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Public Knowledge of Antibiotic Use at Majlis Taklim Al-Ikhlas East Pontianak

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Abstract: The use of antibiotics, in general, is influenced by user knowledge, so if user knowledge is not correct, it can cause errors in use. Improper use of antibiotics can reduce their effectiveness, which will cause adverse risks such as antibiotic resistance. This study aims to determine the public's knowledge of the use of antibiotics in the Al Ikhlas Taklim council. The results of the study obtained were aged 40-60 years with the number of respondents 21 people having a percentage of 78%, in terms of education level, dominated by university education with a percentage value of 41% for the highest work as many as 11 people (41%) were housewives (IRT), the highest income (≥UMR) as many as 16 people (59.3%), while based on the level of knowledge of respondents who were well categorized as having a percentage of 92.59%. This means there is a correlation between age, the level of education, and the respondent's knowledge of antibiotics knowledge.

Keywords: Resistance, Antibiotics, Microbes

1. Introduction

Antibiotics are a class of compounds that can kill or inhibit microbial growth both naturally and synthetically. Still, they are only used for bacteria and cannot be used for viruses, fungi, or other nonbacteria. However, the success of antibiotic therapy is greatly influenced by the discipline of a patient in taking the drug. Antibiotics are not like drugs in general when dealing with infections. Patients who use antibiotics should pay attention, especially to dosage-related ones, namely, taking antibiotics until they run out. Mistaking or using antibiotics unwisely can trigger microbial antibiotic resistance (Asharina, 2017). Microbial resistance to antibiotics has become a global health problem that can harm and degrade the quality of health services. Cases of resistance can be inhibited by using antibiotics wisely, while the spread process can be inhibited by controlling the infection optimally. Various studies have found that about 40-62% of antibiotics are used unwisely in different parts of hospitals. Antibiotics are used for diseases that do not actually require antibiotics (Harapan et al., 2018).

Infection is one of the diseases that still dominate in developing countries and, at the same time, still dominates and is the world's most extensive killer disease of children and young adults. Therefore, the use of antibiotics at this time is still very high. The report states that infection cases reach more than 13 million deaths per year. Antibiotic resistance is currently the biggest threat to global public health, so WHO coordinates a global campaign to increase public awareness and behaviour towards antibiotic use (Yarza, 2015).

The research results of (Si et al., 2021) in Jordan also reported that some antibiotics were used for colds and coughs. In the study, they were using 1,141 samples. The results of the study found that the use of antibiotics as analgesics (28.1%), prophylaxis (55.6%) against

infections, without a doctor's prescription (51.8%), and prescription by telephone (50.0%). Yusuf Sholihan's 2015 study in Surakarta using 276 respondents found that 64.86% had purchased antibiotics without a doctor's prescription. Research from (Kondoj et al., 2020) in Surakarta found that public knowledge about antibiotics still varied from low 36.96% of the total 102 samples to medium (43.48%) and high (19.57%). In the study, it was also found that there were still mothers who stated how to get antibiotics, namely from pharmacies; there were also those who said that antibiotics that had been obtained from previous health services were still available and could be drunk again because they had not run out during the first drink.

Based on the background above, it can be seen that public knowledge about the use of antibiotics is still relatively low and causes a high level of irrational use. This prompted the author to conduct a study to determine the level of public knowledge about the use of antibiotics in the Al-Ikhlas Taklim council in East Pontianak.

2. Materials and Methods

This research was conducted at the Al-ikhlas Taklim council in East Pontianak in October 2023. This type of research uses quantitative descriptive, descriptive research is a research activity with a non-experimental approach, and descriptive conservation is carried out (Imron, 2014). Sugiyono (2018) argues that the quantitative approach is research based on the philosophy of positivism to examine specific populations or samples and random sampling by collecting data using instruments and statistical data analysis (Yarza et al., 2015). This study describes the community's knowledge about the use of antibiotics in the Al-Ikhlas Taklim council in East Pontianak.

Data collection techniques are carried out using instruments in questionnaires containing demographic data in the form of names, ages, recent education, occupation, income and questionnaires about respondents' knowledge of antibiotic use. The population in this study is all people who attended the study of the Al-Ikhlas Taklim council, as many as 28 people and were willing to become respondents, with inclusion criteria, namely people aged >17 years.

Data processing is carried out by descriptive analysis using statistics. Demographic data is entered into an Excel Microsoft to explain the characteristics of each variable in the form of demographic data. The author used a closed questionnaire with "correct" and "wrong" answer categories for the public knowledge questionnaire about antibiotics to obtain these answers. Correct answers are given the number 1, and allergic answers are given the number 0, which is then grouped in percentages. Community knowledge can be categorized well if the percentage value is ≥70%, enough with a percentage value of 30-70% and less with a percentage of ≤30%.

3. Results and Discussion

The distribution of respondents by age, education, occupation and income is shown in this table:

Table 1 : Frequency Distribution of Respondents Based on Demographic Data

Age	Amount	Persentage (%)
Early Adult (18-40 years)	6	22.2
Intermediate Adults (40-60 Tahun)	21	77.8
Total	**27**	**100**
Intermediate	**n**	**Persentage %**
SD	8	30
SMP	2	7.4
SMA	6	22
PT	11	41
Total	**27**	**100**
Education	**n**	**Persentage %**
IRT	11	41
Private	10	37
PNS	6	22
Total	**27**	**100**
Income	**n**	**Persentase %**
High (≥ UMR)	16	59.3
Low (< UMR)	11	40.7
Total	**27**	**100**

Source : primary processed data

Table 3.2 : Frequency Distribution of Respondents Based on Knowledge

Knowledge	n	Persentage %
Good	25	92.59
Enough	2	7.41
Less	0	0

Total	27	100

Source: primary processed data

Based on Table 3.1, respondents are known to be 40-60 years old, as many as 21 people (78%) (Harlock, 2003). Middle adulthood is when a mother feels anxious to get first aid if a child or person in her house is sick, so seek first aid from a pharmacy or doctor and ask for antibiotic drugs because it has not healed.

The highest respondent education, as many as 11 people (41%) are in higher education, the higher the level of education, the easier it will be to receive the information conveyed (Notoatmodjo, 2010), especially regarding respondents' knowledge about antibiotics. The highest job of 11 people (41%) is a housewife (IRT), and the lowest education is six people (22%) civil servants; a person's job dramatically affects the process of accessing information needed for an object (Notoatmodjo, 2010).

The highest income (≥ UMR) is 16 people (59.3%); income is a reward for working after completing their work. The amount of income workers receive is influenced by the working hours used to complete their work, especially in the family; income is the amount of real income from all household members used to meet everyday and individual needs in the household (Haryanto et al., 2023).

Based on Table 3.2 of the frequency distribution of respondents based on knowledge, it was found that respondents' knowledge was categorized as good as 25 people (92.59%) and as sufficient as many as two people (7.41%). Unlike the research conducted by Ageng 2020 conducted on the people of Bantir Village, Central Java, it tends to be low. Respondents with a low level of knowledge were 87.4%, medium knowledge was 11.3%, and high knowledge was 1.3%. This shows that the level of public knowledge about the use of antibiotics in the Alikhlas Taklim council is excellent; this is influenced by age, education, employment, and income of respondents in increasing knowledge about antibiotics.

4. Conclusion

Based on the results of research conducted by the Society on Antibiotic Knowledge in Majlis Taklim al-ikhlas East Pontianak, in the age range of 40-60 years with the number of respondents, 21 people have a percentage of 78%, in terms of education level dominated by university education with a percentage value of 41%, for the highest work as many as 11 people (41%) are housewives (IRT), the highest income (≥ UMR) as many as 16 people (59.3%), meanwhile, based on the level of knowledge of respondents who are categorized well, which has a percentage of 92.59%. This shows a correlation between age, education level, and respondents' knowledge about antibiotic knowledge in the community, especially in the East Pontianak environment.

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Conflict of Interest

All Authors declare no conflict of interest and agree with the content of the manuscript

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