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Increasing Knowledge of Family Empowerment and Welfare Mothers (PKK) about Herbal Medicine



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Abstract

The trend towards a more natural lifestyle encourages people to choose herbal medicines cause not to significant side effects and usually have more affordable prices through utilize traditional ingredients to maintain health. However, many housewives in rural areas do not understand that herbal plants are not only very useful for seasoning dishes, but these plants are also widely needed to cure various diseases. This study aimed to reveal the effect of health education about the use of herbal plants as family medicine on increasing the knowledge of Family Empowerment and Welfare Mothers (PKK) Mojorejo Village, Wates District, Blitar Regency. The research design used quasy-experimental with a one-group pre-test post-test design without control group. The population and sample in this study were mothers of Family Empowerment and Welfare (PKK) Mojorejo Village, Wates District, Blitar Regency totaling 28 respondent taken by total sampling. The data were analyzed by the Wilcoxon Signed Rank Test. The results showed that there was a difference in the average score of knowledge before and after being given health education, namely 20.21 and 28.14. There was a significant influence the provision of education on the knowledge and skills about the use of herbal plants as family medicine of Family Empowerment and Welfare Mothers (PKK) Mojorejo Village, Wates District, Blitar Regency.

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INTRODUCTION

WHO recommendations regarding the use of traditional medicines in maintaining public health, treatment and disease prevention do not necessarily mean that WHO directly recommends traditional medicines as a substitute for modern medicines that have been scientifically proven. Indonesia has abundant natural resources, including many plant species used in traditional medicine (Setiawati et al., 2015). Basic Health Research data in 2018 shows that the majority of households in Indonesia use traditional health services. The following is a breakdown of traditional health services use based on type: 12.9% of households who make their own efforts and 55.7% of households who do not use traditional health services. The types of traditional health efforts that are most frequently used are manual skills (65.3%), ready-made potions (48%), homemade potions (31.8%), energy skills (2.1%), and thought processing skills (1.9%) (Wantini et al., n.d.). Various traditional medicines or herbal medicines have long been used by people in Indonesia as alternatives or additions to their health care. Around 300 plant species are used as raw materials for herbal medicine products and traditional medicines. Many Indonesian people still rely on these traditional medicines as the first choice to treat their health problems, especially because of their wide availability and affordable prices (Liana et al., 2017).

Traditional medicine and the use of traditional medicine have become an integral part of culture and health practices in many societies throughout the world, including in Indonesia. The advantages of traditional medicine include easy accessibility, affordable costs, and knowledge that has been passed down from generation to generation. This makes traditional medicine the first choice for many people in dealing with their health problems, especially for mild and general symptoms (Sumarni et al., 2019). People's ability to care for themselves and understand the symptoms of disease is an important part of disease prevention and health maintenance. Education and increasing public knowledge about traditional medicine and its appropriate use can contribute to these efforts. Combining traditional knowledge with a scientific approach enables people to make smarter decisions about the use of traditional medicine and avoid potential risks or unwanted drug interactions. Along with the development of science and technology, there are also efforts to identify and test the effectiveness of traditional medicines using scientific methods. This can help validate the health

benefits of certain medicinal plants and ensure the safety of their use (Iqbal et al., n.d.). According to research findings reported by (Hikmat et al., 2011), as many as 50% of respondents showed a poor level of knowledge regarding medicinal plants. In general, those who plant Toga are housewives who have gained their knowledge from generation to generation from their grandmothers and mothers. The housewife's expertise in traditional medicine is then utilized by her family, neighbors and the surrounding community.

A preliminary study was carried out by researchers by interviewing several mothers who were members of the Family Empowerment and Welfare (PKK) in Mojorejo village, Wates District. They said they only knew the type of "Empon-empon" that could be used and it was only planted around the house without proper care. Knowledge of the use of TOGA is still very limited in the community, including using ginger as a warming drink, tamarind turmeric as a feminine health treatment, and kencur rice for coughs and increasing appetite. In fact, there are many types of herbal plants that contain various active compounds for various pharmacological effects. It is felt that the use of medicinal plants by the community is not optimal and is still limited to empirical experience without being accompanied by scientific information regarding the efficacy, safety and good methods of making traditional medicines. Education to the public is very necessary about how to use traditional medicine appropriately based on an evidence-based scientific approach.

METHOD

The type of research used was a quasi-experimental with a pre-test and post-test approach without control group which aims to reveal the effect of health education about the use of herbal plants as family medicine on increasing the knowledge of Family Empowerment and Welfare Mothers (PKK) Mojorejo Village, Wates District, Blitar Regency. The total sample was 28 respondents. Samples were taken by total sampling. The independent variable in this study is health education about herbal plants as family medicine. At the same time, the dependent variable is the level of knowledge of PKK mothers. The instrument used in this study was a questionnaire modification. The collected data will be analyzed using the Wilcoxon Signed Rank Test analysis with a significance value of <0.05 .

The research steps that had been carried out were as follows: after the researcher determined the

sample, the researcher then carried out the first stage of assessment (pre-test) to determine the level of knowledge of PKK mothers about herbal plants as family medicine, before carrying out the intervention. After that, the researchers carried out an intervention in the form of health education about herbal plants as family medicine once a week for 3 weeks. The technique for carrying out the

intervention is that researchers provide health education using power point media and practice planting family herbal plants. After the intervention was completed, the second stage of assessment (post-test) was carried out to assess the level of knowledge of PKK mothers about herbal plants as family medicine.

RESULT

Table 1: The Frequency Distribution of Respondents by age and level of education

No	Variable	Frequency (f)	Percentage (%)
1	Age		
	18-30 years old	3	10.71
	31-49 years old	13	46.43
	≥50 years old	12	42.86
	Total	28	100.00
2	Level of Education		
	Elementary school	9	32.14
	Junior high school	2	7.14
	Senior high school	12	42.86
	Academy or College	5	17.86
	Total	28	100.00

Information obtained that from a total of 28 respondents, age respondents mostly 31 to 49 years old as many as 46.43% (13 respondents), education level most of respondents are junior high school educated as many as 42.86% (12 respondents).

Table 2: The Effect of health education about the use of herbal plants as family medicine on increasing the knowledge of family Empowerment and Welfare Mothers (PKK) Mojorejo Village, Wates District, Blitar Regency

Respondents	Knowledge Level Assessment	
	Pre-test	Post-test
1	13	26
2	18	25
3	16	25
4	15	26
5	16	25
6	18	27
7	20	30
8	17	28
9	16	28
10	16	28
11	22	30
12	20	27
13	22	30
14	25	30
15	21	27
16	24	30
17	27	30
18	22	30
19	19	28

Respondents	Knowledge Level Assessment	
	Pre-test	Post-test
20	22	28
21	22	30
22	16	26
23	25	30
24	21	28
25	24	29
26	26	30
27	23	29
28	20	28
Mean	20.21	28.14
SD	3.69	1.76
Z Score	-4.630	
Asymp. Sig. (2-tailed)	0.000*	

Based on table 1, the lowest pre-test knowledge score for PKK mothers is 13 and the highest is 27 with a mean of 20.21, standard deviation of 3.69. The lowest post-test score for knowledge of PKK mothers was 25 and the highest was 30 with a mean of 28.14, standard deviation of 1.76. The results of the analysis using the Wilcoxon statistical test obtained a Z-Score value of -4.630 and $p=0.000$ so that $p<0.05$, which means there was influence or difference of knowledge level in the pre-test and post-test scores.

DISCUSSION

An excellent definition of traditional medicine from the World Health Organization (WHO). It emphasizes the holistic nature of traditional medicine, encompassing not only the treatment of illnesses but also the maintenance of overall health and well-being. The recognition of the diversity of theories, beliefs, and experiences from various cultures reflects the rich tapestry of traditional healing practices around the world. It's important to note that traditional medicine often involves a deep connection between cultural practices, natural resources, and the community's understanding of health and illness. The holistic approach considers not only the physical aspect but also the mental, emotional, and spiritual dimensions of an individual (Che et al., 2017). Using herbal plants as a form of family medicine can be a holistic approach to maintaining health and treating minor ailments. Many cultures around the world have a long history of using herbs for medicinal purposes (Sam, 2019).

Table 1 shows that the majority of respondents were in the age range 31 to 49 years old, as many as 46.43%. Age has a close relationship with thought patterns and grasping power (Satria et al., 2021). As they get older, respondents are very active in socializing and participating in community activities. In accordance with the statement of (Putra & Podo, 2017), which states that individuals will become more active in society and social life and

make more preparations for the success of adapting to old age.

Education can influence the level of understanding of material (Rosya, 2023). Based on the research results, it can be seen that the majority of respondents had a high school education level of 42.86%. At the high school education level, they already have factual, conceptual, procedural and metacognitive knowledge in science, technology, arts and culture (Permendikbud, 2013).

The research results showed that the average knowledge of respondents about herbal plants before the intervention was 20.21 with a minimum value of 13 and a maximum of 27 (table 2). This low level of knowledge of respondents is in line with the results of (Aulena et al., 2021) which stated that studies on the community in Kukuk Sumpung Village, Gobang Village, Bogor Regency, were still low regarding family medicinal plants (TOGA). In this study, respondents only knew a small part of the types and benefits of existing medicinal plants. Based on interviews, it was shown that respondents knew information about the types and benefits of medicinal plants based on stories from their parents. This is in line with the results of research on respondents' sources of information about Toga in the Air Sabit Health Center working area which showed that 47.5% of respondents had received information from generation to generation (M, 2015).

After the intervention, there was a change in the respondent's level of knowledge. The average level of knowledge was 28.14 with $p=0.000$. This research shows that health education interventions regarding herbal plants as family medicine have an influence on respondents' knowledge. The results of this research are in line with (Kadek Wartana et al., 2023) who said that public knowledge increased after being given counseling so that people understood the meaning of toga, its types and benefits for treating disease. Gita C, et al (2022) said that community empowerment through counseling and training in an effort to create healthy and independent villages is able to increase community understanding in the use of village resources in the form of herbal plants. Other research shows that there is a significant relationship between the mother's level of knowledge and the use of family medicinal plants. Extension methods in the form of health promotion have been proven to influence the level of knowledge of family medicinal plants (celery and lemongrass) for hypertension (Sagai et al., 2021).

The use of herbal plants to meet health needs has been a community habit for generations so that knowledge about these plants still persists and is passed down to this day (Odorlina et al., 2014). Based on this experience, it is the reason why respondents have an interest in increasing their knowledge about medicinal plants. In line with (Arasily & Dewi, 2016), personal experience is very influential as a reason to obtain the truth. Culture can influence someone's use of TOGA (Shofia, 2022).

The increase in the level of knowledge of respondents cannot be separated from their age range, the older they get, the more their understanding and thinking patterns develop (Satria et al., 2021). The age range of 17 to 55 years old has been proven to have higher understanding scores compared to teenagers aged 17 to 25 years old (Rosya, 2023). In line with (Ariastuti et al., 2019) stated that people of productive age have the ability to understand and concentrate in absorbing information more quickly. The respondent's education influences increasing knowledge about herbal plants. It is proven that the majority of respondents' educational level is high school, this helps the respondents' mindset to easily and quickly absorb the information provided. (Rosya, 2023) through the results of her research, the influence of education and age group on understanding literacy material shows that respondents with higher

education will easily accept new information and innovations and are willing to apply these ideas.

The respondents in this study were mothers who were members of the PKK. The majority of questionnaires in Ihsan et al., 2016's research were given to women. Women tend to have more time to discuss (Hapsari et al., 2022). According to (Wulandari & Rahmawardany, 2022) said that women have a tendency to pay attention to health problems, making it possible for them to remember what TOGA can be used by themselves and their families. This supports the increase in respondents' knowledge after being given herbal plant intervention for the family. (Mohanis, 2015) research shows a significant relationship between respondent education and the use of medicinal plants. A person's education greatly influences their understanding, knowledge and application of cultivating family medicinal plants.

Medicinal plants processed can be a single ingredient or a mixture, either with other medicinal plants or with other ingredients such as salt. A concrete example is ginger (*Z. officinale*) which is processed with a mixture of salt. Ginger is grated, mixed with a little salt, and applied to the painful part of the body, as a treatment for back pain. This method has proven effective in dealing with these complaints. Apart from that, there is also the practice of processing medicinal plants by mixing several types of plants. For example, a mixture of sembung leaves (*Blumeabalsamifera*), jawerkotok (*Coleus scutellarioides*), ginger (*Z. officinale*), and cikur (*K. galanga*) which are then pounded and sauteed to be eaten. Processing this plant mixture is believed to help relieve pain in the body. This approach reflects the wealth of traditional knowledge in using plants as a source of natural medicine (Mohanis, 2015).

CONCLUSION

We found that after intervention in the form of counseling and training, the level of knowledge of PKK mothers about herbal plants as family medicine was generally good. Based on this research, the Wilcoxon test obtained a Z-Score value of -4.630 and $p=0.000$ so that $p<0.05$, which means there is a significant influence or difference in knowledge scores between the pre-test and post-test.

SUGGESTION

We hoped that this research can be used as a source of information for PKK mothers in Mojorejo Village and utilize the TOGA plant as a non-pharmacological medicine in the first treatment of

disease symptoms in the family. Apart from that, it is hoped that nursing services will develop this non-pharmacological therapy so as to create more professional and quality nursing services in the health sector.

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CONFLICT OF INTEREST

The authors have no conflict of interest in publishing the article.

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