Treatment as prevention in correctional facilities

UTT in South Africa and Zambia

INTRODUCTION
Universal Test and Treat (UTT) offers lifelong antiretroviral therapy (ART) to all individuals who test HIV-positive irrespective of the extent of disease or immunosuppression. To work, UTT depends on universal voluntary HIV counselling and testing. Implementing UTT in settings with high HIV burden is an effective way to provide Treatment as Prevention (TasP). This approach is based on research that shows when individuals are on antiretroviral therapy and virologically suppressed, they do not transmit HIV.

The aim of the TasP study was to evaluate the feasibility of implementing UTT as a strategy to strengthen the continuum of care for HIV and TB in correctional facilities and improve patient outcomes in four correctional facilities in South Africa (one in Johannesburg and two in Breede Valley) and one in Zambia (Lusaka). The study looked at barriers and facilitators of UTT and estimated the resources needed to successfully run these programmes. The study was led by the Aurum Institute in Johannesburg, South Africa in partnership with CIDRZ in Lusaka, Zambia and TBHIV Care in Cape Town, South Africa.

WHY THIS STUDY IS IMPORTANT
TasP is likely to have significant population health benefits, both within correctional facilities and in the community. TasP, delivered using a UTT approach, may also improve inmate health and tuberculosis control as well as prevent HIV transmission.

Although inmates may spend only a fraction of their lives incarcerated, the implementation of UTT in correctional settings provides an opportunity to engage a hard-to-reach, mostly male population that typically has minimal interaction with health services in the community and may be more receptive to health care during periods of detention.

In addition, there is data that suggest that HIV transmission may be taking place in correctional facilities due to the concentration of HIV-infected individuals and high-risk sexual behaviours.

Despite these obvious benefits of offering UTT, there is scarce evidence to guide its implementation in correctional settings in sub-Saharan Africa.

APPROACH
The study used mixed-methods including:
- A study of 977 eligible HIV-positive participants who were recruited, enrolled and followed for 12 months to collect clinical information;
- A facility-wide cross-sectional survey to evaluate 90-90-90 targets during UTT implementation across 3 facilities;
- An evaluation of the estimated costs for implementing UTT in each of the facilities; and
- A qualitative analysis, based on interviews with inmates, staff, healthcare workers and other stakeholders, that examined barriers to and facilitators of UTT.
KEY FINDINGS

1. HIV prevalence and treatment uptake
From June 2016 to March 2018, out of 13,129 inmates who accepted HIV testing services, 1,562 inmates tested positive. Of these, 977 enrolled in the TasP study and 836 (86%) started ART.

2. Retention in care
Retention in care was low across all sites, with high turnover of inmates due to discharge or transfer. Findings show that more inmates from Johannesburg were discharged from the facility (following ART initiation) compared to Lusaka and Breede Valley. Six months after ART initiation, nearly half of the participants had left the facilities and by 12 months, almost 75% had left.

3. Viral suppression
At six months, viral load results were available for 404/836 participants (49%) who began treatment. Viral suppression of less than 1,000 copies/mL was found in 91% of participants.

4. Inmate survey findings
At six months from enrolment, 1,411 inmates participated in a well-being survey. Major depressive symptoms were reported in nearly half of all study participants. Higher depression was observed among inmates in Johannesburg than in the other facilities.

A total of 382 inmates completed the HIV knowledge questionnaire. HIV knowledge was higher in Johannesburg (68.7%) compared to Lusaka (36.0%) and Breede Valley (34.0%).

5. Costing
The total costs for HIV testing, ART initiation and maintenance varied greatly by facility. For example, ART maintenance (defined as 12 months of the standard ART regimen, along with CD4 assessment, HIV viral load monitoring, and creatinine monitoring) per capita, was US$ 2,466.51 for Brandvlei, US$561.02 for Johannesburg, and US$362.35 for Lusaka.

6. Barriers and facilitators
Key barriers to successful UTT implementation were identified as intra-correctional system transfers, constrained resources (human, financial and medical), and some levels of HIV stigma (particularly in South Africa).

Facilitating factors for Zambia included a positive relationship with corrections officials and low levels of stigma. Facilitating factors in South Africa included adoption of UTT policy and a strong inmate demand for HIV/TB healthcare services.

CONCLUSION
The study results indicate that implementation of a UTT/TasP strategy is feasible in correctional settings, and that high rates of virological suppression can be achieved for inmates who remain incarcerated. A major challenge is the lack of coordinating mechanisms to follow participants on ART after they are transferred to another facility or released from detention. This highlights the pressing need to implement strategies that reinforce a coordinated HIV care continuum across all correctional facilities nationally and effective transitional care services upon inmate release.

This study has implications for program implementers and policymakers in Zambia and South Africa, as well as regionally. Extending the national UTT policy in Zambia to include correctional facilities and properly resourcing the South African correctional system to better align written policy with on-the-ground practice will improve access to HIV treatment and care for inmates. Future research needs to develop and evaluate strategies for entry and retention in care along the HIV care continuum—strategies that span the periods of arrest, pre-trial detention, incarceration, transfer, and release.

REFERENCES