International Journal Of Health Medicine and Current Research
E - ISSN : 2528 - 3189
P - ISSN : 2528 - 4398

International Journal of Health Medicine and Current Research
Vol. 5, Issue 03, pp.1826-1839, September, 2020

DOI:
10.22301/IJHMCR.2528-3189.1826

Article can be accessed online on:
http://www.ijhmcr.com

ORIGINAL ARTICLE

INTERNATIONAL JOURNAL OF HEALTH MEDICINE AND CURRENT RESEARCH

MATERNAL KNOWLEDGE OVERVIEW ABOUT THE BENEFITS OF EATING TABLET FE IN REGENCY WORK CENTRAL TOBELO PITU SUBDISTRICT PUSKESMAS DISTRICT NORTH HALMAHERA

Merci Grasela Djorebe [1*], Selvie Ticoalu [1], Arend L Mapanawang [1]

[1] *Midwifery Program Of Sekolah Tinggi Ilmu Kesehatan Makariwo Halmahera (STIKMAH) - Tobelo*

ARTICLE INFO

Article History:
Received 17th April, 2020.
Received in revised form
18th June, 2020.
Accepted 19th August, 2020.
Published online 30th Sept, 2020.

Key words:
Illustration, knowledge, the benefits of consuming

Correspondence to Author:
Merci Grasela Djorebe
Student of Midwifery Program, Sekolah Tinggi Ilmu Kesehatan Makariwo Halmahera (STIKMAH) - Tobelo

ABSTRACT

The cause of the majority of Indonesia's anemia is an iron deficiency that is required for the formation of hemoglobin called iron deficiency anemia. Anemia in pregnant women due to complications brought a high risk for miscarriage, bleeding, newborn babies are low, atonic uterus, uterine inertia, and retained placenta. Treatment of anemia with iron supplementation tablets (Fe), which is the most effective way to increase the levels of iron (Fe) in a short time period in pregnant women.

Objective: To determine the picture knowledge of pregnant women about the benefits of consuming Fe tablets in 2019. Year PHC Pitu descriptive research, where the descriptive method is a method that serves to describe or give a picture of the object under study through data or samples that have been gathered as it is. From these results, there are no results and conclusions. Because still in the research stage.

Citation: Merci Grasela Djorebe[1*], Selvie Ticoalu [1], Arend L. Mapanawang [1], 2020 "Maternal Knowledge Overview About The Benefits Of Eating Tablet Fe In Regency Work Central Tobelo Pitu Subdistrict Puskesmas District North Halmahera", *International Journal Of Health Medicine And Current Research*, 5, (03), 1826-1839.

Preliminary

Background

According to the World Health Organization (WHO) globally, the prevalence of anemia among pregnant women worldwide is 41.8% of mothers who are pregnant. Anemia prevalence in pregnant women in Asia by 48.2%, Africa 57.1%, with 24.1% and Europe 25.1%. Anemia is more likely to take place in developing countries than in developed countries, 36% were caused by a lack of iron intake, increased physiological needs, and perdarahan.3

Data Indonesia Demographic Health Survey (IDHS) in 2013 stated that the maternal mortality rate (MMR) in Indonesia is 359 / 100,000 live births hidup.4 Based on the results of Health Research (Riskesdas) by 2016, the prevalence of anemia in pregnant women in Indonesia amounted to 37.1 %. Giving tablet Fe in Indonesia in 2015 by 85%. This percentage has increased compared to 2014 which amounted to 83.3%. Although the government has been doing relief programs anemia in pregnant women is to give Fe 90 tablets to pregnant women, but the incidence of pregnant women still tinggi.5

Maternal Mortality Rate (MMR) in North Maluku province from 2011 until 2015 is very volatile. In 2015, AKI experienced an increase of 260 / 100,000 live births, which means 100,000 live births there were 260 women who died, this figure is still far from the target of the National AKI is 102 / 100,000 live births in 2015.6

Based on data from North Halmahera District Health department says Maternal Mortality Rate (MMR) in 2017 was 392 / 100,000 live births, which tend to experience a significant increase compared to 2016, ie 367 / 100.00 live births. In 2018 the MMR decreased, ie, 162 / 100,000 live births. In 2018, pregnant women have anemia due to iron deficiency is a total of 355 pregnant women out of 2878 pregnant women in Halmahera Utara.7

The data from health Pitu get MMR in 2017 was 3 / 100,000 live births which are caused due to iron deficiency anemia, eclampsia and lack of antenatal (ANC) .8

Based on this background, the authors are interested in doing research on "Factors that affect the compliance of pregnant women in consuming Fe tablet in Puskesmas Pitu 2019.

Formulation of the problem

Based on the description of the background, we can conclude that the problem formulation: "Knowledge Overview pregnant women about the benefits of consuming Fe tablet in Puskesmas Pitu 2019.

Research purposes

1. General Purpose

To describe knowledge of pregnant women about the benefits of consuming Fe tablet in Puskesmas Pitu 2019.

2. Special Purpose

a. Know the description of knowledge of pregnant women about the benefits of

consuming tablets Pitu Fe at the health center.

b. Knowing the distribution of the characteristics of respondents in Puskesmas Pitu.

Benefits of Research

1. For Educational Institutions

It can be used as a reference source, and as a source of reading material imu insight knowledge development reference for further research.

2. For Researchers

Can learn more about the factors that affect the compliance of pregnant women in consuming Fe tablet and apply science has uncovered about midwifery.

3. For the Respondents

Can increase their knowledge and broaden the client about the benefits of consuming Fe tablet during pregnancy and the impact if it does not consume iron tablet.

4. for health centers

To provide input and information to health workers in health centers of the importance of pregnant women consume iron tablets during pregnancy and can increase quality health services based on the information obtained from this study.

Literature review

Knowledge

definition Knowledge

Knowledge is the result out and this happens after people perform specific sensing. Sensing occurs through the five senses, the senses of sight, hearing, smell, taste, and touch. Most human knowledge is obtained through the eyes and telinga.11

Knowledge of pregnant women will affect behavior. Pregnant women with the knowledge of good nutrition will try to provide adequate nutrition for themselves anyway and her fetus. Knowledge regarding iron pregnant women will have an impact on attitudes to food by applying the information obtained to provide foods that contain iron to meet the needs for kehamilan.11

Knowledge level

a. Know (Know)

Know interpreted as considering a previously learned material. Included in this level of knowledge is recalled (*recall*) Something specific of all the materials studied or stimuli that have been received.

b. Understand (Comprehension)

Understanding is defined as an ability to explain properly about the object known and can interpret the material correctly.

c. Application (Application)

Application is defined as the capability to use a material that has been studied in a situation or condition of real (true).

d. Analysis (Analysis)

The analysis is the ability to describe the material or object into components.

e. Synthesis (Synthesis)

Synthesis refers to an ability to lay or connect the parts in a whole new form.

f. Evaluation (Evaluation)

This evaluation relates to the capability to perform justification or assessment of a material or object.

Knowledge criteria

The knowledge someone could be detected and interpreted by qualitative, namely:

1. Well, when subjects answered correctly 76% -100% of all the questions
2. Simply, if the subjects answered correctly 56% -75% of all the questions
3. Less, when subjects answered correctly <55% of all inquiries.

Factors Influencing Knowledge On Pregnant Women

1. Education

Education is one of the factors that can affect health. Menunjukkantingkat education level of quality and quantity of a person's everyday behavior, the higher the education level of knowledge can be higher. The rate is very influential in healthy mother and baby.

2. Age

The increasing age of a person will be growing and the better the knowledge, because the more mature the higher maternal age of pregnant women knowledge about Fe and will be obedient to consume iron tablets and the selection of food. The more mature the age of a person, the higher their mindset to pay attention to their own health.

3. Occupation

Women who work have greater insight and more to interact with people and the outside world so that the woman can know the importance of consuming Fe tablet. So they are willing to consume regularly.

4. Resources

The source of information is obtained by means of supporting a person to increase their knowledge. Mothers who received information through media (health professionals, parents, family, friends and neighbors) better knowledge compared with pregnant women who get through non-media.

gestation

definition of Pregnancy

Pregnancy is a time starting from conception to the birth of the fetus, the length of a normal pregnancy is 280 days (40 weeks or 9 months 7 days). Calculated from the first day of the last menstrual period. 15

Signs of Pregnancy

A. Definitely Signs of Pregnancy

1. Audible Fetal Heart Rate
2. Motion feels fetus
3. On ultrasound seen pockets of pregnancy, there is a picture of the embryo

4. In the X-ray examination of the fetus seen their order (> 1minggu)

B. Signs Uncertain Pregnancy

1. enlarged uterus
2. Hegar's sign
3. Chadwick mark, that bluish color of the cervix, vagina, and vulva
4. Piskacek mark, namely uterine enlargement in one direction so that stands out clearly in the direction of the enlargement
5. *Braxton hicks*, When the uterus is stimulated (stimulated with palpable) will be easier to contract
6. Basal Metabolism Rate (BMR) increased
7. *Ballotement* positive, if the examination in the mother's abdominal palpation by means of swinging to one side, then it will feel "reflection" on the other side.
8. Urine pregnancy test (HCG test) is positive, a urine test performed at least one week after conception. The purpose of this inspection is to know gonadotropin hormone levels in the urine.

C. Alleged Pregnant

1. Amenorrhea/absence of periods according to the cycle (delayed menstruation)
2. , anorexia nausea, emesis, and hypersalivation
3. Dizzy
4. Mixing / frequent urination
5. obstipation Hyperpigmentation: striae, chloasma, linea nigra
6. varicose veins
7. breast tightened
8. The mood change
9. BB increased

Pregnancy Diagnostic Examination

1. Urine pregnancy test (HCG)
2. High Estimate Fundus uteri
3. Abdominal palpation (Leopold 1-4)
4. ultrasound examination
5. X-ray examination

Maternity Needs

a. Physical needs

diet Food

Food needs in pregnant women absolutely must be met. Nutrition needs in pregnant women can cause anemia, abortion, IUGR, uterine inertia, postpartum hemorrhage, puerperal sepsis, and others. While excess food because they thought the fulfillment of a meal for two will result in obesity, preeclampsia, the fetus is too large and so on. The important thing to note is actually how you can control the menu and the menu processing based on the general guidelines of balanced nutrition. Midwives as nutritional adequacy supervisor can monitor the weight gain during pregnancy.

b. Basic Needs Nutrition

1. protein

Protein serves to maintain and repair tissue cells, as well as make hemoglobin. Hemoglobin is a substance in the color of red blood cells will carry oxygen from the lungs to cells throughout the body, forming antibodies to fight disease and infection, and produces hormones and enzymes.

2. Fat

Serves to give more energy than other substances, taking vitamins A, D, E and K which are not soluble in water throughout the cells of the body. It is important to maintain the growth and health of the skin.

3. Carbohydrates

Carbohydrates serve to provide energy that can directly be used the body, absorbing protein to build and repair the body's cells, as well as add volume to the food so much fun. Sources of carbohydrates are rice, wheat, cereals, potatoes, and fruits.

c. Vitamin needs

1. vitamin A

Growth is important for bones, eyes, hair, and skin. Allowing the body to replace cells of the body, especially the mucous membranes of the eyelids, eyes nose, mouth, and digestive.

2. vitamin B

Vitamin B1 (thiamine), B2 (riboflavin) and B3 (Niacin) are needed to help metabolism energy. Therefore, if the energy requirements increase, the need for these vitamins also increases.

Vitamin B2 helps the process of changing carbohydrates into energy, helps body cells use oxygen, and maintain eye health. Sources of food: bread, butter, cheese, milk, eggs, meat, Hayi, fish, and vegetables.

Other B vitamins essential for metabolic processes and the formation of blood cells healthy. Vitamin B6 is needed to regulate the use of protein by the body and helps to overcome nausea and vomiting.

3. Vitamin C

Vitamin C is essential for the maintenance of healthy teeth, gums, skin, muscle, and bone. It helps wound healing, enhances the body's resistance to infection, and upper body's absorption of iron. Sources of vitamin C are fresh fruits and vegetables, among others, oranges, kiwi, papaya, spinach, cabbage, broccoli, tomatoes, and others.

4. vitamin D

Helps the body absorb calcium and phosphorus are important for forming and maintaining healthy bones and teeth. This vitamin helps the application of calcium and phosphorus in the small intestine and regulates mineralization in bones and teeth. Sources of vitamin D are tuna, salmon, especially in the heart, liver oil, eggs, milk fortified with vitamin D in the body with the help of sunlight.

5. vitamin E

Important for metabolism. Maintain healthy skin and muscle, forming red blood cells, protect the fat and substances contained therein, such as vitamin A, from damage.

6. vitamin K

Important for blood formation, blood clotting, and bone growth. The body gets enough of these nutrients supplements to avoid bleeding, such as postpartum. Food sources: green leafy vegetables, cabbage, peas, potatoes, liver, tomatoes, yogurt, meat, eggs, milk, and nuts.

7. Folic acid

Folic acid is needed by expectant mothers on preconception. Candidates for pregnant women who have folic acid deficiency are at risk of the occurrence of defects in the neural network when the fetus is formed. Folic acid is contained in the liver, wheat, beans, green vegetables, fruits, and yeast.

d. Mineral needs

1. Calcium

Calcium is important for bone and teeth formation and maintains the fluid balance of the body. Important for the development of nerve cells and the brain, for blood clotting, and enables the absorption of vitamin B12.

2. Iron

Iron helps the formation of hemoglobin. Iron for pregnant women is important for forming and maintaining red blood cells so that it can ensure the circulation of oxygen and metabolism of nutrients are needed for pregnant women

3. Zinc (Zn)

Zinc is one of the nutrients that affect the reproductive system because it has efficacy as antibacterial, antiviral, antifungal, anticancer and anti-radiation, which is needed by all the reproductive functions, the formation of the brain and the immune system of the fetus.

4. Fiber

Fiber is regulating the work of digestion. Fiber gives a sense of fullness for longer. This prevents pregnant women from overeating. It also helps facilitate the digestive system, thus preventing constipation occurs. Food sources: vegetables, legumes, fruits, and grains bijian.17

tablet Fe

Understanding Tablet Fe

Iron (Fe) is an essential micro-elements for the body required for the formation of hemoglobin and can be obtained from a variety of, air foods such as red meat, spinach, kale, beans and so on.

Fe during pregnancy needs about 1000 mg, of which 500 mg is needed to increase red blood cells by the masses, 300 mg for transport to the fetus in pregnancy is 12 weeks, and 200 mg more to replace fluids out of the body. The need for Fe during the first trimester relatively little about 0.8 mg per day which is then increased sharply during the second and third trimester, ie 6.3 mg daily. This is because when the blood volume level pregnancies occurred

progressively starting the week of the 6th to the 8th of pregnancy and peaked at week 32 to 34th with minor changes after that week.

Benefits of Tablet Fe

The main benefit of iron is the formation of the enzyme, which serves to change the chemical reactions in the body and forming the main component of red blood cells and se-cell otot.19

Needs Iron And Iron Supplementation During Pregnancy

The need for iron during pregnancy is an average of 800 mg- 1040 mg. This requirement is necessary to:

± 300 mg is necessary for fetal growth

± 50-75 for the formation of the placenta

± 500 mg used for mass increase maternal hemoglobin / red blood cells

± 200 mg is excreted through the intestines, urinary, and skin

± 200 vanished when she gave birth

For that supplementation Fe adjusted for gestational age or iron needs of each trimester, as follows:

1. First trimester: iron requirement ± 1 mg / day (basal losing 0.8 mg/day) plus 30-40 mg for the needs of the fetus and the red blood cells.
2. Trimester II: the need for iron ± 5 mg/day (basal loss of 0.8 mg/day) plus the need for red blood cell conceptus 300 mg and 115 mg.
3. Trimester III: iron requirement of 5 mg/day, plus the need for red blood cell conceptus 150 median 223 mg.

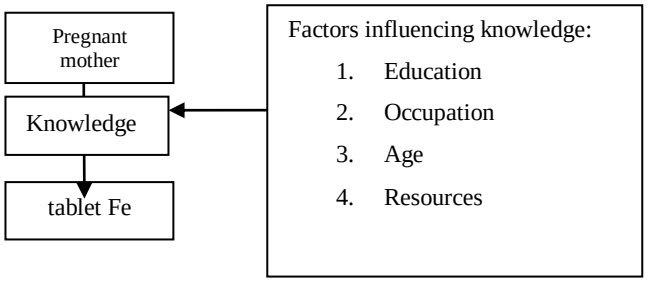
Side Effects Giving Tablet Fe

Giving oral iron tablets can cause side effects on the gastrointestinal tract in some people, such as discomfort in the pit of the stomach, vomiting and diarrhea.

Sources of iron are animal foods such as meat, chicken, and fish. Other good sources are eggs, nuts, green vegetables, and some fruits. Besides, the amount of iron to note the quality of iron in food also called biological availability (invalidity).

No.	Food material	The content of iron (mg)
1	Meat	23.8
2	Soy	8.8
3	beans	8.3
4	Rice	8.0
5	Spinach	6.4
6	beef liver	5.2
7	Formula milk	1.2

Theoretical framework



Operational definition

No.	variables	Operational definition	Measuring instrument	Measure Results	Scale Measuring
1	Knowledge	Knowledge is referred to in this study is knowledge of pregnant women about the benefits of consuming Fe tablets. Which includes Fe. Which includes understanding, levels, and factors of knowledge.	questionnaires	Good 76-100% Quite 76-56% Less <56%	ordinal
2	Education	Formal education followed by mother	questionnaires	1.Rendah 2. Medium 3. High	ordinal
3	Age	The long duration of life since the mother was born until now	questionnaires	1. 20 years 2. 21-35 3.> 35 years	ordinal

Research Methods

Types of research

This type of research uses a descriptive research method is the method of research that describes the knowledge of pregnant women about the benefits of consuming Fe tablet in Pitu Health Center, District Central Tobelo North Halmahera.

Place and time of research

This study will be done in the sub-district Puskesmas Pitu Tobelo central North Halmahera regency in July-August 2019.

Data analysis

Univariate analysis

A univariate analysis performed to obtain a general overview by describing each of the variables used in the research is to see the picture of the frequency distribution in the form of a table.

Data processing

Data processing uses four stages, namely editing, coding, data entry and cleaning as follows:

3.8.1 editing

Editing is checking or correcting data that has been collected, in order to eliminate the errors contained in the recording field and corrective.

3.8.2 Coding (Encoding)

Coding is the provision of the code in each data included in the same category. The code is a gesture made in the form of numbers or letters that give clues to the identity or any information or data to be analyzed.

3.8.3 Data entry

The charging process data on the basis of data tables, whether of the recording at the time of the interview and secondary data. The term is also known as a data entry tabulation of data, namely the transfer of data from the questionnaire to the table.

3.8.4 Data cleaning

Process for cleaning of data entry errors due to an error at the time of the entry process or tabulation of data.

Discussion

This research has been carried out for a month that is dated August 28, 2019, until 28 September 2019 at the sub-district Puskesmas Pitu Middle Tobelo, by collecting data from pregnant mothers using the questionnaires were distributed and filled by pregnant mothers. The number of respondents in this study amounted to 36 people.

Knowledge of pregnant women about the benefits of consuming Fe tablet based on the age distribution

There are several factors that can affect a person's knowledge one of which is age. With increasing, age may affect the comprehension and mindset of someone. Based on table 4.1 of the research result shows the distribution of respondents by age most are 21-34 years old is numbered 23 people (63.8%).

Based on the 21-34 year age distribution of respondents who are knowledgeable with both categories amounting to 8 people (35%), the category is quite amounting to 8 people (35%) and less category amounted to 7 people (30%). While age <20 years as many as 9 people (25%) with good category 1 (11.1%), it was important enough 1 (11.1%) and less category amounted to 7 people (77.7%). And the distribution of respondents the least is the respondents with age> 35 years amounted to 4 people (19.4%) with enough categories amounted to 2 people (50%) and the category of fewer than 2 people (50%).

Previous research conducted by Siti Mutoharoh 2015 in Puskesmas Adimulyo about the characteristics of pregnant women in the tablet consuming

Fe. Based on the results of the 30 respondents, shows that the majority of respondents have 20-35 years of age (80%). Age 20-35 years is a period of fertile and productive period of a person, at that time a person likely to be active social relationships, whereas at age <20 years tend to not have extensive experience in person. Age affects the level of knowledge because of the necessary mental ability to learn and adapt to new situations such as remembering things that had never been studied, analog reasoning and creative thinking, culminating in the 20s.

Knowledge of pregnant women about the benefits of consuming Fe tablet-based educational distribution

In addition to the age factor that can affect a person's knowledge, education may also be one of the factors that affect a person's knowledge. Based on table 4.2 of the research results can be seen most respondents are high school educated is numbered 17 (47.2%) with both categories numbered 6 (16.6%), the category of pretty numbered 6 (16.6%) and the category of less of 5 people (29.4%). Respondents who had elementary education amounted to 7 people with less category amounted to 7 people (100%), respondents JSE amounted to 5 people with enough category 1 (16.6%) and less category amounted to 4 people (80%) and respondents with a college education amounted to 7 people (19.4%) with both categories totaling 3 (42.8%) and amounted to enough category 4 (57.1%).

Researchers had previously explained that low education can influence the behavior of respondents in consuming Fe tablet, this is because the level of education is very influential on a person's level of knowledge about health. Low education can hamper the learning process about the health of such respondents is difficult to access information about the benefits of tablet Fe during pregnancy, so that with a low education do not have a high awareness of the benefits of tablet Fe, this is due to less knowledge about consuming Fe tablet.

Knowledge of pregnant women about the benefits of consuming Fe tablet is based on the distribution of jobs

Another factor that can affect a person's knowledge is a job. Based on Table 4.3 of the result of this research is the most respondents are housewives (IRT) is numbered 28 people (77.7%) with both categories amounting to 8 people (28.5%), sufficient amount to 8 people (28.5%) and less category amounted to 12 people (42.8%).

Respondents who worked as farmers totaling 3 (8.3%) with total category less knowledgeable of 100%, while respondents who worked as a clerk / PNS of 5 people (14%) who have knowledge of good category amounted to 2 people (40%) and enough categories totaling 3 (60%).

According to researchers from the results of the study there were 28 people (77.7%) worked as IRT most knowledge able with less category as many as 12 people (42.8%) work can affect the knowledge of pregnant women about the benefits of tablet Fe, pregnant women who work as IRT is busy taking care of the household so rarely have the time to find information about the health of her pregnancy.

Knowledge of pregnant women about the benefits of consuming Fe tablet is based on the distribution of knowledge

From the results of this research is that knowledge of pregnant women about the benefits of consuming Fe tablets in Puskesmas Pitu included in the poor category. This can be seen in Table 4.4 of 36 pregnant women, there are 16 people (44.4%) who have less knowledge, such as age <20 years amounted to 7 people (77.7%), aged 21-34 years amounted to 7 people (30%) and age > 35 years amounted to 2 people (50%). Pregnant women who have knowledge of the category of age <20 years amounted to 1 (11.1%), aged 21-34 years amounted to 8 people (35%) and> 35 years amounted to 2 people (50%). Meanwhile, pregnant women who have a good knowledge of the category of age <20 years amounted to 1 (11.1%) and 21-34 years of age amounted to 8 people (35%).

Researchers previously performed by Fauziah in 2018 on the effect of use, education and knowledge on the consumption of iron tablet supplementation in pregnant women at health centers Maron, Probolinggo of 40 of the most respondents have less knowledge, there are 20 people (50%) have less knowledge, 11 (27.5%) have moderate knowledge and 9 (22.5%) have a good knowledge. The researchers explained that knowledge of the mother can affect the consumption of iron tablets. Pregnant women with good knowledge will tend to consume iron tablets regularly compared with pregnant women who have less knowledge of consuming Fe tablets.

According to researchers who lack knowledge of pregnant women about the benefits of tablet Fe will affect the mother's behavior in consuming Fe tablet during pregnancy. The better knowledge of pregnant women about the benefits of the higher iron tablet of

pregnant women awareness in consuming Fe tablets.

Conclusion

Based on the results obtained it can be concluded:

1. The result is that the knowledge of pregnant women about the benefits of consuming Fe tablets included in the poor category. Of the 36 respondents, there were 9 (25%) who have a good knowledge of the category, which has sufficient knowledge of the category 11 (30.5%) and the category of fewer than 16 people (44.4%).
2. One of the factors that influence maternal knowledge is the mother's occupation. Most of the work the mother is a housewife that is numbered 28 people (77.7%), mothers with a job as a clerk / PNS of 5 people (14%), while the capital to work as a farmer is the least that is numbered 3 (8.3%).

References

1. Sivanganam S. Weta W. The level of compliance of pregnant women taking iron tablets health centers in the region of Sidemen. Medical Science Digest. 2017; 8 (2): 135-138
2. Astuti D. Factors associated with the incidence of anemia among pregnant women at health centers Lor Undaan Holy District. University Research Colloquium. 2016: 125-131
3. Amini A. et al. Maternal age and parity as risk factors that affect the incidence of anemia among pregnant women in Puskesmas Ampenan. Midwifery Journal. 2018; 3 (2): 108-113.
4. Rumbajan D.et al.The Effects Of Gedi Leaf Decoction (Abelmoschus Manihot) HB Toward Increasing At Parturition. International Journal of Health Medicine And Current Research.2016;1 (01): 69-74 DOI: 10.22301 / IJHMCR.2528-3189.69
5. Mariana D. et al. Relations diet with the incidence of anemia among pregnant women in the Puskesmas. Journal of Nursing Silampari. 2018; 1 (2): 108-122
6. Profile of North Maluku Provincial Health Office, 2015.
7. North Halmahera District Health Office in 2018.
8. PHC medical records Pitu 2019.
9. Hi Abd Muttalib R. et al. Management Trimester Pregnant Women Care Midwifery II Anemia By Weight At Home Delivery Aathira North District Halmahera Tobelo. International Journal of Health Medicine And Current Research.2018;3 (03): 965-968DOI: 10.22301 / IJHMCR.2528-3189.965
10. Fatimah. Antenatal Care implementation associated with anemia in the third trimester of pregnancy in Puskesmas Saedayu I Yogyakarta. Journal of Nurses and Midwifery Indonesia. 2015; 3 (3): 134-139

11. Y. Evayanti knowledge Relations mother and husband support to pregnant women to antenatal care visits regularity (ANC) in Puskesmas Wates Central Lampung. Journal Kebidanan.2015; 1 (2): 81-90.
12. Eryanti D. et al. Knowledge dismenoreae study young women in class VIII at ngeba past white junior high school. International Journal of Health Medicine And Current Research, 2019;4 (01): 1221-1124DOI: 10.22301 / IJHMCR.2528-3189.1221
13. Eugenie T. et al. Motivation and counseling is the dominant factor of the submission of pregnant women taking iron tablets. Journal of science and health technologies. 2014; 1 (2): 85-92
14. Galaupa R. Factors influencing knowledge about tablet Fe pregnant women. Between the journal Obstetrics. 2019; 2 (2) things: 96-103
15. Maljeti M .et al.The Effects Of Spinach capsules (Amaranthus Tricolorl) To Increase The Level Of Hemoglobin (Hb) In Pregnant Women In Mahia Village, Central Tobelo Sub-District North Halmahera. International Journal of Health Medicine And Current Research.2017;2 (03): 558-562DOI: 10.22301 / IJHMCR.2528-3189.558
16. A. Sulistyawati Midwifery Care In Pregnancy. Jakarta: Salemba Medika; 2014.
17. India MT Best Guide Pregnancy, Childbirth, and Baby Care. Yogyakarta: Indolestari; 2015.
18. Rizki F. et al. Iron tablet supplementation relationship with the hemoglobin in pregnant women in the third trimester of cold water Puskesmas Padang. Andalas Medical Journal. 2017; 6 (3) things: 502-506
19. T. IP Rooslyen prevention strategy in the prevention of anemia in pregnancy. Scientific Journal Widya. 2016; 3 (3): 1-9
20. Susilonigtyas I. Granting of iron (Fe) in pregnancy. Journal Unissula. 2019; 50 (128): 73-99.
21. L. Research Mapanawang A health field. Tobelo; 2016.

Mutoharoh S. et al. Characteristics of Pregnant Women Taking Tablet In Adimulyo Fe Di Health Center. Journal of Obstetrics involution. 2015; 5 (9): 18-28

****