



The Effect Of Giving Ginger Water On Disminore In The VIII Class Of Adolescent Girl At Wahidiyah Junior High Shcool Bandar Lor Village Mojoroto District Kediri City

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ABSTRACT

Ginger is a rhizome plant that is well-known as a spice and medicine. Ginger comes from Africa, Asia and spread from India to China. Ginger is divided into 3, namely emprit ginger, elephant ginger and red ginger. Each ginger has almost the same content. Ginger has a high content of essential acids which function as an analgesic and can treat dysmenorrhea. Dysmenorrhea is pain during menstruation which is divided into 3 degrees, namely mild dysmenorrhea, moderate dysmenorrhea and severe dysmenorrhea. The purpose of this study was to the effect of giving ginger water on disminore in the VIII class of adolescent girls at Wahidiyah Junior High School Wahidiyah Bandar Lor Village, Mojoroto District, Kediri City. The design of this study used a quasi-experimental design with a pre-test-post-test approach with a sample size of 30 respondents. The independent variable in this study was the administration of ginger water while the dependent variable was dysmenorrhea in class VIII junior high school girls at Wahidiyah, Bandar Lor Village, Mojoroto District, Kediri City. Analysis of the data used is the Chi Square statistical test, with $\alpha = 0.05$. The results of this study showed that before being given ginger water, dysmenorrhea still felt, after being given ginger water, dysmenorrhea disappeared. Based on the statistical test results obtained $p = 0.000 < 0.05$, it means that H_0 is accepted and H_a is rejected. Based on the results of the research above, there is an the effect of giving ginger water on disminore in the VIII class of adolescent girls at Wahidiyah Junior High School Wahidiyah Bandar Lor Village, Mojoroto District, Kediri City. Ginger water can be given when dysmenorrhea because ginger water is a traditional drink that is safe for consumption for women who are experiencing dysmenorrhea.

Keywords: Ginger Water; Disminore

Article history :

Received: 1 Juni 2021

Received in revised form: 20 Juni 2021

Accepted: 17 Juli 2021

Available online: 1 Desember 2021



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INTRODUCTION

Adolescence begins with rapid physical changes, weight and height gain, changes in body shape, and the development of sexual characteristics such as breast enlargement, waist development. Growth and development in adolescence is very rapid, both physically and psychologically. At the age of 11-16 years in boys and 10-15 years in girls. One of the signs of puberty for a woman is the occurrence of menstruation which usually occurs at the age of 10-17 years ¹.

Menstruation process occurs on average about 1-8 days. Blood that comes out is generally 10 to 80 ml per day ¹. Almost all women must have felt menstrual pain with different levels, ranging from just aches in the pelvis from the inside to excruciating pain. Generally, the pain that usually occurs is felt below the stomach that occurs on the first and second day of menstruation. The pain will decrease after a large amount of blood comes out.

Menstrual pain is one thing that makes every woman feel very uncomfortable. Often menstrual pain also makes women feel bad moods, lack enthusiasm and just want to sleep. In fact, some women experience severe dysmenorrhea and can't carry out activities as usual. Dysmenorrhea occurs in women with a low stress level of 22% with a moderate stress level of 29% and a high stress level of 44%. But the risk of experiencing dysmenorrhea increases 10 times in women who have a history of dysmenorrhea with high stress before compared to those who do not have that history ².

If dysmenorrhea is not treated immediately, it will affect the mental and physical function of the individual, so it is urgent to take immediate action or pharmacological or non-pharmacological therapy. One of the pharmacological therapies is the administration of analgesic drugs. Non-steroidal Anti-Inflammatory Drugs (NSAIDs) can relieve this pain by blocking the prostaglandins that cause pain. Treatment using NSAIDs has dangerous side effects on other body systems, stomach pain and the risk of kidney damage ³.

In a report by the World Health Organization said that traditional medicines have generally been used by various populations in the world. On the European continent 42% Africa 70%. Of the 388 women of Chinese descent in the United States, aged between 20-34 years, all of whom were recently married or intending to become pregnant. They were all asked to keep a diary for 12 months or until they became pregnant. The diary will record the level of stress experienced, both stress at work and personal stress as well as any pain they experience when menstruation arrives. The results show that dysmenorrhea has the highest incidence in women who have high stress levels compared to women with low stress. Menstrual pain is estimated at 45-90%. The incidence of menstrual pain in adolescents is reported to be around 92%. Research in Sweden, 80% of adolescents aged 19-21 years experience dysmenorrhea, 15% limit their daily activities during menstruation and need drugs to reduce dysmenorrhea, 8-10% do not attend or attend school ⁴.

In Indonesia, the incidence of dysmenorrhea is 55% among productive age, where 15% of them complain of limited activity due to dysmenorrhea. In East Java, the incidence of dysmenorrhea is 64.25%, consisting of 54.89% primary dysmenorrhea and 9.36% secondary dysmenorrhea. In a study

of 50 female students from Semarang, it was found that the incidence of mild dysmenorrhea was 18%, moderate dysmenorrhea was 62% and severe dysmenorrhea was 20%. The discomfort of dysmenorrhea will affect the individual emotionally and physically so that action or treatment is needed to deal with pain during menstruation ⁵.

Based on previous research on how to cope with dysmenorrhea in female adolescent students at STIFARM Padang in 2013 with 56 respondents and the actions taken by respondents to overcome dysmenorrhea by traditional pharmacology of betel leaf (67.00%) chemical pharmacology (40%). But in fact chemical analgesic drugs have a harmful effect on organs such as the kidneys, liver, lungs. When used for a long time, the use of analgesic drugs, especially for women to eliminate dysmenorrhea, such as during menstruation is considered very dangerous⁶.

From the results of a preliminary study in the VIII class of adolescent girls at Wahidiyah Junior High School Wahidiyah Bandar Lor Village, Mojoroto District, Kediri City with a questionnaire about dysmenorrhea, from a total of 60 students in the VIII class of adolescent girls at Wahidiyah Junior High School Wahidiyah Bandar Lor Village Mojoroto District Kediri City, the results were 7 students with severe dysmenorrhea (12%), moderate dysmenorrhea 36 students (60%), mild dysmenorrhea 8 students (13%), did not experience dysmenorrhea 9 students (15%). The actions taken to reduce or eliminate dysmenorrhea in the VIII class of adolescent girls at Wahidiyah Junior High School Wahidiyah Bandar Lor Village, Mojoroto District, Kediri City girls who drank herbal medicine 20 students (34%), took medicine 23 (38%), did not take medicine and herbal medicine 17 students (28%)

Non-pharmacological therapies include positioning, relaxation techniques, warm compresses, exercise, relaxation, and giving herbal ingredients. Herbal medicine therapy can be done by using traditional medicines derived from plant materials. Some plant ingredients are believed to reduce pain. One of these plants is ginger (*Zingibers officinale*) whose rhizome part functions as an analgesic, antipyretic, and anti-inflammatory ⁷. Ginger contains high essential oil and oleoresin, so ginger is usually used for traditional medicine ⁸.

METHOD

The design used for this research is a quasi-experimental design, which is a design that seeks to reveal a causal relationship with the pre-test and post-test designs. This study used a purposive sampling technique with a sample of 30 young women who were dysmenorrhea at Wahidiyah Junior High School. Statistical test with Chi square test with a significance level of p 0.05 and 95% confidence level and using questionnaires and observation measuring instruments.

RESULTS AND DISCUSSION

Based on the research, the results obtained:

Table 1. Distribution of the Frequency Table of Research Results

Variabel	Total	
	N	%
Age		
13	10	33
14	15	50
15	3	10
16	2	7
Total	30	100

Cross Tabulation Table of Research Results

<i>Disminore</i>	Ginger Water Effect				Total	Presentase
	No effect	Presentase	Take effect	Presentase		
Mild	0	0%	3	11,1%	3	10%
Moderate	1	33,3 %	22	81,5%	23	76,7%
Severe	2	66,7%	2	7,4%	4	13,3%
Total	3	100%	27	100%	30	100%

From the data above, it shows that ginger water can have a large effect on moderate dysmenorrhea 22 (81.5%) respondents compared to the number that has no effect on 1 (33.7%) respondents. In accordance with the statistical test using SPSS for windows 18 through the chi square statistical test, the result of the significance (P) is 0.502 which means it is greater than (α) 0.05 so H_0 is rejected. This means that there is an the effect of giving ginger water on disminore in the VIII class of adolescent girls at Wahidiyah Junior High School Wahidiyah Bandar Lor Village Mojoroto District Kediri City.

Characteristics of Respondents Based on Age

Based on the research, it can be seen that the respondent's age is 13 years. 10 (33%) respondents. Age 14 years 15 (50%) respondents. Age 15 years 3 (10%) respondents. Age 16 years 2 (7%). From the data above, it can be seen that the VIII grade teenagers of Wahidiyah Junior High School, Bandar Lor Village, Mojoroto District are pre-puberty and puberty periods. The age of this respondent is still included in the pre-pubertal and pubertal adolescent group. The role of parents is very important in this period to supervise and direct teenagers because the mindset of teenagers at this age is still not able to make the right decisions ⁹.

The Effect of Ginger Water on Dysmenorrhea in Young Women

Of the 30 respondents who experienced dysmenorrhea. Among adolescents who experienced mild dysmenorrhea who had no effect on ginger water, 0% compared to those that had an effect, a small

percentage of 3 (11.1%) respondents. Meanwhile, adolescents who have moderate dysmenorrhea who have no effect on ginger water are almost half of 1 (33.3%) respondents compared to almost 22 (81.5%) respondents who have an effect. Meanwhile, adolescents who experienced severe dysmenorrhea who had no effect on ginger water were mostly 2 (66.7%) respondents compared to adolescents who had an effect on ginger water a small proportion of 2 (7.4%) respondents. Ginger water can cure dysmenorrhea because it contains essential acids that function as analgesics or pain relievers. It feels warm which can make the stomach condition more comfortable. Dysmenorrhea is very natural for women who are menstruating but if it is not treated immediately it is very disturbing and can become unnatural¹⁰.

DISCUSSION

The research data shows that education and training on TOGA processing have an impact on people's knowledge about TOGA management. The increase in knowledge can be seen from table 2, namely most of the respondents' knowledge increased, from low knowledge to high knowledge. Increased public knowledge is also seen from the mean pre-test (66.75) to the mean value of the post-test (74.93). The pre-test standard deviation (SD) value = 12.5 and post-test SD value = 17.03 with a significance value of 0.003 which means that there is an influence of education and training in increasing public knowledge about traditional medicine processing.

Family Medicinal Plants (TOGA) are plants owned by the family and function as traditional medicines. These plants are safe, inexpensive, and easy to obtain. Pertiwi et al., (2021) The increase in public knowledge is expected to increase awareness of the COVID-19 pandemic. Low public knowledge is positively correlated with concern. Education and training can increase public knowledge about TOGA. The results of the research that have been carried out are also in line with the results of research reported by Choironi et al., (2019) there was an increase in knowledge of 41.75% after being given education and training.

Family Medicinal Plants (TOGA) are commodities that are sought after by the public after the outbreak of Covid-19. These plants are believed to be efficacious in increasing the body's resistance or immunity as an antidote to Covid-19². The demand for traditional health care is increasing¹⁴. With the change in treatment trends, it is very important to measure the knowledge of the community in managing TOGA in the practice of maintaining daily health. The wrong use of traditional medicine is when people have expectations that traditional medicine can heal, so their use increases¹⁵. In fact, the use of herbal medicines is not necessarily safe. The quality of herbal medicines that are not good can cause various effects for users. The causes of the low quality of herbal medicines that are often encountered are the addition of synthetic medicinal ingredients, the use of toxic plant species, inappropriate doses, interactions with conventional medicines, and contamination of herbal medicines by harmful compounds, such as metabolites of microorganisms¹⁶. The use of medicinal plants is not as simple as people think so far. Everything must be learned and requires its own experience. The use of traditional

medicine must also consider the appropriate dosage/dose and processing method so that the therapeutic goals are achieved¹⁰. Education to the public on how to properly use traditional medicines based on an evidence-based scientific approach is very necessary. Educational needs related to evidence base and training can improve skills, knowledge and attitudes of the community in using medicinal plants appropriately and rationally¹³.

In this study, the public was given education about how to properly process TOGA to make it a safe herb for consumption. There are 7 statements given to respondents about the management of TOGA, where the correct answer is given a score of 1 and the wrong answer is given a score of 0, with the details of the statement as follows; Making simplicia is not able to defend medicinal plants from damage; Making simplicia is able to make the storage of medicinal plants longer; Wet sorting of medicinal plants to reduce post-harvest waste; Washing medicinal plants should use stagnant water; Chopping in the manufacture of simplicia will facilitate drying; Simplicia drying can use direct sunlight; Simplicia packaging does not affect bacterial contamination. The distribution of respondents' answers can be seen in Figure 2.

In this study, researchers emphasized that traditional medicine processors were processed into simplicia before consumption in accordance with the rules of good traditional medicine manufacturing (CPOTB). The application of post-harvest technology has the potential to increase the selling value of TOGA as a simplicia for medicinal raw materials and other processed products such as fresh herbs or health drinks¹. Ainurofiq et al., (2012) reported Various research and developments that utilize technological advances are also carried out as an effort to improve product quality and safety which is expected to further increase confidence in the benefits of these traditional medicines. The development of traditional medicines is also supported by the Regulation of the Minister of Health of the Republic of Indonesia, concerning phytopharmaceuticals, which means that there is a need for quality control of simplicia that will be used for medicinal raw materials or galenic preparations.

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