI explained the connection between self-acceptance and HIV care engagement:

Self-acceptance is being able to stand in one's own truth, and therefore standing in one's right to receive services. So men who have sex with men, key pops (populations) generally, women, sex workers, if they remain in a space of inferiority, low self-esteem, hiding identity...it will always continue to surface as a deterrent to access services. (KI #6)

Others reported finding hope and possibility through ART and viral suppression: "for 25 years I have lived with HIV and I have lived a healthy life, but now that I am undetectable I am free as a bird. I can now say that I am whole. I am 69." (Trans FG, Montego Bay) Finding hope and health helped people to challenge internalized stigma: "I used to call myself AIDS victim because of what others said about me. Now I am empowered, I am a woman with HIV and HIV has taken me places." (Sex worker FG, St. Ann).

Social Support and Solidarity

Accessing social support helped participants to live a good life with HIV and remain engaged in care. A participant reported accessing social support from various sources: "I have been living a good life. I have two sisters supporting me, and also my pastor and my elder. I make sure that I eat, that I'm ok and comfortable; if I feel stressed, I call and have a counselling session with them, and I get back out on the road." (MSM FG, Montego Bay) Friends and support were identified as helping people regain confidence: "living with HIV makes you lose all confidence. That drops, so that's where your friends come in for you, and once you have that backbone you can know that you will get over it, even though it's always going to be there." (Sex worker FG, Kingston).

This social support could be particularly powerful from peers. As a participant described, when connecting with other MSM living with HIV: "You want to feel like you're a regular person...As an MSM, you can trust another MSM because we're both homosexual... sometimes more comfort around our peers gives us more of an ability to say we have something going on for us, and nobody is looking down on us." (MSM FG, St. Ann) A KI described the power of introducing newly diagnosed clients to a community peer

facilitator living with HIV: "they see that she looks amazing, she's fine, she's flourishing, and they can't believe it. And then they see that and automatically there is some sense of hope. So that too encourages retention in care." (KI #9).

Accessing social support from multiple sources also helped participants with adherence. Participants, for instance, reported adherence support from partners: "My partner asks me if I take my medication, and if I eat and things like that." (MSM FG, Montego Bay) as well as friends: "I have friends whom often remind me of the time to take my medication also, I am on a WhatsApp group with friends who are infected as well and we encourage each other to adhere." (MSM FG, Kingston) Others discussed family support with adherence: "when you have family who stand with you, even in times of weakness and have someone to relate to, it means a lot, to encourage you to take your meds, you don't want to die, you just want to live." (Sex worker FG, St. Ann).

Others described that their family provided them with purpose to live and take ART, often raised in relation to one's children: "The decision for me taking ART is my daughter. I purposed in my heart that I will endure and live long enough to see her succeed. For me discrimination was a harsh reality." (MSM FG, Kingston).

Affirming Health and Social Support Services

Participants discussed HIV services that respectfully engaged with MSM, transgender women, and sex workers living with HIV was a motivation for engaging in care. Such organizations promoted confidentiality and were not easily identifiable as an HIV organization, offered respect from staff, and clients could get multiple needs met (e.g., prescriptions filled, psychosocial support). A KI at an AIDS Service Organization described the need for offering programming that fosters empowerment: "Persons who actually reach out to us are persons who really they're lacking in some kind of resources... as simple as psychosocial support that they really need is really somebody to talk to, somebody to give them that empowerment or that hope." (KI #2).

Participants discussed appreciating flexible points of accessing ART provided by HIV clinics: "you can get your medication not only at your treatment site, so you don't have to go to a particular one." (Trans women FG, Montego Bay) Others described accessing support for medication adherence: "My first point of help was (X clinic); someone would call you like approximately 10–15 minutes before taking the medication just as a reminder each day." (MSM FG, Kingston) Accessing affirming organizational support also provided hope:



For me, there was no hope. I was lost. I was drowning. I was dead...I started out at the clinic first. It was hectic...when I left from the clinic I started (X agency). X was where I was able to regain my pride, hope, and joy...I thought I was the only person in the world that had it [HIV]...and when I went there and saw all these girls saying that they had HIV for a long time, I got some hope from there. The organization I'm with now is very good. I found peace of mind and joy there." (Sex worker FG, St. Ann).

Others discussed feeling cared for and accepted at their community HIV clinic. A KI described advancing a client-centred approach to stigma resistance and knowledge of the right to access care with clients:

One of the things we focus on as a strategy is the client-centered approach, where they themselves are taken through processes to where they can get to a point where they say- 'so what?'... so if somebody says you're living with HIV, and you're ugly, or you're a prostitute, or you're worthless, then they have a 'so what' attitude. You know, they go to the health center, and the nurse or the doctor may come across in any way- stigmatizing or discriminatory behaviour... that 'so what' attitude is one that says 'this is me, this is what I live with, this is what defines me, this is what does not define me. That has nothing to do with me having my right to get services, and I will not be distracted by what you're bringing to the table.' (KI #6).

KIs described the importance of creatively offering services that promote confidentiality. This also means adapting to client needs with flexible services. For instance, to overcome anticipated stigma from family or friends when accessing HIV care, an organization created a clinic on Saturdays: "where persons were able to be like 'oh I'm going to hang out with my friends, I'm just going for a walk on Saturday'...so persons wouldn't necessarily know what they're going to do. It's just a regular Saturday." (KI #8) Others discussed offering differentiated care for different communities: "It's a customized, tailor-made plan for that particular person, because everybody's situation is different." (KI#9) For instance, this included combining HIV care with gender affirming services for transgender persons, offering evening clinics for sex workers to accommodate evening working hours, and offering MSM-specific services that offer other prioritized health services.

Discussion

Findings revealed complex and powerful processes of intersecting stigma among sex workers, MSM, and transgender women living with HIV in Jamaica that effectively disrupted HIV care engagement. Stigma was fueled in part by low HIV treatment literacy and misinformation, as well as a lack of legal and institutional protection from discrimination in employment, healthcare, and other settings. HIV positive serostatus and other intersecting social categories were targets of stigma, which reduced access to resources and manifested in enacted and anticipated stigma—particularly noted in community and family settings—and internalized stigma. These multifaceted stigma experiences in turn resulted in delayed and disrupted HIV clinical care as well as reduced ART adherence and scenarios in which persons living with HIV had to choose between the risks of family rejection, job loss, community ostracization, homelessness, and food insecurity, and the risks of HIV disease progression. Yet in the face of this pervasive intersecting stigma, participants discussed strategies to live positively with HIV, including taking ART to resist stigma and fuel hope, receiving and providing social support and solidarity, and accessing affirming health and social services.

Our study corroborates research on intersecting stigma as a barrier to accessing HIV services across global contexts [1, 41–43], including Jamaica [12, 44], and quantitative studies documenting linkages between intersecting stigma and reduced ART adherence in North America [45-48]. Findings signal the utility of the HSD Framework [40] for key populations in Jamaica. For instance, aligned with an HSDinformed study among MSM with HIV in India [49], we found that intersecting stigma manifested in mistreatment and constrained access to social support that converged to reduce ART adherence. We also found, corroborating an HSD-informed study on HIV testing in Uganda [50], that stigma targeting sex work and sexual orientation was exacerbated by low HIV treatment literacy and a criminalizing legal environment. Work-related stigma and disclosure concerns emerged most frequently in qualitative narratives among sex workers. This aligns with prior research with mixed HIV serostatus sex workers in Jamaica who discussed workplace stigma, competition and jealousy [8]. KI described that differentiated HIV care should attend to the specific needs and priorities of each community (e.g., gender-affirming care for transgender persons), aligning with conceptualizations of the potential of differentiated care to challenge stigma. Despite these population differences, participant narratives on stigma across populations overwhelmingly aligned with stigma processes detailed in the HSD cross-cutting framework [50]. Findings build on past HSD-informed research spanning various countries and



health issues (e.g., sickle cell disease [51], cardiomyopathy [52]) to signal that this cross-cutting framework may be applied in HIV research across Jamaican regions and populations to inform stigma reduction and clinical care.

Our findings expand on the HSD framework in two ways, as illustrated in Fig. 1. First, participant discussions revealed that internalized stigma was often projected onto members of the same community, suggesting the relevance of the concept of lateral violence to understand impacts and outward manifestations of internalized stigma. Participant narratives of one's own community engaging in gossiping and enacted stigma reflects this concept: "the manifestation of internalised oppression and the expression of these negative emotions towards others in the oppressed group, oneself, and those less powerful, is known as lateral violence." [53](p. 2). Lateral violence research has been conducted with Indigenous communities [53] and LGBTQ persons [54] in high-income contexts, and our findings raise lateral violence as a direction for LMIC stigma research and an addition to the HSD framework [40]. Second, our findings advance calls to integrate strengths-based approaches into intersectional stigma research [24, 35, 55, 56]. Living positively with HIV was realized through actions spanning intrapersonal (adherence), community (social support and solidarity), and structural (accessing affirming care) levels. This aligns with concepts of intersectional resilience among MSM that include pride, perseverance, advocacy, and social relationships [57], and core tenets of collective action, cohesion and resistance central to the concept of intersectionality [58] and in turn intersectional stigma [24, 35, 55, 56]. These strategies of relationship building and identity affirmation also corroborate research on strategies that HIV-negative MSM use to affirm identity and build community and safe spaces in Jamaica [11]. In the present study, intersectional resilience was identified as directly interrupting stigma processes which otherwise manifested in disruptions along the HIV treatment cascade.

Stigma reduction interventions require multi-level approaches that address interpersonal, community, and structural level stigma [59]. While interventions have been implemented to reduce stigma in HIV care, their single-level approach may limit their ability to inform change [60]. For instance, a systematic review of interventions to reduce HIV-related stigma found that 85% of interventions were implemented at a single level [61]. While successful in reducing the stigma measured, they do not address the structural implications of stigma on HIV-related health outcomes [61]. Interventions that do take on a multi-level approach, such as the educational program centered around raising awareness of HIV-related stigma and its implications in healthcare settings in Vietnam, was a successful approach to reduce reports of discrimination and self-stigma [62].

Findings can inform intersectional stigma reduction interventions in Jamaica that focus on multiply marginalized communities, engage affected communities in intervention development and implementation, and address multiple levels of influence (e.g. intrapersonal: information and skill building, *community*: sensitization; *structural*: political advocacy, enabling environment) [35, 41, 63]. For instance, we found HIV-related stigma was fueled by low treatment literacy and inaccurate knowledge of transmission risks. This was found not only among participants, but also their social circles, including friends and family. Low HIV treatment literacy is found across global contexts [35, 63– 65] and in Jamaica appears to be a persistent stigma driver, noted as an HIV testing barrier in past research with MSM and transgender women [44]. HIV treatment literacy interventions can build on evidence-based health literacy strategies [66], involve reflection on biases toward HIV, sex work, and LGBTQ persons [63, 64], and engage faith communities [67] as well as friends and family members of people living with HIV [68]. Treatment literacy must also continue to centre building the capacity of people living with HIV to challenge stigma, realize rights, engage in HIV care, and to interpret information about HIV prevention and care [69].

Structural level interventions are required to address the lack of legal protection from discrimination faced by sex workers, MSM, and transgender women in Jamaica. The criminalization of sex work and same-sex sexual practices limit legal protections and propel discrimination experienced by these key populations across various contexts, such as places of employment. For instance, participants recounted employment discrimination, such as a loss or refusal of employment following a positive HIV test result, that increased poverty, and in turn produced housing and food insecurity, and ultimately presented barriers to HIV care engagement. Mandatory pre-employment HIV testing is an example of work-based discrimination that requires policy-level change and protection for people living with HIV. Participants also discussed how living in lower-income geographies increased intersectional stigma exposure, reinforcing the need to address economic empowerment to realize rights and health. This finding also corroborates research in high-income contexts that documents how food and housing insecurity drive HIV-related stigma [70, 71], and how poverty stigma is linked with poorer HIV care and treatment outcomes [72].

There are study limitations, including the focus group design that can result in some participants being less comfortable sharing their HIV positive serostatus and other personal stigma experiences. This resulted in challenges recruiting an equal sample size of participants for each population at each site; in some locations such as Kingston it was challenging to recruit sex workers with HIV due to



community stigma, and in Montego Bay it was a challenge to recruit MSM living with HIV. We focused on cisgender women sex workers with HIV, and thus do not reflect the lived experiences of MSM and transgender sex workers with HIV, who may have unique experiences of intersecting stigma. As all participants were recruited from an ASO, they may have more knowledge and less stigma regarding HIV care than those who are not connected to an HIV service organization. Thus we may be missing perspectives from key populations not engaged in HIV care. Despite these limitations, our study is unique in including perspectives from sex workers, MSM and transgender women living with HIV across three Jamaican sites on intersecting stigma and HIV care; and the often poignant quotations exemplify the success of the focus group method in evoking nuanced accounts of lived experiences of multifocal stigma among individuals from marginalized communities.

Taken together, our findings underscore the role of multifaceted intersectional stigma processes in shaping the lived experiences of sex workers, MSM, and transgender women living with HIV in ways that constrain access to resources, social support, and ultimately produce vulnerability to negative HIV outcomes. The HSD Framework [40] offers a salient cross-cutting approach to understand these stigma processes, and participant narratives also generated understanding of multi-level strategies to live positively with HIV and resist stigma. Findings should inform stigma reduction and HIV clinical care approaches that leverage the strengths of communities living with HIV and address stigma drivers and facilitators to promote health and rights for sex workers, LGBTQ persons, persons with HIV, and those at the intersection of these experiences and identities. It is not possible to effectively and comprehensively respond to HIV in the absence of such stigma interventions—they can be considered the heart of HIV care cascade programming rather than an adjunct.

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Declarations

Ethical Approval and Consent to Participate Ethical approval for this study was obtained from the University of Toronto (37795) and the Jamaican Ministry of Health (2019/41). All participants provided voluntary, informed written consent.

Conflict of interest The authors have no conflicts of interest to declare.

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