

Level of Knowledge and Use of Traditional Medicine in Outpatients of Mekarsari Health Center, Barito Kuala Regency

Aditya Noviadi Rakhmatullah¹, Azmi Yunarti², M. Andi Chandra³, Imas Muliwati⁴

^{1,3} Pharmacist Professional Education Study Program, Faculty of Pharmacy, University of Borneo Lestari

^{2,4} Bachelor of Pharmacy Study Program, Faculty of Pharmacy, Borneo Lestari University
Corresponding email: noviadiaditya@gmail.com

ABSTRACT

The use of herbal medicine as a treatment is increasing, especially in Mekarsari District, Barito Kuala Regency. Without proper education, traditional medicine practices can have a negative impact on health. The purpose of this study was to determine the level of knowledge and use of traditional medicine in patients seeking treatment at the Mekarsari Health Centre. This study used a descriptive method with a quantitative approach. The population in this study were all outpatients at the Mekarsari Health Centre in January 2023. This study used a purposive sampling technique in sampling and used a validated questionnaire instrument in data collection. The results showed that 47% of respondents had a sufficient level of knowledge, 25% had a good level of knowledge, 14% had a poor level of knowledge, and 13% had a poor level of knowledge. Based on the method of obtaining traditional medicine, it is known that 55% said that it was from herbal medicine sellers in the form of powder or infusions with a duration of use ranging from one to three days. The majority of traditional medicine users use it to relieve pain and aches (22%). Based on the effects after consuming traditional medicine, 78% said they felt better and 99% said they had no side effects.

Keywords: The level of knowledge; traditional medicine; puskesmas mekarsari

INTRODUCTION

Traditional medicine refers to practices passed down through generations for healing purposes. These practices may include using plants, animals, minerals, specific galenic preparations, or a combination of these elements (BPOM RI, 2014). Herbal medicine, standardized herbal medicine, and phytopharmacology are the three main categories of traditional medicine (BPOM RI, 2019).

Among Indonesians, 48% turn to traditional medicine to maintain health, with 95.6% recognizing its positive effects on their well-being (Riskesdas, 2018; Muslihatul & Heriyati, 2017). Many people use herbal remedies to boost their immune system, which has been used as a treatment to prevent the spread of COVID-19, including during the pandemic. This is in accordance with previous research by Rusida and Depy (2021), more than half of Banjarbaru residents know the use of traditional medicine and food supplements to ward off the spread of the COVID-19 virus. Traditional medicine's safety and naturalness are its users' main attractions (4).

One aspect of the safety of traditional medicine is that it is free from Chemical Drugs (BKO). The addition of BKOs in herbal medicine, among others, can trigger health problems in other organs, such as kidney and liver function disruption. Although regulations on the prohibition have been made, the facts in the field are still found in traditional medicines containing BKOs (BPOM, 2017). Many herbs with medicinal chemicals (BKO) are circulating in the market, including the Mekarsari Sub-district.

Mekarsari sub-district is located far from the centre of the capital city, and based on the results of previous surveys and preliminary studies, it is known that the majority of the population works as farmers. Based on information gathered after a brief interview with several farmers in Mekarsari Sub-district, they usually feel tired after work and consume traditional medicine to relieve aches or tiredness. However, they do not always know whether the remedies they use are safe, so the community needs socialization and education. Therefore,

since 2019, the Mekarsari Health Center has implemented an innovation called EIKE Jamu. EIKE Jamu stands for Etalase of Information Communication & Jamu Education.

EIKE Jamu is a traditional medicine counselling activity carried out by pharmaceutical officers to visitors to the Mekarsari Health Centre once a week. The EIKE Jamu corner is equipped with a display case containing leaflets, traditional medicine pocketbooks, and simplisia that have been packaged in such a way as to be presented to visitors with free herbal drinks. As the traditional medicine extension program at Puskesmas Mekarsari has never been evaluated, the researchers were interested in learning more about the status of traditional medicine knowledge and practices at the facility. This study is expected to be used as a source of information data for future researchers. It can continue research to see the effect of traditional medicine use on outcome therapy.

METHOD

The research design used was descriptive research with a cross-sectional design. Respondents were selected using a purposive sampling technique and inclusion and exclusion criteria. This study also used the Ethical Clearance issued by the Ethics Commission of Muhammadiyah University of Banjarmasin with No.203/UMB/KE/IV/2023.

The overall research time was from January to June 2023 at the Mekarsari Health Center, Barito Kuala Regency, with details from January to February for surveys and preliminary studies, March submission of EC and preparation for data collection (research permits), validation tests and questionnaire reliability tests, April to May data collection, and June data processing.

The population used was outpatients who visited from April to May 2023 at the Mekarsari Health Center, which was 350 people. The information collected was prospective. The sample size was determined using the Slovin formula:

$$n = \frac{N}{1 + N(d)^2}$$

Notes:

n = number of samples

N = total population

d = level of confidence / accuracy (1%, 5%, 10%) in research

Data Collection Technique

Study participants were surveyed using a validated questionnaire to collect data for this study.

Research Tools and Materials

This study used the following items: relevant articles, a knowledge level questionnaire that has been validated and tested for reliability, a description of the use of traditional medicine, a cell phone, paper, pen, and a personal computer that has SPSS installed.

The information collected for this study came from a questionnaire given to patients at Mekarsari Health Center; the questions asked were about their familiarity and experience with traditional medicine.

Instrument Validity and Reliability Test

The validity test was conducted at the Jelapat Health Center, Barito Kuala Regency by distributing questionnaires to 30 respondents. The results of filling out the questionnaire are symbolized by the calculated r value to be compared with the r table value. If the result of the calculated r value is greater than the r table value, it can be said that the question item is significant or valid.

The validity test in this study used a significant level of 0.05 with 30 respondents with $df = n-2$ ($df = 30-2 = 28$). So that the r table is 0.361. The following are the results of the validity test of the knowledge questionnaire about traditional medicine presented in tabular form.

Table 1. Validity Test Results

Question	R Count	R Table	Description
1	0,462	0,361	Valid
2	0,376	0,361	Valid
3	0,468	0,361	Valid
4	0,395	0,361	Valid
5	0,380	0,361	Valid
6	0,479	0,361	Valid
7	0,399	0,361	Valid
8	0,464	0,361	Valid

All valid question items are then analyzed for reliability. The reliability test in this study used SPSS data processing software using Cronbach's alpha method. The decision about reliability is determined by Cronbach's alpha value > 0.6, indicating the question is reliable, whereas if Cronbach's alpha value < 0.6, the question is considered unreliable (Notoatmodjo, 2014). The results table in the reliability test in this study shows the Cronbach's alpha value as follows.

Table 2. Reliability Test Results of Knowledge Questionnaire

Variable	Cronbach's alpha	Description
Knowledge	0,874	Reliable

More than 0.6, or 0.874, is the calculated Cronbach's alpha value. This provides further evidence that the research tool is trustworthy.

Data Processing Techniques

Data processing involves several steps: editing, data entry, data cleaning, and storage. Data entry involves double-checking the correctness of the data collected, while data cleaning involves double-checking the data entered. Finally, the data is stored.

RESULT AND DISCUSSION

Overview of Research Objects

The sample in this study was all outpatients who visited the Mekarsari Health Center of Barito Kuala Regency in April - May 2023. There were 350 patients who visited. Based on calculations, the number of samples used in this study is 186 people.

Distribution of Respondents

Based on the gender distribution of the respondents, we found that 101 were males and 85 were females, or 54% and 46%, respectively.

Table 3. Distribution of Respondents Based on Gender

Gender	Frequency	Percentage (%)
Male	101	54 %
Female	85	46 %
Total	186	100%

There were more male respondents than female respondents. Statistics from April-May 2023 at Puskesmas Mekarsari corroborate this, showing that the health center treats more male patients than female patients. Thus, males made up the largest share of respondents during data collection.

In terms of age distribution, 45 respondents (or 24% of the total) belonged to the 18-30 age group, 65 to the 31-40 age group, 42 to the 41-50 age group, and 34 to the 51-55 age group, accounting for 35% of the total.

Table 4. Distribution of Respondents by Age

Age	Frequency	Percentage (%)
18 – 30 years	45	24 %
31 – 40 years	65	35 %
41 – 50 years	42	23 %
51 – 55 years	34	18 %
Total	186	100 %

The ability to understand also grows with age. The age of the participants was divided into four groups in this study: those aged between 18 and 30, 31 and 40, 41 and 50, and 51 and 55. According to Restiyono's (2016) research, people often turn to traditional medicine as an alternative therapy when they start experiencing symptoms of health problems in adulthood (19-44 years old). This is because individuals in this age group have more life experience and are more likely to self-medicate. Knowledge about traditional medicine is more straightforward to acquire when people are still in their productive years because their understanding and way of thinking are more developed (4). That may be why people of this age comprise a large proportion of the respondent group. Nonetheless, the findings of this study contradict previous research conducted by Susandy et al. (2022), which states that the age of 51-60 is the most common usage of traditional medicine.

The distribution of respondents based on education shows that as many as 81 respondents (44%) have elementary school education, junior high school background in as many as 45 respondents (24%), high school / vocational high school in as many as 40 respondents (22%), diploma as many as 10 respondents (5%), and bachelor's degree as many as 10 respondents (5%).

Table 5. Distribution of Respondents by Education

Education	Frequency	Percentage (%)
Elementary School	81	44
Junior High School	45	24
High School	40	22
Diploma	10	5
Bachelor	10	5
Total	186	100

The majority of respondents in this study have an elementary school education background. The level of education affects the level of understanding of information. Although most of the respondents only had elementary school education, the results showed that the respondents' knowledge level was mostly adequate. This may be due to the influence of education or counseling provided by officers at the Mekarsari Health Center. The lack of universities in Barito Kuala Regency also causes the low level of community education. Especially in the Mekarsari sub-district, the highest level of education available is only up to the senior high school level. In addition, the mindset of people in rural areas is that school is only for acquiring the ability to write, read, and count. So, people choose not to continue their education due to the demands of life or low economic levels and prefer to work. According to Budiman and Riyanto (2013), with higher education, a person will more easily get information from other people and the mass media. The more information obtained, the more knowledge will be obtained about health and other things. In contrast to Puspita's research (2019) in Mlati District, Yogyakarta City, traditional medicine is mainly dominated by people with high education, namely high school or equivalent. This is because the level of education of the community there is better than in Mekarsari District, Barito Kuala Regency.

Other factors that influence the level of knowledge are experience and environment. Some respondents stated that they obtained information about traditional medicine based on hereditary experience from neighbors or relatives. When viewed from the distribution of answers answered by respondents, the questions that were most often answered incorrectly were questions about the classification of traditional medicines and about the characteristics of herbal medicines containing chemical drugs.

Tabel 6. Distribution of Respondents by Occupation

Job	Frequency	Percentage (%)
Students	25	13%
Farmers	81	44 %
Housewife	60	32%
Civil Servants	11	6%
Others (private/self-employed)	9	5%
Total	186	100%

The distribution of respondents based on occupation showed that 81 respondents (44%) were farmers, 60 respondents (32%) were homemakers, 25 respondents (13%) were students, 11 respondents (6%) were civil servants, and nine respondents (5%) were self-employed.

This is in accordance with respondents' education level, most of whom are elementary school graduates. The relationship between education and employment is very close because if someone is not sufficiently educated, it will be challenging to get a decent job. The better a person's employment status, the better their level of knowledge. This can be seen from the level of knowledge about traditional medicine, which is mostly of sufficient value. In addition to educational factors, geographical factors also affect the level of employment, where the Mekarsari Sub-district is primarily agricultural land.

Table 7. Distribution of Respondents by Knowledge Level

Knowledge Level	Frequency	Percentage (%)
Good	47	25,3%
Enough	88	47,3%
Poor	26	14%
Not Good	25	13,4%
Total	186	100%

Table 7 shows that in terms of the distribution of respondents, there were 47 people with high knowledge (25.3% of the total), 88 people with moderate knowledge (47.3% of the total), 26 people with low knowledge (14% of the total), and 25 people with very low knowledge (13.4% of the total).

Table 8. Overview of Traditional Medicine Use

No	Question	Frequency	Percentage
1	Experience of taking traditional medicine		
	a. Yes	186	100%
	b. No	0	0%
2	How to obtain traditional medicine		
	a. Jamu gendong seller	102	55%
	b. Drug store	34	18%
	c. Warung	39	21%
	d. Make your own	11	6%
3	Traditional medicine dosage forms		
	a. Powder (brew)	98	53%
	b. Liquid	57	31%
	c. Tablet	13	7%
	d. Capsules	2	1%
	e. Decoction	16	9%
4	Purpose of taking traditional medicine		
	a. Body aches	41	22%
	b. Maintain endurance	35	19%
	c. Increase appetite	35	19%
	d. Masung angin (indigestion)	34	18%
	e. Vaginal discharge	27	15%
	f. Menstrual pain	12	6%
	g. Itching	2	1%
5	Length of use		
	a. 1-3 days	87	47%
	b. 1 week	52	28%
	c. Every day	11	6%
	d. Until healed	36	19%
6	Efficacy of traditional medicine		
	a. Heal	146	78%
	b. No improvement	40	22%
	c. Getting worse	-	-
7	Side effects of traditional medicine		
	a. Exists	2	1%
	b. Not exist	184	99%

The survey found that 102 participants (or 55% of the total) obtained their traditional medicine from those who sell it, while 39 (or 21% of the total) obtained it from street vendors, 34 (or 18%) from pharmacies, and 11 (or 6% of the total) admitted to making their own concoctions. This aligns with Saputra's (2015) research findings, where Jammu traders are the primary source of traditional medicine. Most respondents preferred buying herbal remedies from people who have their storefronts or go door-to-door. There are two factors: first, the convenience of not having to make their own traditional medicine, and second, the relative ease of finding such traders. Ninety-eight respondents (or 53% of the total) reported using powder (steeping) as their preferred method of consumption. This is because most people who consume traditional medicine choose to get it in liquid form from vendors selling herbal medicine. Based on previous research conducted by Sari (2020) in Mertoyudan Village, Magelang Regency, which showed that 37.3% of respondents chose powdered herbal

medicine.

The purpose of using traditional medicine the most is to relieve body aches or pains as many as 41 (22%) respondents, to maintain endurance as many as 35 (19%) respondents, to increase appetite as many as 35 (19%) respondents, to overcome indigestion or colds as many as 34 (18%) respondents, to overcome vaginal discharge as many as 27 (15%) respondents, to overcome menstrual pain as many as 12 (6%) respondents and to reduce itching as many as 2 (1%) respondents. This study's results align with research conducted in Tabalong Regency, South Kalimantan, by Aprilia (2013), which states that most respondents (35.8%) use traditional medicine to treat body pain or rheumatism. The purpose of using traditional medicine for body aches and pains cannot be separated from the background of the Mekarsari District community, most of whom work as farmers. A farmer tends to experience complaints of body pain due to heavy work.

Based on Table 8, it is known that the majority of respondents took traditional medicine for 1-3 days, namely 87 respondents (47%), 1-week duration as many as 52 respondents (28%), until recovery as many as 36 respondents (19%) and every day as many as 11 respondents (6%). These results follow similar research (Fauziah et al., (2021) that most respondents consume traditional medicine for 1-3 days.

After taking traditional medicine, 146 respondents (78%) claimed to have recovered or felt better. Meanwhile, 40 respondents (22%) claimed no improvement after taking traditional medicine. This proves that traditional medicine is quite effective in treatment, although few respondents still feel no improvement. The effectiveness of traditional medicine is also influenced by the compliance or continuity of respondents in taking traditional medicine. These results align with a similar study by Puspita (2019), which stated that 115 respondents (95.8%) felt better after taking traditional medicine.

One hundred eighty-four respondents (99%) said they had never experienced side effects after taking traditional medicine. This shows that traditional medicine is safe and has relatively few side effects, although two respondents admitted to experiencing nausea and diarrhea. Similar research by Lestari (2020) stated that, according to 90.2% of respondents, herbal medicines have fewer side effects than modern or doctor's drugs.

CONCLUSION

Based on the research that has been done, it can be concluded that the level of knowledge of respondents regarding traditional medicine is good at 25.3%, sufficient at 47.3%, less at 14%, and not good at 13.4%. Meanwhile, most respondents obtained traditional medicine from herbal medicine sellers, such as powder and infusion, at Mekarsari Health Center. Traditional medicine is meant to overcome aches and pains within 1-3 days of use. As many as 78% of respondents felt an improvement, and 99% claimed not to feel any side effects after consuming traditional medicine.

REFERENCES

- Apriliana F. Profil Penggunaan Obat Tradisional Pada Masyarakat Di Kabupaten Tabalong Kalimantan Selatan Tahun 2013. Skripsi. Surakarta: Universitas Muhammadiyah Surakarta; 2013.
- BPOM RI. Peraturan Kepala Badan Pengawas Obat dan Makanan Republik Indonesia, Nomor 12. Tentang Persyaratan Mutu Obat Tradisional. Jakarta; 2014.
- BPOM RI. Peraturan Badan Pengawas Obat dan Makanan Republik Indonesia, Nomor 32. Tentang Persyaratan Keamanan dan Mutu Obat Tradisional. Jakarta; 2019.
- Budiman, Riyanto A. Kapita Selekta Kuesioner Pengetahuan Dan Sikap Dalam Penelitian Kesehatan. Jakarta: Salemba Medika; 2013.
- Fauziah, Maghfirah L, Hardiana. Gambaran Penggunaan Obat Tradisional pada Masyarakat Desa Pulo Secara Swamedikasi. *J Sains Kesehat Darussalam*. 2021;1(1):37–50.
- Notoatmodjo S. Ilmu Perilaku Kesehatan. Jakarta: Rineka Cipta; 2014.
- Pane M. Gambaran Penggunaan Obat Herbal Pada Masyarakat Indonesia Dan Interaksinya Terhadap Obat Konvensional Tahun 2020. *J Med Stud*. 2020;1(1):54.

- Puspita ANI. Gambaran Pengetahuan dan Sikap Masyarakat Terhadap Penggunaan Obat Tradisional di Kecamatan Mlati. Skripsi, Yogyakarta: Universitas Islam Indonesia, Yogyakarta; 2019.
- Restiyono A. Analisis Faktor yang Berpengaruh dalam Swamedikasi Antibiotik pada Ibu Rumah Tangga Di Kelurahan Kajen Kabupaten Pekalongan. *J Promosi Kesehat Indones*. 2016;11(1):15.
- Rusida E., Depy O. Hubungan Pengetahuan Terhadap Perilaku Penggunaan Suplemen Dan Obat Herbal Dalam Mencegah Penularan Covid-19 di Banjarbaru Selatan. *J Ilm Ibnu Sina*. 2021;6(2):292–301.
- Sari AK. Gambaran Penggunaan Obat Tradisional Pada Masyarakat Di Desa Mertoyudan Kecamatan Mertoyudan Kabupaten Magelang. Skripsi. Magelang: Universitas Muhammadiyah Magelang; 2020.
- Susandy V, Ana M, Iramie DKI. Studi Tingkat Pengetahuan Dan Pola Penggunaan Obat Tradisional Sebagai Terapi Komplementer Penyakit Degeneratif Di Kauman Nganjuk. *J Jamu Kusuma*. 2022;2(2):64–75.