



Incidence of Pneumonia on the Nutritional Status of Young Children in the Work Room of the Antang Public Health Center, Makassar South Sulawesi

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Abstract

Pneumonia is infection network lungs Which nature I reason hisis bacteria, virus, mold, exposure material chemistry or damage physique from bacterial lungs which normal cause pneumonia is Streptococcus and Mycoplasma Pneumonia, whereas virus which cause pneumonia is Adenoviruses, Rhinovirus, Influenza Virus, *Respiratory Syncytial Virus*. The aim of this study to find out the relationship between nutritional status and the incidence of pneumonia in toddlers in Region Work Public health center Antang. Type study This is method study analytical observation with a cross sectional approach. This research was carried out in part Antang health center working area. population in study this all toddler which visit in Public health center Antang. Technique taking sample use simple random sampling. The data analysis carried out was univariate analysis and bivariate analysis. Test that on used is the *chi square statistical test* with another alternative test, namely the Fisher Exact test with level meaning $p=0.02$ so HA accepted Because proven to exist connection knowledge Mother pregnant with attitude with $p<0.05$. Concluded there is connection Between Nutritional Status and the Incidence of Pneumonia in Toddlers in Community Health Center Working Areas Antang. Based on results study this, as good as his officer health especially midwife collaborate with health agencies that hold outreach and outreach activities so that they can increase knowledge, and information person related old pneumonia treatment on toddler.

Keywords: Pneumonia, Nutritional Status, Toddlers, Antang Community Health Center, Makassar, South Sulawesi





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1. Introduction

Pneumonia is an acute infection of lung tissue caused by bacteria, viruses, fungi, exposure to chemicals or physical damage to the lungs. The bacteria that usually cause pneumonia are Streptococcus and Mycoplasma Pneumonia, while the viruses that cause pneumonia are Adenoviruses, Rhinoviruses, Influenza. Virus, Respiratory Syncytial Virus (RSV) (Anwar and Ika, 2014).

The occurrence of pneumonia is characterized by symptoms of coughing, rapid breathing and pulling the lower chest wall inward (Anwar and Ika, 2014).

Pneumonia is the main cause of death of children under five in the world. Pneumonia causes the deaths of more than 2 million children under five every year. Pneumonia is caused by inflammation of the lungs which makes breathing painful and oxygen intake is low (WHO, 2014).

The high number of under-five deaths due to pneumonia resulted in the 4th Millennium Development Goals target, which aims to reduce child mortality by 2/3 from 1990 to 2014, not being achieved (WHO, 2015).

According to WHO (World Health Organization), the infant mortality rate in 2013 was still high, reaching 6.3 million people. The highest under-five deaths occur in developing countries at 92% or 29,000 under-fives/day (Rahman et al, 2014).

Pneumonia is an infectious disease that is still a health problem in Indonesia, and is the third leading cause of death in Indonesia after cardiovascular disease and tuberculosis. The high incidence of pneumonia especially attacks the infant and toddler age groups. The number of pneumonia sufferers in Indonesia in 2013 ranged from 23-27% and deaths due to pneumonia were 1.19 % (Ministry of Health of the Republic of Indonesia, 2014).

Pneumonia is the second leading cause of death for infants (12.3 %) and toddlers (13.2%) after diarrhea (Ministry of Health of the Republic of Indonesia, 2010). Pneumonia





was included in the ten most common inpatient illnesses in hospitals in 2010 (Directorate General of Health Effort Development, Indonesian Ministry of Health, 2012).

2. Research Methods

The type of research used in this research is analytical observational research with a cross sectional approach, namely to determine the relationship between nutritional status and the incidence of pneumonia in toddlers in the Antang Community Health Center working area.

The research was conducted in the Antang Community Health Center working area. The sample is part of the population selected as the research object. This research sample used simple random sampling with respondents who met the inclusion-exclusion criteria.

3. Results and Discussion

a. Results

Characteristics Respondent

Amount respondents in study This amount 50 person toddler Which own Connection between status nutrition And incident Pneumonia on toddler Based on the results of research conducted in the Antang Community Health Center Work Area with 50 respondents obtained data as following:

Table 1
Distribution Frequency Respondent Based on Age

Age	Frequency	Percent
1-3 year	25	50.0
4-5 year	25	50.0
Total	50	100.0

Table 1 about distribution respondents based on age, from 50 respondent, showing that respondents age 1-3 year as much 25 person likewise respondents age 4-5 year as much 25 person.





Table 2
Distribution Type Sex Respondent

Type sex	Frequency	Percent
Man	25	50.0
Woman	25	50.0
Total	50	100.0

Table 2 regarding the distribution of respondents based on gender level respondents, out of 50 respondents, indicated that 25 were male respondents (50.0%) woman 25 respondents (50.0%).

Table 3
Distribution Frequency Respondent Based on Status Nutrition in Region Work Antang Health Center

Status Nutrition	Frequency	Percent
Good	16	32.0
Bad	34	68.0
Amount	50	100.0

Table 3 regarding the distribution of respondents based on the nutritional status of children in Indonesia Antang health center working area, out of 50 respondents, showed that the respondent Which have status nutrition Good as much 16 person (32.0%), whereas respondents who have status nutrition bad as many as 34 people (68.0%).

Table 4
Frequency Distribution of Respondents Based on Incident Pneumonia

Incident Pneumonia	Frequency	Percent
There is	22	44.0
No There is	28	56.0
Amount	50	100.0

Table 4 regarding the distribution of respondents based on the incidence of pneumonia in Antang Health Center Work Area, from 50 respondents, shows that





Genesis Pneumonia no there is as much 22 0 people (44.0%). Whereas Incident Pneumonia there is as much 28 person (56.0%).

Table 5
Connection Between Status Nutrition with Incident
Pneumonia Public health center Antang

		Pneumonia Occurrence			P	α
		There is	No There is	Total		
Status	Bad	10	6	16	0.02	0.05
	Nutritio n		20.0%	12.0%		
		11	23	34		
	Good	22.0%	46.0%	68.0%		
Total		21	39	50		
		42.0%	58.0%	100		

Table 5 shows the distribution of respondents based on nutritional status in the region Antang health center work from 16 (32.0%) people according to Malnutrition Status, 10 people (20.0%) There was pneumonia and 6 people (12.0 %) had no pneumonia There is Meanwhile, of the 34 (68.0 %) people according to good nutritional status, 11 (22.0%) Incident Pneumonia Heavy And 23 people (46.0 %) Incident Pneumonia There isn't any.

Based on test statistics *Test Square* obtained mark $\rho = 0.02$. With Thus H_0 is rejected, H_a is accepted or there is a relationship between Nutritional Status and Incident Pneumonia.

b. Discussion

The relationship between nutritional status and the incidence of pneumonia. The results of the Chi-square statistical test on the results of this study showed that there was a relationship between nutritional status and the incidence of pneumonia. Where $\rho = 0.02 < 0.05$. Table 5.6 regarding the distribution of respondents based on nutritional status in the Antang health center working area of 16 (32.0%) people according to poor nutritional status, 10 people (20.0%) had severe pneumonia and 6





people (12.0 %) had mild pneumonia. Meanwhile, of the 34 (68.0 %) people according to good nutritional status, 11 (22.0%) had severe pneumonia and 23 (46.0 %) had mild pneumonia.

Malnutrition will damage the body's defense system against microorganisms and mechanical defenses, making it easy to get infectious diseases such as pneumonia. This is due to the destruction of body tissue to obtain the proteins needed by viruses/bacteria (Rusepno, 2005).

According to Marimbi (2010), infection depletes protein and calories which should be used for disrupted child growth and development. This research is in line with research conducted by Muktasim A (2012), which stated that there was a relationship between nutritional status and hospitalization of pneumonia patients in toddlers. From the results of data analysis, it was found that the P value = 0.02.

4. Conclusion

From the results of research conducted in the Antang Health Center Work Area regarding the relationship between nutritional status with the incidence of pneumonia in toddlers in Antang health center working area can be concluded that: The level of relationship between status nutrition with incident pneumonia in region work public health center Antang, showing that respondents which have Distribution Frequency Respondent Based on nutritional status in the Antang health center working area. bad. 16 people (32.0 %) Good 34 person (68.0%). whereas Distribution Frequency Respondent based on Pneumonia Occurrence. There were 21 people (42.0 %) there were 39 people (58.0%). This matter shows that there is a relationship between nutritional status with the incidence of pneumonia in toddler in region work health center Antang, with p value = $0.02 < 0.05$.

5. Compliance With Ethical Standards

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Disclosure of conflict of interest

This research collaboration is a positive thing for all researchers so that conflicts, problems and others are absolutely no problem for all writers.

Statement of informed consent

Every action we take as authors is a mutual agreement or consent.

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