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## RESEARCH ARTICLE

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## Maternal Behavior and The Recurrence of Upper Respiratory Track Infection

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### ABSTRACT

Acute respiratory tract infection is an acute infectious disease that attacks one or more parts of the respiratory tract from the nose (upper channel) to the alveoli (lower channel). According to acute respiratory infection (ARI) upper respiratory tract infection consists of three elements. They are infection, respiratory track and acute infection that is the entry of the microorganism in the body and incubate due to some symptoms. Acute infection is infection that occurred in 14 days. This research aims to describe the relationship between mother behavior (knowledge, attitude and action) with the recurrence of upper respiratory track infection. This research was an analytic survey research with cross sectional study method applying purposive sampling technique. The samples were 171 respondents. The research instrument was a questionnaire, then analyzed using Chi square test. It was concluded that there was a significant relationship between knowledge and the recurrence of ARI.

**Keywords:** Knowledge, Attitude, Action, Acute respiratory tract infection

### INTRODUCTION

ARI (acute respiratory tract infection) is an acute infectious disease that attacks one or more parts of the respiratory tract from the nose (upper channel) to the alveoli (lower channel). The main transmission of ARI through droplets that come out of the nose / mouth of the patient when coughing or sneeze containing bacteria. some cases of ARI can cause outbreaks with high mortality and morbidity, thus causing emergency conditions on public health and becoming a national problem<sup>(1)</sup>.

ARI ranks first in the disease suffered by infants and toddlers in Indonesia. The prevalence of ARI in Indonesia is 25.5% with pneumonia morbidity in infants 2.2% and in toddlers 3%, while mortality in infants is 23.8% and toddlers 15.5%. In developing countries morbidity and mortality due to lower respiratory tract infection reaches 25% - 50%. This pain is even higher in densely populated areas<sup>(2)</sup>.

ARI is most often an acute disease among children including toddlers. In the West Seram regency Service Office, 17 of the largest health centers are from 11 sub-districts. ISPA is the first ranked disease. The discovery of ARI in the West Seram regency Office in 2014 the number of ARI in infants was 17 cases with a percentage (0.918%) and 2015 as many as 138 cases (8.189%) and in 2016 as many as 29 cases with a percentage (1.725%)<sup>(3)</sup>.

According to the behavior concept of L. Green one of the influences on one's health is one's knowledge and attitude. Knowledge certainly plays an important role, because by having good knowledge about ARI, mothers can decide what attitudes can be done to overcome health problems, especially reduce the risk of recurrence of ARI in their babies<sup>(4)</sup>.

ARI recurrence is also influenced by the low body resistance of toddlers, the presence of other diseases and unhealthy environmental conditions that affect the appearance of ARI again. This unhealthy environmental condition is influenced by one's behavior in maintaining the health of the surrounding environment<sup>(5)</sup>.

From the initial survey conducted on 6-7 June at Luhu Public Health Center in West Seram Huamual Sub district, ARI is ranked first of 10 types of outpatient diseases in public health centers of Huamual sub-district. The findings of toddlers with ARI in 2014 were in Puskesmas work area as many as 314 children under five (toddlers) while the incidence of ARI in 2015 in the working area of Puskesmas occurred 335 of toddlers. In 2016, the incidence of ARI in the health center working area was 300 toddlers<sup>(6)</sup>.

## METHODS

The research design used was an analytic survey with a cross sectional study approach, namely the independent variables and dependent variables were taken in the same time period to determine the relationship of knowledge, attitudes and actions in the prevention of ARI with recurrence of acute respiratory infections (ARI) in infants 1-5 year in Luhu Village, Huamual Sub district, West Seram Regency, 2017. The samples were 171 respondents. The research instrument was a questionnaire, then analyzed using Chi square test.

## RESULTS

Table 1. Distribution of the knowledge of respondents

No	Knowledge	n	%
1.	Good	17	9.9
2.	Enough	76	44.4
3.	Less	78	45.6
	Total	171	100.0

Based on the results of Table 1, the most of respondents (90.1%) had the knowledge in enough and less category.

Table 2. Distribution of the attitude of respondents

No	Attitude	n	%
1.	Positive	122	71.3
2.	Negative	49	28.7
	Total	171	100.0

Based on the results of Table 2, the most of respondents (71.3%) had the positive attitude.

Table 3. Distribution of the actions of respondents

No	Action	n	%
1.	Positive	136	97.5
2.	Negative	35	2.5
	Total	171	100.0

Based on the results of Table 3, the most of respondents (97.5%) had the positive action.

Table 4. Distribution of ARI recurrence

No	ARI recurrence	n	%
1.	Yes	159	93.0
2.	No	12	7.0
	Total	171	100.0

Based on the results of Table 4, the most of respondents (93.0%) had the toddler with ARI recurrence.

## DISCUSSION

### The relationship of maternal knowledge with recurrence of ARI in toddlers in Luhu Village

The results of data analysis statistically addressed the relationship of maternal knowledge with ARI recurrence,  $p\text{-value} = 0.016 (<0.05)$ . Knowledge is the result of knowing and this happens after people perceive a particular object. Sensation occurs through the human senses, namely the senses of sight, hearing, smell, taste, and touch with oneself. Most human knowledge is obtained through the eyes and ears<sup>(7)</sup>.

In line with the research conducted by Batuatas in 2012 there was a significant relationship between maternal knowledge about ARI and recurrence of ARI in infants in Grobogan regency with a  $p$  value (probability)

of 0.008. Based on the results of the study it can be concluded that there is a significant relationship between maternal knowledge about ARI and recurrence of ARI in infants.

The researcher assumes that the results of the research shows 171 respondents that there are still many respondents who have less knowledge (45.6%), while respondents who have sufficient knowledge (44.4%) are comparable to the lack of ARI knowledge. Because of the lack of health education, the attention of mothers to their children is lacking, it is busy doing activities and cannot do their own prevention as ignorance in the recurrence of ARI prevention due to lack of maternal knowledge about ARI.

### **The relationship of maternal attitude with ARI recurrence in toddlers in Luhu Village**

The results of this study pointed out that from 171 respondents who have the most positive attitude were 71.3% and the least have a negative attitude (28.7%). From this result it can be seen that the majority of respondents' attitudes are positive in maintaining recurrence ARI in toddlers compared with respondents who are negative by not maintaining a recurrence attitude in ARI toddlers. After statistical tests obtained p-value = 1.000, it can be concluded that there is no significant relationship between maternal attitude and ARI recurrence of toddlers in Luhu Village. A person's attitude can come from good knowledge from the education bench or the right information about health will influence the behavior as a long-term outcome of health education because of that knowledge and attitude will create recurrence prevention efforts that parents do to their children.

Supported by research conducted by Marlina Andriani 2014, from 40 respondents 27 people (100%) had positive traits 13 of them (48.1%) did not have ARI recurrence and 14 people (32.5%) and ARI recurrence 13 people (100%) had negative attitudes 2 people (15.4%) did not experienced the recurrence of ARI, and 11 people (84.6%) experienced recurrence of ARI. Statistical test results obtained p value = 0.080 so there was no significant relationship between maternal attitudes and recurrence of ARI in toddlers in Tigobaleh, Bukittinggi in 2014<sup>(8)</sup>.

The researcher assumed that the results of the research shows 171 respondents that there are still many respondents who have a positive attitude that is 122 respondents (71.3%) and the least have a negative attitude that is 49 respondents (28.7%) The right attitude of mothers about ARI recurrence prevention can help detect and prevent ARI earlier. With the increasing attitude of a mother about stimulation it is expected that there will be a change in the direction that supports health especially in the prevention and management of ARI so that the incidence of ARI is reduced.

### **Relationship between maternal actions with recurrence of ARI in infants in Luhu Village**

The statistical test results show that the mother's actions with the respiratory infection in toddlers with a significant relationship p-value = 1.000. It can be concluded that there was no significant relationship between actions with recurrence of ARI in toddlers in Luhu Village, Huamual Sub district, West Seram Regency.

The action is someone who knows the stimulus or object of health, then makes an assessment or opinion on what is known, the next process implements or practices what is known or reacted (considered good)<sup>(7)</sup>.

Researcher assumes that the results of the research show that from 171 respondents there are still many respondents who have a positive attitude that is 136 respondents (96.5%) while the negative attitude is 35 respondents (20.5%). It mentioned that many respondents who have less knowledge due to their actions towards children are lacking. Where at the time of illness is often delivered just like that, even though the facilities for health services are already adequate, so that when someone is sick we as parents play an important role in this case the mother is important in maintaining health for her child.

## **CONCLUSION**

There was a relationship between maternal knowledge with recurrence of acute respiratory infections in toddlers in Luhu Village, Huamual Sub district, West Seram Regency.

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