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DISCUSSION TERRACE ANEMIA PREVENTION IN FEMALE ADOLESCENTS BY UNDERSTANDING THE CAUSES AND SOLUTIONS

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ABSTRACT

Introduction: Female adolescents are a group that is prone to anemia due to puberty, experiencing menstruation, and an inappropriate diet. Community service activities aim to increase the understanding of young women about anemia to be able to make prevention efforts.

Methods: Community services are carried out through webinars with a zoom platform. Activities include lectures, and interactive discussions, interspersed with fun games. A total of 52 teenagers participated in the activity until the end. The media used during the action was in the form of presentation slides. Evaluation is done by asking open-ended questions and the opportunity to provide feedback to the participants.

Results: Teenagers enthusiastically participated in the webinar on anemia discussion according to the information conveyed openly during the implementation and evaluation of activities. Female adolescents can mention the meaning, causes, signs and symptoms, and efforts to overcome anemia. Teenagers are interested in consuming COO-BIT!, which is introduced.

Conclusion: The teenagers understand anemia prevention and are committed to paying attention to healthy nutritional intake after participating in the discussion terrace. Teenagers are motivated to take care of their health.

KEYWORDS

adolescent; anemia; behavior; gender equality; prevention

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1. INTRODUCTION

Anemia is a condition in which the number of red blood cells and hemoglobin levels are low, so the hematocrit or blood viscosity becomes watery (Bachrudin & Najib, 2016). The leading cause of anemia is an iron deficiency of 50-80% (Milman, 2011). One of the groups that are prone to iron deficiency anemia is young women (Proverawati, 2011). Anemia is due to several factors, such as poor nutritional status, irregular menstrual patterns, high activity, and low parental income (Srinigrat,

Yuliyatni, & Ani, 2019). In general, the prevalence of anemia globally reaches 40-88% of the total population (WHO, 2013). As much as 30% of the incidence of iron deficiency anemia occurs in developing countries (Ozdemir, 2015). In Indonesia, anemia reaches 23.7%, with the prevalence of incidence in adolescent girls aged 15-24 years at 32% (Ministry of Health, 2019).

For young women, anemia can increase because every month, they experience menstruation, which causes an increase in iron expenditure (Istiany &

Rusilanti, 2013). In addition, the desire to have a slim body makes young women tend to apply food restrictions that cause nutritional deficiencies, one of which is iron deficiency (Adriani & Wirjatmadi, 2012). Perceptions of barriers also cause a high rate of anemia in adolescent girls. They feel that consuming iron tablets does not provide benefits, they are unattractive forms of iron tablets and tablets, and peers who do not take them dislike their taste (Aprianti, Sari, & Kusumaningrum, 2007). 2018).

Another study also stated that the better the support provided by the family, the better the prevention of anemia in adolescent girls (Puspah, 2018). In addition, there is a relationship between attitudes and the incidence of anemia because if the knowledge about anemia is good, an excellent preventive attitude will be realized (Caturiyantiningtiyas, 2015). Some long-term and short-term effects of anemia include decreasing body resistance, difficulty concentrating, and increasing the risk of premature birth, bleeding, and maternal death (Briawan, 2013). In the province of East Java, the number of teenage girls aged 10-19 years who had received blood supplement tablets was 29.7%. However, success in consuming blood-added pills, especially for young women, is still far from expectations due to perceived obstacles. The perception that the drug is only taken during menstruation (3.9%), forgetting (18.4%), bad taste and smell (30.1%), fear of side effects (11.2%), feeling unnecessary (20.9%), and others (13.7%) (Ministry of Health, 2019). The research found that behavior that does not support young women in preventing anemia during menstruation is caused by a lack of knowledge about anemia (Mularsih, 2017).

Implementing anemia prevention behavior early on is very important, especially for young women to prepare themselves well to face reproductive tasks, namely pregnancy and childbirth. Based on these considerations, the whole community, especially young women at high risk of experiencing anemia, is

expected to understand its causes, types, and symptoms so that the desire to prevent and treat anemia grows. Community service activities aimed to increase awareness of young women about the risk of anemia so that they are motivated to avoid and treat anemia.

2. MATERIAL AND METHODS

This community service activity is conducted online through webinars, involving students in project-based learning for Maternity Nursing Courses. The target group for community service activities carried out by female adolescents is prone to anemia due to lifestyle, incredibly inadequate nutritional intake, and blood that comes out during menstruation.

Regular students attend community service activities integrated with project-based learning in maternity nursing. The activity was carried out online through the zoom platform in connection with restrictions on social activities due to the Covid-19 Pandemic. Zoominar followed by 52 young women. The activities were held on Sunday, April 2, 2022, from 08.30 to 11.30 WIB (180 minutes).

Before the Implementation Takes place Prior to the Implementation of the activity, we carried out several planning steps to make this project successful. Meeting to determine the topic of activity. Coordination with Advisory Lecturers, Preparation of Activity Promotion Media, Webinar Media Preparation, Coordinate between Resource Persons, Moderators, and MCs through Zoom Meetings (Figure 1).

Implementing community service activities is by brainstorming (brainstorming), lectures, and interactive discussions. This method is possible through the zoom application, combined with an interactive ice-breaking game online to increase the participants' enthusiasm. The young women who participated in the activity were allowed to provide feedback and ask questions directly or via chat and zoom after each material was presented. Materials

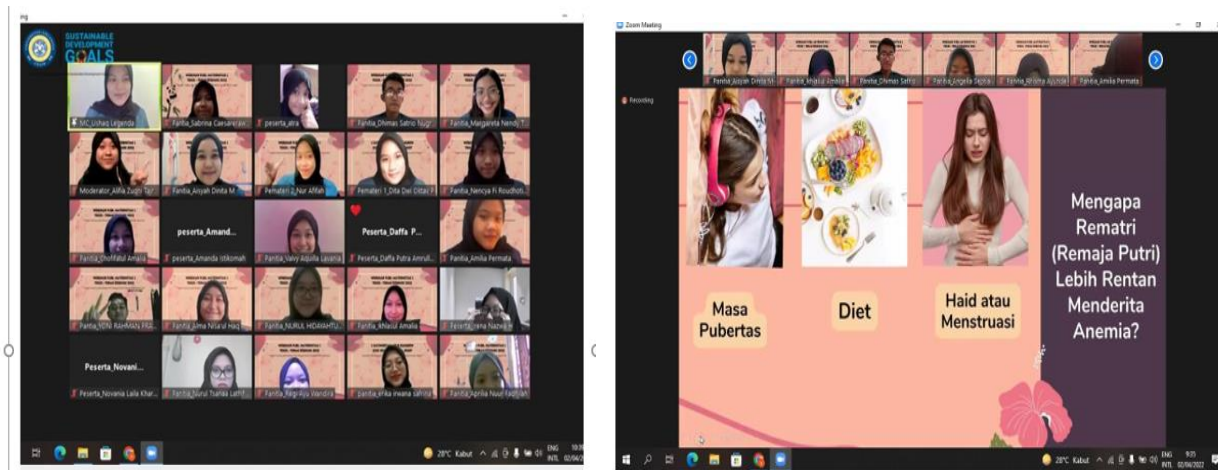


Figure 1. Documentation of Webinar Activities with a Discussion of Anemia

discussed in community service include the definition of anemia, types of anemia, causes, and symptoms of anemia due to anemia, prevention of anemia in female adolescents, and the introduction of COO-BIT! Products.

After the Implementation Takes place, This stage is also called the step of preparing reports on activities and evaluating activities that have taken place. The evaluation was carried out after the discussion session ended. Evaluation of activities is carried out by asking questions to participants and providing feedback on activities because there is no pre-post test on community service participants. The committee also facilitates participants in the WA group to coordinate community service activities.

Presentation slides are used for delivering material, and after participating in the activity, each participant gets a file that was discussed during the activity. The hope is that young women who participate can pass on the information obtained during the webinar to their peers around their environment.

3. RESULTS

Based on table 1, all community service participants are female. This includes late adolescents and early adults. Most (77%) were aged > 20 years. The educational level of the participants was mostly high school, although some were at a higher education

level. All participants had experienced menstruation. Some had taken blood-boosting vitamins, but more (67%) did not consume them.

Two presenters were presented on (1) Fun Learning to Prevent Anemia in Young Women by Optimizing Nutrition. It covers the definition of anemia, its causes, symptoms, signs of anemia, consequences of anemia, and how to prevent and treat anemia. The information conveyed adds to the insight of young women about the risks of anemia that may be experienced and encourages them to make countermeasures.

Next presented about (2) Say Bye to Anemia with COO-BIT! COO-BIT food products! are creations made from Bit fruit. Co-BIT is made based on literature studies. The essential ingredients can help prevent various health problems, one of which is anemia. Bit fruit is rich in iron which can reactivate and regenerate red blood cells and supply oxygen which is useful for the health of red blood cells (Figure 2).

4. DISCUSSION

Adolescent girls are one of the groups prone to anemia because they are menstruating. When young women have their first menstruation, they need more iron to replace the blood loss due to menstruation and can be at risk of developing iron deficiency anemia. Presentation slides are used for delivering material, and after participating in the activity, each participant

Table 1. Demographic Data of Community Service Participants (N = 52)

Characteristics	Category	f	%
Sex	Female	52	100
Age (years)	<20	12	23
	≥ 20	40	77
Education level	Senior High School	20	38
	Higher education	32	62
Menstruation	Already	52	100
Take blood-boosting vitamins	Yes	17	33
	No	35	67



Figure 2. COO-BIT! Innovation Product to Treat Anemia

gets a file that was discussed during the activity. The hope is that young women who participate can pass on the information obtained during the webinar to their peers around their environment.

The behavior manifested by these young women can be influenced by several factors, namely, age, health information received, knowledge, and parents' income, which impacts interest in maintaining health, especially in preventing anemia (Puspitasari, Armini, Pradanie, & Triharini, 2022). Behavior is also influenced by habits that repeatedly form permanent behavior (Rahmawati, Yunitasari, Armini, Padoli, & Suharyono, 2021). On the other hand, a person will display adaptive behavior if he knows the benefits, has social pressure or encouragement, and has sufficient support from both internal and external. Conducted by (Puspah, 2018) states that the better the support provided, the better the prevention of anemia in adolescent girls. Research conducted by Triyanto, Setiyani, and Wulansari (2014) states that

the family is the primary source of support for adolescents to be able to behave adaptively.

In addition, the emergence of opportunities for adaptive behavior is higher when adequate health facilities are available. Suppose the individual realizes that the perceived ease of accessing health services is higher than the barriers. In that case, it will form a positive perception of being able and taking advantage of the available facilities to realize healthy behavior. (Hadisuyatmana, Armini, & Diana, 2019). In line with research (Lestari, 2018), having good health facilities will improve the prevention of anemia in young women.

Bad dietary habits and unhealthy food (*junk food*) should be avoided (Jalambo, Karim, Naser, & Sharif, 2018). Young women must also meet the necessary nutrients, not only macro but also micro (Armini, Dwi, Linga, & Dewi, 2021). In addition, young women who get iron tablets from school or have iron supplies at home tend to consume iron tablets regularly (Noviazahra, 2017). Habits directly or indirectly will

foster intentions and shape anemia prevention behavior (Triharini & Armini, 2019).

Practical food products that are easy to consume are also an alternative for improving adolescent Nutrition. COO-BIT! Use ingredients mainly from fruit beets. One benefit of fruit bit is resolving anemia because it contains folate, which occurs in red blood formation. Therefore, beetroot is a natural medicine that is powerful for anemia and strengthens the power of the stand body so fluently. Product COO-BIT! Contain ingredient experience in the form of fruit bit and resolve anemia in adolescent girls. Therefore, this product is safe for young women.

5. CONCLUSION

Young women enthusiastically participated in the webinar on the prevention of anemia. Knowledge gained about anemia and prevention efforts increases motivation to pay attention to healthy nutritional intake. It is necessary to advance the understanding of anemia prevention behavior among young women and their families as the primary source of support for adolescents in adaptive behavior. In addition, the government is expected to actively promote the prevention of anemia and distribute the provision of iron tablets periodically to young women.

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