Universal Test and Treat policy and adolescents in South Africa

Adolescent initiation of anti-retroviral treatment (ART) before and after introduction of Universal Test and Treat (UTT) in South Africa: When do adolescents initiate and why?

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BACKGROUND

Between January 2015 and August 2016, the guidance from South Africa's National Department of Health (NDOH) was to offer ART to HIV-infected pregnant women and all patients with CD4 counts <500. A policy of universal test and treat (UTT) was introduced on 1 September 2016, making ART available to all HIV-infected persons regardless of CD4 count. Same-day initiation (SDI), advocating ART initiation on the day of a patients' HIV diagnosis, came into effect on 1 September 2017. We describe patterns of ART initiation among HIV-infected adolescents, aged 10-24 years, attending an adolescent-only primary health clinic – the Ward 21 Adolescent Clinic in Hillbrow, in the inner city of Johannesburg, South Africa.

Wits RHI's USAID-funded Adolescent Innovations Project (AIP) established the Ward 21 Adolescent Clinic in partnership with the Gauteng Provincial Department of Health in 2014 to provide an adolescent and youth friendly (AYF) model of adolescent care and treatment in a primary health care setting. In addition to establishing Ward 21, the AIP has developed, implemented and evaluated a replicable AYF model of targeted and linked interventions to improve the screening, diagnosis, quality of care, adherence, retention and transition of adolescents and young people living with HIV in primary health care in two South African health sub-Districts.

METHODS

We used a mixed methods approach to determine rates of ART initiation, time between HIV diagnosis and initiation, changes in CD4 count at ART initiation, loss to initiation, reasons for non-initiation and loss to follow-up (LTFU) in the periods following introduction of UTT and SDI. Data was extracted from the NDOH's TIER.net ART database for all patients attending Ward 21 Adolescent Clinic, testing HIV positive between January 2015 and 31 January 2018. Patients' HIV diagnosis dates were categorised as pre-UTT, post-UTT or post-SDI. Loss to follow up was defined as a patient not attending the clinic for at least three months after a missed visit, and being un-reachable on three attempts to contact them. Information about patients' reasons for non-initiation were collected by facility based staff. Data were analysed using STATA v.13.

RESULTS

During the study period, 358 non-pregnant adolescent patients tested HIV-positive and had their diagnosis date recorded in the NDOH's TIER.net ART database (Figure 1). Of these patients: 80% were female; 14% were aged 10-14 years, 40% were 15-19, and 46% were 20-24. Two-thirds (236/358) initiated ART during the study period and nearly one-third (115/358) never initiated ART at the Ward 21 Adolescent Clinic. Among those initiating ART: 38% were diagnosed pre-UTT, 50% post-UTT, and 12% post-SDI. Among 189 ART-initiated patients for whom additional visit attendance data was available, 69% were still active on ART 6 months after initiation. Of the ART-uninitiated patients (n=115), 28 transferred to another clinic and 87 were LFTU. Pre-UTT, 38% of patients initiated within one month of HIV diagnosis, this rose to 44% post-UTT and 81% post-SDI. During the pre-UTT and post-UTT periods about one-third of patients never initiated treatment, post-SDI this reduced to 17%. Median pre-ART CD4 count was 341 pre-UTT, 437 post-UTT, 438 post-SDI, and 398 for those who never initiated ART.

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358
Tested HIV positive
across three study time periods

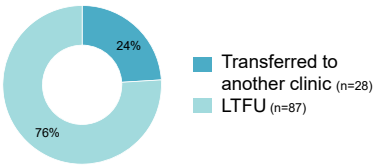
236
Initiated ART in the study period

115
Did not initiate ART in the study period

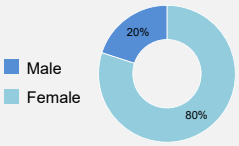
Pre-UTT Jan – Aug 2016	Post-UTT Sep 2016 – Aug 2017	Post-SDI Sep 2017 – Jan 2018
Patients diagnosed		
90	118	28
Median pre-ART CD4 count (/μL)		
341	437	438
Patients initiating ART <1 month after HIV diagnosis		
38%	44%	81%
Patients active on ART 6 months after initiation		
62%	74%	*6 month data unavailable*

Pre-UTT Jan – Aug 2016	Post-UTT Sep 2016 – Aug 2017	Post-SDI Sep 2017 – Jan 2018
Newly diagnosed patients who did not initiate ART		
33%	36%	17%
Median last recorded CD4 count (/μL)		
398		

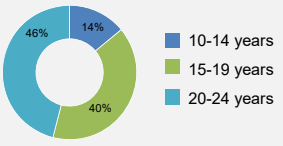
Status of ART uninitiated patients (n=115)



Gender (n=358)



Age (n=358)



CONCLUSIONS

In this clinic, the proportion of adolescent patients initiating ART within one month of HIV diagnosis increased after implementation of UTT and SDI. Baseline CD4 counts increased from pre-UTT levels, suggesting the policy change may have brought previously ineligible people into care.

While policy shifts shortened the time to ART initiation, loss to initiation remained high and there was no improvement in 6-month retention in care. The same day initiation policy seems to enable rapid ART initiation, but attention must be paid to retention in care, as many new initiated adolescent patients are lost.

An innovative peer navigation programme is part of an intervention package being implemented to continue to improve initiation rates and reduce patient treatment defaulting. This intervention is intended to support newly diagnosed patients to access and adhere to care and treatment.

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