

Study of Knowledge, Attitudes and Behavior Dietary Habits of First Trimester Pregnant Women at Tirtomoyo Health Center II

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ABSTRACT

Introduction: The diet of pregnant women has an impact on the fetus. The way to fulfill nutritional needs is to consume balanced nutrition. Shortage event chronic energy (KEK) in pregnant women is one of the influencing factors anemia. The nutritional adequacy of pregnant women affects their nutritional status. There are 6.4% of pregnant women with KEK and 9.6% of pregnant women with LILA <23.5 cm and there are 7.2% of pregnant women with anemia in Tirtomoyo Health Center II. Knowledge, attitude and behavior is the main key to supporting healthy behavior change. **Objective:** This research was conducted to find out knowledge, attitudes and behavior of pregnant women about eating habits in the first trimester at Tirtomoyo Public Health Center II in Wonogiri Regency. **Method:** This research is descriptive research. The research population for pregnant women in the first trimester of 90 people was taken as a sample by accidental sampling of 30 people. The research instrument uses a KAP questionnaire that has been tested for validity and reliability. Presentation of data with frequency distribution. **Result:** Our study showed that only 33.3% of pregnant women had good knowledge about balanced nutrition in the first trimester. As many as 80% of respondents had a positive attitude towards balanced nutrition in the first trimester and 86.7% of pregnant women had a positive attitude towards fulfilling nutrition in the first trimester. **Conclusion:** Even though the mother's knowledge was limited regarding balanced nutrition, the mother had good attitudes and behavior regarding the diet of pregnant women in the first trimester. Health workers at the Tirtomoyo II health center need to conduct health education about nutrition in pregnant women.

Keywords: attitude, behavior, dietary habits, knowledge, pregnant women

Introduction

The prevalence of anemia in pregnant women is still high. Based on Indonesian basic health research data in 2018, there are 48.9% of pregnant women who experience anemia. Pregnant women who experience anemia are at risk of giving birth to low birth weight babies. Babies who are born are also at risk of anemia, which can inhibit the growth of brain cells. This can cause delays in the growth and development of children (Badan Pusat Statistik, 2018). There is a study which shows that there is a relationship between nutritional status and the incidence of anemia in pregnant women. The OR value shows 3.109 explaining that pregnant women with nutritional status at risk of chronic deficiency energy are 3 times more at risk of developing anemia than pregnant women with nutritional status not at risk of chronic deficiency energy (Marlapan et al., 2013).

Pregnant women need additional energy, protein, vitamins and minerals to support the growth of the fetus and the body's metabolic processes. A research study conveys a problem that often occurs in pregnant women, namely not realizing that there is an increase in nutritional needs during pregnancy. Therefore, it is important to provide good nutritional needs during pregnancy so that pregnant women can obtain and maintain optimal nutritional status. Food consumption of pregnant women must meet the needs for themselves and for the growth and development of the fetus or baby. Therefore, pregnant women need more nutrients compared to non-pregnant women, while their food consumption remains varied and balanced in quantity and proportion (Direktorat Jenderal Pelayanan Kesehatan, 2022.)

Actual requirements during pregnancy vary among individuals and are influenced by previous nutritional status and medical history, including chronic diseases, multiple pregnancies, and closely spaced pregnancies. The need for one nutrient can be interfered with by the intake of another. For example, a mother who doesn't meet her calorie needs will need a larger amount of protein. Nutritional requirements are not constant throughout the course of pregnancy. Nutrient requirements change little during the first trimester and most during the last trimester (Direktorat Jenderal Pelayanan Kesehatan, 2022). In Article 1 of Permenkes No 28 of 2019, it is written that the RDA is a value that indicates the average need for certain nutrients that must be met every day for almost everyone with certain characteristics which include age, gender, level of physical activity, and physiological conditions, to live healthily. RDA is used at the level of consumption which includes adequate energy, protein, fat, carbohydrates, fiber, water, vitamins and minerals. Pregnant women in the first trimester need +180 Kcal of energy, + 1 gram of protein, +2.3 grams of total fat, +0.3 grams of Omega 3, +2 grams of Omega 6, +25 grams of carbohydrates, +3 grams of fiber, and +300 ml of water (Permenkes RI No. 28 tahun 2019).

From the results Anamnesa during the ANC at the Health Center Tirtomoyo II, many pregnant women don't like fishy-smelling foods such as red meat and vegetables. There is a ban to eat certain types of food, such as catfish, for fear of the baby's head will be oval. The mother also abstains from eating shrimp for fear that the baby will be hyperactive. From the results of the annual report of Health Mothers and Children in 2020 at UPTD Puskesmas Tirtomoyo II. There are 6.4% of pregnant women with KEK and 9.6% of pregnant women with LILA <23.5 cm and there are 7.2% of pregnant women with anemia (Annual report on Maternal and Child Health in 2020 at UPTD Tirtomoyo II Health Center).

Knowledge, attitude and behavior is the main key to supporting healthy behavior change and better. Knowledge is one of the related factors with the attitude and behavior of a person in the field of health. Knowledge Pregnant women who are good about nutrition will form good attitudes and actions also good in maintaining a diet that suits the needs of the

pregnant women. Based on this, researchers are interested in examining the knowledge, attitudes and eating habits of pregnant women in the first trimester.

Objective

This research was conducted to find out knowledge, attitudes and behavior of pregnant women about eating habits first trimester at Tirtomoyo Public Health Center II in Wonogiri Regency.

Method

This is descriptive study used a cross-sectional approach, carried out at Tirtomoyo Health Center II in Wonogiri from May to November 2021. Out of 90 pregnant women in their first trimester, 30 people were involved as research subjects. Pregnant women included in the sample were first trimester pregnant women who did not experience complications. Women who experienced bleeding, hyperemesis and had disease were excluded from this study. Research using accidental sampling. Data were analyzed by univariate. The research instrument uses a questionnaire of knowledge, attitudes and skills that have been tested for validity and reliability. The questionnaire with a total of 45 questions was declared valid with Cronbach scores Alpha 0.918.

Result

The following presents the characteristics of the research subjects.

Table 1. Characteristics of Respondent

Characteristics	Frequency	Presentage
Age		
<20	4	13.3
20-35	23	76.7
>35	3	10.0
Education		
Elementary school	4	13.3
Junior high school	8	26.7
Senior high school	13	43.3
College	5	16.7
Occupation		
Work	13	43.3
Not work	17	56.7
Total	30	100

Based on table 1, the age of the majority of respondents was 20-35 years old (76.7%). The majority of mothers' education is high school (43.3%) and some pregnant women work (56.7%). Knowledge, attitude and behaviour of pregnant women about good eating habits in the first trimester can be seen in the following table.

Table2. Knowledge, Attitude and Behaviour of Pregnant Women about Eating Habits in the First Trimester

Variable	Frequency	Presentage
Knowledge		
Less	9	30
Enough	11	36.7
Good	10	33.3
Attitude		
Negative	6	20
Positive	24	80
Behavior		
Negative	4	13.3
Positive	26	86.7
Total	30	100

Based on table 2, only 33.3% of pregnant women had good knowledge about a balanced diet in the first trimester. As many as 80% of respondents had a positive attitude to a balanced diet in the first trimester and 86.7% of pregnant women had positive behavior in consuming foods that balance in the first trimester.

Discussion

In our study, most of the respondents were aged 20-35 years. Most of them had high school education and some of the respondents worked. According to Fowles et al., (2011) although research on the relationship between age, education level and food quality with the mother's diet is still unclear, there is little research that finds that there is an effect of age on diet in pregnant women. Likewise with the level of education and income of the mother. Research on maternal characteristics still needs to be investigated further. Pregnant women at an older age tend to have good knowledge about a balanced diet in of first trimester pregnant women. Pregnant women at a more mature age also have good behavior in consuming balanced nutrition. Pregnant women with low levels of education tend to have poor knowledge and poor behavior in consuming balanced nutrition

Our results showed that even though the mother's knowledge was limited regarding balanced nutrition, the mother had good attitudes and behavior regarding the diet of pregnant women in the first trimester. Based on Weerasekara et al., (2020), in a large-scale cross-sectional study in Sri Lanka, it was found that knowledge, attitudes and behavior regarding nutrition during the reproductive period affected the body mass index of respondents. This also affects food security in the household sphere. There were respondents with nutritional status problems, both undernourished, overweight and obese. This situation affects their health status in the future, and also affects the baby they will give birth to. Health workers need to carry out massive health promotion efforts at vulnerable reproductive ages. The government needs to improve food security to meet nutrition at the reproductive age. According to Torkan et al., (2018) in Social Cognitive Theory, it is found that there is a significant relationship between eating behavior and self-efficacy, social support, self-regulation, hope for healthy living and access to healthy food. Self-regulation has nothing to do with bad eating habits.

Pregnant women who eat unhealthy patterns do not experience anemia. This can happen because pregnant women replace it to meet the needs of iron by consuming fe tablets regularly and drinking pregnancy milk, eating often healthy snacks such as green bean

porridge, getting pregnant at an age that is not at risk, during pregnancy there was no bleeding, did not consume coffee, and did not have chronic disease (Mariana et al., 2018). In a survey study in Bangladesh, it was found that a culture of abstinence from certain nutritious foods during pregnancy and breastfeeding can affect the nutritional status of babies born. In the study area, colostrum is not given to babies for certain reasons that have become a culture. This can harm the baby's immunity. Mothers who have less knowledge can lead to the poor nutritional status of the baby. Poor knowledge can lead to poor attitudes and behavior also in maternal and child health care. Pregnant women need to be educated about good eating patterns, adequate rest during pregnancy, immunizations needed for mother and baby, the importance of taking iron tablets, and the importance of prenatal care (Hasan et al., 2016).

A cross-sectional study at the Hospital of the Academy of Sciences of the Chinese University of Shenzhen was conducted from December 2020 to February 2021 among 310 pregnant women aged 18-40 years. This study aims to determine the sociodemographic determinants associated with knowledge, attitudes and behavior of pregnant women regarding nutrition in pregnancy. The research was conducted on vulnerable groups. The results of the study found that age, husband's education level, knowledge of nutrition in pregnant women, monthly family income and attitudes towards fulfilling the nutrition of pregnant women were significant predictors in vulnerable groups. In this research, there is a gap between knowledge and attitude and there is a gap between attitude and practice. Interventions in the form of education on balanced nutrition can improve the practice of fulfilling balanced nutrition in vulnerable groups (Wang et al., 2023).

Our research is descriptive research. The findings in our study indicate that the knowledge of pregnant women at the Tirtomoyo II health center is still low. Even so, the attitudes and behavior of pregnant women are mostly positive. The limitation of our research lies in the small number of samples taken using the non-probability sampling method. Further research needs to involve a larger sample with sampling that allows all pregnant women to have the opportunity to become respondents. In addition, the relationship between all variables needs to be confirmed with a better method, either cross sectional or case control.

Conclusion

Our results showed that even though the mother's knowledge was limited regarding balanced nutrition, the mother had good attitudes and behavior regarding the diet of pregnant women in the first trimester. Further research using probability sampling and cross sectional methods as well as case control is needed to determine the relationship between knowledge, attitude and behavior variables. Health workers at the Health Center Tirtomoyo II need to conduct health education about nutrition in pregnant women.

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