**Open Letter**

**HIV testing amid COVID-19: community efforts to reach men who have sex with men in three Kenyan counties**

[version 2; peer review: 2 approved]

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**Abstract**

In comparison to European and American countries, Kenya has been less impacted by the COVID-19 pandemic in terms of reported cases and mortalities. However, everyday life has been dramatically affected by highly restrictive government-imposed measures such as stay-at-home curfews, prohibitions on mobility across national and county boundaries, and strict policing, especially of the urban poor, which has culminated in violence. This open letter highlights the effects of these measures on how three community-based organizations (CBOs) deliver HIV programs and services to highly stigmatized communities of men who have sex with men living in the counties of Kisumu, Kiambu, and Mombasa. In particular, emphasis is placed on how HIV testing programs, which are supported by systematic peer outreach, are being disrupted at a time when global policymakers call for expanded HIV testing and treatment targets among key populations. While COVID 19 measures have greatly undermined local efforts to deliver health services to members and strengthen existing HIV testing programs, each of the three CBOs has taken innovative steps to adapt to the restrictions and to the COVID-19 pandemic itself. Although HIV testing in clinical spaces among those who were once regular and occasional program attendees dropped off noticeably in the early months of the COVID-19 lockdown, the program eventually began to rebound as outreach approaches shifted to virtual platforms and strategies. Importantly and unexpectedly, HIV self-testing kits
proved to fill a major gap in clinic-based HIV testing at a time of crisis.

**Keywords**
COVID 19, Men who have sex with men, HIV testing, Kenya
Introduction
On 11th March 2020, the World Health Organization (WHO) declared the spread of COVID-19 a global pandemic after it swept across 114 countries, causing more than 4000 deaths. At the time of writing, SARS-CoV-2 has rapidly spread in 213 countries with an estimated number of 8.6 million persons being diagnosed with the virus, while claiming more than 460,000 lives globally.

In an effort to reduce the spread of the virus and mitigate the number of COVID-19-related mortalities, governments globally have introduced various public health measures, including restrictions on international and domestic travel and border controls; increased screening, testing and contact tracing; promotion and implementation of enhanced hygiene programs (i.e. regular handwashing and hand sanitizer use); and use of face masks and physical distancing in public spaces. Some countries have imposed partial or complete lockdowns and enforced curfews to regulate the movement of its citizens. Businesses have been forced either to operate from home or entirely shut down, rendering many workers, outside of those declared “essential”, unemployed. In economically disadvantaged countries like Kenya, these closures and travel restrictions are expected to have a dramatic impact on a national economy that derives most of its GDP from the tourism industry.

Although the COVID-19 epidemic has been less severe in East Africa compared to a number of Euro-American regions, since the announcement of the first COVID-19 case in Nairobi, Kenya, on March 12, 2020, the rate of infection across the country is projected to increase. At the time of writing, Kenya has reported over 37,000 COVID-19 cases across 34 counties, with 650 deaths related to the virus. The Kenyan government has enforced strict measures to prevent the spread of the corona virus and avert a health care crisis in an already fragile health system. These measures include a “dusk to dawn” curfew, inter-county mobility restrictions, mandatory use of face masks in public spaces, and forms of policing that have culminated in violence. Bearing the brunt are the urban poor and daily wage earners who have been intensely victimized by these policing measures.

Working on HIV programs with people whose behaviours are already criminalized in the Kenyan context, we are witnessing the unique and emergent struggles they are encountering. Kenya’s COVID-19 response measures have indeed imposed considerable obstacles to the effective delivery of HIV services to highly marginalized communities such as (SW), men who have sex with men (MSM) and people who inject drugs (PWID). In this paper, we specifically share the implementation experiences surrounding HIV prevention programs serving MSM in Kenya run by three community-led organisations: MAAYGO in Kisumu county, MPEG in Kiambu county and HAPA Kenya in Mombasa county. These programs have more recently attempted to strengthen HIV testing systems, a process that began prior to the COVID-19 epidemic. This program emphasis is highly motivated by recent global health HIV policies that compel program implementers to further their efforts in reaching the “undiagnosed” in order to achieve highly ambitious “90-90-90” (now “95-95-95”) population testing, treatment, and viral suppression targets.

The programs that community organizations run to strengthen HIV testing in each of the three county sites in Kenya are technically supported through an ongoing collaboration with health scientists from the University of Manitoba; program specialists from the local NGO, Partners for Health and Development in Africa (PHDA); and health policy officials from The National AIDS and STI’s Control Programme (NASCOP), Government of Kenya. In describing the impact of COVID-19 on the MSM community in three contrasting counties of Kenya, we specifically outline the strategies developed and implemented by the community-led organisations to ensure that HIV testing and other key prevention services remain available amid myriad COVID-19-related restrictions and the concomitant fears and anxieties of program beneficiaries.

Impact of COVID-19 on MSM
The MSM-led organizations implementing HIV programs for MSM at each of the three sites mainly include working class men who, during COVID-19, have suffered job losses and unpaid leave like many other working class Kenyans. Many of these men have tended to gravitate toward particular forms of employment in what they regard as “safer” workplaces, but which have been extremely hard hit by the COVID-response measures: the hospitality industry, bars, barber shops and salons, and massage parlors. Many community members also depend on formal and informal modes of sex work, often to augment their income, and have seen the collapse of the sex industry with the closure of hotspots and other public spaces and venues where they normally gather to meet clients. Finding clients through virtual dating sites poses challenges for MSM for two reasons. For one, compared to female sex work, male sex work suffers the additional stigma of “homosexuality”, which has been criminalized by the Kenyan state, and thereby inhibits on-line advertising for sexual services for fear of blackmail. The Kenyan Penal Code and the Sexual Offences Act do not criminalise sex work, per se, but do criminalise the actions of third parties associated with sex work. However, Municipal by-laws across the country do directly criminalise sex work through articles outlawing “loitering for the purpose of prostitution,” “importuning” for the purpose of prostitution, and “indecent exposure.”. These laws impact MSM who

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1 FIDA, 2008. Documenting Human Rights Violations of Sex Workers in Kenya
A study conducted in Nairobi, Kisumu, Busia, Nanyuki, Mombasa and Malindi. Kenya
do sex work. Second, efforts to adhere to physical distancing practices has greatly reduced the pool of available clients.

Loss of jobs and income has had dire financial consequences and led to food insecurity among MSM. Although receiving repeated requests for financial support from members, the ability of CBOs to respond to these needs more fully is greatly constrained by international funding systems on which their programs rely. Financial insecurity has forced some MSM to stay with friends to save on rent, thereby increasing the conditions of overcrowding and COVID-19 exposure risks. Being unable to afford rent, some MSM have been forced to vacate rented homes and now forced to stay on streets. With no source of income and limited resources to sustain livelihoods, it is virtually impossible for these men to afford personal protection equipment (PPE), as directed by the Kenyan government. A number of members who live with one of their sexual partners have begun to report experiences of intimate partner violence, including incidents of forced evictions. For those characterized as “noncompliant” with the government-related COVID-19 guidelines, especially violent, punitive actions taken by police in the form of beatings and arrest, have been brutal in their focus on sex workers, MSM and people who inject drugs. The general sentiment among members we have spoken to is one of anxiety, stress and hopelessness with regards to an unpredictable future.

Impact on HIV testing

According to Kenya’s national guidelines, MSM, like other highly HIV vulnerable “key populations”, are expected to undergo regular testing every three months. This health service utilization strategy relies upon regular and intensive peer outreach work (to generate and maintain demand for health services), which must continually confront and break down access barriers related to pervasive stigma. Amid the COVID-19 pandemic, HIV testing has been greatly disrupted, including among those who regularly test, with clinical attendance waning considerably. Prior to COVID-19, the three CBOs had planned several activities for the period of February to April, 2020, which aimed to increase awareness and acceptance of, and demand for, HIV testing through the promotion and distribution of OraQuick® HIV self-testing (HIVST) kits. However, because most of these activities relied upon face-to-face outreach and interactions between peers, many of these activities were initially halted with the announcement of COVID-19 response measures. Previously, outreach workers regularly met with their peers in entertainment hotspots and other public venues and cruising places. However, regular and systematic peer outreach, which supported both regular testing in CBO-run clinics and the distribution of HIVST kits to peers, soon collapsed. Furthermore, CBO members were often fearful of coming to the clinic and interacting with clinical staff in each of the three sites, as rumours of COVID-19 transmission stirred fears in their communities.

Physical distancing measures also initially forced the organizations to halt staff meetings, community health forums, and health promotion sessions. Evening curfews were imposed through “cessation of movement” orders within municipal districts, thereby disrupting delivery of services within each of the three sites. Fear and anxiety related to transmission of a new virus (i.e., SARS-CoV-2) also kept the community members away from the clinics. The MSM community could no longer readily move between their homes and the clinic to access services; nor could peer educators and service providers actually reach the clinical facilities (testing and linkage to treatment). Reviewing the combine program data from the three organizations from January to July 2020 shows how the restrictions impacted upon outreach and clinical services in April 2020 (see Figure 1, Figure 2 and Figure 3).

Although we see noticeable declines in the program performance indicators (peer outreach, HIV testing and linkage to ART) in the month of April 2020, we can also note some improvement in program performance since the month of May, which is owed to the innovative approaches that the community-based organizations (CBOs) undertook in each of the sites.

![Figure 1. MSM contacted through peer outreach in the three sites (combined program data, Jan-July 2020).](image)
Adapting HIV testing programs in response to COVID-19
Addressing safety concerns of service providers and program beneficiaries
Adhering to public health recommendations on COVID-19 infection control, the three CBOs trained their staff on COVID 19 transmission and prevention (see Figure 4). Moreover, the CBOs implemented various safety measures for their staff and program beneficiaries. Each organization placed a water dispenser and handwashing station at the entrance of the office and the clinic. Every individual accessing the premises therefore was expected to wash their hands as they entered. Although few international funders permitted the reallocation of HIV financial aid, UHAI-EASHRI, Africa’s first indigenous activist fund supporting sexual and gender minorities and sex worker human rights, provided grants to respond to the COVID-19 pandemic, thus enabling CBOs to afford protective gear like gloves and masks for clinical staff and peer health workers. For community members and partner organizations unable to afford PPE, CBOs shared their supply of face masks and small bottles of sanitizers, which peer educators packed for distribution (see Figure 5). However, to adhere to physical distancing...
condoms and lubricants, which were previously made available in hotspots, could be safely provided by the program. The SOP was designed to streamline operations for commodities in a way that protected both the CBO frontline health workers and the beneficiaries receiving the services. The SOP also provides programmatic guidance for the effective delivery of HIV commodities to the MSM community that carefully accounted for COVID-19 safety measures. For the SOP to be put into practice, the outreach, clinical and support staff were taken through an intensive training and sensitization sessions on COVID-19.

Initiating and strengthening virtual outreach
In light of the shut-down of face-to-face peer outreach activities in public space, the programs soon shifted greater attention to their virtual outreach program to increase the utilization of social media platforms such as WhatsApp and Facebook. In Kiambu, MPEG scaled up their presence in the STEP 1 platform (a virtual platform to access confidential HIV and STI services) through which they started making contact with new community members. MPEG sent more than 9000 messages related to COVID-19 and HIV testing to their members using the bulk SMS platform called the Ujumbe SMS. In Kisumu, each MAAYGO peer educator created a WhatsApp group for their peers where they could lead health education discussions on the spread of the new coronavirus and provide information on how one could access HIV prevention commodities and services during COVID-19. They used the group to also check-in on each other at a time when physical distancing frequently cut people off from vital social support networks. The WhatsApp groups were even used by some peer educators to reach new peers, enabling them to connect through existing social networks. In Mombasa, HAPA Kenya intensified their virtual outreach via dating sites such as Grindr and on Facebook pages by engaging new peer educators to conduct outreach in virtual spaces. Attempting to promote HIV and COVID-19
such as stress, anxiety, fear of loss, while also reminding members to visit the clinic during appointed times to avoid overcrowding. The peers were also requested to encourage their friends to access available services at HAPA-Kenya’s drop-in center. The virtual team, comprised of 14 peer educators, made considerable effort to re-engage members who had once gathered in public hotspots, but had migrated to virtual spaces, so that they could be supplied with vital HIV services including HIVST kits. This team reported finding many of their lost contacts on new virtual platforms, such as TikTok (an app for sharing short videos).

Delivering HIV testing services

In the COVID-19 era, CBOs employed innovative strategies to provide HIV testing services to their members. The organizations also saw an increase in demand for HIV Self testing kits. According to the program data, although HIV testing among MSM reduced in the month of April, the use of HIVST kits increased compared to clinic-based rapid testing (see Figure 8).

In Kiambu, MPEG partnered with government health facilities, at the county level, to provide services to MSM. This translated into MPEG receiving support in terms of human resources and space. The latter form of support was vital for COVID-19 infection control as all government health facilities maintained strictly prescribed safety protocols. In Mombasa, HAPA Kenya employed a project van and hired public service motor bikes called boda boda to deliver condoms and HIVST kits (see Figure 9). Different boda boda riders were assigned to each of the sub-counties and their schedules were prepared in advance, on a weekly basis, by the outreach team to ensure timely delivery of commodities. In the context of Kisumu, when MAAYGO realised that clinic visits had begun to drop, they started to promote HIVST among those who (previously) frequently and occasionally tested for HIV at their premises. One of the goals of promoting HIVST was to ensure that MSM receiving kits were linked to further prevention and

Figure 7. A screenshot showing one of the peer educators using WhatsApp platform to create demand for HIVST (The name “Oscar alpha” is a pseudonym).

![HIV testing among MSM](image)

**Figure 8.** HIV testing among MSM, by type of test, in three sites (combined program data, Jan-July 2020).
treatment services. During COVID-19, the program continued to implement a centralised follow-up system for those who reported having received and used HIVST kits. CBO clinicians and counsellors conducted follow-ups through phone calls with members.

Ongoing communication and information sharing

The MAAYGO team in Kisumu conducted virtual meetings with staff, peer educators and outreach workers, via zoom video communications (see Figure 10). One of the major and persistent challenges faced during these meetings, however, was internet instability, especially for team members located in rural areas.

In Mombasa, between May and June 2020, feedback and program updates between peer educators and managers were organized through group meetings with 15 staff members allowed at one time. In Kiambu, MPEG employed similar methods to conduct meetings with team members to keep abreast of program activities and emerging challenges. Staff and volunteers who needed to join these meetings were provided with extra airtime to enable their participation.

More recently, the CBOs have begun to hold some face-to-face staff meetings, which take place under strict conditions: enough spacing between the meeting participants, wearing face masks, and frequent hand sanitization (see Figure 11).
pose a major population health burden and challenge to the effective operation of health systems\textsuperscript{15}.

In the “end of AIDS” era, where aspirations of “elimination” run high in global health policy discourse that hinges “success” on the amplification of HIV testing and treatment targets\textsuperscript{16}, COVID-19 profoundly unsettles this optimism. However, despite the myriad challenges initially faced by the three Kenyan CBOs discussed in this report, especially in March and April 2020, towards the end of May program indicators showed a rebounding, greatly owed to the ingenuity and commitment of CBOs in their re-design of strategies for reaching their peers. We would like to recommend to community-led organisations and other implementers that in a crisis such as COVID they need to a) assess and understand the emergent needs of the community during such a crisis and respond to the most urgent needs; b) develop innovative strategies to reach the most vulnerable groups and provide services; c) address the fears and anxiety around the new pandemic among the implementing team and in the community and d) provide personal protective equipment to the staff and also, importantly, health insurance.

These efforts of CBOs were supported by flexibility offered by some funders and the Ministry of Health, which provided guidance and policy support. The adaptation of outreach and program delivery and monitoring was also greatly supported through the flexibility offered by the technical partners; even though “strengthening HIV testing” and HIVST promotion was the initial goal of the collaboration, this flexibility accommodated the room to adapt to the emergent circumstances of COVID-19 with alternative ways of promoting HIV testing. Importantly, this flexibility afforded the space to reveal the unexpected utility of HIVST technologies in a time of crisis, helping community-based programs to resume their role in HIV service delivery amid restrictions on mobility. Indeed, the significance of the community-level responses—which shoulders the responsibility for delivering, distributing and promoting the use of vital HIV services and commodities—arguably must be more fully accounted for in any future epidemic or systemic crisis. Otherwise, we risk trading one crisis for the (re)emergence of another. We recommend to government, donors and technical partners to a) provide clear guidance and support during the pandemic; b) provide flexibility in relation to targets and budgets; and c) invest in mental health to address how fear and anxiety related to the pandemic intersects with pre-existing forms of stigmatization.

**Data availability**

All data underlying the results are available as part of the article and no additional source data are required.

**Consent**

Written informed consent for publication of the participants’ images was obtained from the participants.
References

6. Bearing the brunt are the urban poor and daily wage earners who have been intensely victimized by these policing measures. Daily Nation. 2020, [accessed 14th June 2020].
Open Peer Review

Current Peer Review Status: ✔️ ✔️

Version 1

Reviewer Report 07 September 2020

https://doi.org/10.21956/gatesopenres.14346.r29237

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Venkatesan Chakrapani
Centre for Sexuality and Health Research and Policy (C-SHaRP), Chennai, Tamil Nadu, India

- This open letter (“HIV testing amid COVID-19...” by Odinga et al.) comprehensively documents the challenges faced by MSM in three Kenyan cities in accessing HIV testing services amid the COVID situation and the steps taken by MSM-led organisations to increase access to HIV testing.

- Regarding context setting: The letter states that consensual adult same-sex sexual relationship is criminal in Kenya, an important structural element that has been shown to decrease access to HIV services. The authors can also add whether sex work is criminalised as well (as some MSM may engage in sex work). It will be helpful for the readers if the authors can briefly comment on whether access to services is more challenging for particular subgroups of MSM (in relation to sexual identities, sexual roles or gender expression, and sex work status) to understand the local context and intersectionality. For example, whether MSM in sex work and those who have feminine gender expression were more likely to not get tested for HIV when they needed it?

- COVID-related insurance for organisation staff: I understand that even after the initiation of nation-wide curfew, the outreach workers and peer educators continued to meet MSM face-to-face in the field and clinics. Was any COVID-related health insurance provided to the staff? If not, can it be considered? (It has implications for reallocations of the budget and the authors can state their views on it).

- Regarding self-testing: It will be better if the authors can clarify what happened to persons tested positive (in clinic-based testing and self-testing). Especially, whether those who tested positive in self-testing were asked to go for a ‘confirmatory’ HIV testing? For those MSM who have regular partners, one option would be to provide self-test kits to MSM to deliver them to their regular partners. Was that strategy considered; and if so, what was the experience in implementing it?

- Condom use and HIV testing: If relevant data are available, a brief discussion on access to
condoms and sexual behaviours can be added as HIV testing is especially required for those
who are not consistently using condoms in the past three months.

- Recommendation on decriminalisation: Given the negative impact of the criminalisation of
consensual adult same-sex relationships on access to services and mental health, in their
list of recommendations, the authors can consider adding decriminalisation of consensual
adult same-sex sexual relationships as a structural intervention, as recommended by
UNAIDS.

- Overall, the open letter is informative, and its recommendations will be useful for
programme managers and policymakers.

**Is the rationale for the Open Letter provided in sufficient detail?**
Yes

**Does the article adequately reference differing views and opinions?**
Yes

**Are all factual statements correct, and are statements and arguments made adequately
supported by citations?**
Yes

**Is the Open Letter written in accessible language?**
Yes

**Where applicable, are recommendations and next steps explained clearly for others to follow?**
Yes

**Competing Interests:** No competing interests were disclosed.

**Reviewer Expertise:** Access to HIV prevention and treatment, Stigma and discrimination, Health
disparities faced by MSM and transgender women

I confirm that I have read this submission and believe that I have an appropriate level of
expertise to confirm that it is of an acceptable scientific standard.

**Author Response 07 Sep 2020**

**Parinita Bhattacharjee,** Partners for Health and Development in Africa, Nairobi, Kenya

Response to the Reviewer, 7th September 2020

- This open letter (“HIV testing amid COVID-19...” by Odinga et al.) comprehensively
documents the challenges faced by MSM in three Kenyan cities in accessing HIV
testing services amid the COVID situation and the steps taken by MSM-led
organisations to increase access to HIV testing.

Thank you so much.
○ Regarding context setting: The letter states that consensual adult same-sex sexual relationship is criminal in Kenya, an important structural element that has been shown to decrease access to HIV services. The authors can also add whether sex work is criminalised as well (as some MSM may engage in sex work). It will be helpful for the readers if the authors can briefly comment on whether access to services is more challenging for particular subgroups of MSM (in relation to sexual identities, sexual roles or gender expression, and sex work status) to understand the local context and intersectionality. For example, whether MSM in sex work and those who have feminine gender expression were more likely to not get tested for HIV when they needed it?

Thank you so much. MSM in Kenya do engage in sex work and sex work is partially or fully criminalized in Kenya: The Kenyan Penal Code and the Sexual Offences Act do not criminalise sex work per se. These codes criminalise the actions of third parties associated with sex work, rather than focusing on sex workers themselves. However, Municipal by-laws across the country do directly criminalise sex work through articles outlawing “loitering for the purpose of prostitution,” “importuning” for the purpose of prostitution and “indecent exposure.”[[i]]. We will include this aspect in the revised version.

○ COVID-related insurance for organisation staff: I understand that even after the initiation of nation-wide curfew, the outreach workers and peer educators continued to meet MSM face-to-face in the field and clinics. Was any COVID-related health insurance provided to the staff? If not, can it be considered? (It has implications for reallocations of the budget and the authors can state their views on it).

Thank you for the suggestion. This is currently not provided and we will add this as a recommendation in the revised version.

○ Regarding self-testing: It will be better if the authors can clarify what happened to persons tested positive (in clinic-based testing and self-testing). Especially, whether those who tested positive in self-testing were asked to go for a ‘confirmatory’ HIV testing? For those MSM who have regular partners, one option would be to provide self-test kits to MSM to deliver them to their regular partners. Was that strategy considered; and if so, what was the experience in implementing it?

Thank you for the suggestion. The three MSM CHO led programmes provide ART in their clinics and hence all those who are tested positive through clinic based rapid testing are linked to ART. Kenya has a policy of “test and treat” for all. Hence anyone who is tested positive are expected to be linked to ART after counselling and consent. Those who are provided with HIV Self Testing kits are followed up and encouraged to visit the clinic for confirmatory test and other services. If tested positive through confirmatory test in the clinic, they are linked with ART services. In the revised version of the manuscript we will add the linkage to ART information.

While there is anecdotal data that MSM who receive HIVST also use the kit with their regular partner. As a project we have not explored that aspect and have not monitored it.

○ Condom use and HIV testing: If relevant data are available, a brief discussion on access to condoms and sexual behaviours can be added as HIV testing is especially required for those who are not consistently using condoms in the past three months.
Thanks for the suggestion. In the revised version we can add data and discussion on condom distribution. The national guidelines in Kenya recommends quarterly clinical checkup and HIV testing for key populations on a quarterly basis.

- Recommendation on decriminalisation: Given the negative impact of the criminalisation of consensual adult same-sex relationships on access to services and mental health, in their list of recommendations, the authors can consider adding decriminalisation of consensual adult same-sex sexual relationships as a structural intervention, as recommended by UNAIDS.

Thank you for the suggestion. We can consider this suggestion in the revised version of the manuscript.

- Overall, the open letter is informative, and its recommendations will be useful for programme managers and policymakers.

Thank you.


**Competing Interests:** No competing interests were disclosed.
Is the rationale for the Open Letter provided in sufficient detail?  
Yes

Does the article adequately reference differing views and opinions?  
Yes

Are all factual statements correct, and are statements and arguments made adequately supported by citations?  
Yes

Is the Open Letter written in accessible language?  
Yes

Where applicable, are recommendations and next steps explained clearly for others to follow?  
Yes

**Competing Interests:** No competing interests were disclosed.

**Reviewer Expertise:** Public health (HIV, RH, Gender based violence, Key and priority populations)

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.

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**Author Response 04 Sep 2020**

**Parinita Bhattacharjee**, Partners for Health and Development in Africa, Nairobi, Kenya

**Response to reviewer, 4th September 2020:**

1. The paper is well written and covers an important topic on HIV testing amid COVID-19 and how CBOs are configuring their services to adjust to the emerging challenges in services provision.  
   Thank you so much.

2. That said, I feel the authors should have organized the respective CBOs response in terms of the challenges, and innovations (both short-term and long-term innovations) for HIV testing. If available, it would be interesting to not only look at trends in HIV testing but the full HIV treatment cascade data during pre- and post-COVID-19 period.  
   Thank you for the feedback. As the focus of the paper was on HIV testing during COVID 19, we provided data related to HIV testing only. Based on your comments we are now providing linkage to treatment data. Please see the table below.

3. Also, given that we are in August can the data be updated to look at the trends in testing and HIV treatment cascade data if possible?
The time lag between submission and publication sometimes make the data outdated. Please find attached data here updated till July 2020 including treatment linkage data.

4. Finally, what are some recommendations that the authors can give to governments, program managers and CBOs providing critical services to key population groups such as MSM in Kenya and other similar settings?

Thank you for the feedback.

Recommendations to the government and donors:

a) Provide clear guidance - it is important to provide clear guidance on changes in programming due to COVID 19 or any other crisis. Guidance from government or donor helps in reducing fears and anxiety among implementers and key populations and allows both to be safe and responsible.

b) Be flexible with budgets and targets – COVID 19 created various new needs for a HIV prevention programme among KP including safety equipment for implementers, food and nutrition for key populations. The government and donors have to be flexible to address these immediate emerging needs.

c) Focus on mental health – COVID 19 brought with it fear and anxiety but also social isolation and depression. We recommend that HIV prevention programmes with key populations should integrate interventions to improve mental health among key populations to address the needs when crises like COVID 19 happen.

Recommendations to the implementers and CBOs:

COVID 19 has created a crisis that the implementers or CBOs did not prepare for. The recommendations are:

a) Assess and understand the needs of the KP community during this crisis and respond to the same - During the initial months of COVID 19 (March – May 2020) pandemic, the need of the MSM were not condoms and lubricants but nutrition as many of the MSM had lost their livelihood. The MSM led CBOs had to raise funds through donors and community to address this immediate need.

b) Develop innovative strategies to reach the population and provide services – The pandemic led to several changes including close of hotspots, restrictions in mobility and having face to face meeting. The MSM led CBOs had to innovate by taking on the virtual route, home delivery of commodities etc. as described in the article.

c) Address the fears and anxiety around the new pandemic among implementing team and the KP community. The MSM led CBOs had to do several training and run virtual campaigns to provide correct information about COVID 19 and continuously remind people about safe behaviours (handwashing, wearing masks etc).

**Competing Interests:** No competing interests were disclosed.