

Abstract

Tuberculosis (TB) was one of the most critical infectious diseases in the world and continued to be one of the most important health challenges, especially in developing countries such as Indonesia. It was critical to develop diagnostic tools to improve early detection and reduce the rate of transmission. This study aimed to assess the market acceptability of a Loop-Mediated Isothermal Amplification (LAMP)-based rapid tuberculosis detection kit in the Jabodetabek healthcare market in Indonesia. The research was conducted using quantitative research methods by distributing structured questionnaires to 250 respondents, including healthcare practitioners and members of the general public in Indonesia. The study assessed the critical factors influencing market acceptability, including accessibility, affordability, perceived healthcare needs, and trust in healthcare regulations, while also examining the moderating effect of BPJS health insurance on market acceptability. Partial Least Squares Structural Equation Modeling (PLS-SEM) was utilized to evaluate the relationships among these variables and the market acceptance of the proposed diagnostic technology. The study also considered the supply-side perspective of healthcare practitioners to obtain a comprehensive understanding of the critical factors affecting market acceptability in Indonesia's healthcare market, particularly in the context of tuberculosis diagnostic tools.

Keywords: Tuberculosis diagnostics, Market acceptance, Loop-Mediated Isothermal Amplification (LAMP), Healthcare technology adoption