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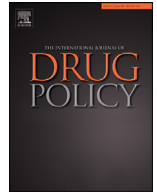
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Research Paper

Impact of COVID-19 on substance use disorder treatment services in Kenya: Qualitative findings from healthcare providers



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ABSTRACT

Background: People who inject drugs are at an increased risk for contracting SARS-CoV-2 and have experienced barriers to accessing harm reduction services during the COVID-19 pandemic. Understanding how to best provide these services is essential for COVID-19 mitigation. The goal of this study was to ascertain challenges and successes for caring for people who inject drugs in Kenya during the COVID-19 pandemic.

Methods: We conducted focus group discussions and one-on-one key informant interviews with healthcare providers who work with people who inject drugs in Kenya. Interviews explored how COVID-19 and social distancing measures impacted service provision, as well as what strategies were used to overcome these barriers. We used thematic analysis to analyze transcribed interviews.

Results: Participants included 29 service providers from 11 healthcare professions at three medication assisted treatment (MAT) and four drop-in center (DIC) sites (N=15 males and N=14 females, with an average age of 35 years). Four overarching themes emerged in our thematic analysis in which providers described both barriers to providing care and solutions to overcome them: (1) COVID-19-related misconceptions; (2) Limited COVID-19 testing and screening; (3) Structural changes related to service provision; and (4) Access to material resources such as meals, needle and syringe program kits, and personal protective equipment.

Conclusions: Our findings demonstrate the COVID-19 pandemic-imposed challenges for substance use disorder treatment providers and patients, however with ingenuity many of these challenges were able to be overcome.

Introduction

There are nearly 16 million people who inject drugs worldwide (Degenhardt et al., 2017). The impact of the novel coronavirus (COVID-19) on these individuals is poorly understood. Communal behaviors, such as sharing cigarettes or pipes, and the increased likelihood of living in congregate settings lead researchers to anticipate higher rates of COVID-19 transmission (Vasylyeva et al., 2020; Volkow, 2020) and risks for COVID-19-related complications (e.g., respiratory coinfections) among this population (Bartholomew et al., 2020; Farhoudian et al., 2020). The COVID-19 pandemic has placed enormous burdens on healthcare systems, including harm reduction services such as needle and syringe programs (NSPs) and medication-assisted treatment (MAT) for opioid use disorder (Bartholomew et al., 2020; Glick et al., 2020; Picchio et al., 2020; Vasylyeva et al., 2020). Yet, to date, service

reductions and their effects on the health of people who inject drugs have mainly been documented in high-income countries. To better serve low- and middle-income countries (LMICs), research must also focus on changes in NSP and MAT provision in settings like sub-Saharan Africa (SSA), where public health officials have limited funding and infrastructure to implement these interventions (Strathdee et al., 2010).

The COVID-19 pandemic has altered how many healthcare systems operate throughout the world, as seen by closures, reduced program hours, and disruptions in harm prevention and drug treatment services (Glick et al., 2020; Kishore & Hayden, 2020; World Health Organization [WHO], 2020a). These changes are particularly evident at locations that provide harm reduction services for people who inject drugs and individuals with substance use disorders (SUDs) in high-income countries; research has documented decreases in infectious diseases testing, reduced syringe distribution, and altered pick-up schedules for MAT and other SUD treatments (Bartholomew et al., 2020; Glick et al., 2020; Picchio et al., 2020; Vasylyeva et al., 2020; Whitfield et al., 2020). In SSA, service disruptions coupled with reduced opioid drug supply have raised concerns that people who inject drugs may engage in riskier sub-

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stance use practices and experience adverse health effects, including increased risk of fatal and non-fatal overdose (Adebisi & Priso, 2021).

As the COVID-19 pandemic continues and is expected to remain an endemic disease, it is increasingly important to identify the challenges and best practices of providing harm reduction services to people who inject drugs, a group that remains highly stigmatized particularly in LMICs (Lim et al., 2019). In SSA there are an estimated 1.4 million people who inject drugs (Degenhardt et al., 2017). Early in the pandemic, many countries in SSA implemented public health measures such as lockdown to prevent and reduce the spread of COVID-19 (World Health Organization [WHO], 2020b), facing limited access to COVID-19 diagnostic supplies (Ihekweazu & Agogo, 2020; Simons, 2020). Moreover, the need for personal protective equipment (PPE) far exceeded the available supply early in the pandemic (OECD, 2020; Onyebuchi, 2020).

The existing gaps have highlighted a need to increase understanding of how to best provide harm reduction services to those at greatest risk, while accounting for available resources and complying with pandemic restriction measures. Studies indicate there are growing number of people who inject drugs in Kenya, a population with notably high rates of HIV (18%) and prevalence of high-risk substance using and sexual practices (Kurth et al., 2015; Akiyama et al., 2019). The goal of this study was to gain insight into the challenges and successes in caring for people who inject drugs in Kenya during the COVID-19 pandemic from healthcare provider perspectives.

Methods

Setting, study design and participants

This qualitative study was part of a supplement to the Testing and Linkage to Care for Injection Drug Users study that evaluated a “seek, test, treat, and retain” approach to HIV viral load suppression among people who inject drugs in Kenya (Kurth et al., 2015). The Government of Kenya (National AIDS & STI Control Program) implemented a nationwide program to provide services for people who inject drugs following the WHO recommended package in 2013, followed by MAT programs in 2014 (Rhodes et al., 2015). Sites provided a variety of services including: NSPs, HIV/HCV testing and treatment, prevention and treatment of sexually transmitted infections, condom distribution, education and counseling, vaccination, Tuberculosis diagnosis and treatment and meals, clothing and hygiene products when available (Akiyama et al., 2019). Program sites are largely located in coastal Kenya, as this area represents the epicenter of the SUD, HIV, and hepatitis C virus (HCV) syndemic in Kenya, likely as a result of the slow inland spread of heroin and injection drug use following the 1980s tourist boom (Beckerleg et al., 2005; Ali et al., 2005).

We conducted five group interviews and two key informant (one-on-one) semi-structured interviews with 29 SUD service providers across seven sites; four sites were drop-in center (DIC) sites and three were MAT clinics with 11 diverse professions ranging from more medical roles (such as nurses, physicians, HIV Testing Services counselors, and clinical officers) to roles with a less clinical scope of practice (such as peer case managers, social workers, site administrators, and Health Records Information Officers). Our intention was to conduct focus groups of 6-10 providers each; however due to COVID-19 restrictions, interviews were conducted with all available participants or representatives at the site. All 29 providers who were approached consented to participate.

Data collection

In August 2020, we conducted five group interviews and two one-on-one key informant interviews with a total of 29 participants. Three investigators [AM, MN, and MJA] developed a semi-structured interview guide to encourage participants to articulate how COVID-19 challenged

the provision of community-based SUD services and how providers overcame these challenges. Providers were specifically asked to discuss the impact of social distancing and other preventive measures on their ability to provide services and on their clients' ability to access care.

Focus Group Discussions were led by a single investigator [MN, a research coordinator associated with the parent study] and were held in private meeting rooms for approximately 1 hour. Interviews were conducted in English, audio recorded, and professionally transcribed verbatim. During the interviews, MN took field notes regarding key themes and discrepancies in responses. The research team (AM, LR, MJA, MN) reviewed the first 3 transcripts to develop the coding structure reviewed and coded the remaining transcripts. We retrieved and discussed the coded transcripts as a whole and by code to refine the categories and generate subcategories.

Analysis

The research team analyzed the transcripts in an iterative process using thematic analysis. Following completion of all interviews, four investigators [AM, LR, MJA, MN] developed a coding scheme to encompass emerging categories and stratified findings by impacted party (providers vs. clients) and site type (MAT vs. DIC) when applicable. The coding list was entered into Dedoose (Version 8.0.35, Los Angeles, California) and applied to all transcripts. Three investigators [AM, MN, LR] independently coded all transcripts in Dedoose. The team then discussed the transcripts and resolved discrepancies by consensus. Provider quotes were selected and contextualized within a ‘risk environment framework’ (O’Leary et al., 2018) to overcome the limits of individualism in characterizing harm reduction interventions, as well as to appreciate how drug-related harm intersects with health and vulnerability more generally in the COVID-19 pandemic era. Responses were found to be reliable given the participants' professional observations and experiences, as well as consistency with reported themes across sites, professions, and participants. These findings have been reported in accordance with the Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines (Tong et al., 2007).

Results

Four overarching themes emerged in the thematic analysis: 1) Misconceptions surrounding COVID-19; (2) Limited COVID-19 testing and screening; (3) Structural changes related to service provision; and (4) Access to material resources (such as meals, NSP kits, and PPE).

Misconceptions surrounding COVID-19

Many providers at both MAT clinics and DIC sites described how clients' mistrust of the government and providers has generated fear regarding COVID-19 and perpetuated misconceptions about its risk and severity. Such misconceptions often led to poor uptake of social distancing guidelines in the community and limited providers' ability to enforce COVID-19 precautions at the clinic level. A MAT provider described how these misconceptions led their clients to disregard COVID-19 precautions which put staff members at risk.

“These people... for real they are ignoring these things. For real. They believe there's no COVID. They say it is trick for the government and they just want to eat money [misuse funding]. As much as we try to tell them there is Corona ... for me, there is no client who will enter my door without wearing a mask that is my first precaution.” (MAT Clinical Officer)

Another DIC provider reflected on how some clients did not believe that COVID-19 is a concern for them, instead believing “that it is a white man disease.”

Some providers who conducted outreach in the community reported feeling stigmatized for wearing PPE due to COVID-19-related misconceptions:

“We used to go with the van, and they could see us in a van wearing masks and they used to tell us there is no Corona and you are wearing masks hence we are the ones with Corona. Because of putting on protective gear, we have been stereotyped to have COVID-19.” (DIC Nurse)

To address the lack of knowledge and misconceptions, staff received COVID-19-related training and provided continual education to clients. Education and peer outreach are interventions designed to reduce social microenvironmental risk factors for HIV acquisition among people who inject drugs (Strathdee et al., 2015). Given the high prevalence of HIV among Kenyan people who inject drugs, and it is important to identify factors to reduce risk of negative health outcomes during the pandemic.

Despite initial distrust and COVID-19-related misconceptions that made it challenging to enforce social distancing guidelines, a DIC provider described how clients grew accustomed to the new recommendations over time: “The impact at first with the social distance and everything, it was very hard to convince them [clients]. But with time they came to catch up with it and it was okay they adhered to it eh”. COVID-19 misconceptions, in some cases, resulted in clients’ improper use of PPE, avoidance of service providers and sites and stigmatization of service providers.

Limited COVID-19 testing and screening

Participants discussed limitations in COVID-19 testing and screening capacity. Due to restricted access to testing supplies, many facilities were left to screen clients based on symptoms alone. Providers expressed their belief that symptomatic screening may have resulted in inaccurate estimations of COVID-19 cases in client populations.

When asked about clients with COVID-19, most service providers explained that while they had not identified symptomatic individuals in their programs, they could not say with certainty that no client had contracted COVID-19 given their reliance only on screening for COVID-19 symptoms. One MAT Clinical Officer explained: “So far we do not have any cases. Though we cannot be certain since people have not been tested.”

The inability to test clients onsite was not confined to just one MAT clinic. Most service providers from both MAT and DIC sites explained that testing was available only to those entering SUD inpatient rehabilitation facilities. As one social worker at a MAT site explained:

“No, we do not offer testing neither do we know if our clients have accessed testing from elsewhere. But what we know when they go to the rehab, they have to test for COVID.”

In addition to the challenges associated with relying on symptom screening, COVID-like symptoms were often experienced by people who inject drugs prior to the pandemic like cough, fatigue, and body aches. During the pandemic this led some clients to avoid service sites due to a belief they had the disease and would be required to quarantine. As this DIC provider explained:

“Most of the clients could not access [testing] easily... they just felt that they already have the virus, and they were afraid and hence hide, hence all or most clients preferred to stay away from the site.” (DIC Field Supervisor)

In some cases, providers were concerned that symptom screening would generate fear among clients given the similarity of COVID symptoms with general symptoms among people who inject drugs. One clinician working at a DIC site noted: “Most of clients were afraid to come because looking at the symptoms they had, they thought it was COVID. It just created fear.” Additionally, participants found it difficult to detect

true cases and identify the burden of disease among clients. As this DIC provider described:

“Most of clients have respiratory issues because of smoking so it becomes hard to determine... Most of them manifest with cough with or without Corona so if you screen from cough and breathing problems then you will diagnose all.” (DIC Clinician)

Nevertheless, based on symptomatic screening and the use of other diagnostic devices, such as infrared thermometers, the prevailing sense among providers was that the prevalence of COVID-19 cases was low.

In some cases, the apparent absence of COVID-19 from the client population was able to be confirmed. For example, some sites were able to access referral mechanisms for COVID-19 testing. This provider explained that despite referring clients to offsite testing, none tested positive: “We refer ... So far all those that have been tested turned out negative” (DIC Clinician).

Structural changes related to service provision

At the beginning of the pandemic, all sites implemented changes at the clinic level to promote social distancing and reduce viral transmission. While these changes involved basic measures (such as placing physical markers to remind clients to socially distance), more significant measures (such as reducing access to services and to physical resources) were also instituted. COVID-19 policies, a macroenvironmental political risk factor for negative health outcomes, affected all sites; however, challenges related to service access and solutions to overcome them varied between DICs and MAT clinics.

Before the pandemic, DIC clients traveled long distances for services; with COVID-19 precautions, this was no longer feasible. To reduce COVID-19 transmission, most DIC sites reduced the number of services they provided and the number of clients they could treat at a time. A DIC provider reflected on the reduced client load and service efficiency:

“With all those restrictions it meant that we used a lot of time to treat very few people. Because of all those directives i.e., social distancing [travel bans] etcetera, hence the numbers who accessed services were few.” (DIC Field Supervisor)

Another DIC provider (nurse) explained how social distancing measures affected their clients and how their site tried to overcome them: “It was very difficult for them to reach us. We had a social worker who would go to see the clients, but she could not reach all of them”. Other providers described the challenges associated with having to temporarily suspend outreach services due to clients’ noncompliance with social distancing requirements:

“Going for outreaches was a challenge due to crowding and social distancing requirements [COVID-19 restrictions] ... also [when] the government had sent a message with regards to banning all crowds, there were no outreaches were done from April to June.” (DIC Nurse)

In addition to reporting that outreach services were adversely affected, most providers also noted the impact COVID-19 precautions had on psychosocial services offered at their sites. Many sites reported a reduction or at times a cessation of psychosocial and outreach services.

Some sites developed creative solutions to reduce the impact of social distancing and COVID-19 mitigation policies on their clients. Both MAT and DIC sites split staff between shifts to reduce overcrowding both at the clinic and in the field. Some sites transitioned to conducting visits outdoors to reduce transmission risk. However, as a provider explained, additional complexity arose due to privacy concerns among clients:

“Most clients prefer inside. When you take the client outside, there are things that they did not disclose. There was no privacy outside. So, when you go and you want to write a prescription, he follows you and tells

you he had forgotten something so the issue of privacy made the clients to just not disclose all their health-related issues during that time.” (DIC Clinician)

Some sites developed an alternative staffing schedule to continue services and reduce transmission risk. As this DIC nurse explained: “We were also working in shifts to minimize chances of infections.”

Some sites formed or leveraged partnerships with community-based organizations and hospitals to continue providing services. For example, two DIC sites worked with their county’s COVID-19 response team to create advocacy and sensitization about COVID-19 at the community level and remind clients that their harm reduction services were still available. Similarly, another DIC partnered with the healthcare team at their Sub-County hospital to serve as a referral chain for their clients receiving methadone:

“No, we have liaised with the Sub-County [hospital] during this pandemic to assist the patients. We have our staff there in the methadone sector so we say we will refer the client there try to assist there because we are not able to handle all the patients from the here.” (DIC Nurse)

MAT clinics also leveraged partnerships with other organizations to decentralize MAT services, for example by opening satellite dispensary locations at the [Malindi regional] prison to dispense methadone “to decongest the Clinic” and ensure the daily methadone dose was not affected.

While some sites developed partnerships and referral networks to decentralize their services, other sites focused on moderating the impact of the national lockdown order and travel restrictions. One DIC case manager described the consequences on their clients needing to travel long distances for treatment:

“We depended on the clients to come here and access services but not all clients would come here only a small percentage like 40%. The cessation of movement [or] lockdown also affected movement of clients since some clients were locked out, the ones who had moved to Mombasa could not come back and hence could not come to the center.” (DIC Case Manager)

Microenvironmental physical risk factors including spatial inequalities of people who inject drugs residing significant distances from treatment sites were particularly challenging during the pandemic. Some sites used this as an opportunity to service new clients who could not travel to their regular sites for services:

“We had clients who were caught in Mombasa, so they had to access the services in Mombasa. Then we had others who were not our clients but were caught within Ukunda so we had to attend to them.” (DIC Program Coordinator)

In other instances, the identity cards issued for MAT clients and special travel documents granting staff the ability to travel between counties were key to accessing treatment. One MAT nursing officer reflected on the importance of identity cards: “Most of the clients come from Kwale county, those living in Mombasa, used to have MAT identities for passage. So they could still come to have their methadone.”

Similarly, a DIC provider described the necessity of obtaining proper travel documentation in order to identify staff as essential healthcare workers and allow them to fulfill duties that extended beyond their county:

“To date everywhere we go for an outreach we have that letter that has been signed stating ‘allow the Reachout center trust to conduct outreaches’ and if you do not have a letter from the county health commissioner you will not be able to conduct the same.” (DIC Field Supervisor)

Taken together, some providers noted that the pandemic inadvertently improved certain services. For example, a DIC project director noted: “In fact, it is better now. It is a blessing in its own. We even had satellite offices, a case in Likoni, that is now fully fledged to provide drug users services.”

Accessing material resources such as meals, NSP kits, and PPE

Similar to the impact on reduced harm reduction services, many sites had to limit the physical resources they could provide to clients, such as meals and NSP kits. This primarily affected the DIC sites due to the services they offer. For example, a DIC provider reflected on how changes to meal distribution affected her clients:

“It became hard for clients to come to the Center due to the policies prohibiting gathering. This is where our client come and eat and after that they relax. But when the no gathering policy was established, it affected us.” (DIC Social Worker)

To adhere to COVID-19 restrictions while still providing services, another DIC site adjusted their meal distribution:

“We used to give them with plates and wash them but when COVID came we devised a plan that enable the clients have packed food, pick their meals, and have it wherever they wanted to avoid crowding at the center. (DIC Program Coordinator)

While other sites scaled back their onsite distribution of harm reduction supplies (such as NSP kits and condoms) along with meal services, others implemented innovative approaches. For example, this provider explained how they employed peer educators to aid in socially-distanced service provision:

“About NSP, they usually inject the kits which are given by peer educators according to the hot spot... We try and minimize the crowding so... the peer educators take the NSP kits to the clients. The patients couldn’t access the kits freely from this center as before.” (DIC Nurse)

Providers also described various challenges related to PPE, including clients who did not comply with PPE requirements or used PPE improperly. In some cases, clients had misconceptions about PPE, while in other cases clients could not access it. The cost of syringes, condoms, and PPE are all economic microenvironmental risk factors, that can impact injecting behavior and lead to higher transmission of blood borne infections among other harms. A provider described a scenario in which PPE enforcement among clients resulted in mask sharing:

“There were no services [provided to those] without masks, and it was strict at the hospital and here as clients had to go to the hospital only with a mask. Because of that they were sharing masks.” (DIC Social Worker)

While many providers described their clients’ hesitancy to wear masks and their attempts to circumvent site mask policies, providers also reflected on how clients persevered to wear masks because they knew they would not receive much-needed services without one. Describing the reasoning behind the site’s decision to offer clients masks, this provider stated:

“With the new normal we are still facing a challenge at the DIC because most of the clients come without a mask. No client will be allowed inside the DIC without a mask because that is the rule. So, we were forced to produce and to source for as many masks as we can so that any client who comes in to the DIC without a mask we provide.” (DIC Program Director)

Adaptive solutions at the site level are vital to preventing the syndemic effect of COVID-19 and other infectious diseases such as HIV, HCV, and tuberculosis. Despite the common barriers and stigma experienced by providers wearing PPE, some also noted that COVID-19 precautions ultimately fostered improved hygiene among their clients. One MAT clinical officer stated: “Hygiene has really improved because they wash hands regularly as a protocol.” Their laboratory technologist colleague went on to share: “Even diarrhea has decreased.”

Discussion

This study provides unique insight into the impact of COVID-19 on the provision of harm reduction services for people who inject drugs from the provider perspective in Kenya. Moreover, this study explores how providers overcame these barriers. The themes that emerged during these interviews (misconceptions surrounding COVID-19 (Gachohi et al., 2020; Ibrahim, 2020; Schmidt et al., 2020), inadequate access to COVID-19 diagnostic supplies (Ihekweazu & Agogo, 2020; Simons, 2020), diminished access to harm reduction services, and limited availability of material resources (OECD, 2020; Onyebuchi, 2020) reflect what has been reported in high-income settings (Bartholomew et al., 2020; Glick et al., 2020; Kishore & Hayden, 2020; Picchio et al., 2020; Vasylyeva et al., 2020; Whitfield et al., 2020, World Health Organization [WHO], 2020a). This study not only identifies the impact COVID-19 had on providers at DICs and MAT clinics, it also demonstrates provider-level understandings of client needs. Providers recognized that when providing harm reduction services to this complex and marginalized population, providers must account for client-perceived stigma and mistrust of the healthcare system, as well as other macro risk environmental factors while also upholding social distancing requirements in the midst of a pandemic (O'Leary et al., 2018).

As expected, providers reported an initial decrease in clients' access to existing services to comply with COVID-19 mitigation policies. Most sites reported a cessation in psychosocial services and simultaneously noted an increase in clients needing to access that service. However, they also reported solutions they used to work around these newfound limitations, such as ramping up outreach services and leveraging peer educators for NSP kit distribution. This inherent need to adapt amid a pandemic has been reported in other settings (Jacka et al., 2020; Wilkinson et al., 2020; Zolopa et al., 2021). For example, a recent review encouraged health centers offering harm reduction services to operate more flexibly during a pandemic, calling for mobile or outreach models for NSP distribution (Wilkinson et al., 2020). Another review concluded that during widely disruptive events such as the COVID-19 pandemic, NSPs should not limit the number of clean supplies participants can request at a time. Instead, they should be permitted to take home as many as they want (Zolopa et al., 2021). While our participants did not discuss eliminating the cap on supplies, such an intervention could have circumvented diminished access to physical services due to travel bans. However, the ability to lift limits on the number of allowable supplies in resource-limited settings should be further explored, as this may not be feasible due to the number of supplies available for distribution in general (Avert, 2019; Stone, 2018).

Along with identifying expanded outreach services and the deployment of peer educators as innovative workarounds to COVID-19 related restrictions, participants mentioned that program identification cards, issued prior to the pandemic for medication pick-up, circumvented some pandemic-initiated structural barriers and allowed clients to continue to travel for treatment despite lockdown restrictions. The novelty of these identity cards during the COVID-19 pandemic has been recognized in other settings as well (Guirguis, 2020; Wilkinson et al., 2020, 33). For example, "essential journey cards" have been issued in the United Kingdom in the wake of the COVID-19 pandemic which state the cardholder is prescribed essential medication and grants them permission to visit the pharmacy or their drug treatment service provider despite COVID-19 travel restrictions and lockdowns (Release, 2020). Provision of identity cards for individuals in programs such as MAT, HCV, and HIV treatment programs allow individuals to travel to their clinic to pick up treatment during a lockdown, thereby retaining them in treatment which has substantial implications for the community at large. For example, people receiving NSP kits can reduce the need for sharing supplies and thus reduce their risk of bloodborne illnesses such as HIV and HCV. While ser-

vice disruptions could lead people who inject drugs to engage in riskier practices and subsequently increase their risk of adverse health effects and increasing their risk of fatal and non-fatal overdose has been raised in the literature (Adebisi & Prismo, 2021), this was not a concern expressed by our participants.

In addition to reductions in services and supplies, other settings have reported limited availability of PPE. This puts staff and clients at risk for contracting COVID-19 and can lead to staff shortages further reducing available services (Glick et al., 2020; Vasylyeva et al., 2020). While our participants focused more on the effects of limited PPE for clients rather than on providers, they also reflected on how their own wearing of PPE perpetuated their clients' mistrust and misconceptions of COVID-19. The public's misconceptions of the virus and their distrust of healthcare workers at the height of the pandemic are not exclusive to our study and contribute to the susceptibility and vulnerability of people who inject drugs (O'Leary et al., 2018). Just as one participant recalled a client referring to COVID-19 as a "white man disease," participants in a qualitative study in South Africa reported this misconception as well (Schmidt et al., 2020). Similarly, another study from sites across the African continent identified that some people who inject drugs had the misconception that COVID-19 only affects the middle and upper class (Gachohi et al., 2020; Ibrahim, 2020; Schmidt et al., 2020). Fear and stigmatization of healthcare workers and the categorization of disease based on race or social class is not novel to the COVID-19 pandemic; similar responses were reported during the 2014 Ebola outbreak in West Africa (Nossiter, 2014; O'Leary et al., 2018; Sow et al., 2016). These findings highlight the opportunity for providers embedded within vulnerable communities, like peer navigators and peer case managers, to help combat misinformation.

Globally, many healthcare workers have relied on symptom screening to identify individuals with COVID-19 and subsequently determine whether services can be provided to that individual, particularly in settings where testing capacity is limited. As our participants explained, the downfall of this reliance on symptomatic rather than diagnostic screening among people who inject drugs is that substance use has the potential to mask COVID-19 symptoms and the presence of similar persistent symptoms leads some people to incorrectly assume they have the virus and avoid care altogether (Dunlop et al., 2020). In other settings, recommendations have been issued for frequent screening of people who inject drugs for COVID-19 (Bartholomew et al., 2020; Farhoudian et al., 2020; Wilkinson et al., 2020). Our findings suggest the development of some population-specific screening measures such as for people who inject drugs, emphasizing the development of new respiratory (COVID-19-like) symptoms rather than the ongoing presence of symptoms that more accurately reflect the baseline status of a person who injects drugs. Higher specificity in COVID-19 screening measures among people who inject drugs would help differentiate people who have COVID-19 from those who have always had persistent coughs and difficulty breathing.

This study has some limitations. First, given COVID-19 restrictions, fewer staff were working on site, resulting in smaller sample sizes and recruitment solely from Coastal Kenya. This limits generalizability to other LMICs. Furthermore, only staff who were onsite the day of the focus group discussions were included; therefore, these findings may not be representative of all staff members at the selected sites and inherently does not incorporate the perspectives of staff working out in the community (a notably key measure used by some sites to ensure client access to treatment). The interviews were also conducted prior to vaccine approval, and thus the findings do not capture the most recent implemented (or relaxed) COVID-19 policies. Finally, given the collective nature of focus group discussions, participants may seek to provide socially desirable responses in the presence of others (Tong et al., 2007). However, given participants' existing relationship with the discussion leader, we believe these responses were reliable.

Conclusion

These findings demonstrate the ingenuity and adaptivity of healthcare providers who work with people who inject drugs in Kenya, in response to the challenges imposed by the COVID-19 pandemic. Participants recognized the misconceptions surrounding COVID-19 that plagued their clients and reflected on their innovative and collaborative approaches when providing necessary services despite travel restrictions and social distancing guidelines. Examples of adapting to COVID-19 restrictions by Kenyan providers include: identity cards to allow travel to care, decentralizing services to sites closer to clients, and providing PPE, pre-packaged meals, and NSP kits to clients who could not afford them impacting the risk environment (O'Leary et al., 2018). With these adaptations proving to be effective in reaching clients, public health officials may be inclined to consider whether such changes ought to be integrated into current best practices and standards of care. While there is limited research on best practices for providing harm reduction services in resource-limited settings amid a pandemic, our findings generally reflect those of studies from other settings. Given the ability of harm reduction supplies to prevent adverse health effects and the transmission of communicable diseases, future research is needed into the feasibility of eliminating limits on NSPs and related supplies distribution during a pandemic, particularly in settings where resources are scant to begin with.

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Ethics approval

The authors declare that they have obtained ethics approval from an appropriately constituted ethics committee/institutional review board where the research entailed animal or human participation.

The Ethics and Research Committee of Kenyatta National Hospital (University of Nairobi), and the Yale University Institutional Review Board approved this study. Written, informed consent was obtained from all participants.

Declarations of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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