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THE DIFFERENCE BETWEEN SPIRITUAL EMOTIONAL FREEDOM TECHNIQUE AND ACUPRESSURE ON THE DYSMENORRHEA INTENSITY

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Abstract

Background: Dysmenorrhea is a type of menstrual pain that is often experienced by adolescent girls, including school-aged students. This condition can interfere with learning activities, concentration, and even psychological well-being, often leading to school abstain. **Method:** This study employed used a non-equivalent control group design. Proportional stratified random sampling was conducted on 110 students at SMP Plus Cahaya Insan Depok who met the inclusion criteria. Pain intensity was measured using the Numeric Rating Scale (NRS). Data were analyzed using the Wilcoxon Sign Rank Test and the Mann-Whitney test. **Results:** The results showed that the average value of pain intensity in the intervention group (SEFT) was 4.95 which decreased to 2.11, showing a difference of 2.84. Meanwhile, the average value in the control group (acupressure) was 4.65 which decreased to 4.00, showing a difference of 0.65. There was a significant difference in the average dysmenorrhea intensity between the SEFT group and the acupressure group after treatment, with a p-value of 0.002 (<0.05). **Conclusion:** There is a significant difference in the effect of SEFT and acupressure on dysmenorrhea among adolescent girls.

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INTRODUCTION

In 2023, the United Nations launched the 10th edition of the Sustainable Development Goals (SDGs), consisting of 17 goals. One of the goals is to achieve good health and well-being for all, including adolescents, where, during which adolescence the process of physical and psychological Dysmenorrhea is a gynecological complaint that occurs due to an imbalance of the hormone progesterone in the blood, causing recurring pain in women.[4] There are several symptoms felt by women when experiencing dysmenorrhea among others: headaches, abdominal cramps that can spread to the pelvis and legs, back pain, mood disorders, and changes in appetite.[1] Menstrual pain can appear irregularly, where pain can occur before or during menstruation until it reaches its peak within 24 hours, and after 2 days, the pain will disappear.[5]

Dysmenorrhea is divided into two types: primary dysmenorrhea and secondary dysmenorrhea. Primary dysmenorrhea results from elevated prostaglandin levels and is not associated with gynecological abnormalities, while secondary dysmenorrhea occurs due to underlying gynecological abnormalities.[6] Dysmenorrhea is caused by several factors that contribute to menstrual pain. Factors that influence primary dysmenorrhea are early age of menarche, nutritional status, physical activity/exercise habits, family history, menstrual duration, and cycle length.[2]

The prevalence of dysmenorrhea reported in the literature varies widely. A 2022 study in Ethiopia, conducted using a systematic review and meta-analysis, found that the combined prevalence of dysmenorrhea across 38 studies ranged from 16 to 91%, with 10–20% of these students suffering from severe dysmenorrhea, which was the leading cause of repeated school absences (80%), loss of concentration in class (66.8%), lack of active participation (47.4%), inability to complete homework (21%), failed exams (15.4%), and activity limitations (29.9%) (5, 6, 9–13). The overall prevalence of dysmenorrhea on academic achievement in Ethiopia ranged from 20 to 88.3%.[7]

According to WHO (World Health Organization) in 2022, the incidence of menstrual pain in the world is very large, on average more than 62% of women in each country experience menstrual pain, where in America the percentage is around 60% and Sweden around 72% of women of productive age are tormented by pain during menstruation, the incidence of menstrual pain ranges from 45-95% among women of productive age, although it is generally not life-threatening menstrual can be highly distressing and disruptive for those who experience it.[1]

The prevalence of dysmenorrhea in Indonesia in 2023 was recorded at 107,673 individuals (62.25%) of the total population of women of reproductive age, with 59,671 individuals (54.89%) experiencing primary dysmenorrhea and 9,496 individuals (9.36%) experiencing secondary dysmenorrhea. In West Java in 2023, 51.86% of women experience dysmenorrhea, consisting of

21.80% with mild dysmenorrhea, 19.34% with moderate dysmenorrhea, and 10.72% with severe dysmenorrhea, which can impact their daily activities, productivity, and quality of life.[2]

The high prevalence of dysmenorrhea has a significant impact on the quality of life of adolescent girls, as it limits their daily activities, particularly school attendance and participation. Dysmenorrhea is a major cause of morbidity among adolescents, resulting in limitations in daily activities and repeated absences from school.[6] Adolescent girls who suffer from dysmenorrhea but still want to attend school have the potential to experience learning difficulties, such as decreased concentration and enthusiasm for learning that can hinder their ability to learn effectively. Adolescent girls who do not attend school can also have their academic and non-academic achievements affected.[7]

The impacts of untreated dysmenorrhea in adolescent girls can be both short-term and long-term. Short-term consequences include impacting daily activities, particularly for adolescents such as disrupting learning, difficulty concentrating, having more days off (missing school), emotional conflict, tension and anxiety, moodiness, irritability, and an inability to interact effectively with others. Long-term consequences of dysmenorrhea include infertility.[4]

These impacts can be addressed or minimized through pharmacological and non-pharmacological efforts with the primary goal to reduce pain so that primary dysmenorrhea survivors can continue their normal activities and improve their quality of life.[5] Pharmacological dysmenorrhea management efforts recommended by the American Academy of Family Physicians include the use of nonsteroidal anti-inflammatory drugs (NSAIDs), hormonal contraceptives, and paracetamol (acetaminophen). Non-pharmacological management efforts use alternative or complementary therapies such as warm compresses, vitamin supplements (B, D, E, or Omega-3), yoga, massage, herbs, acupressure, and SEFT.[1]

SEFT and acupressure are considered complementary therapies for reducing dysmenorrhea pain in schoolgirls, as both offer proven and effective non-pharmacological approaches with their own advantages. SEFT and acupressure work through different mechanisms SEFT focuses on emotional and energetic balance, while acupressure focuses on physical stimulation of meridian points.[8]

Comparison allows for a better understanding of how each therapy addresses different aspects of dysmenorrhea, namely the psychological and physical. SEFT may be more effective for schoolgirls due to its discrete approach and its ability to address academic stress.[9] Severe pain and discomfort can increase stress, anxiety, and tension levels in schoolgirls. Students with dysmenorrhea often experience mood swings such as becoming more irritable. On the other hand, acupressure

may be more suitable for individuals seeking a more immediate physiological effect. Comparing the effectiveness of SEFT and acupressure may help identify which therapy is more effective or produces faster results in a particular case of dysmenorrhea.[10]

SEFT combines energy therapy, psychology, and spirituality to address dysmenorrhea. In female students. The psychological factors such as stress and anxiety often exacerbate dysmenorrhea pain. SEFT helps release pent-up emotional burdens, thereby reducing the perception of pain and providing a calming, relaxing effect. Acupressure, on the other hand, focuses more on the physical.[11] Acupressure focuses more on physical stimulation to improve circulation and release endorphins, so it does not directly address psychological factors.[12]

SEFT therapy and acupressure massage are both considered complementary therapies, and each individual is free to choose the method that is suitable. In the medical and health world, it is crucial to know which therapy has a more significant effect or works faster, especially for specific conditions such as dysmenorrhea. While both are subjective and considered safe, there may be differences in effectiveness, duration of effect, comfort, or ease of application.[13] Understanding the relative advantages and disadvantages of each method allows for more appropriate therapy tailoring for each individual. If one method proves consistently more effective or efficient, it can become part of a broader clinical recommendation or complementary therapy protocol.[8]

In March 2025, researchers conducted a preliminary study by conducting a mini-survey on dysmenorrhea by filling out questionnaires and interviews with 120 adolescent girls at SMP Plus Cahaya Insan Depok. The results showed that 67.4% or 65 adolescent girls experienced dysmenorrhea, 25.6% or 5 adolescent girls did not experience dysmenorrhea and 7% or 3 adolescent girls had not yet menstruated. There was pain with a mild scale of 34 female students, pain with a moderate scale of 30 female students and pain with a severe scale of 1 female student. Based on previous studies, it was concluded that dysmenorrhea has an impact on the quality of female students' learning at school, such as difficulty concentrating in understanding learning materials, decreased learning motivation, and absenteeism in class. With this research, it is hoped that it can provide an alternative non-pharmacological intervention that is practical, economical and can be implemented independently by adolescent girls in the school and home environment.

This study aimed at two inexpensive, safe, and self-administered non-pharmacological approaches: Spiritual Emotional Freedom Technique (SEFT) therapy and acupressure massage. While both approaches have been shown to individually reduce pain, few studies have directly compared their effectiveness in the context of school-aged adolescents in Indonesia. Furthermore, psychological factors such as stress, anxiety, and academic pressure contribute to worsening dysmenorrhea in adolescents, and approaches like SEFT, which address both spiritual and emotional

aspects, are believed to provide more comprehensive benefits than purely physical approaches like acupressure.

Similar research on SEFT therapy and acupressure massage has been conducted extensively. However, comparative studies examining the differences in effectiveness of the two therapies have never been conducted. Therefore, this study aims to determine the differences between SEFT therapy and acupressure in reducing dysmenorrhea pain in adolescent girls.

METHODS

This study employed a quasi-experimental method with a non-equivalent control group design to compare the intensity of dysmenorrhea pain between two groups of respondents: the intervention group received the SEFT therapy, and the control group received acupressure massage. The population in this study consisted of all 7th and 8t^{h}-grade female students at SMP Plus Cahaya Insan Depok. A total of 110 students were selected as research participants with 55 assigned to the SEFT therapy intervention group and 55 to the acupressure massage control group.

The sample was selected using proportional random sampling technique namely samples that were distributed proportionally and selected randomly, this approach increased the accuracy of the comparison between the SEFT therapy group and the acupressure group, because the sample composition of each grade level was balanced in 7th and 8th grade female students of SMP Plus Cahaya Insan Depok who meet the inclusion criteria, namely students who have started menstruating and experiencing primary dysmenorrhea with mild to moderate pain intensity, and were not currently taking analgesics or undergoing hormone therapy. Exclusion criteria include students with reproductive system disorders such as endometriosis, pelvic inflammatory disease, cysts, tumors, or abdominal injuries.

Data were collected through an online survey distributed via a WhatsApp group that respondents. This group was used to track each participant's menstrual schedule, as each student had a different cycle. The researcher also distributed informed consent forms to respondents who agreed to participate in the study, which were signed prior to data collection. The study was conducted at SMP Plus Cahaya Insan Depok between March and May 2025. The survey link was distributed via a WhatsApp group, and the students reported their experience of dysmenorrhea in the group on the first day of menstruation. The researcher then scheduled a meeting with the respondent that was usually conducted at school unless it was a holiday in which case the researcher visited the respondent at their home. The initial pain intensity was measured when the respondents experienced dysmenorrhea and was recorded on an observation sheet. After the initial measurement, the researcher explained and demonstrated the procedure of SEFT therapy to the

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intervention group and acupressure massage to the control group. The researcher monitored the participants during the intervention, either SEFT therapy or acupressure massage, once daily for the first two days of menstruation via video call. Pain intensity was remeasured immediately after each intervention session and recorded on the observation sheet.

Following the baseline measurement, the researcher explained and demonstrated the SEFT therapy procedure to the intervention group and the acupressure massage procedure to the control group. The researcher monitored the respondents as they performed the interventions, either SEFT therapy or acupressure massage once daily for the first two days of menstruation via video call. Pain intensity was re-measured immediately after each intervention session and recorded on the observation sheet.

The intervention group received SEFT therapy treatment for ± 20 minutes with 3 stages, namely the set-up, the tune-in and the tapping or tapping on 18 points on the body, given once a day for the first two days of menstruation. In the control group, acupressure massage treatment was given using 2 acupressure points, namely points L14 and SP6 done once a day for two days with a clockwise massage of 30 rotations for 5 minutes each at points L14 and SP6 on the right and left sides alternately with a total time of ± 20 minutes.

The instrument for measuring the intensity of dysmenorrhea pain was taken from the research of Novany et al (2025), measured using the Numeric Rating Scale (NRS) with a scale range of mild pain (score 1-3), moderate pain (score 4-6), with a validity value of r = 0,90.[14] The SEFT instrument used in this study followed the standard operating procedure (SOP) for SEFT as outlined by Sulistyowati & Rahmawati (2023) that was previously validated in a study by Hardiyani et al. (2025).[10] Meanwhile, the acupressure massage instrument followed the standard operating procedure for acupressure therapy established by the Nursing SOP Task Force Team of the Indonesian National Nurses Association (DPP PPNI) in 2021, as validated by Khamidah et al. (2023).[15]

The data analysis used in this study included univariate analysis to examine the distribution of the research variables and bivariate analysis to determine the differences in the effects of SEFT therapy and acupressure massage on the intensity of dysmenorrhea in adolescent girls. The Wilcoxon Signed-Rank Test and the Mann-Whitney U Test were used for bivariate analysis as the results of the normality test using the Kolmogorov-Smirnov test showed that the data were not normally distributed. This study was approved by the Health Research Ethics Committee (KEPK) of the PPNI College of Nursing, West Java, in May 2025, with approval number: III/080.1/KEPK-SLE/STIKEP/PPNI/JABAR/V/2025.

RESULTS

Univariate Analysis

Based on the research, the following results are obtained as below :

Respondent Characteristics

Table 1. Distribution of Respondent Characteristics

Characteristics	SEFT Group			Acupressure Group		
	n	%	Mean±SD	n	%	Mean±SD
Age						
12 years	8	14,5	13,07±0,663	8	14,5	13,05±0,650
13 years	37	67,3		38	69,1	
14 years	8	14,5		7	12,7	
15 years	2	3,6		2	3,6	
Menarche						
10 years	2	3,6	11,45±0,689	2	3,6	11,45±0,662
11 years	30	54,5		29	52,7	
12 years	19	34,5		21	38,2	
13 years	4	7,3		3	5,5	
Menstrual Period						
<5 days	3	5,5	7,29±1,149	1	1,8	7,53±0,920
5-8 days	47	85,5		48	87,3	
>8 days	5	9,1		6	10,9	
Total	**55**	**100%**		**55**	**100%**	

Based on the distribution of respondent characteristics presented in Table 1, it was found that the majority of respondents (67.3%) in the intervention group (SEFT therapy) were on average 13 years old, while in the control group (acupressure massage), 69.1% of respondents were also on average 13 years old. In terms of age at menarche, most respondents (54.5%) in the intervention group experienced menarche at the age of 11 and similarly, 52.7% of respondents in the control group experienced menarche at the age of 11. Regarding the duration of menstruation, the majority of respondents (85.5%) in the intervention group reported a menstrual period lasting between 5–8 days, and 87.3% of respondents in the control group also experienced menstruation within the same range.

Table 2. Distribution of Pre and Post Dysmenorrhea Intensity in the SEFT Group and the Acupressure group

Group	Pre-SEFT	Post-SEFT	Pre Acupressure	Post Acupressure
Mean	4.95	2.11	4,65	4,00
Median	5.00	2.00	5,00	4.00
Minimum	3	1	3	3
Maximum	6	3	6	5
Std. Deviation	0,803	0,533	0,615	0,694

Based on Table 2, the average intensity of dysmenorrhea pain in the intervention group before receiving SEFT therapy was 4.95 with a standard deviation of 0.803. After receiving SEFT therapy, the average pain intensity decreased to 2.11 with a standard deviation of 0.533. In the control group,

before receiving acupressure massage, the average dysmenorrhea pain intensity was 4.65 with a standard deviation of 0.615. After the acupressure massage was administered, the average pain intensity decreased to 4.00 with a standard deviation of 0.694.

Bivariate Analysis

Bivariate analysis was conducted to determine the difference in dysmenorrhea pain intensity after treatment between the SEFT group and the acupressure group. Before performing the mean difference test between the two independent groups (intervention and control groups), a normality test was conducted for both groups using the Kolmogorov-Smirnov method, as the data were numerical in scale. This method was selected because each group in this study consisted of 55 respondents.

Table 3. Normality Test Dysmenorrhea Intensity in the SEFT Group and the Acupressure Group in Adolescent Girls

	Group	*p-value*
Dysmenorrhea Intensity	SEFT Therapy Group Pretest	0.000
	SEFT Therapy Group Posttest	0.000
	Acupressure Massage Group Pretest	0.000
	Acupressure Massage Group Posttest	0.000

Based on Table 3, the results of the normality test using the Kolmogorov-Smirnov method for both the SEFT group and the acupressure group showed a p-value of 0.000 (< 0.05), indicating that the data in both groups were not normally distributed.

Differences in Dysmenorrhea Intensity Between the SEFT Group and the Acupressure Group Among Adolescent Girls

The results of the analysis comparing dysmenorrhea intensity between the SEFT group and the acupressure group among adolescent girls are presented in the following table:

Table 4. Results of the Analysis of Differences in Intensity Dysmenorrhea Pre and Post Treatment in the SEFT Group and the Acupressure Massage Group Among Adolescent Girls

Group	n	Mean±SD	95% CI (Lower-Upper)	*p-value**	*p-value***
SEFT					
Pretest	55	4,94±0,803	1,96-2,25	0,000	
Posttest		2,11±0,533			0,000
Acupressure					
Pretest	55	4,65±0,615	3,81-4,19	0,000	
Posttest		4,00±0,694			

* ***Uji Wilcoxon Sign Rank Test*** ** ***Uji Mann-Whitney***

Based on Table 4, the intensity of dysmenorrhea in the intervention group (SEFT) showed a significant change. Before the SEFT intervention, the mean pain intensity was 4.95 that falls into the moderate category. After the intervention, it decreased to 2.11 that was categorized as mild, with a mean difference of 2.84. In the control group (acupressure), a decrease in dysmenorrhea intensity was also observed; however, it was not considered significant in terms of category change. Although the average pain intensity decreased from 4.65 to 4.00 (a difference of 0.65), both values remain within the moderate pain category. The Wilcoxon Signed-Rank Test for the SEFT group yielded a p-value of 0.000 (< 0.05), indicating a significant difference in dysmenorrhea intensity before and after the intervention. This suggests that SEFT therapy had a statistically significant effect on reducing dysmenorrhea intensity in adolescent girls. Similarly, the Wilcoxon Signed-Rank Test for the acupressure group also showed a p-value of 0.000 (< 0.05), indicating a statistically significant difference in dysmenorrhea intensity before and after the acupressure intervention. This means acupressure therapy also reduced dysmenorrhea intensity in adolescent girls.

The comparison of SEFT and acupressure in terms of dysmenorrhea intensity in adolescent girls was measured by conducting a mean difference test of pain intensity between the two groups at each measurement point. The difference in mean pain intensity between the two groups was analyzed using the non-parametric Mann-Whitney test, as the data were not normally distributed. The results showed a significant difference in the mean dysmenorrhea pain intensity between the SEFT therapy group and the acupressure massage group after the intervention, with a p-value of 0.000 (< 0.05).

DISCUSSION

Respondent Characteristics

The frequency distribution of respondent characteristics based on age showed that both the intervention group (SEFT) and the control group (acupressure) were predominantly composed of adolescents aged 13 years. In this study, respondents were selected from among aged 12 to 15 years. According to Salsabila et al., adolescents aged 10–14 years (early adolescence or the pre-adolescence phase) undergo physical changes and begin to adapt to social life.[6] During this period, the reproductive system begins to mature, as indicated by the onset of menstruation in females. Menstruation is the process in which the uterine lining sheds, caused by a decrease in the levels of estrogen and progesterone hormone. However, many adolescents face various menstrual problems, such as irregular cycles, dysmenorrhea, and menorrhagia.[4]

The respondent characteristics showed that the majority of participants in both the intervention group (SEFT) and the control group (acupressure) experienced menarche at the age of 11. In this

study, respondents were selected from among adolescents who experienced menarche between the ages of 10 and 13. According to Indah et al., the incidence of dysmenorrhea in adolescents with early menarche (before 12 years old) may occur because their reproductive organs are not yet fully developed and functioning optimally, which can lead to pain due to cervical constriction during menstruation.[11] Menarche age is classified into three categories: early menarche (<12 years), normal menarche (12– 14 years), and late menarche (>14 years).[16] Generally, menarche occurs between the ages of 13 and 14. Early menarche can also result in a lack of emotional and psychological readiness, which may lead to anxiety and depression when facing the first menstruation.[17]

Based on the results regarding characteristics related to the duration of menstruation, it was found that the majority of respondents in both the intervention group (SEFT) and the control group (acupressure) experienced menstrual periods lasting between 5 and 8 days. According to Kusyanti et al., the normal duration of menstruation typically ranges from 3 to 7 days, although it may vary among individuals. Menstruation lasting less than 3 days is referred to as hypomenorrhea, while menstruation lasting more than 7 days is known as menorrhagia.[18] These variations are often influenced by factors such as stress, nutritional status, and hormonal imbalances. The duration of menstruation is also influenced by psychological factors, such as stress, which can increase hormonal sensitivity and activity. This may cause the endometrium, during the secretory phase, to continue produce prostaglandins.[19]

Dysmenorrhea is caused by an increase in prostaglandin levels, which triggers uterine contractions and vasoconstriction, resulting in pain. Symptoms include nausea, dizziness, fatigue, and interference with daily activities, which can interfere with adolescents' ability to concentrate and learn effectively at school.[6]

Dysmenorrhea Intensity After SEFT Intervention

The results of the study showed that respondents experienced a decrease in pain intensity after undergoing SEFT therapy for two consecutive days. A significant reduction was observed, with a mean difference of 2.84, indicating a change in pain intensity from the moderate category to the mild category after the SEFT intervention. These findings are supported by a study conducted by Novany et al. (2025), which found that the Spiritual Emotional Freedom Technique (SEFT) exerts a significant effect on dysmenorrhea after two days of intervention. SEFT combines spiritual methods (prayer) with energy-based techniques (tapping) to reduce pain further strengthened by elements of belief and relaxation.[14] This combination rapidly influences the body's energy system and psychological factors, thereby providing a significant reduction in dysmenorrhea pain within a

short period of time. The effectiveness lies in its simultaneous impact on both physical aspects (energy system) and psychological aspects (belief, relaxation).[20]

Dysmenorrhea is caused by uterine contractions that restrict oxygen supply, prompting the release of pain-inducing chemicals from the tissues. SEFT is believed to help normalize disrupted energy flow caused by dysmenorrhea. During therapy, the practitioner performs prayers, while the patient also engages their personal beliefs in the healing process. This spiritual component may help reduce pain perception and, in some cases, even eliminate the pain within a short period of time.[21] Although pain-relieving medications may be considered safe, their continuous use can have negative impacts on health. A study conducted by Hardiani et al. (2025) found that the majority of female students experienced moderate levels of pain before undergoing the Spiritual Emotional Freedom Technique (SEFT), while most reported experiencing mild level of pain after the SEFT intervention.[10] Dysmenorrhea pain typically peaks within 24 hours after the onset of menstruation and gradually subsides after 2 to 3 days. During this peak period, effective therapeutic interventions such as SEFT can produce significant results, as they target the most intense phase of pain.[11]

Through the application of SEFT therapy, individuals experiencing emotional or physical challenges such as dysmenorrhea may experience a reduction in pain intensity and in some cases, complete relief within a very short period of time. It is due to SEFT emphasizes spiritual elements, involving prayer, and focuses on the body's energy system by using the tapping method on meridian points. Furthermore, to targeting the body's energy system, SEFT also incorporates relaxation techniques that engage the respondent's personal beliefs. This combination is believed to help reduce the perceived level of pain.[9]

This study showed that there was a decrease in dysmenorrhea intensity in the control group (acupressure). Although pain intensity decreased, it remained in the same category, namely moderate with a mean difference of 0.65 after the acupressure intervention. Although acupressure at points SP6 and LI4 was found to be effective in reducing dysmenorrhea pain, the reduction was smaller and not statistically significant compared to the reduction achieved through SEFT therapy. This suggests that while acupressure primarily focuses on physiological mechanisms, SEFT provide additional psychological benefits.[14]

This reduction indicates that acupressure therapy at the SP6 (Sanyinjiao) and LI4 (Hegu) points was effective in reducing dysmenorrhea pain. Its effectiveness was associated with the physiological mechanism of endorphin release in the body that acts as a natural analgesic and is activated through external pressure stimulation, such as acupressure.[22] This therapy stimulates the nervous and endocrine systems to suppress pain perception and provide a relaxing effect on the

uterine muscles. Therefore, acupressure massage can serve as an effective, safe, and easy-to-perform non-pharmacological alternative to help relieve dysmenorrhea pain in adolescent girls.[23]

These findings are in line with Husaidah *et al*., who found that acupressure helped respondents feel more relaxed and boosted their immune system, ultimately resulting in reduced dysmenorrhea pain. This pain reduction was attributed to pressure applied to the LI4 point located between the thumb and index finger on the back of the hand and the SP6 point located about three finger-widths above the inner ankle, both of which are known to be associated with the female reproductive system.[24]

Pressure on these points helps increase blood circulation in the uterine area and relieves uterine muscle contractions, which are the main cause of dysmenorrhea pain. Stimulating the LI4 and SP6 points is to reduce the intensity of dysmenorrhea pain by promoting uterine muscle relaxation, lowering prostaglandin levels, and increasing blood flow to the reproductive organs. Therefore, regular application of acupressure to these points especially during the first and second days of menstruation is effective in reducing the intensity of dysmenorrhea.[25]

Differences in Dysmenorrhea Intensity Between SEFT and Acupressure Groups

The results of this study showed that SEFT and acupressure were effective in reducing the intensity of dysmenorrhea pain in adolescent girls. It is because SEFT and acupressure are safe and effective non-pharmacological alternatives for managing dysmenorrhea. This study found a significant difference in pain intensity reduction in the SEFT intervention group while the acupressure control group experienced a decrease, but it was not statistically significant, as pain intensity remained within the same range. Dysmenorrhea in female students decreased after SEFT therapy and acupressure massage. The average difference in pain intensity reduction in the SEFT group was 2.84 points, while the reduction in the acupressure group was 0.65 points.

Dysmenorrhea is not only caused by physical factors such as uterine contractions but also can be exacerbated by psychological conditions such as stress, anxiety, or trauma. When dysmenorrhea is primarily influenced by emotional factors like stress, SEFT may be more effective, as it directly addresses the underlying psychological issues. Conversely, when the pain is predominantly caused by physiological factors such as muscle cramps, acupressure may provide a more immediate effect by relieving physical tension.[21]

According to field findings, school-aged adolescents are vulnerable to stress, anxiety, and pressure from academic, social, and family environments. These stressors and negative emotions can worsen dysmenorrhea pain.[7] SEFT combines energy therapy and spiritual techniques to release emotional blockages that may trigger pain. By addressing these emotional issues directly,

SEFT can reduce the intensity of dysmenorrhea because of the combination of spiritual and psychological aspects that may not be fully addressed by physical methods such as acupressure alone.[13]

SEFT involves fostering a sense of spiritual connection between the patient and God Almighty, that stimulates the hypothalamus to reduce the production of Corticotropin-Releasing Factor (CRF). CRF, in turn, signals the adrenal cortex to decrease cortisol secretion. Cortisol suppresses the immune system, thereby reducing anxiety levels. SEFT directly addresses disruptions in the body's energy system to eliminate negative emotions, allowing these emotions to dissipate naturally as the body's energy system is realigned.[1]

Acupressure massage is a form of therapy that targets acupuncture points without using needles, This massage is by applying pressure with the fingers. Acupressure is a simple, safe, and non- invasive therapy that does not cause the side effects commonly associated with chemical treatments. This therapy involves applying pressure to specific meridian points on the body.[23] Acupressure is a healing method similar to acupuncture, easy to perform, and can be done independently. By applying finger pressure to acupuncture points, acupressure stimulates the release of endorphins that promote muscle relaxation and relieve pain. One meridian point commonly used in this therapy is Spleen 6 (SP6).[26]

Differences in the Effectiveness of SEFT and Acupressure in Reducing Dysmenorrhea Intensity between the SEFT and Acupressure Groups

After two days of intervention, there was a difference in the intensity of dysmenorrhea among adolescent girls in both the SEFT and acupressure groups. This finding proves that SEFT is more effective than acupressure in reducing dysmenorrhea intensity. Spiritual Emotional Freedom Technique (SEFT) may be considered to be more effective than acupressure massage for dysmenorrhea because SEFT that does not only focus on the body's energy system but also integrates spiritual components such as prayer that helps reduce pain more comprehensively by engaging the emotional and faith aspects. Furthermore, SEFT provides a "strengthening effect" by combining spirituality and energy, thus extending its benefits to the emotional and psychological realms to physical issues.[13]

The pain reduction experienced by respondents was attributed to prayer and a positive mindset to ensure the body's energy flow can be directed more effectively, thereby neutralizing psychological resistance or negative subconscious thoughts. Respondents were guided to pray with focus, sincerity, and acceptance, allowing them to accept their condition in any circumstance. Following the prayer, light tapping was applied to specific meridian points. This tapping helps neutralize physical pain and emotional distress by restoring the normal and balanced flow of energy

in the body.[14] SEFT is considered an effective non-pharmacological intervention for treating dysmenorrhea. The SEFT intervention lasted 20 minutes. Its effectiveness was attributed to the respondents' comfort during the gentle tapping on the meridian points, combined with spiritual calm, that enhanced the pain reduction process.[9]

Based on the theoretical explanations above and the findings of this study, the researcher concludes that both SEFT and acupressure are proven to be effective in reducing the intensity of dysmenorrhea. However, SEFT has shown more significant results in several studies especially in addressing psychological and emotional aspects.[21] This greater effectiveness was attributed to SEFT's integration of physical elements such as tapping on the body's meridian points with spiritual and psychological components. As a result, the therapy does not only reduce pain but also induces relaxation, a sense of surrender, and emotional comfort.[10] In contrast, acupressure works solely by stimulating specific meridian points through manual pressure without involving spiritual or psychological elements that might promote the same level of emotional calm and comfort as SEFT.[11]

The SEFT therapy focuses on emotional and spiritual energy aspects, helping to reduce anxiety, stress, and psychological burdens that often exacerbate dysmenorrhea. These factors are commonly experienced by adolescent girls and can significantly disrupt their daily activities as students such as reduced concentration, lower productivity, and increased stress levels. If left unaddressed, these complaints may negatively impact academic performance.[5] Furthermore, effective communication is essential during observations and interviews with participants to establish positive rapport and ensure the smooth collection of information. The choice between SEFT therapy and acupressure massage can be adjusted based on individual preferences and therapeutic responses. Both are safe, effective, and non-pharmacological alternatives for reducing dysmenorrhea pain.[1]

One of the limitations identified in this study is that the interventions in both the SEFT and acupressure groups were conducted for only two days, with no long-term follow-up sessions provided. As a result, the study was unable to evaluate the long-term effectiveness of SEFT and acupressure in reducing dysmenorrhea pain over time. This finding suggests that integrating SEFT into school health programs may help improve adolescent well-being.

CONCLUSION

This study found a significant difference in the reduction of dysmenorrhea pain intensity in the SEFT intervention group and the control group. In contrast, the control group that received acupressure showed a decrease in dysmenorrhea intensity, but it was not statistically significant, as

the pain category remained the same. The average reduction in pain intensity in the SEFT group was 2.84 points after the intervention, whereas in the acupressure group, the mean reduction was only 0.65 points. Therefore, SEFT was more effective in reducing dysmenorrhea pain intensity than acupressure. The Spiritual Emotional Freedom Technique (SEFT) may be considered more effective than acupressure in managing dysmenorrhea, as SEFT does not only target the body's energy system but also incorporates spiritual elements such as prayer, which can reduce pain more comprehensively by addressing both psychological and spiritual aspects. In contrast, acupressure primarily focuses on physical stimulation to improve blood circulation and trigger endorphin release, without directly addressing psychological factors. Thus, SEFT can be recommended as an effective non-pharmacological therapeutic alternative that can be implemented in schools and homes as part of reproductive health and pain management education for adolescent girls.

RECOMMENDATION

Educational institutions are encouraged to provide health education programs that incorporate non-pharmacological approaches, such as Spiritual Emotional Freedom Technique (SEFT) and acupressure massage, as part of adolescent reproductive health education. Training teachers and students in the application of these techniques is expected to help adolescents, especially girls, manage dysmenorrhea independently and maintain optimal daily functioning. Furthermore, stress management needs to be emphasized, as psychological stress is a contributing factor that can exacerbate dysmenorrhea. Stress can be alleviated through activities such as meditation, journaling, or counseling with school professionals. Therefore, schools are expected to not only provide comprehensive reproductive health education but also implement supportive policies, such as designated rest areas and flexible academic assignments, to help female students cope with dysmenorrhea without disrupting their learning.

For future research, it is recommended to combine SEFT and acupressure therapy into a single intervention model and to conduct long-term follow-up assessments (e.g., one or three months post-intervention) to evaluate the sustainability of their effects in reducing dysmenorrhea pain.

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Declarations

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