

## **The Effect of Acupressure Therapy on Menstrual Pain Intensity**

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**ABSTRACT:** Reproductive health of young women is not only a sexual problem but also involves all aspects of reproduction, including secondary sex development, which includes soft voice, enlarged breasts, enlargement of the hip area, and menarche. Therefore, this research aims to know the effect of acupressure therapy on the intensity of menstrual pain in female students at STIKes Yatsi Tangerang. This type of research is a quasi-experimental research that design isuses based on group pre-test and post-test. The population in this study was a Level II Midwifery student at STIKes Yatsi. Besides, the research was carried out in March 2022. Eventually, there is a change in menstrual pain in second-level female students at STIKes Yatsi before and after acupressure therapy.

**Keywords:** Acupressure Therapy, Menstrual Pain

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## **INTRODUCTION**

According to the data from the World Health Organization (2018)<sup>(1)</sup>, 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.<sup>(2)</sup>

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. 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.<sup>(3)</sup>

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.<sup>(4)</sup>

## **METHODOLOGY**

The design of this research is a quasi-experimental research. The aim is to find out a symptom or effect that arises, as a result of the treatment of acupressure therapy for menstrual pain. The design uses one group pre-test and post-test. The population in this study were students of Level II Midwifery at STIKes Yatsi, totaling 30 respondents. This research will be carried out at STIKes Yatsi Tangerang. The time of the research will be carried out in March 2022. The research criteria used consist of inclusion criteria such as midwifery students who experience dysmenorrhoea, students who are willing to become respondents and Level II Midwifery students. The exclusion criteria in the study were female students who did not experience menstrual pain and female students who experienced bone injuries. The data processing used if normally distributed is the Parametric statistical test (Paired Sample T-Test). If it is not normally distributed, then use the Non-Parametric statistical test, namely the Wilcoxon test.

## RESULTS

Based on the results of data collection taken in March 2022. The population found by researchers was 30 newborns. The sampling technique was purposive sampling according to the inclusion and exclusion criteria. Obtained respondents 30 respondents. Furthermore, the subject is drawn according to the stipulated provisions.

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

Variable	N	Mean	Min	Max	Stand
Pretest	30	7,73	6	10	1,258
Posttest	30	2,20	0	4	1,424

From table 1 above, the average menstrual pain intensity during the pretest is 7.73 which is classified as much more painful pain, the minimum pain score is 6 while the maximum pretest pain score is 10 which is classified as very painful pain. The average posttest pain score is 2.20, which is classified as mild pain, the minimum posttest pain score is 0 which is classified as not feeling sick at all, and the maximum score is 4 which is classified as slightly more painful. From these data, the average difference in pain before doing acupressure therapy and after doing acupressure therapy was 5.53.

**Table 2 :** Changes in Menstrual Pain in Level II College Students Before and After Acupressure Therapy

Pain	Z score	Sig (2-tailed)	Description
Pretest	-4,865	.000	Signifikan
Posttest			

Based on the results of the pain difference test before and after doing acupressure therapy using the Wilcoxon test, a significant value was obtained  $0.000 < 0.05$ , meaning that there was a change in menstrual pain in second-level female students at STIKes Yatsi before and after acupressure therapy.

## DISCUSSION

From the results of the study, it was found that the average intensity of menstrual pain during the pretest was 7.73 which was classified as much more painful pain, the minimum pain score was 6 while the maximum pretest pain score was 10 which was classified as very painful pain. The average posttest pain score is 2.20, which is classified as mild pain, the minimum posttest pain score is 0 which is classified as not feeling sick at all, and the maximum score is 4 which is classified

as slightly more painful. From these data, the average difference in pain before doing acupressure therapy and after doing acupressure therapy was 5.53.

The results of this research are in line with the theory of Adikara (2015)<sup>(5)</sup> which states that by strengthening the blood supply and facilitating circulation of blood, thus, pressure is applied to the points LI4, SP6, Biri3-B634, -Bri3. The effect of suppressing the idiopathic pressure points of acupressure is related to its effect on the production of endorphins in the body. Endorphins are pain killers that are produced by the body itself. Endorphins are peptide or protein molecules that are made from a substance called beta-lipotropin which is found in the pituitary gland. In addition, endorphins can affect the pain-sensing areas of the brain in a manner similar to that of opiate drugs such as morphine. The release of endorphins is controlled by the nervous system, the nerves are sensitive to pain from external stimulation and so stimulated by the use of acupressure techniques to instruct this endocrine system to release certain amounts of the endorphin needed.

This is in line with the research conducted by Husaidah (2021)<sup>(6)</sup> and shows the results of pain scale measurements Mean Rank before therapy. So that young people need to add information and understanding through various mass media to equip themselves in dealing with complementary menstrual pain.

Based on the results of the pain difference test before and after doing acupressure therapy using the Wilcoxon test, a significant value was obtained  $0.000 < 0.05$ , meaning that there was a change in menstrual pain in second-level female students at STIKes Yatsi before and after acupressure therapy.

Rahmawati, et al proves that he has acupressure which is empirically proven 100% can be an alternative to non-pharmacological therapy which is unable to overcome or minimize pain, this statistical test  $p < 0.001$  means it is less in Bengkulu using VAS (Visual Analog Scale) in this research, the mean pain reduction is 2,12.

The results of the research that were obtained are in line with the theory that states that by strengthening the blood supply and improving the circulation of the blood, this is how acupressure is applied to the point LI4, SP6, B273 & LR3, lr. The effect of suppressing the idiopathic pressure points of acupressure is related to its effect on the production of endorphins in the body. Endorphins are pain killers that are produced by the body itself. Endorphins are peptide or protein molecules that are made from a substance called beta-lipotropin which is found in the pituitary gland. In addition, endorphins can affect the pain-sensing areas of the brain in a manner similar to that of opiate drugs such as morphine. The release of endorphins is controlled by the nervous system, the nerves are sensitive to pain from external stimuli and so triggered by the use of acupressure techniques to

instruct this endocrine system to release certain amounts of the iendorphins (the adrenaline needs).

## **CONCLUSIONS AND RECOMMENDATIONS**

Based on the discussion of research results related to the previous chapter, the following conclusions can be drawn:

- a. The average value of the intensity of menstrual pain during the pretest is 7.73 which belongs to the pain that is much more painful
- b. The average posttest pain score is 2.20, which is classified as only a little pain.
- c. The results of the pain difference test before and after doing acupressure therapy using the Wilcoxon test obtained a significant value of  $0.000 < 0.05$ , meaning that there was a change in menstrual pain in level II female students at STIKes Yatsi before and after acupressure therapy

## REFERENCES

WHO. *World Health Statistics*. 2018.

Ariyanti V. Pengaruh pemberian jus wortel terhadap penurunan skala nyeri dis minore primer pada remaja putri. 2020;2(1):1. Available from: <https://wellness.journalpress.id/wellness>

Rasjidi I. *Manual Histerektomi*. Jakarta: EGC; 2008.

Ridwan H. Program Studi Kebidanan Metro Politeknik KesehatanTajungkarang Indonesia tahun 2008 mencapai 54 . 89 %, sedangkan sisanya adalah penderita tipe sekunder ( Proverawati dan Misaroh , Negeri 1 Pekalongan , didapatkan bahwa sebesar 88 % ( 44 ) siswi dari 50. *Metod Akupresur Untuk Meredakan Nyeri Haid*. 2015;VIII(1):51-6.

Adikara RTS. Pelatihan Terapi Komplementer Alternatif \& Akupreser untuk Dokter, Perawat, Bidan dan Umum. *Asos Chiropr dan Akupresur Seluruh Indones Cab Bond*. 2015;

Husaidah S. Pengaruh Terapi Akupresur Terhadap Intensitas Nyeri Hhaid (Dismenore) Pada Mahasiswa Kebidanan Institut Kesehatan Mitra Bunda 2020. *J Sehat Mandiri*. 2021;16(1):72-81.