

## **Evaluasi Pelaksanaan Program Pemberian Tablet Tambah Darah Remaja Putri Tahun 2019 di Kota Pekanbaru**

### **Evaluation of The Implementation of Ferrous Tablets Supplementation Program for Adolescent Girl in 2019 at Pekanbaru City**

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#### **ABSTRAK**

**Latar Belakang:** Program pemberian tablet tambah darah (TTD) merupakan salah satu upaya penanggulangan anemia berdasarkan rekomendasi WHO yang salah satu sarannya adalah remaja putri. Indikator keberhasilan program ini adalah diharapkan dapat menurunkan kejadian anemia pada remaja putri.

**Tujuan:** Penelitian ini bertujuan untuk mengevaluasi pelaksanaan program pemberian tablet tambah darah kepada remaja putri tahun 2019 di Kota Pekanbaru sebagai bentuk upaya penanggulangan kejadian anemia pada remaja. Penelitian ini menggunakan pendekatan evaluasi program dengan mengevaluasi tahapan dari input, proses dan output dari pelaksanaan program ini.

**Metode:** Penelitian ini menggunakan metode kualitatif yang kemudian disajikan dengan naratif deskriptif. Data yang diperoleh adalah data primer yang didapatkan dan dikumpulkan dengan wawancara mendalam dengan informan yang didasarkan atas pertimbangan pengetahuan dan pemahamannya mengenai pelaksanaan program pemberian tablet tambah darah di Kota Pekanbaru. Pemilihan informan berdasarkan purposive sampling yang dilakukan secara tidak acak dan didasarkan suatu pertimbangan tertentu berjumlah 27 orang informan dan data sekunder dengan telaah dokumen dan kemudian di analisis dengan analisis konten.

**Hasil:** Hasil penelitian menunjukkan bahwa pelaksanaan program TTD remaja putri di Kota Pekanbaru sudah berjalan, namun masih terdapat banyak kendala dalam pelaksanaannya sehingga cakupan keberhasilan dari program ini belum mencapai target nasional. Kendala dalam pelaksanaannya berupa masih kurangnya koordinasi kerjasama antar lintas sektor, masih kurangnya penyediaan media KIE dalam sosialisasi dan masih rendahnya tingkat kepatuhan remaja putri dalam konsumsi TTD.

**Kesimpulan:** Pada tahapan input, sumber daya manusia untuk pelaksanaan program ini sudah dapat dikatakan cukup, masih terlambatnya penganggaran dana untuk pelaksanaan, masih kurangnya pengadaan media informasi untuk pelaksanaan program dan masih kurang kuatnya regulasi dan koordinasi antar lintas sektor dalam pelaksanaan program. Pada tahapan proses, perencanaan pelaksanaan program sudah menggunakan data riil dalam penentuan sasaran, tidak adanya struktur organisasi tertulis dalam pelaksanaan program, distribusi tablet tambah darah mengacu pada skema dari Kementerian Kesehatan RI, serta masih terdapat ketidaksesuaian dalam rekapitulasi bulanan mengenai pelaksanaan program ini di daerah. Pada tahapan output, dari pertama di jalankan di tahun 2018 di Kota Pekanbaru mengalami peningkatan cakupan di tahun 2019, namun masih terdapat puskesmas yang belum menjalankan program ini.

**Kata kunci:** tablet tambah darah, remaja putri, program KIE

#### **ABSTRACT**

**Background:** The program for giving Fe tablets (TTD) is one of the efforts to overcome anemia based on WHO recommendations, one of the targets is young women. The success indicator of this program is that it is expected to reduce the incidence of anemia in adolescent girls.

**Objectives:** This research aims to evaluate the implementation of the program of giving Fe tablets to adolescent girl in 2019 in Pekanbaru City as an effort to overcome the incidence of anemia in adolescents. This research uses a program evaluation approach by evaluating the stages of the input, process and output of the implementation of this program.

**Methods:** This research uses a qualitative method which is then presented with a descriptive narrative. The data obtained are primary data obtained and collected by in-depth interviews with informants based on consideration of their knowledge and understanding of the implementation of the program of giving Fe tablets in Pekanbaru City. The selection of informants was based on purposive sampling which was not randomized and based on certain considerations totaling 27 informants and secondary data by document review and then analyzed by content analysis.

**Results:** The results show that the implementation of the Fe tablets program for adolescent girl in Pekanbaru City has been running, but there are still many obstacles in its implementation so that the scope of success of this program has not reached the national target. Constraints in its implementation are the lack of coordination of cross-sectoral cooperation, the lack of provision of IEC media in socialization and the low level of compliance of young women in consuming iron tablets.



**Conclusions:** At the input stage, human resources for the implementation of this program can be said to be sufficient, there is still a delay in budgeting funds for implementation, there is still a lack of procurement of information media for program implementation and there is still a lack of strong regulation and inter-sectoral coordination in program implementation. At the stage of the process, planning for program implementation uses real data in targeting, there is no written organizational structure in program implementation, the distribution of Fe blood volume refers to the scheme from the Indonesian Ministry of Health, and there are still discrepancies in the monthly recapitulation regarding the implementation of this program in the regions. At the output stage, from the first run in 2018 in Pekanbaru City, there was an increase in coverage in 2019, but there are still public health center that have not run this program.

**Keywords:** Fe Tablets, Adolescent Girl, IEC programme

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## INTRODUCTION

Anaemia is defined as a condition in which the level of hemoglobin (Hb) in the blood is lower than normal<sup>1</sup>. Anaemia is one of the three major challenges in nutritional problems faced by Indonesia today, namely the high incidence of micronutrient deficiencies which can then increase the risk of anaemia. One of the age groups that are prone to anemia are adolescents and especially adolescent girl<sup>2</sup>. This is due to the increased nutritional requirements to support peak growth. Anemia in adolescents will have a negative impact on decreased immunity, concentration, learning achievement, adolescent fitness and adolescent productivity. In addition, adolescent girl experience menstruation which causes large amounts of blood to be shed, causing a drastic decrease in hemoglobin<sup>3</sup>. Adolescent girl are the nation's future generation who will determine the next generation<sup>4</sup>. This is evidenced by several researches which state that anaemia plays a major role in influencing the cognitive development of children and has the risk of having a history of giving birth with low birth weight which will then affect health conditions in the future<sup>5</sup>. In 2019, globally the prevalence of anaemia for all age groups was 22.8% with a total case rate of 1.42 billion people with anemia worldwide<sup>6</sup>. Based on data from Basic Health Research (Riskesdas) in 2007, the prevalence of anemia in general in Indonesia is 14.8% and in school-age children is 16.3%<sup>7</sup>. In 2013, the incidence of anemia in general in Indonesia was 21.7% with the incidence in the 5-14 year age group of 26.4% and the 15-24 year age group of 18.4%<sup>7</sup>. The incidence of anemia in women is 23.9% and anemia in men is 18.4%<sup>7</sup>. In 2018, the prevalence of anemia in general for ages 5-14 years was 26% and for ages 15-24 years it was 32%. The highest proportion of anemia occurred in the 15-24 year age group<sup>8</sup>.

The cause of anemia in general and the most common is due to iron deficiency. In addition, it is also caused by a lack of nutrients such as folic acid, vitamin B12 and vitamin A. Acute and chronic inflammation, parasitic infections, congenital disorders that affect hemoglobin synthesis, lack of red blood cell production can cause anaemia<sup>9</sup>. According to the World Health Organization (WHO), the causes of anaemia are divided into two factors, namely nutritional factors and non-

nutritional factors. Nutritional factors are caused by poor diet and lack of iron content in food, biologically low availability of iron and deficiencies of other vitamins such as folic acid, vitamin C and vitamin B12<sup>10</sup>. On non-nutritional factors caused by the high or increased need for iron during adolescence, the presence of hookworm infestations, the presence of infections such as malaria, blood loss during menstruation in adolescent girls and marrying at a young age and early gestational age<sup>10</sup>.

To overcome the problem of anaemia, anaemia prevention efforts based on WHO recommendations are the provision of Fe Tablets (TTD) through the Iron Nutrition Anaemia Management Program. The program is a program that is set to be given to groups of pregnant women and adolescent girl. In 2014, the Ministry of Health issued a regulation in Permenkes No. 88 of 2014 concerning "Standards for Blood Supplementing Tablets for Women of Childbearing Age (WUS) and Pregnant Women". Then the Permenkes was followed up with the issuance of a circular letter from the Director General of Public Health Number HK.03.03/V/0595/2016 regarding the provision of iron tablets to adolescent girls and women of childbearing age<sup>11</sup>. Based on this, on the commemoration of National Nutrition Day 2021, the Ministry of Health carries the theme "Healthy Adolescents, Free of Anaemia" as a momentum to increase commitment in building health and nutrition towards a healthy nation and achievers, especially through balanced nutrition education and supplementation of Fe tablets for adolescent girls<sup>12</sup>.

In Indonesia, the incidence of anaemia is included in the expected achievement target for health services, namely the National Medium-Term Development Plan (RPJMN) in 2015-2019 where for adolescent health services in 2018 it is targeted that the achievement rate of giving the Fe tablet (TTD) program for adolescents reaches 20 % and in 2019 it reached 25%. Based on data from the Pekanbaru City Health Office in 2018, the coverage of giving Fe tablets to adolescent girls was only 10.8% and increased in 2019 to 37.2%<sup>13</sup>. Even though the coverage for giving Fe tablets for adolescent girl has increased, not all public health center areas are running this program<sup>13</sup>. There are still public health centers that are 0% in the coverage of giving this Fe tablets. This is because there are still public health center that have not



run this program, even though this program has been required to be run 100% throughout Indonesia. Judging from the low success rate of the Fe tablets program for adolescents girl in Riau Province and Pekanbaru City which has not reached the expected target of the 2015-2019 RPJMN, plus there is no complete data regarding the prevalence of anaemia because there is no measurement of hemoglobin (Hb) levels in adolescent girl, it is necessary to review the problems faced and identify the inhibiting and supporting factors in the program for distributing Fe tablets to adolescent girls, especially in Pekanbaru City by conducting program evaluation research. Evaluation research implies collecting information about the results that have been achieved by a program that is carried out systematically so that accurate data is produced. By evaluating the program, you can see the overall implementation of the program. Is the program running in accordance with the program objectives. Can see the results of existing achievements, weaknesses and strengths, see the obstacles and supporting factors which can then be improved so that they become recommendations for program implementation.

## METHOD

This research uses a qualitative study method. This research was conducted in Pekanbaru City, Riau Province in May 2021 – June 2021. In-depth interviews were conducted with informants consisting of main informants and supporting informants where the COVID-19 pandemic period was still happening by following strict health protocols. The main informants consisted of the person in charge (PJ) for the blood supplement tablet program for adolescent girl at the Riau Province Health Office, the person in charge (PJ) for the blood supplement tablet program for adolescent girl at the Pekanbaru City Health Office, and the person in charge (PJ) for the blood supplement tablet program for adolescent girl at the Riau Province Education Office, the person in charge (PJ) for the blood supplement tablet program for adolescent girl at the Pekanbaru City Education Office, the person in charge (PJ) for the blood supplement tablet program for adolescent girl at the Pekanbaru City Ministry of Religion and several nutrition workers at several health centers in Pekanbaru City who run the program for giving this adolescent blood-added tablet. Supporting informants are respondents who receive this program consisting of UKS coaches and adolescent girl in several schools in Pekanbaru City. The selection of informants was carried out by purposive sampling technique by determining the criteria of the informants according to the research objectives. The criteria for the informants selected were based on consideration of knowledge and understanding on the implementation of the Fe tablet program for young women in Pekanbaru City. The identity of the informant is displayed by being given a letter coding according to the

agency and the order of the interview.

Primary data were collected through in-depth interviews using interview guidelines with informants and presented descriptively. Secondary data is obtained by reviewing documents, policies, guidelines and regulations related to research. The collected data was then transcribed verbatim and a content analysis approach was used to reduce and obtain analytic data. The data is said to be valid when there is no new information or repeated information when conducting interviews with informants which is supported by the triangulation process of sources and triangulation of research methods to strengthen the results of the data obtained. Source triangulation is done by collecting data with various sources, namely using primary and secondary data. Method triangulation is done by selecting various informants to cross-check the truth of the information. Then the results of the interviews were categorized according to the discussion of the agreed themes. The variable that will be discussed in this study is the informant's understanding of the input, process and output of the program for Fe tablets to adolescent girl.

## RESULTS AND DISCUSSION

In this research, a review of the problems in the application of the program was carried out so that it could be carried out with an evaluation process of the implementation of the program of giving Fe tablets to adolescent girls in Pekanbaru City. By evaluating the program, you can see the overall implementation of the program. Is the program running in accordance with the program objectives. Can see the results of existing achievements, weaknesses and strengths, see the obstacles and supporting factors which can then be improved so that they become recommendations for program implementation. Implementation of evaluation still involves scientific procedures such as research. There is no detailed data regarding the implementation of the iron nutritional anaemia prevention program through the provision of Fe tablets to adolescent girl in Pekanbaru City and there is no data regarding the evaluation of the implementation of this program so that researchers are interested in conducting research on the evaluation of the Fe tablet program in Pekanbaru City. in terms of input, process and output.

In presenting the results of the research and discussion, the researcher presents sequentially according to the steps in data collection, namely presenting the results of the document review first, then presenting the results of in-depth interviews from research informants and followed by existing theories. The following is a table of the characteristics of the informants in this research



**Tabel 1.** Informant Characteristic

No	Informan Code	Sex	Age	Education
<b>Main Informant</b>				
1.	<b>UD01</b>	Female	42 Y.O	S1
2.	<b>UD02</b>	Female	32 Y.O	S1
3.	<b>UD03</b>	Female	54 Y.O	S2
4.	<b>UD04</b>	Female	40 Y.O	S2
5.	<b>UD05</b>	Male	53 Y.O	S3
6.	<b>UP01</b>	Female	31 Y.O	S1
7.	<b>UP02</b>	Female	32 Y.O	D3
8.	<b>UP03</b>	Female	31 Y.O	D3
	<b>UP04</b>	Female	32 Y.O	S1
1.	<b>Supporting Informant</b>			
	<b>PG01</b>	Female	45 Y.O	S1
	<b>PG02</b>	Female	44 Y.O	S1
	<b>PG03</b>	Female	31 Y.O	S1
	<b>PG04</b>	Female	30 Y.O	S1
	<b>PG05</b>	Female	27 Y.O	S1
	<b>PG06</b>	Female	25 Y.O	S1
	<b>PG07</b>	Female	58 Y.O	S1
	<b>PR01</b>	Female	15 Y.O	MTSN
	<b>PR02</b>	Female	15 Y.O	MTSN
	<b>PR03</b>	Female	15 Y.O	MTSN
	<b>PR04</b>	Female	15 Y.O	MTSN
	<b>PR07</b>	Female	14 Y.O	SMPS
	<b>PR09</b>	Female	17 Y.O	SMKS
	<b>PR10</b>	Female	17 Y.O	SMKS
	<b>PR11</b>	Female	17 Y.O	SMAN
	<b>PR12</b>	Female	17 Y.O	SMAN
	<b>PR13</b>	Female	17 Y.O	SMAS
	<b>PR14</b>	Female	17 Y.O	SMAS

**Input**

In program evaluation, the input section is a collection of parts or elements contained in the system and which are needed for the system to function. Input is the initial part of the system that provides the needs for the implementation of activities for the system. In the input there are several elements such as budget, human resources, regulations, facilities and infrastructures.

**Human Resources**

It is stated in the Circular of the Directorate General of Public Health No.HK.03.03/V/0595/2016 concerning Procedures for Giving Fe Tablets to Young Women and Women of Childbearing Age, it is stated that the Provincial Health Office in every region in Indonesia distributes Fe Tablets to the Health Office. in the Regency/City, then the Regency/City Health Office distributes this iron to the Public health center and then, Public health center continues the distribution to schools through school health unit activities. Based on the Circular of the Mayor of Pekanbaru No.440/DINKES-KESMAS/1926/2019 concerning Support for Giving Fe Tablets to adolescent girl in Schools, it is stated that the implementing staff in this Fe tablet program are implementing staff in the field, namely health center nutritionists and The supervisor of the School Health Unit (UKS) is assisted by student representatives (OSIS, PMR,

Youth Health Cadre) in the school.

"...In its implementation, it has been arranged and distributed in the respective public health center, later it will be adjusted according to the work plan and main tasks..." (**UD02**)

"... because the program from the official service automatically goes down to the nutrition section at the public health center, but in practice we do not stand alone, we collaborate with the school health unit first and then the pharmacy department for the availability of drugs..." (**UP01**)

"...from the determination of the resources for the implementation of the Fe supplementation program for adolescent girl, it involved nutritionists, doctors from the health promotion department and school health unit staff at the public health center..." (**UP03**)

From the results of in-depth interviews, it was found that the human resources for the implementation of the program for giving Fe tablets were already available. Nutrition workers in each field of nutrition,



both at the health office and at the puskesmas level, are available with one person in each division. In practice, the nutrition department does not run and stand alone. The nutrition division collaborates across programs, namely with the pharmacy, health promotion and school health unit divisions at the puskesmas. Each field works with its respective duties and functions but are interrelated and help each other.

The results of this study are in line with Fitriana's that the Fe tablet program has been integrated with other programs. The resources involved include administration for correspondence, nutritionists and school health unit<sup>14</sup>. Human resources are one of the aspects that support the success of a program.

"...if you say it's not enough, Ms. If you look at the whole program, I think it's sufficient, but the lack of human resources is not enough to hold 1 nutrition program because there are many nutrition programs. If you look at it as a whole, it's not enough, because it's still stuck..." (UP01)

For the adequacy of human resources, the implementation of the Fe tablet program in Pekanbaru City can be said to have fulfilled one nutritionist in each field. However, most nutrition workers hope for additional human resources for the implementation of this Fe tablets program to be more optimal. Considering the many indicators in the nutrition program that must be implemented, so that if there is more than one nutritionist, it will be easier and better to do it.

#### Budget

Based on the document review, funds to support the Fe tablet program for adolescent girls are included in the Special Allocation Fund (DAK) budget. Health Operational Assistance (BOK) is part of the non-physical DAK in the health sector which is prioritized for promotive and preventive health efforts. Based on in-depth interviews with informants, it was found that the Health Office had budgeted for the provision of Fe tablets through the Health Allocation Fund (DAK). This is as explained in the Regulation of the Minister of Health of the Republic of Indonesia No. 12 of 2021 concerning Technical Guidelines for the Use of Special Non-Physical Allocation Funds for the Health Sector for the Fiscal Year.

"...but for the budget for the provision of tablets, the budget comes from the Provincial Health Office, but the agency cannot fully fulfill it. There is a budget calculation, for example the fulfillment of the province is 75% and then from the respective districts or from the center 25%..." (UD01)

"...the budget for the supply of drugs comes from the agency, the budget comes from the DAK, which will be followed by pharmacy people. After that, the pharmacy will pick up the tablets from

the puskesmas and share them with the nutrition section..." (UD02)

In carrying out fieldwork in distributing Fe tablets to schools, the implementing received financial assistance from the BOK. All of the main informants, namely nutritionists at the public health center, stated that the budget for the field activities for the Fe tablet program came from BOK funds. This is in line with Fitriana's research which states that the results of her research show that Fe tablets program activities were obtained from the Samarinda City Health Office. However, for the allocation of funds for the distribution of Fe tablet program to adolescent girl, BOK funds are used in the form of transportation funds. This is also conveyed in the results of the study where the informant stated that there was no significant expenditure of funds during the distribution of Fe tablets program to schools except for transportation costs.

"...if it's appropriate, sis, it means that we should get aid funds from the Health Operational Assistance indeed, but maybe what's not appropriate is that the amount can't cover all of our down activities..." (UP01)

"...hm, that's Health Operational Assistance funds, health operational assistance..." (UP04)

Based on the results of in-depth interviews with informants regarding the timeliness of the disbursement of the budget funds, the following information was obtained:

"...if our funds are disbursed, we are usually never on time. Because Health Operational Assistance funds are usually accrued in 3 months, so the disbursement will pass from that month because it is related to the length of the process for disbursing funds..." (UP02)

The allocation of funds is appropriate in accordance with the details of the activities made. However, in terms of timeliness in reducing their funds, there are still some puskesmas that are not on time in budgeting their funds.

#### Regulation

In 2014, the Ministry of Health issued a regulation in the Regulation of the Minister of Health (Permenkes) No. 88 of 2014 concerning "Standards for Blood Supplementing Tablets for Women of Childbearing Age (WUS) and Pregnant Women". Then the Permenkes was followed up with the issuance of a circular letter from the Director General of Public Health Number HK.03.03/V/0595/2016 regarding the provision of Fe tablet program to adolescent girls and women of childbearing age, it was stated that the Provincial Health Office distributed Fe Tablets to the District/City Health



Offices, then the District/City Health Office distributes this Fe tablet to the Public health center and the Public health center continues the distribution to schools through school health unit activities. Pekanbaru City itself has followed up through the Pekanbaru Mayor's Circular No. 440/DINKES-KESMAS/1926/2019 regarding Support for Giving Fe Tablet to adolescent girl in Schools.

Based on in-depth interviews, most of the informants stated that they had followed a circular from the Ministry of Health and received a circular from the Mayor of Pekanbaru to support the provision of Fe tablets for young girls at school. For the city level, this circular is used as a reference and reinforcement in implementing the program in the field. This circular is also the basis for the establishment of cross-sectoral cooperation in supporting the Fe tablet program in schools.

"... hm there is a circular made from the Mayor. But derivatives, from the Ministry of Health, the new provincial health office to us..." (UD02)

"...because this is a government program and we are under the service, so we follow the rules from the service, from the service means it is also derived from the ministry of health..." (UP04)

"... yes, Ms., there are 3 letters of support from the city health office, the provincial health office and the health ministry. 3 is the letter that we brought down the field early..." (UP01)

This is in line with Rahmat Hidayat's research which states that the Merlung Health Center as one of the health facilities in Merlung District which runs a Circular regarding the provision of Fe tablet program to adolescent girls and women of childbearing age who then implements this program in all junior high and high schools in Merlung District<sup>15</sup>.

#### Facilities and Infrastructure

The availability of blood-added tablets has been regulated by the Health Office by following the mechanism or flow of requests for Fe tablets in accordance with the Guidelines for the Prevention and Management of Anemia in Young Women and Women of Childbearing Age (WUS) issued by the Ministry of Health in 2018. Based on in-depth interviews, Pekanbaru City in implementation has followed the reference of the above guidelines. The Pekanbaru City Health Office has utilized the available funding sources, namely the APBN through the Health Allocation Fund (DAK) in providing Fe tablets. The results of the study are in line with the guidelines from the Ministry of Health where district and city nutrition officers recapitulate the planning for the needs of the proposed Puskesmas from each school which then reports to the District and City Pharmacy Installations (IFK). IFK reports this plan to the Provincial Pharmacy Installation with a copy to the Provincial Health Office. Then the Provincial IF proposes the need for Fe tablets

program to the Directorate General of Pharmacy and Medical Devices at the Ministry of Health.

The results of the research found that there were obstacles or obstacles in the facilities and infrastructure in the implementation of the Fe tablet program for adolescent girl in Pekanbaru City, namely the lack or absence of Communication, Information and Education (KIE) media during outreach to schools so that the information conveyed was not well conveyed and less motivating young women. The media is only in the form of presentation materials and also some videos, but for the procurement of leaflets, booklets or posters are not yet available.

"...because it's like this, before the sign is given, information is given first, then the community can accept it, right? He can accept that he wants to drink his Fe tablets. Maybe here we need facilities and infrastructure to convey information to the public..." (UD02)

"...we should have leaflets for us to give to students so that apart from providing counseling, children can also read. According to my mother, if there is a shortage, there is not enough procurement for leaflets or brochures for children's learning facilities..." (UP03)

"... if for facilities and infrastructure, maybe we need IEC media, because young women are also very difficult to accept to be able to consume these tablets..." (UD01)

According to Saban's research, media posters, leaflets/brochures greatly affect the increase in students' knowledge about anemia, so that in supporting the Fe tablet program, adolescent health education with media is very necessary<sup>15</sup>. The results of the study which stated that there was still a lack of IEC media in the implementation of the adolescent girl Fe tablet program were supported by statements from female adolescent informants, namely:

"... if I'm not mistaken, there is a puskesmas person who comes to school to tell you about this, but if you are given a brochure, there is nothing, sis..." (PR01)

#### Supporting Factors and Inhibiting Factors in the Input Stage

At the input stage of the Fe Tablet Program for adolescent girl in Pekanbaru City, there were still some obstacles and inconsistencies with the guidelines and regulations from the document review, such as there were still schools that were not welcome with this Fe tablet program, there were still many parents who did not allow their children to take Fe tablets, there is still a lack of IEC media facilities and infrastructure in its implementation and there is still a lack of implementing personnel for this program.



"... If there are many who hinder, yes, actually, but it's more on the technical side in the field. Sometimes we have an okay deal with the principal but the school health unit staff is not very welcoming to us..." (UP01)

"... a lot of young women are afraid to drink it, right. Because of the effects of taking these Fe tablets, sometimes there is nausea, dizziness, but actually that's normal. Those whose names are parents, we give them to their children, we don't meet their parents, so sometimes their parents are worried about how they don't allow their children to drink signed..." (UD02)

Supporting factors in implementing the input from the program for Fe tablets to adolescent girl, such as the support of a circular letter from the Ministry of Health, the Provincial Health Office and a Circular from the Mayor of Pekanbaru. Then the Riau Provincial Health Office distributed control cards to monitor the consumption of Fe tablets to adolescent girls in several districts/cities. Then there is support from cross-sectoral parties, namely schools, schools that accept the program for giving this Fe tablet in schools so that this program can run well. Then there is support from across programs at the public health center, each program or team that is incorporated in the implementation of this Fe tablet program works well with each other and supports each other.

"... the supporting factor is Alhamdulillah, every year it is supported by letters from the mayor down to the health office. The letter will strengthen us to go down to schools so that it explains that our program is a clear program. Then Alhamdulillah, the human resources at the puskesmas supported the implementation of the program..." (UP03)  
"... those who support it at least, if the circular letter supports it..." (UD02)

### Process

In the process section, it is a collection of parts or elements contained in the system and which functions to convert inputs into planned outputs. Process is a way or method to change input into output. Processes in the health system can be viewed from the management function. The management functions applied using the health service system are planning, organizing, action or implementation and monitoring.

### Planning

Based on the results of the review of the Guidelines for the Prevention and Management of Anemia in Young Women and Women of Childbearing Age, it is stated that the planning for the need for the implementation of the Fe tablet program includes

calculating the number of targets and calculating needs. The target of iron supplementation activities in school institutions is youth aged 12-18 years in accordance with the Circular Letter of the Director General of Public Health Number HK.03.03/V/0595/2016. Calculation of remittance targets at the central and district/city levels uses the 2015-2019 Health Development Program Target Data. Meanwhile, the calculation of the public health center and school levels uses the latest Basic Education Data (DAPODIK) from junior and senior high schools or the equivalent<sup>16</sup>. Then the need for tablets is calculated using a formula that has become a reference for providing Fe tablets according to the target.

Based on the results of in-depth interviews, it was found that the planning activities in the Fe tablet program in Pekanbaru City were in accordance with the guidelines from the Ministry of Health. The Pekanbaru City Health Center always conducts screening of students in schools every new academic year to obtain data on the number of students in each school. Then decide to go to the selected school and calculate the target number and need for this Fe tablet. The results will be reported to the Health Office for the availability of Fe tablets. The slight difference with the guidelines is that the Riau Provincial Health Office still uses projected data for the provision of tablets, while the City Health Office and Public Health Centers in Pekanbaru City have used real data in the field for the provision of tablets.

"... if the planning of this activity is involved, it is clear that IFK is the only part of nutrition. There is a drug demand plan (RKO). So the RKO is always side by side with him from the pharmacy installation and the program manager..." (UD01)

"... we use real data..." (UD02)

"...we use real data, the data is from school health unit. We know that school health unit has a screening activity. Networking. This screening is carried out at the beginning of every year, at the beginning of the new school year for school children..." (UP01)

This research is in line with Alita's statement that the preparation process includes the needs planning process (calculation of the number of targets and calculation of needs), provision and socialization<sup>17</sup>.

"... We have a mini workshop that we run, but we don't discuss the signatory specifically. Every month we hold lokmin so we discuss other programs as well..." (UP02, UP04)

The informant's statement found that the public health center always held a mini workshop every month to discuss all health programs at the public health center. There is no mini-workshop that specifically discusses the Fe tablet program, it has been incorporated in the discussion of all programs in the mini-workshop which is



held every month.

### Organizing

Based on a review of documents from the Pekanbaru Mayor's Circular regarding the support for the Fe tablet program in schools, it is stated that the Health Office monitors the availability of Fe tablets at the City Pharmacy Installation and distributes Fe tablets to the public health center. Then the public health center distributes it to schools. Cross-sectoral collaboration, such as the Education Office and the Ministry of Religion, is directed to socialize the Fe tablet program in schools alongside the Health Office. Based on in-depth interviews, it was found that the City of Pekanbaru in each implementing agency did not have a formal and written organizational structure related to this Fe tablet program. Each level of the implementing agency works in accordance with their respective main tasks and functions, supports each other across programs and works flexibly.

"...oh nothing, according to the main task. For example, I am responsible for the signatory reports for pregnant women and young women. At least the mother is in accordance with the job description..."

**(UD01)**

"... if the organizational structure is specifically set, it's not. Because he fell, he was flexible, so if you say there is a special organizational structure, it's not. Not in writing, yes, if for example we go down from the beginning, that's all. Must be a nutritionist, health promotion and UKS..."

**(UP03)**

### Implementation

The results of the document review of the Guidelines for the Prevention and Management of Anemia in Young Women and Women of Childbearing Age, it was found that the basic approach of this Fe tablet program is the Blanket Approach, which means trying to cover all program targets<sup>16</sup>. Fe tablets are given to young girls aged 12-18 years at school with a frequency of 1 tablet every week throughout the year. Giving Fe tablets to adolescent girls at school can be done by determining the day of taking iron tablets together every week according to the agreement of each school.

Based on the results of in-depth interviews with informants, it was found that the distribution of Fe tablets in Pekanbaru City was carried out by means of a blanket approach which was distributed by the team each month as many as 4 tablets per student with 1 tablet of Fe tablets program taking 1 tablet for 1 week. This is in line with Hasanah's research which conducted distribution using a blanket approach<sup>18</sup>. The distribution is carried out in stages from the Provincial Health Office, then through the City Health Office which distributes Fe tablets to the Public health center and the Public health center distributes it to schools. In practice, implementing parties

such as Public health center in Pekanbaru City have not checked Hb levels before giving the Fe tablets. This is because there is no available Hb level measurement tool so that the measurement cannot be carried out. The implementing, namely the public health center, stated that they carried out socialization before giving Fe tablets, but from the recipient side, namely young women, they said that most of the public health center did not conduct socialization in detail so that information about Fe tablets was not conveyed properly to young women. Cross-sectoral parties such as the Education Office and the Ministry of Religion have never socialized this program in schools together with the Health Office.

"...the process is at least at the beginning of the year, it's like that, we budget it in the Special Allocation Fund for Fe tablets for adolescent girls and pregnant women. Then we disburse the funds in the middle of the year around June. Then after that, pharmacy immediately ordered Fe tablets to be distributed to the public health center. Later the public health center will immediately run it in the field or school and then report it every month. If for the procurement it is only once a year..."

**(UD02)**

After getting a Fe tablet from the Pekanbaru City Health Office, each public health center will run this program to schools.

"After we plan, usually we are nutritionists together with the school health unit staff, we recruit one doctor who is willing to come with us to provide counseling. So later, after receiving the letter, we will make an invitation letter signed by the head of the public health center, later we will make the date and which school we will drop off at. So we distributed the invitations to the schools that we went to, we met with the school health unit staff at school to hold counseling about the sign. Later we will ask for contact from the school or leave our contact to confirm whether they agree to the counseling on the day and date that we specify. If they are willing we will go down, if not we will reconfirm what date they are willing to go down..."

**(UP03)**

The city of Pekanbaru itself has not been in accordance with the process of distributing blood-added tablets for 12 months and all schools have received TTD. The city of Pekanbaru has only run for 8 months in 1 year and only a few schools in the working area of the Puskesmas are given this program in schools. Most schools are not determined to take one day with blood-added tablets, so it is often not controlled and monitored in the implementation of taking blood-added tablets. This is not in line with Fitriana's research, where the





distribution is routine and has determined the day of taking iron tablets together so that the consumption of iron tablets in adolescent girls can be controlled<sup>14</sup>.

Statements from informants regarding the lack of detailed socialization and determination of drinking days together. This was stated by several young female informants, namely:

"... no, if you don't have a drink on the same day, just let you know when it's the best time to drink your Fe tablets, sis..."

**(PR02)**

"... if you have socialized about tablets that add blood, you've never done that, sis..."

"...Yes, Sis, for several weeks, every Friday morning. Drink at the same time, the same in class..." **(PR11)**

### Monitoring

Based on the results of a review of the Pekanbaru Mayor's Circular, it was found that the school and the public health center carried out monitoring by filling out the Fe tablet program monitoring card which was carried out by school health unit teachers assisted by student representatives (OSIS, PMR, Youth Health Cadres) at the school. However, based on the results of in-depth interviews, most schools do not use control cards for monitoring the consumption of Fe tablets, most of them only record their names on the form when they drink and then collect them to the School Health Unit Supervisor (UKS). On average, most of the public health center always carry out monitoring once a month to schools. Monitoring is followed by data recapitulation of the previous month and provision of stock of Fe tablets for the following month. The recapitulation from the school was then submitted and reported to the City Health Office, which then indirectly monitored the data from the public health center.

"... if our regular visits are only once a month or sometimes twice a month. For example, if there is a field trip coincided with another activity. It's flexible, but most often at least once a month..." **(UP02)**

"...yes, we come regularly every month, we ask beforehand about the report..." **(UP01)**

This is in line with Fitriana's research which states based on the results of the study that the monitoring of Fe tablets is only in the form of reporting data from implementing officers every month. The data comes from statements from school health unit teachers only regarding the amount of Fe tablets that has been distributed<sup>14</sup>.

It was found that the school health unit supervisor had not routinely monitored and reminded adolescent girl about the consumption of Fe tablets. The monitoring process carried out is still ineffective because the

recording process is not carried out strictly so that it allows adolescent girl to be dishonest in consuming the given Fe tablet. Because the monitoring process carried out is still ineffective, this affects the success of the level of iron consumption in adolescents and then affects the success rate of Fe Tablets program for adolescent girl in Pekanbaru City.

### Recording and Reporting

Based on the results of a document review from the Guidelines for the Prevention and Management of Anemia in Young Women and Women of Childbearing Age, it was found that at the registration stage, adolescent girls will record through the School Health Unit. Recording is carried out by the school health unit implementation team at the school in accordance with additional tasks. This Fe tablets administration is recorded on the Nutrition Supplementation Card and My Health Report Book. In the results of in-depth interviews, it was found that all of the target adolescent girls did not receive my supplementation card and health report book. So that the recording process is carried out on a form made by the public health center containing the name and checklist column as a sign that they have consumed Fe tablets per week.

"... reports are recapitulated every month and given to us..." **(UD02)**

"...we make forms per class, later per class we will recap it again into per school, now we report the number of these schools to the office..." **(UP04)**

"...the report is once a month we ask the school, whether it is filled or empty, every month we still make a report..." **(UP01)**

Based on the results of the document review from the Guidelines for the Prevention and Management of Anemia in Adolescent Girls and Women of Childbearing Age, it was found that at the reporting stage, the recapitulation of school records will be reported to the public health center and then will report to the Health Office. The frequency of reporting for all levels is every 3 months. This is in accordance with what was obtained from in-depth interviews, where starting from the school level reported the results of the recapitulation every month to the public health center. Then the public health center also reports the recapitulation every month to the City Health Office. For the level of the City Health Office to the Provincial Health Office, it is done every three months. Reports that are reported are only the name of the adolescent girl and the number of times she has taken Fe tablets for 1 month.

### Supporting Factors and Inhibiting Factors in Process Stages

The supporting factor of this stage of the process is the support from across sectors, across programs and also from the recipients of the program, namely schools and especially adolescent girl



"...if the supporting factors are cross programs that support this program. And also the school that involved school health unit teachers in giving this Fe tablets..." (UD01)

"... if the supporting factors are supported by all school residents, school principals and even students also support..." (PG03)

The inhibiting factor is that there are still schools that are not willing to join this program, the lack of attention to the expired date of tablets in the distribution so that there is a buildup of tablets, there are still many parents who forbid their children to take Fe tablets and there is still a lack of coordination and control in its implementation

"...then there is this young woman whose parents don't allow it, even though this is not actually a drug, it's a supplement like a vitamin. There are also those who ask for help from the school health unit teacher at school because that is not our only job, so we have problems..." (UD01)  
"...if there is nothing that hinders their activities, sis, but yes, the tablet was about to expire, sometimes I don't dare to give it to the child, so I just put it in the school health unit..." (PG05)

The inhibiting factors that are still experienced by the City of Pekanbaru need more attention from the government to support the success of the female adolescent Fe tablets program and then support the global targets and Indonesian targets to support action commitments to reduce 50% of the prevalence of anaemia in women of childbearing age in 2025. If there are still obstacles in practice, this target will not be achieved.

#### Output

Output is a collection of parts or elements resulting from the ongoing process in the system. Output can be physical and non-physical. The output in the health system is the implementation of effective, efficient and equitable health development which can be seen from the degree of public health.

#### Scope of Success of the Adolescent Girl Fe Tablets Program

Based on the results of a document review from the report on the percentage of success of the Fe tablet program for adolescent girl in Pekanbaru City in 2018 it was 10.8% and in 2019 it increased to 37.2%. This percentage figure refers to the 2015-2019 National Medium-Term Development Plan (RPJMN) where the percentage for the Fe tablet program in 2018 is 25% and in 2019 it is 30% data<sup>19</sup>.

Based on the results of in-depth interviews, it was found that the program for Fe tablets has only been implemented in Pekanbaru City starting from 2018, so there are still many shortcomings in its implementation.

In 2019 there was an increase in the percentage of success for the Fe tablet program in Pekanbaru City, and the percentage has also reached the national expectation figure of 37.2%. However, in overall implementation, there are still public health center that do not run the program or the percentage of success is still 0% and also not all schools can run this program, so it can be said that there are still many shortcomings in its implementation. The city of Pekanbaru itself states that it has not been able to fully implement this program within 12 months each year, so currently it is still running about 8 months from a period of 1 year due to the children's school holiday schedule and also the lack of human resources to assist in its distribution.

"... from 2018 to 2019 there was an increase. From 2019 to 2020 it decreased due to the pandemic..." (UD01)

"...2019 was pretty good, yes, the coverage increased compared to 2018 which was still falling..." (UD02)

"... if the success is said to be successful, it's not 100%, plus the factor that we haven't been able to do 12 months, then we also feel unable to go down to all schools in the work area, automatically the percentage of success will also decrease from the total number of students. total targets are all..." (UP03)

#### Target Accuracy and Distribution Time

Based on the document review of the Circular Letter of the Director General of Public Health Number HK.03.03/V/0595/2016, it was found that in the implementation of the provision of Fe tablets for adolescent girl there are several points, namely:

- How to give Fe tablets with a dose of one tablet per week throughout the year.
- Giving Fe tablets is done for young girls aged 12-18 years
- Giving Fe tablets to young women through school health unit in educational institutions (junior and high school levels or equivalent) by determining the day to drink Fe tablets together every week according to the school's agreement.

Based on the results of in-depth interviews, the implementation of the Fe tablet program in Pekanbaru City is in accordance with the provision for adolescents aged 12 to 18 years who are at the level of education in Junior High School to Senior High School. The provision of Fe tablets throughout the year is still an obstacle in Pekanbaru City, because the implementation in Pekanbaru City has only run for 8 months out of 12 months throughout the year starting from February or March and finishing in September or October.

Timely distribution is recommended for consumption after meals or before bedtime. In practice,



there are still many that are not appropriate for the time of consumption. Usually, adolescent girls will take their tablets in the morning or afternoon when they are at school and often not accompanied by eating first.

"... if the program is implemented properly, because we are from the government, it's done for young women, because that's why teenagers had their periods and were prepared for their future. Then now these children could be due to lack of blood factor so they are less enthusiastic about learning. That's why this program was carried out so I think it's right..." (UP04)

"... the implementation is right for young women, and it is according to what was planned so it is right..." (UP03)

#### Supporting Factors and Inhibiting Factors in the Output Stage

The supporting factor in this Output stage is the participation of schools and health centers to support the success of the program

"... all of them support the implementation, but that was usually the problem in the technical field..." (UP01)

"...the participation of schools and health centers in the success of the program..." (UP04)

The inhibiting factor is that there are still some school health unit who are not right in recording and reporting so that it affects the percentage of program reporting.

"... if for the output the most influential is the recording and reporting, yes the first one, like it's still late in collecting it and it's still not in accordance with our wishes, so it affects the results of the report..." (UP01)

"... lack of control so we need support from all school residents to increase the success of this signet consumption..." (UP03)

#### CONCLUSION

From this research, it can be concluded that the distribution of Fe tablets in Pekanbaru City has been going quite well, but there are still some obstacles in its implementation. At the input stage, the human resources for the Fe supplementation program can be said to be sufficient, but when viewed as a whole for the nutrition program, it cannot be said to be adequate. It needs to be reviewed in terms of workload analysis in the work area of the health office or health center so that it can be seen both objectively and subjectively in the constraint of the shortage of implementing human resources. There is still an inaccuracy in the disbursement of funds, there are still

shortcomings in the procurement of IEC media for the implementation of the Fe supplementation tablet program, there is still a lack of coordination in implementing existing regulations. At the process stage referring to the flow of Fe tablet demand and distribution, it can be seen that there can be obstacles in the Fe tablet procurement process. The long process makes the Fe tablet procurement time a little longer, so it can be budgeted for this Fe tablet with an age of approximately 18 months so that it can still be distributed when the stock of new tablets is still in the process of being handled and the remaining stock of tablets is not close to the expiration date. Targeting has used data on the number of adolescent girl in real terms. However, there is still a lack of coordination in monitoring and there are still inaccuracies in recording the monthly recapitulation in schools. At the output stage, the accuracy of distribution and timing of program implementation are appropriate and from being implemented in 2018 the percentage of program success increased in 2019,

From all stages of input, process and output, it can be concluded about the factors that support the implementation of the program and the factors that hinder the implementation of the program. A supporting factor in the implementation of the program for giving Fe tablets in Pekanbaru City is the existence of a circular letter from the Ministry of Health and supported by a circular from the Mayor of Pekanbaru regarding support for the program for giving Fe tablets for adolescent girls. Then there is cross-program and cross-sector support in program implementation. In addition to supporting factors, there are inhibiting factors in the implementation of the Fe tablet program in Pekanbaru City, namely some technical problems in the field and still not all cross-sectoral agencies have participated in working together for the success of the Fe tablet program in schools.

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