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**Original Articles: Case Study** 

# ANALYSIS OF NURSING CARE FOR PREGNANT WOMEN WITH THE IMPLEMENTATION OF FE TABLET EDUCATION THROUGH METHOD AUDIOVISUALS TO OVERCOME THE DEFICIT KNOWLEDGE OF ANEMIA

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#### **Abstract**

**Background:** Anemia is a micronutrient problem in the form of a condition of deficient levels of hemoglobin (Hb) in the blood caused by low intake of iron which is needed for the formation of Hb. Not consuming Fe tablets in pregnant women is the most common cause of anemia in pregnant women.

**Objective:** The aim is to analyze nursing care for pregnant women by implementing Fe tablet education through audiovisual methods to overcome anemia knowledge deficits.

**Methods:** This research design uses descriptive in the form of a case study in the nature of nursing care including nursing assessment, nursing diagnosis, nursing intervention, nursing implementation and nursing evaluation. The research was carried out at the RSI Jemursari Surabaya. The time for taking this case study research was carried out by the researcher at January 10 to 12, 2023. Research was carried out for 3 days.

**Result:** The results of the research after implementing Fe tablet education via audiovisual media on anemia in pregnant women 3 times in 3 days with an implementation time of 15 minutes showed that the patient's level of knowledge increased from scale 2 (moderately decreased) to scale 3 (moderate).

**Conclusion:** The conclusions from the case study show that the application of Fe tablet education via audiovisual is effective as a nursing intervention for anemia problems in pregnant women.

# INTRODUCTION

Knowledge deficit is the absence or lack of cognitive information related to a particular topic. Caused by cognitive limitations, impaired cognitive function, lack of exposure to information, lack of interest in learning and ignorance of finding sources of information. (SDKI, 2022). This ignorance often occurs in pregnant women who experience anemia. The anemia is a micronutrient problem in the form of a condition of deficient levels of hemoglobin (Hb) in the blood caused by low intake of iron which is needed for the formation of Hb. Not consuming Fe tablets in pregnant women is the most common cause of anemia in pregnant women (Astuti, 2017). Problems that occur in pregnant women with anemia are

due to a lack of knowledge about the importance of fe tablets in the growth of the fetus in the womb. Characterized by pregnant women who often ask about the illness they are currently suffering from. Pregnant women show wrong perceptions about consuming Fe tablets which will not have an effect on the health of the fetus and the pregnancy process.

Based on the World Health Organization (WHO), anemia in pregnancy is confirmed if the hemoglobin (Hb) level is <11 g/dL. Meanwhile, the Center for Disease Control and Prevention defines anemia as a condition with Hb levels <11 g/dL in the first and third trimesters, Hb <10.5 g/dL in the second trimester, and <10 g/dL in postpartum, 83.2 % prevalence of pregnant women suffering from anemia, whereas in Southeast Asian countries the prevalence is 97.8%. The incidence of anemia or lack of blood in pregnant women in Indonesia is still relatively high. Based on the 2019 Riskesdas findings, 48.9% of pregnant women in Indonesia experience anemia, with 84.6% of anemia occurring in pregnant women aged 15-24 years. When compared to 2019, 2019 Basic Health Research (Riskesdas) data, the prevalence of anemia in pregnant women in Indonesia was 37.1%. This shows that the prevalence of anemia in pregnant women has increased by 11.8%. So, anemia is still a public health problem in Indonesia, including in East Java. This condition shows that anemia is quite high in Indonesia and shows a figure approaching a serious public health problem with an anemia prevalence limit of more than 40% (Ministry of Health of the Republic of Indonesia, 2022). Based on the results of interviews with nurses and observations on January 10, 2023 in the Mawar Room at RSI Jemursari Surabaya, it was recorded that there were 32 visits from pregnant women during the last month.

The level of knowledge in consuming Fe tablets is one of influences that can anemia in pregnant women. The low knowledge of pregnant women about Fe tablets has impact on the incidence of anemia in pregnant women. There is a significant relationship between the level of knowledge and the incidence of anemia in pregnant women. A person's level of knowledge will influence awareness of healthy lifestyle behavior and form a good mindset, so that mothers will find it easier to receive information and have adequate knowledge. One effort to increase knowledge is by providing education. Education can be provided using media because media is able to arouse and bring pregnant women into an atmosphere of joy and happiness, where there is emotional and mental involvement. The effectiveness of using media in providing education is largely determined by the number of senses of reception involved. The more senses are used, the easier it is to understand the delivery of educational messages. Several types of media are visual media, audio media and audiovisual media. Audiovisual media in the form of video is very effective in activating the five senses of hearing and sight at the same time. Because in absorbing material, 82% involves the five senses of sight and 11% the five senses of hearing compared to other media. And proven to have a 50% higher effectiveness rate than without audiovisual media. audio media and audiovisual media. Audiovisual media in the form of video is very effective in activating the five senses of hearing and sight at the same time. Because in absorbing material, 82% involves the five senses of sight and 11% the five senses of hearing compared to other media. And proven to have a 50% higher effectiveness rate than without audiovisual media. audio media and audiovisual media. Audiovisual

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Based on the description above, the application of education through audiovisual media regarding Fe tablets is an educational action that can overcome the knowledge deficit in pregnant women in overcoming the knowledge deficit of anemia risk, so the author is interested in observing "Analysis of Nursing Care for Pregnant Women Using Fe Tablet Education Application Through Audiovisual Methods to Overcome Anemia Knowledge Deficit at RSI Jemursari Surabaya".

# **METHODS**

# Study Design

This research used descriptive in the form of case studies in the nature of nursing care including nursing assessment, nursing diagnosis, nursing intervention, nursing implementation and nursing evaluation.

# Settings

The location of the study was conducted in RSI Surabaya Jemursari. The research was conducted from January 10 to 12, 2023.

# Research subject

The research was conducted on pregnant women who experienced a knowledge deficit about Fe tablets, namely Mrs. A.

#### Instruments

This study used observation instruments of Nursing Care Process that conducted by Faculty of Nursing and Midwifery, University of Nahdlatul Ulama Surabaya.

#### Data collection

Data collection is done by taking anamnesis, examination and observation.

#### Data Analysis

The data analysis used in this study is descriptive analysis based on data in the format of nursing care.

#### **Ethical Consideration**

The researcher applied for permission to the RSI Jemursari Surabaya to conduct research by bringing an application permission letter from University of Nahdlatul Ulama Surabaya. Meanwhile, research subjects were given informed consent before nursing care was carried out.

#### **RESULTS**

Data was obtained through examinations, interviews and observations carried out from 10 to 12 January 2023. When carrying out the assessment, Mrs. A was 25 years old and 10 weeks pregnant. Mrs.

A is Muslim, last education was high school. Mrs. A is a housewife. 1st Wedding. Address Kebraon Utara Surabaya. Clients are clients who have never been exposed to education about the importance of Fe tablets during pregnancy. Mrs. A said her pregnancy was planned because this was her first child, Mrs. A also had no history of previous illness. Mrs. A does not have any hereditary diseases in the family. Mrs. A did not have ANC examination data in the assessment. Mrs. From examining Mrs. A's gynecological history, there was clear vaginal discharge with no odor and no itching in the genital area and Mrs. When assessing Mrs. A's response to the nurse, there was eye contact, responding well to every question. The patient also said that her pregnancy was complaining No know why you often feel tired easily, feel nauseous and vomiting, and weak. Physical examination revealed that G4C5S6 was conscious. The general condition is good, when the vital signs were measured, the blood pressure was 90/84 mmHg, the pulse was 86x/minute, felt weak and had a regular rhythm, the RR was 20x/minute and the body temperature was 36oC. On examination of Mrs. A's eyes, the data showed that the right and left were symmetrical, the conjunctiva was anemic, the sclera was not icteric, on examination of the nose there were no secretions and the lip mucosa was moist. On breast examination there was no tenderness in both breasts and no lumps were found. On abdominal examination, the balloment was palpable, there were no surgical scars, there was no tenderness, the TFU had not been palpable. Data were not obtained from genetic examination because no assessment was carried out. On examination of the extremities there was no edema.

The main nursing diagnosis that emerged for Mrs. Blood test results HB 10gr/dl with gestational age 8-9 weeks, Blood Pressure 90/84mmHg, Pulse 86/minute, Respiration 20x/minute, Temperature 36°C.

Intervention: Mrs. This therapy was carried out for 3 days and 30 minutes with the patient's response understanding therapy given by the nurse, Mrs. A was active in asking questions to the nurse regarding her lack of knowledge about Fe tablets.

Before carrying out therapy, the researcher asked for permission and entered into a time contract with Mrs. A for 3 days with a duration of 30 minutes for Fe tablet audiovisual therapy to overcome the risk of anemia, starting from the date January 10 to 12, 2023. The application of audiovisual therapy begins with self-preparation and a consent sheet that has been prepared is mandatory by the researcher. Next, make a contract for time, place and explain the purpose. The tools used in the action are audiovisual equipment. After carrying out this therapy for 3 days with 30 minutes, it is hoped that Mrs. A, Questions about the problems faced from scale 4 (moderately decreased) to scale 2 (moderately increased)

Implementation: Mrs. This therapy was carried out for 3 days 30 minutes with the patient's response to understanding the therapy given by the nurse, Mrs. A was active in asking questions to the nurse regarding her lack of knowledge about Fe tablets. Before carrying out therapy, the researcher asked permission and entered into a time contract with Mrs. A for 3 days 30-minute duration for Fe tablet audiovisual therapy to overcome the risk of anemia, starting from the date January 10 to 12, 2023. The application of audiovisual therapy begins with self-preparation and a consent sheet that has been

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Evaluation is the final stage of the nursing process after taking action according to the action plan that has been prepared. So, the researcher will carry out an assessment of Mrs. A, namely by looking at the results that have been carried out for 3 days in 30 minutes. Meetings with clients showed changes in ignorance about the use of Fe tablets to treat the risk of anemia in pregnant women. Observation results showed that blood pressure was 90/84mmHg, pulse 86/minute, Respiration 20x/minute, temperature 36°C. Mrs. A said she already knew the importance of Fe tablets in the current pregnancy process.

#### DISCUSSION

Overview of Nursing Care

Based on the results of the assessment carried out on clients, the priority problem obtained was a knowledge deficit related to lack of exposure to information or impaired knowledge. Clients being assessed for anemia in pregnant women.

Based on the results of the assessment obtained from the client, Mrs. A, a 25-year-old female, is one of the pregnant women who is at risk of anemia. Client said he didn't know much about his illness, because he often felt dizzy, felt nauseous, wanted to vomit, and got tired easily when doing activities. From the objective data, it was found that Mrs. A looked weak, pale, and had anemic conjunctiva. Blood test results: HB 10g/dl at 10 weeks gestation, blood pressure 90/84mmHg, pulse 86/minute, respiration 20x/minute, temperature 36oC.

This is related to Fitria's (2018) research that the number of mothers who experience anemia is influenced by the lack of knowledge of pregnant women, about foods that are good for pregnant women, besides containing iron and a lack of consuming Fe tablets. The high rate of anemia in pregnant women can also be caused by pregnant women's lack of knowledge about the importance of Fe tablets.

Based on the results of a preliminary study conducted on January 10, 2023In the Mawar Room at RSI Surabaya Jemursari, it was recorded that there were 32 visits from pregnant women with the risk of a lack of knowledge about the importance of Fe tablets during the last 1 month. Therefore, the role of nurses is very important in efforts to increase client knowledge regarding the knowledge deficit that occurs in pregnant women who experience anemia.

# Nursing Implementation

The main nursing problem experienced by Mrs. A is a knowledge deficit caused by a lack of knowledge about the importance of Fe tablets for fetal health and nutritional fulfillment during pregnancy. And clients complain about lack of knowledge about their disease. With this, education is being carried out about Fe tablets to deal with the impact on the quality of pregnant women's health.

This is in line with Misaroh's research in the journal Fitria (2018). Many women in Indonesia experience iron deficiency, so Hemoglobin levels are low. Iron deficiency in pregnant women can disrupt energy metabolism, which can cause a decrease in the ability of the body's organs to work and also affect the quality of health of the mother and fetus.

Researchers conducted education on Fe tablets for 30 minutes using audiovisual media. with the hope that the resulting deficit in knowledge about the importance of Fe tablets will increase, marked by changes in the lifestyle of pregnant women who are given this education.

# Nursing Evaluation

Based on this research, Fe tablet education was carried out through audiovisual on pregnant women, Mrs. This is proven by the results where during the assessment the client stated that he did not know much about his illness, often felt dizzy, nauseous, wanted to vomit, and got tired easily when doing activities and after education the client had an interest in learning (focused and active), there was an increase in knowledge (if asked can answer), understand about the disease he is experiencing.

These results are in accordance with the results of research conducted by Susilawati in 2011 which stated that there was a significant relationship between pregnant women's knowledge of Fe tablets and the incidence of anemia. Nearly (36.7%) of pregnant women have little knowledge about Fe tablets in Jorong Koto Malintang, North Sumatra.

## LIMITATION

There is no limitation in this study.

# **CONCLUSION**

The study was carried out by means of observation and interviews on 25-year-old, Mrs. A who suffered from anemia at 10 weeks of gestation, experienced a lack of knowledge about her illness and often felt dizzy, felt nauseous and wanted to vomit, and got tired easily when doing activities.

Priority nursing diagnoses are the focus of handling knowledge deficits because they can affect the organs in a pregnant woman's body.

The intervention given to Mrs. A was to overcome lack of knowledge about her illness, which often felt dizzy, nauseous and wanted to vomit, and got tired easily when doing activities. Researchers provide education on the importance of Fe tablets in pregnant women's anemia through audiovisuals in the hope that the level of knowledge will increase.

Nursing evaluation on the diagnosis of a knowledge deficit was resolved and the intervention was continued independently by the patient by sharing the video.

It is hoped that the results of the implementation that has been carried out can be used by future researchers as a reference for conducting research on maternity nursing in providing care for patients who suffer from knowledge deficits in different places and providing appropriate education.

#### AUTHOR CONTRIBUTION

**Sabila Rohmatul Ula Alistia:** Literature review, conceptualization, methodology, carrying out the nursing process, and manuscript drafting.

#### **ORCHID**

Sabila Rohmatul Ula Alistia : None.

#### CONFLICT OF INTEREST

There is no conflict of interest in this study.

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