

REVIEW OF COMMUNITY BASED DISTRIBUTION IMPACTS ON 95-95-95 GOALS AMONG KEY POPULATIONS IN ZAMFARA STATE, NORTHWESTERN NIGERIA.

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Author's contributions

This study was a collaborative effort of the authors. The authors reviewed and approved the final version of the manuscript for publication.

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ABSTRACT

Community-Based Distribution, one of the methods used in Differentiated Service Delivery, involves taking HIV treatment, care, and services to the key population in their communities through trained healthcare providers. This approach has been shown to have positive impacts on the outcomes of HIV care and services. The study was a retrospective study involving pooling data from the client's clinical notes and electronic records using observational method over a period of forty months between November 2021 and February 2025 which were then analysed using simple statistical methods. Between November 2021 and February 2025, a total number of 64,455 key population were tested; out of which 5,965 (9.3%) were tested positive. Among those tested positive: men who had sex with men, 464 (7.5%), Female sex workers 1,271 (21.3%), Sexual partners of HIV positive clients 1,651 (27.7%), People who inject drugs, 4,298(41.9%). Numbers tested at community levels 53,758(92.0%) while 4,732(8.1%) were tested at the central facility. Numbers currently on HIV treatment 5,875(98.8%); those virally suppressed 5,868(99.9%) while retention rate stood at (99.9%) as at Feb 2025. The cervical cancer screening rate in the period under review was 29.3%. Community based distribution under differentiated service delivery model has significantly enhanced the achievement of 95-95-95 goals among Key populations living with HIV in Zamfara, however, there is low rate of cervical cancer screening in the state.

Keywords: Community-based distribution, Key population, Human Immunodeficiency Virus, Female Sexual Workers.

1.0 INTRODUCTION

In 2013 World Health Organisation (WHO) released ART guidelines with the aim of mitigating low uptake of anti-retroviral therapy (ART) emphasizing the need to decentralize HIV treatment, care and support (Emmanuel *et al* 2025).

Studies conducted in Nigeria had shown that decentralization of ART/HIV cares had resulted in significant decline in deaths from AIDS- related causes and prevention of new cases (Eluwa *et al.*,2025).

Community-based distribution (CBD) involves delivering health services communities through trained community members or health workers. The CBD approach has been shown to increase accessibility- especially in hard-to-reach, rural areas or security challenged areas (Shittu *et al.*,2023). Community based distribution has also shown been to improve convenience in HIV cares and services, by eliminating the rigorous risks and costs of travelling to city centers for services. (Awoyemi *et al* 2018). CBD also enhances trust, as clients tends to trust people they know in the community than outsiders. Community- Based Distribution (CBD) for key populations (KPs) involves delivering health services, including HIV prevention, testing and treatment directly to marginalized groups through peer-led outreaches, community-based testing and linkages to care and treatment services (Durosinmi-Etti *et al.*,2023). WHO, UNAIDS and PEPFAR identify “Key populations” as sex workers (FSW), men who have sex with men (MSM), people who inject drugs (PWID), transgender (TG), prisoners and other people living in closed settings (NACA, 2024). These group of people are at increased risk of HIV irrespective of the epidemic type or local context due to their higher risk-behavior.

Key population are disproportionately affected by HIV (NACA, 2019). For instance, people who inject drugs are 24 times more likely to acquire HIV than adults in the general population, sex workers 10 times more likely, and men who have sex with men are 24 times more likely (NACA, 2019). It was reported in 2013, that 50% of all new HIV infections worldwide were among KP (UNAIDS, 2019). WHO in her recent publications outlined the 95-95-95 targets by the year 2030 (NACA, 2019) with the goals of having 95% of the people living with HIV knowing their status including KPs, 95% of those tested positives are on antiretroviral therapy (ART) and 95% on treatment have viral suppression by the year 2030. In achieving the WHO above targets, studies have shown that Differentiated Service Delivery (DSD) in general and Community-Based Distribution (CBD) in particular has significant roles. Zamfara, a Northwestern state in Nigeria, with 14 Local Government areas, has been ravaged with insecurity in the last one decade. Though the HIV prevalence rate in Zamfara State is low-0.4 (NACA, 2024), the hostilities to KPs disclosures in the state on account of tradition and religion significantly hampered KPs identification, testing and linkage to HIV treatment, care and prevention in the state. Consequently, the study aimed to establish the impacts of CBP on KPs in the state and current status of the WHO 95-95-95 targets under the current programme of KP CARE-2 been implemented by the society for family health (SFH) Zamfara State.

2.0 METHOD AND MATERIALS

This was an observational retrospective study. Electronic Data collected between November 2021 and February 2025 were retrieved and analyzed using simple statistical methods and expressed in tabular, pie and bar charts formats. The study populations were female sexual workers (FSW), men who have sex with men (MSM), People who inject drugs (PWID) and Sexual Partners of HIV positive key populations (SP). The operational definitions for all Key populations were based on WHO and Joint United Nations Program on AIDS (UNAIDS) reference guidance. (UNAIDS, 2019). The data obtained were statistically presented below.

3.0 RESULTS:

Distribution of key population tested for HIV and positivity Rates.

Total tested= 64,455

Total positive= 5,965

Overall positivity rate= 9.3%

Table 1: Distribution of HIV positive results

Group tested	Numbers positive	Percentage
Female Sexual Workers (FSW)	1271	21.3%
People Who Inject Drugs (PWID)	4732	41.9%
Men who have Sex with Men (MSM)	464	7.5%
Sexual Partners of index cases (SP)	1651	27.7%
Others	95	1.6%

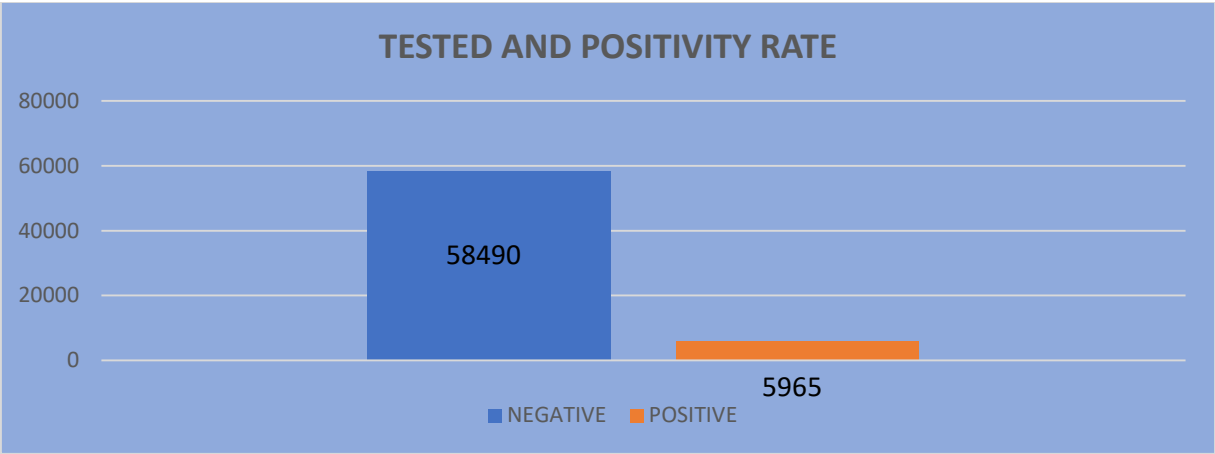


Figure 1: Bar chart showing KPS tested and positive rate

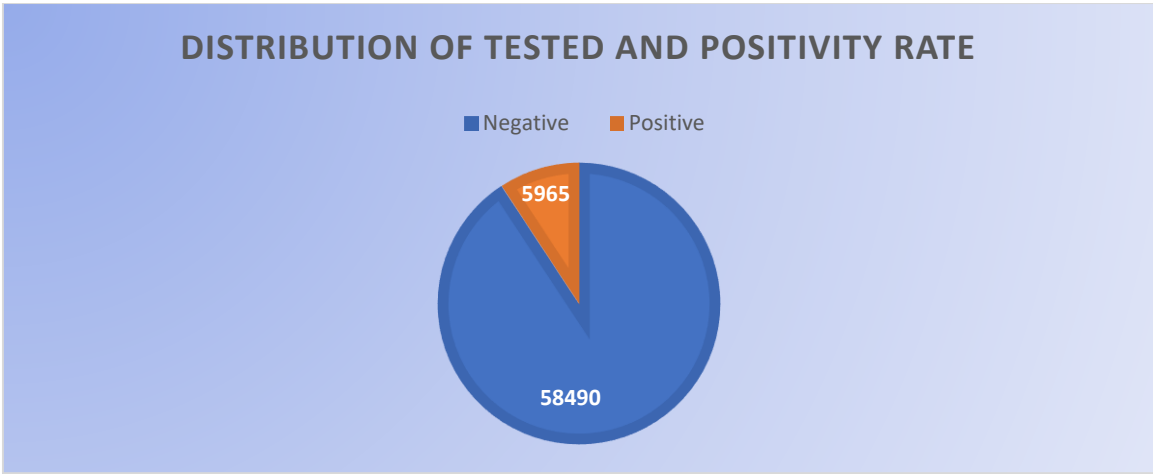


FIGURE 2: Pie-chart showing distribution of tested cases and positivity rate

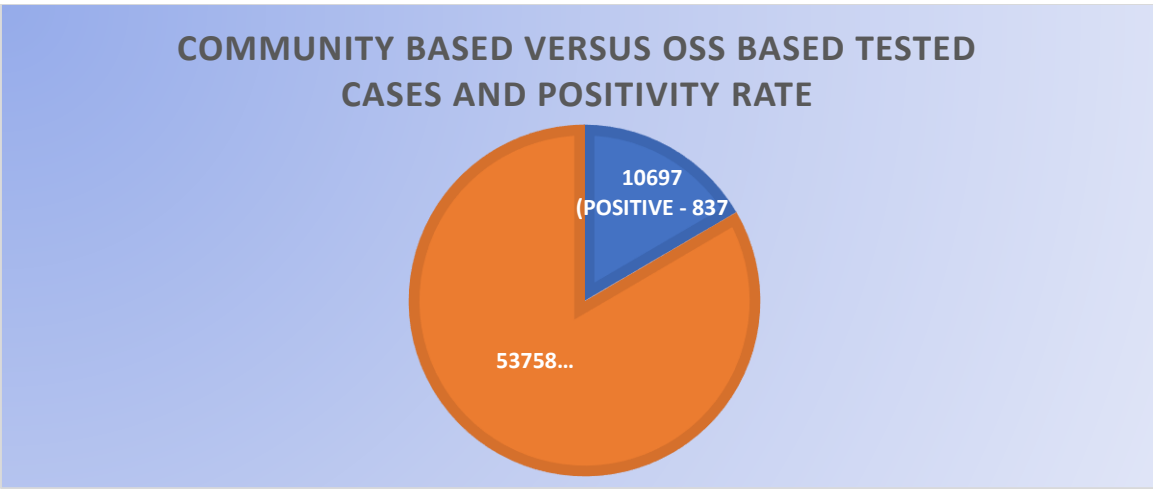


FIGURE 3: Pie chart showing community versus OSS based tested cases

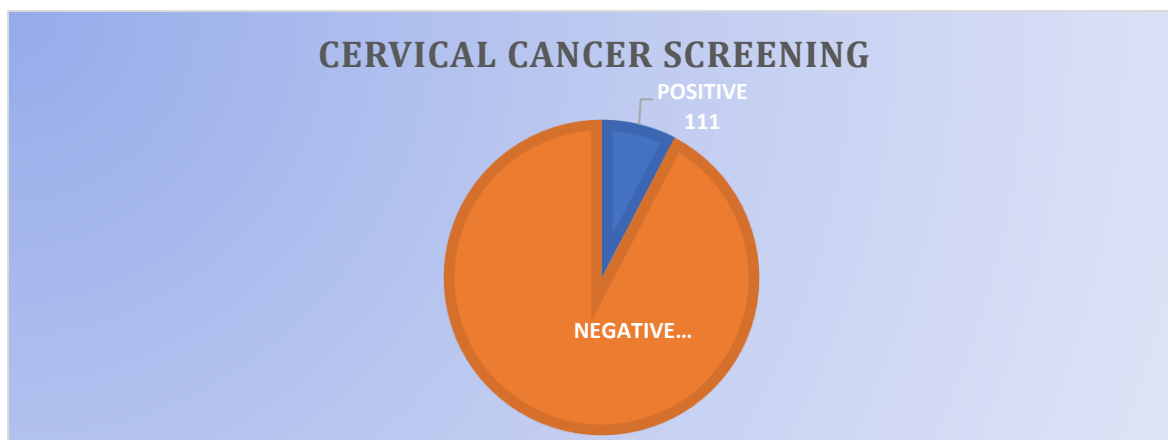


FIGURE 4: Pie chart showing cervical cancer screening rate

4.0 DISCUSSION

It was observed from the study that as at Feb 2025, a total of 64,455 Key populations have been tested as shown in Figure 1, out of which 5,965 (9.3%) were HIV positive and currently on treatment. Majority of the Key Populations Tested were done at the community levels 53,758 (92%) while only 4,372 (8.0%) KPs_s were tested at the One-stop-shop facility in Gusau as shown in Figure 3, which is similar to findings from other OSS KP- Care 2 states as reported in key population programme review (NACA, 2024). The highest positive yields from the study 4,732(41.9%) were recorded among people who inject drugs, which was contrary to findings in kano (Shittu *et al* , 2022), Bayelsa (Emmanuel et 2025) and Bauchi (Shittu *et al* 2022) where highest positive yields were found among female sexual workers (FSW).as shown in Table 1. The Study revealed that, all the Key Populations tested positive for HIV were all initiated on HIV drugs and currently on ART, which was in keeping with the 2nd-95 target by WHO, similar to findings in elsewhere. The suppression rate during the period under review was 99%, also in keeping with the 3rd -95 WHO target. It was observed that Men who have sex with men were present in the state and some of them were tested positive for HIV--,464(7.5%) in Zamfara State, contrary to general belief of non-existent of such due to the Islamic-dominated nature of state. However, there was no transgender elicited in the course of study. The positivity yield among MSM (7.5%) is similar to that found in Kano, but lower than that found in Bauchi and Bayelsa. (NACA, 2024)

The viral load suppression during the study period were greater than ninety nine percent (>99%) which was higher than the national VL suppression in Nigeria (2024); but similar to findings in Kano and Bauchi.(NACA, 2024). The cervical cancer screening uptake from the study was (29.3%) which was far lower than the national target of (>60%), and lower than that observed in Jos, Kano and Bayelsa; which might not be unconnected to the widespread insecurity across Zamfara state as well as aversion by women for pelvic examination by male healthcare workers as well as myths and wrong assumptions about cervical screening.

5.0 CONCLUSION

The HIV epidemics among KPs in Zamfara is a reality and existing contrary to the general assumptions of nonexistence of Key Populations in the state. The highest prevalence of HIV in Key populations in the state are found among People who inject drugs (PWID). Large proportions of KPs can only be reached through community based (DSD) approach as only a small fraction of KPs accessed OSS center in Zamfara state possibly unconnected to stigmatization and cultural and religious practice in the state. Therefore, there is need for more involvement of Community Based Organizations (CBOs) in the overall care and services of people living with HIV in Zamfara state.

RECOMMENDATIONS

From the observations from the study, we hereby recommend the involvement of more Community Based Organizations (CBOs) in the HIV program for both KPs and general population. There is also need for more advocacy and sensitization of the KPs on the importance of cervical cancer screening.

Conflict of Interest: The authors declared that there is no competing interest.

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