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# Research Article

# Analysis Of Food Taboo Culture With Protein Intake In Pregnant Women

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### **ABSTRACT**

Food taboos can increase the risk of nutritional deficiencies, especially protein, fat, vitamin A, vitamin E and iron in pregnant women. The purpose of this study was to determine the relationship between food taboo culture and protein intake in pregnant women. This research is an analytic observational study with a cross sectional approach. The sample in this study were all pregnant women in the Pojoksari Village selected by the total sampling method. The results of the study show that most pregnant women practice a food taboo culture. Based on the results of statistical tests with chie square obtained p value = 0.683, which means there is no relationship between food taboo culture and protein intake in pregnant women. Although there is no relationship, it is known that pregnant women who practice food taboo culture have less protein intake to a deficit. Providing education about the food taboo to pregnant women is important to keep their nutritional intake during pregnancy well fulfilled.

**Keywords:** Food taboos, protein intake, pregnancy

# INTRODUCTION

Cultural factors in Indonesia are one of the causes of nutritional problems in pregnant women. Beliefs and dietary restrictions during pregnancy affect the food consumption of pregnant women, so that they have an effect on nutritional intake during pregnancy (Arzoaquoi et al., 2015). Food taboos in pregnant women can increase the risk of nutritional deficiencies in pregnancy (Sitoayu, et al., 2021).

Based on data from the 2014 Total Diet Study (SDT), the picture of food in pregnant women is quite adequate. This can be seen from the proportion of pregnant women with a protein adequacy level <80% of the protein estimate (AKP) (Permenkes, 2019). Pregnant women who are unable to meet protein requirements will experience anemia due to lack of hemoglobin and red blood cell formation (Supariasa et al., 2016). Anemia is one of the indirect causes of maternal death (Varadarajan, A. & Sheela P., 2009).

Shimels, et al (2019) in their research stated that as many as 18.2% of pregnant women in Ethiopia avoided eating green chilies, offal meat, and green vegetables for cultural reasons. So that there are 26.2% of pregnant women who do the food taboo experience anemia.



Another study conducted by Angraini on pregnant and postpartum women in Bongkot Village stated that there are dietary restrictions for pregnant women including abstinence from eating from animal groups, namely squid, shrimp, crab, mutton, duck eggs and several types of fish. Because it is believed that eating food from these animal groups can cause breast milk to become fishy, the body becomes itchy and makes it difficult to give birth (Angraini, 2013).

Based on a preliminary study conducted by researchers on five pregnant women in Pojoksari Village, it was found that four pregnant women practiced a food taboo culture. The food taboo culture that pregnant women apply includes not consuming seafood, pineapple, durian, mutton, and etc.

Based on the research above, the food taboo culture is still practiced by pregnant women in various countries, including Indonesia. Pregnant women who practice the food taboo are known to experience nutritional problems during pregnancy, such as anemia. Anemia in pregnant women occurs due to deficiency of iron and protein intake in pregnant women. This study aimed to determine the relationship between food taboo culture and protein intake in pregnant women.

# MATERIAL AND METHODS

This research was in analytic observational study with the approach used was a cross sectional study. The primary data collected in this study were food taboo culture and protein intake in pregnant women. Food taboo culture data was taken with a structured interview technique using an interview sheet instrument. Data on protein intake in pregnant women was taken by interview technique using a food recall sheet instrument 3x24 hours. The population in this study were all pregnant women in Pojoksari Village, Sukomoro District, Magetan Regency. The sampling technique used was total sampling. The relationship between food taboo culture and protein intake was analyzed using the Chi square test.

This research process has received a certificate of ethical merit from the Health Research Ethics Committee of Universitas Nahdlatul Ulama Surabaya with Number 141/EC/KEPK/UNUSA/2022.

## RESULTS AND DISCUSSION

The research conducted by interviewing 25 pregnant women in Pojoksari Village, Sukomoro District, Magetan Regency produced the following data.

Table. 1 Distribution of pregnant women in Pojoksari Village, Sukomoro District, Magetan Regency

U	U	•	
Category	Total	Percentage	
Gestational Age			
TM 1 (0-12 weeks)	4	16	
TM 2 (13-27 weeks)	12	48	
TM 3 (28-40 weeks)	9	36	
Total	25	100	
Pregnancy			
Number 1	14	56	
Number 2	9	36	
Number 3	2	8	
Total	25	100	
Education			
Primary school	2	8	
Junior high school	4	16	

-	Senior high school	15	60
	College	4	16
	Total	25	100
	Profession		_
	Housewife	18	72
	Private employees	3	12
	Entrepreneur	2	8
	Government employees	2	8
	Total	25	100

Based on the table above, it is known that almost half of the respondents (48%) were in the 2nd trimester of pregnancy (13-27 weeks). Most respondents (56%) are pregnant with their first child, Most respondents (60%) have a high school education, and some respondents (72%) are active as housewives.

**Table 2. Food Taboo Culture for Pregnant Women** 

Food Taboo Culture	Total	Percentage (%)
Do	18	72
Didn't Do	7	28
Total	25	100

According to the table above, most pregnant women (72%) practice a food taboo culture by avoiding certain foods during pregnancy.

**Table 3. Protein Intake for Pregnant Women** 

Total	Percentage (%)
15	60
6	24
3	12
1	4
25	100
	15 6 3 1

Based on the table above, it is known that the majority of pregnant women (60%) have a good protein intake. However, there is a small percentage (4%) of pregnant women with a deficit protein intake.

Table 4. Cross tabulation analysis of food taboo culture with protein intake in pregnant

			Protein Intake				
	Good Currently Not Enough Deficit T			Total			
Food Taboo	Don't do	Count	6	1	0	0	7
	Don t do	%	24.0%	4.0%	0.0%	0.0%	28.0%
	To do	Count	9	5	3	1	18
		%	36.0%	20.0%	12.0%	4.0%	72.0%
Total		Count	15	6	3	1	25
		%	60.0%	24.0%	12.0%	4.0%	100.0%
P = 0,683							

Based on the table 4, it is known that almost half of the respondents (36%) who practice food taboo culture have good protein intake. A small proportion of respondents (4%) who practice food taboo culture have a deficit protein intake. The results of statistical tests showed that there was no significant relationship between food taboo culture and protein intake in pregnant women. Although there is no statistically significant relationship, it can be seen in the table that there are pregnant women who practice a food taboo culture with a deficit protein intake.

Laras Sitoayu, et al (2021) in their research stated that there is a relationship between food taboo behavior with food knowledge, education level, socio-cultural environment and history of health disorders. According to the data of this study, pregnant women with low education (SD) practice a food taboo culture by avoiding foods that are considered harmful to their pregnancy. The pregnant women studied were in the same cultural environment, causing pregnant women to practice food taboo culture because of the influence of the cultural environment.

Afiyah Sri Harnani (2006) in her research wrote that more than half of the respondents she studied did the food taboo. The foods that are abstained are squid, prawns, Sembilan fish, catfish, all kinds of marine fish, eggs, mutton, pineapple, durian, heart, eggplant, and palm sugar. In line with this research, pregnant women in Pojoksari Village who practice the food taboo culture avoid foods that are considered to be harmful to their pregnancy. Foods to avoid include durian, pineapple, banana sticks, spicy food, ice (cold water), eel, catfish, tape, squid, shrimp. Based on the results of interviews conducted by researchers to respondents, it was found that pregnant women who practice food taboo culture still consume food as a source of protein, namely eggs, chicken meat, beef, etc.

Every pregnant woman avoids certain types of food. For example, pregnant woman A only avoids eating durian and young pineapple during pregnancy for fear of miscarriage, but the pregnant woman still eats other foods, such as shrimp, squid, meat, etc. Research by Arnati Wulansari (2019) states that the foods tabooed by pregnant women in their research include food as a source of carbohydrates, protein, and vitamins. The symbolic meaning of each group is that hot food causes miscarriage, the body becomes thick and the blood clots easily, and the baby becomes fertile. Based on the results of interviews, it is known that pregnant women who practice food taboo culture have reasons, which include pregnant women not eating attached bananas for fear of giving birth to conjoined twins, avoiding drinking ice for fear of the baby being too big, some pregnant women avoiding eating eels and catfish for fear of the baby. born to be slippery because there is too much mucus in the body.

Afiyah Sri Harnani (2006) in her research stated that 26.6% of pregnant women who practice food taboo culture have less protein intake. In this study, 36% of pregnant women who practiced food taboo culture had normal protein intake. This is because pregnant women avoid foods that are not a source of protein. The pregnant woman continues to eat protein sources, both animal and vegetable, because she knows the importance of these foods as nutrients needed for the growth and development of the fetus. There are 4% of pregnant women who practice a food taboo culture and have a protein intake deficit. This is because in addition to pregnant women avoiding some foods as a source of protein (shrimp, squid, mutton), these pregnant women rarely eat food as a source of animal protein because they cannot buy these foods for economic reasons.

Laras Sitoayu, et al (2021) in their research stated that there is a relationship between food taboo behavior with food knowledge, education level, socio-cultural environment and history of health disorders. Based on the data of this study, it was found that 28% of pregnant women who did not practice the food taboo culture. The pregnant woman does not avoid certain foods during pregnancy for cultural reasons or customs. Data on the distribution of respondents stated that as many as 60% of pregnant women had a minimum education of high school. This can affect the food taboo behavior in pregnant women, because of the knowledge about food that pregnant women have. Pregnant women with a minimum of high school education can absorb the information provided.

Based on interviews conducted with pregnant women, it is known that most of the respondents have received information about food taboos from midwives. Pregnant women said that

midwives recommend that during pregnancy the mother does not abstain from eating and consumes food according to balanced nutrition to maintain the health of the mother and fetus in the womb. Not all pregnant women follow the directions from the midwife, some pregnant women continue to practice the food taboo culture because they follow the advice and recommendations of their parents and relatives. Excusing fear of endangering pregnancy, some pregnant women practice a food taboo culture by avoiding certain foods. The results of the interview also found that taboo in pregnant women is not only from food, but can be in the form of action. For example, pregnant women must carry small scissors during pregnancy to avoid disturbance of spirits, etc.

### **CONCLUSION AND SUGGESTION**

Based on the results of the study, it is known that there is no relationship between food taboo culture and protein intake in pregnant women. however, there are pregnant women who practice a food taboo culture and have a low protein intake and a deficit. It is recommended to pregnant women not to practice food taboo culture that is detrimental to pregnancy. Advise pregnant women to eat foods guided by balanced nutrition. It is hoped that nutritionists can play a role in providing education to pregnant women and the public about food taboos, so that people can understand the negative impact if pregnant women practice food taboo culture.

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