



FINAL EVALUATION

OPTIMIZING LATENT TUBERCULOSIS TREATMENT INITIATION IN CAMBODIA AMONG PEOPLE LIVING WITH HIV (OPTICAM)

EVALUATOR: PIERRE-YVES NORVAL
EVALUATION DATES: JULY – NOVEMBER 2023



COUNTRY:
CAMBODIA



BUDGET:
€990,178



LEAD ORGANIZATION:
Institut Pasteur
du Cambodge

PARTNERS:
National Center for
HIV/AIDS, Dermatology
and STD (NCHADS),
Centre National Anti-
tuberculeux (CENAT),
Clinton Health Access
Initiative (CHAI)



START DATE:
01/09/2019

END DATE:
30/05/2024

THE PROJECT

Background

Cambodia has achieved incredible results in its response to tuberculosis (TB). In 2022, the National Tuberculosis Program (NTP) reported 32,865 cases of tuberculosis and 70% treatment coverage, returning to pre-COVID levels. The TB treatment success rate in 2022 was 95.5% while the percentage of TB patients tested for HIV reached 90%. The NTP adopted tuberculosis preventive treatment (TPT) in 2020 for household contacts of TB cases and people living with HIV (PLHIV) on antiretroviral therapy (ART). Despite the progress made, TPT coverage among newly enrolled PLHIV was 32% in 2022 (47% in 2021), well below the United Nations High Level Meeting (UN HLM) targets for 2022. The challenges related to low TPT coverage are addressed in the OPTICAM project.

Project operating model

OPTICAM is an operational research project on TB prevention implemented by the Institut Pasteur du Cambodge (IPC) in partnership with NCHADS (National Center for HIV/AIDS), CENAT (National Anti-Tuberculosis Center) and CHAI (Clinton Health Access Initiative) in eight antiretroviral treatment centers (OI/ART). The project was funded by L'Initiative from September 2019 to May 2024 and aims to increase TPT coverage among PLHIV, through three month short-course treatments combining isoniazid and rifapentine (3HP). The project included a first phase to identify barriers to taking TPT among PLHIV. Phase two started in October 2021 after a delay due to a global shortage of 3HP. Recruitment took less than a year and analysis is ongoing.

OBJECTIVES

Overall objective

The goal of the OPTICAM research project is to improve TB preventive treatment (TPT) coverage among people living with HIV (PLHIV) of 21% before the study intervention to 75% by the end of the project.

Specific objectives

- **SO1:** Identify the barriers at system, health professional and patient levels to the initiation of TB preventive treatment for PLHIV;
- **SO2:** Raise awareness among health workers at OI/ART sites of the latest guidelines on the treatment of latent TB in people living with HIV;
- **SO3:** Evaluate the impact of an intervention combining the use of a shorter regimen, based on weekly doses of isoniazid and rifapentine for three months (3HP) achieved through a secure supply chain and a comprehensive package of capacity building of health personnel and information for PLHIV based on previously identified barriers, compared to the current practice of a six-month regimen based on isoniazid (6H), on TPT coverage among PLHIV attending OI/ART clinics in Cambodia.

EVALUATION RESULTS

Relevance

The objectives of the OPTICAM project are aligned to international priorities and to national priorities in the National TB and HIV/AIDS Strategic Plan. The project's two-phase methodology of analyzing pre- and post-intervention data and the selection of provinces with low TPT coverage were relevant. The collaboration between the IPC, NCHADS and CENAT during the study was impressive. Gaps related to the cost analysis being limited to L'Initiative support, the TPT coverage measure being for all PLHIV rather than those newly enrolled, and the TB diagnostic algorithm for PLHIV not including chest X-ray.

Effectiveness

Effectiveness has been demonstrated through the TPT coverage target among PLHIV being exceeded, achieving 90% compared to the target of 75%. Two posters and an oral presentation were accepted for the Union conferences on barriers to taking TPT. Gaps relate to the lack of TPT coverage expansion among PLHIV, and even a decline, after they stopped being involved in the project in 2022. The lack of analysis and dissemination of project data negatively impacted the TB and HIV programs on TPT among PLHIV, which resulted in a 3HP stockout for one month at the time of the visit.

Efficiency

OPTICAM is co-funded by the Ministry of Health for staffing, infrastructure, X-ray and GeneXpert equipment and TB drugs. The investment in OPTICAM doubled the number of people on TPT in one year, demonstrating the efficiency of the project. Gaps related to the incomplete cost analysis, because without the necessary human resource costs, the long data analysis time reduced the project's efficiency. Although cost-benefit analysis was not included in the study, it would have been useful to assess the number of TB cases averted through TPT prevention and the positive effect of using the shorter 3HP regimen on TB prevention.

Impact

The impact of putting an additional 1,500 PLHIV on TPT in 8 OI/ART clinics during the project made it possible to avoid TB developing and therefore a decrease in TB transmission and incidence. Doubling TPT coverage in one year shows that it is possible to achieve the Global Fund and the Stop TB Partnership goal on TPT among PLHIV. Capacity building tools on TPT among PLHIV have been developed and can be used for TPT among household contacts of TB cases. Gaps relate to the lack of TPT expansion among PLHIV despite strong project results and the decline in collaboration between TB and HIV program managers after the study inclusion period.

Sustainability

Sustainability is limited to the training tools that are still being used. Gaps relate to TPT coverage returning to low pre-project levels as soon as cases were no longer included in the study. TPT expansion did not take place as planned during the project due to decreased engagement of the TB and HIV programs, lack of efforts to support these essential activities through national funding, the TPT coverage indicator for newly enrolled PLHIV (rather than the number) not being used, lack of funding for supervision, lack of good 3HP supply forecasts leading to drug shortages at the time of the evaluation visit, despite low level of activity in 2023.



Conclusions and recommendations

Recommendations made based on the evaluation results:

1. CENAT and NCHADS should:

- ▶ Resume TB-HIV working group meetings through organizing a meeting by the end of 2023 on the increase in TPT among PLHIV.
- ▶ Strengthen the CENAT core team for TPT scale-up.
- ▶ Develop a TPT expansion plan to reach 90% national TPT coverage among newly enrolled PLHIV.
- ▶ Review the diagnostic algorithm for TB among PLHIV through systematic (instead of optional) free chest X-rays, followed by a GeneXpert test to identify asymptomatic TB. To be started up in health centers with digital X-ray equipment.
- ▶ Stop printing X-rays in facilities with digital X-ray equipment and consider other ways of carrying out checks, such as storing .JPEG images in the Cloud.
- ▶ Develop a targeted approach for male PLHIV for TB screening (higher frequency of CXR [chest X-ray] than among women).

2. OPTICAM project partners (IPC, NCHADS, CENAT) must:

- ▶ Prepare and implement at the end of the project an update to the 2020 standards on TB infection and TPT and disseminate OPTICAM results by the end of 2023 in advance of a planned dissemination event in early 2024.
- ▶ Participate in or submit a project for an expansion phase in the next L'Initiative Projects Channel call.
- ▶ Investigate the risk factors for the progression of TB infection to TB, which are more common in men than women (tobacco, alcohol, etc.).

3. L'Initiative and the Regional Health Advisor and French Embassy in Cambodia must:

- ▶ Support TB partners (National TB Program, CSOs, universities etc) to submit TB projects to L'Initiative's annual call for projects on vulnerable populations and health systems strengthening, through clarifying L'Initiative's priorities and expectations.

4. The Global Fund should align its TPT indicators with WHO indicators on:

- ▶ TPT coverage among newly enrolled PLHIV (rather than all existing and new PLHIV in care).
- ▶ TPT coverage among household contacts aged under or over five, instead of raw numbers.

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