

Covid-19 impact on HIV care continuum among men who have sex with men in South Africa: a doctoral study protocol

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KEY FINDINGS

The **Covid-19 pandemic** negatively impacted the **provision, access and utilization of HIV treatment services** among **key populations (KPs)** including **Men who have sex with Men (MSM)**. Objective 1 of the study (systematic review) has showed that there were limited **key population-specific interventions** (three) implemented to **mitigate** the impact of Covid-19 on HIV treatment services in included Sub-Saharan African studies. Differentiated service delivery interventions were implemented among KPs across physical and virtual locations. These interventions demonstrated improvements in **HIV treatment linkage, initiation, and viral suppression**. Objective 2 has shared the **personal experiences** of MSM (beneficiaries) and stakeholders from an MSM HIV Prevention Programme in Capricorn District, Limpopo Province. This was guided by the **Consolidated Framework for Implementation Research (CFIR)**. The beneficiaries have expressed that Covid-19 was a **life-changing** event that disrupted their daily lives and access to HIV services including **ART**, condoms and lubricants. It has led to some defaulting on ART due to **movement restrictions and fear** of Covid-19. **The stakeholders** have expressed that they have implemented **innovative interventions** to continue catering for the HIV treatment needs of the MSM such as **safe-space HIV testing** and offering transport to fetch ART at the nearest public facilities. The **partnerships and connections** they have established with the Department of Health and other non-governmental organizations have also helped to ensure service provision to the MSM despite the complications brought by Covid-19. Programme data analysis (objectives 3 and 4) will further quantify Covid-19 impacts by reporting an **interrupted time series analysis** on HIV treatment outcomes.

BACKGROUND

- ❖ South Africa continues to bear the greatest burden of HIV with approximately 8.45 million people living with HIV (PLHIV) and an estimated 164,000 new HIV cases in 2022 [1].
- ❖ The HIV pandemic substantially affects key populations (KPs) including men who have sex with men (MSM, e.g., gay, bisexual etc).
- ❖ Key populations and their sexual partners accounted for 51% of new HIV infections in Sub-Saharan Africa (SSA) in 2021 [2].
- ❖ Men who have sex with men have a 22 times higher risk of contracting HIV than their counterparts in the general population between the ages of 15 and 49 years [3].
- ❖ Key populations experience barriers such as violence, stigma and discrimination limiting their accessibility and utilization of healthcare services, inclusive of HIV care services.
- ❖ In addition to these long-standing barriers, the emergence of the coronavirus disease 2019 (Covid-19) pandemic has disrupted the provision of HIV services in this population.
- ❖ This study aims to assess the impacts of Covid-19 on the HIV treatment continuum among MSM towards strengthening linkage and retention in care in selected Provinces of South Africa.

METHODS

- ❖ This study will be conducted using a mixed method approach to answer the following four objectives:

Table 1: Summary of methods i.e., objectives, study design, data collection methods and data analysis

Objectives	Design	Data collection	Data analysis
Objective 1: To conduct a systematic review of primary studies conducted on strategies implemented towards strengthening HIV treatment services among key populations during the COVID-19 lockdown period in SSA.	-Systematic review	-Inclusion: Published or grey literature from January 1, 2020, to December 2022 -Registered in PROSPERO -PRISMA guidelines -Databases: Pubmed, ScienceDirect, EBSCOHost, and Scopus	-PICO framework
Objective 2: To explore and describe the successes, limitations, and opportunities for improvement of the HIV treatment Programme implemented among MSM during COVID-19 lockdown by an NDoH implementation partner	-Explorative	-A purposive sample of 20 key informants (MSM programme implementors and beneficiaries) - Semi-structured questionnaire -Inclusion: Aged 18 years and above - The interviews were recorded verbatim and supported by tape recording for accuracy purposes - Data was coded to generate themes and sub-themes in consultation of the CFIR - Probing questions were also used where necessary	-Qualitative/thematic analysis with Atlas.ti
Objective 3: To conduct a longitudinal assessment of de-identified routinely collected data among MSM enrolled in the NDoH Implementation Partner's HIV Programme to assess changes in the availability, accessibility, and utilization of HIV treatment services among selected Provinces of South Africa	-An interrupted time series analysis	- De-identified MSM routine programmatic data -01 January 2018 to 31 December 2022 -Gauteng, KwaZulu Natal, and Mpumalanga -Inclusion: Aged 18 years and above, residing in one of the three selected provinces, part of the programme during the Covid-19 period	-An interrupted time series analysis ✓ Pre-Covid 19 period: February 2018- February 2020 ✓ Peri-Covid-19 period: March 2020- December 2022
Objective 4: To assess changes in HIV treatment outcomes using de-identified routinely collected data among MSM enrolled in the NDoH Implementation Partner's HIV Programme in selected Provinces of South Africa		-Indicators: ART availability, number of HIV tests, HIV yield, ART collection and waiting time, ART linkages, ART initiations, adherence and retention, and viral suppression over time	

MSM: Men who have Sex with Men; SSA: Sub-Saharan Africa; NDoH: National Department of Health; ART: Antiretroviral Therapy; CFIR: The Consolidated Framework for Implementation Research; PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analyses; PROSPERO: The International Prospective Register of Systematic Reviews; PICO: Population, Intervention, Comparison, Outcome Framework

RESULTS

The results are presented by objective.

Objective 1:

Selected references

1. Johnson LF, Dorrington RE. Thembeisa version 4.6: A model for evaluating the impact of HIV/AIDS in South Africa; 2023. Available from https://www.thembisa.org/content/downloadPage/Thembeisa4_6report. Accessed 02 October 2023.
2. World Health Organization. Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations. World Health Organization; 2016. Accessed 23 July 2023.
3. Stone J, Mukandavire C, Boily MC, Fraser H, Mishra S, Schwartz S, Rao A, Looker KJ, Quaipe M, Terris-Prestholt F, Marr A. Estimating the contribution of key populations towards HIV transmission in South Africa. Journal of the International AIDS Society. 2021;24(1):e25650.

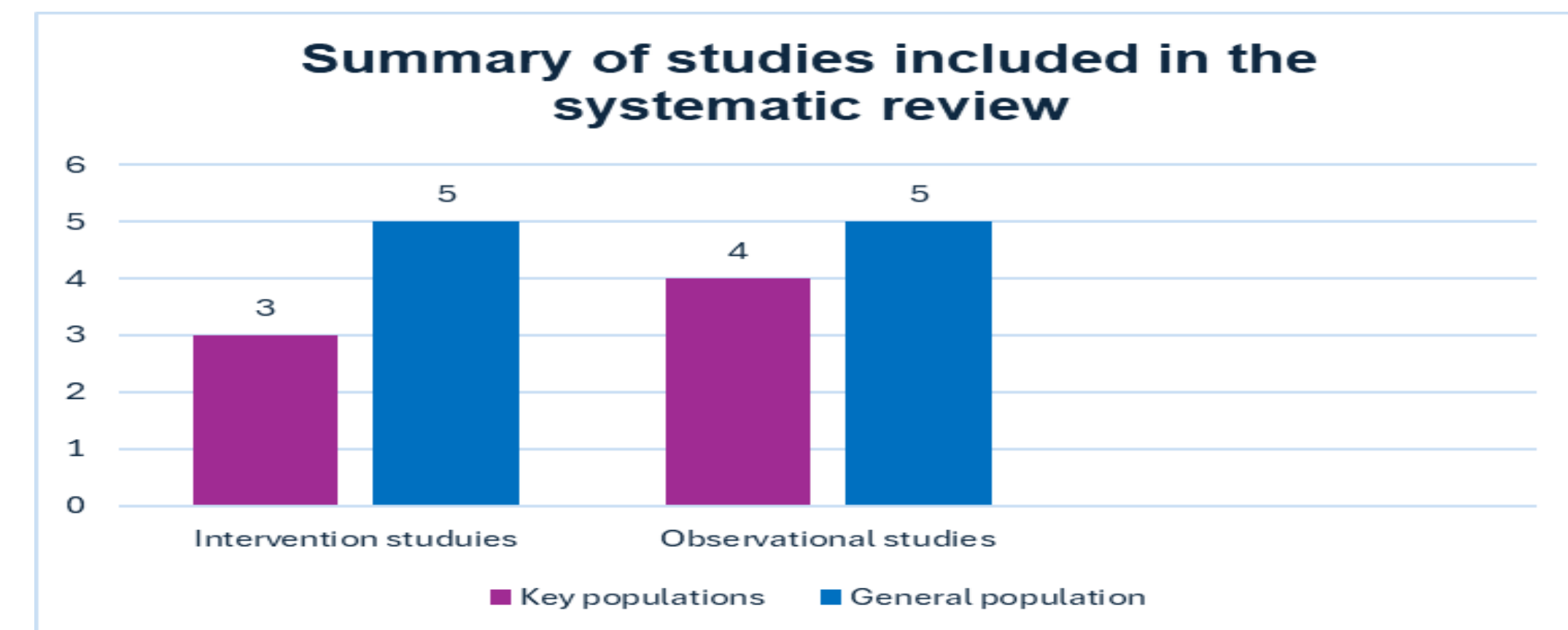


Figure 1: Summary of included studies

Table 2: Summary of main findings from selected included studies

Intervention studies	Target population	Intervention	Main findings
Katbi et al., 2022; Nigeria	MSM, FSW, PWID, and TG	DSD	HIV linkage rates started to increase after the COVID lockdown period with significant linkage to care rates (100% new HIV cases linked to ART) recorded between June to Sept 2020.
Meeting Targets and Maintaining Epidemic Control (EPIC) Project, 2021; Namibia	KPs	Quickres (a website that enables online appointment for health services)	Increased ART initiation and adherence, 95% of key populations on ART had their viral loads suppressed.
Oryokot et al., 2021; Uganda	General population	Multi-month ART dispensation	6 months ART refills seemed to offer higher participation of the PLHIV in care.
CDC, 2020; Tanzania	General population	Community-based ART	The medical facilities were less crowded. Moreover, 3,506 people received community ART.
Observational studies			
Macharia et al., 2021; Kenya	Male sex workers	-	Due to the lack of medication delivery for ART and increasing transportation expenses, together with concerns about contracting COVID-19, ART accessibility has been severely restricted.
Moyo et al., 2022; Zimbabwe	Female sex workers	-	Participants had to present authorization letters in order to get through police roadblocks in order to receive ART from medical facilities. There is little client-provider interaction and the perception that healthcare providers were rushing.
Benade et al., 2022; South Africa	General population	-	The COVID-19 pandemic and the countermeasures to the pandemic greatly reduced the number of PLHIV initiating treatment in South Africa.
Linnemayr et al., 2021; Uganda	General population	-	76% of respondents believed that COVID-19 negatively affected their ability to visit HIV clinics, 54% believed that doing so increased their likelihood of contracting the virus, and 14% said that COVID-19 had negatively impacted their ability to adhere to their ART.

Objective 2:

- ❖ 16 MSMs were interviewed, aged 20 to 38 years; mean age=27,9 years.

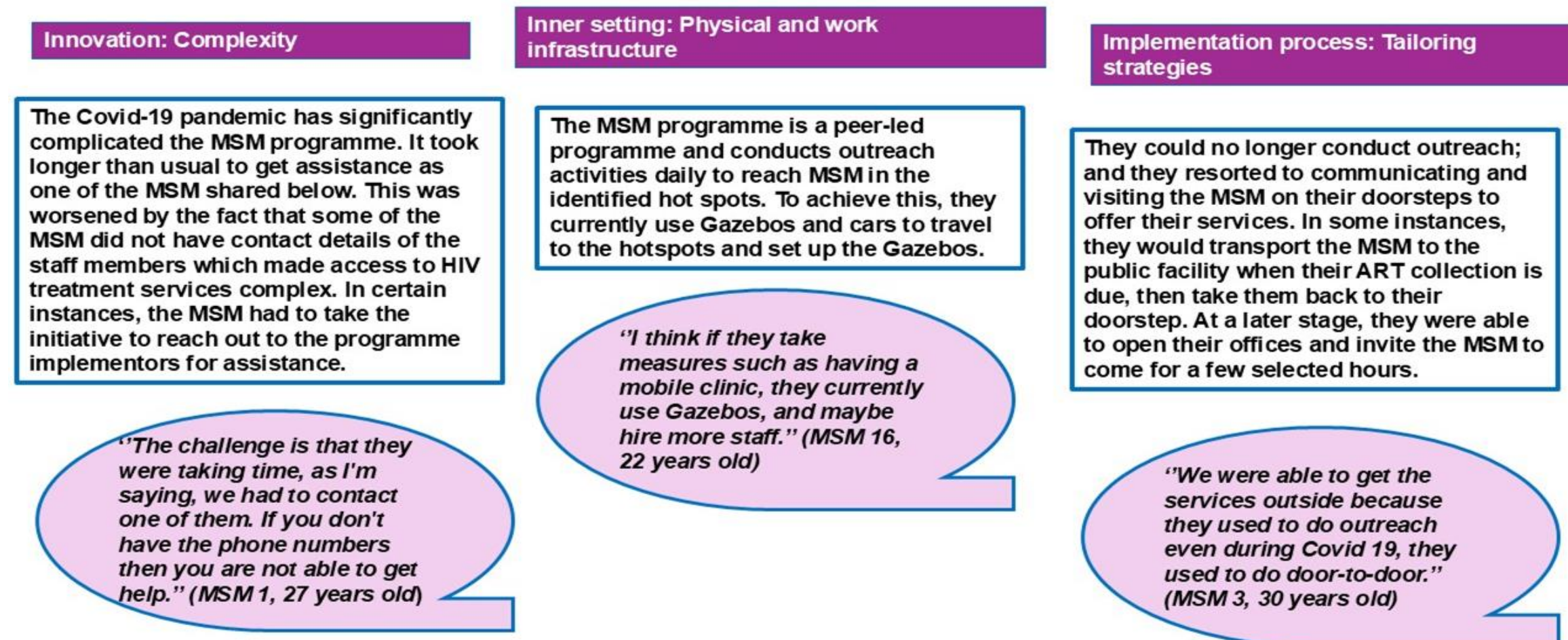


Figure 2: Summary of qualitative results from men who have sex with men based on the consolidated framework for implementation research constructs

Objectives 3 and 4: Currently underway, results not yet available.

CONCLUSIONS

- ❖ The Covid-19 pandemic has negatively impacted the access and use of HIV treatment services for MSM, leading to poor treatment outcomes.
- ❖ Investing in and classifying such interventions as essential services will ensure prioritization and fewer disruptions in the provision of HIV services to the MSM in similar settings, leading to progression in meeting the 95-95-95 UNAIDS goals and ending HIV as a pandemic.

ADDITIONAL KEY INFORMATION

- ❖ **Author Contact Information:** ramakgahlelas@uj.ac.za; +27 11 559 1496
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