Treat All and the 1st 90

HIV Test Rates and Yields following implementation of HIV test and treat in Bulilima District, Zimbabwe

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BACKGROUND

- Zimbabwe has an adult HIV prevalence of 14.6%[1]

- At 22.3% Matabeleland South Province has the highest HIV prevalence in Zimbabwe.

- The ability of HIV test and treat strategies (Treat All) to contribute to 90-90-90 goals requires first reaching the 1st 90 by ensuring 90% of people living with HIV know their status.

- Little is known about the influence of Treat All upon demand and uptake for HIV testing in high prevalence, resource-limited settings.

Treat All Campaign logo used by PEPFAR partners during Zimbabwe's Treat All Learning Phase

OBJECTIVE

To explore changes to HIV test rates and yields among clients accessing facility-based services in Bulilima District, Matebeleland South Province, following implementation of Treat All..

METHODS

- Retrospective analysis of HIV test rates and yields.

- 11 purposively selected PEPFAR prioritised health facilities in Bulilima, District, Matebeleland South Province (Figure 1).

- Bulilima District borders with Botswana and is reported to have a highly mobile cross-border population.

- De-identified age and sex-disaggregated characteristics of clients accessing HIV testing services in the month prior to Treat All (May 2016) and 1, 3 and 6 months after Treat All strategy implementation abstracted from facility-based registers.

- Data entered into MSExcel and analysed using STATAV12

FACE HIV Program Districts
Treat All Learning Districts

Figure 1. FACE HIV Program District Coverage

RESULTS

HIV Testing Rates and Prevalence

- Over the period of interest, 3,103 individuals were tested for HIV at selected health facilities; HIV prevalence of 12.7% (n=393; 95%CI: 11.6-13.9%).

- Over a six month period, a 290% increase in number of individuals receiving HIV testing was observed from pre-Treat All (n=388) to six months after Treat All (n=1130) (Figure 2).

- With increased testing, HIV test yields decreased over the same period from 19.1% to 11.1%.

- Despite reduced test yields, due to increased test rates the absolute number of individuals newly diagnosed increased by 68% from pre-Treat All to Month 6.

Figure 2. HIV test rate, new positives identified and test yield, Bulilima District (N=3,103)

RESULTS continued

Figure 3. Age and sex disaggregated HIV test rates and new HIV positives identified May-Aug 2016

Age and sex disaggregated HIV test rates

- Absolute numbers of individuals that received HIV testing increased across all age and sex disaggregated categories over time following the introduction of Treat All (Figure 3)

- Overall, women accounted for over 2/3 of all HIV tests conducted (68.4%; n=2124; 95%CI: 66.8-70.1).

- Proportional test rate increases from Pre-Treat All (M0) to 6 Months after Treat All (M6) were greater among men than women (3.3 vs 2.7 respectively).

- Greatest test rate increases were observed among the 50+ year age group (5.7)

- Within-sex age groupings, the highest test rates were observed among men aged 25-49 and women aged 15-24.

HIV positive test yields

- Due to higher absolute test rates, women represented the majority (66.7%; 95%CI: 61.9-71.2) of all new positives identified (Figure 2)

- **Within younger adults (15-24yrs):** women aged 15-19yrs and 20-24yrs had significantly higher test yields than men of the same age (8% vs 2.2%; p=0.02 and 14.5% vs 8%; p=0.04 respectively)

- **Among older adults (25+yrs):** men aged 25-49yrs had the highest HIV test yield (23.2%) of any other age and sex disaggregated group, with a significantly greater proportion of men testing positive than women (23.2% vs. 16.7%; p=0.007).

CONCLUSIONS

- We observed increased HIV test rates and number of new HIV positive diagnoses in the six months following implementation of Treat All.

- Rate increases of HIV testing were greatest among older men following implementation of the test and treat strategy. However, due to routine HIV testing in antenatal care settings, women continue to test at much higher rates than men and account for the majority of new HIV diagnoses.

- Our findings highlight the value of provider-initiated testing and counselling to all individuals with unknown HIV status at all health care entry points in high prevalence settings as a facility-based strategy to ensure 90% of all PLHIV know their status (1st 90).

- Further research is required to understand barriers and facilitators to sustained access to HIV testing, care and treatment services among young women, older men and mobile, cross-border populations to develop evidence-based differentiated models of care.

REFERENCES

[1]de Oliveira T, et al. Transmission networks and risk of HIV infection in KwaZulu-Natal, South Africa: a community-wide phylogenetic study. The lancet HIV. 2017
[2]Zimbabwe Population Based HIV Impact Assessment, ZIMPHIA 2015–2016. Harare: Ministry Of Health and Child Care, Zimbabwe; 2016
[3]ZIMSTAT. Zimbabwe Demographic and Health Survey 2015: Final Report. Rockville, Maryland,: Zimbabwe National Statistics Agency (ZIMSTAT) and ICF International; 2016.
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