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Treatment outcome of the implementation of HIV test and treat policy at The AIDs Support Organization (TASO) Tororo clinic, Eastern Uganda: A retrospective cohort study

Ronald Opito[1,2]*, **Joseph Mpagi**[3], **Denis Bwayo**[4], **Francis Okello**[1], **Kenneth Mugisha**[2], **Agnes Napyo**[1]

1 Department of Public Health, Busitema University, Mbale, Uganda, **2** Directorate of Program Management and Capacity Development, The AIDs Support Organization (TASO), Kampala, Uganda, **3** Department of Microbiology, Busitema University, Mbale, Uganda, **4** Department of Internal Medicine, Busitema University, Mbale, Uganda

* dropitoroni@gmail.com

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Abstract

Background

Uganda has been making progress towards universal HIV test and treat since 2013 and the 2016 test and treat policy was expanded from the 2013 guidelines. The expanded policy was rolled out in 2017 across the country. The treatment outcomes of this new policy have not yet been assessed at program level. The objective of this study was to determine the treatment outcome of the HIV test and treat policy in TASO Tororo Clinic, Eastern Uganda.

Methodology

This was a retrospective cohort study using secondary data. The study involved 580 clients who were newly diagnosed HIV positive in TASO Tororo clinic between June 2017 and May 2018, who were then followed up for ART initiation, retention in care, viral load monitoring and viral load suppression. The data was analyzed using Stat 14.0 version statistical software application.

Results

Of the 580 clients, 93.1%(540) were adults aged ≥20 years. The uptake of test and treat was at 92.4%(536) and 12 months retention was at 78.7% (422). The factors associated with retention in care were a) being counselled before ART initiation, AOR 2.41 (95%CI, 1.56–3.71), b) having a treatment supporter, AOR 1.57 (95%CI, 1.02–2.43) and having an opportunistic infection, AOR 2.99 (95%CI:1.21–7.41). The viral load coverage was 52.4% (221) and viral load suppression rate was 89.1% (197) of clients monitored. Age <20 years was the only identified factor associated with vial load non suppression, AOR 7.35 (95% CI = 2.23–24.24).

Conclusion

This study found high uptake of ART under test and treat policy, with very low viral load coverage, and a high viral load suppression rate among those monitored. The study therefore highlights a need to differentiate viral load testing based on the population needs and ensure each client testing positive receives pre-ART initiation counselling so as to improve retention in care.

Introduction

HIV is still a global burden despite the efforts made to combat it and as per the UNAIDS 2019 report, there are 37.9million people living with the disease globally, with 1.7million new HIV infections and 770,000 AIDS-related deaths [1]. This burden is however skewed towards sub-Saharan Africa, with 61% of the new infections and 68% of the 37.9million people living in the sub Saharan Africa [1].

Uganda contributes 1.4million people living with HIV to the global burden [1], with a national prevalence of 6.2% [2]. HIV prevalence in Mid-Eastern Uganda where TASO Tororo clinic is located was estimated at 5.1% [2]. Based on the Uganda Bureau of Statistics (UBOS) 2014 census report released in 2016, Tororo district had a total population of 517,082 people [3]. The total number of individuals living with HIV in the district was therefore estimated to be 26,372, of which by end of Dec 2018, 16,544 (62.5%) were on care and 8066 (48.75%) were receiving ART from TASO Tororo clinic.

With the high burden of HIV in Uganda, the country has been making progress towards universal HIV treatment since 2013 when it adopted new WHO recommendations. This 2013 guideline expanded eligibility to ART to include test and treat, regardless of WHO clinical stage or CD4 level for all pregnant and lactating women which was started under Option B^+, all children under 15years, HIV positive clients in a sero-discordant relationship, HIV positive clients in the category of key and priority populations, and expanded the CD4 cut off for ART initiation for all the other categories to 500 cells/mm^3, up from the 350 cut off [4]. The current (2016) test and treat policy was expanded from the 2013 guidelines and involves providing life-long ART to all people living with HIV irrespective of CD4 level or HIV clinical stage. It was rolled out in 2017 across the country in a stepwise manner [5].

Studies have demonstrated that prompt ART initiation regardless of CD4 counts or clinical stage is associated with better treatment outcomes and there has been a global shift towards universal test and treat intervention. The uptake of test and treat among children in Uganda was found to be 49.1% with better outcomes among those who initiated ART within seven days reported as death at 8.3% and LTFU at 3.3% compared to 14. 4% and 8.6% respectively in the later initiators [6]. Whereas 28% of 343 women at high risk for HIV infection in Kampala-Uganda initiated ART promptly, with sex work as main job, younger age and being widowed/separated found to be associated with lower odds of prompt ART [7]. Studies on test and treat programmatic outcome in Zimbabwe found same day initiation on ART among 972 newly identified positives to be 65% and 90% of patients initiated on ART were retained in care at 3 months [8].

Barriers to starting ART under test and treat have included cost, poor interactions with Health care workers, feeling healthy, concerns about ART side effects; fear of HIV disclosure and discrimination, limited privacy at health facilities; and fear of long waiting times [9, 10]. Men's social influence, masculine feelings of strength, and success with their sexual partners