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EDUCATION AND TRAINING REGARDING MENSTRUAL HYGIENE MANAGEMENT (MHM) AS AN EFFORT TO CARE REPRODUCTIVE ORGANS IN ADOLESCENT

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ABSTRACT

Introduction: According to the Indonesian Demographic and Health Survey (IDHS) in 2017, young women (63.9%) in maintaining cleanliness during menstruation are still lacking due to low knowledge and information about personal hygiene during menstruation. SMP Negeri 1 Sampit is located in Central Kalimantan where most of the students do not have knowledge about menstrual hygiene management.

Methods: The activities used in this community service program were in the form of health education to 120 students of 7th and 8th grades. The community service events carried out through this webinar include opening, pretest, giving material, and closing with a post test. The pretest was carried out before giving the material to determine the participant's initial understanding of menstrual hygiene management.

Results: Knowledge related to adolescent growth and development scored well as many as 19 people (15.83%) then during the good posttest it became 63 people (52.50%). Knowledge related to menstrual hygiene management during the pretest who got a good score was only 20 people (16.67%) and 72 people (60%) good in posttest. While the knowledge related to mood disorders in adolescents who got a good score at the pretest was 21 (17.5%) and 70 people (58.3%) had a good score in posttest.

Conclusion: Community service activities conducted in the form of online webinars to provide health education and modules to teachers can improve knowledge and practice of menstrual hygiene management as an early effort in maintaining and caring for the health of the female reproductive organs.

KEYWORDS

health education; menstrual hygiene management; adolescent health

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1. INTRODUCTION

Adolescents are residents in the age range of 10-19 years in which adolescence is the time when an individual experiences a transition from childhood to adulthood characterized by physical, biological, psychological, and social changes (Kathryn Geldard & David Geldard, 2011). Adolescent girls who do not understand their bodies and reproductive processes

can think that menstruation is a disease and they can also experience great shame and dirty feelings during their initial menstruation (Agiwahyunto, 2018). Girls just know menstruation at the time of menarche and they often have difficulty buying or getting pads when needed, thus causing MHM in Indonesia is still minimal (Kemenkes RI, 2017). According to the IDHS in 2017, the adolescent girls (63.9%) in maintaining

hygiene during menstruation is still bad due to a lack of knowledge and information about personal hygiene during menstruation (Syahda and Elmayasari, 2020). Kaur's results also showed that adolescents living in villages experienced worse hygiene during menstruation than those living in cities (Kaur, Kaur and Kaur, 2018a).

SMP Negeri 1 Sampit is located at R.A Kartini Road No. 1, Mentawa Baru Hulu, Mentawa Baru/Ketapan, Mentawa Baru Hulu, East Kotawaringin, East Kotawaringin Regency, Central Kalimantan. In the school, there is School Health Programme (UKS) but it leads more to curative health. For promotive and preventive activities related to reproductive health has not been done much. Especially during the COVID-19 pandemic, since 2020 until now there has been no face-to-face learning, but learning is conducted online. The school has one UKS and 2 sanitation facilities. The fact is that students rarely get socialization and counseling related to reproductive health. However, for students who follow Youth Red Cross (PMR), there may already be those who get the material but for the specific material regarding MHM, there are no students getting the material. Toilet facilities in schools are also inadequate such as broken locks. This condition is almost the same with some low and middle income countries such as in Ghana that schools do not provide menstrual materials (Mohammed and Emil Larsen-Reindorf, 2020).

Based on a preliminary study of 10 adolescent schoolgirls aged 13-15 years in SMP Negeri 1 Sampit on December 9, 2020, through an interview via WhatsApp and questionnaire via Google Form, 7 out of 10 schoolgirls had knowledge of menstrual hygiene that was lacking and did not understand the relationship between female reproductive organs and MHM. Besides, 5 out of 10 students changed pads three times a day or only when they felt that the pads were full. There were still schoolgirls who removed used pads by burning those pads. Furthermore, as

many as 8 out of 10 students still believed the myths surrounding menstruation. This is due to the limited knowledge and the influence of norms, cultures, and myths that develop in the family.

Indonesia, the majority of its citizens are Muslim, consider that menarche for women is important because it is the beginning of a woman starting to take responsibility for herself, just like previous studies in India that women who menarche are an important and celebrated thing, but even so it turns out that many teenagers who think that menstruation adds to the burden, both physically and psychologically (Van Eijk *et al.*, 2016). Providing correct knowledge and information related to menstrual hygiene management for adolescent girls will maintain the health of women's reproductive organs and will improve women's quality of life in the future.

To face the problems, it takes insight and a strategy to improve MHM in adolescent schoolgirls. The effort that can be done is to educate the adolescent schoolgirls regarding MHM so that they can maintain cleanliness and prevent diseases in the reproductive system early.

2. MATERIAL AND METHODS

Based on the problem of the results of the preliminary study via WhatsApp and the Google Form questionnaire to the students at Junior High School State 1 Sampit, can find out the main problems related to knowledge, negative attitudes and lack of actions in Menstrual Higiene Management. The solution to the problem is to carry out a community service program by the Faculty of Nursing, Universitas Airlangga about the importance of improving Menstrual Hygiene Management so that students are able to take action in maintaining menstrual higiene and preventing diseases in the reproductive system from an early age.

Community service activities at Junior High School State 1 Sampit are carried out online through the media zoom due to the COVID pandemic situation. This community service carried out from August to

October 2021. In the preparation stage, the team coordinates with the head master and also the counseling teacher regarding plans for implementing community service activities. Prior to the implementation of the activity, the team compiled a module as a guide related to maintaining the health and hygiene of the reproductive organs in adolescents, E-posters and leaflets for students to be used as media for counseling. The team also made media for publication of activities so that the community service activities could also be followed by other adolescent. The modules compiled the topics of adolescent concepts, adolescent reproductive health, and Menstrual Hygiene Management. The module has been well prepared by being compiled by a competent team in pediatric and maternity nursing, and consultations have been carried out by experts in the field of Maternity nursing

The community service events carried out through this webinar include opening, pretest, giving material, and closing with a post test. The pretest was carried out before giving the material to determine the participant's initial understanding of MHM. The activity of providing material was carried out in lectures and discussions by competent speakers so that the participants could understand well the topics presented and had the opportunity to ask questions about material that had not been understood or asked about women's health problems that they experienced related to menstrual problems and adolescent growth and development.

The topics presented consist of three parts, namely: 1) Teenagers' growth and development; 2) Menstrual Hygiene Management; 3) Mood disorders in adolescents. The purpose of giving the first topic is to increase participants' understanding of the physical, psychological and social changes that occur during adolescence. The purpose of giving the second topic is to increase the understanding and skills of young women about self-care during menstruation. While the purpose of giving the third topic is to

increase understanding of the problem of mood disorders and efforts to overcome them.

The posttest was carried out after a discussion session on all topics, which asked about the understanding of the three topics that had been given. The pretest and posttest questionnaires used a questionnaire whose validity and reliability had been measured. After participating in health education activities, participants received materials, leaflets, and certificates which were sent via email to each participant. The module is given to schools as a teacher's guide in teaching about menstrual hygiene management. In addition, the school also received e-posters related to menstrual hygiene management which could be shared on social media to remind them of the importance of menstrual hygiene management.

3. RESULTS

Table 1 shows the characteristics of the majority of participants aged 12 years (n=55, 45.8%) and 13 years (n=46, 38.3%), in which most of them have been menstruating (n=106, 88.3%). The age of participants in menarche or first menstruation varied from the age of 9 years to 13 years. And the majority of participants had never heard of MHM (n=90, 75%).

Table 2 shows that the knowledge of participants before and before being given health education material experienced a significant change. The results of the pretest that most of the participants' knowledge before being given health education materials were still lacking. Knowledge related to adolescent growth and development scored well as many as 19 people (15.83%) then during the good posttest it became 63 people (52.50%). Knowledge related to menstrual hygiene management during the pretest who got a good score was only 20 people (16.67%) and 72 people (60%). While the knowledge related to mood disorders in adolescents who got a good score at the pretest was 21 (17.5%) and 70 people (58.3%) had a good score in posttest.

Table 1 Demographic Characteristics of Students of SMP Negeri 1 Sampit

Characteristics	f	%
Age		
12 years	55	45.8
13 years	46	38,3
14 years	15	12.5
15 years	4	3.3
Already menstruating		
Already menstruating	106	88.3
Not having menstruation yet	14	11.7
The first age of menstruation		
Not having menstruation yet	14	11.7
9 years	2	1.7
10 years	19	15.8
11 years	45	37.5
12 years	34	28.3
13 years	6	5
Have heard of MHM information before		
Have already heard	30	25
Have not heard yet	90	75

Table 2. Knowledge of Students of SMP Negeri 1 Sampit Before and After being given Health Education

Knowledge	Pretest		Posttest	
	Good	Bad	Good	Bad
Adolescent Growth and Development	19 (15.83%)	101 (84.17%)	63 (52.50%)	57 (47.5%)
MHM	20 (16.67%)	100 (83.33%)	72 (60%)	48 (40%)
Mood Disorders in Adolescents	21 (17.5%)	99 (82.5%)	70 (58.3%)	50 (41.67%)

Table 3. The practice of MHM of Students of SMP Negeri 1 Sampit after being given the health education

MHM Practice	Category	
	Good	Bad
Use of materials during menstruation	114 (95%)	6 (5%)
Replacement of pads during menstruation	85 (70.83%)	35 (29.17%)
Handwashing	104 (86.67%)	16 (13.33%)
Genital cleaning	64 (53.33%)	56 (46.67%)
Disposal of used pads during menstruation	108 (90%)	12 (10%)
Pad storage	75 (62.5%)	45 (37.5%)
Washing of underwear during menstruation	109 (90.83%)	11 (9.17%)
Drying underwear during menstruation	117 (97.5%)	3 (2.5%)

Menstrual hygiene management behavior in SMP Negeri 1 Sampit shows that the highest is related to the use of materials during menstruation, 95% is good, while the lowest is the practice of genital hygiene, only 64% is good (Table 3)

4. DISCUSSION

Training using health education as part of health promotion is an effort to improve the knowledge and attitudes of young women so that they are willing and able to do MHM. Research on the Relationship between Counseling on Personal Hygiene and Adolescent Behavior During Menstruation at Cut Nyak Dhien Langsa High School concluded that there was an increase in the knowledge, attitudes and

actions of young women about personal hygiene during menstruation in the treatment group before and after counseling (Zahara, 2015).

The pretest showed that the knowledge level of the respondents of the treatment group was in a bad category. This was because most respondents have not yet received health education or information about MHM. The results of the posttest showed that most of the respondents were already in the good category and there were no respondents with less or bad knowledge categories. Based on research, health education interventions can have a positive impact on knowledge and practice of menstrual hygiene (Hennegan and Montgomery, 2016). This is in

accordance with the results of the study, that the level of knowledge of students after being given health education results is better than before being given intervention.

Adolescent knowledge related to growth and reproductive organs in detail had never been obtained before. This was because the teachers in the school only taught the materials based on the curriculum and the knowledge regarding growth and reproductive organs in Indonesia includes taboo. Participants only found out the characteristics of secondary sex clearly after obtaining material in this community service, although all students had also experienced it. The participants just understood that they had internal reproductive organs and external reproductive organs that were both interrelated and if there were health problems, it could have an impact on each other. For material about MHM, some of them have already gotten at first class so that they got good scores. Besides, they had never obtained the knowledge related to psychological mood disorders before.

Lack of knowledge from students, will be able to form a negative attitude that causes wrong behavior in MHM. Increasing knowledge is very important to do to form a positive attitude. Research shows that misinformation about menstruation in adolescent girls can lead to negative attitudes in other adolescents (Wister, J. A., Stubbs, M. L., & Shipman, 2013). In addition, adolescent attitudes affect the behavior of adolescent girls in maintaining personal hygiene during menstruation. Adolescents in maintaining personal hygiene during menstruation provide a very important role (Meinarisa, 2019). A positive attitude can be formed through the provision of correct health information. This is in accordance with a study on the provision of interventions in the form of health education that can have an effect on increasing the positive attitudes of young women (Su and Lindell, 2016).

The knowledge of junior high school adolescents is still lacking regarding menstrual hygiene management because it is not yet in the school curriculum and there is no guide for teachers regarding menstrual hygiene management. This condition is almost the same as in developing countries in the world, such as the results of Mouli's research comparing MHM in low- and middle-income countries which shows that the majority of adolescent girls are uninformed and unprepared for menarche, as well as family members and school officials who are also incomplete and good at providing information. the correct information (Chandra-Mouli and Patel, 2017). The results of previous research in Indonesia show that knowledge about menstruation is not related to absenteeism at school (Davis *et al.*, 2018).

According to (Notoatmodjo, 2012), knowledge is influenced by factors of age, education, and exposure to information or mass media. Health education is a means that can be used to convey health information to increase knowledge and change behavior in a positive direction. Knowledge is influenced by the learning process. Health education is a learning process in achieving educational goals. The learning process is a change in the ability of the learning subject that is influenced by various factors, namely learning media, methods, and techniques used (Nurjan, 2016). The formation of knowledge mostly starts from vision and hearing to objects to know something (Notoatmodjo, 2012).

In the results of filling out questionnaires related to menstrual hygiene management about genital hygiene, there are still many that are lacking, even though hand hygiene behavior is good, while the majority of latrine use is good, although latrine facilities in schools are still inadequate, such as the number and cleanliness. In a study in Ethiopia, it was shown that lack of hand hygiene and the use of unclean latrines will experience UTI symptoms in the past year (Ademas *et al.*, 2020). The results of the

study show that the school provides different toilets for boys and girls, this is school support related to MHM, in contrast to research in Bangladesh that public schools do not provide gender-specific toilets so that MHM practice there is also low and causes students to be absent from school (Alam *et al.*, 2017). A different study in the Philippines found that toilet conditions in schools were not related to the frequency of changing sanitary napkins (Katsuno *et al.*, 2019). This shows that every region is different even though toilets are important but maybe social norms also influence.

The provision of health education in community service conducted has 3 stages that can increase adolescent knowledge, including the process of entering the information received into memory (learning), storing the information obtained (retention), and recalling the information obtained (recall) so that individuals are able to increase understanding and remember the information that has been obtained. The change in knowledge of the respondents can be known from the results of pretest and posttest in which it can be known through category improvements in most respondents. The change in knowledge is divided into several stages including know, comprehension, analysis, synthesis, and evaluation. Before there are any changes in behavior, individuals will have perceptions related to the level of knowledge obtained from information, so that if the information received is less clear, the learning results obtained are also less optimal. The process of exchanging information that occurs through online webinars and leaflet media is effective for increasing knowledge in adolescents.

The results of this study support the theory of Lawrence Green (Green & Kreuter, 1991) which states that health education can influence predisposition factors that are attitudes that can result in behavioral changes in individuals. Education is a system that has an influence in the formation of attitudes because it can lay the foundation of

understanding and moral concepts in a person (Febriyanti, 2017). Health education in this community service activity is effective in providing information to adolescent schoolgirls at SMP Negeri 1 Sampit. Fun processes and media can make it easier for students to receive information. This is evidenced by the results of the pretest and posttest which show a change in attitude from negative to positive.

Community service health education carried out online with zoom media. This method is an educational technique that is also effective in increasing the knowledge of participants in distance learning. This is based on related research conducted by learning with video-conferencing media, which can replace learning that is usually done face-to-face in class into virtual face-to-face activities through applications that are connected to the internet network (Monica and Fitriawati, 2020). This method can develop listening skills, observe carefully and can bring participants' situations into real situations to deal with events so that this enhances their experience (Wulan Sari, 2016).

5. CONCLUSION

Health education and training related to menstrual hygiene management provided through online webinars and providing modules effectively increases knowledge regarding adolescent growth and development, MHM and mood disorders. at SMP Negeri 1 Sampit so far there has been no special material or curriculum related to MHM. In the future it is necessary to coordinate with various parties related to the provision of MHM materials in each school so that students will get the correct information and teachers are able to provide the information needed to realize women's health in the future.

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