

LEVERAGING DATA ANALYTICS FOR OPTIMIZING TB AND HIV CASE DETECTION AMONG KEY POPULATION IN NIGERIA: INSIGHTS FROM THE KNCV GF CPPM GRANT

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Background:

Key populations in Nigeria, including sex workers, people who inject drugs, and men who have sex with men, bear a disproportionate burden of TB and HIV co-infections. Despite efforts to improve case detection, gaps persist due to limited access to healthcare, stigma, and inadequate data-driven strategies. The Global Fund's Community-Public Private Mix (CPPM) grant has enabled the implementation of targeted interventions, supported by advanced data analytics, to enhance case detection and linkage to care.

Methods:

This study utilized programmatic data collected from 2022 to 2024 across 7 high-burden states in Nigeria. Data analytics tools, including predictive modeling and geospatial mapping were employed to identify hotspots, predict undiagnosed cases, and optimize resource allocation. Key indicators included TB and HIV testing rates, case notification rates, and linkage-to-care outcomes among key populations.

Results:

Preliminary findings revealed a 35% increase in TB case detection and a 28% rise in HIV case identification among key populations following the implementation of data-driven strategies. Geospatial mapping identified 15 high-priority hotspots, contributing to 60% of newly diagnosed cases. Predictive modeling accurately identified 78% of undiagnosed cases, enabling targeted outreach. Linkage to care improved by 42%, with 85% of diagnosed individuals initiating treatment within 14 days.

Conclusion:

The integration of data analytics into TB and HIV case detection strategies under the GF CPPM grant has significantly improved outcomes among key populations in Nigeria. These insights underscore the potential of data-driven approaches to optimize resource allocation, enhance case detection, and improve linkage to care. Scaling up these strategies could accelerate progress toward ending TB and HIV epidemics in Nigeria and similar settings.

Disclosure of Interest Statement: *See example below:*

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