ANALISA TINGKAT PENGETAHUAN DAN KEPATUHAN PENGGUNAAN ANTIBIOTIK PADA MASYARAKAT DUSUN WIROKERTEN

ANALYSIS OF THE LEVEL OF KNOWLEDGE AND COMPLIANCE ON THE USE OF ANTIBIOTICS IN WIROKERTEN VILLAGE COMMUNITIES

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ABSTRAK

Berdasarkan hasil Riset Kesehatan Dasar tahun 2013 masyarakat menyimpan antibiotik sebesar 27,8%. Penyimpanan obat keras dan antibiotik untuk swamedikasi menunjukkan penggunaan obat yang tidak rasional. Sebanyak 86,1% rumah tangga menyimpan antibiotik yang diperoleh tanpa resep dokter. Kurangnya pengetahuan tentang penggunaan antibiotik berpengaruh pada kepatuhan masyarakat. Tujuan penelitian ini untuk mengetahui hubungan tingkat pengetahuan masyarakat dengan kepatuhan penggunaan antibiotik di dusun Wirokerten Banguntapan Bantul. Metode penelitian yang digunakan adalah observasional analitik dengan pendekatan *cross sectional*. Responden dalam penelitian ini berjumlah 311 dengan sampel sebanyak 76 responden. Uji normalitas data menggunakan uji *Kolmogorov-smirnov*. Hasil yang diperoleh diolah dan dianalisa menggunakan SPSS 23 dengan uji Chi Square fisher untuk mengetahui hubungan antara pengetahuan dan kepatuhan. Hasil Penelitian ini menunjukkan bahwa responden memiliki pengetahuan baik sebanyak 46 responden (60%), pengetahuan cukup sebanyak 21 responden (28%), pengetahuan kurang sebanyak 9 responden (12%). Tingkat kepatuhan tinggi sebanyak 20 responden (26%), kepatuhan sedang sebanyak 31 responden (41%), kepatuhan rendah sebanyak 25 responden (33%). Hasil uji statistik diperoleh *Asymp. Sig* 0,000 kurang dari 0,05 sehingga dapat disimpulkan adanya hubungan tingkat pengetahuan dengan kepatuhan penggunaan antibiotik.

Key words: Antibiotik, Masyarakat, Pengetahuan

ABSTRACT

Based on the results of Basic Health Research in 2013, people store antibiotics by 27.8%. Storage of hard drugs and antibiotics for self-medicating indicates irrational use of the drug. As many as 86.1% of households keep antibiotics obtained without a prescription. Lack of knowledge about the use of antibiotics has an effect on people's compliance. The purpose of this study was to determine the relationship between the level of public knowledge and compliance with the use of antibiotics in the hamlet of Wirokerten Banguntapan Bantul. The research method use is analytical observational with a cross sectional approach. The respondents in this study were 311 with a sample of 76 respondents. The data normality test uses the Kolmogorov-smirnov test. The results obtained were processed and analyzed using SPSS 23 with the Chi Square fisher test to determine the relationship between

knowledge and compliance. The results of this study showed that respondents had good knowledge as many as 46 respondents (60%), sufficient knowledge as many as 21 respondents (28%), less knowledge as many as 9 respondents (12%). High compliance rates of 20 respondents (26%), moderate compliance of 31 respondents (41%), low compliance of 25 respondents (33%). Statistical test results were obtained by Asymp. The sig 0.000 is less than 0.05 so it can be concluded that there is a relationship between the level of knowledge and the adherence to antibiotic use.

Key words: Antibiotics, Knowledge, Compliance

1. INTRODUCTION

The high use of antibiotics causes various problems and is a global threat to health, especially in terms of antibiotic resistance (Fernandez, 2013). Based on the results of the 2013 Basic Health Research, it was recorded that 103,860 or 35.2% of 294,959 households (RT) in Indonesia stored medicines for self-medication, with the highest proportion in DKI Jakarta (56.4%) and the lowest in East Nusa Tenggara (17.2%). 35.2% of the household members kept medicine, the proportion of RTs which kept hard drugs was 35.7% and 27.8% stored antibiotics. Storage of hard drugs and antibiotics for self-medication has shown irrational use of drugs. It was stated that 86.1% of households had stored antibiotics obtained without a doctor's prescription (Riskesdas, 2013). Antibiotics are chemicals produced by microorganisms that have the ability to inhibit their development and kill them (Haryanto et al, 2016).

Knowledge is the effect of applying sensation to objects, individual senses which include sight, hearing, smell, taste and touch. This constitutes most of the knowledge itself, this process is influenced by the spirit of interest and object identification (Notoatmodjo, 2014). Compliance is a reference to a situation when an individual's behavior is commensurate with the recommended actions or advice proposed by a health practitioner and information obtained from a source such as health promotion brochures or campaigns in the mass media (Ian, 2011).

Several studies show that lack of knowledge about antibiotics causes antibiotic resistance. The level of one's knowledge is able to increase adherence in taking the drug. The higher the education one has, the easier it is for the person to receive information, so that his knowledge will be better and lead to changes in behavior (Ar-Rasily et al, 2016). Based on the existing problems, researchers are interested in knowing the relationship between knowledge and adherence to the use of antibiotics in the Wirokerten Banguntapan Bantul hamlet community. The population of Wirokerten hamlet is 630 people, with a total of 219 households. The female population is 311 people and the male population is 319 people.

2. METHODS

This type of research is an analytic observational study with a cross sectional approach. Cross sectional is a method in research to conduct research or measure data at one time. Using female respondents because this is in accordance with research conducted by Prima et al., (2015) which states that women are more concerned about health, which includes medicines.

The population in this study is the women community in Wirokerten Banguntapan Bantul hamlet, totaling 311 people. Sampling used purposive sampling with respondents who met the inclusion criteria. The sampling method used the Slovin method (Notoatmojo, 2012) so that 76 respondents were obtained.

The research instrument used in the study used a validated questionnaire from Fendi Wibawa (2020) at the Yogyakarta Indonesian Pharmacy Academy. Using 2 questionnaires, namely the knowledge questionnaire and the antibiotic use adherence questionnaire.

Data analysis in this study used Statistical Package for Social Science (SPSS) 23. Prior to data analysis, the Kolmogorov-Smirnov test was carried out to ensure that the data was not normally distributed. If the data analysis shows that the value of $p > \alpha$ (0.05) then the data is normally distributed, whereas if the value of $p < \alpha$ (0.05) then the data is not normally distributed. As well as to analyze the influence of the characteristics of respondents based on antibiotic knowledge on adherence to use of antibiotics, a Chi-square test was used to determine whether there was a relationship between knowledge level and adherence to antibiotic use.

3. RESULTS AND DISCUSSION

Table 1. Characteristics of Respondents

No	Characteristics	Information	Amount	Percentage
1	Age	20 – 24	7	9
		25 – 29	9	12
		30 – 34	7	9
		35 – 39	14	18
		40 – 44	12	16
		45 – 49	5	7
		50 – 54	7	9
		55 – 59	8	11
		60 – 64	7	9
2	Last education	No School	2	3
		Elementary school	13	17
		Junior High School	15	20
		Senior High School	40	53
		College	6	8
3	Work	Student	1	1
		Businessman	2	3
		Civil servant	2	3
		Private employees	1	1
		Housewife	67	88
		Teacher	2	3
		Factory employee	1	1

Table 1 shows that the number of respondents was 76 respondents, with the most age being 35-39 years old as many as 14 respondents (18%). A person's age affects the knowledge possessed. The older a person is, the better their comprehension abilities and mindset will be (Notoadmojo, 2012). The characteristic results regarding the education level of the respondents are that the majority of the Wirokerten hamlet community have high school education. This shows that the education level of the Wirokerten hamlet community is on the middle scale. The level of one's knowledge is able to increase adherence in taking the drug. The higher the education one has, the easier it is for the person to receive information, so that his knowledge will be better and lead to changes in behavior (Ar-Rasily et al, 2016). The results of the job characteristics of the respondents obtained the highest results as housewives with 67 people (88%). One of the factors that can influence a person's behavior is employment status. The number of housewife respondents is greater in participating in educational activities on knowledge, attitudes and ability to communicate drug information (Pratiwi et al, 2016).

Table 2. Community Knowledge About Antibiotics.

No	Knowledge level	Frequency	Percentage
1	Good	46	60
2	Enough	21	28
3	Deficient	9	12
	Total	76	100

Based on Table 2 it can be shown that the number of respondents with a good level of knowledge is 46 respondents (60%), respondents with sufficient knowledge are 21 respondents (28%), respondents with less knowledge are 9 respondents (12%). The research results from the knowledge questionnaire obtained the most results and it can be concluded that in this study the respondents were classified as having a good level of knowledge. In line with the research conducted by Fahmarani in (2019) which was conducted at a puskesmas in the Magersari Magelang area, it showed that respondents who had a good level of knowledge were 48.1%, sufficient knowledge was 27.8%, and the knowledge level was less than 24.1%. Based on research from Khoirotul (2022) which was conducted in the Sidotopo Wetan Surabaya Village community, the results obtained were a good level of knowledge of 54%, an adequate level of knowledge was 27%, less knowledge was 19%, and those who had good usage behavior were 62%, sufficient behavior was 15%.

Table 3. Community Compliance with the Use of Antibiotics

No	Knowledge level	Frequency	Percentage
1	High	20	26
2	Moderate	31	41
3	Low	25	33
	Total	76	100

Table 3 shows that the highest number of respondents with moderate compliance was 31 respondents (41%). In line with research conducted by Rahayu et, al., (2021) showed a moderate compliance result of 63%. Patient non-compliance in taking medication is caused by several factors, as the patient's memory tends to decrease with age, the patient's memory tends to decrease resulting in forgetting to take medication, the reason patients feel disturbed by the obligation to take medication is because they feel bored with the routine obligation, deliberately not taking medication because they feel healthy, because patients forget to bring medicine when traveling (Nanda et al, 2018).

Table 4. Statistical Test Results

Knowledge	Obedience			P Value
	not obedient	Obedient	Total	
Not enough	30	0	30	0.000
Good	26	20	46	
Total	56	20	76	

Based on Table 4, it was found that the respondents level of knowledge was lacking with adherence to the use of non-adherent antibiotics as many as 30 respondents. Respondents with a good level of knowledge with non-adherent antibiotic adherence were 26 respondents. Respondents with a good level of knowledge with adherence to antibiotics are 20 respondents. So it can be concluded that the majority of people in Wirokerten Banguntapan Bantul Hamlet have a low level of knowledge with adherence to the use of non-adherent antibiotics (22.1%). In line with research conducted by Haldi et al., (2021) with the result that (26%) respondents were non-compliant. The results of another study were also conducted by Swarjana et al., (2021) with insufficient knowledge of non-compliance (17.3%). Chis-square statistical test results to determine whether there is a relationship between the level of knowledge and the use of antibiotics. The results of Fisher's test of p value <0.05 indicate that there is a relationship between the level of knowledge and adherence to the use of antibiotics in the community in Wirokerten Banguntapan Bantul Hamlet. This shows that there is a unidirectional relationship, meaning that if there is an increase in knowledge, the use of antibiotics will also increase (Kurniawati, 2019). In line with research conducted by Meinitasari (2021), the results of the study showed that there was a significant, direct relationship between the level of knowledge on the behavior of using antibiotics in the Batur Hamlet community with a significance value of 0.000. The results of another study conducted by Pratiwi (2019) found a significant relationship between patient knowledge and adherence to using antibiotics. In line with research conducted by Nuraini et al., (2019) that there is a relationship between the level of knowledge and compliance with the use of antibiotics.

4. CONCLUSION

Based on the results of research that has been done about the relationship between the level of knowledge and adherence to the use of antibiotics in the community in the Wirokerten Banguntapan Bantul hamlet, the Asmp Sig value is obtained. 0.000 which indicates that there is a relationship between the level of knowledge and adherence to the use of antibiotics in the community in Wirokerten Banguntapan Bantul Hamlet January 2022.

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