

Improving Women's Reproductive Health Through Complementary Midwifery: Menstrual Well-being Education and Digital-Based Holistic Therapy

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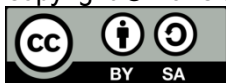
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ABSTRACT

Introduction: Menstruation is a physical symptom that occurs in women of reproductive age and can have an impact on daily life. Menstrual Wellbeing Education and Digital-Based Holistic Therapy uses an innovative approach to support women's health and well-being through digital technology. These therapies touch on physical, emotional, and mental aspects by utilizing digital platforms such as applications, videos, and virtual consultations. **Objective:** to increase women's knowledge and understanding of menstrual cycles, hormonal changes, common symptoms, and pain and emotional management. This approach also seeks to reduce stigma and myths related to menstruation. **Methods:** This activity consists of a pre-test before counseling, followed by perception with participants, educational stages with the viewing of an educational video, providing information on examples of digital media, such as mobile applications, social media, websites, and virtual consultations. **Results:** This counseling activity has a positive impact and achieves goals in the form of increasing knowledge, changing attitudes, and promoting more positive behaviors. **Conclusion:** Digital health products, and in particular menstrual health apps, have the potential to make a positive difference due to their scalability and ease of access

KEYWORDS: Complementary Midwifery; Digital healthcare; Holistic therapy; Menstrual Well-Being; Reproductive Health

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INTRODUCTION

Women of reproductive age are prone to experiencing various health problems related to the reproductive system, such as menstrual pain (dysmenorrhea), premenstrual syndrome (PMS), and hormonal stress (Wahyuni, 2023). Menstruation is a physical symptom that occurs in women of reproductive age. Menstruation has a significant impact on women's daily lives and health when their academic and social activities are most active. Given that many women experience difficulties in daily life due to premenstrual syndrome and dysmenorrhea, it is important to identify, prepare for, and manage the menstrual cycle in advance (Hong et al., 2024).

Menstrual Wellbeing Education and Digital-Based Holistic Therapy is an innovative approach to support women's health and well-being through the use of digital technology. The main goal of menstrual wellbeing education is to increase women's knowledge and understanding of menstrual cycles, hormonal changes, common symptoms, and pain and emotional management. This approach also seeks to reduce stigma and myths related to menstruation. Digital-Based Holistic Therapy is a therapeutic approach that touches on physical, emotional, and mental aspects as a whole, by utilizing digital platforms such as applications, videos, and virtual consultations.

Data from the National Population and Family Planning Agency (BKKBN) in 2023 shows that around 67% of women of reproductive age in Indonesia experience dysmenorrhea, and most of them do not get proper treatment or only rely on pain medication (Mu'minah et al., 2023). Most treatments still rely on medications, whereas complementary obstetric approaches such as relaxation therapy, aromatherapy, warm compresses, oxytocin massage, and yoga have been shown to be non-pharmacologically

effective (Yusnidar & Mirawati, 2022). Many women are uninformed and unprepared for menstruation, and experience fear and anxiety when reaching menarche. Mothers, other sisters, and female peers are their primary sources of information, but this information is often inadequate or imprecise. Girls experience a variety of symptoms, such as pain, headaches, and fatigue, and when combined with social and cultural taboos, they are often unable to participate in domestic, educational, occupational, social, and/or religious activities. Few women seek health care when they experience menstrual problems, but many use home remedies (Plesons et al., 2021). In addition to the physical aspect, menstruation also has an impact on women's quality of life, productivity, and mental health. In a survey by the Indonesian Ministry of Health (2022), it is known that more than 40% of women of productive age experience disruption of daily activities during menstruation, but their understanding of the concept of menstrual well-being is still low—a holistic approach that includes physical, mental, and social aspects of the menstrual experience (Ministry of Health of the Republic of Indonesia. General Secretariat, 2024).

Dysmenorrhea most often appears as abdominal cramps; however, it can also present with headaches, nausea, vomiting, or other common symptoms. The diagnosis is primarily clinical, but other tests such as pelvic exams, pregnancy tests, and STI screenings can help rule out other sources of pain. Although the main treatments for dysmenorrhea are NSAIDs and hormonal therapy, lifestyle changes and complementary/alternative treatments can also be helpful approaches. Lifestyle changes include aerobic exercise and stretching, while complementary alternative treatments include peppermint, cinnamon, ginger, and other herbs and supplements (Gutman et al., 2022). Studies involving eight nonpharmacological interventions were included. Regarding conventional meta-analysis, we chose the Visual Analogue Scale (VAS) as the primary outcome to evaluate pain intensity. Results showed that eight interventions (Exercise, Herbs, Acupuncture, Aromatherapy, Transcutaneous Electrical Nerve Stimulation, Topical Heat, Acupressure, Yoga) showed a positive effect on the reduction of menstrual pain compared to placebo or no treatment. A Bayesian network meta-analysis revealed that exercise of -3.20 (95% CI -4.01 to -2.34), acupuncture -2.90 (95% CI -3.97 to -2.85) and topical heat -2.97 (95% CI -4.66 to -1.29) may result in a reduction in pain intensity (VAS) (Li et al., 2024).

In the digital era, access to health education is getting easier through online platforms. This is an opportunity to convey information more broadly, inclusively, and sustainably. Digital-based educational media, such as videos and e-leaflets, increase information retention up to 70% better than conventional counseling (Aryani et al., 2024). Digital health products, and in particular menstrual health apps, have the potential to make a positive difference due to their scalability and ease of access (Cunningham et al., 2024). Through this community service program, an educational and applicative approach based on complementary midwifery is needed that targets women of reproductive age with the use of digital media. It is hoped that women can better understand their body cycles and be able to take care of themselves independently, so that their quality of life and reproductive health improve overall. On the other hand, technological developments have encouraged the acceleration of digitalization in health services, including community-based health education. Based on the description above, this community service has the goal of improving the quality of life of women of reproductive age. Integrating complementary midwifery approaches through digital education.

METHODS

Implementing this activity starts with coordinating with the village apparatus and involving cadres and other health workers in the village to discuss joint activity plans, including the time and place of the activity. The target of this activity includes all women of productive age. This community service activity is divided into several stages:

1. Preparation stage. Provide tests before activities, by filling out questionnaires that include general data, knowledge about menstruation and treatment, behavior during menstruation, attitudes, and perceptions of women of reproductive age about handling during menstruation.
2. Education Stage. Starting with the broadcast of an equitable video, providing information on examples of digital media that can be used, such as mobile applications, social media, websites, virtual consultations, and other educational videos. The methods used in this stage are lectures and discussions with video media, booklets, and digital posters. The material presented included women's knowledge and understanding of menstruation, including menstrual cycles, hormonal changes, general symptoms, as well as pain and emotion management, as well as holistic therapy and its benefits. After the delivery of the material, a discussion was held with all participants.
3. Practical Activity Stage. Practice some examples of holistic therapy, such as yoga, meditation, reflexology, aroma therapy, deep breathing relaxation, nutritional therapy and balanced diet, herbal therapy, and spices that can be done at home. After the demonstration, the participants were asked to try and repeat some of the actions that had been taught.
4. Monitoring and Evaluation Stage. Monitoring and evaluation are carried out after the activity is completed, namely by providing tests after education and evaluating the development of participants through group chats and periodic evaluations by cadres.

RESULTS AND DISCUSSION

The purpose of menstrual wellbeing education is to increase women's knowledge and understanding of menstrual cycles, hormonal changes, general symptoms, and pain management, as well as treatment efforts with digital-based holistic therapy. One of the effective methods to increase knowledge and change current behavior is through digital-based education involving health workers, such as midwives and health cadres. During the activity, participants participated in the event enthusiastically, especially during the question-and-answer session, where participants asked several questions about the material that were still did not understand. In addition to the question and answer session, the speakers and participants also shared experiences about menstruation by opening a sharing session to share experiences during menstruation.

Before the activity was carried out, participants were given pre-test questions to measure how much they knew about menstruation, dysmenorrhea, and its handling. Then, after the counseling was completed, participants worked on post-test questions that would be used to measure the level of understanding of participants who participated in the counseling.



Figure 1. Pre test

Table 1. Descriptive Statistics of Knowledge Pre–Post Test

Pre-Post Test	Number of Participants	Average	Min	Max
Pre-Test	15	62,5	43,75	100
Post Test	15	81,25	68,75	100

Based on Table 1. It can be seen that the average pre-test and post-test scores have increased. Almost all questions in the pre-test and post-test show an increase in the number of correct answers.



Figure 2. Education process



3. Evaluation and documentation

Menstrual well-being education is one of the strategies that can be used to increase women's understanding and awareness of their reproductive health. Menstrual well-being includes understanding the menstrual cycle, managing symptoms that arise, and the importance of maintaining health holistically. A study showed that women who were educated about menstrual well-being experienced a significant reduction in PMS (Premenstrual Syndrome) symptoms and improved their quality of life (Maulina et al., 2025). Complementary obstetrics refers to an approach that integrates conventional methods with alternative therapies to support women's reproductive health (Febriati et al., 2020). This approach includes a variety of techniques, such as acupuncture, aromatherapy, and herbal therapy, which are effective in managing menstrual symptoms and improving overall health. The use of complementary therapies in reproductive health care can improve patient satisfaction and reduce dependence on chemical drugs (Zuraida, 2023).

Digital-based holistic therapy is also one of the promising innovations in complementary obstetrics. By leveraging technology, women can access relevant health information and resources through digital apps and platforms (Cha, 2023). For example, a health app that provides guidance on menstrual cycles, symptom management tips, and discussion forums with health experts. A survey showed that 75% of participants felt more confident in managing their reproductive health after using a digital-based health app (Fauqi et al., 2024). Digital-based holistic therapy offers a new approach to women's reproductive health management. With health apps that provide information and support, women can more easily access the resources they need. For example, apps that offer

meditation guidance, yoga, and other relaxation techniques can help reduce stress and improve mental well-being during menstruation. Women who use this health app report a reduction in physical and emotional symptoms associated with the menstrual cycle (Andrews et al., 2023).

In addition, digital-based holistic therapy also allows women to connect with communities that have similar experiences. Through forums and discussion groups, they can share experiences, tips, and support, which in turn can increase a sense of solidarity and reduce isolation. Social support plays an important role in improving women's mental health during the menstrual period (Diana Oktarina et al., 2024). Digital therapies can complement or even replace traditional treatment methods, offering new possibilities for remote care and patient monitoring (Shah et al., 2021). The increasing use of smartphones, wearables, and other connected devices has resulted in new treatment modalities and has become one of the ways of digital therapy (Kshatri et al., 2022).

The importance of this education is also supported by data from the Ministry of Health of the Republic of Indonesia, which shows that women who receive reproductive health education have a lower risk of health problems, such as reproductive tract infections and hormonal disorders. In addition, proper education can help reduce the stigma and myths that often surround menstruation, so that women feel more comfortable discussing this issue. That way, overall, this counseling activity has a positive impact and achieves goals in the form of increasing knowledge, changing attitudes, and promoting more positive behaviors.

CONCLUSIONS

Improving women's reproductive health through complementary obstetrics and menstrual well-being education is a strategic step that can have a positive impact on the health of women of reproductive age. By integrating conventional and complementary approaches, as well as leveraging digital technologies, women can more easily access the information and support they need. Therefore, the government and health institutions need to continue to support education programs and the development of health applications that can improve the quality of life, especially women's reproductive health in Indonesia.

Conflict of Interest Statement

No conflict of interest

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REFERENCES

- Andrews, R., Lancaster, D., Bache, K., & Lacey, A. S. (2023). Does the Health & Her app improve menopausal symptoms? A longitudinal cohort study. *BMJ Open*, *13*(12). <https://doi.org/10.1136/bmjopen-2023-077185>
- Aryani, D., Mulyani, S., & Ekawaty, F. (2024). Comparative Analysis of Health Education Video Media and Leaflet Media on Increasing Adolescent Women's Knowledge about Breast Self-Examination (SADARI). *Indonesian Nurse Scientific Journal*, *5*(1), 51–61. <https://doi.org/10.22437/jini.v5i1.33449>
- Cha, D. (2023). Digital healthcare: the new frontier of holistic and efficient care. *Clinical and Experimental Emergency Medicine*, *10*(2), 235–237.

- <https://doi.org/10.15441/ceem.23.054>
- Cunningham, A. C., Prentice, C., Peven, K., Wickham, A., Bamford, R., Radovic, T., Klepchukova, A., Fomina, M., Cunningham, K., Hill, S., Hantsoo, L., Payne, J., Zhaunova, L., & Ponzo, S. (2024). Efficacy of the Flo App in Improving Health Literacy, Menstrual and General Health, and Well-Being in Women: Pilot Randomized Controlled Trial. *JMIR MHealth and UHealth*, *12*, e54124. <https://doi.org/10.2196/54124>
- Diana Oktarina, Sabtian Sarwoko, and Yudi Budianto. (2024). Factors Related to Adolescent Reproductive Health at the Youth Posyandu in Sumber Sari Village, UPTD Work Area of the Toto Rejo Health Center, East Oku Regency in 2023. *Ventilator Journal*, *2*(1), 25–36. <https://doi.org/10.59680/ventilator.v2i1.970>
- Fauqi, A., Srirahmawati, I., Hendriani, N., & Rezki, M. R. (2024). *Creation of Digital-Based Learning Media for Teachers in Improving Understanding of Sex Education for Elementary School Students*. *5636*(4), 774–784.
- Febriati, L. D., Rahayu, P. P., & Zakiyah, Z. (2020). Characteristic Relationship with Complementary Practice of Midwifery. *National Seminar of UNRIYO*, *1109*, 211–219.
- Gutman, G., Nunez, A. T., & Fisher, M. (2022). Dysmenorrhea in adolescents. *Current Problems in Pediatric and Adolescent Health Care*, *52*(5), 101186. <https://doi.org/https://doi.org/10.1016/j.cppeds.2022.101186>
- Hong, M., Rajaguru, V., Kim, K., Jang, S.-Y., & Lee, S. G. (2024). Menstrual Cycle Management and Period Tracker App Use in Millennial and Generation Z Individuals: Mixed Methods Study. *J Med Internet Res*, *26*, e53146. <https://doi.org/10.2196/53146>
- Ministry of Health of the Republic of Indonesia. General Secretariat. (2024). *Indonesian Health Profile 2023* (M. Farida Sibuea, SKM, MSc.PH; Boga Hardhana, S.Si (ed.)). Ministry of Health of the Republic of Indonesia.
- Kshatri, J. S., Satpathy, P., Sharma, S., Bhoi, T., Mishra, S. P., & Sahoo, S. S. (2022). Health research in the state of Odisha, India: A decadal bibliometric analysis (2011-2020). *Journal of Family Medicine and Primary Care*, *6*(2), 169–170. <https://doi.org/10.4103/jfmpc.jfmpc>
- Li, X., Hao, X., Liu, J.-H., & Huang, J.-P. (2024). Efficacy of non-pharmacological interventions for primary dysmenorrhoea: a systematic review and Bayesian network meta-analysis. *BMJ Evidence-Based Medicine*, *29*(3), 162–170. <https://doi.org/10.1136/bmjebm-2023-112434>
- Maulina, R., Kusumawardhani, E., Antika, E., Lestari, P., Yunanda, E., Putri, P., Damayanti, E., Puteri, A., Puspitasari, E. A., Nabila, F. F., Ratri, F. K., Abdillah, J., Jamiilah, N., Mujahida, K. S., Meinawati, K., & Mazaya, L. (2025). *MENSTRUAL EDUCATION TO ENHANCE KNOWLEDGE IN FEMALE ADOLESCENTS AGED 8 – 14 YEARS MENSTRUAL READINESS EDUCATION AS AN EFFORT TO INCREASE KNOWLEDGE IN GIRLS AGED 8 – 14 YEARS OLD Undergraduate and Midwifery Professional Education Study Program, Faculty of Medicine, Uni*. *9*(1), 120–132.
- Mu'minah, I., Purwo Aniarti, R., & Atmarina Yuliani, D. (2023). Efforts of women of childbearing age in preventing reproductive health problems in the working area of the Kalibagor Health Center, Banyumas Regency. *INVOLUTION: Journal of Midwifery Sciences*, *13*(1), 24–29. <https://doi.org/10.61902/involusi.v13i1.553>
- Plesons, M., Patkar, A., Babb, J., Balapitiya, A., Carson, F., Caruso, B. A., Franco, M., Hansen, M. M., Haver, J., Jahangir, A., Kabiru, C. W., Kisangala, E., Phillips-Howard, P., Sharma, A., Sommer, M., & Chandra-Mouli, V. (2021). The state of adolescent menstrual health in low- and middle-income countries and suggestions for future action and research. *Reproductive Health*, *18*(1), 1–13. <https://doi.org/10.1186/s12978-021-01082-2>
- Shah, S. S., Gvozdanovic, A., Knight, M., & Gagnon, J. (2021). Mobile App–Based Remote Patient Monitoring in Acute Medical Conditions: Prospective Feasibility Study Exploring Digital Health Solutions on Clinical Workload During the COVID Crisis.

- JMIR Form Res*, 5(1), e23190. <https://doi.org/10.2196/23190>
- Wahyuni, C. (2023). *REPRODUCTIVE HEALTH AND FAMILY PLANNING REFERENCE BOOK*. Get Press.
https://scholar.google.com/citations?view_op=view_citation&hl=en&user=gOows9AAAAAJ&pagesize=80&citation_for_view=gOows9AAAAAJ:NMxIIDi6LWMC
- Yusnidar, Y., & Mirawati, M. (2022). Education for women of childbearing age (WUS) about reproductive system disorders. *Endocrinology*, 2(2), 105–112.
<https://doi.org/10.59563/singkerru.v2i2.163>
- Zuraida. (2023). *Complementary Therapy in Midwifery Services* (A. Karim (ed.); 1st ed.). OUR FOUNDATION WRITES. <https://fkeb.delihusada.ac.id/wp-content/uploads/2024/11/21.-Buku-Terapi-Komplementer-Dalam-Pelayanan-Kebidanan-.pdf>