

Optimising the delivery cascade for tuberculosis preventive treatment among people living with HIV



A multi-country program evaluation (Opt4TPT)

About Opt4TPT

The Opt4TPT study was a three-year programmatic assessment of TPT delivery in Ethiopia, South Africa, and Zimbabwe.

Legend
Study_sites

name
Ethiopia (KNCV TB Foundation)
South Africa (The Aurum Institute)
Zimbabwe (CHA)
Country Boundaries



The overarching goal of the study was to generate critical knowledge to improve TPT uptake, implementation, and outcomes.

Specifically, the objectives of the study were to:

- Quantify the TPT continuum of care, from treatment initiation to completion—among PLHIV and describe reasons for TPT refusal, discontinuation, and completion, including patient perceptions, adverse events, drug tolerability, incident TB and death
- Identify key system and provider characteristics, including models of care present in a clinic contributing to TPT prescribing, including clinic structures, healthcare workers attitudes, and knowledge of and adherence to local TPT prescribing guidelines.
- Conduct a cost-effectiveness analysis.

How is data being collected?



Patient Level

Prospective cohort study at three health facilities per country among PLHIV ≥ 18 years receiving HIV care either newly initiating OR on long-term ART

- Clinical care and management of patients were provided routinely by health care staff
- Participants followed-up to 24 months post-enrolment into the study (n=2097)
 - Interviews, case note abstractions
 - TB investigations at 12- and 24-months post enrolment
- Adherence monitoring using a digital adherence tool in a subset of participants (n=1500)
- In-depth interviews with a subset of participants based on treatment completion status (n=135)
- Data on costs to patients for adverse events experience
 - Patient incurred costs of adverse events
 - Incremental costs per DALY averted, patient year and TB cases averted due to TPT



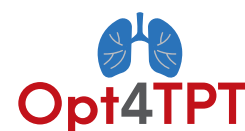
Clinic Level

What are the structures and processes in the delivery of TPT?

- Analyse all steps involved for each patient
 - Recording of patient consultations with healthcare providers (n=150)
 - Review of pharmacy records and interviews with pharmacy managers on drug stock management
 - In-depth interviews with healthcare providers to understand the facilitators and barriers to TPT prescribing

Collaborations

The Opt4TPT Study was building on existing projects and global investments. This includes the Aurum Institute's IMPAACT4TB project, which was aimed at catalysing 3HP initiation among approximately 2 million people, focusing on PLHIV and children under five, and subsequently all those in close contact with TB patients in 12 high-burden countries. Therefore, Opt4TPT was building on the IMPAACT4TB infrastructure to gain deeper insights into patient- and cliniclevel processes, experiences, and preferences for TPT regimens.



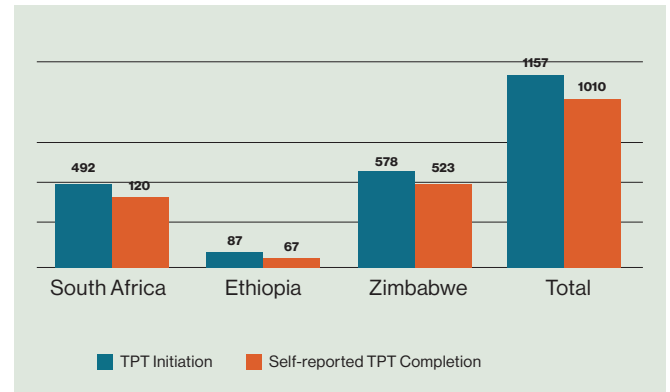
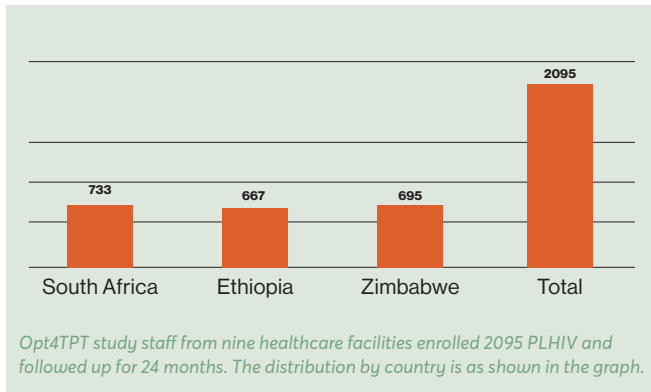
Significance

By following a cohort of PLHIV prospectively and directly observing service delivery in health facilities, Opt4TPT's approach will provide valuable new knowledge regarding routine use of TPT, as well as outcomes during, and following, TPT. This study will create an important understanding of TPT uptake and completion from the patient perspective and delivery from the health system perspective. These results will provide actionable information for improving service delivery and the scale-up of TPT. Data collection was

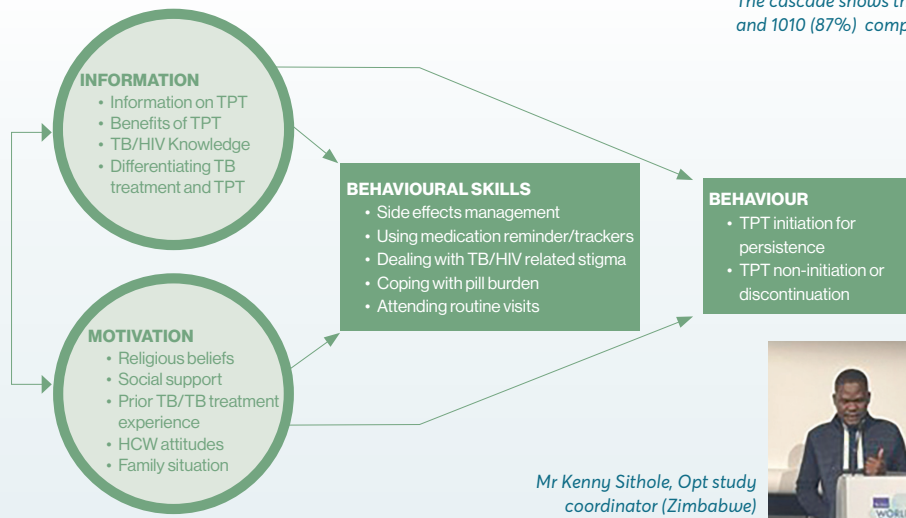
finalised in December 2023. Dissemination is ongoing from March 2023 scheduled and will continue after study closure (June 2024) through the following platforms:

- Partners collaboration (Ministries of Health and implementation partners) – March 2023
- Local Dissemination in Zimbabwe – April 2024
- CQUIN Research Meeting – 16 November 2023
- Local Dissemination in South Africa – May 2024
- Local Dissemination in Ethiopia – May 2024
- Local/regional and international conferences – 2023/2024

Highlights

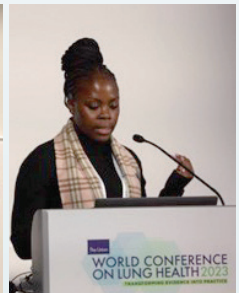


The cascade shows that of the 2095 PLHIVs enrolled, 1157 were initiated on TPT and 1010 (87%) completed



Qualitative findings showed that TPT education and knowledge encouraged TPT initiation and completion. Stigma, pill burden and side effects were some of the reasons cited for refusal to start or discontinuation of TPT

Mr Kenny Sithole, Opt study coordinator (Zimbabwe) presenting on the implementation nuances for TPT programmes to consider for a highly mobile community at the UNION Conference, Paris, France



Dr Lindiwe Tsope presenting the patient qualitative findings on the barriers and facilitators to TB preventive treatment among people living with HIV in three sub-Saharan Africa countries at the UNION conference, Paris, France

Dissemination activities →



Dr Tonderai Mabuto at the CQUIN meeting 16 November 2023, Johannesburg, South Africa



Dissemination of final findings for Zimbabwe in Bulawayo, Zimbabwe on April 10 2024



Dissemination of Opt4TPT South Africa Findings in Midrand on May 13, 2024, South Africa

Name and Surname	Role	Telephone (Office)	Telephone (mobile)	Email address
Prof Violet Chihota	Principal Investigator	(+27) 010 590 1495	(+27) 082 319 1559	VChihota@auruminstitute.org
Dr Lucy Chimoyi	Project Director	(+27) 010 590 1360	(+27) 072 797 6465	LChimoyi@auruminstitute.org
Dr Ahmed Bedru	Country PI (Ethiopia)	(+251) 116 63 01 46	(+251) 911 40 54 05	ahmed.bedru@kncvtbc.org
Ms Nicole Kawaza	Country PI (Zimbabwe)	(+263) 719 742 383	(+263) 774 742 383	nkawaza@clintonhealthaccess.org