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Research Article

## An Overview of Public Knowledge and Attitudes towards the Use of Herbs during the Covid-19 Pandemic

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### Abstract



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During the Covid 19 pandemic, one of the prevention measures suggested by Indonesian Food and Drug Authority (BPOM) is to consume herbal medicine to boost one's health immunity. The major factors that encourage the individual to consume herbal medicines are their knowledge and attitude towards the herbal medicines themselves. In these pandemic condition, consumption of herbal medicines will still increase as one of the prevention measures. This research aims to understand the knowledge and attitude of indigenous people in Wasur village RT 002 RW 001 regency towards herbal medicines during the pandemic. This research is descriptive research using a cross-sectional approach. The instrument that is being used in this research is a questionnaire. There are 100 people as the sample used in this research was taken under a nonrandom sampling technique with purposive sampling criteria that have been inclusively determined. The results have shown that plants that are frequently consumed as herbal medicines are Sambiloto (36%), Ginger (26%), Meniran leaves (13%), Galangal leaves (13%), Papaya leaves (11%), and Guava leaves (8%). The dosage form that is being used by the sample is decoction. The village's knowledge of the people's herbal medicines is mainly passed down by the family (60%). The majority of these herbal medicines concoctions are local's concoctions. To be noted in this research, 44 persons of the samples passed the "GOOD" knowledge criteria, and 98% passed the "GOOD" criteria for attitude toward herbal medicines. This research concludes that knowledge and attitude are majorly in the "GOOD" criteria.

**Keywords:** Consume, Knowledge, Attitude, Herbal.

## Introduction

SARS COV-2 causes novel Corona Virus disease (Covid-19). On March 11, 2020, it was declared an international health emergency. Until now, new cases have increased since the first time Covid was discovered in Wuhan <sup>1</sup>. Until now, no specific treatment has been found to overcome the Corona Virus due to its fluctuating ability and rapid spread. Therefore, one of the efforts to prevent and maintain health recommended by the World Health Organization (WHO) and the Ministry of Health of the Republic of Indonesia is using herbal therapy <sup>2, 3</sup>. Following the decision of the World Health Organization WHO, which encourages innovation in every country toward the use of traditional medicine, the Indonesian Food and Drug Authority (BPOM) explains that several plants, such as ginger, turmeric, temulawak, meniran, bitter, and guava leaves, can be used. To increase immunity and be helpful as an antioxidant if consumed long-term <sup>4</sup>.

Due to Riskesdas 2013, 30.4% of households in Indonesia have utilized traditional health services as one of the therapies of choice in dealing with various diseases. In 2018, the prevalence of traditional medicine use was 31.4%, with 24.6% consuming family medicinal plants <sup>5, 6</sup>. According to the Research on Medicinal Plants and Herbs (Ristoja), in 2015, the number of medicinal plants identified in Indonesia was 1,559 plants, consisting of 156 species, which shows that the use of traditional medicine has been carried out long before there was formal health service as complementary medicine. However, many islands and ethnicity allow for differences in

using plants as traditional medicine. It is because of the differences in empirical experience and the unique culture of each tribe.

Papua is one of the regions in Indonesia with a relatively high level of utilization of herbal medicines. Due to the low level of health facilities in the area, people tend to use herbal medicine in various ways. The use of herbal therapy in Papua utilizes 650 plant species with more than 134 species, and one example is the use of ant nests in the Merauke area <sup>7, 8</sup>. During the Covid-19 pandemic, the use of herbal plants has increased because it is considered an effort to increase the body's resistance as long as no specific treatment has been found to overcome the Corona Virus <sup>9</sup>. It is because knowledge is one of the factors that influence the use of herbal medicines, in addition to other factors that also influence attitudes, traditions, and beliefs, as well as the availability of health facilities and infrastructure.

Therefore, the author is interested in researching the knowledge and attitudes of the community towards herbal medicine during the Covid-19 pandemic in Wasur Merauke village because people who live in the Wasur area consume herbal medicine compared to conventional medicine. The purpose of this research was to find out the description of the knowledge and community attitudes towards the use of herbs in Wasur village in RT. 002/RW. 01 Merauke Regency during the Covid-19 pandemic.

## Literature Review

Traditional medicine is an ingredient or ingredient in the form of plant material, animal material, mineral material, extract preparation (galenic), or a combination of these materials that have been used for centuries for experience-based therapy. The characteristic of traditional medicine is that the raw materials are still in the form of *simplicia*, most of which have not been standardized and have never been studied<sup>11</sup>. According to Article 104 of Law Number 36 of 2009 concerning health, traditional medicine must be used logically. Therefore, it is necessary to pay attention to the selection of the right ingredients, the accuracy of the dose, timeliness of use, the accuracy of how to use, the accuracy of review of information, not misuse, accuracy in selecting drugs for specific indications.

One of the advantages of herbal plants is that they have various active substances that can be used to treat various diseases, so it is necessary to compare the efficacy and side effects of the plants consumed<sup>12</sup>. Indonesia's natural medicines are classified into *jamu*, standardized herbal medicines, and *phytopharmaceuticals*. This classification is based on the production process, dosage form, processing technique, and the amount of evidence supporting each product's benefits and quality<sup>10</sup>.

An immune system is a form of body defense against foreign substances consisting of microorganisms (bacteria, viruses, fungi, parasites), tumor cells, and materials/substances that are antigenic (allergens)<sup>13</sup>. The immune system has two defense mechanisms for protecting the body: the specific immune system and the non-specific immune system. Innate immunity is a non-specific defense of the body and is part of the immune system that functions as a front-line barrier at the onset of disease infection. Therefore it is often referred to as natural or native immunity<sup>14</sup>. The specific immune system consists of humoral or humoral mediated immunity (HMI) and cell-mediated immunity (CMI). This system responds specifically to antigens through antigen and antibody reactions, forming memory T cells and B cells against the exposed antigen<sup>15</sup>.

Immunostimulants are a group of biological and synthetic compounds that increase cellular or humoral immune responses in the body<sup>16</sup>. Immunostimulants are divided into two groups, namely biological and synthetic immunostimulants. Biological immunostimulants include cytokines, monoclonal antibodies, fungi, and medicinal plants (herbs). At the same time, synthetic immunostimulants consist of levamisole, isoprenaline, and muramyl peptidase. The immune system can be improved through drug supplements that function as immunomodulators<sup>17</sup>. Various immunomodulators are currently available, incredibly natural herbal ingredients.

During the Covid-19 pandemic, it is necessary to prevent and control Covid-19. In addition to keeping a distance and using personal protective equipment outside the home, increasing body resistance also needs to be done as a preventive measure<sup>3</sup>. The Indonesian Food and Drug Authority recommends consuming herbal plants and health supplements to increase endurance. Herbal plants that have immunostimulant effectiveness consist of meniran herbs (*Phyllanthus niruri*), sambiloto (*Andrographis paniculata*), and Ginger (*Zingiber Officinale*), Temulawak (*Curcuma xanthorrhiza* Roxb.) Sambiloto (*Andrographis paniculata*), Guava leaves (*Psidium guajava* L. ). Indonesian herbal plants are rich in bioactive compounds in them. Several Indonesian herbal plants, which have been studied previously, contain several bioactive compounds from the flavonoid, triterpenoid, alkaloid, polyphenolic, terpenoid, phenolic, and trihydroxy lactone

groups. These bioactive components will improve the body's immune system and antioxidant activity<sup>4</sup>.

Empirically, meniran is used as a diuretic drug to treat the kidneys and liver<sup>18</sup>. Besides that, Meniran is also given to children as cough medicine and is also used as an anthelmintic. In addition to the root leaves of the meniran plant, it is also empirically used to treat tooth pain. Meniran is often used to help smooth the delivery process by the Papuan people and is processed by boiling it first<sup>19</sup>. Consumption of meniran has the potential to cause harmful side effects such as hypoglycemia, hypotension, and electrolyte and mineral imbalances. The mineral is a phytopharmaceutical registered with BPOM with claims to help maintain the immune system, it helps eliminate urinary stones in the kidneys and urinary tract, and there are already products registered as phytopharmaceuticals with claims to increase the immune system. It is also in line with the BPOM recommendation, which mentions meniran as a plant that can be consumed during the Covid-19 pandemic because it has been proven to increase body immunity<sup>4</sup>.

Empirically, ant nests are widely used to treat tumors or cancer, bronchitis, diabetes mellitus, hypertension, coronary heart disease, and stroke. Until now, ant nests have been used in various dosage forms, namely infusions, decoctions, and extract preparations in capsules. Because phenolic compounds are the primary source of antioxidant compounds in ant nests, various pharmacological effects of ant nests are determined by the strength of antioxidant activity, which is influenced by the total phenolic content in the ant nest preparations consumed<sup>20</sup>. In an In-Vivo study using broiler chickens given the AI kill vaccine, based on the results of this study, it can be concluded that the administration of ant nest extract was able to reduce the level of Coefficient of Variance (CV) in the AI antibody titer test and was able to increase the mean AI antibody titer. Increasing the average antibody titer and decreasing CV can provide more optimal protection against H5N1 virus attacks. The best result of titer and CV is administering ant nest extract at a dose of 10 mg/kg BW<sup>21</sup>.

Knowledge results from knowing, which occurs when one learns something before. There are six stages of knowledge, namely to know, comprehend, apply, analyze, synthesize, and evaluate. According to Notoadmojo, the factors influencing knowledge are divided into external and internal, namely age and education.

Attitude is a reaction or response of someone who is still closed from someone to a stimulus or object. The manifestation of that attitude cannot be directly seen but can only be interpreted in advance from closed behavior; attitudes clearly show the connotation of the suitability of reactions to certain stimuli, which in everyday life are emotional reactions to social stimuli<sup>22</sup>.

## Research Method

This study uses a cross-sectional method in which all variables are measured simultaneously and explains the knowledge and attitudes description of the use of herbs during the Covid pandemic by residents in the RT. 002/RW. 001 Wasur village, Merauke Regency using a questionnaire. This research was conducted in October-November 2021. Data collection from this study was carried out in RT. 002/RW. 001 Wasur Village, Merauke Regency, Papua, and the data will be processed at the Faculty of Medicine, Christian University of Indonesia. The population used in this study are residents who live in RT. 002/RW. 001 Wasur Village, Merauke Regency, with a total of 130 people. The sample in this study was calculated using the Slovin formula, so based on the above formula calculation, the sample size used was 100. A nonrandom sampling technique

will make sample selection with a purposive sampling type. This method will use inclusion and exclusion criteria so that the results obtained are expected to be following the research objectives. The research instrument used is a questionnaire distributed to respondents containing 30 questions about herbal medicine during the Covid-19 pandemic. The questionnaire has been designed to obtain information on knowledge and attitudes towards herbal medicine during the Covid-19 pandemic. The attitude questionnaire contains closed questions about attitudes towards the use of herbs during the Covid-19 pandemic, and the assessment uses a Likert scale. There is also a calculation of attitudes with a Likert scale. Data processing stages are editing, coding, data entry, cleaning, and tabulating. Data analysis in the study was preceded by testing on 30 respondents to find out whether the respondents could understand the questions that had been prepared in the questionnaire. After that, the validity and reliability tests were carried out.

## Result and Discussion

Based on data collection that has been done in RT. 002/RW. 001 Wasur Village, Merauke Regency in 2021, using a questionnaire (google form). This data collection used a nonrandom sampling method with a purposive sampling type, where the researcher only took data based on inclusion criteria. From the data obtained, 100 respondents have varying knowledge and attitudes. The following are the results of research that researchers in tabular form have processed.

**Table 1: Characteristics of Respondents**

Characteristics of Respondents	n (%)
<b>Gender:</b>	
Male	53
Female	47
<b>Age:</b>	
15 – 25	68
26 – 36	11
37 – 47	13
45 – 58	8
<b>Education:</b>	
Junior High School	3
Senior High School	67
Undergraduate/Magister/Doctoral	30

Based on table 1, as many as 100 respondents, 47 (47%), were female, and 53 (53%) were male. It was found that the distribution of most respondents was male. It is in line with the data on the population of Wasur village in 2021, where the sexes are 274 men and 258 women. In contrast to the research conducted by Ratna et al., where it was found that the number of female respondents who used herbal therapy was more than men, one of the factors that caused it was that women were generally more likely to be respondents than men <sup>23</sup>.

Based on table 1, as many as 100 respondents, 68 people (68%) were in the age range of 15-25 years, 11 people (11%) were in the age range 26-36 years, 13 people (13%) were in the age range 37-47 years, and eight people (8%) were in the age range of 48-58 years. It was found that the respondents' age distribution was mainly in the age range of 15-25 years. The most extensive age range in the table can be caused because the age of 15-25 years is the age range that is most active in using social media such as WhatsApp, so the highest age range is found at the age of 15-25 years. It follows research which said that the highest number of respondents was 17-25. It is because, in that age range, they tend to use

social media activity and have the highest percentage of filling questionnaires <sup>24</sup>. Based on research conducted by Ratna et al., the age range that primarily uses herbal treatment in the early adult age group, namely the age range of 18-40 years, is because teenagers have more strenuous activities, so they use herbal remedies more often as alternative treatments <sup>25</sup>. According to David et al. in a study conducted in Uganda, teenagers in the age range 15-24 years old consume herbal plants that can be influenced by religious beliefs, being told by their families, and the unavailability of adequate health facilities.

Based on table 1, as many as 100 respondents, 3% had a junior high school education, 67% had a high school education, and 30% had an undergraduate education. Based on this, it was found that most respondents already had sufficient education, so they tended to get and receive various information related to herbal medicine. It is in line with the research of Rasmi et al., where the most significant number of respondents are at the high school education level, so respondents tend to be more receptive to information related to herbal medicine <sup>23</sup>.

**Table 2: Usage Pattern**

Herbal Medicine Usage Pattern	Frequency
<b>Types of plants consumed</b>	
Sambiloto	36
Meniran	25
Ginger	8
Anthill	11
Papaya leaf	13
Haliyah Leaves	4
Eucalyptus oil leaves, plantain leaves, turmeric	3
Total	100
<b>plant dosage forms</b>	
dip	22
Stew	78
Total	100
<b>plant-related information</b>	
Personal experience	32
Family	60
Neighbors/friends	8
Total	100
<b>frequency of plant consumption</b>	
Once	32
Twice	48
Third time	20
Total	100
<b>The origin of the plant consumed</b>	
make your own	85
shop/market	15
Total	100

In this study, the most widely used herbal plant was sambiloto, with the number of respondents who said that they consumed 36%. It follows the BPOM statement, which states that consuming bitter plants during a pandemic has the benefits of increasing body resistance. It differs from the Indonesian herbal medicine Formulary in 2016, which said ginger's most widely used herbal plant in traditional medicine was <sup>26</sup>. In addition to Sambiloto, the community also mentions

Meniran, Ginger, Ant's Nest, Papaya Leaves, and Aaliyah Leaves as herbal plants that are usually consumed. In addition, there are also eucalyptus oil leaves, plantain, and turmeric. Empirically the use of red Haliyah leaves (*Kariwao*) and papaya leaves are consumed to relieve coughs and colds, while plantain leaves are used to reduce high fever.

The most widely used dosage form is a stew, which is 78%. It could be due to the herbal plants consumed are processed independently. In addition, 28% of respondents consumed herbal plants in the form of dyes. It is in line with research conducted by Agvindra (2020), which explains that the way to consume most herbal plants is by boiling at 37.3%, with a total of 384 respondents <sup>27</sup>. In this study, most of the respondents received information about herbal medicines from their families, namely 60%. It is in line with research conducted by Afrilliana, which stated that 61.7% of 120 respondents knew about herbal medicine from their families <sup>11</sup>.

According to the research of Herti et al., the most effective media to find information about traditional medicine are family, friends, neighbors, and health workers <sup>28</sup>. It is in line with Research on Medicinal Plants and Herbs, which explains

that the family uses traditional medicine based on heredity <sup>7</sup>. In addition, 32% of respondents obtained information based on personal experiences, and 8% received information from neighbors.

Based on the table, it can be seen that 48% consume herbal plants 2x a week, and 32% consume herbal plants only 1x a week. According to a study conducted by Alfonsa, the frequency of use of traditional medicines is usually only based on experience, so it does not have an exact benchmark for the time and frequency of using traditional medicines <sup>29</sup>. However, according to Triyono, written in Afrilia's research, people tend to consume herbs when they feel unwell <sup>11</sup>. Based on the table, it is known that as many as 85% percent of respondents get herbal plants consumed based on their concoction. It can be caused because the people who live in Wasur village have grown their medicinal plants independently.

It is in line with Ristoja's research which explains that as many as 62.2% of Indonesian people consume herbal plants grown independently <sup>17</sup>. In addition, as much as 15% obtain herbal plants by buying them at the market/stall.

**Table 3: Frequency Distribution of Respondents' Knowledge**

NO.	Statements	Yes		No		Total	
		n	%	n	%	n	%
Plant Introduction							
1.	Do you know herbal plants are helpful for endurance during the Covid-19 pandemic?	96	96	4	4	100	100
2.	Bitter gourd leaves have a bitter taste	100	100	0	0	100	100
3.	Gejawas are often used as a treatment for diarrhea	97	97	3	3	100	100
4.	All parts of the meniran plant can be used in medicine	90	90	10	10	90	90
5.	The parts of the ginger, turmeric, and temulawak plants that are used are the rhizomes	100	100	0	0	100	100
Definition							
6.	Traditional medicine is a mixture of ingredients derived from plants and used in medicine	98	98	2	2	100	100
Benefit							
7.	Temulawak has a good effect on increasing endurance	98	98	2	2	100	100
8.	meniran can be used to treat malaria and help the birth process	85	85	15	15	100	100
9.	The turmeric plant contains active substances that function to increase endurance	95	95	5	5	100	100
10.	Can Ginger, Sambiloto, and Gejawas increase endurance?	96	96	4	4	100	100
Side effects							
11.	Each herbal plant has a different content and will depend on the effects caused	87	87	13	13	100	100
12.	Ant nest has no harmful side effects on the body	88	88	12	12	100	100
13.	People with stomach disorders if consuming ginger can cause bloating	52	52	58	58	100	100
14.	All herbal plants can be drunk every day	67	67	33	33	100	100
15.	Herbal plants can be consumed with modern medicine without being given a lag time	45	45	55	55	100	100

Based on table 3, the frequency of knowledge of the Wasur village community is known that 96% of respondents know herbal plants that can increase body immunity during the Covid-19 pandemic. In addition, the people of Wasur village also have good knowledge about herbal plants, and it can be seen that 100% of respondents have answered that bitter has a bitter taste.



In addition, 98% of the people of Wasur village also know the definition of traditional medicine according to Law No. 36 of 2009 concerning health. The people of Wasur village also know that Ginger, Meniran, Turmeric, and Temulawak can increase body resistance. It is in line with the BPOM statement where several plants have benefits as immunomodulators during the Covid-19 pandemic.

Based on questions about the side effects of ginger plants in people with gastric disorders, 58% answered incorrectly, and 52% answered correctly. It can happen because when consuming ginger, people do not feel the side effects of the plant. Most people already know that herbal plants can be consumed every day. It can be seen from as many as 67% who have answered correctly. Public knowledge regarding the consumption of herbal plants and modern medicines that must be given a time lag is already known by the community, and most people have answered correctly. It shows that people already know how to use herbal medicines rationally. In addition, 87% of people already understand that each herbal plant contains different active substances.

Another study found that the herbal immunomodulator's knowledge during a pandemic was in the excellent category by 69% and the less category by 31% of the total 100 respondents <sup>24</sup>. Knowledge is one of the most critical factors

influencing a person's behavior formation. Knowledge also has a significant role in something due to recognizing a pattern, such as a drug use. Based on research conducted by Sulfiyana et al., one's knowledge of herbal medicine can be caused by direct involvement in consuming herbal medicine or the influence of families who consume herbal medicine <sup>31</sup>.

**Table 4: Distribution of Respondents' Knowledge of Herbal Medicine**

Knowledge	Frequency (n)	Percent (%)
Well	84	84
Not enough	16	16
<b>Total</b>	<b>100</b>	<b>100</b>

Table 4 shows the overall distribution of the knowledge of the people of Kampung Wasur regarding knowledge of herbal medicine with a total of 100 respondents, with 84 (84%) of respondents having good knowledge and 16 (16%) of respondents having less knowledge of herbal medicine. It follows the research conducted by Madania and Pirdawati regarding knowledge of herbal medicine, which is seen from several indicators; it is found that respondents' knowledge level is in a suitable category as much as 80%, with a total of 496 respondents <sup>30</sup>.

**Table 5: Frequency Distribution of Attitudes to Herbal Medicine**

S. N.	Statements	SD		D		N		A		SA	
		n	%	n	%	n	%	n	%	n	%
1	I take herbal medicine as my first choice when I'm sick	4	4	7	7	19	19	28	28	42	42
2	Consuming Herbal Plants during the Covid-19 pandemic can be helpful for body health	0	4	3	3	6	6	24	24	67	67
3	In my opinion, during the pandemic, herbal medicine is more economical than modern medicine	2	2	0	0	15	15	23	23	60	60
4	I think everyone should consume herbs during the pandemic	0	0	4	4	19	19	35	35	42	42
5	I will continue to consume herbs as long as the side effects are not harmful to the body	3	3	3	3	16	16	23	23	55	55
6	I prefer to consume herbal plants as prevention against Covid-19 during the pandemic	0	0	2	2	20	20	31	31	47	47
7	I prefer to consume ginger stew instead of vitamins during the Covid-19 pandemic	3	3	9	9	31	31	19	19	38	38
8	Consuming ant nests regularly can be beneficial for the body	0	0	4	4	26	26	27	27	43	43
9	After consuming herbal plants, I feel many benefits	0	0	0	0	12	12	36	36	52	52
10	Herbal plants can not increase endurance	6	60	2	28	7	7	1	1	4	4
		0		8							
11	Consuming herbal plants is very necessary during the Covid-19 pandemic	2	2	1	1	6	6	41	41	50	50
12	Consuming herbal plants is not beneficial for the health of the body during the Covid-19 pandemic	6	62	2	22	8	8	4	4	4	4
		2		2							
13	I leave it to my family to consume herbs during the Covid-19 pandemic	4	4	2	2	17	17	26	26	51	51
14	I think consuming temulawak during the Covid-19 pandemic can be helpful for body health	3	3	2	2	13	13	32	32	60	60
15	I consume herbal plants because they are easier to obtain and process	1	1	2	2	3	3	36	36	58	58

Based on Table 5, it is known that most people strongly agree (42%) that herbal medicine can be used as the first choice when sick, while seven respondents do not agree that herbal medicine can be used as the first choice when they are sick. As many as 67% of the public strongly agree that taking herbal medicines during a pandemic can be helpful for body health. In addition, most of them strongly agree that consuming ginger during a pandemic is more beneficial than taking vitamins, but 31% of the people also answered that they were hesitant. In addition, it was found that most people agreed (47%) that herbal treatment consumed during the pandemic was a preventive measure. So it can be concluded that the community has a supportive response and accepts herbal treatment for consumption during the Covid pandemic.

It can also be seen that most people strongly agree that herbal medicines are consumed due to the reason that herbal medicines are much more economical than modern medicines as much as 60% and also the majority of people who strongly agree as much as 58% that herbal medicines are consumed because they are easier to obtain and process manually. Independent. Regarding the effectiveness of ant nest plants, most agree as much as 43% that consuming ant nests regularly can benefit the body. In this study, it was found that most people strongly agreed (55%) chose to continue taking herbal medicines as long as the side effects were not dangerous, but 16% were unsure whether to continue consuming herbal plants. In addition to the ant nest, the community also agreed (60%) that consuming temulawak could be helpful during the pandemic, and a positive attitude (51%) strongly agreed that they advised their families to consume herbal plants during the pandemic.

**Table 6: Distribution of Respondents' Attitudes towards Herbal Medicine**

Attitude	Frequency (n)	%
Well	98	98
Poor	2	2
<b>Total</b>	<b>100</b>	<b>100</b>

Based on the study results in table 6, obtained from 100 respondents, as many as 98 (98%) respondents had good attitudes, and 2 (2%) respondents had poor attitudes. Attitude is a reaction or response still closed by a person to a stimulus or object. The results of the research on the attitude of the Wasur Village community towards herbal treatment during the Covid-19 pandemic had a good attitude (98%) of respondents. Knowledge and attitudes towards self-medication of herbal medicines in medical students during the Covid pandemic.

It is in line with research that found that respondents have a good attitude, as many as 130 (86%) towards using herbal medicine as prevention during the Covid-19 pandemic <sup>32</sup>. In addition, there was also a less than 2% attitude. It is in line with research conducted by A. Rizkia et al. on ASN at the South Sulawesi Health Service regarding the use of herbal medicines during the Covid pandemic, and obtained a negative attitude result of 40.4% of a total of 201 respondents <sup>33</sup>. Attitudes like the above can occur following the table stated by Asurilah et al. in the research study of knowledge and attitudes and actions of the community towards the use of traditional medicine, that a person's attitude towards an object is not only influenced by the level of knowledge but can also be influenced by several things such as experience. Personal or someone else. Continuous social contact can influence a person's attitude towards treatment choices <sup>34</sup>.

## Conclusion

The distribution of the characteristics of the Wasur village community in 2021 for the most age is in the age range of 15-25 years. The sex distribution is primarily male, and the highest level of education is Senior High School. The pattern of herbal plants consumed the most was Sambiloto, as much as 36%. The most consumed dosage form was stew, as much as 78%, the plants consumed were the result of self-mixing as much as 85%, the most source of information was the family at 60%, and the frequency of use was 2x a week. The level of knowledge of the Wasur village community towards herbal medicine during 2021 was at most in the excellent category. The attitude of the Wasur village community towards herbal medicine during 2021 was mostly in the excellent category. These results can be used as a reference to help conduct

counseling on the use of herbal medicine and become an additional reference to the library at the UKI medical faculty.

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