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Research Paper

Factors of Medicinal Plants Users as Alternative Medicinal in indonesia

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Abstract

Traditional medicines are the cultural heritance of Indonesian that should be preserved and developed in order to support the society's health development and to improve the society's economy. This research was aimed to figure out the society's behaviors in using traditional medicines and the dominant factors that influence them in using traditional medicines. This research is a non-experimental research, with analytical survey method and cross sectional approach. The data were analyzed descriptively. The sample and the population were grouped into district clusters. This research is an analytical survey with cross sectional approach which aims to (a) analyze the behavior of society of traditional drug utilization based on perception of sickness, type of complaint, residence, distance to health facility, health, family support, and promotion of traditional medicine. (b) Identify the dominant factors that influence the community in using traditional medicine.The study was conducted in Ogan Ilir District of South Sumatera Province. The respondents were motivated to use traditional medicines through (a) predisposing factors perceived sickness; (b) enabling factors, including economic level, location of domicile, type of complaints, insurance and distance to health facilities; and (c) reinforcing factors, including family support and traditional medicine promotion. Serving as the predicting factors in the traditional medicine use were the variables perceived sickness, type of complaint, distance to health facilities and traditional medicine promotion, with the variables occupation, insurance, education, family support, domicile and income serving as the confounding variables.

Keywords

Behavior, medicinal plants, alternative medicinal

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1. INTRODUCTION

According to Regulation of the Government of the Republic of Indonesia No. 08 of 1999, the use of plants is conducted in the interest of sustainable utilization of plants for the greatest prosperity of the society. The plant or its part or product is used while maintaining the diversity and balance of the ecosystem (Kartika, 2015). Indonesia is rich in different local wisdom concerning medicinal plants, many of which have not been used for medication. Given that many plants have properties which have not been identified and developed clinically and modernly. It is necessary to conduct continuous exploration, research, testing and development of medicines.

There has been a tendency of increase in the use of natural ingredients, particularly medicinal plants, today. The medicinal plants processed as traditional medicines since ancient times now have been widely used, especially by middle to lower society. With the advance in technology, now many kinds of medicinal plants have been processed and packaged modernly. This has developed into a healthy lifestyle in a natural way (Adams et al., 2009).

Self-medication/swamedikasi by the community is an effort that many people do to overcome the complaints or symptoms of disease, before seeking help to the nearest health service facility or health worker. In 2013 Basic Health Research Results showed that a total of 103,860 people or 35.2 percent of 294,959 households in Indonesia store medicine in households, either from prescription or independently purchased. The proportion of people prescribing hard drugs without prescriptions reaches 81.9 percent of them including antibiotics of 27.2 percent and the rest as "supply drugs" if they are sick and "remnant drugs" of 32.1 percent of households, and the likelihood that the number of self-medication treatment will continue to increase every year.

The cultural heritage (local wisdom) of medicinal plants can in fact be managed properly as first-aid medicines to treat various kinds of diseases, but the properties of such plants have

mostly never been standardized for proper use. To preserve the nature in order to maintain the existance of medicinal plants and their healing properties, to allow for broader and more prevalent use of medicinal plants, and to preserve and promote the nation's cultural heritage, it is necessary to conducte continuous exploration, research, testing and development of traditional medicines and medication. Many of the plant riches growing in Indonesia are utilized by other nations for research, and evantually to be processed into more useful medicines, while we, to whom those reaches belong, mostly put heavier trust to medical treatment only (Mafimisebi and Oguntade, 2010).

2. EXPERIMENTAL SECTIPN

2.1 Instrument and Data Collection

This research is an analytical survey with cross sectional approach which aims to (a) analyze the behavior of society of traditional drug utilization based on perception of sickness, type of complaint, residence, distance to health facility, health, family support, and promotion of traditional medicine. (b) Identify the dominant factors that influence the community in using traditional medicine.The study was conducted in Ogan Ilir District of South Sumatera Province from July to December 2016 with a sample of 400 samples, then the population was grouped into village clusters. From the number of existing Villages, 50 percent were taken randomly to be sampled. From this selected village then the research sample is selected by random sampling to get a number of 400 samples.The instrument in this study used a modified questionnaire based on a questionnaire survey of Basic Health Research (Riskesdas, 2013). Nevertheless, the questionnaire remains validity and reliability test.

The tested questionnaires were conducted to determine the validity and reliability of 8 parts, namely the variables of complaints, sickness perception, health insurance, family support, and promotion of traditional medicine. Trial conducted on the community in Banyuasin Regency, due to the similarity of character with the community of Ogan Ilir Regency.

The analysis of questionnaire test was calculated using Product Moment statistic method from Pearson.The results of the questionnaire on variables of the types of complaints, sickness perception, health insurance, family support, and promotion of traditional medicine when viewed in the table Corrected Item-Total Correlation indicate that from 12 questions, it turns out that the value of r count is no smaller than the value of r table. The r value of the table at n 20 is 0.235. This means that all questions are valid to be used as a measuring tool. For reliability test, in this research used Cronbach Alpha method, which is a method which is done by comparing between r value with r table value. The value of r arithmetic is represented by the Cronbach Alpha value. If the value of Cronbach Alpha obtained is greater than the value of *r* table, then the instrument declared reliable. From the experiments conducted for the variable variable of complaint type, pain perception, health insurance, family support, and promotion of traditional medicine, the value of Cronbach Alpha all variables greater than r table (0,235), it can be concluded that the variable of type of complaint, perception illness, health insurance, family support, and promotion of traditional medicine pass the reliability test. Data collection techniques with interviews are interviews about the behavior of traditional drug utilization and other factors collected by using questionnaires to obtain primary data. Observation method is observation done on the use of medicinal plants directly, by looking at what drugs are stored by the respondents, both modern medicine and traditional medicine. Document survey method to see name, age, gender, address.

2.2 Data Processing and Analysis

Data processing consists of several steps, such as: editing, processing, tabulating , coding and entrying. Then, data processing was done electronically by using SPSS program. The data analysis was univariate and bivariate analysis with chi - square test.

The sample in this research is part of Ogan Ilir Regency who is 15 years old and above and willing to be interviewed. In this study the researchers used the Slovin formula, to obtain a minimal sample size, with the following formula:

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

Where n is the amount of the sample, N is the number of population, α is the *error tolerance* = 0.05, so the the minimum sample size is 399,62 rounded to 400 samples.

3. RESULTS

3.1 Characteristic of Respondents

The analysis was conducted on perception of sickness, type of complaint, residence, distance to health facility, health, family support, and promotion of traditional medicine. This study uses primary data, that is data obtained from questionnaires distributed to residents of Ogan Ilir Regency who were chosen at random. The result of univariate analysis as follows:

Based on Table 1. described that the perception of illness variable is into four categories namely: bad, medium, healthy, and very healthy. From Table 1 it can be seen that from 400 respondents, most of them have healthy perception, that is 243 people (60.8%), then 82 respondents (20.5%) feel health condition in medium condition, and the rest, which amounted to 75 people (18.8 percent) feel very healthy.

The result of analysis it can be seen that the number of respondents who live in rural areas is more than 257 people (64.3 percent) compared with respondents who live in urban areas, that is 143 people (35.8 percent).the type of complaint is divided into two categories, namely chronic and acute. From Table 1. it can be seen that the number of respondents who stated that they suffer from acute illness is bigger, that is 222 people (55,5%) compared with respondents who suffer from chronic disease, that is only 10 people (2.5%), did not know

Table 1. Univariate Test Results of Research Variables

No	Variable	Frequency (n)	Percentage
1	Perception of Illness		
	1. Bad	0	0
	2. Medium	82	20.5
	3. Healthly	243	60.5
	4. Very Healthly	75	18.8
2	Residential Place		
	1. Rural	257	64.3
	2. Urban	143	35.7
3	Type of Complaint		
	1. Chronical	10	2.5
	2. Sereve	222	55.5
	3. Not Available	168	42
4	Revenue		
	1.≤ Rp 1.000.000/month	69	17.3
	2. > Rp 1.000.000/month	331	82.8
5	Health Insurance		
	1. No	116	29
	2. Yes	284	71
6	Distance to Health Facility		
	1. Far	127	31.8
	2. Near	21	68.3
7	Family Support		
	1. Available	379	94.8
	2. Not Available	21	5.3
8	Promotion of Traditional Medicine		
	1. Available		
	2. Not Available	379	94.8
		21	5.3
	Amount	400	

there were as many as 168 people (42.0 percent). The type of complaint is divided into two categories, namely chronic and acute. The result of analysis of the number of respondents who stated that they suffer from acute illness is bigger, that is 222 people (55,5%) compared with respondents who suffer from chronic disease, that is only 10 people (2.5%), did not know there were as many as 168 people (42.0 percent).Income variables are divided into three categories, namely > Rp 1,000,000 / month, and ≤ Rp 1,000,000 / month. Table 1. shows that out of 400 respondents, most of the income> Rp 1,000,000 / month, is 331 people (82.8 percent), while those with income ≤ Rp 1,000,000 / month there are 69 people (17, 3 percent).

The insurance variable is divided into two categories, i.e. yes (if the respondent has at least one health insurance membership card is still valid) and not (if the respondent does not have any health insurance membership card). From Table 1. it can be seen that the number of respondents who become the participant of health insurance is more, that is as much 284 people (71,0 percent) compared with respondents who do not become health insurance participant, that is 116 people (29,0 percent) from 400 respondents under research.

Based on the results of this study, it is known that the closest distance to the nearest facility can be reached within 3 minutes, while the farthest can be reached within 60 minutes, and the average value (mean) is 19.17 minutes. In this study, health facility distance variables are divided into two categories, ie far (when the distance to the facility of means > mean) and close (when the distance to the facility of safety ≤ mean). From Table 1 it can be seen that the number of respondents whose residence is near to health facility is 273 (68.3%) more than respondents whose residence is far from health facility, that is 127 people (31.8% of the 400 respondents under survey. family support variables are divided into two categories, that is, and none exist.

In this study it can be seen that from 400 respondents, who claimed to have family support in utilizing traditional medicine

is greater, that is as many as 379 people (94.8 percent) compared with respondents who do not get the support of their family, that is only 21 people (5, 3 percent). The promotional variables of traditional medicine are divided into two categories, is there (if the respondent has ever received information about traditional medicine) and none (if the respondent never gets information about traditional medicine). The result of analysis of the number of respondents who have received more traditional drug promotion, that is as many as 250 people (62.5 percent) compared with respondents who never get the promotion of traditional drugs, which amounted to 150 people (37.5 percent) 400 respondents under research, of the 400 respondents under survey.

4. DISCUSSION

In this research, the variables of traditional medicine use were devided into two, namely use (if the respondents stored traditional medicines in any form within 12 months before the research was conducted) and non-use (if the respondents did not store any traditional medicine in any form within 12 months before the research was conducted).

From the analysis results, it was figured out that the number of respondents using traditional medicines was higher, which was at 255 (63.8 percent), than those who did not use any traditional medicine, which was at 145 (36.3 percent). The results of this research were slightly higher than those of 2010 Riskesdas, stating that 55.3 percent of respondents claimed themselves as loyal consumers of traditional medicines (jamu). The 2013 Riskesdas data showed that the proportion of households storing traditional medicines at their houses was 15.7 percent, and the proportion of households using traditional health service was 30.4 percent.

Meanwhile, based on the results of the National Sosioeconomic Survey (SUSENAS), the use of traditional medication increases from year to year. In 2010, the use of traditional medication increased into 45.17 percent, and in 2011 it increased again into 49.53 percent (Kemenkes, 2010). According to the research conducted by Supardi and Susyanty (2010) analyzing the 2007 Susenas, 55.8 percent of the whole household sample did self-medication, including traditional medication, for treating their diseases. According to the data from the Central Agency for Statistics (BPS), the percentage of population had self-medication traditionally was 23.89 percent in 2011, 24.42 percent in 2012, 21.59 percent in 2013, and 20.99 in 2014.

These differences is possibly due to the difference in the sample size, as the surveys abovementioned used big-sized samples. The 63.8-percent prevalence is arguably high, and it can be assumed that it is derived from the fact that the majority of the respondents of this research believed that traditional medication is acceptable for the people of Ogan Ilir Regency. The wider accountability of traditional medication in this region is possible due to the cultural acceptance, easy access, and affordability of traditional medicines in comparisn to modern medicines and facilities.

The knowledge about traditional medicines is the primary determinant for users. Individuals and society may obtain various forms of information on traditional medicines from different sources due to numerous reasons. This research also attempts to analyze the various sources from which the respondents gained information on the traditional medicines they used. The analysis results show that most of the respondents gained the information on traditional medicines from their family/friends/contacts, numbering 133 (52.2 percent). This finding is worth noting as the knowledge on traditional medicines is mostly passed down or obtained through training based on spken tradition from family members and parents.

Moreover, it was found out that media, either printed or electronic, are important sources of information on traditional medicines. As many as 21.2 percent (52) respondents reported that books and Internet were their main sources of information on traditional medicines. This finding affirms that the various forms of information media developing today may serve as effective marketing tools for promoting traditional medicines. It is an undeniable truth that the society today have higher awareness of technological advances, so any form of information and advertisement of traditional medicines now is easily accessible through different media, either printed or electronic. However, 11.8 percent respondents (47 people) stated that they gained information on traditional medicines from docters/other health personnels. This underlines the existence of competition, sceptisism, distrust and suspicion between traditional and modern medications in medical practices (Buor, 2004). Traditional medicines are often used for treating or preventing various health conditions. Currently, traditional medicine users seem to be highly dependant on their family, friends and media to obtain information.

In terms of frequency of use, most traditional medicine users (204 people or 80 percent) used traditional medicines once in a month, 37 users (14.5 percent) used traditional medicines once in a week, and 14 users (5.5 percent) used traditional medicines once in a year. In relation to the place from which respondents obtained the traditional medicines, it was found out that 79.2 percent (2012 respondents) concocted their medicines on their own. This modality normally occured in respondents as the various ingredients and substances they knew were easily available in their back yards. The other sources of Traditional Medicine were medicine sellers/public markets (12.2 percent), pharmacies (2.0 percent), traditional medication practicioners (1.2 percent) and other places (5.5 percent).

The majority of the respondents used the traditional medicines widely known for treating particular conditions and applied them personally when they or one of their family members had the same conditions. Those medicines were obtained from their home yard or within their neighborhood. This signifies that most users knew the practice of herbal medication passed down from the older generations through informal training, folktales, and verbal communication. Some others gained the ability to concoct the traditional medicines through dreams

Table 2. The Results of Bivariate Test

Variables	Utilization of Traditional Drugs				Frecuency		P value
	Yes		No				
	n	%	n	%	n	%	
Perception of Illness							
1. Medium	66	80.5	16	19.5	82	100	0
2. Healthy	180	74.1	63	25.9	243	100	
3. Very Healthy	9	12	66	8	75	100	
Residential Place							
1. Rural	185	72	72	28	257	100	0
2. Urban	70	49	73	51	143	100	
Type of Complain							
1. Chronic	0	0	10	100	100	100	0
2. Acute	131	59	91	41	222	100	
3. Unware	124	73.8	44	26.2	168	100	
Revenue							
1. ≤ Rp1.000.000/month	61	88.4	8	11.6		100	0
2. > Rp1.000.000/month	194	58.6	137			100	
Health Insurance							
1. Yes	104	89.7	12	10.3	116	100	0
2. No	151	53	133	46.8	284	100	
Distance to Health Facility							
1. Far	92	72.4	35	27.6	127	100	0.019
2. Near	163	59.7	110	40.3	273	100	
Family Support							
1. Yes	247	65.2	132	34.8	379	100	0.023
2. No	8	38.1	13	61.9	21	100	
Promotion of Traditional Medicine							
1.Yes	170	68	80	32	250	100	0.03
2.No	85	56.7	65	43.3	150	100	

and sometimes supernatural powers (Mafimisebi and Oguntade, 2010; Okunlola, 2007). This practice may lead to indiscriminate and unprescribed medication leaving both positive and negative impacts.

Some other studies (Van Andel and Carvalheiro, 2013; Peltzer and Mngqundaniso, 2008) also found out that disease prevention in may households usually starts from home (beyond health facilities) by using traditional medicines. These medicines are obtained from various sources such as alternative medication (witchdoctors, traditional bone setter, traditional birth attendants, spiritualits, etc), self concoction, pharmacy, and so forth. Usually, conventional medical service is only sought when the disease develop

5. CONCLUSIONS

Respondents were motivated to use traditional medicines by (a) predisposing factors, namely: perceived sickness. (b) enabling factors, namely economic level, domicile, type of complaint, insurance, and distance to health facilities, and (c) reinforcing factors, namely family support and traditional medicine promotion. This research found that the factors serving as predictors in the use of traditional medicines were the variables sex, ethnic group, perceived sickness, type of complaint, distance to health facilities, and traditional medicine promotion, with variables occupation, insurance, education, family support, domicile, and income serving as confounding variables. In addition, the statistical test showed no significant difference between age groups in the use of traditional medicines. With the results of this research, it is expected that a number of strategies for improving the practice of traditional medicine use in the public health care are formed. Those, the following policy recommendations are proposed as a means for improving traditional medicine use.

REFERENCES

Adams, J., D. Sibbritt, and A. Young (2009). A longitudinal analysis of older Australian women's consultations with complementary and alternative medicine (CAM) practitioners,1996-2005. *Age Ageing*, **38**; 93–99

Kartika, T. (2015). Inventarisasi jenis-jenis tumbuhan berkhasiat obat di desa tanjung baru petai kecamatan Tanjung Batu kabupaten Ogan Ilir (OI) provinsi Sumatera Selatan. *Sainmatika: Jurnal Ilmiah Matematika dan Ilmu Pengetahuan Alam*

Kemenkes (2010). *Riset Kesehatan Dasar (Riskesdas), 2010*. Balai Penelitian dan Pengembangan Kesehatan, Kementerian Kesehatan Republik Indonesia

Mafimisebi, T. E. and A. E. Oguntade (2010). Preparation and use of plant medicines for farmers' health in Southwest Nigeria: socio-cultural, magico-religious and economic aspects. *Journal of Ethnobiology and Ethnomedicine*, **6**(1)

Okunlola, J. O. (2007). The sociology of the use of medicinal plants. In Medicinal Plants in Agriculture: The Nigerian Experience. In *Proceedings of the Akure-Humboldt Kellog/3rd SAAT*

Peltzer, K. and N. Mngqundaniso (2008). Patients Consulting Traditional Health Practitioners in the Context of HIV/AIDS in Urban Areas in Kwazulu-Natal. *South Africa. Afr. J. Trad.*, 5(4); 370 – 379

Riskesdas (2013). *Pertanyaan Rumah Tangga dan Individu*. Badan Penelitian dan Pengembangan Kesehatan, Republik Indonesia Kementerian Kesehatan

Supardi, S. and A. L. Susyanty (2010). Penggunaan obat tradisional dalam upaya pengobatan sendiri di Indonesia (Analisis Data Susenas Tahun 2007). *Buletin Penelitian Kesehatan*, **38**; 80–89

Van Andel, T. and L. G. Carvalheiro (2013). Why Urban Citizens in Developing Countries Use Traditional Medicines: The Case of Suriname. *Complementary and Alternative MedicineComplementary and Alternative Medicine*, **114**

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