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THE LEVEL OF HOUSEWIFE'S KNOWLEDGE ABOUT ANTIBIOTIC USE

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ABSTRACT
Low knowledge about medications including the use of antibiotics can lead to the failure of therapy objectives. Improperly use of antibiotics can cause bacterial resistance. The correct use of antibiotics can be influenced by several factors, one of which is the level of knowledge. This study aims to determine the level of housewives' knowledge about antibiotic use in Dasan Tapen Induk Village, Gerung District, West Lombok Regency. Method: This research is a descriptive survey study, using purposive sampling technique. The sample consists of 77 respondents who meet the inclusion and exclusion criteria. Data from the respondents were collected using a questionnaire and analyzed quantitative descriptive. 41 respondents (53.25%) had good knowledge, 30 respondents (38.96%) had sufficient knowledge, and 6 respondents (7.79%) had poor knowledge. It can be concluded that the level of housewives' knowledge about antibiotic use is classified as good (53.25%).

Keywords: antibiotics; gerung district; housewives; knowledge

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INTRODUCTION

Infectious diseases remain one of the significant public health issues, especially in developing countries. The main medication used to address this issue is antimicrobials, one of which is antibiotics. Antibiotics are drugs used to treat infections caused by bacteria. The improper use of antibiotics can trigger the emergence of resistance problems. According to data from the World Health Organization (WHO) in 2009, Indonesia ranked 8th out of 27 countries with the highest burden of microbial resistance to bacteria worldwide (Wahyunadi, 2013). Recent data shows a concerning rise in antibiotic resistance cases in Indonesia, and the country ranks second after India among 11 Southeast Asian countries in terms of mortality related to antibiotic resistance (Sihombing et al., 2023). In Indonesia, drug classification is categorized into over-the-counter (OTC), limited OTC, controlled drugs and narcotics. Over-the-counter drugs are drugs that can be consumed without physician's prescription (Chaerunissa, 2009). On the other hand, antibiotics categorized controlled drug which is only can be used with prescription.

The public perceives antibiotics as a cure for all diseases. Often, people purchase antibiotics without a doctor's prescription and consume them to treat conditions such as cough, cold, fever, and acute diarrhea caused by viruses (Arrang, 2019). The improper use of antibiotics can lead to irrational antibiotic use (Riberu, 2018). The 2013 Basic Health Research (Riskesdas) showed irrational antibiotic use in Indonesia, with 86.1% of households storing antibiotics without a prescription.

A study reported a significant relationship between knowledge and behavior after consuming antibiotics, showing a one-way interaction. As knowledge increases, the use of antibiotics

becomes more understood (Sugihantoro et al., 2020). Knowledge about antibiotics is essential, especially for housewives, who play a critical role in maintaining and controlling family health. This study aims to assess the level of housewives' knowledge about antibiotic use in Dasan Tapen Induk Village, Gerung District, West Lombok Regency.

METHOD

This study is a descriptive research aimed at providing an objective description of a particular condition. The population in this study consists of housewives residing in Dasan Tapen Induk Village, Gerung District, West Lombok Regency, totaling 341 housewives. The sample taken was 77 housewives, representing each family card (KK). The selected respondents were housewives who met the inclusion criteria, namely: aged 18-45 years, able to read and write, and willing to participate as respondents. The exclusion criteria included individuals with mental health disorders and housewives working as healthcare professionals. A total of 77 respondents filled out a questionnaire (Puspitasari, 2022) as a measurement tool for the level of knowledge about antibiotic use. After the questionnaire was completed, the data were processed and analyzed. The data analyzed using univariate analysis. The level of knowledge was categorized into three groups based on the percentage of scores obtained: good (76%-100%), sufficient (56%-75%), and poor (<56%).

RESULT

A total of 77 housewives were classified based on characteristics such as age, education, and occupation as follows:

Table 1.
Respondent Characteristics Based on Age

Age (years)	f	%
16 – 25	5	6.49
26 – 35	13	16.89
36 – 45	25	32.47
>46	34	44.15

From the table of respondent characteristics based on age, the majority of housewives were aged >46 years, with a total of 34 respondents (44.15%). The least represented age group was 16-25 years, with only 5 respondents (6.49%).

Table 2.
Respondent Characteristics Based on Education

Educational Level	f	%
SD	27	35.06
SMP	5	6.49
SMA	31	40.26
PT	14	18.19

Table 2 shows that the most common educational level among the respondents was high school (SMA), with 31 respondents (40.26%). The least common educational level was junior high school (SMP), with only 5 respondents (6.49%).

Table 3.
Respondent Characteristics Based on Occupation

Occupation	f	%
Civil servant (PNS)	8	10.39
Housewives (IRT)	53	68.83
Entrepreneurs	6	7.79
Farmers	10	12.99

Based on the table of respondent characteristics by occupation, the largest group of respondents were housewives, with 53 respondents (68.83%). The remaining respondents included housewives who also

worked as civil servants (PNS) with 8 respondents (10.39%), entrepreneurs (wiraswasta) with 6 respondents (7.79%), and farmers with 10 respondents (12.99%).

Table 4.
Respondent Knowledge Level

Knowledge Level	f	%
Good	41	53.25
Sufficient	30	38.96
Poor	6	7.79

According to the respondent knowledge level table, out of 77 respondents, the highest number which are 41 respondents (53.25%) had good knowledge.

DISCUSSION

Housewives (IRT) play a crucial role in maintaining the health of their families, including in the proper use of antibiotics. Knowledge underlies a person's attitudes and behavior. Knowledge is domains that are important for the formation of real action. Good knowledge will change attitudes to be positive so that more action is taken directed (Notoadmojo, 2010). Good knowledge about antibiotics can help them make informed decisions regarding treatment, reduce the risk of misuse, and protect the health of family members from the adverse effects of improper antibiotic use. Improper use of drugs will cause many problems. These problems include aspects of effectiveness, side effects, interactions, economics and drug abuse (Nurmiati, 2022). In antibiotics use, some people tend to did self medication. Self-medication is time saving, no need to seek medical practitioners for minor ailments, cheaper, easily available, convenient and it gives quick relief. Comparing with a study among housewives in Northern India, self-medication has been chosen because repeated consultations to the doctor may cause a burden to them financially and it is time-consuming. Physician is only consulted when the symptoms are serious enough or could not be relieved by medication (Kaushal, 2012). Another study showed almost all respondents seek medical practitioners when symptoms worsen, which shows correct conduct of action as unrelieved pain may indicate a chronic medical condition, where medical intervention is needed (Kusniwarti, 2020).

This study presents data from 77 housewives based on age, where the majority (44.15%) were over the age of 46, with 34 respondents. This age group can be categorized as productive age, where individuals in this group have the physical condition and job types that can generate products and services to live optimally (BKKBN. 2013). Data from Table 2, which presents the respondent characteristics based on education, shows that the highest percentage of respondents (40.26%) had a high school education (SMA), while 18.19% had a higher education (university). If combined, the number of respondents with high school and higher education totals 45 individuals (58.45%). Education is known to influence individuals, including their behavior and lifestyle choices, particularly in terms of motivation to participate in development (Wawan, 2010).

In Table 3, which presents characteristics based on occupation, it is observed that the majority of respondents (68.83%) were housewives who focused on household duties and did not work outside the home. In Table 4, regarding respondents' knowledge level, it was found that 41 out of 77 respondents (53.25%) had good knowledge. Based on the questionnaire analysis, these respondents had sufficient knowledge about antibiotics, their usage, and the potential side effects. The 53.25% of respondents who were categorized as having good knowledge are consistent with the percentage of housewives with high school or higher education and those aged above 46 years. Housewives with higher education and who are in the productive age group tend to have good knowledge, regardless of the type of job they engage in. In this

study, 68.83% of respondents were housewives who focused on household duties or did not work outside the home. A study explained about some knowledge on antibiotic use which are definition of antibiotics, example of antibiotics, roles of antibiotics, administration of antibiotics, adverse effect of antibiotics, antibiotics resistance, and place of antibiotics purchase (Mardiati, 2021).

Those knowledges are very important especially for housewives. Knowledge about administration of antibiotics told most people did not know that antibiotics must be spent even though the condition has recovered from an illness by 61.1%. This is reinforced by WHO, which reported that from 12 countries, including Indonesia, as many as 53-62% people stopped taking antibiotics when they felt they were better. This is due to laziness, which the community acknowledges retaking medicine when they feel cured even though the medicine is still left. Housewives who are of productive age, have a good level of education and have an occupation tend to have knowledge related to antibiotics. The poor behavior is caused by the lack of knowledge and attitudes of students regarding the use of antibiotics. This was proven by the correlation test, which showed a direct correlation between knowledge, attitude, and behavior of the respondents (Hamdani, 2021). This is consistent with other similar research conducted previously, which found a significant relationship between the level of knowledge and attitude in the use of antibiotics among university students in Jember. In other words, the better the level of knowledge, the better the attitude towards the use of antibiotics (Hasan, 2019).

In society, the perception that housewives are only responsible for managing the household is still prevalent, which is why the majority of the respondents do not work outside the home (Toyyibah, 2019). However, this result supports the data indicating good knowledge levels, as it aligns with the statement that most housewives spend their time teaching and nurturing their children with proper parenting practices (Kartono, 2011). A study showed that key themes identified from perception surveys were a substantial lack of Antimicrobial Resistance (AMR) awareness and knowledge about antibiotics, particularly among the poor and lower educated, widespread antibiotic self-medication without prescription, and over-the-counter non-prescription antibiotic dispensing in community pharmacies (Ralalicia, 2022).

CONCLUSION

Based on the results of the study, the majority of housewives in Dasan Tapen Induk Village, Gerung District, West Lombok Regency, scored between 80-100%, which accounts for 53.25% of the respondents. It can be concluded that they have good knowledge.

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REFERENCES

Arrang, Sherly Tandi, Cokro F, Sianipar EA. (2019). Penggunaan Antibiotika yang Rasional pada Masyarakat Awam di Jakarta. *Mitra : Jurnal Pemberdayaan Masyarakat*. Vol 3(1).

Chaerunissa AY, Surahman E, Imron SSH. (2009). *Farmasetika dasar: konsep teoritis dan aplikasi pembuatan obat*. Widya Padjadjaran.

Hamdani, Siva, Nuari DA, Rahayu, T. (2021). The Relationship between Knowledge, Attitudes, and Behaviour of Universitas Garut Students of Antibiotic Uses. *Jurnal Ilmiah Farmako Bahari*. Vol 12 (2).

Hasan, In. (2019). *Survei Pengetahuan, Sikap, dan Perilaku Penggunaan Antibiotik di Kalangan Mahasiswa Perguruan Tinggi di Jember*. (Tesis, Fakultas Farmasi, Universitas Jember).

Kartono, Kartini. (2011). *Psikologi Wanita Mengenal Wanita Sebagai ibu Dan Nenek*, Jilid 2. Mandar Maju.

Kaushal J, Gupta M, Jindal P, Verma S. (2012). Selfmedication patterns and drug use behavior in housewives belonging to the middle income group in a city in Northern India. Indian J Community Med. Vol 37(1).

KEMENKES RI. (2013). Pokok-pokok hasil RISKESDAS Indonesia 2013.

Kuswinarti, Aisyah Binti Mohamad Rohim, Aminah, S. (2020). Attitude and Behavior towards Self-medication using Non-steroidal Anti-inflammatory Drugs and Paracetamol among Housewives in Hegarmanah Village, Jatinangor. *Althea Medical Journal*. Vol 7(1).

Mardiati, Nurul, et al. (2021). Knowledge and Attitude of Antibiotic Use among Public in Rural Area of Cempaka, Banjarbaru, South Kalimantan. *Borneo Journal of Pharmacy*, Vol 4 (3).

Notoadmodjo S. (2010). *Promosi kesehatan teori dan aplikasi*. Rineka Cipta.

Nurmiati, et al. (2022). Analisis Rasionalitas Penggunaan Obat Antibiotika Pada Pasien ISPA Di Rumah Sakit Langara Kabupaten Konawe Kepulauan. *Jurnal Pharmacia Mandala Waluya Vol.1 (3)*

Peraturan Menteri Kesehatan Republik Indonesia Nomor 28 Tahun 2021 Tentang Pedoman Penggunaan Antibiotik

Puspitasari, Chandra Eka., Meivira, A., Dewi, MNAR. (2022). Evaluasi Tingkat Pengetahuan Penggunaan dan Penyimpanan antibiotik pada Masyarakat di Kecamatan Ampenan Periode April-Juli 2021. *Jurnal Sains dan Kesehatan*. Vol 4 (6)

Ralalicia, Limato, et al. (2022). Optimizing antibiotic use in Indonesia: A systematic review and evidence synthesis to inform opportunities for intervention. *The Lancet Regional Health - Southeast Asia*, Vol 2.

Riberu V. (2018). Tingkat Pengetahuan masyarakat tentang penggunaan antibiotik di Desa Weoe Kecamatan Wewiku Kabupaten Malaka. (*Tesis POLTEKKES KEMENKES Kupang*). 23-31.

Sihombing, et al. (2023). Response to antimicrobial resistance in South-East Asia Region. *The Lancet Regional Health Southeast Asia*

Toyyibah, Amanah. (2019). *Tingkat Pengetahuan Ibu rumah tangga tentang penggunaan antibiotika di Kelurahan Pulosari Kecamatan Brebes Kabupaten Brebes*. (Karya Tulis Ilmiah, Politeknik Harapan Bersama). https://perpustakaan.poltektegal.ac.id/index.php?p=show_detail&id=13553&keywords=

Wahyunadi, N.M.D. (2013). *Hubungan Tingkat Pengetahuan Tentang Bahaya Resistensi Antibiotik dengan Perilaku Penggunaan Antibiotik yang Irasional Pada Pasien di Puskesmas Rampal*

Celaket Malang. (Skripsi Sarjana, Universitas Brawijaya). http://repository.ub.ac.id/id/eprint/123374

Wawan, & Dewi. (2010). *Teori & Pengukuran Pengetahuan, Sikap dan Perilaku Manusia*: Nuha Medika.

World Health Organization. (2009). *Tentang Pemakaian Antibiotika Secara Rasional*: World Health of Organization. https://www.who.int/publications/i/item/9789290211266