http://ijnms.net/index.php/ijnms
ORIGINAL RESEARCH

e- ISSN: 2686-2123
p- ISSN: 2686-0538

EVALUATION OF THE LEVEL OF COMMUNITY KNOWLEDGE ABOUT HOW TO USE AND ANTIBIOTIC RESISTANCE IN DUPOK VILLAGE, BANGKALAN REGENCY

Rizal Umar R*, Riyadatus Solihah,Mufarika
Department of Clinical dan Community Pharmacy, STIKes Ngudia Husada
Email : rizalrahmadani251@gmail.com

ABSTRACT

Abstract

Antibiotics are drugs that we often encounter in everyday life, not infrequently doctors often prescribe this one drug, but in use in the community there are still often errors in consuming antibiotics resulting in antibiotic resistance or resistance to an antibiotic. The occurrence of misuse of antibiotics is caused by lack of public knowledge and lack of education from medical personnel in hospitals. Low level of knowledge about the use of antibiotics can cause inappropriate use of antibiotics, so there is a risk of causing antibiotic side effects. Providing education is one way that can be used to increase knowledge about the rational use of antibiotics. The purpose of this study is to determine the level of public knowledge about how to use antibiotics and antibiotic resistance. The study was conducted in Dupok Village, Bangakalan Regency, this type of research was *cross sectional through a survey with questionnaire media. Sampling was carried out using the cluster sampling method* involving 100 households (Family Heads). The research instrument used was a closed questionnaire with a total of 10 questions. The data obtained is then analyzed descriptively.

Keywords

Keywords: Level of knowledge, how to use antibiotics, antibiotic resistance, dupok bangkalan.

INTRODUCTION

Antibiotics are one of the most widely prescribed drugs worldwide (1). Antibiotics are drugs that function to kill or inhibit bacterial growth. Antibiotics belong to the class of hard drugs that are widely used in the management of pharmacological therapy (2), irrational use of antibiotics and lack of public knowledge about the use of these antibiotics that cause resistance. Antibiotic resistance is when bacteria cannot be killed by an antibiotic. The main cause of antibiotic resistance is its widespread and irrational use. More than half of patients in hospital care receive antibiotics as treatment or prophylaxis. About 80% of antibiotic consumption is used for human benefit and at least 40% based on inappropriate indications, such as viral infections (3). In addition, about 40-62% of antibiotics are used inappropriately for diseases that do not actually require antibiotics and as many as 30%-80% of antibiotic use is not based on indications (4), then, high and unwise prescribing of antibiotics in Indonesia will increase the incidence of resistance (5).

The survey was conducted by the Center for Indonesian Veterinary Analitical Studies (CIVAS) for three years from September 2013 to August 2016. In hospitals in Klaten, Karanganyar and Sukoharjo Regency, it shows that the level of patient knowledge about the use of antibiotics in hospitals in these areas is still low, namely

61.1% (6). The results of research conducted by WHO from 12 countries including Indonesia, as many as 53-62% stop taking antibiotics when they feel cured. WHO coordinates a global campaign to raise public awareness and behavior towards antibiotics. It is estimated that the death toll from antibiotic resistance by 2050 will be 10 million, of which 4.7 million are Asian. The high rate of antibiotic resistance is caused by several factors, such as social, economic, educational, type of work, experience and age. The higher a person's education, the more he will not use antibiotics carelessly (7). Efforts to minimize antibiotic resistance include educating the public about antibiotic knowledge, and providing an understanding of patient knowledge and attitudes towards antibiotic use (8). Education on the use of antibiotics to the public will reduce the occurrence of antibiotic resistance, this will certainly be a very good impact and a way to educate the public in using antibiotics correctly. Based on the background described above, the researcher is interested in researching the evaluation of the level of community knowledge about how to use and antibiotic resistance in Dupok Village, Bangkalan Regency.

METHOD

This research is a descriptive study with a cross sectional design. The data collection process was carried out in the period June-July 2023 by distributing questionnaires that had been tested valid (0.348-0.693) and reliable r = 0.902 (9). The population in this study was a community in Dupok Village, Bangkalan Regency which was then sampled using cluster sampling techniques. Cluster sampling is used when the data sources are very broad, such as the population of a country, province and district where the groups have a high similarity but are internally quite varied (10). The sampling technique used has two stages. The first stage determines the sample area or area and the second stage determines the sample in the selected area. The instruments used in this study were questionnaires, questions on the questionnaire as many as 10 questions consisting of 5 questions about how to use antibiotics and 5 questions about antibiotic resistance. The data obtained were then analyzed using guidelines from Notoadmojo (2010). Data collection conducted using questionnaires will be given to respondents. The questionnaire is made using the Rating Scale in the form of a check list (√) correct answers worth 2 incorrect answers worth 0 (11). Each participant's score is then grouped based on the percentage obtained by the correct sum formula divided by the total number of scores where good grades if ≥ 65% and bad grades ≥ 35%.

RESULTS

This study is a study that uses a descriptive analysis approach that aims to provide an overview of the level of public knowledge about how to use antibiotics and knowledge about antibiotic resistance, the respondents used were housewives in Dupok Village, Bangakalan Regency who had consumed antibiotics. Antibiotics are drugs that come from all or a specific part of microorganisms and are used to treat bacterial infections. Antibiotics exist that kill bacteria and limit bacterial growth. The use of antibiotics has long been used to fight diseases caused by infection by microorganisms, especially bacteria (12).

DISCUSSION

Respondents' level of knowledge of antibiotic use

Assessment of the level of public knowledge of antibiotic use and antibiotic resistance using a questionnaire consisting of 10 statement items with true or false answer choices. The scores on this questionnaire are 1 and 0 which are different for each item.

No.	Question	True (%)	False (%)
1.	The minimum limit for taking antibiotics is 3 days	56	42
2.	All antibiotics taken 3x daily	31,3	68,7

3.	When cured antibiotics do not need to be taken again / spent	28,2	71,8
4.	All diseases can be cured with antibiotics	43,1	56,9
5.	Side effects that often appear when using antibiotics are allergies, nausea and vomiting	72	28
6.	The use of inappropriate antibiotics can cause bacterial resistance to antibacterial so that the patient becomes incured which is called resistant	33,1	66,9
7.	Take erythromycin tablets preferably on an empty stomach	62	38
8.	Antibiotic resistance can be prevented by rational consumption of antibiotics	27,9	72,1
9.	The consumption of antibiotics 2 times a day is intended to be taken once every 12 hours	43,8	56,2
10.	Antibiotics are used to treat viral infections	34	66

After the questionnaire is analyzed, to determine the level of public knowledge about how to use antibiotics and antibiotic resistance, it is necessary to calculate to find out the score of each respondent so that it can be categorized into GOOD, SUFFICIENT, or LESS.

After analysis, it is known that the category of public knowledge about antibiotics and antibiotic resistance is good 17%, enough 14%, and less 69%. This shows that the average respondent has a level of knowledge of antibiotics that is still relatively lacking. There are several factors that can affect people's knowledge about antibiotic use, namely experience, education level, beliefs, facilities, income and socio-culture (13). According to researchers, the factor that influences people in using antibiotics other than public knowledge is the lack of clearer information related to the use of antibiotics given by doctors and pharmacists (8).

CONCLUSIONS

Based on the research that has been done, it can be concluded that the percentage of antibiotic knowledge level in the Dupok community of Bangkalan Regency is still less with a percentage of 69%. The need for education and cooperation between health workers in explaining how to use antibiotics correctly so as to reduce antibiotic resistance among the community.

REFERENCES

1. Fadare JO, Tamuno I. Antibiotic self-medication among university medical undergraduates in Northern Nigeria ANTIBIOTIC PREVELNCE STUDY IN BOTSWANA View project Familial and socio-economic correlates of somatisation disorder View project [Internet]. 2011. Available from: http://www.academicjournals.org/jphe

2. Anggraini W, Farmasi J, Kedokteran F, Kesehatan I, Pemberian P, Terhadap E, et al. PHARMACEUTICAL JOURNAL OF INDONESIA [Internet]. Vol. 2020, PHARMACEUTICAL JOURNAL OF INDONESIA. Available from: http://.pji.ub.ac.id

3. Utami ER. ANTIBIOTIKA, RESISTENSI, DAN RASIONALITAS TERAPI. Vol. 1, El-Hayah. 2011.

4. Megawati F, Agustini NPD. Knowledge and Behavior of Antibiotic Use among PKK Women (Family Welfare Empowerment) with Career Women Status in Banjar Yangbatu Kauh, East Denpasar. Jurnal Ilmiah Medicamento. 2022 Mar 29;8(1):63–8.

5. Kesehatan J, Laily Yarza H, Irawati L. Hubungan Tingkat Pengetahuan dan

Sikap dengan Penggunaan Antibiotik Tanpa Resep Dokter [Internet]. Vol. 4, Andalas. 2015. Available from: http://jurnal.

6. Anggraini W, Farmasi J, Kedokteran F, Kesehatan I, Pemberian P, Terhadap E, et al. PHARMACEUTICAL JOURNAL OF INDONESIA [Internet]. Vol. 2020, PHARMACEUTICAL JOURNAL OF INDONESIA. Available from: http://.pji.ub.ac.id

7. Puspitasari CE, Meivira A, Dewi NMAR. Evaluasi Tingkat Pengetahuan Penggunaan dan Penyimpanan Antibiotika pada Masyarakat di Kecamatan Ampenan Periode April–Juli 2021. Jurnal Sains dan Kesehatan. 2022 Dec 31;4(6):654–63.

8. Pratiwi AI, Wiyono WI, Jayanto I. Pengetahuan Dan Penggunaan Antibiotik Secara Swamedikasi Pada Masyarakat Kota. Jurnal Biomedik:JBM. 2020 Dec 31;12(3):176.

9. Puspitasari CE, Meivira A, Dewi NMAR. Evaluasi Tingkat Pengetahuan Penggunaan dan Penyimpanan Antibiotika pada Masyarakat di Kecamatan Ampenan Periode April–Juli 2021. Jurnal Sains dan Kesehatan. 2022 Dec 31;4(6):654–63.

10. Validitas U, Reliabilitas D, Penggunaan K, Penyimpanan D, Di A, Ampenan K, et al. Validity and Reliability Test of Questionnaire Use and Storage Antibiotics Drugs in Ampenan. Vol. 4, Archives Pharmacia. 2022. 47-54+JESSICA+MAMPOUW.

11. Ihsan S, Illiyin Akib N. STUDI PENGGUNAAN ANTIBIOTIK NON RESEP DI APOTEK KOMUNITAS KOTA KENDARI STUDY OF NON PRESCRIPTION USE OF ANTIBIOTICS ON COMMUNITY PHARMACY IN KENDARI.

12. Victoria Kondoj I, Astuty Lolo W, Jayanto I. PENGARUH TINGKAT PENGETAHUAN DAN SIKAP TERHADAP PENGGUNAAN ANTIBIOTIK DI APOTEK KIMIA FARMA 396 TUMINTING KOTA MANADO THE INFLUENCE OF KNOWLEDGE LEVELS AND ATTITUDES TOWARDS ANTIBIOTICS AT KIMIA FARMA PHARMACY 396 TUMINTING MANADO CITY.