

# Relationship of the Level of Education, Knowledge and Attitude of the Mother against the Efforts of Disease Prevention Acute Respiratory Tract Infectious Diseases

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**Abstract:** *Acute respiratory tract infectious diseases (respiratory tract infectious diseases) are caused by a virus or bacteria. The disease begins with heat accompanied by one or more symptoms: throat pain thrash, colds, dry cough or phlegm so. Knowledge is closely associated with education which is expected of a person with a college education, then that person will be more widely also knowledge. But it needs to be emphasized that an educated person is low does not mean absolute knowledgeable low anyway. Increased knowledge is not absolute retrieved from formal education, but can also be obtained on the non-formal education. The purpose of this research is to know the relationship of the level of knowledge, education and attitudes of mothers with the efforts of disease prevention acute respiratory tract infectious diseases in children toddlers. The population in this research is all the parents who visited the Clinic Kotaraja. Samples of this research are the parents of a toddler who suffered respiratory tract infectious diseases or toddlers who have experienced respiratory tract infectious diseases and come into treatment Clinics brought Kotaraja. The method of sampling used the technique of accidental sampling. Data processed in univariate and bivariate using test correlation spearman. The results; It was found that a third variable that is done the correlation turned out to have the results of more than 5% (0.5) so it does not have a relationship of respiratory tract infectious diseases prevention efforts against on toddlers. This gives you an idea that education, knowledge, and attitudes do not have a close relationship in the respiratory tract infectious diseases prevent on toddlers.*

**Keywords:** level of education, knowledge, attitude, respiratory tract infectious diseases prevention efforts.

## 1. Introduction

Acute Respiratory tract infectious diseases (respiratory tract infectious diseases) are still the material world at the moment. According to the WHO (2013) are the main cause of respiratory tract infectious diseases morbidity and increased mortality from infectious diseases in the world. Almost 4 million people died due to respiratory tract infectious diseases annually, 98% of her caused by respiratory tract infectious diseases.

Acute respiratory tract infectious diseases are caused by a virus or bacteria. The disease begins with heat accompanied by one or more symptoms: pain or pain swallowing throat, runny nose, dry cough or phlegm so.

In Indonesia's case of acute respiratory tract infectious diseases (respiratory tract infectious diseases) always ranks first cause as much as 32.1% of infant mortality in the year 2009, as well as the cause of 18.2% of deaths on toddlers in the year 2010 and 38.8% in 2011. Based on data from disease prevention of respiratory tract infectious diseases programs in 2009 coverage sufferers of respiratory tract infectious diseases 13.4%, exceeding the results obtained in the case of 18,749 while targets set only 16,534 cases. A survey conducted at the morality of SUBDIR ISPA at 2010 puts respiratory tract infectious diseases or Pneumonia as a cause of infant death in Indonesia with the largest percentage of 22.30% of all deaths of toddlers (Kemenkes RI, 2012). *Period prevalence* respiratory tract infectious diseases highest is East Nusa Tenggara (41.7%), Guinea (31.1%),

Aceh (30.0%), West Nusa Tenggara (28.3%), and East Java (28.3%). In Rikesda 2007, East Nusa Tenggara province is also the top rated with respiratory tract infectious diseases. Period prevalence of respiratory tract infectious diseases in Indonesia according to Rikesda 2013 (25.0%) not much different from 2007 (25.5%).

As to the population of respiratory tract infectious diseases characteristic the highest occurs at the age group 1-4 years (28.8%). According to gender, did not differ between men and women. The disease is more experienced on the population quantity of lower and medium ownership index down.

Based on reports from several health centers, most of respiratory tract infectious diseases tract infectious diseases is as much 65,311 (48.51%), followed by skin diseases as much as 16,649 (12.36%), as many as Malaria 12,524 (9.30%), diseases of the oral cavity & Tooth as much 9,271 (6.8%), Muscular system diseases & connective tissue as much as 7,831 (5.81%), Gastritis as much as 4.07 (5.486%), diarrhea (3,659 2.71%) as much, accidents and Forced as many as 3,419 (2.53%), diseases of the eyes as much as 1,977 (1.46%) and TB as much as 1,696 (1.25%). (Profil Kesehatan Kota Jayapura, 2012).

Knowledge is closely associated with education which is expected of a person with a college education, then that person will be more widely also knowledge. But it needs to be emphasized that an educated low does not mean absolute knowledgeable low anyway. Increased knowledge is not

absolute retrieved from formal education, but can also be obtained on the non-formal education. A person's knowledge about something object also contains two aspects, namely the positive and negative aspects. The second aspect is what ultimately will determine the attitude of a person towards a particular object. The more positive aspects of the object is known, will foster a positive attitude toward the object (Syahrani, Santoso, & Sayono, 2012).

The data from the data obtained by visits i.e. October 2016 totaled 274 November 2016, amounted to 267 and decline, in December the year 2016 have elevated i.e. amounted to 302.

## 2. Research Methodology

This type of study used in this research is quantitative, *observational methods cross sectional study*. *Cross sectional* research is the kind of research that just do the observation and measurement of variables only one time or that time by finding the relationship of two variables (Saryono, 2011). To manage its data from those figures, it is necessary to use statistical tests.

The location of the research done at the clinic, this location Kotaraja chosen because researchers want to find out the level of education, knowledge and attitude of mother with the disease prevention efforts (respiratory tract infectious diseases tract infectious diseases) in toddlers. The researchers chose this location because of the high number of sufferers of respiratory tract infectious diseases at the clinics so as to help get the data, the implementation of the data collection or research in May of the year 2017. The number of samples took as many as 89 people of the total population.

## 3. Result of Study

### a) The level of education and prevention efforts of respiratory tract infectious diseases.

Table 4.6, the results of the calculation of the variable of education and prevention efforts.

		Prevention			Correlation	Sig (p)
		Good	Less	Total		
Education	Good	14	1	15	0.059	0.584
	Average	52	2	54		
	Enough	18	2	20		
Total		84	5	89		

The primary data sources: 2017

Can be seen in the table above that a good level of education as many as 15 people and do a good prevention efforts as many as 14 people and less 1 person, the level of secondary education as much as 54 people who do as much good in prevention efforts 52 and less as much as 2 people, and the level of education is quite as many as 20 people and do well in prevention efforts as many as 18 people and a less good as much as two people.

Total prevention efforts are good as much as 84 people and as many as 5 people. Total respondents as much as 89 respondents. Based on table 4.6 shows the value of the

correlation coefficient rho spearman for a relationship with education levels of respiratory tract infectious diseases disease prevention efforts in the region amounted to Kotaraja 0059 Clinics with significant values (p) 0584 ( $p > 0.05$ ). This means rejecting the alternative hypothesis ( $H_a$ ) and received the zero hypotheses ( $H_0$ ).

In other words there is a significant relationship between education levels of respiratory tract infectious diseases prevention efforts. Based on the output of the above note Corrales's (coefficient of correlation of 0584, then these values indicate the level of relations that are between level of education with respiratory tract infectious disease prevention efforts, with the direction of the positive correlation.

### b) The level of knowledge and of respiratory tract infectious diseases prevention efforts

Table 4.7 the results of the calculation of variable knowledge and prevention efforts.

		Prevention			Correlation	Sig (p)
		Good	Less	Total		
Knowledge	Good	58	3	61	0.026	0.812
	Average	18	2	20		
	Enough	8	0	8		
Total		84	5	89		

The primary data sources: 2017

It can be seen at the table above that level of knowledge both as many as 61 people with prevention efforts that are carried out either as many as 58 people and as many as 11 people, the level of knowledge is quite as many as 20 people and do prevention efforts are well as many as 18 people and as many as 11 people, less knowledge level as many as 8 people and doing good with prevention efforts. Based on table 4.7 shows the value of the correlation coefficient rho spearman for a relationship with the level of knowledge of respiratory tract infectious disease prevention efforts in the region of 0.026 Kotaraja Clinics with significant values (p) by 0812 ( $p > 0.05$ ). This means rejecting the alternative hypothesis ( $H_a$ ) and received the zero hypotheses ( $H_0$ ). In other words there is no significant relationship between education levels of respiratory tract infectious diseases prevention efforts. Based on the output of the above note Corrales's (coefficient of correlation of 0812, then these values indicate a high level of relationship between the levels of knowledge of respiratory tract infectious diseases disease prevention efforts, with the direction of the positive correlation.

### c) The attitude and effort prevention

Table 4.8, the results of the calculation of the variable attitude and prevention efforts.

		Prevention			Correlation	Sig (p)
		Good	Less	Total		
Attitude	Positive	81	5	86	0.046	0.672
	Negative	3	0	3		
Total		84	5	89		

The primary data sources: 2017

Based on the above table it can be seen that attitude positive as many as 86 people and who did well in prevention efforts as many as 81 people and less as many as five people, while a negative attitude as much as 3 and did well in prevention efforts and total prevention efforts are carried out either by as much as 84 people and less as many as 5 people.

Based on table 4.7 shows the value of the correlation coefficient rho spearman for a relationship attitude with respiratory tract infectious diseases prevention efforts in the area of Employment Clinics Kotaraja registration-0046 with significant values (p) of 0.672 ( $p > 0.05$ ). This means rejecting the alternative hypothesis ( $H_a$ ) and received the zero hypotheses ( $H_0$ ).

In other words there is no significant relationship between attitudes of respiratory tract infectious diseases prevention efforts. Based on the output of the above note Corrales's (coefficient of correlation of 0.812, then these values indicate a high degree of relationship between the stances of respiratory tract infectious disease prevention efforts, with the direction of the negative correlation.

#### 4. Discussion

##### a) The relationship between the educational levels of Respiratory tract infectious diseases prevention efforts

Based on the analysis of the level of education among the bivariate elderly with respiratory tract infectious diseases prevention efforts on children by using the *correlation spearman* shows the value of the correlation coefficient rho spearman for relationship education level with the spread of respiratory tract infectious diseases prevention efforts in the region amounted to Kotaraja 0059 Clinics with significant values (p) 0.584 ( $p > 0.05$ ). This means rejecting the alternative hypothesis ( $H_a$ ) and received the zero hypotheses ( $H_0$ ). In other words there is no significant relationship between education levels of respiratory tract infectious diseases prevention efforts.

Based on the output of the above note Corrales's (coefficient of correlation of 0.584, then these values indicate the level of relations that are between levels of education with respiratory tract infectious diseases prevention efforts, with the direction of the positive correlation.

Education is the process of formation of the prowess of fundamental skills-intellectually and emotionally towards nature and fellow human beings (John Dewey in Ahmadi, 2007). According to the Rosseau, education is giving us supplies that did not exist at the time the children will be but we need it at the time of adulthood (in Ahmadi, 2007). Results of the study showed that the higher the Pollen level of education a person then the makes for receiving and processing the information obtained, according to Notoatmodjo in Sari (2012). Study on the level of education obtained a lot of the good mother to medium from high school graduates to College.

This indicates that mother's education level does not affect efforts to prevent diseases of respiratory tract infectious

diseases on toddlers. As revealed by Syahrani, Santoso & Sayono (2012) that is an educated low does not mean significant knowledgeable low anyway.

Highly educated does not mean absolute do a good prevention efforts and otherwise low-educated not necessarily does not do a good prevention efforts against a disease.

##### b) Relationship of the level of knowledge of respiratory tract infectious diseases prevention efforts.

Based on the analysis of the level of knowledge among bivariate with respiratory tract infectious diseases prevention efforts. From the results of the analysis of the relationship of the two variables above by using a test statistic *Correlation Spearman* rho correlation coefficient values for spearman's relationship with the level of knowledge of respiratory tract infectious diseases prevention efforts in the region Kotaraja clinics of the significant value of 0.026 (p) by 0.812 ( $p > 0.05$ ). This means rejecting the alternative hypothesis ( $H_a$ ) and received the zero hypotheses ( $H_0$ ). In other words there is no significant relationship between the levels of knowledge of respiratory tract infectious diseases prevention efforts. Based on the output of the above note Corrales's (coefficient of correlation of 0.812, then these values indicate a high level of relationship between the levels of knowledge of respiratory tract infectious diseases prevention efforts, with the direction of the positive correlation.

Based on this study it appears that knowledge does not always relate to the person's behavior in conducting a tined will. Knowledge is influenced by one's experiences, environments, both physical and non-physical and social culture that later experiences are perceived, is believed to be known, thus leading to motivation, intention to act and eventually became the action. Knowledge may not be the factor that influences directly against respiratory tract infectious diseases precautions.

The existence of a strong influence of other variables such as the environmental community with a habit that is not in line with community-owned knowledge so despite public knowledge in category good but did not become the trigger on communities to do what they know through action for real. In addition the driving factor of the local health officer's role is not optimal in providing counseling about health especially about precaution of respiratory tract infectious diseases to the citizens or the surrounding communities so that the behavior of society still less well.

Research conducted by Nasirudin i.e. that there is no relationship of the level of knowledge of the behavior of the prevention of transmission of Tuberculosis gained value p value = 0.448 because respondents are well knowledgeable and good conduct as many as 61.1% with knowledgeable respondents bad behavior and misbehave as much as 55.6% so that it can be seen that a good knowledge of the respondent did not become a benchmark respondents to behave well, 15 it is in line with research conducted by Dini and friends got that knowledge has no relationship with the behavior obtained value p value = 0.36.



Based on his analysis it can happen because the respondents less motivation of health workers. This is supported by the statement of the respondent that the public rarely gets a visit from health workers so that people don't get the motivation of health workers. Motivation in the form of praise, giving the confidence and the chance to prove his ability in keeping with good health.

**c) The relationship of attitude with respiratory tract infectious diseases prevention efforts**

From the results of the analysis of the relationship between the stance of respiratory tract infectious diseases prevention efforts by using the test statistic *Correlation Spearman Rho* correlation coefficient shows the value of rho spearman for a relationship attitude with prevention efforts respiratory tract infectious diseases in the region of clinics Kotaraja registration-0046 with significant values (p) of 0672 ( $p > 0.05$ ). This means rejecting the alternative hypothesis ( $H_a$ ) and received the zero hypotheses ( $H_0$ ).

In other words there is no significant relationship between attitudes of respiratory tract infectious diseases prevention efforts. Based on the output of the above note *Correlasi's* (coefficient of correlation of 0812, then these values indicate a high degree of relationship between the stance of respiratory tract infectious diseases prevention efforts, negative correlation with the direction. This shows that attitudes have a significant and negative relationship toward respiratory tract infectious diseases events, meaning that the lower a mother's attitude towards prevention of respiratory tract infectious diseases then it will negatively impact an increase of respiratory tract infectious diseases events in children as well otherwise. Research results with different research Riza (2008) performed on the Toddlers In Child Irna RSMH Palembang, stating that the better a person's respiratory tract infectious diseases will be attitudes, then the number of respiratory tract infectious diseases events that occur will be getting lower, as did otherwise, once a person has a less good attitude about respiratory tract infectious diseases, then the number of respiratory tract infectious diseases events that occur will be higher.

This research was different then research Maryunanik Atiek (2013) stating that the attitude is an important factor in the formation of behavior. Based on the results of this research that suggests a connection between the attitude to the practice how to care, it may imply that the respondents have already noticed the stimulus that he received and has a tendency to act, so that can bring up an expected behavior for the respondent himself. Research of different research Sheli Shobur says that there is a meaningful relationship between the attitudes of mothers with pneumonia on a toddler who stated that when an individual has a positive attitude towards a stimulus or health then he would object have the attitude that shows, accept, acknowledge, agree and implement the norms that apply where the individual is located.

From the research that has been done by Riza (2008), Atiek Maryunanik (2013), and Sheli Shobur (2008) can pull in conclusion that mothers who have a positive attitude tend to be good in practice how to care of respiratory tract infectious diseases, while in this study mother that having a positive

attitude is less good or less skilled in handling incidents of respiratory tract infectious diseases and environmental conditions that existed around the House respondents also affects the occurrence of respiratory tract infectious diseases in toddlers.

Based on the data obtained, it can pull in the conclusion that when a positive attitude but a toddler suffering from respiratory tract infectious diseases, that this can happen due to other people who are considered important in the environment, as most parents can handle a problem that occurs in the home environment for example, clean the dust inside the House, preventing the smoke from burning can cause damage to the respiratory tract infectious diseases tract defense mechanisms, so that the respiratory tract infectious diseases tract irritation occurs. In addition, with previous personal experience certainly parents have known respiratory tract infectious diseases symptoms from it then should the respondents to be able to make use of existing facilities, such as the respondents immediately saw a toddler to the clinic.

The mother's knowledge and a positive attitude are still there that respiratory tract infectious diseases and otherwise low-knowledge and attitude that is low but toddlers don't suffer respiratory tract infectious diseases, this is because the personal experience, the influence of the mass media, and the influence of other people who considered important in their environment, because according to Lawrance Green (1980) in Notoadmodjo (2007) there are 3 factors cause his toddler parents suffer from respiratory tract infectious diseases, namely: the first factor where this factor includes the knowledge and attitudes of parents in dealing with the occurrence of respiratory tract infectious diseases on toddlers, this factor becomes a trigger against behavior that is the basis or motivation for his actions due to tradition or customs, beliefs to others, the level of education and degree of social economy. The second probability factor i.e. the trigger factor against behaviors that allows an action to be implemented. These factors include the availability of health facilities and infrastructure. The third factor is the amplifier that is this factor determines whether the action health gain support or not. These factors manifest in the form of the attitudes and behaviors of caregivers of the elderly.

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