
The Relationship Of Patients' Knowledge About Atibiotics And Compliance With Atibiotic Use In Narumonda Health Center

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Abstract

Antibiotics have been proven to be beneficial for human life since they were first discovered until now. However, improper use can cause various problems. The most important problem is the emergence of bacterial strains resistant to various types of antibiotics. One of the factors that supports this phenomenon is the patient's lack of knowledge and understanding about antibiotics. Lack of knowledge will influence patient non-compliance in using antibiotics. This study aims to determine the relationship between patient knowledge about antibiotics and compliance with antibiotic use at the Narumonda Community Health Center, Toba Regency in 2023. This type of research is descriptive and carried out prospectively. Data were collected using a questionnaire from 35 respondents. The research results showed that 60% of respondents had good knowledge, 17.14% had sufficient knowledge and 22.86% had poor knowledge. The majority of respondents (82.86%) did not comply with the use of antibiotics and only 17.14% of respondents complied with the use of antibiotics. A relationship was found between knowledge and compliance with the results of statistical tests (Spearman correlation test) with a value of $p < 0.05$. The correlation coefficient value is 0.360 with a positive correlation direction, meaning that there is a correlation that is meaningful and in the same direction but has a weak relationship.

Keywords: Antibiotics, Knowledge, Compliance

INTRODUCTION

Antibiotics are a group of compounds, both natural and synthetic, produced by bacterial or fungal microorganisms (Marjoni and Yusman, 2017). Antibiotics are drugs used to treat infections caused by bacteria, and also help the body's natural defense system to eliminate these bacteria (Fernandez, 2013). Treatment with antibiotics for infectious diseases aims to inhibit the growth and kill the bacteria that cause them (Axelsson, 2013).

The use of antibiotics will be beneficial and effective if used appropriately. However, in reality antibiotics have been used widely by the public without knowing the impact of inappropriate use of antibiotics (Radulović et al., 2007). High levels of antibiotic prescribing are one of the factors causing resistance to antibiotics. Antibiotic resistance is a form of bacterial resistance to antibiotics due to bacterial mutations occurring due to incomplete eradication of bacteria. Antibiotic resistance is the center of world attention because it can cause mortality, reduce the effectiveness of therapy and increase health costs. If the problem of antibiotic resistance continues, the highly developed and sophisticated world will return to the dark ages of medicine like before the discovery of antibiotics (APUA (Alliance for Prudent Use of Antibiotics), 2011).

Resistance to antibiotic use is exacerbated due to lack of patient compliance in using antibiotics. The level of knowledge influences behavior related to drug use. So if the level of knowledge is low then the behavior or level of non-compliance will be higher (Harahap et al., 2018).

Compliance is a term used to describe whether patients use their medication according to or not according to instructions (Kemenkes RI, 2011). Compliance can be seen as behavior that conforms to established directions or norms with full knowledge or understanding. Compliance is assessed as a positive and good personal activity. The desired choice aims for a person to act in accordance with the law, community norms, regulations, and a person's own will which has a strong influence while choosing to consider it (Fitriani et al., 2015). There are four signs of compliance,

namely the right instructions for use, the right amount of medication taken, the right interval of use, and the right duration of use (Fauziah, 2016).

According to research (Zulfa & Handayani, 2020). regarding a survey of compliance with the use of short-term oral antibiotics in several community health centers in Surabaya, it was stated that there were 87.0% who were not compliant in using antibiotics and only 13% were compliant in using antibiotics. Based on research by (Mura et al., 2023), a lack of understanding and awareness of rational use is the cause of non-compliance. According to (Fauziah, 2016), a person's non-compliance in taking medication can be caused by the patient such as not remembering when to take medication, the patient's family, doctor-patient communication, KIE, Pharmaceutical Technical Personnel (TTK). Other factors that cause non-adherence according to research by (Wattiheluw et al., 2020), namely busy work, social activities, stopping treatment spontaneously when symptoms improve, having the belief that the drug can damage the body, and stopping treatment to save the remaining drug for reuse.

Based on the explanation above, it is necessary to conduct research on "the relationship between patient knowledge about antibiotics and compliance with antibiotic use at the Narumonda Community Health Center, Toba Regency in 2023"

RESEARCH METHODS

The research method used is a descriptive method, namely research that provides an overview or description of the relationship between patient knowledge about antibiotics and compliance with antibiotic use at the Narumonda Community Health Center, Toba Regency in 2023. The population in this study was patients at the Narumonda Community Health Center who received antibiotic prescriptions, namely 35 respondents and all of them were used as a sample using a saturated sampling technique, data collection was used using a questionnaire distributed to respondents.

RESULTS AND DISCUSSION

Table 1. Frequency Distribution Based on Respondent Demographics

No	Respondent Characteristics	Frequency (F)	Percentage (%)
1	Gender		
	• Man	16	45,71
	• Woman	19	54,29
	Amount	35	100
2	Age		
	• 12-25 Year	7	20
	• 26-35 Year	5	14,29
	• 36-60 Year	23	65,71
	Amount	35	100
3	Work		
	• Students	5	14,29
	• PNS	1	2,86
	• Self-employed	6	17,14
	• Farmer	23	65,71
	Amount	35	100

Most of the respondents were male, the age of the respondents was between 12-60 years and the majority of respondents were aged 30-60 years, namely 65.71% (23 respondents). As for the demographics of respondents based on occupation, the majority of respondents work as farmers, namely 65.71% (23 respondents).

Table 2. Frequency distribution of patient knowledge about antibiotics

No	Knowledge Category	Frequency (F)	Percentage (%)
1	Good	21	60
2	Enough	6	17,14
3	Not enough	8	22,86
Amount		35	100.0

The distribution of respondents' knowledge about antibiotics was that the majority (60%) of respondents had good knowledge, 6 respondents (17.14%) had sufficient knowledge and there were still 8 respondents (22.86%) who had poor knowledge.

Table 3 Frequency distribution of compliance with antibiotic use

No	Compliance Category	Frequency (F)	Percentage (%)
1	Obedient	6	17,14
2	Not obey	29	82,86
Amount		35	100

The distribution of respondents' compliance in using antibiotics was that the majority of respondents, 85.71% were non-compliant and 14.29% of respondents were compliant.

Table 4. Relationship between patient knowledge about antibiotics and compliance with antibiotic use at the Narumonda Health Center UPT, Toba Regency in 2023

Knowledge	Obedience			P value
	Obedient	Not obey	Total	
	n (%)	n (%)	n (%)	
Good	6 (17,14)	15 (42,86)	21 (60)	0,034
Enough	0	6 (17,14)	6 (17,14)	
Not enough	0	8 (22,86)	8 (22,86)	
Amount	5 (17,14)	30 (82,86)	35 (100,0)	

The results of the analysis of the relationship between patient knowledge about antibiotics and compliance with antibiotic use at the Narumonda Community Health Center, Toba Regency in 2023, showed that 21 (60%) respondents had good knowledge, and of the 21 respondents who had good knowledge there were only 6 (17.14%) respondents. who adhered to the use of antibiotics, and the remaining 15 (42.86%) did not comply. Meanwhile, respondents who had sufficient knowledge and less were all respondents who did not comply with the use of antibiotics.

The results of the statistical test (Spearman correlation test) obtained a P value (p) of 0.034 where this value was < the alpha value ($p < 0.05$) thus it was concluded that H_0 was rejected this means that there is a relationship between patient knowledge and compliance with antibiotic use. The correlation coefficient value in this study is 0.360, close to 0 with a positive correlation direction (+). A positive correlation coefficient value can be interpreted as meaning that there is a correlation that is meaningful and in the same direction but has a weak relationship (Sari & Prabaningtyas, 2022).

The results of this research are in line with Cahya, M.U. (2023) There is a relationship between public knowledge about antibiotics and compliance with antibiotic use at the Sukowono

Community Health Center. (Meinitasari et al., 2021) in his research concluded that there is a relationship between the level of knowledge and the behavior of using antibiotics in the community.

Someone who has good knowledge will have better understanding and awareness, which will have a positive influence on compliance with drug use. Knowledge is a factor that influences a person's beliefs and will shape a person's behavior. Someone who is well informed will have a better level of understanding and awareness which will influence good behavior (Nuraini et al., 2019).

Knowledge plays an important role in providing insight into a person's attitudes and behavior. Based on sufficient knowledge, a person can understand the main problem well so that he can think about the pros and cons of the attitude taken. Patients who have good knowledge have a positive effect on compliance with rational drug use (Kandelaki et al., 2015).

CONCLUSION

The results of research on patient knowledge about antibiotics and compliance with antibiotic use at the Narumonda Community Health Center, Toba Regency in 2023, 60% of respondents had good knowledge, 17.14% had sufficient knowledge and 22.86% had poor knowledge. The majority of respondents (82.86%) did not comply with the use of antibiotics and only 17.14% of respondents complied with the use of antibiotics. A relationship was found between knowledge and compliance as proven by the results of a statistical test (Spearman correlation test) with a p value <0.05. The correlation coefficient value is 0.360, close to 0 with a positive correlation direction (+). A positive correlation coefficient value can be interpreted as meaning that there is a correlation that is meaningful and in the same direction but has a weak relationship.

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