

Relationship Family Health Behavior with The Frequency of Occurrence of Children Upper Respiratory Tract Infections In Puskesmas Banyu Urip Surabaya

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ABSTRACT

Upper Respiratory Tract Infection (URTI) is the most common deadly disease of children in Indonesia. The disease is still underestimated by some families and still consider as harmless disease, so that it may suffered by the children repeatedly. Most parents do not understand that this disease can cause more dangerous diseases if not immediately handled, especially when the immune system is in bad condition. The purpose of this study was to determine the relationship between family health behavior with the incidence of URI of toddlers. The type of this research was analytic observational with cross sectional approach. The population was 53 mothers with sick and healthy toddlers who visited the Puskesmas Banyu Urip Surabaya. The sample was 47 respondents which taken by simple random sampling. Independent variable was family health behavior while dependent variable was incident of URTI. Instruments were questionnaire and interview sheet. The data analyzed by Mann-Whitney test with significance level $\alpha = 0,05$. The result showed that most of the respondents (61,7%) had positive behavior and most of them (59,6%) rarely suffered URTI, whereas almost half (40,4%) of respondents had children often suffered URI. Mann-Whitney test analysis results show that $\rho = 0.008 < 0.05$ then H_0 was rejected means there was relationship of family health behavior with the incidence of URTI at infants at Puskesmas Banyu Urip Surabaya.

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I. Introduction

Cough, runny nose and fever is a form of acute respiratory infection that most often affects children under five. URTI is an inflammatory process caused by viral, bacterial, atypical (mycoplasma) or a foreign substance that involves any or all parts of the respiratory tract (Wong, 2003). The disease is still underestimated by several families and harmless, so can the child repeatedly. Most parents do not understand that this disease can cause more severe illness if not handled, especially when the immune system lower. According to the concept Laurence Green, a person or public health is influenced by two principal factors, namely behavioral factors (behavior cause) and factors beyond the behavioral (non-behavior cause). Behavioral factors include factors predisposition (knowledge, attitude, confidence, trust,

In Indonesia, Upper Respiratory Tract Infection (URTI) always ranks first cause of death in infants and toddlers group. In addition URTI often on the list of 10 diseases in hospitals. Mortality



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survey conducted by the Sub-Directorate URTI 2005 put URTI or pneumonia as the biggest cause of infant mortality in Indonesia with a percentage of 22.30% of all under-five mortality (Misnadiarly, 2008). Acute respiratory infections (URTI) are still a major health problem in Indonesia. The prevalence of URTI in Indonesia in 2013 was 25.0% is not much different than the prevalence in 2007 was 25.5%. The highest prevalence of URTI that occurred in the age group 1-4 years 25.8% and <1 year by 22.0% (Riskseddas, 2013). URTI resulted in approximately 20% -30% of deaths in children under five (Depkes RI in Harahap, 2010). Of all cases occurring in the community, 7-13% of cases of severe and require hospitalization. Cough and cold episodes in infants suffering from acute respiratory infection in Indonesia is estimated at 3 to 6 times per year, meaning an average toddler had an attack of cough and cold as much as 3 to 6 times per year. By 78% children who visit health care is caused by URTI (WHO, 2012).

Behavior in the prevention and control of respiratory disease in infants is more effectively done by the family either done by the mother or family who live in one house. Family influences the emergence of the disease in the house. When one of the families suffered from health problems which are contagious it will affect other family members. The existence of family members affected by URTI transmitted to others through breathing air or sputter. In principle URTI germs in the air inhaled by the new host and into the respiratory tract.

Based on the results of preliminary studies conducted in Puskesmas Banyu Urip Surabaya in 1593 the results obtained in the first case last year (December 2016 to November 2017). Found URTI 687 cases (43%), cases of cough and cold as much as 366 cases (23%), Febris 144 cases (9%), diarrhea as many as 120 cases (8%), Typhoid 147 cases (9%) and Immunization by 129 (8%). Based on interviews with 10 family members who have children aged 1-5 years and obtained the results as much as 5 infants (50%) experienced URTI 4 times within the last 1 year, while three infants (30%) had URTI 2 times in 1 year Last, while the 2 toddlers (20%) experienced URTI 1 times in the last 1 year. Based on the above researchers interested in researching on "Relations with the Family Health Behavior Frequency URTI incidence in infants at Puskesmas Banyu Urip Surabaya".

II. Method

This research is an observational analytic research, population in this study is a mother and a toddler who visited Surabaya Banyu Urip health centers by 53 parents with a sample size of 47 respondents taken by probability sampling technique used simple random sampling. The instrument used in this study is a questionnaire designed by the researchers of theories related to family health behaviors and URTI in infants with interviews. Independent vURTIables in this research is family health behaviors, health behaviors applied to a family consisting of : Health maintenance behavior, which includes: The behavior of disease prevention, health promotion behavior and behavior of nutrition (food and drink). Dependent VURTIable Frequency of URTI i.e. children aged 1-5 years old affected by ISPA for the last 1 year commencing from the month of December 2016 until November 2017 with no regard to the criteria of the ISPA (mild, moderate and severe).

III. Results and Discussion

a. Family Health Behavior

table 1 The frequency distribution of respondents by Family Health Behavior in Puskesmas Banyu Urip Surabaya 2018

Family Health Behavior	Frequency	Percentage (%)
Positive behavior	29	61.7

Negative behavior	18	38.3
total	47	100.0

Source: Primary Data, July 2017

Based on Table 5.3 shows the majority (61.7%) 29 respondents have positive attitude.

1. Characteristics of respondents by URTI

table 2 URTI occurrence frequency distribution in the past year at Puskesmas Banyu Urip Surabaya 2018

URTI	Frequency	Percentage (%)
Rarely	28	59.6
Often	19	40.4
	47	100.0

Source: Primary Data, July 2017

According to the table 5.4 shows the majority (59.6%) of 28 respondents rarely experienced URTI in the past year.

2. Family health behaviors relationship with URTI in Toddlers at Puskesmas Banyu Urip Surabaya 2018

table 3. URTI occurrence frequency distribution in the past year at Puskesmas Banyu Urip Surabaya 2018

frequency URTI	URTI				Total	
	Rarely		Often		N	(%)
	N	(%)	N	(%)	N	(%)
Positive behavior	19	65.5	10	34.5	29	61.7
Negative behavior	9	50.0	9	50.0	18	38.3
Total	28	59.6	19	40.4	47	100

Source: Primary Data, July 2017

In the above table shows that out of 47 respondents obtained 29 respondents behave positively, the majority of respondents 19 (65.5%) rarely experience ISPA status and nearly half of 10 (34.5%) status is often affected by ISPA. While 18 respondents behave negatively in get half 9 (50.0%) of respondents rarely affected the status of ISPA, the other half 9 (50.0%) status is often affected by ISPA. From the statistical test Mann Whitney using SPSS 20 for windows with the level obtained $p \alpha = 0.05$ (0.008) $< \alpha$ (0.05) means that H_0 is rejected so that there is a significant relationship between health behaviors of families with URTI in infants at Puskesmas Banyu Urip Surabaya.

IV. DISCUSSION

a. Family Health Behavior

Based on the results of 47 respondents showed the majority (61.7%) positive attitude. Good behavior can prevent and provide first aid in children under five suffering from ARDS and reduce the incidence of URTI back. The forms of family behavior that can prevent the toddler from ISPA for example by avoiding themselves from patients with respiratory infection, avoid the smoke, dust and other material that interferes with breathing, clean URTI houses and neighborhoods, cover mouth and nose when coughing and spitting (MOH, 2008). This is in accordance with the questioner No. 11 on parents encourage other family members to cover your mouth when sneezing and coughing, the majority (59.5%) families have already done so. Families should always maintain a positive attitude, shut your mouth when sneezing is a must. The goal, is to prevent germs from the mouth did not spread everywhere, so toddlers avoid more severe conditions.

Recapitulation charging questioner number 2 shows the majority (70.2%) of respondents were able to take advantage of health services around the neighborhood. So that ISPA can be dealt with appropriately before getting worse and other complications appear. Moreover according to the results of recapitulation filling questioner number 13 earned the majority (53.1%) of respondents to apply the prevention of infection by avoiding toddler ISPA from others affected by ISPA. Many families who understand and know how to prevent transmission such as not allowing family members smoke near infants, toddlers avoid exposure to smoke and dust. While the results of recapitulation filling questioner no. 15 found nearly half (40, 4%) is still negative behavior, the family rarely wash hands when touching a toddler. Banyu Urip health centers in the area of Surabaya has a lot of posters and information about the importance of hand washing as a form of prevention of the spread of bacteria mapun virus. In this research, many respondents do not wash their hands before touching moment toddlers. This suggests that the behavior of washing hands before touching the toddler has not become their habit. It is very dangerous because the hand is the intermediary portal of entry into the body either directly or indirectly with an object such as through money, balls, spoons, plates, books that can cause vURTIOUS diseases such as respiratory infection. In accordance with the opinion of MOH (2008), that hand washing is the process of removing dirt and dust mechanically leather memeakai both hands with soap and water. The purpose of washing hands is one element for the prevention of infection in this study menunjukka that respondents are still many who do not understand the purpose mencucitangan before touching infants, the benefits of washing their hands and how to wash hands properly.

b. The frequency of URTI incidence in infants

Based on the results of 47 respondents showed the majority (59.6%) rarely experience URTI during the past year. There are several factors that affect children affected by URTI one of which is a factor of age, from 47 respondents who have children with URTI majority (74.5%) of them children aged between 1-3 years. Age is one factor of children susceptible to infectious diseases such as respiratory infection. The younger the child the higher the degree of pain the child this is due to the low immune system of children. This is in accordance with the opinion Domili (2013) of children aged 1-3 years more experience due to the ISPA immune system is still weak child and infant respiratory organs child has not reached perfect ripeness, so that when exposed to the bacteria will be more at risk of developing the disease.

In general there is no difference in the incidence of acute respiratory infection due to viruses and bacteria in men and women but there is argued that there is little difference, that is a higher incidence in boys. Based on the results from Table 5.2 that of the 47 respondents whose children suffered URTI majority (53.2%) were female. This condition is possible shift in the habits of children. Currently, both boys and girls have the same tendency in terms of playing.

c. Family health behaviors relationship with URTI occurrence frequency in toddlers

Based on the results of the data, Mann Whitney statistical test using SPSS 20 for windows with the level obtained $p \alpha = 0.05$ (0.008) $< \alpha$ (0.05) means that H_0 is rejected so that there is a

significant relationship between health behaviors of families with URTI in infants puskesmas Banyu Urip Surabaya. From the results that have been obtained to prove that more and more families who behave positively then the fewer children under five affected by URTI > 3 times a year.

Health behavior is a response to a person (organization) to the stimulus or object associated with illness and disease, system services, eating and drinking and the environment. Positive health behavior is an important component in preventing a disease such as respiratory infection. If families applying positive health behavior in his daily life, then the child will not be susceptible to disease because children with the support of her parents can keep it clean and healthy. If the family members carry positive health behavior at home is tantamount to prevent family members of transmitting the disease to other family members such as upper respiratory infections (MOH, 2008). Family influence the emergence of the disease in the house.

Behavior in the prevention and control of respiratory disease in infants is more effectively done by the family either done by the mother or family who live in one house. The existence of family members affected by URTI transmitted to others through breathing air or sputter. In principle ISPA germs in the air inhaled by the new host and into the respiratory tract. Therefore, one of the URTI prevention efforts done by covering the mouth when sneezing to avoid spreading germs through the air, throwing phlegm in its proper place (WHO, 2012)

V. Conclusion

There is a relationship of family health behaviors with URTI in infants at Puskesmas Banyu Urip Surabaya. URTI occurrence frequency can be reduced with good health behavior, especially behavior in preventing transmission of respiratory infection. Health workers are expected in the prevention of respiratory disease in children under five do the treatment and prevention program with synergies mainly provide education on health behavior in the community in order to targets more appropriate health education.

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