

ANALYSIS OF THE EVALUATION OF THE IMPLEMENTATION OF THE BLOOD SUPPLYING TABLET PROGRAM (TTD) FOR ADOLESCENT FEMALES AS AN EFFORT TO PREVENT ANEMIA AT SMKN 2 KERINCI DISTRICT

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ABSTRACT

One of the Ministry of Health's activities to overcome iron deficiency in adolescent girls is implementing a program to provide iron tablets to teenage girls with a target of 52%. This study aims to analyze the evaluation of the program for the implementation of the Blood Supplement Tablet (TTD) Programme for adolescent girls as an attempt to prevent anemia at SMKN 2. This research is a descriptive survey research. The sampling technique is purposive sampling. The study's findings by using qualitative data were processed using the content analysis method including input, process, and output. Discrepancies are occurring in the input aspects of facilities and infrastructure. In the process aspect, nonconformities appeared in the distribution, monitoring, recording, and reporting aspects. In the output aspect, mismatches occurred in the target accuracy, timing, and distribution. In this research, there are still discrepancies in input, process, and output aspects in implementing the TTD program in the working area of the Kerinci District Health Service.

Keywords: anemia, program evaluation, adolescent girls

INTRODUCTION

Iron deficiency is the most widely recognized health problem in the world. Data from the World Health Organization/WHO (2013) shows that the prevalence of anemia is 40-88%. Anemia is a condition of decreased hemoglobin (a red-colored compound that helps oxygen through the bloodstream) resulting in blood volume below the normal level determined by age and sexual orientations indicated by WHO anemia occurs when hemoglobin (Hb) is below 12 grams Hb/dl of blood for women. Iron deficiency often occurs in adolescent girls. This is because they frequently experience stress during the female cycle and skip dinner (Kaimudin et al., 2017). WHO's recommendation at the 65th World Wellbeing Get Together (WHA) sets out a worldwide action plan and focus for maternal, infant, and child nutrition, intending to significantly reduce (50%) the dominance of anemia in women of childbearing age by 2025. Again, with this proposal, the Indonesian government has completed the escalation of anemia prevention and control in adolescent girls and Women of Childbearing Age (WUS) by emphasizing the arrangement of iron tablets through schools.

The activity of consuming Fe tablets routinely in adolescent girls is an implementation of the Regulation of the Minister of Health (Permenkes) No. 88 of 2014 which contains the Standard of Fe tablets for women of childbearing age and pregnant women. In addition to the Permenkes, there is a circular from the Director General of Public Health, Ministry of Health of the Republic of Indonesia No. HK.03.03/V/0595/2016 contains the distribution of Fe tablets to adolescent girls and women of childbearing age (Ministry of Health of the Republic of Indonesia, Research and Development Agency, 2018).

One of the activities of the Ministry of Health to overcome iron deficiency in adolescent girls is to implement a program to provide iron tablets to teenage girls with a target of 52% in 2021. This program aims to improve the nutritional status of adolescent girls so they can break one of the chains of causes of stunting, prevent iron deficiency, and increase iron reserves in the body (Ministry of Health of the Republic of Indonesia, 2016).

In Indonesia, most anemia occurs due to iron deficiency due to the absence of food intake of iron sources, especially animal food sources (heme iron). Although iron (nonheme iron) is found in many plant foods, the amount of iron that digestive organs can absorb is significantly lower than in animal foods. Indonesian people are more dominant in iron sources from plants. The side effects of the Food Utilization Review show that 97.7% of the Indonesian population consumes rice (in 100 grams of rice there is only 1.8 mg of iron). As a result, Indonesians are often at risk of developing iron nutritional anemia (Ministry of Health of the Republic of Indonesia, 2016).

Even if the government has provided Iron Supplement Tablets (TTD) as a preventive measure for anemia in adolescent girls, only about 1.4% of them routinely consume TTD according to recommendations (Taufiq et al., 2020). According to Mandagi (2022), iron supplements for adolescent girls are useful for replacing iron lost due to menstruation and to meet iron needs that have not been met from food. Iron for teenage girls is also useful for increasing concentration in learning, maintaining fitness, and preventing anemia in future mothers.

Based on the results of Riskesdas (2018), the proportion of adolescent girls aged 10-19 years who received Iron Supplement Tablets (TTD) in Indonesia was 76.2% and the prevalence of anemia in Indonesia was 23.7% with the proportion of anemia in women being 27.2%. The proportion of anemia in urban areas was 22.7% and in rural areas was 25%. The proportion of anemia in adolescents aged 15 to 24 was 32%. Adolescent girls often experience anemia due to several factors such as stress, menstruation, and also eating late. Seeing the consequences that occur among adolescents because anemia is very troublesome in the future, it is necessary to enhance the prevention and handling of disease problems must be improved.

In Jambi Province, based on data from the Jambi Provincial Health Office in 2019, the percentage of adolescent girls who have received Fe tablets is 96%. Fe tablets have been made available in 19 Jambi City health center work zones. The target number of adolescent girls who were given Fe tablets was 32,262. The provision of Fe tablets is expected to improve health and reduce the incidence of anemia.

At the initial interview with the nutritionist, Fe tablets were given to the adolescent girls after the nutritionist provided counseling on anemia and the importance of taking iron tablets but compliance with taking iron tablets was low. According to the interview, six out of ten teenage girls did not take the iron tablets that were supplied to them because they felt queasy and disliked the way they smelled, and some of them were prohibited from taking the tablets by their parents.

Based on these problems, I would like to investigate the analysis of the evaluation of the implementation of the Blood Supplement Tablet (TTD) Programme for adolescent girls as an effort to prevent anemia at SMKN 2 Kerinci Regency.

LITERATURE REVIEW

Definition of Anemia

Anemia is a condition of the body where the frequency of hemoglobin (Hb) in the blood is lower than the standard level (WHO, 2020). Hemoglobin is a part of platelets/erythrocytes that bind the oxygen and distribute it to all cells of the body's tissues. The oxygens are needed to play their capacity. The absence of oxygen in the mind and muscle tissue will cause indications, lack of focus, and lack of readiness to exercise. Hemoglobin is formed from a mixture of protein and iron and the structure of platelets/erythrocytes. Anemia is a side effect that must be sought for the cause and how to overcome it is based on the cause (Ministry of Health, 2016).

Signs of Anemia

As indicated by (Ministry of Health, 2016), indications of anemia in adolescent girls are:

1. Symptoms that are often encountered in anemia sufferers are 5 L (Lethargic, Tired, Weak, Exhausted, Inattentive)

2. Headache and dizziness ("spinning head")
3. Blurry vision, drowsiness, fatigue, and difficulty concentrating.
4. Clinically, anemia sufferers are characterized by "paleness" on the face, eyelids, lips, skin, nails, and palms.

Prevention of Anemia in Adolescent Girls

According to (Almatsier et al., 2016), ways to prevent and treat anemia are:

1. Increased utilization of nutritious foods.
 - a. Eat food sources that contain a lot of iron from natural ingredients such as animal foods (meat, fish, chicken, liver and eggs) and other plant foods (dark green vegetables, nuts, tempeh).
 - b. Eating natural vegetables and fruits that contain a lot of vitamin C (katuk leaves, cassava leaves, spinach, guava, tomatoes, oranges and pineapple) is very helpful in increasing iron consumption in the digestive system.
2. Increase iron consumption in the body by taking Iron Supplement Tablets (TTD).
Iron supplements are iron tablets, each containing 200 mg of ferrous sulfate or 60 mg of essential iron and 0.25 mg of folic acid. Women and young women need to consume iron tablets because women experience monthly cycles and therefore need iron to replace the blood that comes out. Iron tablets can treat anemia, increase learning capacity, work capacity and the nature of human resources and the future (Almatsier et al., 2016). The recommendation to take is to take one iron tablet once a week and it is recommended to take one tablet consistently during the menstrual period. Take iron tablets with water, do not drink with tea, milk or espresso because it can reduce the absorption of iron in the body so that its benefits are reduced (Almatsier et al., 2016).
3. Treating all diseases that may cause or worsen anemia such as: malaria, worms, and tuberculosis.

Definition of Evaluation

According to the World Health Organization (WHO), evaluation or assessment is a systematic way to improve ongoing activities and improve planning by carefully selecting alternative future actions. In this sense, it involves a critical analysis of various aspects from the development and implementation of a program and the activities that make up the program, the relevance, formulation, efficiency, and effectiveness, and its acceptance by all parties. Meanwhile, according to Arikunto (2018), evaluation is a process of determining the outcome of several activities planned to support the achievement of goals.

Types of Program/Activity Evaluation

The types of evaluations that are separated based on their objectives and implementation time are divided into three types (Ministry of Health, 2016), namely as follows:

1. Input evaluation
In general, input indicators are National Policies and Programs, strong commitment at all levels, and available resources (man, money, material). Input indicators include relevant regulations, fund allocation, health workers in educational facilities/schools, industries/companies, and primary and secondary health facilities.
2. Process evaluation
Process indicators include advocacy and socialization, effective networking and optimal communication, program management, increasing the capacity of officers, increasing target group activities, integration in surveillance, research, and development in anemia prevention and control programs for remarried women and women of childbearing age.
3. Output evaluation
Output indicators consist of the coverage of anemia programs in re-matri and WUS and compliance of re-matri and WUS who consume TTD. Health indicators (systemically) include input, process, output, effects, and impacts, at the planning, implementation, and evaluation stages of a health effort. Health indicators can be: (1) Indicators of Health Problems, for example, Status of morbidity and mortality, Nutritional status, Environmental health status, Health

behavior, and culture status, (2) Indicators of the state of health resources, for example, Health workers, Health facilities, Health funding, (3) Indicators of environmental health, for example, Availability of clean water, Availability of decent housing, and others, (4) State of Health Policy, for example Laws and regulations, Health politics (Kurniati, 2016)

METHODS

This study is a descriptive survey to determine the analysis of the evaluation of the implementation of the Blood Supplement Tablet (TTD) Programme for adolescent girls as an effort to prevent anemia at SMKN 2 Kerinci Regency. The sampling technique was purposive sampling. Data collection used in-depth interview guidelines. The study was conducted at SMKN 2 Kerinci Regency. Data analysis was carried out from the beginning of the study and during the research process. Data were obtained and then collected to be processed systematically. Starting from interviews, observations, editing, classifying, and reducing. The data presentation used the discussion matrix format and qualitative format with narrative text and direct quotes, and the final stage was to conclude the data.

RESULTS

Description Input

a. Source Power Man

Human resources are one of the supporting aspects of success in a program. In the program of providing additional tablets of blood, resources man Which involved consist of:

- 1) In process preparation :
 - a) Needs planning (Health Service Nutrition Programmer)Regency/City)
 - b) Provision tablet plus blood (Installation Pharmacy Service Health Regency/City And Ministry of Health as a buffer stock)
 - c) Provision means And infrastructure (Public Health Office)
 - d) Provision format recording And reporting (Service Health)
- 2) In-process storage And distribution (Installation Pharmacy District/City Health Office, Community Health Center Nutrition Programmer, and Teacher UKS)
- 3) In the recording and reporting process (UKS Teacher, Nutrition Programmer Health Center, Manager Nutrition Data (Health Service)
- 4) In-process monitoring And evaluation (Service Health)

b. Allocation Funds

Funds are Supporter in a program so that the program that is arranged can run well and achieve the desired goals. Funds in the implementation program This utilizes source funds available (State Budget and Regional Budget) as well as sources other based on needs (Ministry of Health of the Republic of Indonesia, 2016). Funds for procurement of tablets plus blood in the working area of the Kerinci District Health Service originate from Budget Income And Shopping Country (State Budget).

c. Means and Infrastructure

Means and infrastructure that are available well from aspects of quantity and quality will support reaching the objective of a program. The facilities and infrastructure required for the assistance program tablet plus blood. These include blood Hb level measurement tools, brochures/leaflets/books, recording and reporting formats, nutritional supplementation cards, and temporary storage. Based on the results of interviews with teachers, there have been no facilities and infrastructure provided to assist in the implementation of the blood tablet program.

Description Process

a. Preparation

The target activity supplementation signature in the institution school is teenage daughters aged 12 to 18 years by Letter Circular Directorate General Health Public with number HK.03.03/V/0595/2016. Calculation of targets for adolescent girls at the central and district levels and city use Data Target Program Development Health 2015-2019. Whereas calculation in level

health centers and schools by using the latest Basic Education Data (DAPODIK) from Middle Schools and SENIOR HIGH SCHOOL or equivalent (Ministry of Health of the Republic of Indonesia, 2016).

Based on the book Guidelines Countermeasures And Prevention Anemia Teenager Daughter by the Ministry of Health Republic of Indonesia year 2016 the calculation of the amount need based on the amount target with an additional 10% as buffer stock.

TTD = (Target number x 52 tablets) + 10% (Ministry of Health, 2016) Example TTD requirement calculation remate:

1. Amount target remate for example 1000 person
2. The number of TTD required is 1000 remate x 52 tablets = 52,000 tablet
3. Unforeseen needs or as buffer stock is 10% x 52,000 tablets = 5,200 tablets
4. So the total number of TTD needed is 52,000 + 5,200 = 57,200 tablets

According to the informant's knowledge based on the findings of the interview, SMKN 2 conducted needs planning by estimating needs using the goal amount from the prior year.

b. Distribution

The distribution referred to in this research is the activity provision of iron supplements to teenage girls in junior high/high schools and/or equivalent in the working area of the Kerinci District Health Service. TTD was administered at a frequency of 1 tablet every week throughout the year. Granting of Signature in rheumatism in school can done by determining the day drink signature together every week by the agreement in each school. During school holidays, the signature is given before school holidays (Ministry of Health of the Republic of Indonesia, 2016). Based on the research results, the distribution process begins from Service Health to the Health Center. Based on the results interview with the Head Section Pharmacy SMKN 2 Kerinci Regency from the pharmacy warehouse blood-boosting tablets were distributed to the Health Center through a sheet request drug or request from the programmer.

c. Monitoring

Monitoring of all over series activity which done in a way periodic after distribution tablet plus blood teenager daughter done. Monitoring is a matter that covers activity monitoring and evaluation of activities. Monitoring is carried out using a recording system, reporting, coaching by team technical, And visiting field (Ministry of Health RI, 2016). Based on the interview results, monitoring activities at SMKN 2 are carried out by looking at reports sent by the Puskesmas, which are based on the monitoring process carried out by Puskesmas officers to adolescent girls who are menstruating.

d. Recording And Reporting

The recording was done by the team executor UKS in school (teacher) following the addition of the task. Giving Signature recorded on Nutrition Supplementation Card. The Nutrition Supplementation Card is filled out by the teenagers themselves. daughter on moment get And consume Signed. An example card supplementation is attached (Attachment 1).

Reporting giving Signature And compliance consumption Signature recapitulated And reported by School, Where data giving Signature And compliance consumption Signature recapitulated by Teacher mentor UKS For reported to Health Center using forms 1a and 1b (Attachment 2). Then it is forwarded in stages to the Health Center, Health Service Health Regency/City, Service Health Province, And finally to the Ministry of Health.

The frequency of reporting at all levels is every 3 months. Each administrative level that receives the report is obliged to analyze the report received and provide feedback. The report of program feedback and the results of the analysis to assess and develop the program and encourage continuity of reporting. Each level of administration also provides output as the result of the implementation of TTD provision that has been carried out in its working area.

Description Output

Coverage Activity

The scope of activities is the result of implementing the assistance program. Blood supplement

tablets for young women are implemented and used as reports on the results of activities in one year. Young women who are counted as coverage are adolescent girls who receive TTD once every week. Coverage of TTD in remate is calculated if the remate receives TTD One time every Sunday with target achievement referring to The Plan Strategic Directorate Nutrition Public (2015 = 10%, 2016 = 15%, 2017 = 20%, 2018 = 25%, 2019 = 30%) (Ministry of Health Republic of Indonesia, 2016). Based on the interview results around 40% of adolescent girls in The Kerinci District Health Service work area received blood-boosting tablets.

Accuracy Target, Time, And Distribution

Aspect This will show how accuracy target, time giving, and process distribution from activity giving tablet plus blood teenager daughter in school. Based on the interview with Nutrition Officers of the Kerinci District Health Service and Teachers the target for providing tablets plus blood is already appropriate because all targets given tablets plus blood.

DISCUSSION

Input

Based on the results of interviews with several informants regarding human resources (HR), fund allocation, and facilities and infrastructure in the program of providing iron tablets to adolescent girls, it can be concluded that all indicators in the input aspect are not by the guidelines for the implementation of prevention and control of iron anemia in adolescent girls issued by the Indonesian Ministry of Health in 2016. This is likely one of the causes of the lack of quality of the program activities in the work area of the Kerinci Regency Health Office, indicated by the fact that many students still do not consume iron tablets even though they have been given them because many are still afraid to consume them even though they have been socialized.

According to researchers, most young women do not understand the dangers of anemia and the benefits of taking iron tablets, possibly because the socialization activities were carried out in a hurry even though officers had used leaflets and flipcharts. This analysis is proven by research conducted by Muwakhidah (2021) on "The Effectiveness of Education with Booklets, Leaflets and Posters on Knowledge of Anemia in Young Women". In her research, Muwakhidah stated that using media that can make the delivery of information more effective, namely, it must be interesting, on target, easy to understand, brief and clear, and under the message to be conveyed. The benefits of using media are to generate interest and make it easier to understand the material presented (Muwakhidah et al., 2021).

In addition, the human resources involved in helping the success of the blood supplementation tablet program for teenage girls in this school are not appropriate because it was only done by the nutritionist without any help from nurses. Where the task of the nurse is to help measure hemoglobin levels in the blood to determine the incidence of anemia in teenage girls.

Process

The process of preparation, distribution, monitoring, recording, and reporting in general are not in accordance with the guidelines of the Indonesian Ministry of Health. Only the preparation process is in accordance. Where the preparation is carried out by first planning the determination of needs based on targets from the previous year using data summarized in schools from each health center.

However, the distribution, monitoring, recording, and reporting processes were not according to the guidelines issued by the Indonesian Ministry of Health (2016). The distribution process should be carried out every week throughout the year by providing 1 tablet per week for each young woman according to Circular Letter Number HK.03.03/V/0595/2016 concerning the Provision of Iron Tablets for Young Women and Women of Childbearing Age. However, the distribution process in the work area of the Kerinci Regency Health Office is carried out every month due to budget constraints at the Health Center, and based on the confession of 2 informants who should receive iron tablets every week, it turns out that they have only been given 2 times during high school. This does not follow the recommendation for providing iron tablets for young women who should be given 1 tablet per week throughout the year (Indonesian Ministry of Health, 2016).

The implementation of monitoring and evaluation in the iron supplementation tablet program in the Kerinci District Health Office has not been carried out properly. The monitoring and evaluation process of the Health Office is only carried out based on reports sent by the Health Center and there is no follow-up to the evaluation results. Monitoring is carried out to provide information on whether policies or programs are implemented according to plan to achieve goals. Monitoring is an effective management tool because if the implementation is not appropriate from the plan, monitoring can identify where the problem lies and seek a solution. In many cases, monitoring assistance programs are avoided because monitoring can immediately detect deviations from the program.

The recording and reporting process is also not yet appropriate because recording and reporting should be hierarchical starting from the School to the Health Center to the Health Office. However, recording and reporting at school have not been done because the UKS teacher who handles it does not know if there should be recording and reporting at school and how it should be done at school which is recorded through the Nutrition Supplementation Card and My Health Report Book. The frequency of reporting from all levels is done every 3 months. Each level of administration that receives the report is obliged to analyze the report received and provide feedback on the receipt of the report and the results of its analysis to assess and develop the program and to spur the continuity of reporting. (Ministry of Health of the Republic of Indonesia, 2016).

Recording and reporting are indicators of the success of a program or activity. Without recording and reporting, any activity or program that is run will not be visible and will likely not be recognized. The absence of recording and reporting in schools according to researchers is likely one of the causes of the decline in the effectiveness of the quality of the implementation of the program for providing iron tablets for adolescent girls in this school. Then the teenage girls are not seen in terms of their level of compliance in consuming iron tablets. The program's effectiveness can be influenced by the level of compliance and the process was related to habits such as implementation costs, availability, and other factors. Compliance is shown by consuming directly with education and supervision from teachers at school and taking iron tablets together on the appointed day. Lack of monitoring and checking by teachers or parents also affects compliance with consuming iron tablets.

Output

The output in this study is seen from the scope of activities and the accuracy of targets, time, and distribution. When viewed from the scope of activities, the implementation of the program of providing iron tablets to adolescent girls has not been successful because only 40% of teenage girls have received iron tablets. However, when viewed from the accuracy of targets, time, and distribution, this program can be ineffective because the targets, time of administration, and distribution process do not comply with the guidelines issued by the Ministry of Health of the Republic of Indonesia in 2016.

Where all targets are given iron tablets, both those who have menstruated and those who have not menstruated. In addition, the time of administration should be at school, not taken at home. Then the distribution should be carried out throughout the year, but in this study based on interviews with informants who should have received iron tablets throughout the year, they were only given 2 times in one year. Not only that, the iron tablets were also not consumed by the targets because the targets were still afraid to eat the iron tablets. The inappropriateness of the target, time, and distribution was caused by the lack of socialization from the relevant parties. Although socialization has been carried out, it is not well understood by the targets, this can be caused by lack of time in the socialization process or because of lack of mastery of the material by officers even though they have used aids such as brochures/pamphlets

CONCLUSION

1. The input aspects include human resources, fund allocation, and facilities and infrastructure in the program of providing iron tablets for female adolescents at SMKN 2 Kerinci as a whole, which are not by the 2016 Guidelines for the Management and Prevention of Anemia in Pregnant Women and Women of Childbearing Age.
2. The planning process at SMKN 2 Kerinci was considered appropriate. The distribution, recording, and reporting processes were not according to the 2016 Guidelines for the Management and Prevention of Anemia in Pregnant Women and Women of Childbearing Age.

3. The output aspect includes the scope of activities and the accuracy of targets, time, and distribution in the implementation of the program for providing iron tablets for female adolescents at SMKN 2 Kerinci which is considered not to be in accordance with the 2016 Guidelines for the Management and Prevention of Anemia in Pregnant Women and Women of Childbearing Age.

ACKNOWLEDGEMENT

Monitoring of input, process, and output aspects is needed so the program of providing iron tablets for adolescent girls at SMKN 2 Kerinci can run well and achieve the desired program goals. The provision of facilities and infrastructure such as blood Hb measuring devices, leaflets/brochures/booklet media, and appropriate storage space needed to be considered, and monitoring of compliance in taking iron tablets in schools must be improved so that the program carried out does not run in vain. They need to procure a health report book for adolescent girls so that they can monitor the history of giving iron tablets.

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