

## **A Literature Review: The Overview of the Use of Health Information Technology in Pulmonary Tuberculosis Patients**

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### **ABSTRACT**

**The Backgrounds:** Long treatment for tuberculosis, which is 6 months, often makes patients feel bored and forgets to take medicine and causes non-compliance. The development of increasingly high use of smartphones, along with the use of information technology in health, especially for tuberculosis patients, makes many things accessible to patients. By using smartphones, the patients can access the MHealth application, DCC (Drugs Consumption Calendar), SMS gateway, voice calls, and video calls which provide health information and care for tuberculosis patients. It also can make patients obedient to taking medication to increase the TB cure rate. **The Objectives:** To describe the use of health information technology in pulmonary tuberculosis patients.

**The Methods:** The design of this study used a literature review of five articles from the PubMed database and Google Scholar. The instrument critical appraisal in this research used Strobe.

**The Results:** There were 791 tuberculosis patients (76%) who used information technology in the form of mobile phones. The types of information used included Short Message Service (SMS) (31% or 246 patients), using the telephone (17.4% or 221 tuberculosis patients), and using video calls (25, 1% or 199 patients). The health information, generally, were a schedule for taking medication and control, reminder to take medication, reporting if there were side effects that occur during treatment, prevention, transmission, food, and patient diet and counseling.

**The Conclusions:** The use of health information technology is very helpful in the treatment of TB patients starting from text messages, video calls, and voice calls to improve medication adherence in tuberculosis patients.

**Keywords:** Mobile Health App, SMS, Tuberculosis, Information Technology, Video Call