

RELATIONSHIP BETWEEN MOTHER AND FAMILY FACTORS TO THE INCIDENCE OF ACUTE RESPIRATORY TRACT INFECTION (ARI) IN UNDER-FIVES AGED 1-5 YEARS AT PANEI TONGAH HEALTH CENTER SIMALUNG DISTRICT

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Abstract

The problem in this study is the relationship between maternal factors and family factors on the incidence of acute respiratory infection (ARI) in toddlers aged 1-5 years at the Panci Tongah Health Center, Simalungun Regency. This study aims to determine the relationship between maternal factors and family factors on the incidence of respiratory infections. Acute Respiratory Tract Infection (ARI) in Toddlers Aged 1-5 Years at the Panei Tongah Health Center, Simalungun Regency This type of research is an analytic survey study with a cross sectional approach. The population in this study were mothers who had toddlers aged 1-5 years who visited the Panet Tongah Health Center, Simalungun Regency, with a total of 34 people. Saturated Sampling The instrument used in this study was a questionnaire. The data obtained in the study were processed using the Chi Square statistical test with a 0.05. The results showed that the p values of the several factors studied were as follows 1) mother's age p value = 0.319, 2) mother's education p value = 0.356, 3). mother's knowledge p value = 0.001; 4) smoking habits in the house p value - 0.007; 5) use of mosquito coils while sleeping p value = 0.009, 6). use of cooking fuel with firewood p value = 0.029. The results of the research and discussion concluded that there was a significant relationship between the relationship between maternal factors and family factors on the incidence of acute respiratory infection (ARI) in toddlers aged 1-5 years at the Panei Tongah Health Center.

Keywords: Toddlers Age 1-5 years, Family Factors and Mother Factors

INTRODUCTION

Acute Respiratory Infection (ARI) which attacks one or more parts of the respiratory tract from the nose to the alveoli including adnexal tissues such as sinuses, middle ear cavities and pleura (Depkes RI, 2012)

In the world every year it is estimated that more than 2 million toddlers die from pneumonia (1 toddler 20 seconds) out of 9 total toddler deaths. Among 5 under five deaths, 1 of them is caused by pneumonia. In 2000, 2 million under five child deaths were caused by ARI (UNICEF 2001). In developing countries pneumonia accounts for 25% of child deaths, especially in infants aged less than 2 months, 60% of pneumonia cases are caused by bacteria, while in developed countries it is generally caused by viruses (Ministry of Health RI, 2009)

The level of morbidity in a country can reflect the situation of the degree of public health in it. ISPA is a disease that ranks top in the 10 most common diseases in outpatients at hospitals in 2006, with a percentage of 9.23% ISPA is the cause of death in the infant and toddler group A mortality survey conducted by the ISPA sub-directorate in 2005 placed pneumonia as the cause of death the largest infant in Indonesia with a percentage of 22.30% of all infant deaths and 23% of all under-five deaths (Depkes RI, 2008).

The incidence of death in the community can provide an overview of the development of community health degrees or can be used as an indicator in assessing the

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success of health services and other health development programs. Seizures and infectious diseases The under-five mortality rate describes the probability of k dying in the phase between birth and before the age of 5 years. Based on the results of the 2012 Indonesian Demographic and Health Survey (SDK) tab, it was found that the under-five mortality rate (AKABA) in North Sumatra was 54/1,000 live births (North Sumatra Health Office, 2012)

Simalungun Regency has 31 Districts and 34 Health Centers. The preliminary survey that the researchers carried out by looking at data from the ISPA community health center, out of 34 health centers, the Panei Tongah health center was the first place in the list of ISPA cases. It can be seen in the incidence of ISPA in 2014 as many as 1019 and experienced an increase in 2015 as many as 1650 (Simalungun District Health Office, 2015)

According to Blum (1981) quoted by the Indonesian Ministry of Health (1993), the degree of public health is influenced by four factors, namely environmental factors, community behavior factors, health service factors and genetic factors (Santoso and Ranti, 2009). The causes of ARI include viruses, bacteria and rickettsiae as well as air pollution. Factors from the host that can increase the susceptibility of ARI include maternal factors (age, education, knowledge), family factors (smoking habits, use of firewood, opening windows, use of mosquito coils).

Based on the background description above, the researcher wants to examine the relationship between maternal factors and family factors on the incidence of acute respiratory infection (ARI) in toddlers aged 1-5 years at the Panci Tongah Health Center, Simalungun Regency, in 2019.

Formulation of the problem

Based on the description of the background of the problem above, the researchers formulated the problem in this study, namely the relationship between maternal factors and family factors towards the incidence of acute respiratory infection (ARI) in toddlers aged 1-5 years at the Panei Tongah Health Center, Simalungun Regency, in 2019?.

METHODS

Research design

This research method is a quantitative analytic, with an observational design through a cross-sectional approach in which the independent and dependent variables are asked at the same time to respondents in the working area of the Panei Tongah Health Center, Simalungun Regency (Notoadmodjo, 2012)

Place and time

Research Place

The location of this research will be carried out in the working area of the Panci Tongah Public Health Center, Simalungun Regency

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Research time

The research was conducted in August 2019.

Bivariate Analysis

Bivariate analysis is to see the relationship between the independent (independent) variables between the dependent (dependent) variables which is carried out by testing the chi-square statistic with a 95% degree of confidence ($\alpha = 0.05\%$) From the chi-square statistics, the p value is H_0 if the p value is 0.05 then the hypothesis fails to be rejected, meaning that there is a relationship between the independent variable and the dependent variable. If the p value is > 0.05 then the hypothesis is rejected meaning there is no relationship between the independent variable and the dependent variable.

RESULTS AND DISCUSSION

Contents Results and Discussion

Mother Factor

The mother factor studied in this study was Knowledge where there were 47% of children under five suffering from ARI in the group of mothers with less knowledge. The results of the analysis show that there is a significant relationship between mother's knowledge and the incidence of ARI in toddlers aged 1-5 years, this is in line with research conducted by Supraptini (2007) which states that there is a relationship between knowledge and the incidence of ARI. Knowledge or cognitive is a very important domain in shaping one's actions (Overt Behavior) (Notoadmotjo, 2004)

This study shows that there is a relationship between mother's knowledge and the incidence of ARI in toddlers aged 1-5 years at the Panei Tongah Health Center, Simalungun Regency. Knowledge has a major contribution to the incidence of ARI in infants. Knowledge is not only obtained from formal education but also from non-formal Non-formal education that can be carried out to address public health problems, especially in the case of ISPA in toddlers, is health education through health promotion and health counseling (Soetjiningsih, 2012)

Family Factor

The family factors examined in this study are behaviors that can be a risk for the occurrence of ARI in toddlers aged 1-5 years. Family behavior that needs special attention includes smoking habits in the house, using mosquito coils and cooking fuel. Mosquito coils, 44.1% of children aged 1-5 years are affected by ARI and family behavior using cooking fuel, 35.3% of children aged 15 years are exposed to ARI. The results of the analysis show that there is a significant relationship between family behavior and the incidence of ARI in toddlers aged 1-5 years.

The results of observations at the research site show that there are still many families who have the habit of smoking inside the house, almost all people who live in the working area

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where the research is conducted use cooking fuel from wood fires and kerosene stoves, and there are still many families who use mosquito repellents while sleeping. , so that it can be predicted that the air quality in the house does not meet the standards even though air quality is not measured, smoking is the main source of indoor air pollution, because it contains CO, NO, and various other gases and particles that can cause respiratory tract infections, especially in toddlers. Cigarette chemicals are irritating to the mucous membranes of the mouth, nose, pharynx and bronchial trachea (Yuliarti, 2008).

CLOSING

Conclusion

Based on the results of research and discussion of the relationship between maternal factors and family factors on the incidence of acute respiratory infections (ARI) in toddlers aged 1-5 years at the Pane Tongah Health Center, Sumalungun Regency, in 2019, it can be concluded as follows:

1. The relationship between maternal factors and the incidence of acute respiratory infections (ARI) in toddlers 1-5 years at the Pane Tongah Health Center in Simalungun Regency is:
 - Toddlers with positive ARI are 29.4% with mothers aged <20 years and 29.4% with mothers aged 20 years. The results of the analysis show that there is no relationship between mother's age and the incidence of ARI in toddlers aged 1-5 years, there is a chi-square test result of $0.319 > 0.05$
 - Toddlers with positive ISPA are 35.3% with mothers with elementary school education, 11.8% with mothers with junior high school education. and 5.9% with mothers with high school education and PT. The results of the analysis show that there is no relationship between maternal education and the incidence of ARI in toddlers aged 1-5 years. There is a chi-square test result of $0.356 > 0.05$
 - Toddlers with positive ARI were 47% with mothers who had less knowledge and 11.8% with mothers who had good knowledge. The results of the analysis showed that there was a relationship between maternal knowledge and the incidence of ARI in toddlers aged 1-5 years. There was a chi-square test result of $0.001 < 0.05$
2. The relationship between family factors and the incidence of acute respiratory infection (ARI) in toddlers 1-5 years at the Pane Tongah Health Center, Simalungun district is: Toddlers with positive ISPA are 58.8% with families who have smoking habits in the house and 0% with families who don't. have a habit of smoking in the house.

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