

# Analysis of the Relationship between Knowledge Level and the Use of Traditional Medicine in Sungai Rutas Village

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## ABSTRACT

Traditional medicines are widely used by people from the herbal medicine group, standardized herbal medicines and phytopharmacology. People know that traditional medicine is limited to herbal medicine and standardized herbal medicine. while phytopharmacology still sounds unfamiliar to the public. Regarding knowledge and use of medicines that are beneficial for health in traditional medicine, it is still limited, the majority of people consume traditional herbal medicines as many as 100 people, which they make themselves using nutritious plants. The aim of the research was to determine the relationship between knowledge and the use of traditional medicine in Sungai Rutas Village. Analytical observation research method with a cross sectional approach. The sampling technique uses non-probability sampling containing 100 samples. The results of the research show that the level of knowledge of the majority of people is sufficient, as many as 54 people (54%), and the majority of people's use of traditional medicine is sufficient, as many as 45 people (45%). Apart from that, the results of relevant statistical analysis, namely the chi-square test, found that there was a relationship between knowledge ( $p$ -value = 0.008) and the use of traditional medicine as alternative medicine in the community in Sungai Rutas Village, Tapin Regency. The conclusion was that the level of public knowledge regarding the use of traditional medicine was sufficient knowledge, namely 54 people (54%). 46 people (46%) used traditional medicine. The conclusion in this study is that there is a relationship between the level of knowledge and compliance with a  $p$ -value = 0.008.

**Keywords:** Knowledge; traditional medicine; drug use.

## INTRODUCTION

Traditional medicines use elements or substances with a long history of medicinal use in local communities, including plants, animals, minerals, and galenical preparations. Several other subgroups within traditional medicine exist, including phytopharmaceuticals, standardized herbs, and herbal medicine (BPOM RI, 2004). Differences in traditional medicine can be seen based on the drug test. Traditional medicine can pass preclinical tests known as standardized herbal medicine; based on clinical trials, it can be called phytopharmaka. This traditional medicine is a hereditary heritage based on an empirical approach called jamu (Kemenkes RI, 2007).

According to data from the World Health Organization (WHO), as many as 80% of the population of developing countries still use traditional medicine compared to developed countries, which only use 65% (Ismail, 2015). The World Health Organization (WHO) in 2023 stated that traditional medicine has been used as a whole in the world since almost 20 years ago, whereas in countries such as Ghana, Mali, Nigeria, and Zambia, the use of traditional medicine has reached 60%, around 80% of the population in these countries still use traditional medicine to cure their diseases. Public knowledge about traditional medicine is a development of science about the importance of using traditional medicine in reducing the symptoms of the disease suffered. The type of traditional medicine in the general public can be known as jamu, while the standard herbal medicine is still heard in the community (Kemenkes RI, 2018).

The 2018 Basic Health Research results in South Kalimantan Province, which utilized traditional medicine, had a high percentage of 54.1% (Dewi & Nisa, 2019). In a preliminary

study in Sungai Ruta's village, Tapin district, people still use traditional medicine to treat minor illnesses. Information or the level of knowledge of the community in traditional medicine is still minimal because ordinary people only hear the name alone, namely as herbal medicine, even though this knowledge is one of the treatments used by the community as an object of herbal medicine<sup>6</sup>. The use and potential of traditional medicine should be maximized with good knowledge and use (Djamaluddin et al., 2020).

Based on observations made by several people in Sungai Ruta's village, most people consume traditional homemade herbal medicine made using nutritious plants. One use of this efficacious plant is in a traditional herbal medicine recipe called "untalan". The results of previous research conducted by Norjannah (2023) in Tapin Regency show that people still use traditional medicine, especially herbal medicine, to reduce their illness. It is known that in previous studies, the results obtained where the level of knowledge of traditional medicine was classified as a good category by as many as 57 respondents (57%) and the behaviour of using traditional medicine in the correct category by as many as 52 respondents (52%). The Chi-Square test results show a p-value of 0.000, more diminutive than 0.05. Previous research makes the basis for the importance of further observation and observation of knowledge and use of traditional medicine. Thus, there is a relationship between the level of knowledge and the use of traditional medicine. Based on this background, it is necessary to research the relationship between the level of knowledge and the use of traditional medicine as an alternative medicine used by the Sungai Rutas Village, Tapin Regency community.

## **METHOD**

The research was conducted using analytical observation and a cross-sectional research design. Moreover, a questionnaire was used to take measurements. Making an application letter for ethical clearance to the Ethics Committee at Muhammadiyah Banjarmasin University. The test result certificate is attached with 074/UMB/KE/III/2024. The research was conducted from January to June 2024 in Sungai Rutas Village, Tapin Regency. The population in the study was the entire community of Sungai Rutas Village, Tapin Regency, 1,261 people. Sampling through the non-probability sampling technique obtained as many as 100 samples using the Slovin formula with a confidence level of 90% using the main principle of probability sampling, namely that each member of the population has the same opportunity to be selected as a sample. Instrument in the form of a questionnaire tested for validity and reliability with a value ( $r$  Product Moment count more than  $r$  table  $> 0.553$ ). All valid statements are included in the research statement. Based on the results of the table, it is concluded that  $N$  of Item 15 obtained a Cronbach's Alpha result value of 0.952, which is  $\alpha > \text{constant}$  (0.6), so it can be stated that the attitude variable questionnaire is reliable or consistent. The questionnaire was used to determine the effect of knowledge on traditional medicine. The variable to be measured is the effect of the level of knowledge on the use of traditional medicine as an alternative treatment for the community in Sungai Ruta's village. The parametric test it uses to test the relationship between the independent variable and the dependent variable is a Pearson Product Moment Correlation test. Meanwhile, if it is not distributed, it is considered an abnormal non-parametric test with the Pearson Chi-Square test.

## **RESULT AND DISCUSSION**

### **Respondent Characteristics Data**

There were 100 respondents in this study. This study examines several sociodemographic characteristics of respondents, namely age, gender, occupation, latest education, and last consumption of traditional medicine. There were 42 people (42%) in the age range of 18-25 years, 52 people (52%) were male, 33 people (33%) were housewives, 33 people (33%) had a high school education level, and the last consumption of traditional medicine in the last 3 months was 42 people (42%).

The most dominant number was obtained from the age range 18-25 years, namely 42 people (42%). According to Dewi & Nisa (2019) at the Hortus Medicus herbal research house, age is a factor related to the use of traditional medicine (Retnaningsih & Ragil, 2016). Age affects the ability of the community's self-medication to make decisions to determine the

medicine to overcome their disease complaints. Individuals of sufficient age and with a background in education are rational in the decisions taken (Aulia et al., 2021). Based on this age assumption has an effect on self-medication in the use of traditional medicine because someone is old enough to get the information he has and experience in traditional medicine. The dominant respondents with male gender were 52 people (52%). In this study, the willingness and positive response level of male respondents as a research subject was more dominant than female respondents. This is one factor that influences the number of male respondents compared to female respondents. Based on Djameluddin et al. (2020), men know more about developments in traditional medicine in the community than women; it is, in fact, the most dominant men who use traditional medicine to maintain their health (Djandra et al., 2023).

The dominant respondents were those in the housewife profession, totalling 33 people (33%). A study analyzes the relationship between employment status and health behaviours to display a sample with a permanent job. However, it is encouraged to become healthy compared to a sample with a non-permanent job (Kemenkes RI, 2019). According to the assumption in this study, the employment status is more dominant as a housewife even though the dominant number of respondents is male because male respondents tend to vary in their profession at work, so the number is divided into various professions, causing the number of respondents in the demographics of the dominant occupation to be filled by the female gender in the occupation as a housewife, which is an environment in the home and surroundings that can influence someone using traditional medicine.

Respondents had a dominant high school education level, namely as many as 33 people (33%). According to Eryanto & Salman (2021), knowledge is one of the predisposing factors that influence a person's behaviour in the use of traditional medicine and education, which is a factor that affects the level of power in obtaining information, then attitudes and health behaviour. Education is a process of a series of influences that causes changes in his behaviour. It cannot be denied that the higher a person's education, the easier it is for them to obtain health information properly. On the other hand, the more education a person has, the more difficult it is to enter the development of a person, namely receiving health information.

The last dominant respondent consumed traditional medicine in the last three months, namely 42 people (42%). According to Khoirurifa et al. (2020), the reason the community consumes traditional medicine is that it is easy to find. In the community environment, it is easy to find the drug, but the data behind traditional medicine related to the determination of traditional medicine is still minimal (Oktarlina et al., 2018).

### Level of Community Knowledge about the Use of Traditional Medicine as Alternative Medicine in Sungai Rutas Village, Tapin Regency

Table 1. Relationship between traditional medicine use and knowledge

Knowledge	Drug Use in the Community						Total		p-value
	Poor		Sufficient		Good		n	%	
	n	%	n	%	n	%			
Poor	5	5	16	16	2	2	23	23	0.008
Sufficient	9	9	20	20	25	25	54	54	
Good	8	8	9	9	6	6	23	23	
Total	22	22	45	45	33	33	100	100	

The results of the highest level of knowledge are with a sufficient level of knowledge of as many as 54 people (54%). Knowledge is an important concept in forming an individual's actions; Knowledge and awareness are the basis for equal and long-lasting behaviour compared to behaviour not based on knowledge and awareness (Oktarlina et al., 2018). The community knows traditional medicine is directly related to families that have consumed traditional medicine for generations (Djandra et al., 2023).

The results of the questionnaire on public knowledge about traditional medicine in this study were obtained in the first questionnaire, namely, traditional medicine is a medicinal herb derived from plants; only a few correct answers were obtained. Namely, 33 people (33%), questionnaire number 7, turmeric can be used for tonsillitis, the number of correct answers of respondents was only 37 people (37%); the following questionnaire, which had the lowest number of correct answers was the questionnaire number 6, namely ginger can be used to warm the body as many as 38 people (38%). Another questionnaire with the least correct answers was questionnaire 12, jamu gendong, which is traditional medicine for as many as 40 people (40%).

According to assumptions, this illustrates that some people still do not know specifically about traditional medicine. They assume that traditional medicine also comes from animals. Other knowledge in the community is that all types of herbs, such as turmeric and ginger, are only for kitchen spices. Besides, the perception is that herbs are only considered companion drinks/stamina enhancers, not medicines

### **Use of Traditional Medicine as Alternative Medicine in the Community in Sungai Rutas Village, Tapin Regency**

The results of the use of most drugs are in the sufficient category of as many as 45 people (45%). According to Khoirurifa et al. (2020), The purpose of using traditional medicine is the most dominant because it is said that this medicine is effective in curing sudden and mild illnesses by 68.9%. The results of this study are contained in the study to cure severe diseases in the community. Because when someone uses traditional medicine, the side effects are still minor compared to using chemical-based doctor's drugs. Most people use traditional medicine when there is a sudden illness. Sudden illness is a disease that suddenly appears without any previous symptoms.

The results of the respondent's answers to the questionnaire on the use of traditional medicine were that 6 out of 15 questions related to the use of respondents mostly answered rarely. One of them is questionnaire number 5, which has the rare answers: I take traditional medicine according to the recommended rules, as many as 65 people (65 people). According to assumptions, some people think traditional medicine has no clear rules regarding how to take it, when, and during what body conditions. They take it if the body only feels uncomfortable and there are no rules for how to drink it

### **Relationship between Knowledge Level and the Use of Traditional Medicine as Alternative Medicine in the Community in Sungai Rutas Village, Tapin Regency**

The bivariate analysis using the chi-square test showed a p-value of 0.008, smaller than  $\alpha = 0.05$ , indicating that the null hypothesis ( $H_0$ ) is rejected. Thus, it can be concluded that there is a relationship between the level of knowledge and the use of traditional medicine as an alternative medicine in the Sungai Rutas Village, Tapin Regency community. This finding is in line with research conducted by Djandra et al. (2023), which also showed a p-value of 0.000 ( $p < 0.05$ ), which means  $H_0$  is rejected.  $H_a$  is accepted, indicating a significant relationship between the level of knowledge and the use of traditional medicine<sup>10</sup>. This study's results align with the findings of the 2018 Riskesdas, which showed that the use of traditional medicine as part of health efforts in the community has increased, with a percentage reaching 44.3%. This reflects the increasing public interest in using traditional medicine and the

development of traditional health efforts. In addition, the Ministry of Health also recommends that people utilize traditional medicine as an alternative treatment (Kemenkes RI, 2019).

The majority of respondents in this study had sufficient knowledge related to their knowledge of traditional medicine, compared to education, where the majority of people in the high school education category amounted to 33 respondents. However, this is not fully proven because there are other influencing factors which cause respondents' desire to prefer taking synthetic chemical drugs (Oktarlina, 2018).

## CONCLUSION

There is a highly significant relationship between the level of community knowledge and the use of traditional medicine as alternative medicine in Sungai Rutas Village, Tapin Regency, with a p-value of 0.008. It is necessary to conduct education through direct counselling using promotional media such as posters with a lecture method of direct approach to the community about how to use traditional medicine because the parameters in using traditional medicine are reasonable and will be a parameter of success in therapy using traditional medicine.

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