

The Effect of Giving Cinnamon Aromatherapy on Primary Dysmenorrhea in Adolescent's Class 3 Junior High School in SMPN 1 Bekasi City

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ABSTRACT: Dysmenorrhea is the most common gynecological complaint that women experience, especially when entering their teens. This study was aimed to determine the effect of cinnamon (*Cinnamomum Burmanni*) aromatherapy by inhalation on the intensity of primary dysmenorrhea in female students of SMPN 1 Bekasi. The method used in this study is a quasi-experimental or quasi-experimental design which is an experimental activity aimed at seeing an effect or symptom that appears due to a certain treatment, using a sample of 30 samples. Of the 30 respondents, the average score before the intervention was 6.067 while after the intervention the average score was 3.100.

Keywords: Primary dysmenorrhea, Aromatherapy, Cinnamon

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INTRODUCTION

According to the data from the World Health Organization (2018)⁽¹⁾, it was found that the number of incidents of dysmenorrhoea in the world was very large. On average more than 50% of women in every country have dysmenorrhoea. A study in the UK showed that 10% of high school youth were absent 1-3 days per month because they had dysmenorrhoea.⁽²⁾

Dysmenorrhoea usually occurs on the first day of menstruation. The cause of these symptoms is due to the high production of the hormone prostaglandin. Prostaglandins are compounds derived from phospholipids. Prostaglandins produced will induce uterine contractions⁽³⁾. Uterine contractions that occur during menstruation start from a basal pressure of 10 mmHg, resulting in higher intrauterine pressure until it often reaches 150-180 mmHg and can also exceed 400 mmHg, a more frequent frequency of >4-5 every 10 minutes and not rhythmic or coordinate. Prolonged uterine contractions cause blood flow to the uterus to decrease, so the uterus will experience ischemia. During uterine ischemia, anaerobic metabolism will occur, the result will stimulate small type-C pain nerves which will contribute to the occurrence of dysmenorrhoea.⁽⁴⁾

One of the non-pharmacological methods of treatment that can be done is with the acupressure technique. Identical acupressure is known as one of the traditional Chinese traditional therapy methods for the treatment of dysmenorrhoea by using massage techniques on meridian points for certain parts of the body. Acupressure is a massage technique based on the science of acupuncture or it can also be called acupuncture without needles.⁽⁵⁾

METHODOLOGY

Quantitative research was used in this study using a quasi-experimental design of Non Equivalent Control Group which consisted of two groups, the experimental group and the control group⁽⁶⁾. In this study, the sample was female students at SMPN 1 Bekasi City, namely 30 female students who experienced dysmenorrhoea. SMPN 1 Bekasi City was chosen as the place for this research to be conducted, from March 2022 to May 2022. In this research process a questionnaire sheet and a respondent's contract sheet regarding the administration of cinnamon aromatherapy were used for data collection

RESULTS

Table 1 : Average Menstrual Pain Intensity in Level II Students before and after doing acupressure therapy

Variable	N	Mean	SD	P Value
Pretest	30	3.41	0.25	0.000

Posttest	30	3.10	0.32
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Uji T Paired Test.

Based on the results of the paired t test, it was found that the level of anxiety before and after being given the Aromatherapy Cinnamon intervention experienced a significant difference. From 30 respondents, the mean value before intervention was 3.41 and after intervention the mean value was 3.10. The difference is from the results of the paired t test after being given the intervention, the sig 2 tailed value of 0.000 is less than 0.05.

DISCUSSION

Changes in the intensity of menstrual pain or menstruation experienced by women suffering from dysmenorrhea were given cinnamon aromatherapy, because respondents were given cinnamon aromatherapy intervention by inhalation to respondents when suffering from anxiety and menstrual pain in the abdomen. The changes that appear are not too significant. This is caused by many co-factors, for example a patient when faced with pain and various other factors. Pain is subjective, including menstrual pain or coming this month, so every woman has different views on the pain that women feel. But most often the pain of menstruation suffered by women is in the moderate category which slowly changes to mild pain to no pain.

The results of this study are dysmenorrhea pain after (posttest) given ginger compress is a scale of 0 as many as 5 respondents, scale 1 as many as 5 respondents, scale 2 as many as 4 respondents, scale 3 as many as 1 respondent. There is an effect of giving ginger compresses in reducing primary dysmenorrhea pain with p-value: 0.000 ($p < 0.050$)(7)

Based on the results of research on demographic characteristics of respondents related to age, the majority of members of the intervention group are in middle teens ranging from 15 to 17 years, this is in line with which was informed that primary dysmenorrhea will be experienced by adolescents to early adulthood. aged 15 to 25 years and will disappear at the age of 20 years to 30 years without any abnormalities of the genital organs through gynecological examination. As women get older, dysmenorrhea decreases and disappears by itself, argue that this will be felt by women who are old or older women, the more often women experience menstruation or menstruation, this results in the neck of the uterus getting wider(8).

Based on the results of research, the frequency of menstrual pain that women feel is in the moderate category, where the pain can interfere with activities

and back concentration, so rest and medication are needed so that the pain disappears or subsides when dysmenorrhea.

CONCLUSIONS AND RECOMMENDATIONS

In this study, it can be concluded that of the 30 young women who became the experimental group, 30 of them experienced primary dysmenorrhea during menstruation. This study was conducted to determine the effect of cinnamon aromatherapy on dysmenorrhea in female students of SMPN 1 Bekasi. Based on the calculation of the paired t test, it can be seen that the results of the calculation of the paired t test for cinnamon aromatherapy therapy show a sig. of $0.000 < 0.05$, so it can be concluded that there is an effect of cinnamon aromatherapy for reducing anxiety levels in students of SMPN 1 Bekasi.

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