

ABSTRACT

Determinant Factor Social Demographical and Disease MDR- TB in Surabaya

Tuberculosis (TB) was still one of main global health issues. Rapid growth of people with TB numbers had become global great concern. Based on report published by Indonesian Ministry of Health (2011), Indonesia was the fifth country with highest TB case in the world. It was estimated that the rate of MDR-TB in Indonesia was 2% of new TB case. In Indonesia, the number of treated MDR-TB cases was significantly increasing. The increases was varied on each province. Therefore, the research question proposed in this study was how to determine the index of Multi-drug resistance Tuberculosis (MDR-TB) risk in Surabaya and this research was intended to formulate the index of MDR-TB risk in Surabaya.

The analytical observational research which applied Cross Sectional method on secondary data was conducted in Surabaya on May and June 2014. The population of this research was all of MDR-TB suspected patients and the samples of this research were MDR-TB suspected patients in Surabaya consisting of 123 patients. The data were measured and analyzed using SPSS program, particularly bivariate analysis test and multivariate analysis test.

The findings of this research indicated that MDR-TB risk was significantly affected by some social and demographical characteristics such as: age ($p = 0.047$, 95% CI = 1.011 – 4.451), sex ($p = 0.00$, 95% CI = 0.118 – 0.549), profession ($p = 0.0011$, 95% CI = 0.179 – 0.798), social history of the patients ($p = 0.035$, 95% CI = 1.059 - 4.960), secondary illnesses ($p = 0.034$, 95% CI = 1.076 – 6.658), medication helpers (including families) ($p = 0.033$, 95% CI = 0.121 – 0.768), and accessibility to treatment centers ($p = 0.040$, 95% CI = 1.035 – 4.000). Therefore, the index of MDR-TB risk can be formulated as: $[-1.851 - 3.276 \times \text{sex} + 2.511 \times \text{age category} - 1.203 \times \text{working} - 1.858 \times \text{medication helpers} + 1.78 \times \text{secondary illnesses} + 3.673 \times \text{social history} + 1.412 \times \text{BCG Scar} + 1.43 \times \text{accessibility to the treatment centers}]$.

It can be concluded that the risk of MDR-TB was determined by sex, age category, profession, medication helpers, social history, secondary illnesses, BCG scar, and accessibility to health centers. Health Agency of Surabaya Government should be able to implement MDR-TB index in preventing MDR-TB.

Keywords: *MDR-TB, MDR-TB risk index*