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MEDECINS SANS FRONTIERES DOCTORS WITHOUT BORDERS

Advancing population health research to improve intervention: final results from the Mombasa Youth and Key Pop Study

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Introduction

From 2022 to 2025, Médecins Sans Frontières (MSF) and the Mombasa County Department of Health implemented a multifaceted intervention for adolescents and young people (aged 10–24 years; AYP), with a focus on young key populations (sex workers, people who use drugs, sexual and gender minorities; AYKP). Comprising youth-friendly services, outreach activities, and more, the intervention aimed to improve physical, mental, and social health. This intervention was supported by the Mombasa Youth and Key Pop Study to inform evidence-based decision-making and evaluate intervention effectiveness.

Methods

The study was conducted over 3 years with a three-stage parallel mixed-methods design. Stage 1 consisted of a two-wave survey of AYP in 2023 (n=1,405, including 325 AYKP participants) and 2025 (n=2,457, including 548 AYKP). Stage 2 was a repeated survey of healthcare workers conducted in 2023 (n=438), 2024 (n=486), and 2025 (n=519). Stage 3 was a qualitative cohort (n=16, including eight AYKP) across 32 individual and 14 group interviews. Quantitative and qualitative analyses investigated barriers and changes over time to health and healthcare, stratified by general AYP and AYKP.

Ethics

This study was approved by the Kenya Medical Research Institute (Ref. SERU4694), the Mombasa County Department of Health, and the MSF Ethics Review Board (ID 2294).

Results

Good physical health was reported by 80.4% of AYP and 68.7% of AYKP (via Stage 1). Good access to healthcare was low overall (28.2% AYP, 22.0% AYKP); while it increased among AYP following intervention exposure (from 20.3% to 31.0%; adjusted odds ratio [aOR]=2.02, 95% CI 1.44–2.84), no improvement was observed for AYKP (1.45, 0.86–2.44). Indications of depression were observed in 10.4% of AYP and 22.3% of AYKP; intervention exposure was associated with decreased depression among AYP (from 12.7% to 9.6%; 0.55, 0.36–0.85) but not AYKP (0.61, 0.37–1.03). Regarding mental healthcare, 23.9% of participants reported seeking support from a healthcare worker. Yet, mental health stigma among healthcare workers (via Stage 2) was high and unchanged over time (33.3% in 2023, 35.5% in 2025; 1.01, 0.97–1.06). Many healthcare workers also reported stigma towards key populations (29.1% in 2023, 37.3% in 2025; 1.0, 1.0–1.1). Analysis of Stage 1 found AYKP exposure to stigma was negatively associated with healthcare access (0.7, 0.6–0.9) and positively associated with depression (1.7, 1.4–2.1).

Conclusion

The MSF intervention in Mombasa achieved some improvements in health and healthcare for general AYP, but not for AYKP. Stigma was a main factor in this disparity, with key population stigma common in youth-friendly services and shown to decrease service uptake. Thus, although results suggest a youth friendly approach was effective, future interventions must more actively respond to the intersectional vulnerabilities affecting health and healthcare among adolescents and young people.

Conflicts of interest

All authors declare no competing interests.