HHS Public Access

Author manuscript

J Assoc Nurses AIDS Care. Author manuscript; available in PMC 2025 January 01.

Published in final edited form as:

J Assoc Nurses AIDS Care. 2024 ; 35(1): 27–39. doi:10.1097/JNC.0000000000000443.

"I have to do it in secrecy": Provider Perspectives on HIV Service Delivery and Quality of Care for Key Populations in Zambia

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Abstract

Key populations (KPs) experience suboptimal outcomes along the HIV care and prevention continua, but there is limited study of the challenges service providers encounter delivering HIV services to KPs, particularly in settings like Zambia, where provision of these services remains legally ambiguous. Seventy-seven providers completed in-depth interviews exploring constraints to HIV service delivery for KPs and recommendations for improving access and care quality. Thematic analysis identified salient challenges and opportunities to service delivery and quality of care for KPs, spanning interpersonal, institutional, and structural domains. Limited provider training in KP-specific needs was perceived to influence KP disclosure patterns in clinical settings, impeding service quality. The criminalization of KP sexual and drug use behaviors, coupled with perceived institutional and legal ambiguities to providing HIV services to KPs, cultivated unwelcoming service delivery environments for KPs. Findings elucidate opportunities

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Author Contributions

All authors on this paper meet the four criteria for authorship, as identified by the International Committee of Medical Journal Editors. All authors have contributed to the drafting or been involved in revising it, reviewed the final version of this manuscript before submission, and agree to be accountable for all aspects of the work.

Conceptualization: M. Musheke, M. Mbizvo, H. Raymond, R. Keating, H. Witola, S. Geibel, W. Tun, N. Pilgrim; Data curation: D. Mulenga, L. Banda, L. Phiri; Formal analysis: D. Mulenga, J. Rosen; Funding acquisition: M. Mbizvo, S. Geibel, W. Tun, N. Pilgrim; Investigation: D. Mulenga, L. Banda, L. Phiri; Methodology: M. Musheke, M. Mbizvo, H. Raymond, R. Keating, H. Witola, S. Geibel, W. Tun, N. Pilgrim; Project administration: D. Mulenga, L. Banda, L. Phiri; Visualization: J. Rosen; Writing – original draft: D. Mulenga, J. Rosen

for improving HIV service delivery/quality, from decentralized care to expanded legal protections for KPs and service providers.

Keywords

key populations; HIV prevention; HIV care and treatment; stigma; qualitative research; sub-Saharan Africa

Introduction

Key populations (KPs) – including female sex workers (FSW), men who have sex with men (MSM), and people who use illicit drugs (PWUD) – exhibit elevated risks of HIV acquisition and experience disproportionate barriers to accessing HIV prevention, care, and treatment services in certain contexts (Beyrer et al. 2012; Shannon et al. 2015; Stockman and Strathdee 2010). There is limited and inconclusive data on the HIV burden shouldered by KPs in many countries with generalized HIV epidemics, including Zambia. Surveys implemented in six Zambian districts recorded prevalence estimates of 46.0% to 56.4% among FSW (Kasongo et al. 2016; Population Council et al. 2018). The Zambian government, citing a small incidence modeling study from 2008, reports MSM account for 1% of new HIV infections (National HIV/AIDS/STI/TB Council 2014); other sources, nonetheless, report HIV prevalence estimates as high as 33% among MSM (Makofane, Beck, and Ayala 2014). No estimates are currently available for PWUD or people who inject drugs (PWID) in Zambia.

Zambia's National AIDS Strategic Framework (2011-2015) embraced a rights-based approach to the HIV epidemic, acknowledging the role of an enabling programmatic environment in the absence of an acceptable legal and policy environment for improving health service delivery to KPs (Government of the Republic of Zambia and National AIDS/STI/TB Council 2010). The framework catalyzed the establishment of a Key Populations Technical Working Group by the National HIV/AIDS Council and a Ministry of Health directive in 2012 to profile the HIV epidemic among KPs in Zambia. An assessment found that non-governmental organizations (NGOs) provide the majority of HIV services to KPs, as criminalization of KP sexual and drug use behaviors, among other policies, limits the public sector's capacity to support and implement these services directly (Mwondela, Pessoa-Brandão, and Carroll 2015). The principles outlined in the inaugural National AIDS Strategic Framework were rearticulated in the 2017-2021 National AIDS Strategic Framework, demonstrating continued commitment to closing gaps in the HIV care and prevention continua for KPs (Government of the Republic of Zambia and National AIDS/STI/TB Council 2010).

Provider competencies, training, and resources shape the quality of services rendered by KPs, with providers playing prominent roles in efforts to meet the HIV prevention, care, and treatment needs of KPs (Delany-Moretlwe et al. 2015; Nyblade et al. 2019). A 2012 survey of nearly 6,000 MSM across 165 countries identified homophobia and provider stigma as significant barriers to accessing vital HIV prevention commodities, like condoms and lubricants (Arreola et al. 2015). A qualitative study in Zambia highlighted

suboptimal quality of HIV/STI service provision as perceived by FSW, MSM, and PWUD, particularly in public health facilities (Pilgrim et al. 2019). The study identified stigma and discrimination, poor confidentiality, invasive health facility policies, and fear of legal prosecution among some of the major barriers to HIV/STI service engagement (Pilgrim et al. 2019). Other studies in Zambia have demonstrated how experiences with discrimination in public settings deter MSM from seeking health services, rendering HIV service coverage inequitable (Muzyamba, Broaddus, and Campbell 2015). FSW experience a vulnerability to poor HIV outcomes that is compounded by their diminished capacity to report sexual violence and abuse, fearing retaliation from law enforcement, partners, or health personnel for disclosing their income-generating activities (Decker et al. 2016; Oldenburg et al. 2018; Pando et al. 2013). As illicit drug use is criminalized in most settings, PWUD exist at the margins of social and medical sectors, often resulting in their exclusion from available HIV services (Terlikbayeva et al. 2013; Guise et al. 2016). Moreover, there is limited knowledge of the challenges service providers experience when delivering clinical services to KPs, especially in settings—like Zambia—where provision of HIV services to KPs remains legally ambiguous. To date, no studies in Zambia have investigated providers' experiences implementing KP-focused HIV prevention and treatment services, which constrains understanding of appropriate and feasible strategies for optimizing quality of HIV service provision to these marginalized populations.

This qualitative study aimed to identify the barriers health providers encounter when delivering HIV prevention and care services to KPs in Zambia. Findings elucidate social, institutional, and structural gaps in HIV service delivery and illuminate opportunities for multi-level interventions to mitigate these access and quality-related disparities across the HIV care continuum.

Methods

Study setting and recruitment

Data were derived from a cross-sectional, qualitative formative assessment characterizing the HIV service delivery environment for KPs in nine Zambian districts, involving focus group discussions and in-depth interviews with KPs and their service providers (Pilgrim et al. 2019). The present study exclusively reports findings from in-depth interviews with service providers, as results from focus groups and interviews with KPs are presented elsewhere (Pilgrim et al. 2019). Sites were purposively selected in eight of Zambia's 10 provinces to include a geographically diverse sample of districts containing large urban centers, provincial hubs, and border towns (see Figure 1).

Providers were purposively recruited if they reported providing health services to KPs, which included the following populations: females exchanging sex for money or in-kind gifts (FSW); males having oral and/or anal sex with other males (MSM); and people using (i.e., ingesting, smoking, snorting, injecting) any illicit drugs (PWUD) (Pilgrim et al. 2019). Study investigators consulted with local stakeholders, and applying recommendations from these consultations, outreach workers from local organizations helped identify and introduce study staff to potentially eligible providers. To ensure an adequate volume of potentially heterogeneous provider perspectives were captured, a minimum of five interviews were

planned in each site, which was theorized to generate an information-rich, sufficiently saturated sample (Crabtree and Miller 1999).

Eligible participants were 1) 18 years-old or older; 2) spoke English or other designated local language(s) (i.e., Bemba, Nyanja, Tonga, Lozi, Kaonde); 3) delivered HIV/STI, sexual health, or other support services to at least one KP group (i.e., FSW, MSM, PWUD) or possessed specialized expertise in the social/health needs of one or more of these populations; and 4) provided verbal informed consent. Data collectors approached providers in clinical and community settings by sharing study details and assessing eligibility using a standard screening tool.

Data collection

Data were collected between July 2013 and September 2015. Semi-structured, in-depth interviews were primarily conducted in English; depending on participants' language preferences, interviews were also conducted in one or more of the following local languages: Nyanja, Bemba, Tonga, Lozi, and Kaonde. Due to the study's sensitivity, data collectors participated in a two week-long training prior to data collection, where study-specific issues of participant confidentiality and privacy were emphasized (Population Council et al. 2018).

Interview guides addressed numerous cross-cutting themes, including specialized training for effectively serving KPs; multi-level barriers to care access and quality service provision (i.e., confidentiality and privacy, affordability, stigma/discrimination); and recommendations for mitigating barriers to quality care provision for KPs. Socio-demographics and providers' occupational characteristics were captured in a brief survey, administered before each interview.

All interviews were conducted in a private location of the participant's choice. Participants received 50 Zambian kwacha (~$5-7 USD) to compensate for participants' transportation costs and time.

Data management and analysis

Interviews were audiotaped, transcribed verbatim, and translated into English (when required). All transcripts were compared to the original audiotapes for transcription and translation accuracy by data collectors. After validation, transcripts were imported into ATLAS.ti version 7 to facilitate data management and textual analysis. The investigative team immersed themselves in the data by reading each transcript line-by-line. The team identified themes during debriefing meetings, where codes were developed inductively (based on themes emerging organically in the transcripts) and deductively (from themes included in interview guides *a priori*) for data synthesis. Four investigative team members coded transcripts, with at least two staff coding transcripts from each study site to improve inter-coder consistency. Team meetings were used to discuss and reconcile coding discrepancies.

Thematic analysis, a research method for subjectively interpreting textual data through systematic content classification, was used to identify salient themes and patterns (Hsieh and Shannon 2005). Salience was assessed by evaluating the repeated presence of discrete

data elements across transcripts. Following thematic analysis, emerging themes were refined using the constant comparative method (Ayres, Kavanaugh, and Knafl 2003; Corbin and Strauss 2008), through which themes were compared to assess whether the same concept emerged within and across study sites as well as within and across health service settings. A post-coding matrix was used to chart emerging themes across participant demographic and occupational characteristics (e.g., provider cadre, service delivery setting, district), further facilitating pattern identification. Salient themes were further crystallized through regular team debriefings, enhancing credibility and confirmability of emerging themes (Lincoln and Guba 1986).

Ethics

This study was approved by the Population Council Institutional Review Board (#529), the Tropical Diseases Research Centre Ethics Review Committee in Zambia (#STC/2012/11), and the United States Centers for Disease Control and Prevention Office of Human Subject Protections (#2016-066). Administrative approval was obtained from the Zambian Ministries of Health and Home Affairs and the Drug Enforcement Commission. To protect participant confidentiality, only verbal informed consent was obtained from individuals prior to study enrollment.

Results

Table 1 presents a complete profile of participants' socio-demographic and occupational characteristics, stratified by study site. A total of 77 providers representing government institutions (42.9%), NGOs (27.2%), private clinics (26.0%), and faith-based organizations (FBOs) (3.9%) participated in the study. Most providers were male (53.2%), held a post-secondary degree (84.4%), and had been employed at their respective institutions for over 10 years (53.2%). The mean age was 44 years (range: 24-75 years). Over half of providers reported their facilities served all KP groups (53.2%), with a smaller yet sizeable number indicating their services were tailored principally to FSW (29.9%).

Salient barriers to care access and service provision for KPs identified from thematic analysis spanned interpersonal, institutional, and structural domains. Emerging themes nested within these overarching categories included: discriminatory provider attitudes towards KPs; unmet client preferences for providers; absence of KP-specific and -sensitive training; resource and capacity constraints; legal ambiguities of KP service provision; and criminalization of KP sexual and drug use behaviors. Themes corresponding to each emergent category are further described below.

Interpersonal barriers

Discriminatory provider attitudes towards KPs—Participants across health service settings discussed provider discrimination against KPs, linked to conservative social norms governing sexual orientation/activity and substance use, as a chief barrier to care access and quality. This conservative social environment produced cohorts of service providers with insufficient experience and skills to appropriately engage with KPs in clinical settings.

As numerous participants explained, this cultivated clinical environments where service providers could openly stigmatize and discriminate against KPs.

> One of the issues is discrimination…They [KPs] go and tell them [health providers], "Yes, I acquired this STI. I acquired HIV because I'm a sex worker." That old nurse there…will start shouting…We must improve on that. **(Male provider, public facility, Ndola)**

These anticipated or enacted stigmatizing experiences, providers explained, deter KPs from disclosing their social identities or risk behaviors to providers, which inhibits them from availing services tailored to client needs and preferences.

> One of the challenges…is they don't come out. "No, I am not a sex worker." They are a special group…though we don't treat them like a special group…We miss out a lot…If they were handled as sex workers, probably different services would be provided to them…which may make our services to them of higher quality. (**Male provider, public facility, Mansa)**

A few participants distinguished disclosure preferences among different KP groups. MSM, for example, preferred anonymity in health care settings, fearing disclosure of their sexual orientation and/or identity to providers would make them vulnerable to stigma or other forms of mistreatment. Similarly, the inability to conceal physical manifestations of drug use (i.e., weight loss, track marks from injections) from health providers were perceived to discourage PWUD from seeking services.

Unmet client preferences for providers—Participants reflected on the role of KP preferences for their health providers and how unmet preferences may dissuade care-seeking. Age and sex emerged as primary characteristics resonating with clients' preferences for health providers; for instance, KPs may feel more comfortable receiving services from providers of the same sex.

> At the hospital, when someone is sick…even if it's a man and finds a woman attending to him…he has to take off his clothes to show her…They become shy…that a man will see her nakedness…What I do at my clinic…if at all a man comes sick like that…I, a man, will treat the patient…When it's a female that comes with that kind of illness…I will send a fellow female to check on her…In that case, it seems we take things confidentially. **(Male provider, private clinic, Solwezi)**

The limited availability of male providers was perceived to influence health care-seeking among MSM specifically, for they may experience discomfort receiving services from providers of a different sex. Some also noted that FSW may not feel comfortable interacting with younger nurses and, therefore, may avoid seeking services in some instances.

Institutional barriers

Absence of KP-sensitive and -specific training—Participants characterized the lack of KP-focused trainings in medical institutions as a key barrier to quality service provision for KPs. Many providers stated their organizations were met routinely with a dearth of resources and training tools, restricting capacity to provide services tailored to meet the

specialized needs of KPs, like heightened demands for privacy and confidentiality in clinical settings.

> We need…to build our capacity…on how to counsel and attend to…MSM… Immediately somebody walks in, and then everybody knows that this is an MSM, and because of the laws in the country and the beliefs and the cultures…it becomes a big challenge…to handle. **(Female provider, NGO, Lusaka)**

Providers additionally acknowledged capacity gaps in providing specialized KP services in non-medical domains, including psychosocial counseling and referrals to available community-based social services. Participants specifically pointed out the need for information, education, and communication materials to improve provider competency.

> The training we go through is just in management of HIV patients, not for specific populations. If we had that [KP-focused trainings], maybe our staff will then be more responsive to do these things. (**Male provider, public facility, Livingstone)**

Some providers, most of whom worked in the NGO sector, reported receiving training on how to provide client-centered care for KPs. However, they still advocated for supplemental trainings to improve the acceptability and quality of their services to KPs.

> They [KPs] are very comfortable because the people that I work with have gone through extensive training…We have received a lot of trainings from ZPCT [Zambia Prevention, Care, and Treatment Partnership], so staff are very comfortable dealing with these groups [KPs]. **(Male provider, NGO, Mansa)**

Resource and capacity constraints—Resource limitations, including insufficient personnel and commodity shortages, emerged as a chief institutional barrier inhibiting effective service provision to KPs. The lack of sufficient service entry points for HIV care, specifically, was discussed frequently as hindering KP access to health services. Providers, notably those operating outside the public sector, expressed a need for more antiretroviral therapy (ART) dispensaries outside of the public sector. Because ART provision is centralized in Zambia, clients frequently face long queues and that may potentially discourage medication adherence and retention in care. Although some NGOs and private facilities are licensed to dispense ART to their clients with confirmed HIV diagnoses, those unlicensed to dispense ART must refer their clients to the government health facilities, and clients may not follow through with the referral due to privacy concerns.

> Government clinics are crowded…They have so many people…It will be difficult for this person [FSW]…to stand in the queue the whole day…to access the services that she needs, [like] CD4 count…They cannot attend the services that they want… They will stay away…because of the crowd…If she has an STI… she would rather go to the chemist… buy one or two tablets…or capsules that she saw a friend take. **(Male provider, NGO, Chipata)**

Other providers detailed limitations in skilled providers as well as medical equipment required for adequate care provision to KPs, who – in addition to HIV – have other health needs that go frequently unaddressed and unmet.

> Most of them…are positive [for HIV]…meaning that there's possibility of them having things like genital warts…In the whole of Kapiri, there's no screening for cervical cancer…We know that…sex workers…are prone to…papilloma virus, but…there's no one that has been trained to screen for [HPV]…The only time… that we had the cervical cancer screening, someone had to come from Kabwe. **(Female provider, NGO, Kapiri-Mposhi)**

Outside of subsidized HIV care and treatment services, few resources exist to cover expenses for other medical services and products, including antibiotics for STI treatment. This inhibits service uptake or completion of prescribed treatment regimens since these clients are often unable to afford the extra expenses.

> If you went into any government clinic, the drugs for genital warts… they [clients] have to buy [them]…and then you are looking at these that are not financially stable…I think it's something in Zambia…and I don't know why they have overlooked it. **(Female provider, NGO, Kapiri-Mposhi)**

Providers across health service settings recommended institutional reforms to rectify shortcomings in service delivery to KPs, from introducing substance use treatment centers for PWUD to decentralizing ART service provision (i.e., community-based ART distribution) to increasing medication access for KPs living with HIV.

> After learning about their [FSW's] challenges in accessing ART services, we are trying to think about how we can get around those…If we are out in the field, and we come across sex workers that need services at the ART clinic, for instance, we want to begin facilitating those processes of draw their blood…and then I can pick it [ART] up. **(Male provider, NGO, Livingstone)**

Structural barriers

Legal ambiguities to KP service provision—Providers perceived their provision of clinical services to KPs as operating in a legally ambiguous space. Although Zambian law guarantees health access and services for all citizens, the criminalization of specific sexual and substance use behaviors, as providers explained, convoluted the legality of transparent care provision for KPs. Providers in the public sector, in particular, detailed institutional and legal constraints to their provision of specialized care to KPs, even though Zambian laws do not explicitly prohibit provision of health services to people engaging in criminalized activity, like KPs.

> Because we work within a set rules and guidelines, we cannot talk about such things…about man-to-man sex in a public place…because that is not allowed. (**Female provider, public facility, Ndola)**

> We even get worried because we say, "Okay we'll allow the…MSM to come to our organization" …We might be…misunderstood by the lawmakers…because we are seen [to be] helping these people. They'll think we are promoting, [that] we are encouraging [their behavior]. **(Female provider, NGO, Lusaka)**

These misleading, and often contradictory, legal frameworks influenced organizational behavior and provider perceptions of which services were legally permissible. Many

providers specifically mentioned how providing tailored services to MSM is strongly discouraged, as same-sex behaviors are explicitly outlawed in Zambia. As a result, medical discussions about risk factors with clients, including same-sex intercourse among MSM, were latently or, in some instances, explicitly discouraged.

> Will we be breaking the law? I'm interested in their health, but then, at the same time, I'm a citizen who is supposed to follow the law…I don't know if it will be in the best interest of the nation to start providing a service…because then I have to do it in secrecy, hiding it from my government. **(Male provider, public facility, Livingstone)**

In response, providers requested heightened clarity in the legal frameworks to deliver more responsive, client-centered services for sexual and gender minorities. They proposed several interventions, from policies protecting the privacy of KPs in health care settings to, in rare circumstances, full decriminalization of KP sexual and drug use behaviors.

Criminalization of KP sexual and drug use behaviors—The legally repressive environment, as providers explained, influenced KP perceptions of safety and security in service environments, thereby shaping care-seeking behaviors. Participants perceived MSM and PWUD avoidance of health facilities, specifically government clinics, to stem from the criminalization of their sexual and drug use behaviors. Providers at government institutions frequently described fear of arrest/prosecution as factors disincentivizing KPs from seeking health services.

> KPs will hide because of stigma…They feel we will report them to the police, so they will avoid coming [to health facilities] because of fear of being implicated [in criminalized activity] and being taken to the police. (**Female provider, public facility, Mansa)**

These perceptions highlighted a mistrust among KPs in the medical establishment, which fostered broader skepticism in the health sector's autonomy from law enforcement and criminal justice institutions. For example, providers discussed how some PWUD may avoid health facilities, fearing arrest when disclosing their drug use to providers.

> They [PWUD] will be fearing to come and access services at the clinic because… they will think, "If they [service providers] discover that I am a drug abuser, maybe they will report me to the Drug Enforcement Commission." **(Male provider, public facility, Solwezi)**

While providers unanimously allayed these concerns, insisting they would never intentionally compromise their clients' privacy by engaging law enforcement agencies, participants still acknowledged how the perceived threat of privacy violations and law enforcement involvement rendered health facilities unsafe spaces for KPs, which deterred KPs from seeking care.

Discussion

Study findings highlight policy, institutional, and social barriers and potential solutions to high-quality health care delivery among providers serving KPs (see Table 2). Despite

recognizing KPs' heightened needs for confidential and person-centered HIV services, providers in Zambia conveyed that perceived fears by KPs to access health services and disclose sexual and drug use behaviors to service providers, particularly in government facilities, were salient constraints to delivering quality HIV prevention and treatment services. Providers emphasized how anticipated/enacted stigma and discrimination by KPs (stemming from conservative social norms), lack of privacy and confidentiality in clinical settings, insufficient training in delivering KP-centered and KP-specific services, and legal ambiguities of service provision to groups with criminalized behaviors (especially MSM and PWUD) inhibited equitable HIV service provision to KPs. As a result, providers perceived that KPs preferred accessing services outside the public sector, whether at private health facilities or through NGOs, because government health services did not meet their safety, privacy, and confidentiality needs. This supports similar findings identified in other settings, where KP health-seeking behaviors and preferences were shaped by perceptions of safety and security offered in specific clinical environments, even where services offered were of questionable quality (Pilgrim et al. 2019; Rushing, Watts, and Rushing 2005; Sarin et al. 2011; Scorgie et al. 2013).

Findings from this study complement barriers to KP health service access identified in other contexts. A qualitative study of MSM and providers in Eswatini demonstrated that in spite of concerted efforts to deliver HIV services fairly to KPs, delayed care-seeking and service avoidance altogether persisted alongside stigma, violence, and lack of social/legal protections (Kennedy et al. 2013). Other sub-Saharan African studies have identified related concerns of confidentiality and privacy among stigmatized KPs, deterring uptake and use of preventative HIV services (Atujuna et al. 2018; Duby et al. 2018; Pilgrim et al. 2019). Stigma mitigation interventions in clinical settings (i.e., values clarification and attitudes transformation), as demonstrated by experiences in Bangladesh and Kenya, are feasible, highly acceptable, and effective solutions for reducing negative provider attitudes towards KPs and increasing receptiveness of health facilities among stigmatized groups (Geibel et al., 2017; van der Elst, Gichuru et al., 2013; van der Elst, Smith et al., 2013). Implementing these activities in Zambia, specifically in government clinics, should be prioritized in KP programming to ensure equitable health care access and improve care quality.

The lack of sufficient service entry points, especially for ART, was frequently characterized by providers as impeding KP health care access. They expressed the need for more ART dispensing sites outside the public sector, such as NGOs and private facilities. Providers implicated centralized ART dispensing venues as a principal driver of stigma, discrimination, and privacy concerns among KPs; for example, standing in line for ART may reveal one's status (Kennedy et al. 2013; Chanda et al. 2017; Micheni et al. 2017; Wanyenze et al. 2017). Furthermore, providers unanimously stated that the lack of sufficient entry points renders services physically inaccessible (e.g., travel long distances for care) and inefficient due to the long queues. Recommended evidenced-based solutions to reducing these access barriers include decentralized ART services, including community-based ART distribution, and introducing linkages in the health care system to auxiliary support services for KPs, including psychosocial counseling and drug treatment services, using alternative service navigation modalities like peers (Adebajo et al. 2015; Aung et al. 2017; Macdonald, Verster, and Baggaley 2017; Reidy et al. 2014; Tene et al. 2013; Tun et al. 2019).

The hostile legal environment in Zambia was not only cited as a barrier to health access for KPs but also described as a principal driver of suboptimal care quality or service refusal behaviors among providers. Participants, notably those in the public sector, expressed reticence in liberally interpreting the legal frameworks governing their clinical practices and KP health rights, fearing legal ramifications for providing services to clients engaging in criminalized behaviors, particularly MSM and PWUD. These perceptions and concerns were accompanied by provider descriptions of common KP fears of legal repercussions, likely responsible for discouraging KPs from seeking health services. While a number of studies have cited safety concerns as key barriers to adequate care provision among KPs (Cange et al. 2015; Decker et al. 2016; Duby et al. 2018; Kennedy et al. 2013; Sarin et al. 2011), barriers related to perceived legal recourse against service providers were a unique and concerning finding in this study context. Although the Zambian penal code criminalizes same-sex behavior but not sexual orientation, the perception of anticipated legal recourse for KP service provision, specifically to MSM, suggests additional legal/policy sensitization is needed for HIV service providers in Zambia. Additionally, more protections must be articulated and guaranteed to KPs and their service providers alike in Zambia in order to ensure more equitable health service delivery.

These findings add to the limited, but burgeoning, body of research in Zambia describing heightened KP vulnerabilities to HIV and suboptimal health service provision stemming in part from a repressive legal environment. One study of peer navigators in three Zambian districts identified concerns of privacy/confidentiality, layered stigma attributed to sex work and HIV risk, as key barriers to HIV testing among FSW (Chanda et al. 2017). In the same study, pregnancy and access to interventions catering specifically to FSW, including peer counseling, were cited as facilitators of HIV testing. Another study soliciting program implementer and beneficiary perspectives of rights-centered HIV programming found that while MSM and other KPs may embrace rights-affirming health services, they perceive these services to receive minimal acceptance among key stakeholders, namely clinicians and donors, for whom buy-in is required to sustain service delivery (Muzyamba, Broaddus, and Campbell 2015). Findings from the present qualitative study offer novel insights into provider-perceived barriers to health service delivery among a key stakeholder sometimes overlooked in the planning and implementation of KP programming: service providers.

Since the implementation of this study, various approaches have been implemented in Zambia to reduce gaps in service provision and quality for KPs in Zambia. For example, peer-based HIV outreach and service linkage efforts by KP community health workers has improved HIV case-finding among KPs, specifically transgender women and other gender-diverse populations; this model has been implemented in four provinces with support of KP-led NGOs (Mwango et al. 2022). Nevertheless, recent country operational plan guidance from the U.S. President’s Emergency Plan for AIDS Relief has prioritized introduction and scale-up of HIV interventions addressing stigma and discrimination towards KPs (U.S. President’s Emergency Plan for AIDS Relief 2022), underscoring persistent challenges meeting the HIV service needs of KPs in Zambia.

Limitations

This study is subject to at least three limitations. First, findings emerged from a single qualitative data collection method, in-depth interviews. The absence of other qualitative data collection methods in the study design, namely focus group discussions, may have reduced opportunities for method and analytic triangulation, as described elsewhere (Denzin, n.d.; Patton 1999). Second, while a relatively large sample of providers were recruited into the study, provider perspectives and experiences captured through purposive recruitment across service settings and study sites may not necessarily be transferrable to the experiences of other health providers in Zambia or Southern Africa. Lastly, as with other qualitative studies, all data were self-reported and, therefore, should be interpreted in light of social desirability and limitations of recall accuracy.

Conclusions

Findings from this qualitative study of service providers in Zambia reaffirm the multi-level constraints to HIV service provision for KPs. Enhanced legal protections for providers and KPs alike are urgently needed to mitigate access barriers, especially in the public sector, and trainings and sensitization workshops to address stigma and values clarification/bias awareness and improve cultural competency and client-provider communication to optimize care quality. Specialized clinical training focused on KPs and clinical capacity-building to deliver needed care services to KPs are vital strategies for improving the care environment for KPs. Expansion of entry points into the health care system through decentralized ART provision and task-shifting will reduce strain on public sector health facilities and open pathways to more accessible, appropriate service provision venues for KPs. Finally, community- and facility-based stigma mitigation interventions are urgently needed to create a more enabling climate for KP care-seeking. Interventions tailored to the unique needs of KPs and their service providers remain critical to halting HIV transmission and curtailing the epidemic's impact in Zambia. In the absence of targeted efforts at improving the health care accessibility and quality for KPs, HIV transmission will persist, and an AIDS-free generation will remain an unattainable aspiration.

Acknowledgement

We would like to thank service providers for sharing their experiences while participating in this research. We also extend gratitude to our partners, the Zambian Ministries of Health and Home Affairs and the Drug Enforcement Commission (DEC), for their support of this study.

Funding

This work was supported by the United States Centers for Disease Control and Prevention (U2GGH000463; PI: N. Pilgrim) and the National Institute of Mental Health (F31MH126796; PI: J. Rosen). The contents are solely the responsibility of the authors and do not necessarily reflect the official views of the CDC, NIH, or U.S. Government.

Conflict of Interest Statement

N. Pilgrim is currently employed by ViiV Healthcare. ViiV Healthcare neither funded nor had any involvement in the present study. The remaining authors have no conflicts of interest to disclose.

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Key Considerations

- To date, no studies have investigated provider experiences delivering HIV prevention and treatment services to key populations (female sex workers, men who have sex with men, and people who use drugs) in Zambia.
- Semi-structured, in-depth interviews with 77 service providers recruited from nine districts qualitatively uncovered interpersonal (e.g., discriminatory provider attitudes towards KPs), institutional (e.g., insufficient accessible/desirable entry points into health care services), and structural (e.g., legal ambiguities providing services to KPs) barriers to KP-focused HIV service provision and quality of care.
- Offering alternative service delivery platforms outside government health facilities (i.e., decentralized HIV prevention and care models); strengthening clinical training in person-centered service provision, that includes stigma reduction and cultural competency, bias awareness/values clarification, and communication skills; and expanding legal protections for KPs and their service providers are needed to close gaps for KPs along the HIV prevention and care continua.

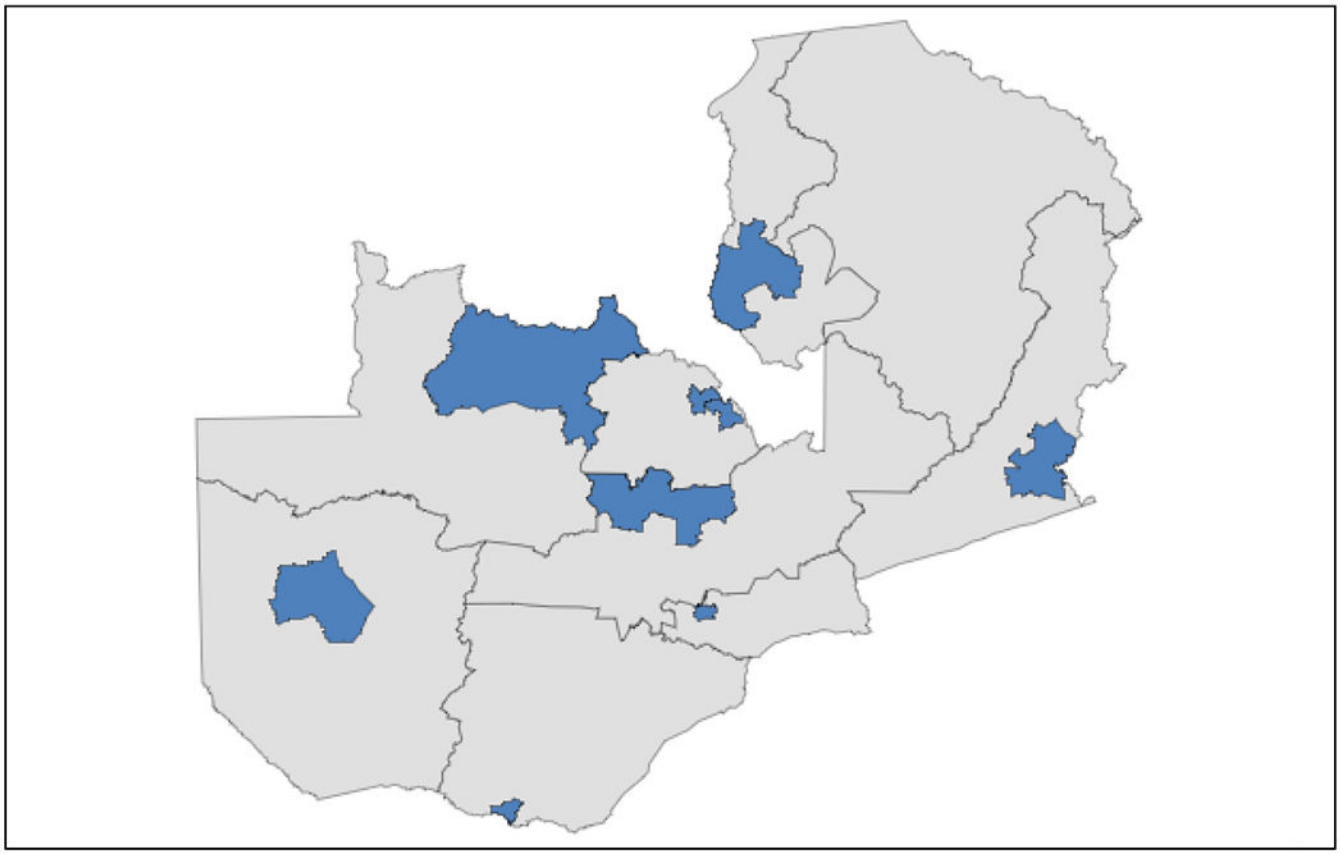

Figure 1.
Map of study implementation districts (shaded in blue) in Zambia, by province.

Table 1.

Socio-demographic and occupational characteristics of interviewed service providers (*N*=77), by district.

	Lusaka (*n*=5)	Livingstone (*n*=17)	Kapiri-Mposhi (*n*=8)	Kitwe (*n*=7)	Ndola (*n*=9)	Solwezi (*n*=7)	Chipata (*n*=8)	Mansa (*n*=8)	Mongu (*n*=8)	TOTAL (*N*=77)
Age, in years (mean, range)	51 (35-64)	26 (27-65)	53 (41-71)	45 (26-58)	41 (28-58)	44 (30-62)	46 (24-75)	50 (28-73)	46 (29-75)	44 (24-75)
Sex										
Male	3	11	3	2	4	5	3	6	4	41 (53.2%)
Female	2	6	5	5	5	2	5	2	4	36 (46.8%)
Education										
No formal education	–	2	–	–	–	–	–	–	2	4 (5.2%)
Primary	–	1	–	–	–	1	1	–	–	3 (3.9%)
Secondary	–	–	1	–	1	1	1	1	–	5 (6.5%)
Post-Secondary	5	14	7	7	8	5	6	7	6	65 (84.4%)
Key population membership										
Yes	–	3	–	–	–	–	1	–	–	4 (5.2%)
No	5	11	8	7	9	7	7	8	8	70 (90.9%)
Missing	–	3	–	–	–	–	–	–	–	3 (3.9%)
Service delivery setting										
Government/public facility	1	8	4	4	5	3	2	3	3	33 (42.9%)
Private clinic	–	3	1	1	2	3	3	3	4	20 (26.0%)
Non-governmental organization	4	4	3	2	1	1	3	2	1	21 (27.2%)
Faith-based organization	–	2	–	–	1	–	–	–	–	3 (3.9%)
Years at organization										
<5 years	1	7	1	2	2	3	2	1	1	20 (26.0%)
5-9 years	1	6	3	–	–	1	2	3	–	16 (20.8%)
10+ years	3	4	4	5	7	3	4	4	7	41 (53.2%)
Population served										
All key populations	4	10	–	3	8	3	6	6	1	41 (53.2%)
FSW and PWUD	–	2	–	–	–	–	1	2	1	6 (7.8%)
FSW and MSM	1	–	–	–	–	–	–	–	1	2 (2.6%)
FSW only	–	5	7	2	1	3	–	–	5	23 (29.9%)

	Lusaka (*n*=5)	Livingstone (*n*=17)	Kapiri-Mposhi (*n*=8)	Kitwe (*n*=7)	Ndola (*n*=9)	Solwezi (*n*=7)	Chipata (*n*=8)	Mansa (*n*=8)	Mongu (*n*=8)	TOTAL (*N*=77)
PWUD only	–	–	–	1	–	–	–	–	–	1 (1.3%)
None	–	–	1	1	–	1	1	–	–	4 (5.2%)

‘Hyphen’ represents no (zero) data collection events.

Table 2.

Challenges to HIV service delivery and quality identified by service providers and proposed solutions, by domain.

Domain	Challenges	Proposed Solutions
Interpersonal	Discriminatory provider attitudes towards KPs	• Facility-based stigma mitigation interventions • Enhanced psychosocial support to KPs experiencing stigma/discrimination
	Unmet provider preferences among KPs	• Curated resource repository of KP-friendly providers and services
Institutional	Absence of KP-sensitive and -specific trainings	• Develop and integrate KP-related trainings into medical and nursing education curricula
	Insufficient entry points into the healthcare system	• Decentralized (i.e., community-based) service provision • Multi-month medication dispensing (e.g., ART, PrEP)
	Limited financial resources to support subsidized care	• Public sector and donor commitments to procure and avail subsidized therapeutics
Structural	Legal ambiguities of providing services to KPs	• Clarification and commitment to client privacy in health care settings • Client/provider protection from legal recourse during service encounters