

ABSTRACT

Background: The quality of health service and medication safety is a major point in in developing countries. As one with the approximate population of 250 million, Indonesia depends heavily on its primary health centers (known as *Puskesmas*). Health centers are currently facing challenges to guarantee their safety performance and reliability.

Aim: Improving medication safety of prescription services with the characteristic of High Reliability Organization (HRO).

Research Design: The explanatory research was carried out at 40 health center in Surabaya. Research variables: mindful leadership, safety culture, safety mindfulness, and medication safety on prescription services, with the output/outcome catering for received drug conformation with its pre-requirements as well as patient understanding conformation with the received medicine information. The HRO characteristic data was obtained through surveys from the heads of health centers and pharmaceutical staff, while the data of medication safety toward the prescription services was obtained through direct observation from prescription received process to the drug dispensed process. The data of patient understanding consists of elderly and toddler caregiver patients, gained from the interview about received drug information. Later, the data is descriptively analyzed using Pareto principles and inferential statistics analysis through PLS SEM v 3.0.

Result and Conclusion: The descriptive analysis result shows that the variable of inspection in pharmaceutics-clinic, appropriateness in the received drug and the oral medicine information reaches the strongest point, gaining over 80% of Pareto principles, while the variable that displays the weakest is written medicine information (47.0%). The PLS SEM analysis result finds the influence on mindful leadership, safety culture, inspection of drug administration's comprehension, compounding and dispensing toward the output/outcome of medication safety in prescription service. Safety culture belongs to the intervening variable that bridges firm leadership and inspection of prescription administration's comprehension, compounding and dispensing. It is also discovered that oral medicine information partially mediates the influence in giving written drug instructions toward patient understanding on the medicine they received. The conclusion is drawn upon the medication safety model in prescription service that is based on HRO characteristics, summing for the influence in mindful leadership, safety culture, inspection of drug prescription-compounding and dispensing comprehension, oral and written medicine information, and the influence of conformance inspection in pharmaceutics-clinic toward the suitable received medicine.

Keywords: High Reliability Organization (HRO), health center, medication safety model.