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RESEARCH ARTICLE

Maternal Dietary Behavior During Pregnancy and the Incidence of Low Birth Weight

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ABSTRACT

Background: *In developing countries, including indonesia, nutritional problems are still major public healt problem. Low nutritional status of pregnant women during pregnancy may result in various adverse effects for both mother and baby, among them are babies born with low birth weight.In pregnant women need to consume good food during pregnancy. The study aims to determine Mother's behavior about food during pregnancy to prevent low birth weight in department obstetrics and gynecology Dr. Pirngadi Medan General Hospital on 2017*

Methods : *This is descriptive study with cross sectional design, the data were collected with questionnaires and analyzed with the SPSS (statistical product and service solutions) program. Population in this research were 80 suffer's datas with 80 datas as samples, and was taken with total sampling. Mother's action of food during pregnancy belong to category of good 75,5%, 25,5 belong to category of fair.*

Conclusion : *Based on these results it was concluded that Mother's behavior about food during pregnancy to prevent low birth weight in department obstetrics and gynecology Dr. Pirngadi Medan General Hospital on 2017 had good knowledge, good attitude about food during pregnancy.*

Keywords : Behavior, Pregnant Mother, Food during pregnancy

INTRODUCTION

Pregnancy is a special situation for a woman as a mother-to-be, because during pregnancy many physical changes will occur.

A mother's diet and healthy lifestyle can influence the growth and development of her unborn child. Pregnant women must have adequate nutrition because the food they consume will be used for themselves and their fetus. 1

During pregnancy, maternal weight gain is crucial for determining the health of the fetus and the future condition of the baby. As previously demonstrated, there is a positive association between the baby's birth weight and the mother's weight. 2

Fetal growth is greatly influenced by the mother's diet before and during pregnancy. If the mother-to-be has an adequate and balanced diet, she will give birth to a healthy child. 3

Pregnancy involves natural physical and mental changes, and expectant mothers must be healthy and have sufficient nutrition before and after pregnancy. For a successful pregnancy, the mother's nutritional status at the time of

conception must be good, and during pregnancy she must receive additional energy and a balanced diet for fetal growth and development, while maintaining a nutritious diet throughout the pregnancy. 4

If a mother experiences malnutrition during pregnancy, it will cause problems for both the mother and the fetus, including: anemia, bleeding, and poor weight gain. Malnutrition can also affect the delivery process, resulting in difficult and prolonged labor, premature labor, postpartum hemorrhage, and postpartum hemorrhage. Malnutrition can also affect fetal growth and can lead to miscarriage, abortion, congenital defects, and low birth weight. 5

A low birth weight (LBW) baby is a baby whose birth weight is less than 2,500 grams, regardless of the cause and gestational age. In 1961, the World Health Organization (WHO) stated that all newborns weighing less than or equal to 2,500 grams were considered Low Birth Weight Infants, because neonatal morbidity and mortality depend not only on their weight but also on the infant's level of maturity.6

Based on the description above, researchers were interested in conducting research on Maternal Behavior Regarding Food During Pregnancy to Prevent Low Birth Weight in the Obstetrics and Gynecology Clinic of Dr. Pirngadi Regional Hospital, Medan in 2017.

METHOD

This study used a descriptive cross-sectional method to determine maternal dietary behavior during pregnancy to prevent low birth weight in the Obstetrics and Gynecology Clinic of Dr. Pirngadi Regional General Hospital, Medan, from July to September 2017.

This study was conducted at the Obstetrics and Gynecology Clinic of Dr. Pirngadi Regional General Hospital, Medan, from July to September 2017. The study population was all pregnant women who received services at the Obstetrics and Gynecology Clinic of Dr. Pirngadi Regional General Hospital, Medan, from July to September 2017. The population of pregnant women from July to September 2017 was 82.

The sample for this study was pregnant women who received services at Dr. Pirngadi Regional General Hospital, Medan. The sample size was determined using the total sampling formula, where the entire population was 80 pregnant women who received services at the Obstetrics and Gynecology Clinic of Dr. Pirngadi Regional General Hospital, Medan.

The data collection method in this study used primary data. The researcher explained the purpose, objectives, and procedures of the study to potential respondents. Potential respondents willing to participate in the study were asked to sign a consent form. Respondents were asked to answer the researcher's questions by completing a questionnaire provided by the researcher within 20 minutes, and the researcher assisted the respondents while answering the questionnaire. After the allotted time had elapsed, the researcher collected the questionnaires for data analysis.

The measurement used a questionnaire containing closed-ended questions. A total of 30 questions were divided into three categories: 10 questions measuring knowledge, 10 questions measuring attitudes, and 10 questions measuring actions.

Validity testing was used to determine the validity of a questionnaire. A questionnaire is considered valid if the statements in the questionnaire accurately reflect what they are intended to measure. To test the validity of the measuring instrument, the correlation between the parts of the instrument and the total score, which is the sum of the scores for each item, was first determined, with the r_table value being 0.361.

Reliability testing is used for questionnaires that are indicators of variables or constructs. Question items are said to be reliable if the respondents' answers to the questions are consistent. Reliability testing is carried out using the SPSS version 17.00 program and the reliability of the questions that have been declared valid in the validity test is determined

using the following criteria: (1) If the Cronbach's Alpha value is > 0.60, the question is reliable. (2) If the Cronbach's Alpha value is < 0.60, the question is not reliable. Reliability testing is carried out to determine the extent to which the instrument can be trusted. This reliability testing is carried out using the Cronbach's Alpha test.

RESULTS

A variable is said to be reliable if the r Alpha value is Cronbach > 0,6	> 35-50 tahun	6	100	0	0	68
	Pendidikan SD	2	25	6	75	
	SMP	2	22.2	7	77.8	9

Table 1 shows that the distribution of maternal dietary behavior during pregnancy at Dr. Pirngadi Regional Hospital, Medan, in 2017, based on the highest age group was 20-35 years, with 74 samples (92.5%), and the lowest age group was >35-50 years, with 6 samples (7.5%). Table 1 shows that the distribution of maternal dietary behavior during pregnancy at Dr. Pirngadi Regional Hospital, Medan, in 2017, based on the highest educational level, was high school, with 54 samples (67.5%), and the lowest educational level was elementary school, with 8 samples (10.0%).

This study shows that the distribution of maternal dietary behavior during pregnancy at Dr. Pirngadi Regional Hospital, Medan, in 2017, based on the highest occupational level, was housewives, with 70 samples (87.5%), and the lowest occupational level, was honorary employees, with 3 samples (3.8%).

Table 1. Frequency distribution of respondents regarding knowledge about food during pregnancy.

Characteristics	Knowledge				Total
	Baik		Cukup		
	n	%	n	%	n
Age					
20-35 year	63	85,1	11	14,9	74
> 35-50 year	6	100	0	0	6
study					
SD	3	37,5	5	62,5	8
SMP	6	66,7	3	33,3	9
SMA	51	94,4	3		54
Perguruan Tinggi	9	100	0	5,6 0	9
job					
Ibu Rumah Tangga	59	84,3	11		70
PNS	7	100	0	15,7	7
Pegawai	3	100	0	0	3

Based on Table 2 above, it can be seen that respondents working as housewives had good attitudes, with 52 samples (74.3%), and 18 samples (25.7%) having fair attitudes. The data in Table 4.12 above shows that respondents working as civil servants (PNS) had good attitudes, with 7 samples (100.0%).

Table 3. Frequency distribution of respondents regarding actions

Characteristics	Action				Total
	Good		Enough		
	n	%	n	%	n
Age					
20-35 year	54	72.9	20	27.1	74
> 35-50 year	6	100	0	0	6
Study					
SD	3	37.5	5	62.5	8
SMP	3	33.3	6	66.7	9
SMA	45	83.3	9	16.7	54
Perguruan Tinggi	9	100	0	0	9
Job					
Ibu Rumah Tangga	52	74.3	18	25.7	70
PNS	7	100	0	0	7
Pegawai Honor	1	100	2	0	3

The results of this study align with those of Meilani (2009), which showed a relationship between maternal age and their level of knowledge regarding

physiological needs during pregnancy. Ages 20-35 are considered optimal for pregnancy and childbirth because the reproductive organs are ready to accommodate pregnancy and childbirth, in addition to the psychological and emotional maturity needed to cope with pregnancy. 7

Age is a factor that reflects a person's psychological and social maturity, enabling them to better respond to information received. This will influence a person's ability to absorb and digest information, which in turn can influence their knowledge. 8

A good education does not necessarily mean good knowledge. This is because education is not only obtained through formal education but can also be obtained through informal education. According to Sukmadinata, education influences knowledge because a person's level of education influences their response to external influences. Educated people will consider the extent of the potential benefits they will gain from an idea. Educated mothers will certainly make significant changes to their past practices. Low levels of education affect health quality due to a lack of knowledge about pregnancy danger signs.9,10 According to Notoatmodjo, highly educated people have more knowledge and breadth than those with less education. Furthermore, respondents receive more information; if they receive good information, their knowledge increases.8

Occupation can influence a person's level of knowledge because work is closely related to social and cultural interaction, while social and sociocultural interaction are closely related to the process of information exchange. In this study, mothers tended to be housewives more often than mothers with other occupations. Therefore, respondents who worked as housewives were predominantly knowledgeable. However, mothers who worked as civil servants and honorary employees also had good knowledge, but their numbers were not as high as those who worked as housewives.10

Based on the study results, mothers' attitudes regarding food during pregnancy were categorized as good, although some were considered adequate, but the majority were in the good category. This is inconsistent with research by Anik Sulistiyanti (2013), which found that the most common attitude regarding food during pregnancy

was adequate, with 18 respondents (52.94%).

Attitude is a person's closed reaction or response to a stimulus or object. Attitude does not yet constitute an action or activity, but rather a predisposition to a behavior. Attitude is a readiness to react to objects in a particular environment as a form of appreciation for the object.8

Work can provide a person with experience and knowledge, both directly and indirectly. A person's work will influence a family's economic status; the more the work generates sufficient funds to meet the family's needs, the better, and the more health care is provided. Attitude does not yet constitute an action, but it will directly guide behavior.12

In terms of behavior, respondents found that, in line with one study, pregnant women who lead normal lives can be assumed to have broader knowledge, deeper expertise, and better wisdom in decision-making. Furthermore, Sri stated in 2006 that a good education allows pregnant women to receive all external information, especially regarding the importance of regular behavioral beliefs in pregnant women. Knowledge or cognition is a very important domain in shaping a person's actions. Low levels of education mean that the knowledge, attitudes, and behavior demonstrated do not align with expected values.12

However, Dian's 2011 research found that a mother's occupation influences her diet during pregnancy. Mothers with higher occupations have higher incomes and are able to consume more nutritious and varied foods, which in turn influences the mother's actions regarding the food she consumes.8

CONCLUSION

Based on the results of research and data analysis on the characteristics of typhoid fever inpatients at Dr. Pirngadi Regional Hospital, Medan, in 2016, it can be concluded that: The majority of study subjects were under 20 years of age (67 people) (50.0%). The majority of study subjects were female (82 people) (61.2%). The majority of study subjects worked as students (56 people) (41.8%).

The majority of study subjects suffered from clinical symptoms of fever (54 people) (40.3%). The majority of study subjects underwent treatment for 1-7 days (120 people) (89.5%).

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