



THE RELATIONSHIP OF KNOWLEDGE AND ATTITUDE WITH GIVING VITAMIN A CAPSULES TO POSTPARTUM MOTHERS IN THE TANJUNG MARULAK HEALTH CENTER WORK AREA

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ABSTRACT

Background; Menstruation is an important event in the life of a young woman. Some adolescents experience disturbances during menstruation, namely experiencing pain during menstruation (dysmenorrhea). Menstrual pain management is divided into two categories, namely pharmacological and non-pharmacological approaches. One of the non-pharmacological treatments is giving carrot juice (*daucus carota*) to reducing dysmenorrhea pain in female students at SMP Negeri 10 Tebing Tinggi City in 2022. **Method;** This type of research is a quasi experiment using a one-group pretest-posttest design. The population of this study were all 93 class IX students at SMP Negeri 10 Tebing Tinggi City. The sampling technique used the Lemeshow formula as many as 15 people. Then the method of sampling is done by purposive sampling. The type of data used is primary and secondary data collected using observation sheets then processed and analyzed using paired t-test. **Results;** The results showed that the majority of dysmenorrhea pain in the pretest group was moderate pain as many as 11 people (73.3%). After being given carrot juice, there was a decrease in dysmenorrheal pain to mild pain in 12 people (80.0%). Statistical test results obtained p-value = 0.000. **Conclusion;** The conclusion is that there is an effect of giving carrot juice (*daucus carota*) to reduce dysmenorrhoea pain. For this reason, for young women to be able to use carrots to make juice to reduce menstrual pain as a non-pharmacological method that is safe and easy to obtain at home.

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1. INTRODUCTION

Menstruation is an important event in the life of an adolescent girl. Menstrual health is an important part of a woman's reproductive health, which includes not only physical health aspects, but also mental, spiritual and social health aspects. Poorly managed menstruation can also lead to

school dropouts, absenteeism, and other sexual and reproductive health problems that have long-term health and socio-economic consequences for adolescent girls (Ernawati et al., 2017).

Some adolescents experience disorders during menstruation, namely experiencing pain during menstruation (dysmenorrhea). Dysmenorrhea is pain during menstruation, usually with cramping and centered in the lower abdomen. Pain complaints can vary from mild to severe. The most common secondary menstrual disorder is pain before, during or after menstruation. The pain arises due to the prostaglandin hormone which makes the uterine muscles contract (Judha et al., 2019).

There are some people who consider menstrual pain to be normal. But in some cases, not a few women experience prolonged menstrual pain. They continue to experience pain, and cannot even do any activities during menstruation because the pain is unbearable (Anugoro & Wulandari, 2017).

The incidence of dysmenorrhea in the world is very large. On average, more than 50% of women in each country experience dysmenorrhea, such as in America the percentage is around 60%, in Sweden around 72% and in the UK a study states that 10% of advanced school adolescents appear to be absent 1-3 days each month due to dysmenorrhea (Ariyanti et al., 2020).

According to the World Health Organization (WHO) in 2018, in the Journal of Midwifery the incidence of dysmenorrhea is quite high throughout the world. The average incidence of dysmenorrhea in young women is between 16.8-81%. On average in European countries dysmenorrhea occurs in 45-97% of women. With the lowest prevalence in Bulgaria (8.8%) and the highest reaching 94% in Finland. The highest prevalence of dysmenorrhea is often found in adolescent women, which is estimated to be between 20-90%. About 15% of adolescents reported experiencing severe dysmenorrhea (Silviani et al., 2019).

The incidence of dysmenorrhea varies from country to country. In the United States, the prevalence of dysmenorrhea is estimated to be 45-90%. Dysmenorrhea is also responsible for absenteeism from work and school, with 13-51% of women having been absent at least once and 5-14% repeatedly absent. Of the 1,266 female students at Firat University in Turkey, 45.3% had pain with every period, 42.5% had pain sometimes and 12.2% had no pain. An epidemiologic study of an adolescent population in the United States reported a dysmenorrhea prevalence of 59.7%. Of those who complained of pain, 12% were severe, 37% were moderate and 49% were mild. Dysmenorrhea causes 14% of adolescent girls to miss school frequently (Anugoro & Wulandari, 2017).

According to research (Assyifa, 2018), giving carrot juice can reduce the pain scale -3.82, namely from 5.64 (before giving carrot juice) to change down 1.82 (after giving carrot juice). While in the control group the average pain scale before was 4.45 and the average pain scale after 3.35, these results have a decrease in pain scale of -0.9. The statistical test results obtained p value 0.000 (p value <0.05) means that there is an effect of giving carrot juice on reducing primary dysmenorrhea pain.

SMP Negeri 10 is one of the junior high schools in Tebing Tinggi City. Through a preliminary survey based on information from the homeroom teacher, it was found that 4 female students experienced primary dysmenorrhea. The four students, every time they experience menstruation, limit their daily activities and need medicines to reduce the pain. In fact, all of them cannot participate in class learning properly, so when menstruation arrives, they always do not attend school and choose to rest at home.

They always ask for permission to go home when they experience menstruation because they cannot stand the menstrual pain they feel. Many things are done to reduce dysmenorrhea pain, which can be done by giving analgesic and anti-inflammatory drugs. Non-pharmacological

treatments are treatments given without the use of chemicals that are sought to help reduce complaints during menstruation. One of the non-pharmacological treatments is by giving carrot juice.

Based on the above background, the researcher is interested in examining "The Effect of Giving Carrot Juice (*Daucus Carota*) on Reducing Dysmenorrhea Pain in Junior High School Students of State 10 Kota Tebing Tinggi in 2022".

2. RESEARCH METHODE

This type of research is quantitative research in the form of Quasi experiment, which is one type of experimental research where researchers do not randomize (randomness) in determining the subject of the research group, but the results achieved are quite meaningful, both in terms of internal and external validity (Yusuf, 2017). The quasi experiment research design in this study used a one-group pretest-posttest design. In this design, there is a pretest, before being given treatment. Thus the results of the treatment can be known more accurately, because it can compare with the situation before treatment (Yusuf, 2017). The location of this research was conducted at SMP Negeri 10 Kota Tebing Tinggi. The reason for choosing the location is that there were 4 female students who experienced primary dysmenorrhea. The four female students, every time they experience menstruation, limit their daily activities and require drugs to reduce the pain. Sampling in this study used sampling techniques through the sample calculation formula using the Lemeshow formula so that 15 people were obtained using purposive sampling technique.

3. RESULT AND ANALYSIS

The results of research on the Effect of Giving Carrot Juice (*Daucus Carota*) on Decreasing Dysmenorrhea Pain in Junior High School Students of State 10 Kota Tebing Tinggi in 2023 are as follows:

Table 1 Frequency Distribution of Dysmenorrhea Pain Categories Before Giving Carrot Juice to Students of SMP Negeri 10 Kota Tebing Tinggi in 2023

No	Kategori Nyeri	Frekuensi	%
1	Ringan	0	0,0
2	Sedang	11	73,3
3	Berat	4	26,7
Total		15	100,0

Based on table 1 above, seen from the pain category, the majority of respondents experienced moderate pain as many as 11 people (73.3%) and the minority experienced severe pain as many as 4 people (26.7%).

Table 2. Frequency Distribution of Dysmenorrhea Pain Categories after Giving Carrot Juice to Students of SMP Negeri 10 Kota Tebing Tinggi in 2023

No	Kategori Nyeri	Frekuensi	%
1	Ringan	12	80,0
2	Sedang	3	20,0
3	Berat	0	0,0
Total		15	100,0

Based on table 2 above, seen from the pain category, the majority of respondents experienced mild pain as many as 12 people (80.0%) and the minority experienced moderate pain as many as 3 people (20.0%).

Table 3 Test of Normality

No	Kelompok	Statistic	Df	Sig
1	Pretest	0,910	15	0,138
2	Posttest	0,817	15	0,066

Based on the Saphiro Wilk test, it is known that the data distribution is normal. This can be seen from the Sig value. = 0.138 for pretest data and 0.066 for posttest data (> 0.05). It can be concluded that the significance value $> \alpha$ (0.05) then the distribution of the data is normal, so proceed with the paired t-test statistical test.

Table 4 Test of Normality

No	Kelompok	Mean	Selisih Mean	SD	t	P-Value
1	Pretest	6,00		1,363		
2	Posttest	2,87	3,13	0,743	13,256	0,000

Based on table 4, it can be analyzed that the average menstrual pain before being given carrot juice is on a scale of 6.00, while the average menstrual pain after being given carrot juice is on a scale of 2.87. It can be concluded that after being given carrot juice, the average respondent experienced a decrease in the dysmenorrhea pain scale by 3.13 points.

Statistical test results using paired t-test obtained p-value 0.000 < 0.05 . So H_0 is rejected and H_a is accepted, which means there is a difference in the pain scale of dysmenorrhea before and after giving carrot juice to female students of SMP Negeri 10 Kota Tebing Tinggi in 2023.

DISCUSSION

The results showed that the p-value was 0.000 < 0.05 . So it can be concluded that there is a difference in dysmenorrhea pain scale before and after giving carrot juice to female students of SMP Negeri 10 Kota Tebing Tinggi in 2023.

The results of this study are in accordance with the research journal (Puspita, 2018) which shows a significant number in the administration of carrot juice with a p-value of 0.000 which means less than $\alpha = 0.05$, thus H_0 is rejected and H_1 is accepted, which means that there is an effect of giving carrot juice on dysmenorrhea pain in adolescent girls.

This study also does not experience a gap with research (Assyifa, 2018), that giving carrot juice can reduce the pain scale -3.82, namely from 5.64 (before giving carrot juice) to change down 1.82 (after giving carrot juice). While in the control group the average pain scale before was 4.45 and the average pain scale after 3.35, these results have a decrease in pain scale of -0.9. The statistical test results obtained p value 0.000 (p value < 0.05) means that there is an effect of giving carrot juice on reducing primary dysmenorrhea pain.

This research is also in line with the research journal (Noravita, 2017) that the P value in the experiment is 0.000 which is smaller than 0.05 which means that there is a difference between the results of the pretest and posttest and there is an effect of giving carrot juice on reducing the level

of primary dysmenorrhea. The P value in the experimental group is also smaller than that in the control group ($0.000 < 0.031$), which means that the experimental group has a more significant decrease in pain than the control group.

The results of this study are in accordance with research (Ariyanti et al., 2020), that the results of the Wilcoxon test obtained a P value of $0.000 < 0.05$, meaning that there is an effect of giving carrot juice on reducing dysmenorrhea pain. While research (Hunowu, 2019) using the paired sample t-test obtained the mean value of pretest treatment menstrual pain of 7.00 and posttest 3.10 with a p value of $0.000 < 0.05$. Pre test control menstrual pain was 6.00 and post test 3.70 with a p value of $0.005 < 0.05$. The significant value is smaller than 5% (0.05), meaning that there is an effect of giving carrot juice on reducing the level of primary menstrual pain of adolescent girls.

4. CONCLUSION

After conducting research on "The Effect of Giving Carrot Juice (*Daucus Carota*) on Decreasing Dysmenorrhea Pain in Students of SMP Negeri 10 Kota Tebing Tinggi in 2023", the following conclusions were obtained:

- a. The average pain scale of dysmenorrhea in female students of SMP Negeri 10 before giving carrot juice was the majority in moderate pain (73.3%).
- b. The average pain scale of dysmenorrhea in junior high school students after giving carrot juice is the majority in mild pain (80.0%).
- c. There is an effect of giving carrot juice (*daucus carota*) on reducing dysmenorrhea pain in female students of SMP Negeri 10 Kota Tebing Tinggi in 2022 with a p-value = $0.000 (< 0.05)$.

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