



THE INFLUENCE OF COMMUNITY KNOWLEDGE LEVELS ON THE USE OF AMOXICILLIN IN X APOTEK

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ABSTRACT

Antibiotics are substances produced by bacteria or synthetic which aim to kill or inhibit the growth of other bacteria, and are substances produced by microorganisms which in low concentrations are capable of inhibiting the growth or killing of other microorganisms. The use of antibiotics is a widely used therapy and is commonly used by health workers as *first-line therapy*, so that its use is widely found in society. The use of antibiotics must be done appropriately because the side effect that arise due to inappropriate use of antibiotics is the resistance of a disease to antibiotics. There are several factors that influence community knowledge regarding the use of antibiotics including education, occupation, age, experience, information, environment, and culture. The purpose of this study was to determine the effect of the community knowledge level about the use of amoxicillin antibiotics.

Keywords: antibiotics; rasional; self-medication; the use

INTRODUCTION

Community knowledge is a process in which a person tries to sense an object. There are several factors that affect knowledge including: Education, work, age, experience, information, environment, and culture. Antibiotics are substances produced by microorganisms which, in low concentrations, are capable of inhibiting the growth or killing of other microorganisms. Antibiotics are substances produced by bacteria or synthetic which aim to kill or inhibit the growth of other bacteria. The purpose of this study was to determine the effect of the community knowledge level about the use of amoxicillin antibiotics.

The type of research used in this study is descriptive qualitative. The purpose of this study was to determine the effect of the community knowledge level on the use of amoxicillin in the realm of knowing, understanding, and application. The research method used here is a cross sectional approach. The sampling technique used in this research is *accidental sampling*. *Accidental sampling*, namely taking sampling unpremeditated by taking cases or respondents who happen to exist or are available somewhere according to the research context. The type of research used for collecting data is descriptive research. This research was conducted using a cross-sectional method, because it only examines at a certain time. The data studied are the findings in the field at this time. The research was conducted at Pharmacy X in Ajung Village in July 2022.

METHOD

This research was conducted in July 2022 in the community who bought the amoxicillin antibiotics at the Pharmacy X. The samples obtained in this study were 50 people who met the inclusion criteria. Respondents will be given an informed consent questionnaire in order to determine the effect of the community knowledge level on the use of amoxicillin antibiotics. Data results from the questionnaire were then processed using Microsoft office excel to determine the percentage level of knowledge and using SPSS to determine whether there was

an effect.

RESULTS

The research on the effect of the community knowledge level about the use of the antibiotic amoxicillin at pharmacy X aims to determine the level of knowledge of the people who come to the pharmacy in the use of the amoxicillin antibiotics. The sample used in this study was 50 respondents with inclusion criteria, namely people who came to the Pharmacy X Jember, aged 17-50 years, people who could read and write, people who bought the amoxicillin antibiotics.

Tabel 1.
Criteria Based on Age (n=50)

Age	f	%
17-27	32	64
28-38	6	12
39-49	11	22
>50	1	2

Age affects one's comprehension and mindset. The older a person becomes, the more comprehension and mindset he develops, so that the knowledge obtained will be better.

Tabel 2.
Criteria Based on Education (n=50)

Educational Background	f	%
Elementary School	4	8
Junior High School	8	16
Senior High School	35	70
Bachelor/undergraduate	3	6

Based on the results of the educational factor characteristics, the higher a person's education level, the more knowledge he has and the easier it is for the person to receive information, so that he is more receptive to newly developed values.

Tabel 3.
Criteria Based on Occupation

Occupation	f	%
Employed	24	48
Unemployed	26	52

Based on the results of the work factor characteristics, 48% of the respondents has occupations and 52% did not have occupations.

Data collection was carried out on respondents with data classification based on the realm of "Knowing", "Understanding" and "Application". Each respondent in each classification will fill out a questionnaire whose contents discuss the level of knowledge on the use of antibiotics.

Tabel 4.

The results of the study on the influence of community knowledge level about the use of amoxicillin antibiotics in the realm of "Knowing"

No	Statements	Correct Answers	Incorrect Answer	Correct Percentage
1	Amoxicillin is one of the antibiotics	48	2	96
2	Amoxicillin is one of the drugs to treat infections caused by bacteria	43	7	86
3	Amoxicillin is also available in the form of ointment (that is applied to treat bacterial infections)	35	15	70
4	Amoxicillin can be taken by children	46	4	92
5	Infected wounds can be treated with Amoxicillin	45	5	90
6	Antibiotics are classified as potent drugs that must be purchased with a doctor's prescription	44	6	88

Tabel 5.

The results of the study on the influence of community knowledge level about the use of amoxicillin antibiotics in the realm of "Understanding"

No	Statements	Correct Answers	Incorrect Answers	Correct Percentage
1	if while taking the antibiotic amoxicillin there is an unwanted reaction you go to the doctor again	50	0	100
2	Improper use of amoxicillin antibiotics can develop germs or bacteria resistance	33	17	6
3	the use of Amoxicillin antibiotics that are not according to the rules of use can cause side effects	41	9	82
4	discontinuation of the use of amoxicillin antibiotics if symptoms have disappeared is allowed	26	24	52
5	after germs develop resistance, it requires antibiotics with higher doses of amoxicillin	42	8	84
6	Antibiotics are safe for use by everyone when used according to the rules of use	48	2	96

Tabel 6.
The results of the study on the influence of community knowledge level about the use of amoxicillin antibiotics in the realm of “Application”

No	Statements	Correct Answers	Incorrect Answers	Correct Percentage (%)
1	Amoxicillin antibiotics are taken until they run out	50	0	100
2	Amoxicillin is taken at least 3 times a day for 3-4 days	49	1	98
3	The use of amoxicillin which should be used up 3 times a day may be taken more than 3 days (twice a day)	23	27	46
4	amoxicillin antibiotics cannot be purchased freely without a doctor's prescription	39	11	78
5	antibiotics cannot be taken only 1 tablet or 2 tablets	29	21	58
6	the use of antibiotics should not be less than 3 days	44	6	88
7	How to take antibiotics for adults and children is different	45	5	90

Tabel 7.
The results of the study on the influence of community knowledge level about the use of amoxicillin antibiotics in the realm of Knowing, Understanding and Application

Categories	Score	Percentage (%)	Knowledge Level
Knowing	261	87	Good
Understanding	240	80	Good
Application	279	79,71	Good

Table 7 shows the percentage in the study of community knowledge level on the use of the amoxicillin antibiotics at Pharmacy X. At the knowledge level in the realm of "Knowing", the results show a percentage of 87% in the Good category, at the knowledge level in the realm of "Understanding", the results show a percentage of 80% in the Good category, while at the knowledge level in the realm of "Application", the percentage results are 79.71% in the Good category.

DISCUSSION

This survey has increased our understanding of pharmacists’ awareness of resistance of antibiotics on Anti Microbial Stewardship (AMS), uptake of evidence-based AMS strategies in routine pharmacy practice and attitudes toward working in AMS, and relevant barriers that prevent their AMS activities. Surveyed patients were aware of AMS but still hold a misperception that their individual efforts have minimal effect in reducing the problem. Pharmacists did not feel that they had adequate training, resources, guidelines, and organizational supports to routinely practice AMS. Most of the respondents were have to receive relevant education, communication tools, and a clear protocol on specific AMS tasks to optimize antimicrobial use.

CONCLUSION

From the results of the study, it can be concluded that the percentage of the use of amoxicillin antibiotics in pharmacy X without a doctor's prescription is 100%. The level of community knowledge about the use of the amoxicillin antibiotics at the pharmacy X Jember (July 2020 period) is in the knowing category. There is an effect of the community knowledge level on the use of amoxicillin antibiotics at pharmacy X.

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