Characterizing the impact of COVID-19 on HIV treatment services among key populations in Sub Saharan Africa: A systematic review

Sebati RB, Phaswana-Mafuya R, Phalane E

South African Medical Research Council/University of Johannesburg Pan African Center for Epidemics Research Extramural Unit (SAMRC/UJ PACER)

Department of Environmental Health, Faculty of Health Sciences, University of Johannesburg

INTRODUCTION

- ❖ Sub-Saharan Africa (SSA) is home to the highest number of people living with HIV (PLHIV), contributing to approximately 70% of the global HIV prevalence and accounting for 57% of new infections (UNAIDS, 2020a).
- ❖ Key populations, according to the UNAIDS definition include female sex workers (FSWs), men who have sex with men (MSM), people who inject drugs (PWIDs), transgender women, prisoners, and incarcerated individuals.
- ❖ Key populations are described as a population that regardless of the type of epidemic or the local environment, are at higher risk of contracting HIV due to their higher-risky sexual behaviours (under served, under researched)
- ❖ Despite accounting for a smaller proportion of the population, key populations and their sexual partners accounted for 65% of HIV infections worldwide in 2020 (UNAIDS, 2021).
- ❖ Moreover, they are often faced with structural barriers, and cultural and social norms (such as stigma, discrimination, violence, etc.) that increase their susceptibility to HIV and prevent them from accessing HIV services (WHO, 2022).
- ❖ In addition to these long standing and historical barriers, the emergence of the coronavirus disease 2019 (COVID-19) pandemic has hampered the fight against HIV and many health services (The Global Fund, 2021)
- ❖ The interruption of ART supply may have more severe effects among key populations due to their increased risk of HIV acquisition and transmission (Stone et al., 2021).

OBJECTIVE

To assess changes in HIV treatment indicators, barriers, and facilitators to delivery and access to HIV treatment before and during COVID-19 among key populations in Sub-Saharan Africa.

METHODS

❖ Conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guidelines and registered on PROSPERO (International prospective register of systematic reviews).

Search strategies developed using Boolean operators e.g

❖ The impact (OR effect) of Coronavirus-2019 (OR COVID-19 OR SARS-CoV-2) on HIV treatment services OR ART initiation AND HIV treatment initiation AND linkage to care AND HIV retention to care AND HIV viral suppression among key populations in Sub Saharan Africa.

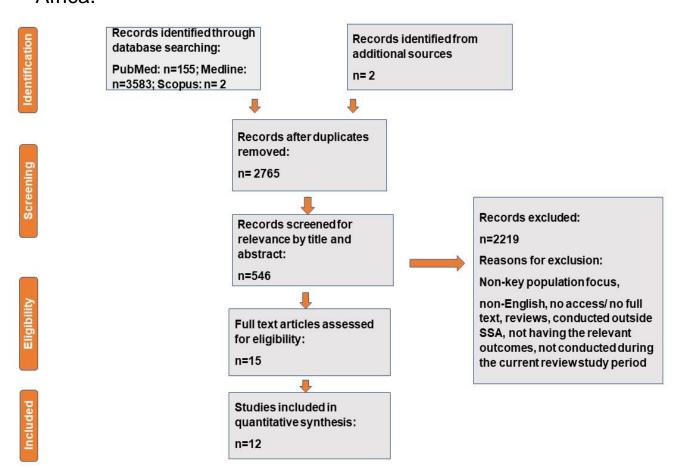
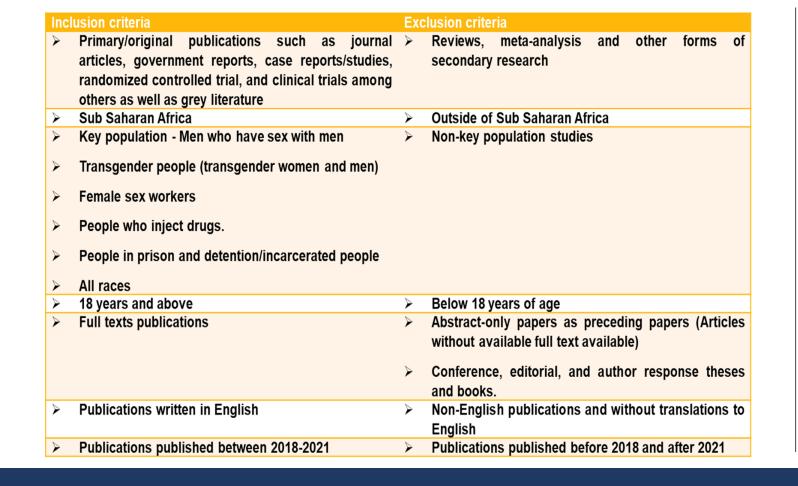


Figure 1: PRISMA Flow chart representing systematic search results

Table 1: Inclusion and exclusion criteria



Sub-Saharan Africa Remaining population 61% 12% People who inject drugs 19% Gay men and other men who have sex with men: 25 times greater risk than heterosexual men. Female sex workers: 26 times greater risk than women in the general population. Transgender women: 34 times greater risk than other adults. People who inject drugs: 35 times greater risk than people who do not inject drugs.

Figure 2: Key population statistics 2021

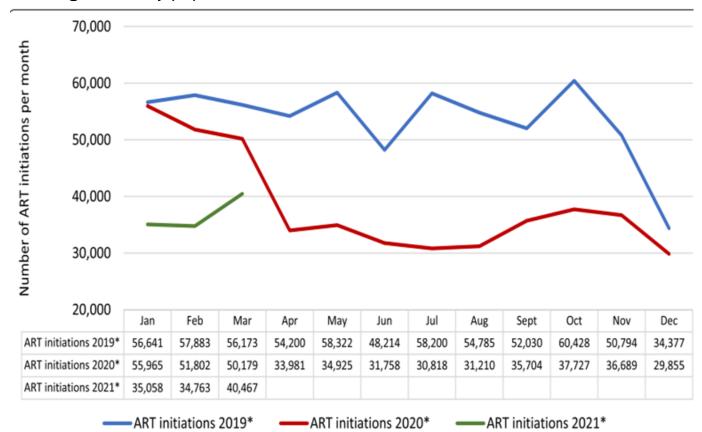


Figure 3: South Africa pre- and peri COVID-19 HIV treatment indicators comparison

Table 2: Kenya pre- and peri COVID-19 HIV treatment indicators comparison

PRE-COVID						DURING COVID				
(OCTOBER 2019 TO MARCH 2020)					(APRIL 2020 TO SEPTEMBER 2020)					
	NEW ON ART	ACTIV E	DEFAULTER S	RETENTIO N		NEW ON ART	ACTIV E	DEFAULTER S	RETENTIO N	
FSW	268 (79%)	245 (81%)	23 (66%)	0.91	FSW	400 (79%)	399 (81%)	1 (10%)	1	
MSM	48 (14%)	39 (13%)	9 (26%)	0.81	MSM	76 (15%)	68 (14%)	8 (80%)	0.89	
TG	22 (7%)	19 (6%)	3 (9%)	0.86	TG	29 (6%)	28 (6%)	1 (10%)	0.97	
TOTA L	338	303	35	0.9	TOTA L	505	495	10	0.98	

CONCLUSIONS

- Majority of the key populations are unable to access HIV treatment services due to stigma and discrimination, and in some cases, illegal constraints also play a role.
- ❖ Most of the barriers to access HIV treatment services that existed before COVID-19 were still there during COVID-19, worsened by movement restrictions and fears of contracting COVID-19 as well as financial constraints caused by COVID-19.
- Health care workers need sensitization training and professionalism to respect everyone's privacy including key populations, and community members need to be educated about sexual identities as well.
- Mitigation measures introduced in some countries did not effectively increase access to HIV treatment services among key populations in some cases, compared to general populations.
- Key population account for HIV transmission in their networks that are part of the general populations.
- Key populations need specific health centers that cater to their needs through tailored services/responses/interventions.
- Key populations are key to ending the HIV pandemic as a public health issue and achieving the 95-95-95 UNAIDS goals by 2030.

ACKNOWLEDGEMENTS

This work reported herein was made possible through funding by the South African Medical Research Council (SAMRC) through its Division of Research Capacity Development under the Mid-Career Scientist Programme from funding received from the South African National Treasury and the South African Medical Research Council. The content hereof is the sole responsibility of the authors and do not necessarily represent the official views of the SAMRC.

Thank you to:

- ➤ Prof Refilwe Phaswana Mafuya (Supervisor)
- > Dr Edith Phalane (Co-supervisor)
- > Dr Claris Siyamayambo (Statistician)