



Improving Adolescent Reproductive Health Through Dysmenorrhea Gymnastics Education at The PSBR Dormitory, Blitar City



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Abstract

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Dysmenorrhea is often occurred at the beginning of menstruation, especially in adolescents. If left untreated, pain experienced by adolescents with primary dysmenorrhea could lead to serious problems that ultimately require health services and could also reduce quality of reproductive health and general body health. The aim of gymnastics activity is to improve the reproductive health of adolescent women through the provision of dysmenorrhea gymnastics education. The activity was divided into 2 sessions, lecture and practice. The first session were explanations, questions and answers about the menstrual cycle, dysmenorrhoea and how to prevent or treat dysmenorrhoea pain using dysmenorrhea gymnastics. The second one was gymnastics practice in the same time between community service team and all of the participants, where the service team was divided as gymnastics instructor and the others as facilitator who correct participants' exercise movements that were not right. This activity was carried out on young women at the PSBR dormitory in Blitar City. Implementation was in the March 2021 and followed by 35 teenagers. The results of this activity indicated that all of the participants were able to follow and carry out activities that have been planned properly. Dysmenorrhea gymnastics were an easy, cheap and safe way to reduce and prevent dysmenorrhea pain so that it could be an independent dysmenorrhea therapeutics option for adolescents, especially teenagers in the PSBR dormitory in Blitar City.

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INTRODUCTION

Adolescence is the initial period of female reproductive development, which is marked by the occurrence of menstruation. In the early phase of menstruation, it is usually accompanied by complaints of menstrual pain, especially in adolescents and women of childbearing age who are not married. (Sari, 2012). The pain is dysmenorrhea, which is usually marked by discomfort or cramps in the lower abdomen before and during menstruation. Dysmenorrhea consists of Primary and Secondary Dysmenorrhea. Primary dysmenorrhea is pain that occurs since the first menstruation and will heal itself all over the time, precisely after body's hormones stabilization or alteration in the position of the uterus after marriage and childbirth. Secondary dysmenorrhea usually appears later, if there are a persistent diseases or abnormalities such as uterine infection, cysts or polyps, tumors surrounding the uterus, and abnormalities in the position of the uterus that interfere with the surrounding organs and tissues. (Cha NH, 2016) stated that pain experienced by adolescents with primary dysmenorrhea could lead to serious problems such as negative emotions accumulated due to complaints such as lower abdominal pain, fatigue, loss of appetite, headaches, diarrhea and nausea.

The incidence of dysmenorrhoea in Indonesia is 64.25% consisting of 54.89% primary dysmenorrhoea and 9.36% secondary dysmenorrhoea. In 2018, result showed that of the 84.4% of 1st Grade Ners girls student at the Stikes Santa Elisabeth Medan Dormitory 26,7% of them experienced dysmenorrhea with mild pain intensity, 73,3% with moderate pain, and 0% with severe pain (Wardhani, 2018) .

Data was obtained in September 2020 from youth outpatient clinic of UPTD Puskesmas Kec.Sananwetan showed that of the 35 young women in the Blitar Youth Community Development Institution

(PSBR) hostel, 25 of them experienced menstrual pain during menstruation. In addition of that, researchers also often found 2 out of 5 PSBR teenagers who came to the Emergency Room of UPTD Puskesmas Kec. Sananwetan experienced dysmenorrhea every month. The acute pain experienced by adolescents with primary dysmenorrhea is became a reason for looking health care resources.

Nonsteroidal Anti-Inflammatory Drugs (NSAIDs) became conventional drug usually given to primary dysmenorrhoea as a part of medical management. The class of NSAIDs (Nonsteroidal Anti-Inflammatory Drugs) given to patients with primary dysmenorrhea are ibuprofen, naproxen and mefenamic acid. Medication is given after the pain is felt, and is continued for the first 2 to 3 days during menstruation (Reeder, 2013).

The pain intensity of dysmenorrhea could actually be reduced without the use of the drugs. Several proven methods could be used such as warm compresses, drinking ginger herbs, Mozart music and dysmenorrhoea gymnastics. Dysmenorrhoea gymnastics is not only could reduce pain but routinely and regularly could increase hormone secretion, especially estrogen (Wardhani, 2018).

Regular dysmnerrhoea gymnastics for young women can release beta endorphins (natural painkillers) into the bloodstream so that it can reduce dysmenorrhea, besides can make body feeling fresh and can cause feelings of pleasure. Exercising regularly when experiencing dysmenorrhea can increase number and size of blood vessels, which supply blood throughout the body include reproductive organs so that blood flow becomes smooth and this can reduce the symptoms of dysmenorrhea. Increasing the volume of blood flow throughout the body include of the reproductive organs can facilitate

supply of oxygen to the blood that vasoconstricted, so that menstrual pain can be reduced (Reeder, 2013).

Dysmenorrhea gymnastics is a non-pharmacological treatment for dysmenorrhea in the form of sports activities. One of the benefits of this exercise is that it stimulates production of endorphins in the brain. Endorphins are hormones produced by the pituitary gland which can provide feeling of calm and resistance to feelings of pain (Tarigan, 2013).

Dysmenorrhea gymnastics is easy to do and does not require tools. This exercise also does not cost money, is easy to do and certainly does not cause harmful side effects to the body. By doing exercise, it will gradually provide a relaxed sensation and can reduce pain (Badriyah and Diati, 2008).

Exercise, in this case dysmenorrhea gymnastics, is proven to increase b-endorphin 4 to 5 times in the blood, so that the more exercise / gymnastics, the higher the b-endorphin level in the blood. Dysmenorrhea gymnastics that done regularly and correctly, which is done for 20 minutes at the time of dysmenorrhea and done 2 times each exercise, can increase b-endorphin which has been shown to be closely related to reducing pain, improving appetite, improving memory, improving respiratory function and blood pressure. (Rahayu, Suryani, & Marlina, 2014).

Some of these reasons were used by the STIKes Patria Husada Blitar community service team to improve the reproductive health of female adolescents in the PSBR dormitory, especially in dealing with dysmenorrhoea pain that often appears during menstruation. Thus, it is hoped that young women can manage the dysmenorrhea pain themselves so that they no longer need services in the emergency room.

METHOD

Time and Place of Activity

This community service activity was carried out in March 2021 at the PSBR (Youth Development Social Institution) Dormitory in Blitar City.

Activity Methods

1. Preparation starts from licensing to the PSBR Dormitory Manager and the Head of the UPTD Puskesmas Kec. Sananwetan Kota Blitar as the person in charge of health in the area where the service activities are carried out.
2. Coordination with the management of the PSBR dormitory and health workers who hold the youth health program in the local Puskesmas area
3. Together with the person in charge of the health cadres at the PSBR and the person in charge of the youth health program at the Sananwetan Community Health Center, gather all the young women in the PSBR hostel in Blitar City.
4. The activity is divided into 2 sessions. The first session was filled with providing education about the menstrual cycle and dysmenorrhea pain then followed by an explanation of how to reduce and prevent dysmenorrhea pain with exercise. This education is given for 60 minutes using the lecture method. The second one was a demo and dysmenore gymnastics practice together with the participants for 20 minutes

RESULT

Characteristics of participants in community service activities

Table 1. Characteristics of Participants based on Age, Education, Menarche, Menstrual Cycle, Complaints of Dysmenorrhea in Activities to Improve Reproductive Health for Young Women through Dysmenorrhea Gymnastics Education at PSBR

Dormitory, Blitar City, March 2021

Variable	Category	f	%
Age	17- 23 Years	35	100
Menstrual Cycle	Regular	26	74
	Irregular	9	26
Complaint of dysmenorrhea	Often	25	71
	Sometimes	6	16
	Rarely	4	12
Menarche age	< 11 years	0	0
	12 -13 years	20	57
	>13 years	15	43

Total number of participants who took part in community service activities in the form of dysmenorrhea gymnastics education which was carried out in March 2021 were 35 young women with age range between 17-23 years. Some of the participants had irregular menstrual cycles. All adolescents have had dysmenorrhea complaints and most of the complaints often occur. Most menarche age was in the normal category, namely 12 - 13 years.

DISCUSSION

Abnormality menstrual cycles in adolescent usually occur at first menarche caused by unstable hormonal levels. Menstrual cycle irregularity influenced by several factors such as nutritional status, stress levels, physical activity, and age of the menarche. Based on the research progress menarche (< 11 years) or slowly menarche (> 13 years) tend to show irregularity of menstrual cycle (Imi, 2019). Almost all of the adolescent with menstruation period every month are often experienced dysmenorrhoea pain. Several primary dysmenorrhoea risk factor are menarche age, abnormality body mass index, fast food habituation, bloody duration every menstrual period, smoking, and coffee (Larasati, 2016).

All of the participants following every session that divided into two session. The activity is divided into 2 sessions. The

first session was filled with providing education about the menstrual cycle and dysmenorrhea pain then followed by an explanation of how to reduce and prevent dysmenorrhea pain with exercise. This education is given using the lecture method and with showing picture of dysmenorrhoea gymnastics movements as showed in figure 1.

Figure 1. Menstruation education explanation, dysmenorrhoea and dysmenorrhoea gymnastics

In the second session all of the participants are following gymnastics together with trainer. Within practice each participants are divided partially as trainer who leading pathway of gymnastics and rest of them as facilitator who monitoring accuracy of the movement and corrected the movement that not right, as showed in figure 2

Figure 2. Dysmenorrhoea gymnastics practice

The results of evaluation of community service activities in the form of dysmenorrhea exercise showed that all of the participants were enthusiastic about participating in the entire series of activities. During the education provision, many participants were asking questions and sharing their experiences with menstruation. When invited to practice dysmenorrhea, all of the participants were also enthusiastic about doing gymnastics following all the sequence of movements demonstrated by the community service team. At the end of the event the participants were more convinced to apply dysmenorrhea when experiencing dysmenorrhea pain because from 4 people who happened to be having menstruation 2 of them stated that they did not feel pain and rest 2 of them felt the pain was reduced. .

Efforts to improve adolescent reproductive health require active roles from various parties, especially for teenagers who have not received the attention of their parents, such as the teenagers in the PSBR dormitory. Through this community service activity, it is hoped that it can improve adolescent reproductive health, especially in handling dysmenorrhea complaints independently by adolescents and can also prevent the incidence of dysmenorrhea. So that adolescents can improve their reproductive health independently.

CONCLUSION

Implementation of community service activities goes smoothly as planned. Young women in the PSBR dormitory have received additional knowledge and information about the menstrual cycle, dysmenorrhea and how to overcome or prevent it. The young women in the PSBR dormitory have also been able to practice the dysmenore gymnastics movement in sequence and appropriately

SUGGESTION

In order for Adolescent Reproductive Health to increase, the service program needs to be continued by providing knowledge on reproductive health with other topics, for example about sexually transmitted diseases, HIV / AIDS, sexual violence, the risk of abortion and others so that adolescents will increase their knowledge of reproductive health so that they can implement behaviors. to maintain proper reproductive health

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