ABSTRACT

Background: An assessment of the Tuberculosis (TB) surveillance system in May 2015 found unsatisfactory data quality with mismatched or incomplete data entry. There was a need to validate the data reported by health facilities staff. Simple Web was a software developed to help the collection, reporting and validation of data on TB patients seen in health centers and hospitals. The software was secure and easy to operate. The purpose of this study was to evaluate the impact of Simple Web application on the quality of tuberculosis surveillance systems and develop application to enhance the data security.

Methods: This research was conducted with two activities, that undertake evaluation of impact of Simple Web with prospective observational design and development of a system application Simple Web to enhance the data security using the research and development. Data was collected by self-administered questionnaire by TB officers to determine system quality, service quality, use and user satisfaction.

Results: The development of application system Simple Web was known to have a tendency post-test result increased on all aspects of good ratings: service quality, system quality, use and user satisfaction. In addition, the flexibility of the TB surveillance system was measured to be more flexible because the Simple Web was able to overcome the existing problems by not requiring increased time, cost and labor, and also the development of Simple Web was also able to improve the timeliness of TB surveillance. Development of Simple Web using data security was known as many as 86.67% of the officers did not concern the security of data.

Conclusions: Simple Web is a helpful tool for increasing the validity or accuracy of TB surveillance data. Its use should be expanded to other districts.

Keywords: Surveillance, Computer software, Data accuracy