



## Analysis of Factors Related to the Incident of Pneumonia in Toddlers in the Working Area of Pajar Bulan Community Health Center, Semende Darat Ulu District, Muara Enim Regency in 2022

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### ABSTRACT

Pneumonia is very dependent on the daily behavior of the mother in taking action to prevent her toddler from contracting a dangerous disease. The aim of the study was to determine the relationship between mother's behavior and the incidence of pneumonia in toddlers in Pajar Bulan. From the Chi Square test results obtained p value (0.000) knowledge variable  $<\alpha$  (0.05), attitude variable p value (0.000)  $<\alpha$  (0.05), mother's action variable p value (0.181)  $<\alpha$  (0, 05). These results can be interpreted that there is a significant relationship between knowledge, attitudes and actions of mothers regarding the incidence of pneumonia in the working area of the Pajar Bulan Health Center, Semende Darat Ulu District, Muara Enim Regency.

## **INTRODUCTION**

ARI (Acute Respiratory Infection) is an acute infection that attacks one part of the respiratory tract from the nose to the alveoli including the adnexa. Pneumonia is an acute respiratory tract infection in which an acute infectious process affects the lung tissue (alveoli). Currently attacking children under the age of 5 years (Depkes. RI, 2006). ISPA disease can be caused by several groups of germs, namely bacteria. Apart from that, there are also several factors that help and influence the emergence of pneumonia, namely air pollution, nutrition, smoking, residential density, and KAP (Knowadage, Attitude, Praticce). (Indonesian Ministry of Health, 2006).

The risk of mortality in children under five, especially in babies, is very high and this risk is determined more by the ability of the mother or family or community to provide attention and treatment to their children. The incidence rate of pneumonia in the Southern province has increased based on the annual report of the ISPA program of the South Sumatra Provincial Health Service in 2006, amounting to 27,865 cases with an incidence of 35.3% (Ministry of Health of the Republic of Indonesia, 2006).

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The main program activities in P2 ISPA include finding, monitoring and treating pneumonia sufferers, examining pneumonia contacts, community education and managing pneumonia (Ministry of Health of the Republic of Indonesia, 2005). Only around 65% of the ISPA P2 program was carried out in Muara Enim Regency at the Pajar Bulan Community Health Center, namely community outreach, the visits that came from the 90% target turned out to be only around 75% achieved. As well as the management of treatment for curing pneumonia, it is hoped that the target to be achieved is around 100% cure rate, while morbidity still reaches 56%. The incidence of pneumonia in 2008 was recorded at 156.3% (RKJMN MOH RI, 2005). Research Objectives: To Find Out The Analysis Of Factors Related To The Incidence Of Pneumonia In Children In The Working Area Of Pajar Bulan Community Health Center, Semende Darat Ulu District, Muara Enim Regency In 2022

## **LITERATURE REVIEW**

### ***ARI Definition (Acute Respiratory Infection)***

ISPA is an infectious disease of the acute respiratory tract lasting up to 14 days. Which attacks one or more parts of the respiratory tract from the nose (upper tract) to the alveoli (lower tract) including the adnexal tissue such as the sinuses, middle ear cavity and pleura.

### ***Understanding Pneumonia***

Pneumonia is a disease that attacks the lung tissue (alveoli) and is characterized by coughing and difficulty breathing, which is usually referred to as rapid breathing or shortness of breath in children aged 0-5 years (MOH RI, 2005). The occurrence of Pneumonia in children often coincides with the occurrence of an acute infectious process in the bronchi which is called Broncho Pneumonia. In the P2 ISPA program, all forms of pneumonia (both pneumonia and Broncho pneumonia) are simply referred to as pneumonia (Ministry of Health RI, 2005).

### ***Pneumonia Epidemiology***

Explain how pneumonia is distributed and how various factors that cause pneumonia influence the incidence of pneumonia. Here it is hoped that the author will be able to answer questions regarding the factors Who (who), Where (where), When (when), and Why (what causes Pneumonia), namely:

*Who:* Factors affected by pneumonia can be age, gender, ethnicity, religion, education, occupation and income. The group of people who have the potential or have the opportunity to suffer from illness or be at risk are usually called the population at risk.

*Where:* Factors in the place where people live or work or wherever there is a possibility that they will face pneumonia, which can be: City (urban), Village (rural), Industrial/Mining Area.

*When:* The incidence of pneumonia is related to time, it can be hours, days, weeks, months, years, dry season and rainy season.

*Why :* Risk factors that influence the incidence of Pneumonia are host factors, agent factors/causes of disease and environmental factors).

Efendi (1998) believes that high family participation will help speed up the healing process of illness. Families must act quickly and invite them to seek treatment at health services if someone in the family is sick, then continue to encourage home and environmental health and provide a special place for the needs of the sufferer. According to Green (1980), behavior is influenced by 3 (three) main factors, namely:

### ***Predisposing factors (Predisposing Factors)***

These factors include people's knowledge and attitudes towards health. Traditions and beliefs of society regarding matters related to health, this system adopted by society, level of education, socio-economic level and so on.

Possible factors (enabling factors)

These factors include the availability of food and services or facilities for the community, for example clean water, rubbish dumps where feces can be disposed of, availability of nutritious food and so on. This also includes health service facilities such as Community Health Centers, Hospitals, Polyclinics, Posyandu, Polindes, Village Medicine Posts, Private Doctors or Midwives, and so on.

### Reinforcing Factors

These factors include the attitudes and behavior of community leaders, religious leaders, the attitudes and behavior of staff, including health workers. This also includes laws, regulations from both the central and regional governments related to health. To behave healthily, people sometimes not only need knowledge and a positive attitude and support from facilities, but also need behavioral examples (references) from community leaders, religious leaders, and officials including health workers. Apart from that, laws, regulations and so on are needed to strengthen community behavior.

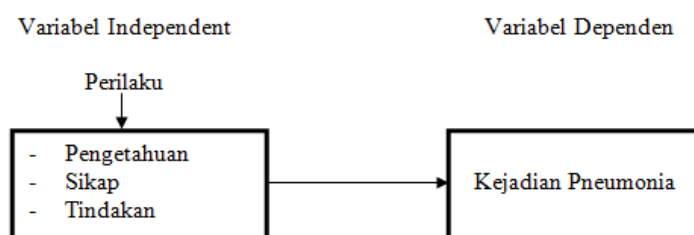


Figure 1. Research Concept Framework

### METHODOLOGY

The type of research used in this study is the Analytic Survey Research Method using a cross sectional design. The research was carried out only once at a time, which aimed to see the relationship between the independent variable and the dependent variable which was carried out at the same time.

### RESEARCH RESULT

This analysis is used to determine the relationship between the independent variables and the dependent variable. Analysis of the relationship between the independent variables and the dependent variable in this study used the Chi Square Test.

Table 1. Relationship Between Mother's Knowledge Level, Mother's Attitudes and Actions and Pneumonia Incidence in the Working Area of Pajar Bulan Health Center, Muara Enim Regency in 2022

No	Variable	Pneumonia Occurrence				Amount		P Value	OR 95 % CI
		Pneumonia		Not Pneumonia					
		N	%	N	%	N	%		
Knowledge									
1	Good	19	59,6	20	95,2	39	75,0	0,000	0,162

2	Not enough	12	40,4	1	4,8	13	25,0		(0,132-0199)
Attitude									
1	Support	22	70,9	20	95,2	42	80,7	0,000	0,183
2	Does not support	9	29,0	1	4,8	10	19,3		(0,150-0,225)
Mother's action									
1	Good	10	32,2	8	38,0 9	18	34,6	0,181	0,580
2	Not enough	21	27,8	13	61,9	34	65,3		(0,475-0,710)

From the results of the Chi Square Test, it was obtained that the knowledge variable p value  $(0.000) < \alpha (0.05)$ , the attitude variable p value  $(0.000) < \alpha (0.05)$ , the mother's action variable p value  $(0.181) < \alpha (0.05)$ . These results can be interpreted as meaning that there is a meaningful relationship between maternal knowledge, attitudes and actions regarding the incidence of pneumonia in the work area of the Pajar Bulan Community Health Center, Semende Darat Ulu District, Muara Enim Regency.

## DISCUSSION

### *Correlation Between Mother's Knowledge Level and Pneumonia Incidence at Pajar Bulan Health Center, Muara Enim Regency*

According to the results of the analysis of the relationship between mother's knowledge and the incidence of pneumonia, it is known that as many as 40.4% of respondents who suffer from pneumonia have mothers with poor knowledge about pneumonia, while in the non-pneumonia group of respondents there are 4.8% of respondents who have mothers with poor knowledge about Pneumonia. From the Chi Square Test results obtained p value  $(0.000) < \alpha (0.05)$ , OR = 0.162 (95% CI: 0.132 - 0.199) these results can be interpreted that there is a significant relationship between mother's knowledge and the incidence of pneumonia in the working area of the Pajar Health Center Month of Semende Darat Ulu District, Muara Enim Regency.

Based on the results of research with mothers of toddlers who were sampled, especially with mothers of toddlers who suffered from pneumonia, it was found that most of these mothers were only able to answer questions below the average score ( $< x$  mean). According to Notoatmodjo, behavior that is based on knowledge will be more lasting than behavior that is not based on knowledge. The education level of the mother is greatly influenced by the incidence of pneumonia because the level of knowledge of the mother

influences the behavior of the mother in maintaining the health of the toddler and how to find alternative treatments and how to properly care for her at home. The higher the level of mother's knowledge, the more likely the mother's behavior will be better in maintaining the health of the toddler and how to find alternative medicines and proper care at home. The more the toddler's health is maintained, and the selection of the right alternative treatment and the right care at home, the less likely the toddler is to be infected with diseases including pneumonia.

From the results of Dewa's research, Daru (2001) incorrect home care is a risk factor for pneumonia from non-pneumonia ARI, incorrect home care will increase the risk of pneumonia from non-pneumonia ARI by 5.4 times (OR = 5.4, 95% CI 2.6 < OR ) This is all influenced by the level of knowledge of mothers of toddlers about pneumonia.

From the description above, it can be concluded that the relationship between maternal knowledge and the incidence of pneumonia in toddlers is proven.

#### ***The Relationship Between Mother's Attitude and Pneumonia Incidence at Pajar Bulan Community Health Center, Muara Enim Regency.***

From the results of the analysis of the relationship between mother's attitude status and the incidence of pneumonia, it is known that 29.0% of respondents who suffer from pneumonia have an unsupportive attitude towards pneumonia, while in the group of respondents who do not have pneumonia, there are 4.8% of respondents who have a mother with an attitude. does not support pneumonia. From the results of the Chi Square Test, p value (0.000) <  $\alpha$  (0.05), OR = 0.183 (95% CI: 0.150 - 0.225). These results can be interpreted as meaning that there is a significant relationship between the mother's attitude status and the incidence of pneumonia in the work area. Pajar Bulan Community Health Center, Semende Darat Ulu District, Muara Enim Regency.

#### ***The relationship between maternal actions and the incidence of pneumonia at the Pajar Bulan Community Health Center, Muara Enim Regency***

According to the results of the analysis of the relationship between the actions of mothers of toddlers and the incidence of pneumonia, it is known that of the respondents who suffer from pneumonia, there are 27.8% of respondents who have poor actions regarding pneumonia, while in the group of respondents who do not have pneumonia, there are 61.9% of respondents who have mothers with bad action regarding pneumonia. From the results of the Chi Square Test, p value was obtained (0.181) >  $\alpha$  (0.05), OR = 0.580 (95% CI: 0.475 - 0.710). This result can be interpreted that there is no significant relationship between actions and the incidence of Pneumonia in the work area of the Community Health Center. Pajar Bulan, Semende Darat Ulu District, Muara Enim Regency.

From the description above, it can be concluded that the relationship between actions and the incidence of pneumonia in toddlers is not proven in this study.

## **CONCLUSIONS AND RECOMMENDATIONS**

From the conclusion of the research results, it turns out that the incidence of pneumonia has a significant relationship with knowledge, attitudes and actions carried out by mothers of toddlers on a daily basis which is expected by mothers to be able to change their behavior in daily living habits.

## **ADVANCED RESEARCH**

In order for research to develop, it is recommended that future researchers examine other factors related to the incidence of pneumonia with more different research designs, methods and sample sizes.

## **ACKNOWLEDGMENT**

The author realizes that the preparation of this research proposal is still ongoing. There are many shortcomings, both in terms of writing and in the material expressed, all of this cannot be separated from limitations, abilities and resources owned by the author. Thus the researcher expresses his gratitude to those who have assisted in this research.

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