

## Saribi Community Health Center Management Model for Providing Blood Enhancement Tablets at SMPN 3 Numfor Barat

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### A B S T R A C T

This study aims to analyze the management method of Saribi Health Center in implementing the TTD program at SMPN 3 Numfor Barat. The method applied in this study is a descriptive approach using observation, interview, and documentation techniques. The management model analyzed includes planning, implementation, monitoring, and program evaluation. The research findings indicate that the success of the program is influenced by collaboration between the health center, school, and students. a number of obstacles that emerged included minimal student understanding of the benefits of TTD, lack of regularity in consumption, and limited resources and medical personnel. but still need improvement in terms of education, supervision, and availability of resources. The recommendations given are strengthening socialization through a more interactive approach, increasing the role of adolescent health cadres, and stricter monitoring to ensure compliance with TTD consumption

## INTRODUCTION

Anemia is a condition where the hemoglobin level in the blood is less than the normal value, which is 11.5-16.5 gr/dl for women and 12.5-18.5 gr/dl for men (Aulya et al., 2022). According to WHO, anemia is also a health problem that can affect both developing and developed countries and can have an impact on human health as well as social and economic development. Data obtained from Basic Health Research (Risksedas, 2018) .

Young women are the heirs of the nation and will become mothers in the future. Health still requires great efforts to achieve it, namely the health of mothers giving birth. In the cycle of female development, female puberty is very important, because this is when growth and development occur. When growth and development are optimal, healthy and quality young women will be created. This will also create healthy and quality prospective mothers (Fadila & Kurniawati, 2018). There are several factors that influence the consumption of TTD, including knowledge, family support, support from School Health Services (UKS), peer support and interests. Nutritional knowledge is a cognitive aspect that shows an understanding of nutritional science, types of nutrients, and their interactions with nutritional status and health.

Nutritional knowledge is one of the factors that can indirectly affect nutritional status because it can affect food intake (Wahyuningsih & Qoyyimah, 2019). In addition, knowledge is also related to compliance with consuming TTD in adolescent girls. The support provided by UKS teachers is the most influential factor in compliance with consuming TTD in adolescent girls (Fatmawati & Subagja, 2020; Nuradhiani et al., 2017). Compliance with consuming TTD in adolescent girls is also related to family support (Savitry et al., 2017). Previous studies have stated that there is a relationship between the environment and TTD consumption in adolescent girls. The environment in question is everyone around adolescent girls such as parents, peers, neighbors who can invite adolescents to consume TTD (Amir & Djokosujono, 2019).

This research is very useful so that nutritional problems can be intervened starting from school children, namely teenage girls who will become mothers. Based on the problems above. researchers want to know *the input* , process and *output* in the evaluation of the implementation of the blood supplement tablet program for teenage girls at SMPN 3 Numfor Barat.

## LITERATURE REVIEW

### Model

A model is a representation of an object, thing, or idea in a simplified form of a natural condition or phenomenon. A model contains information about a phenomenon that is made with the aim of studying the actual system phenomenon. A model can be an imitation of an object, system or actual event that only contains information that is considered important to be studied. (Achmad, 2008: 1).

The purpose of modeling studies is to determine what information is considered important to collect, so that no unique model exists. A system can have various models, depending on the viewpoint and interests of the modeler.

System modeling is a collection of activities in creating a model where the model is a representation or abstraction of an object or actual situation, a simplification of a complex reality.

According to Mulyatiningsih (2019: 162) the model developed can be a learning model, training model, service model, testing model and so on. The development of this conceptual model is more appropriate to refer to the R & D method developed by Borg and Gall (1989: 784). According to him, there are 10 stages that must be passed in R & D, and each stage of development must reflect the existence of research, namely empirical data collection, data analysis, and reporting. The stages of research put forward by Borg and Gall are: (1) *Research and information collection*; (2) *Planning*; (3) *Develop Preliminary form of Product*; (4) *Preliminary Field Testing*; (5) *Main Product Revision*; (6) *Main Field Testing*; (7) *Operational Product Revision* (8) *Operational Field Testing* (9) *Final Product Revision* (10) *Dissemination and Implementation*.

### Management

Management is the function of the board of managers (usually called management), to determine policies on what kind of products will be made, how to finance them, provide services and select and train employees, and other factors that affect the activities of a business. Moreover, management is responsible for creating an organizational structure to implement the policy (Ngalim, 2012:6). Management is the center of thinking power (*think tank*) that functions as a driving engine, an active and effective tool to regulate the elements that form the system so that they are organized and work effectively and efficiently for the expected goals (Didin, 2013:17).

Dezhbankhan et al. (2021) added that the management system is a set of interrelated and interacting elements to set goals, objectives and empower these goals and objectives to be achieved efficiently and effectively. A set of elements in this case is everything that is a resource owned by an organization or institution, in this case the school must function interactively, in one direction, and collaboratively where they support each other to achieve the planned goals, namely improving teacher performance competency. The management concept outlined by Dezhbankhan et al. (2021) focuses on training and education management to improve competency through the management functions of planning, organizing, implementing, monitoring, and evaluating. The importance of a management system so that all processes carried out consisting of planning, organizing, implementing, controlling, and measuring can be

validated and measured objectively based on information. The management system can integrate all elements such as functions, resources, and processes into one logical and coherent system, especially in the information and technology era.

Based on the explanation of the theory above, it can be concluded that management is an effort made to achieve the goals of an organization based on agreement through the process of planning, organizing, implementing, controlling, and evaluating. Management can also be understood as the process of planning, implementing, and supervising a task to obtain effective and efficient results.

### **Saribi Health Center Provides Blood Supplement Tablets**

Socialization to young women is still lacking. Innovation has not been implemented properly, teacher participation in the distribution of Iron Tablets (TTD) is still lacking. Young women do not consume according to the provisions. The Iron Tablet (TTD) distribution program is a government initiative to overcome anemia in young women, especially at the secondary school level. The implementation of this program involves cooperation between health centers and related schools. identified three models of implementation of the TTD program: (a) empowerment of health centers for teachers and students : health center officers empower teachers and student representatives in managing the distribution and consumption of TTD. This approach involves active coordination between health centers and schools, ensuring effective distribution and monitoring of TTD consumption. (b) empowerment without consumption coordination: health centers work together with schools in the distribution of TTD, but without coordination regarding TTD consumption by students. This can lead to a lack of monitoring of compliance with TTD consumption. (c) without empowerment of schools: there is no empowerment or coordination between health centers and schools in the distribution or consumption of TTD, which can result in low compliance of students in consuming TTD.

Several factors that influence the compliance of adolescent girls in consuming TTD include: (a) teacher support because the support and active involvement of teachers in the TTD program can increase student compliance. (b) student attitudes and knowledge understanding positive attitudes and good knowledge about the benefits of TTD plays an important role in increasing compliance with consumption. (c) family support is very good for involvement and family support in the TTD program can motivate students to be more obedient in consuming TTD.

Although there is no specific data regarding the implementation of the TTD program at SMPN 3 Numfor Barat, Saribi Health Center can consider the following steps to improve the effectiveness of the program: Teacher and Student Empowerment: Involve teachers and student representatives in managing the distribution and monitoring of TTD consumption to improve compliance. Education and Socialization: Providing education to students and families about the importance of TTD consumption and its impact on health to increase awareness and positive attitudes. Monitoring and Evaluation: Conducting

routine monitoring of TTD consumption and program evaluation to identify obstacles and find appropriate solutions.

By implementing these strategies, it is hoped that the TTD provision program at SMPN 3 Numfor Barat can run more effectively and achieve the goal of reducing anemia rates in adolescent girls. Giving iron tablets to students who need iron supplements to prevent anemia and increase body resistance. Efforts to prevent and overcome anemia can be done by consuming foods that contain enough iron and protein to increase hemoglobin formation and iron absorption in the body.

## METHODOLOGY

The type of research used to achieve the research objectives is qualitative research. According to Sugiyono (2023), qualitative research is research conducted by collecting data in natural settings, using primary data sources, and relying more on data collection techniques on participatory observation, in-depth interviews, and documentation. The purpose of implementing this type of research is to understand the structure, patterns, relationships, and changes used in the Saribi Health Center management model in providing iron tablets at SMPN 3 Numfor Barat.

Table 1. Instrument Details for Administering Blood-Boosting Tablets

No	Questions / Instruments	Answer Scale
1	Have you ever received iron supplements from health workers or schools?	Yes No
2	How often have you taken iron tablets in the past week?	Never h / 1-2 times / 3-4 times / ≥5 times
3	Do you know the benefits of iron supplements?	Yes No
4	Where did you get the information about iron supplements?	School/ Health worker / Social Media / Family / Others
5	Have you experienced any side effects after taking iron tablets?	None/ Nausea/ Dizziness/ Others (specify)
6	What is your main reason for taking or not taking iron tablets?	Regular consumption/ Forget/ Afraid of side effects/ Don't like the taste/ Others
7	Do health workers or teachers provide education before administering iron tablets?	Yes No
8	Do you think this blood supplementation program is useful?	Very useful/ Useful/ So-so/ Not useful

Table 2. Results of Measuring the Effectiveness of Giving Iron Supplement Tablets

No	Indicator	Before Intervention (Mean ± SD)	After Intervention (Mean ± SD)	p-value	Information
1	Hemoglobin Level (g/dL)	11.2 ± 0.8	12.5 ± 0.9	< 0.05	Significant
2	Frequency of Consumption of Blood Supplement Tablets per Week	1.5 ± 0.7	4.2 ± 0.6	< 0.05	Significant
3	Percentage of Adolescent Girls with Anemia (%)	45%	20%	< 0.05	Significant
4	Knowledge about Blood Supplement Tablets (Score 0-10)	6.2 ± 1.5	8.5 ± 1.3	< 0.05	Significant
5	Consumption Compliance (%)	55%	85%	< 0.05	Significant

Information:

- Pre- and post-intervention data showed an increase in hemoglobin levels, compliance with consumption, and knowledge of iron tablets.
- p-value < 0.05 indicates that the changes that occur are statistically significant.

So the procedure for implementing the Saribi Health Center program of providing iron supplement tablets can be illustrated in the following image below.

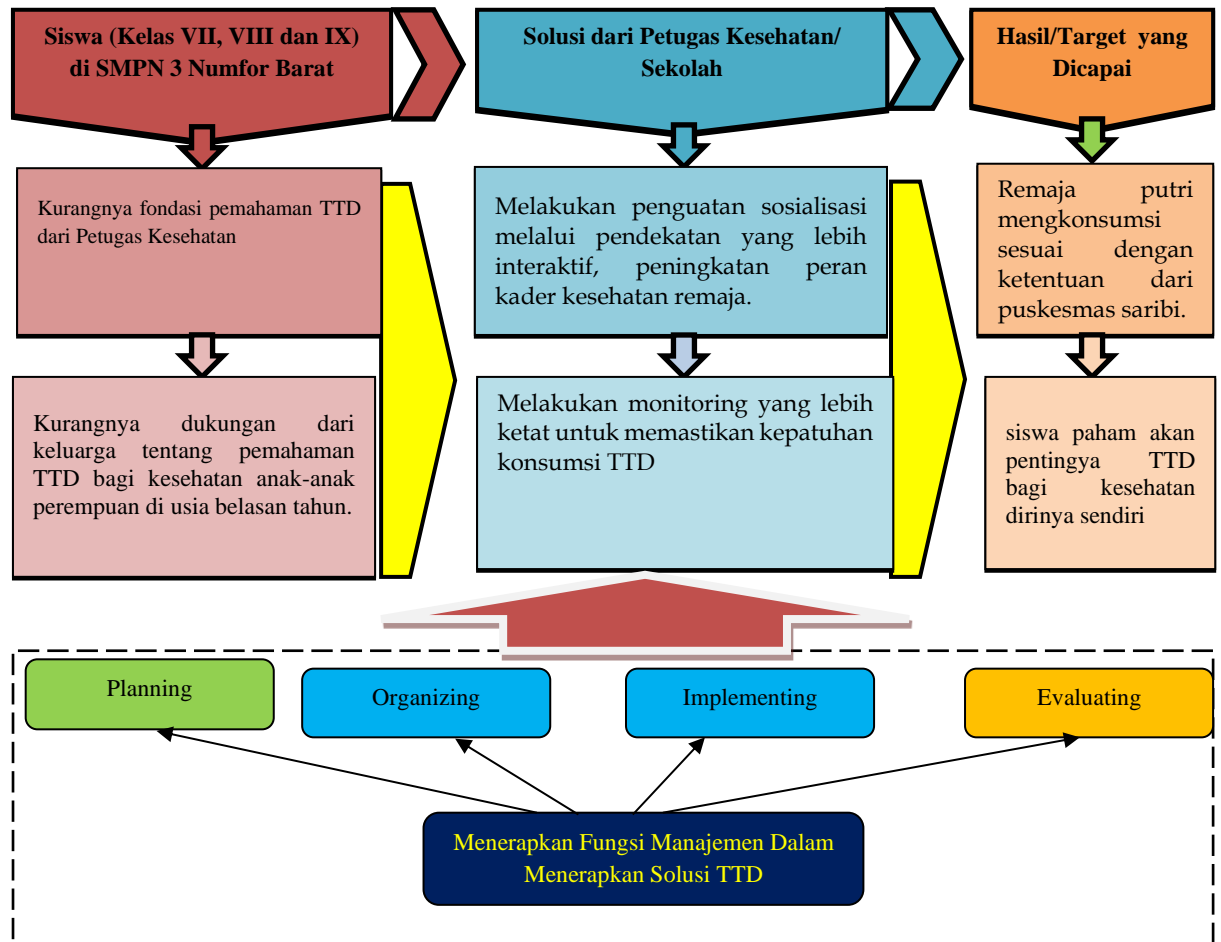


Figure 1. Flow of TTD Implementation at SMPN 3 Numfor Barat, Biak Numfor Regency, Papua Province

## RESEARCH RESULT

The provision of iron tablets (TTD) is a national program to prevent anemia in adolescent girls. Saribi Health Center plays a role as the main implementer in distributing and supervising TTD consumption at SMPN 3 Numfor Barat. This study aims to evaluate the effectiveness of the management model applied. With the following research methods: (a) qualitative descriptive research design with a case study approach. (b) samples of health workers at Saribi Health Center, teachers, and students of SMPN 3 Numfor Barat. (c) instruments Interviews, questionnaires, and direct observation. (d) data were analyzed using descriptive techniques and statistical tests (if necessary).

management research at the Saribi Health Center include several stages: (a) planning includes determining the number of targets, coordinating with schools, and procuring TTD. (b) implementation is carried out in the distribution of TTD every week to female students, socialization of the benefits of TTD, and nutrition education. (c) monitoring and evaluation are the basis for recording compliance with consumption, identifying obstacles, and intervention if obstacles are found.

## **DISCUSSION**

The results of the study showed that the management model implemented by the Saribi Health Center in providing iron tablets (TTD) at SMPN 3 Numfor Barat had a positive impact on increasing compliance in consuming and hemoglobin (Hb) levels of female students. Management strategies that include planning, implementation, and monitoring and evaluation have been proven to increase program effectiveness.

d compared to previous conditions, school-based interventions involving health workers and teachers actively can increase the success of iron supplementation programs in adolescent girls. A study conducted by [related references] also showed that providing intensive education and socialization can increase compliance with TTD consumption. Factors Influencing Program Success : (a) Role Health Center in Education and Distribution, Saribi Health Center plays an important role in providing education to students, teachers, and parents about the benefits of consuming TTD. With routine counseling, understanding of the importance of TTD in preventing anemia increases, which has an impact on increasing compliance with consumption. (b) Involvement of Teachers and Schools act as supervisors of TTD consumption in schools. This is in accordance with previous research which states that school involvement can increase compliance with iron supplement consumption among adolescent girls. (c) Obstacles in the Implementation of the TTD Program shows success, there are several obstacles that need to be considered: Mild side effects such as nausea and dizziness make some female students reluctant to consume TTD. Lack of parental involvement in supervising TTD consumption at home causes non-compliance outside the school environment. The unpleasant taste of the tablets is a factor that inhibits routine consumption.

The management model implemented by Saribi Health Center has proven effective in increasing TTD consumption and hemoglobin levels of SMPN 3 Numfor Barat students. However, there are still challenges that need to be overcome to improve the sustainability and effectiveness of the program. Therefore, more innovative strategies in education, supervision, and improving the quality of iron tablets need to be considered in the development of this program in the future.

## CONCLUSIONS AND RECOMMENDATIONS

Can be concluded saribi health center management model in provision of iron supplements (TTD) at SMPN 3 Numfor Barat: (a) program effectiveness : the iron supplementation tablet (TTD) program at SMPN 3 Numfor Barat has been running well, but still faces challenges in compliance with consumption by adolescent girls. (b) Compliance level: based on the evaluation, the level of student compliance in consuming Ttd is still below the expected target, due to a lack of understanding of its benefits and the side effects it causes. (c) the role of the health center: the Saribi health center has routinely socialized and distributed Ttd, but coordination with schools and parents still needs to be improved. (d) inhibiting factors: several factors that inhibit the success of this program include lack of assistance in consumption, ignorance about the importance of Ttd, and myths and stigmas related to supplements iron.

Saribi Health Center in provision of iron tablets (TTD) according to the following standard operating procedures (SOP): (a) increasing education by conducting more intensive socialization with interactive methods so that female students better understand the benefits of TTD , involving teachers and parents in providing education regarding the importance of consuming TTD. (b) Compliance Strategy in increasing supervision of TTD consumption with the method of drinking together at school , creating an incentive or reward system for female students who routinely consume TTD. (c) Collaboration with the School with establish closer cooperation with schools in terms of monitoring and evaluating TTD consumption , providing health cadres in schools whose job is to remind and accompany TTD consumption. (c) evaluation and monitoring in conducting periodic evaluations of the program to measure effectiveness and find solutions to existing obstacles , improving reporting and documentation of TTD consumption in order to obtain more accurate data . with the implementation of this Synergy , it is expected that the program of providing Iron Supplement Tablets at SMPN 3 Numfor Barat can run more effectively and provide optimal benefits for the health of adolescent girls.

## ADVANCED RESEARCH

Further research is needed to understand more deeply factors that influence the success of the iron supplementation program , and seek innovative solutions to improve compliance and effectiveness of the intervention. With a more comprehensive approach, this program can have a more positive impact on preventing anemia among adolescent girls and contribute to the health of future generations.

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