Food taboos and recommended foods for pregnant women: the study of phenomenology in pendhalungan society

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Abstract. The citizens called Pendhalungan community live in the east area of East Java. It is an acculturation between the culture of Javanese tribe and Madurese tribe which lived in Jember District. This affects the consumption pattern for pregnant women. The purpose of this study is to identify the habits of pregnant women in Pendhalungan community in terms of food taboos and recommended foods. Taboo is a myth that is still believed by the inhabitants. They continue to apply the taboo without knowing a clear reason. This study used phenomenology approach to describe unique consumption patterns. Informants in this study were pregnant women. Collected data from January until August 2017 in Patrang, Artasa and Sumbersari, Sub district of Jember District with Snowball Technique. The data collected is a type of food that is considered taboo and is recommended for pregnant women in the Pendhalungan community. Data analysis method in this research uses content analysis. In conclusion, food taboos in this community are types of foods that contain high protein such as shrimp, chicken liver, eggs and fish. They forbid food based only on myths, without knowing the benefits of that foods taboo. While the recommended foods in pregnancy are fruits and vegetables that are consumed in large portions.

1. Introduction

Nutritional status of pregnant women is one of the indicators in measuring the nutritional status of the society. Nutrition deficiency can occur if the nutritional needs of pregnant women are not met. This is very important because nutritional needs in pregnant women have increased because of increased energy metabolism. Increased need for pregnant women is not only in quantity but also in quality.

Nutrition problems that are often faced by pregnant women are Chronic Energy Deficiency (CED) and nutritional anemia. According to Riskesdas (National Health Survey) data in 2013 [1], the prevalence of pregnant women with CED was 24.2%. Pregnant women suffering from CED have a sudden maternal mortality risk at the perinatal period or the risk of having a low birth weight (LBW) baby. Causes of nutritional problems in pregnant women are lack of knowledge, nutritional intake (food consumption), and education. Besides, infectious diseases (health level) and low income contribute to CED. Someone with a high economic status will most likely be able to fulfill necessary nutrients and health care for pregnancy [2].

Other studies have found that there is a significant relationship between cultures of abstinence and the occurrence of CED. Behaviour of pregnant women is supported by some cultural themes which might bring disadvantages to the mothers’ reproductive health[2],[3]. Prohibition of eating is still widely available in various parts of the world, both abroad and within the country. This happens because of the many beliefs, habits, and customs associated with eating and food. Each tribe has its own ways of choosing food and has consequences for nutritional status[3],[4],[5]. But other studies have also mentioned that eating tab on foods rich in protein, vitamins and minerals are not significantly associated with CED [6].
Pendhalungan Society living in Jember District is an acculturation of two major tribes in Indonesia, namely Java and Madura that have a faith and tradition that is thick enough to affect his life. Some sources of protein, such as shrimp, catfish, eggs and innards, and vegetables (pam, papaya leaves, cassava leaves, papaya fruit) and fruits (jackfruit, pineapple and durian) become taboo in Javanese society in Bantul, significantly affect the status of CED of pregnant women [6].

Nutrition problems are also influenced by erroneous beliefs about the relationship between food and health, a taboo that prevents a person from making the most of the food available to her. Abstinence from certain foods is not a problem if it is in accordance with the health condition of pregnant women and doctor's advice. In contrast, if the food is not related to the challenged conditions of the mother, and foods that are challenged have a high nutrient. This can result in restrictions on the type of food that pregnant women will eat and will ultimately affect nutrient intake if there is a reduction in eating and no substitute food [7]. The aim of this study is to describe dietary restrictions and food recommendations that are prevalent in expectant women in a Pendhalungan community that will affect nutritional status.

2. Method
This research was a qualitative research with phenomenology approach. This study used phenomenology approach to describe unique consumption patterns. Informants in this study were pregnant women. Collected data from January until August 2017 in Patrang, Arjesa and Sumberca, Subdistrict of Jember District with SnowBall Technique. The data collected is a type of food that is considered taboo and is recommended for pregnant women in the Pendhalungan community. Data analysis method in this research uses content analysis. Data collection is done by in-depth interviews and observations of daily life. The main informants were Pregnant Women with total variations including economic status and educational status. Triangulation techniques for data validity were carried out on village midwives and community leaders.

![Figure 1. Research Framework](image-url)
3. Result
There were 11 pregnant women in this study. The range of their age was 18-36 years old with gestational range between 2-9 months. There were 2 pregnant women with nutritional status underweight and 2 pregnant women overweight and 2 others were pregnant women who had Chronic Energy Deficiency.

| Identity | Age | Gestational Age | Nutritional Status (BMI) | UAC (Upper Arm Circumference) |
|----------|-----|-----------------|-------------------------|------------------------------|
| Ev01     | 24 yo | 9 mo/ 3<sup>rd</sup> trimester | Normal (20.44) | Normal |
| Rt02     | 19 yo | 7 mo/ 3<sup>rd</sup> trimester | Normal (22.20) | Normal |
| In03     | 18 yo | 6 mo/ 2<sup>nd</sup> trimester | Normal (19.40) | Normal |
| Me04     | 23 yo | 9 mo/ 3<sup>rd</sup> trimester | Normal (19.11) | Normal |
| And05    | 18 yo | 8 mo/ 3<sup>rd</sup> trimester | Underweight (18.40) | Chronic Energy Deficiency |
| Nu06     | 26 yo | 4 mo/ 2<sup>nd</sup> trimester | Underweight (16.23) | Chronic Energy Deficiency |
| Sid07    | 25 yo | 2 mo/ 1<sup>st</sup> trimester | Normal (24.37) | Normal |
| Am08     | 20 yo | 9 mo/ 3<sup>rd</sup> trimester | Normal (19.42) | Normal |
| Wiw09    | 36 yo | 4 mo/ 2<sup>nd</sup> trimester | Overweight (25.12) | Normal |
| Dev010   | 24 yo | 6 mo/ 2<sup>nd</sup> trimester | Normal (24.12) | Normal |
| Mar011   | 20 yo | 7 mo/ 3<sup>rd</sup> trimester | Overweight (26.68) | Normal |

3.1 Pregnancy Preparation
In response to the good news about pregnancy, there are two different responses made by the family in welcoming the pregnancy. First, families who prepare from pregnancy to childbirth with enthusiasm, this happens especially for the first pregnancy or a long-awaited pregnancy. secondly, families who prepare from pregnancy to childbirth as usual. this happens because pregnancy is not the first, which means already have children before.

Some special preparations are made for family types who are enthusiastic about welcoming the birth of their children, including preparation for food and finance. in terms of food, they will consume more vegetables, fruits and herbs than usual daily consumption, this is done to improve nutrition from expectant mother. in the financial aspect, they will prepare funding for needs during childbirth in the hospital until afterwards. people will usually start saving money and save money to prepare for large expenses during childbirth and after childbirth. several types of expenditure in this stage include the purchase of baby clothes, powder, diapers, soap and milk for babies. Other expenses incurred before giving birth are financing ritual ceremonies during pregnancy and purchasing milk and fruit to supplement the nutrition of pregnant women. This was confirmed by midwives on duty and local community leaders. ritual ceremonies in welcoming pregnancy are usually done in a moment slametan.
While spending more on food consumption is done after they follow the advice of the midwife to maintain nutrition for pregnant women. Behavioral changes during pregnancy also occur in the husband's attitude. the husband will usually be more attentive and protective of his wife after learning about the pregnancy. this form of attention is usually realized by fulfilling every request from the wife. This also affects the work ethic of the husband. They will be more enthusiastic at work even if possible, they will take hours overtime without having to disrupt the quality of time together with his wife.

3.2 Food Taboo in pregnancy

There are food taboos on pregnant women in Pendhalungan Society. Shrimp, chicken liver, egg and fish are food taboos in Pendhalungan Society. Moreover, salty food is also banned. Sometimes they do not know the reason why it was forbidden to eat. They only know that his ancestors did that, and their parents forbade her. They do not want to be considered as children who are not obedient called a child who is not obedient to the command of their parents.

Prohibition of consuming food is also based on health reasons such as salty foods. This type of food has the potential to trigger high blood pressure for pregnant women. the reason for this prohibition is usually suggested by midwives who deal with the health of pregnant women. for pregnant women who have sufficient knowledge about nutrition, they will continue to consume food even though it is considered taboo by the community.

3.3 Food Suggestion in Pregnancy

Suggestions during pregnancy include food and activity. Pregnant women should not engage in activities that drain enormous energy or heavy work. They were advised to rest more of the food, pregnant women are advised to consume more fruits and vegetables and meals are also recommended more than usual consumption. some types of fruit such as bananas, papayas, and oranges are consumed by many pregnant women in Pendhalungan society. They set aside money to buy quality food during of the pregnancy, incase on daily live, they rarely eat fruit.

4. Discussion

The results showed there were still too young pregnancies (under 20 years old). This is too risky for women being pregnant in adolescence. Women under 20 years in the medical sciences have reproductive organs that are immature and at high risk of poor health conditions during pregnancy. In addition, the condition of the ovum is not perfect, and it is risky for the development of the fetus. Some of the health problems in such conditions were high blood pressure in pregnant women and premature births. Both of health problems, those can cause the highest of maternal mortality. Although the health condition of each individual is different, medical examination needs extra attention considering the very vulnerable condition in teenage pregnancy. Mulyaningrum [8] showed that pregnant women aged less than 20 years have a higher risk of CED, even pregnant women who are too young may experience an increase in the risk of CED significantly.

At the age of 21-35 years, the risk of health problems among pregnant women is the lowest one, and it is about 15%. In addition, women in this age group have reproductive maturity, both in terms of emotional and social aspects. on the other hand, for women over the age of 35, the problem that arises is gestational diabetes that occurs in women during pregnancy. They will have high blood pressure and also bladder disturbance.

The number of adolescents giving birth to 95% or 7.3 million cases occurred in developing countries such as Indonesia. A total of 2 million of them are under 15 years of age, while 3.2 million teenagers, 15-19 years have unsafe abortions. Based on BKKBN (National Family Planning Board) data in 2013, the number of adolescents who died during pregnancy and delivery were 70.000 inhabitants. The adolescent population in Indonesia is 18.33% of the total population in Indonesia. The teenager referred to by WHO definition is a person who is young at the age of 10-19 years [9].
Delivery among adolescents also provides a higher maternal mortality risk compared to women aged 20-30 year old women. The birth rate in adolescents contributes 11% of total maternal deaths in the world. Teenagers are at risk of unsafe abortion and death and more than 65% of adolescents have fistulas in the reproductive organs. In addition, the risk of sexually transmitted infections (STIs) due to uncontrolled sexual behavior and vulnerable to HIV-AIDS are becoming higher.

4.1 Pregnancy Preparation

Family will be happy in welcoming pregnancy. Many preparations made by families, especially mothers and fathers to get a healthy pregnancy. Mother will consider healthy food, consume more vegetables and fruits and add eat pore. They will start saving for the child's birth. In addition, there will also be a lot of spending on tradition in welcoming pregnancy and birth such as slametan 4 bulanan and slametan 7 bulanan, selapanan bayi, kenduren, aqiqah etc. The reason they hold the ritual ceremony is to preserve tradition, they also believe the event will provide kindness and become a prayer for their children. this will have an impact on family relationships also getting closer [10].

4.2 Food Taboo in Pregnancy

Shrimp, chicken liver, egg and fish are food taboos in Pendhalungan Society. Shrimp, identified with their concerns over the difficulty during delivery because they believed that shrimp are moving backward and it caused the baby will not come out easily. Chicken livers, which tends to be blackish red, are believed that the baby would have a lip color resembles the color of chicken liver, while the reason eggs and fish are taboo to be eaten is because they believe the child born will smell fishy. Egg is also became food taboo in Mid-West Nigeria, because it is feared the children may develop bad habits after birth [11].

They have banned food by its symbol only, without knowing the benefits of prohibited food. According to the FAO statement in 1997, food originating from animals is the most indoctrinated type of food in the world. In Ghana, food made from animals is considered to be more decent food than food sourced from vegetables [12]. this is also the same as in Pendhalungan, where taboo foods are foods that contain high protein. this condition is contrary to the condition of protein needs of pregnant women which increases with gestational age. Eggs have a protein content of 12.6 grams per 100 grams of eggs. The protein requirement of a pregnant woman is 10 gr / kg weight / day [13]. This is very detrimental to the health of pregnant women. Lack of protein causes CED and anemia in pregnant women.

4.3 Food Suggestion in Pregnancy

Food Suggestion in pregnancy in Pendhalungan Society was fuits and vegetables which consumend in large portion. Fruit and Vegetables Contain Many of the Nutrients Needed by Pregnant Women [13],[14]. Fruits and vegetables are rich in fiber and substances nutrition. Lack of fiber can aggravate the condition of constipation which is common in pregnancy. Banana is Food taboos of Papua New Guinea tribals with other fruits i.e. mango, pawpaws; they are thought cause a hydrocephalus, clubfoot, distorted belly or give rise to other deformities in the newborn[11]. Vitamin A deficiency in pregnancy can increases the risk of organ malformations in the fetus lungs, heart, and urinary tract. Deficiency of iron, vitamin C, and folic acid together can be causing anemia of pregnant women and children born [15].

5. Conclusion

There are two aspects prepared by the Pendhalungan community in preparing for pregnancy and childbirth, namely food and financial aspects. for financial aspects, they use a way to save and seek additional income. it will be used for shopping for healthy food for the needs of mothers and babies. In terms of food, there are taboo foods in Pedhalungan Society which are foods rich in protein; Shrimp, chicken liver, eggs and fish. They forbid food only by symbol, without knowing the benefits of prohibited food. Recommended foods for pregnancy in the Pendhalungan Society is to consume fruits and vegetables in larger portions than usual.
Knowledge awareness about the importance of nutrition needs to be increased to anticipate taboo foods that are actually needed by pregnant women. This will help mitigate the risk of malnutrition for pregnant women and infants.

Acknowledgement
This research is part of applied research scheme funded by the directorate of research and community service, The Ministry of Research, Technology and Higher Education Republic Indonesia for two years, 2017-2018

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