

## Development of a Mobile Image-Based Reminder Application to Support Tuberculosis Treatment in Africa

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**Abstract :** This paper presents the design, development and evaluation of an application prototype developed to support tuberculosis (TB) patients' treatment adherence. The system makes use of graphics and voice reminders as opposed to text messaging to encourage patients to follow their medication routine. To evaluate the effect of the prototype applications, participants were given mobile phones on which the reminder system was installed. Thirty-eight people, including TB health workers and patients from Zanzibar, Tanzania, participated in the evaluation exercises. The results indicate that the participants found the mobile graphic-based application is useful to support TB treatment. All participants understood and interpreted the intended meaning of every image correctly. The study findings revealed that the use of a mobile visual-based application may have potential benefit to support TB patients (both literate and illiterate) in their treatment processes.

**Keywords :** ICT4D, mobile technology, tuberculosis, visual-based reminder

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