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Implementation of Blood-Boosting Tablet Distribution for Adolescent Girls as an Effort to Prevent Anemia

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ABSTRACT

Anemia is one of the health problems worldwide, especially in developing countries, where an estimated 30% of the world's population suffers from it. The aim of this research activity is to understand the implementation of blood-boosting tablet distribution. The method used is qualitative, involving the USG stage to determine problem priorities, followed by SWOT analysis. The sample for this research report consists of high school female students. The next stage involves conducting counseling sessions according to the identified problem priorities. The activity took place at the Hulu Tembilahan Community Health Center in the Indragiri Hilir District from November 4th to December 18th, 2023. Through a well-organized series of stages, from preparation to conclusion, this activity successfully created a positive dialogue space between organizers and participants. The results indicated suboptimal implementation of distributing blood-boosting tablets for adolescent girls at the Hulu Tembilahan Community Health Center in the Indragiri Hilir District and identified problem priorities. The Plan of Action involves Health Education by healthcare professionals as an effort to increase the launch/commitment to anemia-free initiatives in the preventive implementation of anemia among adolescent girls.

Keywords: Counseling, TTD, Young Women

1. INTRODUCTION

Anemia is one of the health problems worldwide, especially in developing countries, where an estimated 30% of the world's population suffers from anemia. Anemia is prevalent in the community, especially among adolescents and pregnant women. Anemia in adolescent girls is still quite high, according to the World Health Organization, with a global anemia prevalence ranging from 40-88% (World Health Organization, 2018). According to the 2013 Basic Health Research (Riskesdas) data, the prevalence of anemia in Indonesia was 21.7% and increased to 32% in 2018 (Kemenkes, 2018). The number of adolescents (10-19 years old) in Indonesia is 26.2%, consisting of 50.9% male and 49.1% female (Kemenkes RI, 2013).

The results of the 2018 Riskesdas recorded that 26.8% of children aged 5-14 years and 32% of those aged 15-24 years suffer from anemia (Riskesdas, 2018). It is undeniable that anemia increases every year, including in Riau Province. Based on the 2018 Riskesdas report, the prevalence of anemia in Riau Province was 25.1%, with 19.4% of them aged 15-24 years. Anemia is one of the health problems in Indonesia that is quite difficult to overcome. Local concepts about anemia have an influence on public health where these concepts are related to a person's behavior which in turn affects their health status (Basith et al., 2017).

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The program of providing iron supplementation or Blood-Boosting Tablets (TTD) to adolescent girls is expected to contribute to breaking the intergenerational malnutrition cycle (World Health Organization, 2015). Based on research by Humayrah & Putri (2023), adolescent girls are at risk of experiencing growth and development delays, cognitive abilities, and vulnerability to infectious diseases. This is due to insufficient iron intake, inadequate absorption, chronic blood loss, and increased iron requirements for red blood cell formation. According to the 2023 national target, the coverage of blood-boosting tablets should be at least 58% of adolescent girls consuming them. The 2023 Health Information data shows that the percentage of adolescent girls receiving blood-boosting tablets in Riau Province in 2022 was 5.4%, which is far from the national target. Data from the Indragiri Hilir District Health Office in 2023 on the distribution of Blood-Boosting Tablets was 9.2%, and the percentage achievement of distributing blood-boosting tablets to adolescent girls at the Hulu Tembilahan Community Health Center has not reached 100% in 2021 at 91%, in 2022 at 89%, and in 2023 as of November at 68%. If not properly distributed, the prevention of anemia in adolescent girls will be hampered, and if not addressed immediately, it will impact adolescent girls with anemia not being treated and will continue into adulthood, contributing greatly to maternal mortality, preterm birth, and low birth weight babies.

The results of initial interviews with the person in charge of the Nutrition Program in the Community Health Efforts Division revealed that the distribution of Blood-Boosting Tablets for adolescent girls was not optimal due to the lack of coordination with schools and officers involved in health promotion efforts and the distribution of blood-boosting tablets in schools. Given the importance of the blood-boosting tablet program for adolescent girls to prevent anemia and the inconsistency in the implementation of blood-boosting tablet distribution with the 2015 Ministry of Health guidelines, which is once a week, the purpose of this study is to change the behavior of adolescent girls in the working area of the Tembilahan Hulu Community Health Center in efforts to prevent anemia through peer counselors by identifying problems, prioritizing problems, determining alternative solutions, and making an Intervention Plan (Plan of Action) in accordance with alternative solutions related to the distribution and commitment to consume blood-boosting tablets by adolescent girls at the Tembilahan Hulu Community Health Center, Indragiri Hilir District.

2. RESEARCH METHOD

The method used is qualitative with the USG stage to determine problem priorities. The next stage is conducting interventions according to the identified problem priorities. This residency report was carried out from November 2 to November 29, 2023. The sampling technique used to determine informants was purposive sampling. Data collection was carried out through in-depth interviews, document review, and direct field observations. In-depth interviews were conducted using interview guides for all informants. The informants in this study were the head of the community health center, the person in charge of nutrition, health promotion staff, and school health unit teachers. Determining problem priorities was done qualitatively using the Urgency Seriousness Growth (USG) method. USG is one of the tools used to arrange the priority order of problems that need to be solved. This is done by determining the level of urgency, seriousness, and development of the problem by assigning a scale value of 1-5 or 1-10. The problem with the highest total score is the priority problem. After prioritizing the problem using the weighting method by considering the aspects of Urgency (U), Seriousness (S), and Growth (G) or the USG method, alternative solutions to the problem are then elaborated, including making a Plan of Action (POA) related to solving the problem.

3. RESULTS AND DISCUSSION

3.1. Problem Identification

Based on the results of interviews, observations, and document reviews that have been conducted, the authors found several problems that occurred in the management of the implementation of health promotion, community empowerment, family health, and nutrition, with the main informant stating:

"…The current TTD activity is the important thing, we just run it even though coordination is a bit lacking, at most it is evaluated during Lokmin. Besides that, the problem is the commitment of the adolescents themselves not to take Fe tablets"

The statement from the main informant was reinforced by a statement made by the key informant:

"...If the Monev about the program is delivered at Lokmin, yesterday the results of the Monev were how to increase the commitment of adolescents to consume Fe tablets as recommended",

and also clarified by the supporting informant:

"...The blood-boosting tablet distribution program is already running, but if I think the evaluation from us is indeed cross-sector coordination for preventive efforts for anemia in adolescent girls is not optimal, especially since the BOK budget is limited, and the main problem is the commitment of adolescents to take Fe tablets."

This causes adolescent girls to be less concerned about the importance of preventing anemia, resulting in high cases of anemia at the school level. Based on the results of interviews with the main informant, it was stated that the obstacles in the program were:

"...The children's commitment and changing media might increase knowledge so that they are more aware, coverage too, the importance of Fe tablets in preventing anemia".

The statement from the main informant was reinforced by a statement made by the supporting informant:

"...The main obstacle is the commitment from the children to consume and the media, if the leaflets are monotonous".

Problem identification is carried out by making a list of problems grouped according to the type of effort, target, achievement, and problems encountered:

a. Cross-sector coordination at the Tembilahan Hulu Community Health Center for anemia prevention in adolescent girls is not optimal.
b. Recording and reporting of the coverage of Blood-Boosting Tablet consumption for adolescent girls for anemia prevention is not optimal.
c. The launch/commitment of adolescent girls to be anemia-free in the preventive implementation of anemia in adolescent girls in the working area of the Tembilahan Hulu Community Health Center is not optimal.

There has been no survey regarding the appropriate media by the health promotion officers of the Tembilahan Hulu Community Health Center about anemia prevention activities in adolescent girls.

3.2. Problem Priority

Establishing problem priorities becomes an important part of the problem-solving process due to two reasons. First, because of the limited available resources, and therefore it is not possible to solve all problems. Second, because of the relationship between one problem and another, and therefore not all problems need to be solved. There are several techniques or methods that can be used to determine problem priorities using both quantitative and qualitative methods. To determine problem priorities, the USG method is used. Urgency, Seriousness, Growth (USG) is one of the tools used to arrange the priority order of issues that need to be resolved.

This is done by determining the level of urgency, seriousness, and development of the issue by assigning a scale value of 1-5 or 1-10. The issue with the highest total score is the priority issue. The use of the USG method in determining problem priorities is carried out if the planning party is ready to deal with existing problems, and the aspects that are highly prioritized are those in the community and aspects of the problem itself. The parties involved in determining problem priorities using the USG method include the Person in Charge of Nutrition, Health Promotion, Head of the Community Health Center, and Students**.**

Table 1. Problem Priorities

Problem	*Urgency* (U),	Seriousness (S)	Growth (G)	Total	Ranking

Cross-sector coordination at the Tembilahan Hulu Community Health Center for anemia prevention in adolescent girls is not optimal	3	4	3	3	4	3	3	4	3	30	4
Recording and reporting of the coverage of Blood-Boosting Tablet consumption for adolescent girls for anemia prevention is not optimal	4	3	3	3	5	3	4	4	4	33	2
The launch/commitment of adolescent girls to be anemia-free in the preventive implementation of anemia in adolescent girls in the working area of the Tembilahan Hulu Community Health Center is not optimal	5	4	4	4	5	5	3	4	5	39	1
There has been no survey regarding the appropriate media by the health promotion officers of the Tembilahan Hulu Community Health Center about anemia prevention activities in adolescent girls	4	3	3	4	4	3	4	4	3	32	3

Description: based on a Likert scale of 1-5
5=very big
4=big
3=medium
2=small
1=very small

Based on the table above, it can be seen that using the USG analysis, the highest priority problem is "The launch/commitment of adolescent girls to be anemia-free in the preventive implementation of anemia in adolescent girls in the working area of the Tembilahan Hulu Community Health Center is not optimal". Furthermore, alternative solutions to the problem from the established problem priority will be elaborated. Before determining alternative solutions, Figure 1 is first made which describes the causes of the problem as follows:

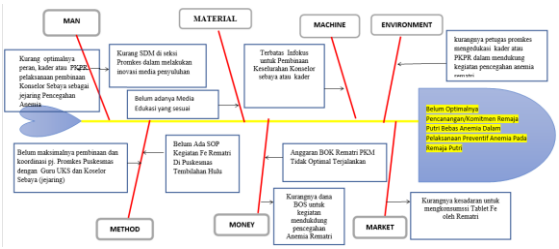

Figure 1. Fishbone Analysis

From the results of problem identification that have been carried out and then the problem priorities are determined and alternative solutions are made, it is then followed by making an intervention plan (Plan of Action) in the form of an intervention plan matrix.

3.3. Man

The Head of the Community Health Center coordinates with the person in charge of nutrition and Health Promotion staff to carry out the implementation of Peer Counselor (Cadre) development as a network accompanied by an evaluation of these activities with the aim of forming peer counselors in schools to motivate and commit adolescent girls to consume blood-boosting tablets on time, where the indicator of success is an increase in commitment and plans for adolescent girls in preventing anemia.

These peer counselors are very potential because of the tendency for adolescents to choose peers as a place for discussion and reference for information. Besides that, by optimizing the role of peers as role models as well as providing counseling for adolescents related to anemia prevention, this counseling is expected to be more trusted, so that adolescents are more open to convey every problem in their health (Riyanti & Legawati, 2018). This is also evidenced by the results of research showing that sufficient peer support has sufficient efforts to prevent anemia. Respondents with less peer support also had sufficient efforts to prevent anemia, and it was proven that peer support had a significant relationship with efforts to prevent anemia (Muthia Adila et al., 2023).

3.4. Method

Nutrition officers, assisted by the person in charge of the health promotion program, make efforts to prevent anemia using the Focus Group Discussion (FGD) method to improve the guidance and coordination of the person in charge of the community health center's health promotion with School Health Unit teachers and Peer Counselors (networks) with the indicator of success expected to increase agreements or plans related to the blood-boosting tablet distribution program in schools. In addition, the main method in this activity is the counseling method, which is the Socratic method (two-way method), where this method uses two-way communication between students and health workers who provide counseling.

This counseling method is expected to enable students to receive the material well and the education carried out can be applied in the environment. Health education about anemia prevention education in schools by increasing commitment and peer support can provide the necessary information so that students can determine better attitudes and future plans (Arifah et al., 2022).

3.5. Material

Nutrition officers, assisted by the person in charge of the health promotion program, create educational media in the form of leaflets and educational videos that can be distributed in the working area of the Community Health Center or on the social media of the Tembilahan Hulu Community Health Center regarding anemia prevention through the consumption of blood-boosting tablets, so that educational media materials are available, so that each community and especially female students in schools can easily access and learn the material.

Providing education is one way to increase knowledge about anemia. Education for school-age groups using conventional media is considered less successful because with the rapid development of internet technology in recent years, it has had its own impact on conventional media (print media) (Az-zahra & Kurniasari, 2022).

Creating education with videos as a medium is reinforced with captions and hashtags, users

communicate their identity in cyberspace, and each video is a representation of what they want to convey to the audience. The use of social media as an information medium to seek health knowledge related to anemia prevention by followers results in a cognitive (information), affective (emotional), and behavioral response in accessing, viewing, and searching for these posts (Fadhilah et al., 2022). There are two media effects that result in a behavioral response, namely aggressive behavior (bad or even destructive activities) and prosocial behavior (positive activities). This response is interpreted as a result or consequence of someone receiving a stimulus (Rusdi et al., 2020).

3.6. Market

Lack of awareness to consume Fe tablets, Fe tablet consumption is effective for nutritional improvement, if taken according to the instructions for use. The rules for using Fe tablets are to take one blood-boosting tablet (TTD) once a week or as needed or it is recommended to take one tablet during menstruation. The benefits of Fe tablets are as a substitute for iron lost with blood during menstruation in women, in pregnant and breastfeeding women, so their iron needs are very high which need to be prepared as early as possible since adolescence. Adolescent girls who suffer from anemia will affect learning ability, work ability, quality of human resources and future generations, and improve the nutritional status and health of adolescent girls and women (Riyanti & Legawati, 2018). Especially during menstruation, adolescent girls are recommended to consume Fe tablets. Normal menstruation experienced by adolescent girls lasts between 2-7 days each month and can also increase the incidence of anemia. This is because the volume of menstrual blood that comes out reaches an average of 33-50 ml or about 7 to 10 teaspoons/day. During that menstrual period, women lose 30 mg of iron. The amount of blood lost will cause menstruating women to experience weakness, lethargy, and dizziness, which are signs of iron deficiency anemia. This can be exacerbated if the menstrual cycle is prolonged due to the large volume of blood that comes out (Khobibah et al., 2021). The impact of Hb levels < 12 g/dL can reduce work productivity and also reduce academic ability in school. Meanwhile, the long-term impact of Hb levels < 12 g/dL sufferers will be during pregnancy, adolescent girls are not able to meet the nutritional needs for themselves and their fetuses, which can increase the risk of maternal mortality, prematurity, low birth weight, and perinatal death and stunting (Ningsih, 2020).

3.7. Machine

Limited infocus for overall peer counselor development. The program holder proposes completeness related to the media used to the Health Office or independent budgeting through JKN funds, in order to achieve promotive and preventive activities. The implementation of Blood-Boosting Tablet (TTD) distribution and counseling activities will greatly support if there are innovative media used. Awareness of Fe tablet consumption cannot be separated from information and knowledge, this is because knowledge is a factor that influences a person's consumption behavior. Factors that influence nutritional problems in adolescents include knowledge. Low knowledge about consumption is closely related to consumption and awareness in fulfilling individual nutritional needs (Dwistika et al., 2023). Based on the results of community service conducted by Nia Musniati et al., 2022, in this anemia prevention education activity, there was an increase in knowledge that could occur, one of which was due to the use of various media. This anemia prevention education activity used the lecture method using power point media, videos, and leaflets. With increased knowledge about anemia prevention, it is hoped that female students can apply anemia prevention behaviors

in their daily lives, such as consuming one blood-boosting tablet per week and one tablet every day during menstruation (Musniati & Fitria, 2022).

3.8. Money

The Head of the Community Health Center seeks other sources of funds from health funds and School Operational Assistance (BOS) funds so that the distribution of blood-boosting tablets and anemia prevention education efforts can run optimally. The Head of the Community Health Center can coordinate with the Principal and teachers in the form of BOK (Health Operational Assistance) funds managed by the Community Health Center and used for training activities, especially the provision of infocus. Operational costs are also needed to support the implementation of other health programs in schools so that program implementers can organize and utilize health services whose aim is to maintain and improve adolescent health, especially anemia prevention (S et al., 2023). In addition, to support anemia prevention activities through the distribution of blood-boosting tablets, schools can also provide a healthy canteen by providing food consumption that plays a role in the process of hemoglobin formation, namely foods high in iron, folic acid, vitamin B12 protein, and vitamin C which functions to help iron absorption (Kebidanan & Palu, 2022).

3.9. Environment

Nutrition officers and health promotion staff conduct counseling activities in each school with the aim that school children know the proper procedures and practices in preventing anemia so that there are no more environments that have the habit of not consuming blood-boosting tablets, especially for adolescents. The indicator of the success of this activity is that all schools in the Tembilahan Hulu Community Health Center area are implemented in the practice of anemia prevention through the distribution of blood-boosting tablets. These results are in accordance with the results of research related to anemia prevention practices. Sources of information obtained from peers and families can improve good practices or behaviors towards anemia prevention in adolescent girls. Information about anemia prevention delivered in an attractive form in accordance with the lifestyle of today's adolescents and delivered through media favored by adolescents will be very attached to the minds of these adolescents and can have a big influence on changes in their behavior. Likewise, when information about anemia prevention is conveyed by people trusted by adolescents to have abilities in their fields such as health workers, these adolescents will make the information important knowledge that they want to apply in the daily lives of female students. In addition, health workers and teachers must work together to realize anemia prevention (Marfiah et al., 2023).

4. CONCLUSION

Identification of problems found at the Tembilahan Hulu Community Health Center in the implementation of blood-boosting tablet distribution. Based on the results of weighting using the USG method, the priority problem obtained is "The launch/commitment of adolescent girls to be anemia-free in the preventive implementation of anemia in adolescent girls in the working area of the Tembilahan Hulu Community Health Center is not optimal". After obtaining the problem priority, a Fishbone analysis was carried out and then alternative solutions were sought that were adjusted to the elements of the causes of the problem, namely man, method, material, market, machine, money, and environment.

5. RECOMMENDATION

It is recommended to optimize efforts regarding innovation and collaboration in the utilization of health promotion media at the Tembilahan Hulu Community Health Center to

succeed and increase understanding in order to change the behavior of adolescent girls.

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