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RESEARCH ARTICLE

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Relationship between Behavior of Traditional Medicines Usage and Health-Related Quality of Life in Surabaya Community in 2019

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ABSTRACT

The use of traditional medicine, in general, is considered safer than modern medicine. This study aims to determine the relationship between frequency of traditional medicines usage, the type and amount of traditional medicines consumed on traditional drug user's health-related quality of life. This research was an observational study conducted in a cross-sectional way. The study was conducted in the city of Surabaya in 2019. Calculation of sample size required for 400 people using the Slovin formula. Inclusion Criteria of respondents were domiciled in Surabaya, had or were taking traditional medicine, aged over 17 years. The research instrument was in the form of a Questionnaire and Short Form 6 Dimension (SF6D) sheet that had been validated for the measurement of the quality of life for health. The instruments were distributed using the Snowball Sampling technique with Google Forms. While manual distribution using random sampling techniques to the people of Surabaya. The collected data were analyzed with the Spearman correlation test and the Kruskal Wallis test. All analyses were carried out with the help of SPSS. The results show that the frequency, type and amount of traditional medicine consumed had a $p > 0.05$ to health-related quality of life. The behavior of traditional medicine usage shows that there is no significant relationship to health-related quality of life to the health of the Surabaya community.

Keywords: health-related quality of life; traditional medicine; SF6D; behavior

INTRODUCTION

Background

Traditional medicine is considered as an alternative effort by most of the people who have carried self-medication. This assumption is proof that people still believe in the efficacy of traditional medicine. Based on the 2013 Basic Health Research Report (Riskesdas), there is a national scale health research by the Health Research and Development Agency of the Ministry of Health. The report states that 35.2% of households store medicines for self-medication purposes and 15.7% are traditional medicines ⁽¹⁾.

The use of traditional medicine is considered more secure than modern medicine. This assumption is caused by traditional medicine's tendency to have relatively fewer side effects than modern medicine ⁽²⁾. Research related to the use of traditional medicines by the community has been conducted in the last 10 years. Research by Hara et al. (2012) states that the Maybrat people in Kampung Renis utilize 47 species from 30 families and 30 plant genera as traditional medicine. Utilization of these plants either through the process of mixing or not mixed (consumed directly) ⁽³⁾. Research by Irawan et al. (2017) states that there is a positive relationship between the use of traditional medicines (herbs) with modern medicines in breast cancer patients and the quality of life of these patients. Traditional medicine plays a role as a complementary therapy ⁽⁴⁾. An overview of the use of traditional medicines and their side effects has also been investigated by Ismiyana

(2013). The researcher mentioned that Jimus villagers consume traditional medicines in various forms of preparations to treat minor illnesses, degenerative diseases and infections ⁽⁵⁾.

The percentage of traditional drug users in Indonesia from year to year has increased from 15.2% to 38.30% (2000-2006) ⁽⁶⁾. The use of traditional medicines has continued to increase in the last 5 years due to the GERMAS BUDE JAMU program (Gerakan Masyarakat Bugar dengan Jamu) by the Ministry of Health.

Health-related quality of life (HRQOL) is a multidimensional concept used in examining the impact of health status on quality of life ⁽⁷⁾. HROQoL is an outcome according to the assessment from the patient's perspective related to health perceptions, feelings of comfort and functional abilities themselves ⁽⁸⁾. Research by Supardi and Susyanty, (2010) states that the use of traditional medicines for self-medication is increasing ⁽⁶⁾. This means that traditional medicine has been widely believed to help relieve discomfort and help maintain a healthy body ⁽⁶⁾, but until now has never been done research that links between behavior and the use of traditional medicine health-related quality of life.

Purpose

This study aims to determine the relationship of traditional medicine use behavior with the perceived benefits of users from health-related quality of life aspects.

METHODS

This research was an observational study conducted in a cross-sectional design. The study was conducted in the city of Surabaya in 2019. Respondents' inclusion criteria were as follows: had lived or lived in Surabaya, had or were taking traditional medicine (in any preparation), age over 17 years. The population of Surabaya City according to BPS in 2018 is 2,885,555 people. If calculated by Slovin formula, the samples size taken is 400 peoples.

The research instrument was in the form of a self-developed survey sheet (questionnaire) based on theories related to traditional medicine and SF6D that had been validated for the measurement of Health-Related Quality of life ⁽⁹⁾. The instruments were distributed using the Snowball Sampling technique using the help of Google Forms. Manual distribution using random sampling techniques to the people in Surabaya.

The collected data were analyzed by correlation test and difference test. The Correlation test uses the Spearman test to determine the relationship of the independent variable to the dependent variable. Kruskal Wallis statistical test to determine differences between indicators in the same group on the Health-related quality of life. All analysis was carried out with the help of SPSS.

RESULTS

Demographic Data

Table 1 illustrates the demographics of respondents who have provided answers. The total respondents who filled out the questionnaire were 226 people. Based on gender, 80.5% were women while 19.5% were men with the most age range was 21-30 years (52.7%). Respondents who were married were 58.8% while 40.3% were single. The last education of the biggest respondents was 52.7% Diploma / Bachelor degree from various fields of expertise with the most work in the private sector both contracted with private companies and entrepreneurs (36.3%).

Traditional Medicine Usage Behavior

Table 2 illustrates the behavior of traditional drug users. There were 3.5% of respondents who said they had never used traditional medicine in their entire life while 96.5% said they had or were using traditional medicine. As many as 48.7% of respondents stated using traditional medicine according to the rules they wanted, 43.4% read the rules of use listed on the packaging of traditional medicines first before consuming them. The use of traditional medicines by respondents was still not routine, 78.8% of respondents said that they use traditional medicines when needed or when remembering to consume them. This means that the majority of respondents were users of traditional medicine, although the frequency of its use has not been routinely done because they still consider traditional medicine to be consumed only when needed.

Table 1. The demographic characteristics of respondent

Demographic (n=226)	Total (%)	Demographic (n=226)	Total (%)
Sex		Marital status	
Male	44 (19.5)	Single	91 (40.3)
Female	182 (80.5)	Married	133 (58.8)
Ages		Divorce	2 (0.9)
<21 Year	15 (6.6)		
21-30 Year	119 (52.7)		
31-40 Year	67 (29.6)		
41-50 Year	17 (7.5)		
>50 Year	8 (3.5)		
Occupation		Education	
Government Employees	34 (15)	Junior High School	1 (0.4)
Household	23 (10.2)	Senior High School	44 (19.5)
Private	82 (36.3)	Diploma/ Undergraduate	119 (52.7)
Scholar	9 (4)	Postgraduate	62 (27.4)
Lecturer	32 (14.2)		
Health Worker	16 (7.1)		
Others	30 (13.3)		

Table 2. Traditional medicine usage behavior

Traditional medicine usage behavior (n=226)	Total (%)
Rules of use	
As written instruction	98 (43.4)
As own desire	110 (48.7)
As health personal instruction	18 (8)
Frequency of use	
Always/ everyday	18 (8)
Often	22 (9.7)
Never	8 (3.5)
Others	178 (78.8)
Type of traditional medicine	
Jamu	113 (50)
Standardized herbal medicine	62 (27.4)
Phytopharmaca	44 (19.5)

Table 2 also illustrates that 50% of respondents were users of traditional medicine in the form of steeping herbs users were derived from botanicals or ready brewed powder herbal medicine production company. Jamu was easier to obtain and the price was relatively affordable.

Relationship Between Variables

Table 3 illustrates the relationship between traditional drug use behavior and health-related quality of life. Traditional drug use behavior was assessed by indicators of the frequency of use, rules of use and types of traditional medicines used by respondents. Statistical test results showed that all indicators of traditional medicine did not had a significant relationship ($p > 0.05$) to health-related quality of life.

Table 3. The relationship of traditional medicine to health-related quality of life

Traditional medicine indicators	Correlation (r)	<i>p</i>
Frequency of use	0.006	0.923
Rules of use	0.033	0.598
Type of traditional medicine	0.091	0.175

Statistical Different Test

Table 4. Statistical different test of traditional medicine indicator on health-related quality of life (utility score)

Indicator	Average of Utility Score	SD	χ^2	Asym. Sig (2 tail)
Frequency of use				
Always/ Everyday	0.9306	0.0377	5.582	0.134
Often	0.8479	0.1505		
Others	0.8941	0.1101		
Never	0.9495	0.0612		
Rules of Use				
As written Instruction	0.8980	0.1050	1.448	0.485
As own desire	0.8980	0.1044		
As health personal instruction	0.8536	0.1675		
Type of Traditional Medicine				
Jamu	0.8945	0.1011	4.674	0.097
Standardized Herbal Medicine	0.8768	0.1203		
Phytopharmaca	0.9098	0.1239		

Table 4 explained the results of statistical differences between indicators of behavioral use of traditional medicines on health-related quality of life. There was no significant difference (significance value $p > 0.05$) the level of health-related quality of life between respondents who took traditional medicine every day with respondents who rarely or never consumed traditional medicine. There was no significant difference (significance value $p > 0.05$) of health-related quality of life between respondents who consumed with instructions from health workers or without clear rules. There was no significant difference (significance value $p > 0.05$) of health-related quality of life for respondents who consumed herbal medicine against respondents who consumed phytopharmaca.

DISCUSSION

All of these results indicate that the frequency, type and amount of traditional medicines consumed have no significant relationship ($p > 0.05$) with the health-related quality of life community in Surabaya. These results are not in line with studies related to the use of traditional medicines conducted in Indonesia, Korea, and China in patients with comorbidities, wherein the study concluded that the administration of herbal medicine and traditional medicine can improve the quality of life of patients⁽¹⁰⁻¹³⁾.

The difference in the results of this study is possible because there are other factors affect the health-related quality of life the people of Surabaya. Some of them are environmental, genetic, behavioral and health service factors. Health services in Surabaya, in particular, the provision of health facilities, is one of the best in Indonesia so that people get excellent service.

Community behavior such as exercise also influences the quality of life. In line with Mandagi's research (2010) conducted in Surabaya on respondents with diabetes mellitus, concluded that one of the factors that have a relationship with quality of life status is sports⁽¹⁴⁾. Elderly respondents with type 2 diabetes who are diligent in exercising regularly whether gymnastics, walking or cycling also have a better quality of life compared to those who do not exercise⁽¹⁵⁾.

CONCLUSION

The behavior of the use of traditional medicine shows that there is no significant relationship both in terms of frequency of use, type and number/dose to the health-related quality of life people in Surabaya.

REFERENCES

1. MoH-RI. Basic health research 2013 (Riset kesehatan dasar 2013). Jakarta: MoH-RI; 2013.
2. Sari LORK. Utilization of traditional medicines with consideration of benefits and safety. *Pharm. Sci Mag.* 2006;3(1):1-7.
3. Hara FLK, Nunaki JH, Sadsoeitoeboen MJ. Utilization of Plants as Traditional Medicine by the Maybrat People in Renis Village, Mare District, South Sorong Regency. *J Nat.* 2012;8(1).
4. Irawan E, Rahayuwati L, Yani DI. The Relationship of the Use of Modern and Complementary Therapies to the Quality of Life of Breast Cancer Patients. 2017;5:10.
5. Ismiyana F. Description of the Use of Traditional Medicines for Self-Treatment in Communities in the Village of Jimus Polanharjo Klaten.[Thesis]. [Surakarta]: Muhammadiyah University of Surakarta; 2013.
6. Supardi, Sudibyo, Susyanty AL. Use of Traditional Medicines in Self-Treatment Efforts in Indonesia (SUSENAS Data Analysis 2007). *Health Research Bulletin.* 2010;38(2):80-9.
7. Yin S, Njai R, Barker L, Siegel PZ, Liao Y. Summarizing health-related quality of life (HRQOL): development and testing of a one-factor model. *Popul Health Metr.* 2016;14(1).
8. Andayani. *Pharmaco-economy: principles and methodology.* Yogyakarta: Bursa Ilmu; 2013.
9. Haris RNH. Measurement of quality of life in the general population in Yogyakarta City using the Indonesian version of the short form-6 dimension instrument (SF-6D). Thesis. Yogyakarta: UGM; 2019.
10. Astana PRW, Ardiyanto D, Mana TA. Changes in Quality of Life and CD4 + Value of HIV / AIDS patients by providing immunostimulant herbs in Sragen. *Indones J Clin Pharm.* 2018;29;7(4):227.
11. Triyono A, Astana W, Novianto F. The influence of hyperglycemia herbal formula on quality of life patients in the saintification herbal medicine clinic of Tawangmangu. *Talenta Conf Ser Trop Med TM.* 2018;1(3):177-81.
12. Han W, Lee E, Han G, Yoon S, Leem J. Effectiveness of comprehensive traditional korean medicine treatment on quality of life anorexia and cachexia of cancer patients: retrospective chart review. *J Korean Med.* 2019;40(2):119.

13. Namjooyan F, Ghanavati R, Majdinasab N, Zadeh HR. The efficacy pf traditional formulation on quality of life and fatigue in mutiple sclerosis patients: a randomized double blind placebo- control clinical trial. J Contemp Med Sci. 2019;5(2).
14. Mandagi AM. Factors related to the quality of life status of people with diabetes mellitus (Study at Puskesmas Pakis, Sawahan District, Surabaya City. Surabaya: UNAIR; 2010.
15. Lara AG, Hidajah AC. The relationship of education, exercise habits, and eating patterns with the quality of life of the elderly in the Wonokromo Public Health Center in Surabaya. J PROMKES. 2017;4(1):59.