

Empowerment Of Health School Unit Officers to Carry Out Acupressure and Self-Suggestion in Overcoming Adolescent Dysmenorrhea

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ABSTRACT

The School Health Unit (UKS) is a cross-sectoral initiative aimed at improving students' health knowledge, fostering healthy behaviors, and enhancing physical, mental, and social well-being among school-age children. The role of UKS cadres is essential in ensuring the effective implementation of school health programs. One of the major health challenges faced by adolescents today is reproductive health problems, particularly dysmenorrhea. According to the World Health Organization (WHO, 2020), approximately 90% of adolescent girls experience dysmenorrhea. Simple non-pharmacological methods, such as acupressure and self-suggestion, can be applied to reduce menstrual pain. This training program was designed to improve the knowledge and practical skills of UKS cadres in managing dysmenorrhea, enabling them to educate and support their peers. The training methods included lectures, demonstrations, and problem-solving sessions. The activity was conducted on May 4, 2024, and involved 40 UKS officers and one supervisor. The results showed a significant improvement in participants' knowledge and skills about acupressure and self-suggestion in overcoming dysmenorrhea. Posttest findings indicated that 77.5% of participants had good knowledge of dysmenorrhea management, 70% were able to correctly perform self-suggestion techniques, and 95% successfully demonstrated acupressure practices. In contrast, pretest results revealed that all participants (100%) had no prior knowledge of these techniques. Overall, the training effectively enhanced both cognitive understanding and practical skills of UKS cadres in managing dysmenorrhea, highlighting the importance of integrating complementary therapies into school-based health programs.

Keywords : Acupressure, Adolescents, Dysmenorrhea, Empowerment of UKS Officers, Self-Suggestion.

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INTRODUCTION

SMPN Negeri 2 Abiansemal is a public junior high school located on Jl. Kamboja, Sedang Village, Badung Regency. SMP Negeri 2 Abiansemal received grade A accreditation status with a score of 91 (accreditation in 2018) from BAN-S/M (National Accreditation Board)

School/Madrasah. SMPN 2 Abiansema has 1.43 students divided into 31 classes. The vision of SMPN 2 Abiansema is Excellence in Achievement, Discipline, Intelligent with Character, Skilled, Based on the Nation's Culture and Environmentally Friendly. To realize this vision, the mission raised is to realize intelligent and competitive graduates, realize the implementation of adaptive curriculum development, realize an effective, efficient and innovative learning process, realize relevant and ICT-based educational facilities and infrastructure, create professional educators and education personnel, realize professional education management, realize professional educational assessment, realizing adequate education costs, realizing the nation's character education / students with character, realizing a clean, healthy, beautiful, beautiful and charming school environment (*Bersehati Awan*).

To be able to realize this mission, it is important to maintain the health of the academic community of SMPN 2 Abiansema, including its students. To ensure the health of SMPN 2 Abiansema students, optimal programs, places and UKS officers are needed to be able to provide education and simple health services in the school environment.

School Health Business (UKS) is an integrated effort across programs and sectors in order to improve healthy living abilities and subsequently shape healthy living behaviors of school-age children in schools starting from elementary schools (SD), junior high schools (SMP), and high schools (SMA) (Badung Regency Health Office, 2022). In running a UKS, it is necessary to have health workers who include medical personnel, nursing or other health center officers who have been trained as UKS/UKGS implementers. UKS/UKGS teachers are classroom teachers or teachers who are appointed by the Badung Regency Health Office as UKS/UKGS supervisors in schools and have been trained on UKS/UKGS. School health cadres are students selected by teachers to participate in health service efforts for themselves, friends, and school residents in the education unit environment. The existence of UKS in each school is expected to improve the health of students both physically, mentally and socially and reduce the number of school children's illnesses.

The results of the achievement of the health screening coverage indicator for 7 junior high school/MTS students in 2022 were 9,549 (100.0%) of the total estimated number of junior high school students set at 9,549 students. This means that it has reached the target set in the 2022 Strategic Plan of 100%. This 100% achievement must still be maintained at all times (Badung Regency Health Office, 2022).

To achieve the target of school health screening indicators in Badung Regency, public health efforts programs are supported by activities: school development at the kindergarten, elementary, junior high, high school/k levels in Badung Regency, UKS competition, canteen officer training. School Health Business (UKS) is an effort by educational units in instilling, growing, developing and improving healthy living skills, with the application of clean and Healthy Living Behavior, as well as the health degree of students through the implementation of Trias UKS, namely: Health Education: through knowledge improvement activities intracurricular, co-curricular and extracurricular and habituation of PHBS, Health Services: through disease prevention such as by immunization and taking deworming, Healthy School Environment Development: by completing PHBS infrastructure, including clean water, toilets, handwashing stations, garbage cans, drainage channels (Directorate General of Early Childhood Education, Primary and Secondary Education, Ministry of Education, Culture, Research, 2022).

The implementation of UKS in schools cannot be separated from the important role of UKS Cadres. School health cadres are students selected by teachers to participate in health service efforts for themselves, friends, and school residents in the education unit environment. Efforts to involve students in nutrition programs in schools are an important factor to encourage behavior change. The results of the study (Harahap et al., 2025) show that providing training

to UKS cadres can have a significant influence on adolescents' knowledge, skills and attitudes. These results prove that cadre training and peer education are effective in improving students' knowledge and behavior. Those who become UKS Cadres are students who are teenagers. One of the problems that threaten the health and welfare of children and adolescents today is reproductive health problems. The development of the reproductive organs in adolescent girls needs to get special attention for health workers. Menstrual disorders (dysmenorrhea) in adolescent girls according to *the World Health Organization* (WHO) in 2020 were 1,769,425 (90%) and 10-16% suffered from severe dysmenorrhea. About 70-90% of cases of menstrual pain (dysmenorrhea) occur in adolescents. the incidence of dysmenorrhea in Bali reached 48.5%. The existence of this dysmenorrhea disorder will affect their daily activities including their academic, social and sports activities (N. M. S. D. Lestari, 2013). The incidence of dysmenorrhea in Bali reaches 48.5% (T. R. Lestari, Wati, Juanamasta, Thrisnadewi, & Sintya, 2019). The problems found in the partners involved were that as many as 36.8% of adolescent girls at SMPN 2 Abiansemal experienced severe pain, 31.6% moderate pain and 31.6% mild pain during menstruation with an average pain score of 5.1. Data on this problem was taken when the author carried out the research in 2023. Dysmenorrhea or menstrual pain is a disorder that occurs during menstruation that most often causes adolescents to go to health services for consultation and treatment (Prawirohardjo, 2014).

Some of the factors that affect dysmenorrhea are body mass index (BMI), smoking, menarche age (first menstruation), menstrual length, and psychological disorders (Kural, Noor, Pandit, Joshi, & Patil, 2015) (Pundati, Sistiarani, & Hariyadi, 2016), family history (Ju, Jones, & Mishra, 2014), and exercise habits (Nurwana, Sabilu, & Fachlevy, 2017).

Therapies that can be done to overcome dysmenorrhea in adolescent girls are pharmacological and non-pharmacological. The administration of analgesia drugs is a pharmacological method that can be given to adolescent girls, while non-pharmacological methods that can be done are breath relaxation, music therapy, acupuncture, acupressure, aroma therapy and yoga (Hamlin & Robertson, 2017). The advantages of non-pharmacological therapy in addition to being able to overcome pain, can improve the quality of life of a person who does it (Hamlin & Robertson, 2017). Acupressure is one of several types of physiotherapy that is carried out by massaging and stimulating certain points in a person's body (Setyowati ER, 2018). Performing acupressure/pressure on these specific points can stimulate electrical conductors on the surface of the skin that can channel energy to aid in the healing process. Swa Sugesti is the giving of suggestions to oneself that uses simple techniques using positive sentences in accordance with the basic principles of hypnosis. Swa Sugesti is one part of hypnosis that can be done independently without a trained instructor. Hypnosis is one method to communicate with a person's subconscious mind while in a relaxed state. Hypnosis can trigger the production of *Endorphine* hormones in the body (Adzkie & Kartika, 2020). Both hypnosis and acupressure can help the body to stimulate the production of the hormone *endorphine* which is useful for reducing pain due to dysmenorrhea. Based on the results of the study in 2023, the author provided an intervention to adolescent girls at SMPN 2 Abiansemal in the form of Keris (Combination of Acupressure and Self Hypnosis), there was a decrease in the menstrual pain scale from an average pain score of 5.1 to an average pain score of 3.68. Problems related to dysmenorrhea in adolescent girls at SMPN 2 Abiansemal Based on research conducted by the author in 2023, it was found that most adolescent girls experienced 47.4% mild pain and at least 10.5% experienced severe pain. And after a statistical test was carried out, a p value of 0.000 was obtained. So it can be concluded that the Keris intervention (Combination of Acupressure and Self Hypnosis) is effective in reducing pain during menstruation in adolescent girls at SMPN 2 Abiansemal. This intervention will be very beneficial if it is carried out periodically in the school environment through UKS cadres.

Currently, there has never been a coaching of UKS cadres to be able to provide simple therapy to young women who experience dysmenorrhea.

METHOD

1. Steps to implement the solution to the problem faced by the partner:
 - a. The first stage that is carried out is the stage of identifying problems and needs of partners, where in partners there are 3 main problems, namely 36.8% of adolescent girls at SMPN 2 Abiansemal experience severe pain, 31.6% moderate pain and 31.6% mild pain during menstruation, this dysmenorrhea disorder will affect their daily activities including their academic, social and sports activities, adolescent girls do not know complementary therapies to reduce menstrual pain (dysmenorrhea).
 - b. Agreeing on the solution offered by the author to partners to solve the problem, namely by providing guidance for UKS officers regarding Cashier (Combination of Acupressure and Self-suggestion) in Overcoming Adolescent Dysmenorrhea at SMPN 2 Abiansemal which consists of several materials, namely: menstruation and disorders that occur during menstruation, simple screening that can be done by yourself on their reproductive health, acupressure and self-suggestion in overcoming dysmenorrhea in adolescent girls
 - c. Prepare necessary materials and coordinate with the team
 - d. Agree on the timing of the coaching with partners
 - e. Providing counseling about menstruation and disorders that occur during menstruation
 - f. Provide counseling and training on simple screening that can be done on their own reproductive health
 - g. Providing counseling and training on acupressure and self-suggestion in overcoming dysmenorrhea
 - h. Conduct an evaluation after providing counseling and training to UKS officers by assessing the understanding, skills and commitment to apply the skills obtained
 - i. Assisting UKS officers to apply the training results that have been obtained to students at SMPN 2 Abiansemal through counseling to young women at SMPN 2 Abiansemal
 - j. Evaluate the commitment of UKS officers in applying skills for 6 months
 - k. Conducting an evaluation of menstrual pain experienced by adolescent girls at SMPN 2 Abiansemal after being given counseling by UKS officers periodically once a month for 6 months.
 2. The development method to be implemented is a series of stages that are systematically arranged, here is an overview of the partners as follows:
 - a. Place of Execution
This service will be held in the SMPN 2 Abiansemal area
 - b. Tools and Materials Used for Empowerment
 - 1) The tools and materials used include: LCD Projector, relaxation music CD, speakers, laptops, yoga mats, lavender aroma therapy, pens, paper, notebooks.
 - 2) Equipment that needs to be prepared by STIKES Bina Usada Bali: LCD Projector, speaker, diffuser.
 - c. Systematic Implementation of Empowerment
The method of developing acupressure and self-suggestion for UKS officers that will be carried out is a series of stages that are systematically arranged, the following are the stages of activities.
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1) Socialization

At this stage, it is carried out by presenting all training participants, the information provided is the activity plan, targets and objectives, and expertise of the proposing team.

2) Counseling and Training

In the training, they are guided and accompanied directly by the PKMS implementation team in accordance with their fields of expertise, including:

- a) Bdn. I Gusti Agung Manik Karuniadi, S,ST., M.Kes, provided counseling and training on Acupressure and Swa Sugesti. The delivery of each acupressure material and self-suggestion is 1 hour. The demonstration and role play of acupressure and self-suggestion are 1 hour, respectively.
- b) Dr. Bdn. Luh Putu Widiastini, S.Si.T., M.Kes provided counseling about menstruation and disorders that occur during menstruation. The delivery of material and discussion of this material lasted for 1 hour.
- c) dr. I Gusti Gede Mayun Surya Darma, S. Ked, Sp.OG., M. Biomed., M.Keb provided material on simple screening that can be done on their own reproductive health. The delivery of material and discussion of this material lasted for 1 hour.

3) Evaluation

To assess the effectiveness of the training provided on the knowledge and skills of UKS cadres, an initial measurement of the knowledge and skills of UKS cadres on acupressure and self-suggestion to overcome dysmnorhea was carried out and the measurement of knowledge and skills of UKS cadres on acupressure and self-suggestion to overcome dysmnorhea after being given training. The measuring tools used were acupressure and self-suggestion to overcome dysmnorhea knowledge questionnaire and for the measurement of acupressure and self-suggestion to overcome dysmnorhea skills checklist was used. The knowledge category is divided into three: Good (76-100%), Adequate (56-75%), and Poor (<56%). For skill measurement, it is categorized $\geq 70\%$ can perform acupressure and self-suggestion according to the checklist included in the category of can do.

The Training Method is given by:

a) Lecture plus method

This method is given by motivating young women to be more focused in listening to information, because the implementation team fully controls the training room, at the end of the discussion, the team gives the young women the opportunity to ask questions about what they have not understood according to the learning that has been given.

b) Demonstration methods and *role play*

In this method, the implementation team demonstrated how to do yoga and the administration of lavender aromatherapy with prepared props, and then the young women applied according to the instructions of the implementation team.

c) Problem Based Learning *Method*

This method discusses information related to menstrual disorders that are often experienced by adolescents, then discussed to find solutions to problems related to the case.

RESULTS

1. Preparation Stage

In the first preparation stage, the first is to contact the Deputy Principal of the Public Relations section and explain the activities that will be carried out. The second stage is to ask permission from the Principal of SMPN 2 Abiansemal. After obtaining permission, coordinate with the Principal of SMPN 2 Abiansemal on April 25, 2024 related to the plan for the time and place of implementation of the Empowerment of UKS Officers to Carry Out Cashier (Combination of Acupressure and Swasugesti) in Overcoming Adolescent Dysmenorrhea at SMP N 2 Abiansemal. The place for the training activities was decided in one of the classrooms at SMPN 2 Abiansemal. The time for the activity is on Saturday, May 4, 2024 at 08.00 WITA.

2. Implementation stage

The implementation of the Empowerment of UKS Officers to Carry Out Cashier (Combination of Acupressure and Self-Suggestion) was carried out as planned on Saturday, May 4, 2024. The training was attended by 40 UKS Officers and one coach who accompanied during the coaching process.



Figure 1. Presentation of material on acupressure ST 36 point

In figure 1, the team performs the percentage and marks the ST 36 point acupressure technique.



Figure 2. Simulation of acupressure point ST 36

In figure 2, each UKS officer practices acupressure point 36 to himself.



Figure 3. LI4 point acupressure simulation

3. Evaluation and Response of Youth Cadres

At the time before conducting the training, a pretest was conducted for UKS officers to find out the initial knowledge of how to reduce dysmenorrhea, 12 people (30%) said they knew how to deal with dysmenorrhea. 5 people said they did it by means of warm compresses and 3 people by resting. All UKS officers (100%) did not know about acupressure and self-suggestion to overcome dysmenorrhea. UKS officers, who are students of SMPN 2 Abiansema, seemed enthusiastic about participating in the training. The evaluation is carried out at the end of the training, UKS officers understand dysmenorrhea, and simple ways that can be done to overcome it with acupressure and self-suggestion. After the training, the posttest was carried out, as many as 31 people (77.5%) had good knowledge on how to reduce dysmenorrhea, as many as 28 people (70%) could repeat the self-suggestion made, and 38 people (95%) could demonstrate acupressure to overcome dysmenorrhea. In the last evaluation conducted on October 7, 2024, the results of adolescent girls who experienced dysmenorrhea decreased, namely 47.4% experienced mild pain, 42.1% moderate pain and 10.5% severe pain.

DISCUSSION

The results of this community service activity demonstrate a significant improvement in both knowledge and skills of UKS officers after receiving training on dysmenorrhea management using acupressure and self-suggestion techniques.

Prior to the intervention, the pre-test findings indicated that only 30% of participants had prior knowledge of how to manage dysmenorrhea. The methods identified were limited to conventional approaches such as warm compresses and rest. This finding suggests that adolescents' understanding of menstrual pain management remains basic and does not yet include complementary therapies. Previous studies have shown that adolescents commonly rely on simple self-care methods due to limited knowledge of effective non-pharmacological interventions (Ferna, 2018; Wong et al., 2016). Furthermore, all participants (100%) were unfamiliar with acupressure and self-suggestion techniques, indicating a clear gap in (Wong et al., 2016) knowledge regarding complementary and mind-body approaches.

Following the training, there was a substantial increase in participants' knowledge, with 77.5% demonstrating good understanding in the post-test. This improvement indicates that the educational intervention was effective in enhancing cognitive comprehension. Educational and

self-care-based interventions have been shown to significantly improve adolescents' knowledge and ability to manage dysmenorrhea (Armour et al., 2019). In addition, 70% of participants were able to correctly repeat the self-suggestion techniques, while 95% successfully demonstrated acupressure practices. These findings highlight that the training effectively improved not only knowledge but also practical skills.

The high percentage of participants able to demonstrate acupressure suggests that hands-on training methods, such as demonstrations, are highly effective in skill acquisition. This is consistent with findings from recent studies indicating that acupressure training significantly improves adolescents' ability to manage menstrual pain independently (Aksoy-Can et al., 2025; Saragih, 2025). Meanwhile, the slightly lower percentage in self-suggestion ability (70%) may indicate that psychological techniques require more consistent practice and reinforcement to achieve optimal outcomes.

The final evaluation also revealed a decrease in the severity of dysmenorrhea among adolescent girls. Most participants reported mild pain (47.4%) and moderate pain (42.1%), while only 10.5% experienced severe pain. This suggests that the intervention had a positive impact on reducing menstrual pain intensity. Acupressure has been widely reported to reduce dysmenorrhea by improving blood circulation and stimulating endorphin release (Kong et al., 2023; Yu et al., 2025). In addition, psychological approaches such as self-suggestion can influence pain perception by reducing stress and modulating hormonal responses (Anggraini, 2024).

Overall, this program demonstrates that education and training on complementary therapies such as acupressure and self-suggestion are effective in improving knowledge, enhancing practical skills, and reducing the severity of dysmenorrhea among adolescents. Therefore, similar programs are recommended to be implemented sustainably in school settings as part of promotive and preventive efforts in adolescent reproductive health. These findings are also supported by broader evidence emphasizing the importance of non-pharmacological and lifestyle-based approaches in managing primary dysmenorrhea (Burnett & Lemyre, 2017; Gamage et al., 2017).

Based on the findings of this community service program, several policy recommendations can be proposed to strengthen adolescent reproductive health programs, particularly in the management of dysmenorrhea through complementary approaches.

First, it is essential to integrate menstrual health education, including non-pharmacological pain management strategies such as acupressure and self-suggestion, into school-based health programs (UKS). Schools serve as strategic platforms for early health promotion, and incorporating structured modules on complementary therapies can improve adolescents' self-care capacity and health literacy (Armour et al., 2019; WHO, 2022). This integration aligns with global recommendations emphasizing comprehensive menstrual health education as part of adolescent health services.

Second, capacity building for UKS officers, teachers, and school health personnel should be prioritized through regular training and skill-based workshops. The significant improvement in both knowledge and practical skills observed in this study indicates that hands-on training methods are highly effective and should be institutionalized within school health systems (Aksoy-Can et al., 2025; Saragih, 2025). Continuous training will ensure sustainability and consistency in delivering accurate health information.

Third, policymakers should support the inclusion of complementary and integrative health approaches in national adolescent health guidelines. Non-pharmacological interventions such as acupressure have been proven to be safe, cost-effective, and culturally acceptable methods for managing dysmenorrhea (Kong et al., 2023; Yu et al., 2025). Integrating these approaches into official guidelines can broaden the scope of adolescent-friendly health services

and reduce over-reliance on pharmacological treatments.

Fourth, collaboration between educational institutions, healthcare providers, and local health authorities should be strengthened to ensure program sustainability. Multisectoral collaboration has been recognized as a key factor in successful school health interventions and adolescent health promotion programs (Gamage et al., 2017; WHO, 2022). This includes support from community health centers (puskesmas) in providing supervision, monitoring, and technical assistance.

Finally, further policy support is needed to encourage routine monitoring and evaluation of school-based health interventions. Establishing standardized evaluation frameworks will help assess program effectiveness, scalability, and long-term impact on adolescent health outcomes. Evidence-based policymaking is crucial to ensure that interventions remain relevant and effective in addressing adolescents' needs (Burnett & Lemyre, 2017).

CONCLUSION

UKS officers can understand and practice acupressure and self-suggestion provided after receiving this training. All UKS officers were enthusiastic in participating in this training process. This can be seen from the post-test results that 77.5% have good knowledge of how to reduce dysmenorrhea, 70% can repeat the self-suggestion made, and 95% can demonstrate acupressure to overcome dysmenorrhea. This UKS officer training is effectively carried out for UKS officers, because UKS officers who are always dealing with SMPN 2 Abiansemal students in carrying out promotive and preventive efforts, this is evidenced by the decrease in dysmenorrhea experienced by SMPN 2 Abiansemal students. The author hopes that this training will be able to be carried out continuously (continuously) at SMPN 2 Abiansemal so that the benefits can be felt by the entire academic community of SMPN 2 Abiansemal.

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