

The Effectiveness Of Papaya Leaf Decoction On Young Women Against Dysmenorrhea During Menstruation In MTS. Annur Of Aek Corsik Village In 2021

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ABSTRACT

Menstruation is one of the aspects of sexual maturity that first occurs during puberty of a woman. Menstruation (menstruation) is periodic and cyclic bleeding from the uterus accompanied by the release (desquamation) of the endometrium. Menstruation (menstruation) accompanied by pain (Dysmenorrhea) is abdominal pain that comes from uterine cramps that occur during menstruation. According to WHO (World Human Organization) the incidence of dysmenorrhea in Indonesia is 64.25%, consisting of 54% primary dysmenorrhea and 9.36% secondary dysmenorrhea. Handling dysmenorrhea by giving analgesic drugs as symptomatic (pharmacological) and non-pharmacological therapy, namely drinking papaya leaf decoction. This research is a type of quantitative research with a quasi-experimental one group pre post test method without control. Research with a group design of subjects was given an intervention without any comparison. This research was conducted at MTs An-Nur in Aek Korsik village in 2021, with a population of 72 students and a sample of 30 respondents. The sampling technique uses quota sampling. Data collection The intensity of dysmenorrhea using the Numerical Rating Scale (NRS), statistical analysis of the data using the paired sample T-Test test obtained that the average level of menstrual pain (dysmenorrhea intensity) or the mean before being given papaya leaf decoction was 4.70. Then there was a decrease for the average intensity of dysmenorrhea or the mean after being given papaya leaf decoction to 3.20 and the p-value was 0.000 <0.05 (p = 0.000 <0.05). The conclusion is that there is effectiveness of papaya leaf decoction in adolescent girls against dysmenorrhea during menstruation in MTs. Annur of Aek Korsik Village, so that it is hoped that young women who experience dysmenorrhea can consume boiled papaya leaves well.

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1. Introduction

One of the reproductive health in adolescents is menstruation. Menstruation is one of the aspects of sexual maturity that first occurs during puberty for a woman. Menstruation (menstruation) is periodic and cyclic bleeding from the uterus accompanied by the release (desquamation) of the endometrium (Sarwono, 2016). Menstruation (menstruation) accompanied by pain (Dysmenorrhea) is abdominal pain that comes from uterine cramps that occur during menstruation. According to WHO (World Human Organization) the incidence of dysmenorrhea in Indonesia is 64.25%, consisting of 54% primary dysmenorrhea and 9.36% secondary dysmenorrhea (Dewi, 2016).

Dysmenorrhea is subjective, its severity or intensity is difficult to assess. Handling dysmenorrhea by giving analgesic drugs as symptomatic (pharmacological) and non-pharmacological therapy, namely drinking papaya leaf decoction. The tendency of Indonesian people to turn to nature or "Back to Nature" is one of the trends in our current habits, especially to maintain a healthy body. The use of traditional medicine is generally considered safer than the use of modern medicine. This is because traditional medicine has relatively fewer side effects than modern medicine.

Medicinal plants in Indonesia consist of various species which are sometimes difficult to distinguish from one another. The Indonesian people have long known and used medicinal plants as an effort to overcome health problems. Knowledge of medicinal plants is based on experience and skills that have been passed down from generation to generation. The use of natural ingredients as traditional medicine in Indonesia has been carried out by our ancestors since centuries ago as evidenced by the existence of old manuscripts on palm leaves, Husodo (Java), Usada (Bali), Lontarak Pabbura (South Sulawesi), primbon jampi fiber documents,

Vitamin E contained in papaya leaves (Follum papaya) can reduce menstrual pain, through inhibition of prostaglandin biosynthesis where vitamin E will suppress the activity of phospholipation A enzymes and cyclo oxygenation through inhibition of post-translational activation of cyclooxygenation so that it will inhibit prostaglandin production. On the other hand,

vitamin E also increases the production of prostacyclin and PGE 2 which functions as a vasodilator that can relax the smooth muscle of the uterus (Maulani, 2018).

2. Method

This research is a type of quantitative research with a quasi-experimental method of one group pre post test without control.

a. Population and Research Sample

The population in this study were all young women in MTs. Annur, Aek Korsik Village, Aek Ledong District, Asahan Regency, North Sumatra, totaling 72 people. The sample in this study is the entire population with a total sampling of 72 young women from the entire population.

b. Data collection

The effectiveness of the treatment was assessed by comparing the pre-test and post-test scores. In the design of this study, the first observation (pre test) was carried out so that researchers could examine the changes that occurred after the treatment, but in this research design there was no control group (comparison).

c. Processing and analysis of data

The data will be processed using SPSS version 20 software. Data analysis is carried out using quantitative analysis to obtain research results.

3. Results

A. Characteristics of Respondents

The frequency distribution based on the age of the respondents is presented in the following table:

TABLE 1.

FREQUENCY DISTRIBUTION OF THE EFFECTIVENESS OF PAPAYA LEAF DECOCTION BASED ON THE AGE CHARACTERISTICS OF ADOLESCENT GIRLS DYSMENORRHEA DURING MENSTRUATION IN MTS. ANNUR OF AEK CORSIK VILLAGE IN 2021

Age	Frequency	Percentage (%)
13 years old	7	23.3
14 years	11	36.7
15 years	12	40
Amount	30	100.0

Primary data obtained in 2021

Based on table 1, it can be seen that of the 30 teenage girls who experienced dysmenorrhea during menstruation at MTs. Annur, Aek Korsik Village in 2021, the majority of teenage girls who were 15 years old were 12 people (40%).

B. Univariate Analysis

- The intensity of dysmenorrhea (menstrual pain level) during menstruation before being given papaya leaf decoction to adolescent girls. The frequency distribution based on the intensity of dysmenorrhea (menstrual pain level) during menstruation before being given papaya leaf decoction in adolescent girls is presented in table 3.2 below.

TABLE 2.

FREQUENCY DISTRIBUTION BASED ON THE INTENSITY OF DYSMENORRHEA (MENSTRUAL PAIN LEVEL) DURING MENSTRUATION BEFORE BEING GIVEN PAPAYA LEAF DECOCTION TO ADOLESCENT GIRLS IN MTS. ANNUR OF AEK CORSIK VILLAGE IN 2021

Pain Intensity	Frequency	Percentage (%)
No Pain (0)	0	0
Mild Pain (1 - 2 - 3)	10	33.3
Moderate Pain(4 - 5 - 6)	16	53.4
Severe Pain (7 - 8 - 9)	4	13.3

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Bad (10)	0	0
Amount	30	100.0

Primary data obtained in 2021

Based on table 2, it can be seen that most of the intensity of dysmenorrhea (menstrual pain level) during menstruation before being given papaya leaf decoction to adolescent girls in MTs. Annur of Aek Korsik Village in the moderate pain category, which is 16 people (53.4%).

- b. The intensity of dysmenorrhea (menstrual pain level) during menstruation after being given papaya leaf decoction in adolescent girls. The frequency distribution based on the intensity of dysmenorrhea (menstrual pain level) during menstruation after being given papaya leaf decoction in adolescent girls is presented in table 3 below.

TABLE 3.
FREQUENCY DISTRIBUTION BASED ON THE INTENSITY OF DYSMENORRHEA (MENSTRUAL PAIN LEVEL) DURING MENSTRUATION AFTER BEING GIVEN PAPAYA LEAF DECOCTION TO ADOLESCENT GIRLS IN MTs. ANNUR OF AEK KORSIK VILLAGE IN 2021

Pain Intensity	Frequency	Percentage (%)
No Pain (0)	1	3.3
Mild Pain (1 - 2 - 3)	17	56.7
Moderate Pain (4 - 5 - 6)	11	36.7
Severe Pain (7 - 8 - 9)	1	3.3
Bad (10)	0	0
Amount	30	100.0

Based on table 3, it can be seen that most of the intensity of dysmenorrhea (menstrual pain level) during menstruation after being given papaya leaf decoction to adolescent girls in MTs. Annur of Aek Korsik Village in the category of mild pain, which is 17 people (56.7%).

C. Bivariate Analysis

This section presents the results of an analysis of the effectiveness of papaya leaf decoction in adolescent girls based on the characteristics of the intensity of dysmenorrhea (menstrual pain level) during menstruation in MTs. Annur Desa Aek Korsik in 2021. To determine the effectiveness of this papaya leaf stew, a paired T test was used, the results are presented in table 4 below.

TABLE 4.
THE EFFECTIVENESS OF PAPAYA LEAF DECOCTION IN YOUNG WOMEN AGAINST DYSMENORRHEA DURING MENSTRUATION AT MTs. ANNUR, AEK KORSIK VILLAGE IN 2021

Variable	Treatment	N	mean	SE	SD	t	p-value
Knowledge	Before	30	4.70	,322	1,765	9,127	0.000
	After	30	3.20	,312	1,710		

Primary data obtained in 2021

Based on table 4, it can be seen that the average level of menstrual pain (dysmenorrhea intensity) or the mean before being given papaya leaf decoction is 4.70. Then there was a decrease for the average intensity of dysmenorrhea or the mean after being given papaya leaf decoction to 3.20. Because $t_{arithmetic} 9.127 > t_{table} 2.042$ or $p\text{-value } 0.000 < \alpha (0.05)$, then H_0 is rejected. It is concluded that there is a significant effectiveness of papaya leaf decoction in adolescent girls against dysmenorrhea during menstruation in MTs. Annur, Aek Korsik Village.

4. Discussion

A. Univariate Analysis

- 1) Description of the intensity of dysmenorrhea (menstrual pain level) during menstruation before being given papaya leaf decoction to adolescent girls in MTs. Annur of Aek Corsik Village in 2021

The intensity of dysmenorrhea (menstrual pain level) during menstruation before being given papaya leaf decoction to adolescent girls in MTs. Annur Desa Aek Korsik in 2021 with 30 respondents, from the results of the distribution of the effectiveness of papaya leaf decoction before being given to young women against dysmenorrhea during menstruation, the category of moderate pain was 16 people (53.4%), the category of mild pain was 10 people (33.3%), and severe pain category as many as 4 people (13.3%).

After the researcher analyzed the results of the study, most of the categories were moderate pain. This can be influenced, one of which is that there is no effectiveness of papaya leaf decoction because it has not been given and also from psychological factors, constitutional factors, cervical canal obstruction factors, endocrine factors, menstrual duration factors, and allergic factors. The surrounding environment is also very influential on dysmenorrhea and early puberty.

This can also be seen from the results of research conducted (Sophia, 2013) on students of SMK N 10 Medan that the duration of menstruation is significantly related to the incidence of dysmenorrhea. And according to the results of a study (Septiyanti, 2013) on a student of the STIKes Dahasen Bengkulu S1 Nursing study program which showed that stress can affect the incidence of dysmenorrhea, as well as the results of a study (Pundati, 2016) entitled Factors related to the incidence of dysmenorrhea in semester VIII students. General Sudirman University, Purwokerto.

- 2) Overview of the intensity of menstrual pain (dysmenorrhea) it can be seen that most of the intensity of dysmenorrhea (menstrual pain level) during menstruation after being given papaya leaf decoction to adolescent girls in MTs. Annur Village Aek Corsik

The intensity of menstrual pain (dysmenorrhea) can be seen that most of the intensity of dysmenorrhea (menstrual pain level) during menstruation after being given papaya leaf decoction to adolescent girls in MTs. Annur Desa Aek Korsik, namely the no pain category as many as 1 person (3.3%), the mild pain category, namely 17 people (56.7%), the moderate pain category as many as 11 people (36.7%), and the severe pain category as many as 1 person (3.3%).

After the researchers analyzed the results of the study, most of the categories of mild pain, there was a decrease in the level of pain this was caused by the effectiveness of papaya leaf decoction. From the results of Maulani's research in 2018, vitamin E contained in papaya leaves (*Follum papaya*) can reduce menstrual pain, through inhibition of prostaglandin biosynthesis where vitamin E will suppress the activity of phospholipation A enzymes and cyclo oxygenation through inhibition of post-translational activation of cyclooxygenation so that it will inhibit production prostaglandins. On the other hand, vitamin E also increases the production of prostacyclin and PGE 2 which functions as a vasodilator that can relax the smooth muscle of the uterus.

The results of this study are also supported by previous research results (Ashra, 2014) The average dysmenorrhoea pain scale before being given papaya leaf therapy was 5.93 with moderate pain category with a minimum value of 4 and a maximum of 8. The average dysmenorrhoea pain scale after being given papaya leaf therapy is 4.00 with a mild pain category with a minimum value of 2 and a maximum of 7. The administration of papaya leaf therapy on the dysmenorrhoea pain scale in 2014 experienced a decrease in effectiveness.

B. Bivariate Analysis

The results of statistical analysis in this study showed t count 9.127 with a p-value of 0.000. Therefore arithmetic $9.127 > t$ table 2.042 or p-value $0.000 < (0.05)$, then H_0 is rejected. It is concluded that the effectiveness of papaya leaf decoction in adolescent girls against dysmenorrhea during menstruation.

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Of the 30 respondents before being given papaya leaf decoction there were 16 respondents with moderate pain category, 10 respondents with mild pain category, 4 respondents with severe pain category, while after being given papaya leaf decoction there was 1 respondent with no pain category, 17 respondents with mild pain category, 11 respondents with moderate pain category and 1 respondent with severe pain category. The average intensity of dysmenorrhea is lower after being given papaya leaf decoction, this indicates that the effectiveness of papaya leaf decoction is very significant in adolescent girls who experience dysmenorrhea during menstruation.

The results of this study are also supported by previous research results (Elly Rachmawati, 2015) with the results of the Wilcoxon signed rank statistical test between before and after giving papaya leaves (*Carica papaya*) obtained value = 0.000 ($0.000 < 0.05$) so that H1 is accepted, This means that there is an influence on the level of pain before and after being given papaya leaves (*Carica papaya*) at SMAN 5 Kediri Kediri in 2015. The results of this study are expected to be an alternative to reduce the pain of dysmenorrhea.

5. Conclusions

Based on the results of research and discussion on the effectiveness of papaya leaf decoction in adolescent girls against dysmenorrhea during menstruation in MTs. Annur of Aek Korsik Village in 2021, the following conclusions can be drawn:

1. Before being given papaya leaf decoction to adolescent girls, most of the intensity of dysmenorrhea (menstrual pain level) during menstruation in MTs. Annur Desa Aek Korsik in the moderate pain category, which is 16 people (53.4%).
2. After being given papaya leaf decoction to adolescent girls, most of the intensity of dysmenorrhea (menstrual pain level) during menstruation in MTs. Annur of Aek Korsik Village in the category of mild pain, which is 17 people (56.7%).
3. The effectiveness of papaya leaf decoction in adolescent girls against dysmenorrhea during menstruation in MTs. Annur Desa Aek Corsik 2021 with *p-value* 0.000 less than ($= 0.05$).

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