COMPARATIVE ANALYSIS OF CASE FINDINGS THROUGH STRATEGIC HIV TESTING APPROACHES IN KOGI STATE, NIGERIA

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BACKGROUND

The 2019 NAIIS indicates that Kogi State has a HIV prevalence of 0.9% with a HIV burden of 40,288 population of People Living with HIV (PLHIV). However, only 23,768 of PLHIV were on treatment, with a gap of 41% yet to be diagnosed and linked-to-care. The first of the global 90:90:90 targets demands that HIV Testing Services coverage must increase within the geographic areas and populations where the HIV burden is highest, and in previously under-served areas and populations at risk for HIV.

METHODS

The study was conducted through a rank bi-serial comparison of the correlation coefficient derived from the yield of case findings for 2018 and 2019 HTS at 6 selected Health Facilities in Kogi State. Data was validated prior to the comparison of the rank correlation coefficient analysis for 2018 and 2019. Targeted PITC, Home-based testing, Health fairs and multi-disease screening campaigns/events, Index-client testing and Partner Notification Services provided the approach for the identification of case findings. Data was collected on client intake forms and HTS register for the routine diagnostic tests for HIV 1 and 2 for clients by Health Care Facilities.

RESULTS

A trend lines Y= 21.1 + (0.002) X and Y= 51.6 + (0.001) X were derived. The analysis indicates that the RDTs for HIV outcomes for the selected health care facility presents r^2 values of 0.53 and 0.10 for 2018 and 2019 respectively for PLHIV has had a 43% drop in the usage of RTKs while increasing the yield of case findings.

2018	2019
X = 3117.67	X = 3,297.00
$\bar{Y}$= 30.17	$\bar{Y}$= 55.64
Sxx = 96,972,279	Sxx = 92,727,100.00
Sxy = 282,144	Sxy = -70612.09
Syy = 1,556	Syy = 1,332.55
Rxy = 0.73	Rxy = 0.32
R^2 = 0.53	R^2 = 0.10
β = 1.40	β = 0.001
α = 3.14	α = 51.52
$Y_1 = 21.1+0.002X_1$	$Y_2 = 51.52+0.001X_1$

Prior to the rank bi-serial correlation analysis for the 2018 and 2019 HTS Rapid Diagnostics Test (RDT), data was processed, validated and then the trend lines $Y_1=21.1+(0.002)X_1$ and $Y_2=51.52+(0.001)X_2$ were derived (95% CI). The results in equation Y_1 and Y_2 respectively indicate autonomous (α) case findings from the uptake HTS RDTs which are 21 and 51 for 2018 and 2019, respectively.

CONCLUSION

The inference has an importance that has shifted the relevance of HTS towards greater efficiency due to the targeted strategic drive. A positivity yield in 2018 was dependent on 53 RDTs while a yield in 2019 was dependent on 10 RDTs, thus these findings emphasize targeted RDTs for improving the yield by 43% current assets utilization (RTKs) reduction.

To reach the sustainable development goals 3, a public health approach to the differentiated HIV prevention, treatment and care should be promoted so that the efficiency of RDTs for HTS outcomes could improve the uptake of ART services by PLHIV especially by those presenting with Advanced HIV disease with WHO stage 3 or CD4 ≤200 c/mm^3 at the HCF. The analysis presents r^2 values of 0.53 and 0.10 for 2018 and 2019 respectively for persons between the ages of 18 months to above 50 years indicating a phenomenal 43% drop in the usage of Rapid Test Kits.

REFERENCES

1.Prevention Gap report. Geneva: UNAIDS; 2016

2. FMoH National Guidelines for HTS (2017)

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