ABSTRACT

Analysis of Factors Related to Tuberculosis Incidence in Children of Mataram City, West Nusa Tenggara Province

Tuberculosis (TB) is a global emergency for humanity. Case Detection Rate (CDR) in Mataram had not reached the target of > 70% in 2012 which was 38.4%. CDR range in the last five years varied from 35,1% to 40,2%. This has become one of the risk factors of TB cases in children, because there were many cases of undiscovered adults with positive TB smear. The proportion of childhood TB in Mataram has increased. Severe TB cases in children are still found, so that TB is still becoming a health problem for children in Mataram city. The purpose of this study was to determine factors related to TB incidence in children of Mataram. The method of the study was an analytical observational with case control study design. The subjects of the study were children aged 0-14 years diagnosed with TB in Mataram city. The total numbers of sample were 135, which consist of 45 cases and 90 controls. The cases were taken from children patients of TB registered of Health District Office in Mataram City, while the controls were taken from the surrounding neighbors of TB patients. The data were collected through interviews and observations. The data analyses were done by means of descriptive analysis, bivariate analysis (chi-squares) and logistic regression multivariate analysis. The results of multivariate analysis indicated factors related to the TB incidence were: children’s home occupancy density (OR 4,491), children nutritional status (OR 5,746), and proximity to adult TB contacts (OR 101,903). Recomendation advised to activities in reducing the risk of contact proximity with adult TB patients, family nutrition improvement by giving nutritional supplements, as well as the improvement of the physical environment of TB patients’ dense houses.

Keywords: proximity, tuberculosis (TB), children, nutritional status, home occupancy density