

Original Article

RELATED KNOWLEDGE AND ATTITUDE OF THE USE OF ANTIBIOTICS IN PATIENTS WITH DIARRHEA IN KENDARI INDONESIA

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ABSTRACT

Backgrounds: The use of antibiotics to be a problem in the handling of patients with diarrhea in the city of Kendari. The negative impact of the use of antibiotics is the emergence and development of bacteria resistant to antibiotics, the emergence of diseases caused by bacterial superinfection, the occurrence of side effects of drugs

Objective: To determine the relationship between knowledge and attitude of people with diarrhea in the city kendari

Methods: This research was analytic observational cross-sectional method with the entire patient population is diarrhea who came to visit in as many as 234 people Poasia Health Center and the study sample is equal to 148 people. The sampling technique is done by random sampling technique

Results: The results of the analysis indicate knowledge $\alpha (0.05) > p (0,000)$ or the chi-square value > value table that is $29.658 > 3.841$, then HO is rejected and H1 is accepted. While the attitude showed $\alpha (0.05) > p (0,000)$ or the chi-square value > value table that is $52.269 > 3.841$, then HO is rejected and H1 accepted

Conclusions: There is a relationship between knowledge and attitudes to the use of antibiotics in patients with diarrhea in Kendari. A person who has enough knowledge about the use of antibiotics in patients with diarrhea then it will not use antibiotics unless the prescribing physician.

Key words : antibiotic, knowledge, attitude, diarrhea.

INTRODUCTION

Diarrheal disease is an infectious disease that is characterized by a bowel movement frequency mushy or liquid with more than three times a day.¹ Diarrhea is defined as watery bowel movements more than four times a day, with mucus and blood and not.²

Diarrheal disease is a disease that requires immediate remedial action because it can lead to fatalities if delayed, thus Drug very important role in health care, especially diarrhea. Various options are currently available drugs that required careful consideration in choosing a drug. Improper use of drugs, ineffective, unsafe, and also uneconomical or more popular

with the term irrational, today has become a problem in itself in good health services in developed countries and in developing countries, this problem often encountered in the unit health services.³

Diarrheal disease is still one of the major causes of morbidity and mortality, nearly all geographic regions of the world and all age groups attacked diarrhea, North America In the state of children suffering from diarrhea more than 12 times per year. Diarrhea causes of death by 15-34% of all deaths, approximately 300 deaths per year. Based on the report by the World Health Organizatio said, diarrhea is still one of the major causes of morbidity and mortality of children in many developing countries, every year is estimated at more than one billion cases of diarrhea in the world with 3.3 million deaths.³

Indonesia's health profile data years 2000-2010, the tendency incidents rose. At the 2000 Incidence Rate 301/1000 diarrheal disease population, in 2003 rose to 374/1000 inhabitants, in 2006 rose to 423/1000 inhabitants and in 2010 to 411/1000 population.³ The rate of death from diarrhea is still quite high. National Health Survey show that diarrhea is the number two cause of death in the amount of 23.0% in infants and number three in the amount of 11.4% in infants. In general, acute diarrhea in Indonesia due to problems of environmental hygiene, food hygiene, as well as infectious microorganisms: bacteria, viruses, and fungi.¹

In Southeast Sulawesi diarrheal disease remains a public health problem obtained information that the number of patients with diarrhea in 2010 amounted to 62 691 cases of the total population of 2.20745 million inhabitants with a prevalence of 284 per 10,000 births. While in 2011 the number of people with diarrhea have increased the number of 96 179 cases of the total population of

2,277,864 inhabitants with a prevalence of 422 per 10,000 births.⁴ This figure shows the discovery of diarrhea patients do not achieve the national target.

Based on the profile of Kendari City Health Department, the number of cases of diarrhea in 2010 the number of people as much as 9,111 cases of the total population of 351 465 Life with a prevalence of 259 per 10,000 births. While in 2011 the number of patients with diarrhea decreased to 6,248 cases of the total population of 364 477 Life with a prevalence of 171 per 10,000 births in 2012 and returned with diarrhea increased by 9251 cases of a total population of 403 203 inhabitants with a prevalence of 229 per 10,000 births.⁵

The incidence of diarrheal disease in District Poasia in each year is always increasing. Data PHC Poasia in 2010 of 20 236 inhabitants there are 752 patients with diarrhea with a prevalence of 371 per 10,000 births, in 2011 there were 1,450 residents of 20 463 patients with a prevalence of 709 per 10,000 births, and in 2012 there were 1,562 residents of 20 487 patients with diarrhea with a prevalence of 762 per 10,000 births. From these data indicate that diarrhea is always occupy the top 10 categories of diseases that occur in health centers Poasia.⁶

Diarrheal disease is a viral infection of rotavirus disease that does not require antibiotics in its management because of no benefit and side effects can harm the patient.⁷ Therefore, in patients with diarrhea should not be given antibiotics except in certain diarrheal patients with signs and symptoms of infection such as fever, bloody stool and leukocytes in stoolness.⁸

Today the use of drugs, especially antibiotics relatively increased. This is because the level of utilization and rational use of antibiotics and excessive is a very serious problem even more alarming is that

there are several types of antibiotics used to treat infections caused by viruses.⁹

Sometimes the people doing their own treatment for the class of antibiotics and has become an important issue around the world. Because one of the negative effects of irrational use of antibiotics is the emergence and development of bacteria resistant to antibiotics, the emergence of diseases caused by bacterial superinfection, the toxicity effects of the drug, so that patient care becomes longer, the cost of treatment becomes more expensive, and ultimately a decline quality of health.¹⁰ The obyektif of this study that determine the relationship of knowledge and attitudes to the use of antibiotics in patients with diarrhea in Kendari.

METHODS

This study was an observational analytic study with cross sectional study. The sample in this study amounted to 148 people. Samples were taken based on the following criteria: 1) Inclusion criteria:

Patients recurrent diarrhea, Respondents working area health center located at Poasia, respondents were willing to be interviewed, and 2) Exclusion Criteria: Patients diarrhea who first treated at the clinic, Respondents address outside Poasia working area health centers, respondents are not willing to be interviewed. The sampling technique used purposive sampling, statistical test using chi-square (χ^2) with a significant level of $p > 0.05$ (95% confidence level).

RESULTS

Knowledge is knowledge of the respondents about matters relating to the use of antibiotics in patients with diarrhea. With enough knowledge hopefully someone can change the behavior of short-term in order to avoid side effects that can harm the patient to form a new behavior. The distribution of the relationship between the respondents' knowledge with the use of antibiotics is presented in Table 1:

Table 1: Respondents Knowledge relationship with the Use of Antibiotics in Patients with Diarrhea in Kendari

Knowledge	Antibiotics use			Total		
	Yes		No			
	n	%	n	%	n	%
Less	47	65.3	25	34.7	72	100
Enough	15	19.7	61	80.3	76	100
Total	62	41.8	86	58.2	148	100
Chi Square value = 29.658		df = 1		p = .000		
Table value = 3.841						

Table 1 shows that of the 72 respondents who have less knowledge about the use of antibiotics, there are 47 respondents (65.3%) were using antibiotics and 25 respondents (34.7%) who did not

use antibiotics, whereas of the 76 respondents who have sufficient knowledge about use of antibiotics, there were 15 respondents (19.7%) were using antibiotics and 61 respondents (80.3%)

who did not use antibiotics. Based on the statistical test using chi square test between the respondents' knowledge with the use of antibiotics in patients with diarrhea showed that the chi-square value > value table that is $29.658 > 3.841$ with df 1 in the amount of the value of $\alpha (0.05) > \rho (0,000)$. This indicates that the null hypothesis is rejected and the hypothesis of the accepted means there is a relationship between knowledge with the use of antibiotics in patients with diarrhea.

The attitude in question in this study is a tendency to think, and act berpersepsi respondents in the use of antibiotics in patients with diarrhea. A good attitude can affect a person's behavior in taking action towards positive that with the use of appropriate antibiotics. The distribution relationship with the attitude of the use of antibiotics in patients with diarrhea is presented in Table 2.

Table 2: Respondents Attitudes relationship with Antibiotic Use in Patients with Diarrhea in Kendari

Attitude	Antibiotic use				Total	
	Yes		No		n	%
	N	%	n	%		
Negatif	43	82.7	9	17.3	52	100
Positif	19	19.8	77	80.2	96	100
Total	62	41.9	86	58.1	148	100
Chi Square value = 52.269 Table value = 3.841			df = 1		$\rho = .000$	

Table 2 shows that of the 52 respondents who have a negative attitude towards the use of antibiotics, there are 43 respondents (82.7%) were using antibiotics and 9 respondents (17.3%) who did not use antibiotics, whereas of the 96 respondents who have a positive attitude towards use of antibiotics, there were 19 respondents (19.8%) were using antibiotics and 77 respondents (80.2%) who did not use antibiotics.

Based on the statistical test using chi square test between the attitudes of respondents to the use of antibiotics in patients with diarrhea showed that the chi-square value > value table that is $52.269 > 3.841$ with df 1 in the amount of the value of $\alpha (0.05) > \rho (0,000)$. This indicates that

the null hypothesis is rejected and the hypothesis of the accepted means there is a relationship between attitudes to the use of antibiotics in patients with diarrhea.

DISCUSSIONS

Knowledge is the result out, which occurs after the conduct sensing to a particular object, the dominant outcome knowledge that is essential for the formation of one's actions. Or cognitive knowledge about the use of antibiotics in patients with diarrhea is a very important factor for the formation of one's actions in the rational use of antibiotics

With limited knowledge and information about the rational use of antibiotics in patients with diarrhea can

make people more susceptible to drug administration was wrong in patients with diarrhea. In contrast with enough knowledge, related to usability, functionality and the side effects of antibiotic treatment in patients with diarrhea make the public better informed on the proper use of antibiotics in patients with diarrhea who that person suffering from diarrhea does not need to use antibiotics in penatalaksanaanya because of no benefit and side effects can harm patients except on medical advice to see the signs and symptoms of diarrhea patients

Knowledge will make one more look at ways and opportunities to increase the degree of his life. Knowledge will affect one's actions and attitude to behave healthy life.¹¹ Thus one would be able to do something that is considered good if you have enough knowledge, knowledge covered in this study was limited to know and understand.¹²

Knowledge one can be easily obtained because of his educational background as well as information obtained about the appropriate use of antibiotics in patients with diarrhea.¹³ Respondents with higher educational background is easy to accept and understand the information provided by health professionals and vice versa if the respondent had a low education it is difficult to accept and understand the information provided.

Table 1 shows the 15 respondents (19.7%) who have enough knowledge yet still use antibiotics without a prescription, this is because the respondents feel better cured using antibiotics than other drugs, because of the effect of antibiotics is so fast that the respondents are accustomed use of antibiotics every time diarrhea without considering the long-term side effects from the use of these antibiotics.

While respondents with less knowledge and do not use antibiotics as much as 25 respondents (34.7%) due to respondents who really do not know about diarrhea medication or other drugs that most respondents were junior high school students who have more faith in the medical personnel and did not dare to buy their own medication due to lack of information obtained about drugs diarrhea.

Therefore, the level of education and information obtained about the appropriate use of antibiotics and rational influence on a person's knowledge about the use of antibiotics in patients with diarrhea

Officer role is very important in terms of increasing public participation in efforts to maintain and improve her health. One way is through the explanation given by the pharmacist in patients with diarrhea when taking medications that are usually the people with higher education will ask about antibiotics. This description is intended as a preventive action in order to increase public knowledge of the not knowing to knowing, and who knows to be able to understand, apply, analyze, synthesize, and evaluate the behavior so that the public has adequate knowledge about appropriate antibiotic use in patients with diarrhea .

Attitude has three components that support the cognitive component is a representation of what is believed by the individual, the affective component is feeling regarding the emotional aspect and the conative component is a tendency to behave in a certain aspect. The cognitive component is a person's belief about what is right, trust comes from what is seen and what is already known to be formed an idea or ideas about the nature of the object. If connected with the use of antibiotics in patients with diarrhea action is influenced by the knowledge society and their beliefs

about the use of antibiotics that can cure diarrhea.

Affective component involves emotional issues, whether the public will respond positively or negatively on the use of antibiotics in patients with diarrhea, emotional reactions are heavily influenced by the trust that has been described in the cognitive component. Cognitive component shows how a person's tendency to behave but yet, visible forms of behavior of the statement or greeting someone, as seen in Table 8 where the persistence of the nine respondents (17.3%) who had a negative attitude towards the use of antibiotics, but do not use antibiotics and there are 19 respondents (19.8%) who had a positive attitude towards the use of antibiotics but still using antibiotics. This is caused because someone who has a good attitude not necessarily have a good action too.

Attitude is not automatically manifest in overt action behavior.¹⁴ Attitude is not necessarily manifested in action, it is possible that respondents statement with things that are fine, but the attitude of the answer is not realized in real action¹⁵.

Attitude is a factor of a person's behavior patterns to perform an action. Attitudes can be influenced by several factors such as internal and external factors. Internal factors can be from the man himself to reject or accept such behavior. While external factors can of social interaction in the surrounding environment.¹⁶

Someone who ever heard of usability, functionality, side effects and appropriate antibiotic treatment in patients with diarrhea, then that society will gain knowledge about it. This knowledge will bring people into good behavior and positive with no use of antibiotics without a prescription.

Components of attitude is one thing that is important not to abuse of antibiotics

in accordance with the illness due to lack of public knowledge. Person's ability to address the health problems, especially regarding the use of antibiotics in patients with diarrhea will have positive influence on health. Likewise if someone addressed the problem of the use of antibiotics in patients with diarrhea with both the readiness to take action to prevent further complications due to drug resistance hampers.

Factors that influence the formation of attitudes is a personal experience, culture, others are considered important, the mass media, educational institutions and religious institutions as well as emotional factors within the individual. The mass media provide suggestive messages directing one's opinion. New information about something that gives new cognitive foundation formation of attitudes towards it. If sufficiently strong, suggestive messages will provide a basis for assessing affective something forming attitudes towards certain.¹⁶

CONCLUSION

There is a relationship between knowledge and attitudes to the use of antibiotics in patients with diarrhea in Kendari. A person who has enough knowledge about the use of antibiotics in patients with diarrhea then it will not use antibiotics unless the prescribing physician.

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