

KOMPUTIKA

December 2024
Issue 4

NEWSLETTER

Project Celik TB: A Digital Innovation Initiative for Tuberculosis Care and Management

INSIDE

—

TAG

[Community Engagement [Digital Innovation] [B40] [Orang Asli]

—

AFFILIATION

Department of Information Systems,
Faculty of Computer Science & Information Technology, Universiti Malaya

Faculty of Medicine,
Universiti Malaya



Train the Trainers Session

EDITED BY

Raja Jamilah Raja Yusof
Mohd Shahrul Nizam
Mohd Danuri

Project Celik TB: Improving Knowledge, Awareness and Practice among the Underserved Communities in Malaysia

— By Vimala Balakrishnan, Tiong Chiong Kian, Thayananth Kumaresan, Tan Jin Khye and Nicholas Ng Jian Shen

Project Celik TB is a long-term initiative spearheaded by a dedicated group of members committed to enhancing Tuberculosis (TB) patient care and management in Malaysia. TB continues to pose a substantial global health challenge, and the incidence of TB in Malaysia has shown an alarming upward trend in recent years. A critical issue identified in TB management is the remarkably low TB literacy among affected individuals, particularly those from marginalized communities such as the low-income group (B40), immigrants, and indigenous people (Orang Asli). Scholars and domain

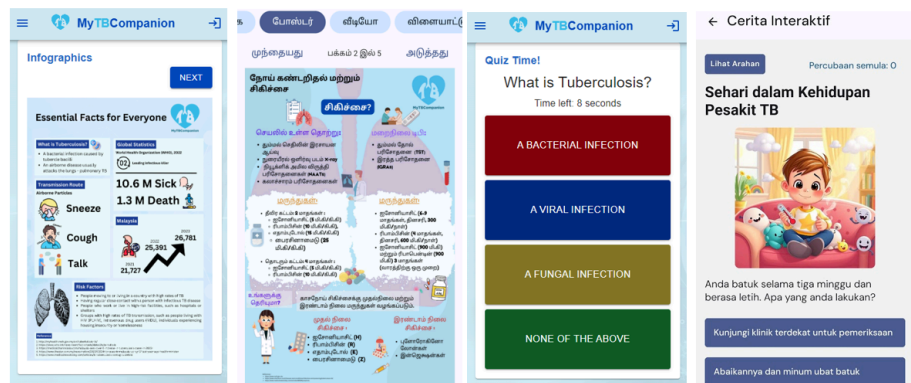
experts emphasize the urgency of improving Knowledge, Attitude, and Practice (KAP) within these communities, given the escalating cases and mortality rates. To address this pressing need, Project Celik TB was initiated specifically to improve knowledge and awareness about TB among the underserved communities. This is a community engagement project supported by the American Embassy in Malaysia.



Project Celik TB Team Members

MyTBCompanion

We aim to train peer influencers and improve KAP among the B40 and Orang Asli communities in Malaysia through the development and implementation of MyTBCompanion – a mobile app that supports Video Observed Therapy (VOT), tele-consultation etc. Modules specifically created to improve knowledge and awareness are educational materials in the form of brief videos, infographics as well as games. MyTBCompanion is available in four languages (i.e., Malay, English, Mandarin and Tamil). It is also supported through a web-version. We believe that the use of a digital platform such as MyTBCompanion will significantly enhance KAP among TB patients, caregivers, and the public in the marginalized communities. By empowering individuals through education, we aim to contribute to the reduction of TB incidence and mortality rates in Malaysia.



Games and educational materials in multiple languages

Train the Trainer Programme

As part of our initiative, we proposed to conduct piloting and train the trainer sessions in order to train individuals who are interested in becoming peer influencers. Pilot study was conducted in October 2024 with 23 people in attendance. The goal of this study was to gather feedback on the educational materials and games developed. Surveys and talk-out aloud methods were used. Feedback was then consolidated and refinements made accordingly.



Pilot Test

A training of trainer (TOT) session was conducted on December 8, 2024 at the Faculty of Computer Science and Information Technology, Universiti Malaya. A total of 59 individuals participated, including nine trainers and 47 participants representing diverse socioeconomic groups, with 31 participants from the B40 category, 17 from M40, and 11 from T20. The participants were grouped into control versus intervention. This was deemed necessary to assess if their KAP improved after using MyTBCompanion.

The session began with a talk by Dr. Wong Chee Kuan, a consultant respiratory physician and the Head of the Respiratory Medicine Unit in the Department of Medicine at Universiti Malaya Medical Centre. The session offered an in-depth exploration of several respiratory conditions, including asthma, chronic obstructive pulmonary disease (COPD), pneumonia, and TB, among others. This was then followed by Explorace, where participants competed to solve respiratory diseases related puzzles.

Following the engaging Explorace session, participants reconvened for a pre-test survey to assess their baseline understanding of TB. Subsequently, the MyTBCompanion web system was demonstrated to the intervention group to showcase the educational materials such as infographics, videos, FAQs, and interactive games like word search, quizzes, interactive stories, and fill-in-the-blanks.



Explore

After the introduction to MyTBCompanion, participants were granted time to navigate the website and explore its functionalities. Trainers facilitated group breakout sessions, providing personalized assistance to participants. These trainers addressed technical issues, answered queries, and demonstrated how to utilize the platform effectively.



Group Breakout Sessions with Trainers

Currently, the participants are journaling their activities as part of the data collection procedure. They are required to perform tasks that includes viewing the videos and playing games on a weekly basis, and to document these activities. At the of the 4th week, they will be required to answer the post-test survey. Both the pre- and post-test data will be analyzed to ascertain if participants' KAP improves with the use of the materials supported in MyTBCompanion.

Our up-coming activity is tentatively scheduled to be held in February/March 2025, targeting the B40 community. This is to be replicated among the Orang Asli community in May 2025.