

## **Empowering Adolescent Girls through the SERASI Program: Promoting Health and Happiness During Menstruation**

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### **ABSTRACT**

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Menstruation is a physiological process experienced by adolescent girls, but it often causes discomfort both physically and psychologically. Lack of knowledge, the presence of stigma, and limited skills in managing health during menstruation can impact adolescents' learning activities and quality of life. The SERASI (Healthy and Happy During Menstruation) program is designed as a health promotion effort to improve the understanding, attitudes, and skills of adolescent girls in maintaining reproductive health, especially during menstruation. The method used is health education with a participatory approach through interactive lectures, group discussions, and menstrual hygiene management practice. Results: The implementation results show an increase in adolescent knowledge about healthy menstrual management, a more positive attitude about menstruation, and an improvement in skills for maintaining hygiene and managing sanitary complaints. The SERASI program is effective in supporting adolescent girls to manage menstruation more healthily, comfortably, and happily, thereby improving their quality of life and self-confidence.

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## INTRODUCTION

Menstruation is a normal physiological process experienced by every teenage girl as a sign of the maturation of reproductive organs. However, many teenagers experience various complaints during menstruation, both physical, such as menstrual pain, headaches, and fatigue, and psychological, such as anxiety, stress, and decreased self-confidence (WHO, 2022). This condition has the potential to disrupt learning activities, social interaction, and even the quality of life for adolescents (UNICEF, 2021).

In Indonesia, data show that most adolescent girls do not yet have adequate knowledge about menstrual management. A survey by the Indonesian Ministry of Health (2020) found that over 60% of adolescent girls did not receive information about menstruation before experiencing menarche. This lack of preparedness leads to anxiety, discomfort, and even inappropriate behavior in maintaining menstrual hygiene.

If not handled well, the low knowledge and skills of adolescents in managing menstruation can increase the risk of reproductive tract infections, worsen social stigma, reduce school participation, and hinder the achievement of optimal adolescent reproductive health (UNFPA, 2020; WHO, 2022). A study also showed that health education-based interventions are able to increase adolescents' knowledge, positive attitudes, and skills in dealing with menstruation in a healthy way (Nair et al., 2021).

The problem is becoming increasingly complex because many adolescent girls still have low knowledge regarding menstrual hygiene management (MHM). Research in Indonesia shows that most adolescents do not yet understand how to maintain hygiene during menstruation, are not yet able to manage menstrual pain properly, and still feel embarrassed or taboo about discussing menstruation (Kemenkes RI, 2020). This low level of reproductive health literacy can increase the risk of reproductive tract infections and negatively impact the well-being of adolescents (UNFPA, 2020).

A woman has a difference in her reproductive system compared to men, which is menstruation. Menstruation, or a period, is the periodic and cyclical bleeding from the uterus, accompanied by the shedding (desquamation) of the endometrium (Winkjosastro, 2009). Menstruation is a cycle because it occurs repeatedly. A woman's normal cycle is 28 days, with the longest cycle length being between 25 and 30 days (Reed et al., 2018).

Many women experience abnormal menstrual cycles, such as periods lasting longer than 35 days or shorter than 21 days, missing three or more consecutive periods, and others. This abnormality in the menstrual cycle can indicate a disorder in the female reproductive system. Additionally, women often experience Premenstrual Syndrome (PMS). During PMS, women typically experience behavioral changes such as mood swings, anxiety, irritability, changes in appetite, as well as physical changes like joint or muscle pain, headaches, fatigue, bloating, and others (Mayo Clinic, 2022).

Menstrual pain is a menstrual disorder caused by excessively strong uterine contractions due to the overproduction of prostaglandins experienced by a woman (Sherwood, 2011). The incidence of menstrual pain worldwide is still very high. The average percentage of menstrual pain incidence globally is over 50%, or ranges from 15.8% to 89.5% of women in each country experiencing menstrual pain. The prevalence of menstrual pain in the United States is estimated to be 45-90%, in India it is 75%, and in Egypt, the prevalence rate is estimated to be 75% (American Family Physician, 2014).

Therefore, promotive and preventive interventions are needed through adolescent-friendly, interactive, and empowerment-oriented health education. The "SERASI (Healthy and Happy During

Menstruation)" program was developed to address this need, with the aim of increasing the knowledge, positive attitudes, and skills of adolescent girls in managing menstruation healthily. With a participatory approach, this program is expected to help adolescents experience menstruation more comfortably and happily, thus supporting optimal quality of life and development.

## METHOD

The SERASI (Healthy and Happy During Menstruation) program is conducted online as an adaptation to the digital era and to reach more participants. The activities are designed with a participatory health education approach, combining education, discussion, and interactive practice.

- Participants

The target audience for this activity is adolescent girls aged 12–18 who are attending junior high school and senior high school/vocational school. This target group was chosen because early and middle adolescence is a crucial period for forming an understanding of reproductive health (WHO, 2022).

- Media and Platforms

The activities were conducted using video conferencing platforms such as Zoom Meeting or Google Meet, with supporting materials provided through Google Classroom and WhatsApp/Telegram groups for discussion and follow-up. The use of digital technology has proven effective in supporting interactive health education for adolescents (UNICEF, 2021).

- Delivery Method

- ✓ Interactive lecture: Presentation of material related to menstrual physiology, menstrual hygiene management (MHM), and strategies for managing menstrual complaints.
- ✓ Small group discussion (breakout room): Teenagers share experiences and find solutions together, guided by a facilitator.
- ✓ Online demonstration: Simulation of correct pad usage, maintaining reproductive organ hygiene, and relaxation exercises to reduce dysmenorrhea.
- ✓ Educational media: Short videos, infographics, and e-books are shared online as additional learning resources (Nair et al., 2021).
- ✓ Interactive Q&A: Provides space for participants to consult directly with facilitators/healthcare professionals.

- Evaluation

- ✓ Pre-tests and post-tests conducted online using Google Forms to measure participants' knowledge improvement.
- ✓ Satisfaction questionnaires to assess participants' responses to the program.

Monitoring participation in online discussions as an indicator of understanding and engagement.

- Expected Output

- ✓ Increased knowledge and positive attitudes among adolescent girls regarding menstruation.
- ✓ Practical skills in maintaining menstrual hygiene and managing menstrual pain.

- ✓ The formation of a more open adolescent community that can discuss reproductive health issues in a healthy and constructive manner.
- Time and Place
  - ✓ The planned time to be used is 2 hours and 30 minutes, from 08:00-10:30.
  - ✓ The session will begin with an opening, followed by a pre-test, material delivery, discussion and Q&A, alignment of perceptions, and a post-test.
  - ✓ Discussion session will be divided into several groups using Break Out Rooms.
  - ✓ The platform used will be Zoom Meeting.
  - ✓ The location of the implementation will be where the respondents are, provided they have internet access
- Sustainability Strategy

To ensure the program's sustainability, WhatsApp/Telegram groups were formed as a platform for adolescent discussion and consultation with facilitators or healthcare professionals. Additionally, participants are encouraged to become peer educators in their respective schools to spread positive information about menstruation (WHO, 2022; UNFPA, 2020).

## RESULT

The webinar activity was conducted online through the Zoom meeting platform, and the core activity was sharing insights about menstruation based on a literature review conducted by the group with the participants present during the event. The number of participants in this webinar was 48.

**TABLE 1.** Distribution of Respondents Based on Pre-test (n=48)

No.	Question	Correct	In correct
1.	In which phase are FSH and luteinizing hormone (LH, luteinizing hormone) released by the brain to the ovaries to stimulate the development of approximately 15-20 egg cells within the ovaries?	9	39
2.	Myth or fact: Is it forbidden to have intercourse during menstruation?	40	8
3.	Myth or fact, drinking cold water can delay menstruation.	42	6
4.	Here are things to keep in mind when maintaining hygiene during menstruation:	34	14
5.	A normal menstrual cycle physiologically indicates that the reproductive organs are generally healthy and functioning without issues. What is one of the effects of an irregular menstrual cycle?	42	6
6.	Here's the right way to deal with menstrual pain.	32	16
7.	The condition where a woman experiences menstrual pain is also called	37	11
8.	How many days is a normal menstrual cycle for women...?	20	28
9.	Which factors can affect the menstrual cycle?	45	3
10.	The shedding of the inner layer of the uterine wall (the uterine mucosal layer), which is rich in blood vessels, occurs periodically and is expelled through the vagina. This periodic bleeding through	42	6

the vagina, which happens with the shedding of the uterine mucosa (endometrium), is also called

**TABLE 2.** Distribution of Respondents Based on Post-test (n=37)

No.	Question	Correct	In correct
1.	In which phase are FSH and luteinizing hormone (LH, luteinizing hormone) released by the brain to the ovaries to stimulate the development of approximately 15-20 egg cells within the ovaries?	13	24
2.	Myth or fact: Is it forbidden to have intercourse during menstruation?	24	13
3.	Myth or fact, drinking cold water can delay menstruation.	36	1
4.	Here are things to keep in mind when maintaining hygiene during menstruation: A normal menstrual cycle physiologically indicates that the reproductive organs are generally healthy and functioning without issues. What is one of the effects of an irregular menstrual cycle?	31	6
5.	Here's the right way to deal with menstrual pain.	33	4
6.	The condition where a woman experiences menstrual pain is also called	24	13
7.	How many days is a normal menstrual cycle for women...?	34	3
8.	Which factors can affect the menstrual cycle?	25	12
9.	The shedding of the inner layer of the uterine wall (the uterine mucosal layer), which is rich in blood vessels, occurs periodically and is expelled through the vagina. This periodic bleeding through the vagina, which happens with the shedding of the uterine mucosa (endometrium), is also called	37	0
10.		35	2

Based on the table above, there were 48 participants who took the pretest and 37 participants who took the posttest. Looking at both tables, there was a change in the participants' knowledge before and after receiving the presentation, except for question number 2, where there was an increase in the number of participants who answered incorrectly. Also, in the pretest results table, there were more participants who answered incorrectly with an accuracy of more than 3 people answering incorrectly, and even 39 participants answered incorrectly on question number 1 and 28 participants answered incorrectly on question number 8. Meanwhile, in the posttest, the accuracy of correct answers was higher when looking at each question. Only on questions number 1, 2, 6, and 8 did more than 6 people answer incorrectly.

"Serasi" was held via Zoom Meeting with the theme "Healthy and Happy During Menstruation" to provide health education to the general public regarding menstrual health. Overall, the event went according to plan, except for an unexpected incident during the event where one participant made an inappropriate comment in the Zoom comment section. However, the committee promptly addressed the participant. The participants also seemed very enthusiastic about this activity. Most participants actively asked questions, listened to the presentation until the end, took notes on the material presented, and took the initiative to share it with other participants in the participant WhatsApp group. Out of 61 participants who registered for the event, 37 completed the post-test form. Of these, 40.5% rated the material presented as excellent (score of 10), 43.2% rated the speaker as excellent (score of 10), and

43.2% rated the overall webinar event as excellent (score of 10). Participants found the event very interesting, informative, and the language easy to understand.

Events like this are considered to have a positive impact on both participants and organizers. The impression conveyed by the committee during the preparation and implementation of health education was that they were happy because they had the opportunity to share knowledge with others, and they were able to increase their knowledge and experience.

## DISCUSSION

The SERASI (Healthy and Happy During Menstruation) program is conducted online as an effort to improve the knowledge, attitudes, and skills of adolescent girls in managing menstruation. The evaluation results show an increase in participants' understanding of menstrual physiology, menstrual hygiene management (MHM), and practical skills in dealing with menstrual complaints. This finding is consistent with the research by Nair et al (2021) which states that both school-based and online health education can significantly improve menstrual health literacy.

From an attitudinal perspective, there appears to be a shift towards a more positive direction, namely a reduction in feelings of shame and taboo surrounding menstruation, and an increase in the self-confidence of adolescent girls. This aligns with UNICEF's findings (2021), which emphasize that interactive reproductive health education programs can help adolescents normalize perceptions about menstruation and reduce social stigma.

Online demonstration activities, such as practicing reproductive organ hygiene and relaxation exercises to reduce menstrual pain, also provide meaningful learning experiences. Practice-based interventions have been proven effective in improving adolescents' skills in managing reproductive health (Kemenkes RI, 2020). Thus, the SERASI program can be seen as a form of health promotion innovation that meets the needs of adolescents in the digital age.

Additionally, the use of online platforms (Zoom, Google Meet, WhatsApp/Telegram) has proven effective in reaching more participants and enabling flexible learning. WHO (2022) affirming that the utilization of digital technology in adolescent health education can be a sustainable strategy amidst the challenges of limited face-to-face interaction.

However, there are some limitations, including internet network constraints, limited direct interaction, and variations in participant engagement. This shows the need to integrate online programs with face-to-face activities for optimal results. UNFPA (2020) also recommends a hybrid (online and offline) approach to strengthen adolescent reproductive health education.

Overall, the SERASI program makes a positive contribution to increasing knowledge, building healthy attitudes, and developing adolescent girls' skills in managing menstruation. This type of intervention needs to be expanded in scope and made a sustainable program to support the achievement of optimal adolescent reproductive health.

The results of the SERASI program implementation show that online health education can be an effective strategy for improving adolescent reproductive health literacy. The increase in participants' knowledge scores after the activity proves that interactive online educational methods can effectively facilitate adolescents' understanding of menstruation. This is consistent with previous research stating that information technology-based interventions are able to improve reproductive health knowledge and attitudes in adolescents (Chandra-Mouli et al., 2019).

Besides the cognitive aspect, changes in adolescents' attitudes towards menstruation are also an

important achievement. Participants who initially felt shy and taboo about discussing menstruation became more open after small group discussions (breakout rooms). According to UNICEF (2021), Creating a safe space for discussion is key to reducing the stigma surrounding menstruation among adolescents.

From a skills perspective, practicing menstrual hygiene management (MHM) through online demonstrations and the use of educational media has been proven to improve participants' ability to maintain personal hygiene during menstruation. This aligns with the findings of Nair et al. (2021), that a practice-based educational approach is more effective in improving the skills of adolescent girls compared to passive lectures.

However, challenges still exist in the implementation of online programs, such as limited internet access, digital devices, and varying levels of participation. This condition indicates the presence of a digital divide, which can affect program effectiveness (Ministry of Health of the Republic of Indonesia, 2020). Therefore, a blended learning model that combines online and face-to-face sessions needs to be considered to ensure a more even distribution of program impact (WHO, 2022).

Overall, the SERASI program makes a positive contribution to building reproductive health literacy, reducing stigma, and fostering practical skills in adolescent girls for managing menstruation. If implemented sustainably and expanded in scope, this program can support the achievement of the Sustainable Development Goals (SDGs), particularly point 3 (good health and well-being) and point 5 (gender equality) (UNFPA, 2020).

## CONCLUSION

The SERASI (Healthy and Happy During Menstruation) program has proven effective in improving the knowledge, attitudes, and skills of adolescent girls in managing menstruation. Through an interactive online approach, participants gained a better understanding of menstrual physiology, menstrual hygiene management, and practical skills to address menstrual complaints. Additionally, the program successfully fostered positive attitudes and reduced stigma surrounding menstruation, enabling adolescents to experience their menstrual cycles in a healthier, more comfortable, and confident manner.

Thus, the SERASI program can serve as a model for innovation in promoting adolescent reproductive health in the digital age, and can be adapted for various adolescent age groups in Indonesia. The limitations of this activity are internet connectivity issues and a decrease in engagement in online settings. To overcome this, we have created a discussion group thru the WA group application, which participants can use anytime, anywhere for consultation and discussion.

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## ATTACHMENT



FIGURE 1. Publication Poster

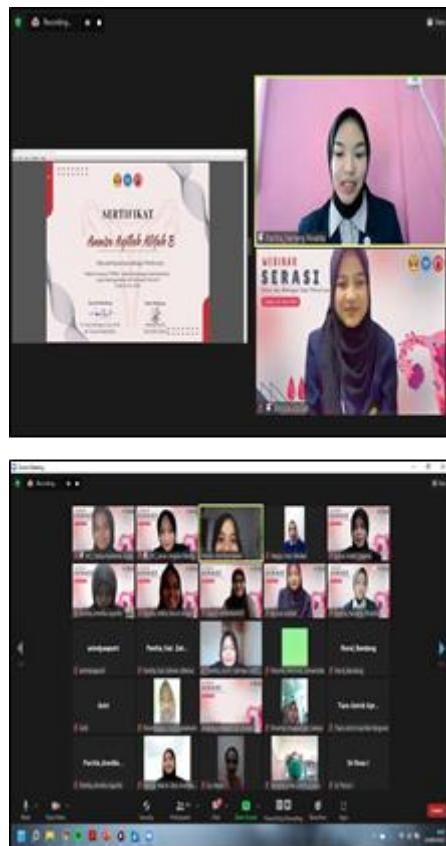


FIGURE 2. Activity Documentation