

RISK FACTORS OF ADVERSE EVENT FOLLOWING IMMUNIZATION MEASLES RUBELLA (MR) IN EAST JAVA PROVINCE

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ABSTRACT

Background: Measles and rubella (MR) can cause morbidity and mortality. The Government's action to reduced incidence of these diseases are did MR immunization program. Decreased coverage of MR immunization could increase incidence of measles and rubella. One thing that can reduce immunization coverage is people's fear about adverse events following immunization (AEFI).

Objective: To identify the risk factor of serious MR AEFI in East Java Province.

Methods: A case control study was conducted on children that received MR immunization who met the inclusion criteria. Data were collected and processed on 6 months started from November 2020. Serious AEFI causes a person to be hospitalized, experience disability, die or cause social problem. The risk factors for age, gender, nutritional status, mode of birth, infant gestation, history of allergy, immunization healthworkers maternal education, maternal knowledge, parental income and occupancy density for serious AEFI were analyzed by logistic regression.

Results: From total sample of 143 subjects, there were 43 subjects with serious MR AEFI. Ages 1-5 years dominate the serious MR AEFI, namely 88.3%. Among all the risk factors analyzed, history of allergy and low maternal education had higher risk of 3.67 times (95% CI: 1.25-11.11) and 6.99 times (95% CI: 2.21-12.22) respectively for the onset of serious MR AEFI than subjects who did not have history of allergy and high maternal education. Meanwhile, other risk factors did not have any significant association.

Conclusion: History of allergy and low maternal education were risk factors associated with onset of serious MR AEFI in children.

Keywords: MR AEFI, risk factor, children, East Java Province