



Exploration of Nutritional Knowledge Aspects of Pregnant Adolescents in Javanese Ethnicity in Ponorogo Regency, East Java

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Abstract

Maternal health problems are one of the main indicators of health status, namely maternal mortality. Maternal mortality is still a major public health challenge around the world, including in Indonesia. The purpose of this study was to explore aspects of nutritional knowledge related to healthy food, balanced nutrition, exclusive breastfeeding and care during teenage pregnancy for Javanese ethnicity in Ponorogo, East Java. This type of research is qualitative with a phenomenological approach. This research was conducted in June - July 2020. The main informants in this study were pregnant women aged 10-19 years in the working area of the Balong Community Health Center, Ponorogo Regency. The source of the informants was determined by snowball sampling. The snowball sampling technique is a form of judgment sampling. Data collection is more emphasized through in-depth interviews (in-depth interviews), namely individual dialogue with informants obtained directly from pregnant women. The results of the study of 6 informants who were teenage pregnant women in the Balong PKM work area, Ponorogo Regency, all informants had underweight nutritional status (BMI / age) and Chronic Energy Deficiency (KEK). The knowledge explored in the form of: food for pregnant women, balanced nutrition, exclusive breastfeeding, risk of teenage pregnancy and pregnancy care. Based on the results of the interview, the informant said that foods that are good for pregnant women to consume are fruits, vegetables, milk and vitamins. Regarding balanced nutrition, all informants did not know at all what balanced nutrition for care during pregnancy, the informant said there was no difference in pregnancy care except health checks at health services, treatments such as maintaining cleanliness and regular exercise.

Introduction

Maternal health problems are one of the main indicators of health status, namely maternal mortality. Maternal mortality is still a major public health challenge around the world, including in Indonesia. Reducing maternal mortality is still a priority for global health (Say, 2014). Every day, an estimated 835 women die from preventable pregnancy complications. Almost all maternal deaths (99%) occur in developing countries. Maternal mortality is higher among women living in rural areas and among the poor (WHO, 2018).

Efforts to reduce MMR are carried out both globally and nationally. WHO works with partners to address inequalities in access to and quality of reproductive, maternal and newborn health services; ensure universal health coverage for comprehensive reproductive, maternal and

newborn health care; address all causes of maternal mortality, reproductive and maternal morbidity, and related disability and strengthen health systems to collect high-quality data to respond to the needs and priorities of women and girls and ensure accountability to improve quality of care and equity (WHO, 2018).

Early marriage has a high chance of adolescent pregnancy which will have a negative impact on both the child and the mother. The factors that contribute to teenage pregnancy are culture, poverty, the role of women in society, mass media, family, education, social environment. Octaviani & Margawati (2012) in the Council on Foreign Relations in 2018 noted that Indonesia is one of the ten countries with the highest child marriage in the world

Based on data from the Central Bureau of Statistics for 2015, the prevalence rate of child marriage was already high in 2015, which is spread across 21 provinces out of 34 provinces in Indonesia. The number of child marriages based on the distribution of provinces throughout Indonesia has reached an alarming rate, namely with a percentage of 61% (sixty one percent), there are 20 provinces with a higher prevalence of child marriage than the national figure (22.82 percent). These provinces are spread across Indonesia in equal numbers between West Indonesia and East Indonesia. The five provinces which are the top five provinces with the highest prevalence are West Sulawesi (34.22 percent), South Kalimantan (33.68 percent), Central Kalimantan (33.56 percent), West Kalimantan (32.21 percent), and Central Sulawesi. (31.91) while East Java 23.17 (BPS, 2015). Whereas in 2017, there was an increase in the number of provinces which showed an increase in the number of child marriages from 2015, namely North Maluku Province and Riau Province, which are now classified as provinces that show quite high numbers (above 25%). The percentage rates for child marriage in the two provinces are 34.41% and 25.87% and East Java is still above the Indonesian average of 27.09% (BPS, 2017a).

According to data from the Central Bureau of Statistics in (2017b) the percentage of East Java women aged 10 years and over who are married under the age of 17 according to the highest regency and city is in Bondowoso district, second place is Probolinggo Regency, East Java and while Ponorogo Regency is above the average percentage of East Java above 21,158 (10 districts with the highest percentage rate).

According to Susenas 2017 percent of those who became pregnant for the first time were under 15 years old, 4.70 percent became pregnant for the first time at 15 years of age, 17.53 percent became pregnant for the first time at 16 years of age, and 38.90 percent became pregnant for the first time aged 17 year. Women before the age of 15 years and the age at first pregnancy also before the age of 15 years were 46.84 percent or nearly half. 46.84 percent of women aged 20-24 years who were married before the age of 15 and at the age of their first pregnancy were also before the age of 15 years, or nearly half of them. In fact, those whose first pregnancies were still quite large, namely 77.96 percent, which means that 3 out of 4 women aged 20-24 years who married before the age of 15 were pregnant when they were still children (BPS, 2017a). In terms of nutrition, they are classified as vulnerable because the body is still growing and the fetus requires high nutritional intake. Without the support of good knowledge and socio-economic conditions, pregnant women in their teens are prone to malnutrition. (Khomsan, 2010). A similar study by Walters et al. In 2019 in rural Malawi on 62 pregnant adolescents, the results of the study were that there was a significant difference between dietary diversity in adolescent pregnant women, only 7% of pregnant women consumed milk and eggs, RDA for adolescent pregnant women was very low, there were taboo foods this region. According to Rea et al., (2019) good knowledge is also in line with the behavior carried out by individuals, knowledge of maternal nutritional intake during pregnancy will also affect the actions or things consumed by pregnant women in meeting good nutritional needs. Various

factors trigger nutritional disorders in adolescence, among others: poor eating habits, misunderstanding of nutrition, excessive preference for certain foods. Therefore, the importance of knowledge related to nutrition for adolescents to change bad habits that often occur in adolescents (Marmi, 2014). The purpose of this study was to explore aspects of nutritional knowledge related to healthy food, balanced nutrition, exclusive breastfeeding and care during adolescent pregnancy in Javanese ethnicity in Ponorogo, East Java.

Methods

The research design used is qualitative research using the phenomenological study approach method. Qualitative research is research that aims to understand what phenomena experienced by research subjects such as behavior, perception, motivation, action and others holistically and by means of descriptions in the form of words and language in a special natural context and by utilizing various methods. natural (Moleong, 2011). This research was conducted in districts with the highest early age marriage data in Ponorogo Regency, East Java, when the study was conducted in June - July 2020. The sources of informants were determined by snowball sampling. The snowball sampling technique is a form of judgment sampling. The sampling method with this technique is carried out in a chain, the technique of determining the sample which is initially small in number, then enlarges. Like a snowball rolling farther and bigger. And for validity it uses source triangulation as a way to compare information from in-depth interviews with different informants. The informants in this study were 8 informants consisting of 6 main informants (pregnant women) and 2 supporting informants

Results and Discussion

Good knowledge is also in line with the behavior carried out by individuals, knowledge about the mother's nutritional intake during pregnancy will also affect the actions or things consumed by pregnant women in meeting good nutritional needs. Various factors trigger nutritional disorders in adolescence, among others: poor eating habits, misunderstanding of nutrition, excessive preference for certain foods. Therefore, the importance of knowledge related to nutrition for adolescents to change bad habits that often occur in adolescents (Marmi, 2014). The knowledge explored in adolescent pregnant women in this study is knowledge of pregnant women eating, knowledge of balanced nutrition, exclusive breastfeeding, the risk of adolescent pregnancy and care during pregnancy.

Food Knowledge for Pregnant Women

Based on research obtained from Indepth Interview related to knowledge of good food for pregnant women, according to 4 informants, fruit and vegetables are good food for pregnant women.

"... what ya mba, if the midwife is told to eat vegetables and fruit and drink vitamins diligently ..." (Mrs. ND, 18)

"... Grandma, I usually eat polite soup, mba, kelor and banana. yo, fruit and vegetables are more important now entering mba " (Mrs. DW, Year18)

"... mba hehe, that's all I don't know ..." (Mrs. DY, Year 16)

The informant knows that healthy food such as consumption of fruits, vegetables and vitamins is good for pregnant women. The informant said that good healthy food consumed by pregnant women is vegetables, fruits and vitamins.

"... yes, if you eat well, eat vegetables and drink milk ..." (Ms. NA, 18 Years)

"... yes, food like you can ma'am, like fruit and vegetables, ma'am hehehe, vitamins or milk for pregnant women ..." (Mrs. DY, 16 Years)

Two informants added that apart from vegetables, fruits and vitamins, consuming milk is also good for mothers during pregnancy. Based on the results of the interview quotation above, healthy foods for pregnant women and good for consumption during pregnancy are fruits, vegetables, milk and vitamins. All informants concluded that healthy food in the form of vegetables, fruits, milk and vitamins is for pregnant women.

The knowledge of teenage pregnant women regarding healthy food is still lacking, informants can only describe good food for pregnant women without knowing the reasons why food is good for pregnant women. Pregnant women in adolescence lack knowledge regarding what foods are good for the fetus in their womb which will have an impact on food intake, in line with research conducted by Alwina et al (2019) which was conducted on 31 samples of pregnant women in the second and third trimesters of the study. Almost all of the respondents had insufficient food intake and special attention was needed regarding teenage pregnant women.

It can also be seen from the FFQ for pregnant women, pregnant women often consume rice, eggs, processed nuts (tempeh, tofu, oncom), green vegetables (kangkong, spinach), fruits (bananas and oranges). Meanwhile, animal protein sources such as ungags (chicken, duck) are only consumed 2-4 times a week. And for the meat is only consumed once a month.

Balanced Nutrition Knowledge

Balanced nutrition is a daily diet containing nutrients in the type and amount according to the body's needs by taking into account the principles of diversity or variety of food, physical activity, hygiene and ideal body weight. The principle of balanced nutrition is visualized in the form of a pyramid, for Indonesia by looking at the culture visualized as "Tumpeng Gizi Balanced" with 4 principles of balanced nutrition, a variety of foods according to needs, cleanliness, physical activity and monitoring ideal body weight (Marmi, 2014).

Based on information obtained from Indepth Interview related to knowledge of balanced nutrition, all informants said they did not know about balanced nutrition.

"... yes, mba hehe fruit vegetables are good for pregnant women"

"I don't know what balanced nutrition is, mba ..." (Ms. DS, 17 years)

"... Healthy food, mba? like vegetables and drinking milk.... " (Mrs. DW, 18 Years)

".... food that has content that is good for health, mba? ..." (Mrs. ND, 18 years)

"... I don't know mba, just found out ..." (Ms. NA, 18 years)

"... no mba ..."

"... vegetables, fruit, I know the most, but they say it's good to eat meat too ..." (Mrs. DY, 16 years)

"... for pregnant women I usually eat more of that earlier, ma'am .."

"... I don't know, ma'am ... " (RH, 19 years old)

Based on the results of the interview, all informants did not know about balanced nutrition, the informants only described foods that are good for pregnant women to consume, such as vegetables, fruits, milk and meat that are good for pregnant women. The informants considered that the source of the nutrients needed was in foods such as vegetables, fruit, milk and meat. Informants do not know at all about balanced nutrition, if pregnant women do not know or lack

of knowledge about the fulfillment of nutrition for pregnant women will have an impact on the nutritional status of the mother and the health of the fetus or the mother herself.

Research conducted by Fujiana (2020) concludes that young age and immature growth and development make adolescent girls experience difficulties in carrying out the role of motherhood. Lack of knowledge and experience causes teenage girls not to be optimal in giving the best for their children. Nurses, especially maternity nurses, can provide health education to young women in carrying out pregnancy, childbirth and providing care for newborns.

Knowledge About Exclusive Breastfeeding

Based on information obtained from Indepth Interview related to knowledge about exclusive breastfeeding. 5 informants said they did not know about exclusive breastfeeding and 1 informant said exclusive breastfeeding was given to babies for up to 2 years.

"... ..*Waahhh what is that mba hehe...*" (Ms. DS, 17 years)

"... *Wow, what is it, you just heard hahaha ...*" (Mrs. DW, 18 Years)

"... *What's that mba hehe...*" (Mrs. DY, 16 years)

"... *I don't know ma'am ...*" (RH, 19 years old)

"... *exclusive breastfeeding is breastfeeding until how many months, as long as I know ...*" (Mrs. ND, 18 years)

Based on the results of the interview, the informants did not know about exclusive breastfeeding, 4 informants were very unfamiliar with exclusive breastfeeding and did not know the meaning of exclusive breastfeeding. 1 informant seemed to know about exclusive breastfeeding but it was incomplete and forgot to what age breastfeeding was given.

"... *Asi exclusively mengaASI for 2 years, yeah, you know that...*" (Ms. NA, 18 years)

The informant explained that he was related to knowing about exclusive breastfeeding, said that exclusive breastfeeding was given until the age of the baby was 2 years old but did not explain completely about exclusive breastfeeding. Knowledge related to exclusive breastfeeding is knowledge that pregnant women must have before giving birth because the benefits of breastfeeding are very much for the health of the baby. Lack of knowledge will have an impact on the actions of the mother in caring for the baby later.

The results explained that related to the knowledge of pregnant women about balanced nutrition and exclusive breastfeeding, all informants did not know about balanced nutrition and exclusive breastfeeding. Breast milk (ASI) is the best food for babies. Breast milk has advantages in terms of nutrition, immune power, psychology, economics and so on. Breast milk has nutrients (nutrients) that are suitable for babies, containing fat, carbohydrates, protein, salt and minerals and vitamins. Contains protective substances in the form of lactosibilus bifidus, lactoferrin, lysozyme, complement C3 and C4, antibodies and does not cause allergies (Marmi, 2014). The results of research from Fau et al (2019) show that 20.8% of adolescent mothers provide exclusive breastfeeding in Luahagundre Maniamolo District. The results of the chi square test showed that the variables of knowledge ($p = 0.004$), attitude ($p = 0.001$), belief ($p = 0.001$), support from health professionals ($p = 0.001$), husband / family support ($p = 0.001$), and the influence of social media ($p = 0.001$) which means that all variables have a relationship with exclusive breastfeeding of adolescent mothers to infants.

Adolescent Pregnancy Risk Knowledge

Based on information obtained from Indepth Interview, 4 informants said they did not know about the risk of teenage pregnancy and 2 informants said that teenage pregnancy had more risks.

"..... I don't know either ma'am hehehe" (NA mother, 18 years)

"... .. I don't know, ma'am, it's the same as pregnant women in general ..." (Mrs. DS, 17 Years)

"... no ma'am? ..."

"... do you feel bad, ma'am? ..." (Mrs. DW, 18 years)

"... I don't know ma'am" (Mrs. RH, 19 Years)

Based on the results of the interview, the informant did not know the risk of teenage pregnancy. 4 informants did not know about the risk of teenage pregnancy.

"... no mba, eh but have you ever heard of it if it's more dangerous ..."

"Have you ever seen ndek tv if it is more difficult to get pregnant at a young age and it is said that the possibility of a miscarriage is also possible" (Mrs. DY, 16 years)

"... ya know, just being told that at a young age there are many risks but it's already already too mba ..."

"... I was told that my family was close to that, mba, told to be careful, they were told to take care of their health, they said that my age was still vulnerable, especially when I was still pregnant and I said that my age was still young to get pregnant ..." (Ibu ND, 18 Tahun)

Based on the results of the interview, 2 informants had heard about the risk of teenage pregnancy and said that being pregnant at adolescence had more risks. The informant obtained information related to the risk of teenage pregnancy from TV and family.

Suryaningsih's research (2019) examined the relationship between miscarriage and anemia with young marriage in the village of Hapesepo Lama with a sample of 78 pregnant women using a random sampling method. The results showed that there was no significant relationship between miscarriage and maternal age, but there was a significant relationship between anemia during pregnancy and the age of young pregnant women. Research conducted by Ogawa et al (2019) in a hospital in Japan, the results of the study showed that those under 20 years of age are at risk of preterm delivery and LBW compared to pregnant women aged 24-24 years at several hospitals in Japan.

In the research of Suryaningsih, et al. In 2019, they examined the relationship between miscarriage and anemia with young marriage in the village of Hapesepo Lama with a sample of 78 pregnant women using a random sampling method. The results showed that there was no significant relationship between miscarriage and maternal age, but there was a significant relationship between anemia during pregnancy and the age of young pregnant women. A similar study by Hapisah and Ahmad Rizani in 2015 used an analytical survey with a sample of 80 people with a random sampling system with systematic sampling. The results of the study were 18 people (22.5%) respondents with no anemia and 31 people (38, 75%) of respondents have anemia. There is a relationship between teenage pregnancy and the incidence of anemia, the Chi-Square test results obtained p value = 0.013.

Food Restrictions

Pregnant teenagers without good nutrition knowledge will easily be swallowed up by myths about various taboo foods and scientifically incorrect dietary taboos. In the research conducted by Fatmawati et al (2019) from the results of this study it can be concluded that there is a relationship between education and nutritional knowledge with the nutritional status of pregnant women in low-income families in Bandar Lampung City.

Based on information obtained from Indepth Interview, all 5 informants have different dietary restrictions and 1 informant does not have any dietary restrictions.

"... yes, at most you can eat spicy ..." (Ms. NA, 18 Years)

Based on the results of the interview, there were informants who were challenged by spicy food during pregnancy.

"... Papaya mba, your back must hurt, you can't get ice at the same time because the effect is a bit painful in your body ..."

"... yes mbs is the most afraid of having a big baby ..."

".. oh it is forbidden to eat in the mattress, you said the husband's family made growth slow, Javanese people are strange, the ban, mba .."

"... Papaya and coconut milk and the soup leaves, mba, you can't eat soup leaves ..."
(Mrs. ND, 18 years)

Based on the results of the interview, there were informants who were challenged by several foods and there was a prohibition on eating on the bed. Informants are prohibited from eating papaya, drinking ice water, soup leaves, papaya vegetables and eating on the bed because they feel sore after eating papaya.

"... Ma'am, I can't eat catfish, banana flowers, kweni fruit, durians and enom pineapples? ..."

"... with Moringa, all of them are not allowed, because it is for driving away spirits ..."
(Ms. DS, 17 years)

Based on the results of the interview, there were informants who were challenged by several foods. Informants were prohibited from eating catfish, manga kuweni fruit, durian, young pineapple and moringa leaves.

"... feel sick, mom, it's forbidden to eat sour and spicy mba ..."

".. still have mba, I can't eat catfish, banana flowers, and young pineapples .." (Mrs. DY, 16 years)

Based on the results of the interview, there were informants who were challenged by several foods, the informants were prohibited from eating acids, spicy food, catfish, banana flowers and young pineapples.

"... eat pineapple and banana flowers, ma'am? In the village, you can't eat pineapple and banana fruit ..." (RH, 19 years old)

Based on the results of the interview, there were informants who were challenged by several foods, in the village, the informant's mother was prevented from eating pineapple and bananas.

".. no" eat, eat everything ... " (Mrs. DW, 18 years)

Based on the results of the interview, there were informants who did not have any dietary restrictions at all when they were pregnant, which were believed by the informants to be information that was given from generation to generation and is preserved until now, the

informants believed that dietary restrictions would have an impact on the baby after birth. Research conducted by Susanti, et al. In 2011 in the city of Jepara showed that there was a relationship between the culture of abstinence from food and the nutritional status of pregnant women in the third trimester, there was no relationship between economic status and knowledge of nutrition and nutritional status in pregnant women in the third trimester ($p = 0.002$; $p = 0.097$; $p = 0.097$; $\alpha = 0.05$). (Susanti et al, 2010). Sudirman et al (2020) also conducted a study looking at the more specific socio-cultural relationship of dietary abstinence with the nutritional status of pregnant women in Antang Makassar housing in 2020, there is a significant relationship between dietary restrictions and the nutritional status of pregnant women

Reported elsewhere in several African and Asian countries, where some groups are restricted in their diet during pregnancy. However, the reasons behind avoiding consumption of these foods vary within these communities. For example, Fulla ethnic women in Gambia are prohibited from eating certain types of foods rich in carbohydrates, animal protein and micronutrients during pregnancy for various reasons, leading to high protein / calorie malnutrition during childhood and pregnancy in the country (Pérez & García , 2013). Poor nutrition during pregnancy also puts many mothers at high risk during labor (Chakona & Shackleton, 2019).

Based on the results of research from the results of interviews with informants who support traditional leaders, there are dietary restrictions and traditions related to pregnant women.

"At most, if you are 3 months pregnant then there is brokoi! Brokoi.... What if the Indonesian language is thankful I hope for blessings "

"The woman is the origin of the word for Barokah, 3 months old or Selamatino, Karane people say, save it for 30 days and 35 days."

"For 7 months, the name is staying 7 months to bathe the bae flowers. Later the man will split a coconut. Then the coconut is depicted as a puppet, the wayang characters continue to be after bathing, the coconut is split open if the hemisphere is straight, it means the same between the left side and the right side, then the child will be a girl, if the hemisphere is one-sided or one-sided it means the child is a boy "

"Each person's taboo is different, mba"

"The food is hot food, it can't be hot like jackfruit you can"

"Mango kueni is not allowed"

"It's hot the effect is hot, mba" (Mr. SP, 52 years)

The informant said that there are traditions such as brokoi and tingkepan which are carried out at the age of 3 and 7 months of pregnancy as a form of gratitude, a tradition that is carried out as gratitude for the gift given by the god of abstinence to eat for pregnant women such as manga and jackfruit are believed by the surrounding community because they are hot .

The foods most frequently avoided during pregnancy are meat products (chicken, wild meat and red meat), fish, potatoes, fruit (oranges and other fruits that are identical in color such as oranges, peaches, pineapples and guavas), nuts. - nuts, eggs, butternut and pumpkin. Most of the foods reported as taboo are rich sources of essential micronutrients (nuts, eggs, offal, all fruits, pumpkin and butternut), protein (bushmeat, fish, eggs, chicken, organ meats and nuts) and carbohydrates (potatoes), which are very important for maternal health and child development (Zerfu et al., 2016; Diana et al., 2018). The prohibition and prohibition of eating

for pregnant women is very detrimental to pregnant women themselves. Foods that are prohibited from containing good nutrition for pregnant women.

Conclusion

It shows that 6 informants have nutritional problems, namely thinness and Chronic Lack of Energy (KEK). In terms of knowledge, the informants can mention the types of healthy eating that are good for pregnant women such as fruits, vegetables, milk and vitamins. Informants who do not know about balanced nutrition can give examples of types of food. Regarding exclusive breastfeeding, there were no informants who knew the meaning of exclusive breastfeeding and finally the knowledge related to dietary restrictions 5 informants had dietary restrictions that were passed down from generation to generation and were obeyed by pregnant women, dietary restrictions such as ice water, catfish and eating sweet foods were believed to be make the baby big and difficult in the birth process. Pineapple and mango kuweni are hot and will make the fetus miscarry. Eating restrictions are obtained from parents (mothers) and grandmothers, eating restrictions are believed to affect the health of the fetus in the womb of pregnant women. Knowledge of teenage pregnant women about pregnancy and knowledge of nutrition during pregnancy is still classified as lacking.

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