

DOI: 10.5281/zenodo.19101179

PERCEPTION OF BATAK ANGKOLA COMMUNITY FIGURES TOWARDS PREGNANT WOMEN'S NUTRITION IN PADANGSIDIMPUAN CITY; PHENOMENOLOGICAL STUDY

Nurelilasari Siregar^{1,2}, Stang³, Rahayu Indriasari⁴, Ummu Salmah⁵, Anwar Mallongi⁶

¹Doctoral Program Student, Faculty of Public Health, Hasanuddin University, Makassar, Indonesia

²Department of Midwifery, Faculty of Health, Aufa Royhan University, Padangsidempuan, North Sumatra, Indonesia

³Department of Biostatistics, Faculty of Public Health, Hasanuddin University, Makassar, Indonesia

⁴Department of Nutrition, Faculty of Public Health, Hasanuddin University, Makassar, Indonesia

⁵Department of Biostatistics, Faculty of Public Health, Hasanuddin University, Makassar, Indonesia

⁶Department environmental health, Faculty of Public Health, Hasanuddin University, Makassar, Indonesia

Received: 06/02/2026

Accepted: 05/03/2026

Corresponding Author: Nurelilasari Siregar
(elila2103@gmail.com)

ABSTRACT

The nutritional status of pregnant women plays a very important role in the continuity and success of a pregnancy, one of the factors that plays a major role in complications of pregnant women is chronic energy deficiency (CED). Pregnant women who experience CED are at risk of giving birth to low-birth-weight babies which are often associated with stunting. The purpose of this study was to explore in depth the perceptions of Batak Angkola community leaders (traditional leaders, religious leaders, cadres) regarding the nutrition of pregnant women in Padangsidempuan City. The research design used is phenomenology. The data collection method was carried out by in-depth interviews. The purposive sampling method is used to select participants who meet the criteria as participants. Participants in this study numbered 12 people consisting of pregnant women with special needs, traditional leaders, religious leaders and cadres in Padangsidempuan City. The transcribed interview results were analyzed using content analysis. The results of this study found 4 themes which reflects the phenomenon being studied. These themes are socio-cultural aspects in pregnancy care, the role of community leaders in fulfilling the nutritional needs of pregnant women, the influence of culture on maternal nutrition during pregnancy and the response of community leaders to their involvement in nutritional education for pregnant women. It is recommended that the Padangsidempuan City Regional Government involve traditional leaders and religious leaders in educating pregnant women about nutritional behavior during pregnancy and optimizing cadre assistance for malnourished pregnant women.

KEYWORDS: Nutrition Of Pregnant Women, Community Leaders, Batak Angkola Tribe.

1. BACKGROUND

Maternal and Child Health is a target in the *Sustainable Development Goals* (SDG's) where one of the SDGs goals is to reduce MMR to 70 per 100 thousand live births. The Maternal Mortality Rate (MMR) in Indonesia reaches 305 per 100,000 of the number of live births where disorders during pregnancy are a major problem and contribute to maternal mortality. One of the problems that can cause complications during pregnancy that has received government attention is the implementation of balanced nutrition for pregnant women (1)

The nutritional status of the mother plays an important role in the continuity and success of a pregnancy. The role of adequate nutrition is very vital, starting from the first trimester of pregnancy to the first thousand days of life. Disruption of nutritional intake during this period is associated with the risk of chronic diseases during pregnancy, namely Chronic Energy Deficiency (CED). Insufficient energy and protein intake in pregnant women can cause pregnant women who experience CED to be at risk of giving birth to low birth weight (LBW) babies. LBW is often associated with low height or stunting (2,3)

The prevalence of anemia and chronic energy deficiency (CED) in pregnancy globally is 35-75% where in the third trimester it is greater than in the first and second trimesters of pregnancy. WHO also noted that 40% of maternal deaths are related to anemia and CED in developing countries with the highest prevalence of these problems due to mothers with Chronic Energy Deficiency (CED) which can cause their nutritional status to decline (1).

Based on data obtained from the Basic Health Research (Riskesdas) in 2018, the proportion of pregnant women experiencing KEK in Indonesia was 17.3%. The incidence of KEK in North Sumatra Province in 2019 was 14.9%. Data from the Padangsidempuan City Health Office in 2022 showed that the percentage of KEK incidence was 13.7% of all obstetric complications in pregnant women, KEK pregnant women ranked highest in the data of pregnant women with obstetric complications in Padangsidempuan City. If this achievement is compared with the WHO Public Health target for pregnant women with a KEK risk of <5%, then the achievement obtained is still far from the global target (4,5).

Target Achievement of Prevention of Malnutrition in Pregnant Women According to the Ministry of Health 2020 was caused by several

factors, namely the level of compliance in reporting the achievement of KEK pregnant women indicators routinely every month is still low Availability and quality of human resources, Prevalence of KEK in adolescent girls (aged 15-19 years) is still high at 36.3%. Knowledge about nutritious food intake for pregnant women and the culture that preserves certain food taboos for pregnant women are still obstacles and the number of pregnant women who receive antenatal services according to standards (K4) has only reached 58.98% with a target of 2020 of 80% (6).

From the various factors above, it can be seen that culture still has a role in fulfilling balanced nutrition for pregnant women. Food consumed daily will be seen from the pattern of habits eaten and will affect the nutrition of pregnant women according to the intake eaten so that it will tend to be deficient in nutrients, for example chronic energy deficiency (7). Eating habits in pregnant women are one of the characteristics that can describe behavioral patterns related to the type of food consumed, how often the portion is eaten, then taboos or tastes that are liked or disliked for the food to be eaten, then how to choose the food to be eaten (8).

Problems experienced by pregnant women still need attention even though various nutritional improvement programs have been carried out. The form of nutritional improvement program for pregnant women with KEK is the Provision of Additional Recovery Food (PMT-P) in the form of program biscuits, biscuits other than programs, powdered milk, liquid milk, raw food ingredients, and cooked food ingredients. The implementation of PMT-P distribution is not supervised specifically regarding the rules on the amount that must be consumed by the mother, so that often the food is not consumed by the mother and the food is given to other family members (9).

Prevention by taking a transcultural approach where the approach is to provide nutrition education to mothers through people in the environment of pregnant women who can directly influence the behavior of pregnant women. The Angkola Mandailing tribe in Padangsidempuan City has multicultural cultural values that produce community values that can influence the health behavior of pregnant women. In the Mandailing tribe, eating patterns are also based on habits that exist in society where some eating behaviors that often occur are consuming more carbohydrates and the existence of a patriarchal pattern, namely when eating, the father is prioritized. Decision-making

factors in pregnancy care in the Mandailing tribe are also inseparable from the influence of people around pregnant women.

One approach that can be taken to improve balanced nutritional behavior in pregnant women is to apply the Transcultural Midwifery theory with a socio-cultural approach to women's health care. In the context of the Batak tribe, one aspect of culture that plays an important role is community compliance in listening to advice and suggestions from community leaders, especially hatobangon, religious scholars and cadres. Hatobangon are people who are respected in the community and are considered to hold the rules related to customs that are carried out in the community from generation to generation and cannot be changed so that they can influence behavior. Islamic scholars or religious figures are also part of community leaders whose advice is listened to. The involvement of cadres also plays an important role in health services for pregnant women . (10) .

Based on a preliminary study in Padangsidimpuan City conducted using the interview method with 3 community leaders consisting of 1 traditional leader, 1 religious leader and 1 cadre, two of whom said that they thought that caring for pregnant women was not their responsibility but the responsibility of health workers in their area, and they thought that the taboos that had been passed down from generation to generation were believed not to affect health . Based on this phenomenon, this study aims to explore the perceptions of Batak Angkola community leaders regarding the nutrition of pregnant women in Padangsidimpuan City.

2. RESEARCH METHODS

This study is a qualitative study with a phenomenological approach to explore the perceptions of community leaders regarding nutrition in pregnant women. Data collection was carried out by researchers as the main research instrument. Data were collected through in-depth interviews involving *certain* sources to provide complete information and conduct triangulation to check the data. Data collection was carried out using a voice recorder based on a combination of interviews with open questions. The informants of this study consisted of 12 informants, namely 3 KEK pregnant women, 3 traditional leaders, 3 religious leaders, and 3 cadres with predetermined criteria. The study was conducted in Padangsidimpuan City in November 2024 .

3. RESULTS AND DISCUSSION

3.1. Research Result

Participants in this study were 12 people, with an age range of 31-45 years as many as 8 participants and an age range of 20-30 years as many as 3 participants and age <20 years as many as 1 participant. Participant Education 2 people were elementary school, 8 participants had high school education, 2 participants had a bachelor's degree. Based on occupation 4 participants worked as entrepreneurs, 2 participants were civil servants, 4 participants worked as farmers and 2 participants were unemployed. The characteristics of the participants in detail will be explained below.

Table 1: Participant Characteristics.

No	Initials	Age	Education	Work	Language
1	Mrs. RD (pregnant woman with KEK)	34 Years	SENIOR HIGH SCHOOL	Farmer	Indonesian/Batak
2	Mrs. WS (pregnant woman with KEK)	17 years	SD	Doesn't work	Indonesian/Batak
3	Mrs. M ((pregnant woman with KEK)	27 Years	SENIOR HIGH SCHOOL	Doesn't work	Indonesian/Batak
4	Mr. AS (Religious Figure)	45 Years	Bachelor	civil servant	Indonesian/Batak
5	Mr. S (Religious Figure)	38 Years	SENIOR HIGH SCHOOL	Farmer	Batak
6	Mrs. L (Religious Figure)	40 Years	SENIOR HIGH SCHOOL	Self-employed	Indonesian/Batak
7	Mrs. IH (Traditional Leader)	38 Years	SENIOR HIGH SCHOOL	Farmer	Batak
8	Mr. F (Traditional Leader)	43 Years	SD	Farmer	Batak
9	Mr. B (Traditional Leader)	40 Years	Bachelor	civil servant	Indonesian/Batak
10	Mrs. T (Cadre)	28 Years	SENIOR HIGH SCHOOL	Self-employed	Indonesian/Batak
11	Mrs. N (Cadre)	30 years	SENIOR HIGH SCHOOL	Self-employed	Indonesian/Batak

12	Mrs. F (Cadre)	36 Years	SENIOR HIGH SCHOOL	Self-employed	Indonesian/Batak
----	----------------	----------	--------------------	---------------	------------------

The results of this study found 4 themes, namely: The views of community leaders on pregnant women, the role of community leaders in caring for pregnant women, the influence of culture on

maternal nutrition during pregnancy and the response of community leaders to their efforts to involve them in nutritional education for pregnant women. More details can be seen in table 2 below.

Table 2: Content Analysis Results.

No 1	Theme 1: Socio-cultural aspects in pregnancy care	
	Sub themes	Category
	1. Pregnant women's values	1. Pregnancy is a normal process and needs to be paid more attention to. 2. Still serving families as usual
	2. Myths related to pregnant women's behavior	1. Young people should not be pregnant 2. You cannot see the dead 3. It is believed that working a lot will make the labor process easier. 4. Using spices to ward off demons
2	Theme 2: The role of community leaders in fulfilling the nutritional needs of pregnant women	
	Sub themes	Category
	1. Pregnant women with KEK	1. Supporting the tradition of mambosuri for pregnant women 2. Performing mambosuri and sasalin ceremonies during pregnancy
	2. Traditional figures	3. Supporting the tradition of mambosuri for pregnant women 4. Carrying out the mambosuri tradition for pregnant women 5. Providing maternity care to pregnant women as a form of concern
	3. Religious leaders	1. Supporting the tradition of mambosuri for pregnant women 2. Carrying out the mambosuri tradition for pregnant women 3. Praying for pregnant women in the mambosuri ceremony
	4. Cadre	1. Inviting mothers to have pregnancy check-ups 2. Providing pregnancy check-up information 3. Providing additional food from the health center to malnourished pregnant women
3	Theme 3: The Influence of Culture on the Nutrition of Pregnant Women	
	Sub themes	Category
	1. Pregnancy Ceremony/Ritual	1. Performing mambosuri 2. Giving birth to pregnant women
	2. Food taboos for pregnant women	1. Do not eat pineapple and durian, it is believed to cause miscarriage 2. It is believed that not eating bamboo shoots can cause babies to have lots of hair 3. You should not eat raw fish and eggs because they are fishy
4	Theme 4: Response of Community Leaders to their involvement in nutrition education for pregnant women	
	Sub themes	Category
	1. Positive response	1. Traditional figures can provide education at traditional events 2. Religious figures can provide education during religious studies and events. 3. Cadres are involved in assisting in improving the nutrition of pregnant women
	2. Negative Response	1. The health and nutrition of pregnant women is the responsibility of health workers. 2. It feels taboo to be involved in programs to improve the nutrition of pregnant women

1. Theme: Socio-Cultural Aspects in Pregnancy Care

In the socio-cultural aspect of pregnancy care, it is categorized into two sub-themes. Participant statements about the values of pregnant women are:

"I think pregnancy is a normal thing for married couples. Pregnant women should receive more attention, but that doesn't mean that the mother should just rest and not do work and activities as usual."

"In my opinion, pregnant women are very noble, being pregnant requires sufficient energy and nutrition, so mothers should be given more nutrition, but in our culture, even though the wife is pregnant, she still has to serve the family, for example preparing food, especially for her husband."

Myths related to the behavior of pregnant women during pregnancy are also strongly believed by pregnant women in the Batak Angkola tribe, the following are statements from participants

regarding several myths in caring for pregnant women:

"It is true that pregnant women need rest, but if pregnant women do not work or are lazy, it will affect their delivery. Many pregnant women who work hard, such as in the fields and rice fields, actually have smoother deliveries, no surgery."

"Usually, pregnant women are not allowed to tell anyone about their pregnancy, for fear that someone will have bad intentions, so usually we know they are pregnant when they are already in the late stages of pregnancy."

"When I was pregnant, I often saw my mother using antidotes such as garlic and salimbatuk made into safety pins, then made into clothes, they said they could ward off demons. Because they said the blood of pregnant women is liked by demons. So, I just believed it and applied it when I was pregnant too."

"Pregnant women are forbidden to pay their respects and eat at the place where the deceased is. If someone dies, we are told not to come along, or if we do, not to be near the corpse. It is said to be taboo."

2. Theme Of the Role of Community Leaders in Fulfilling the Nutritional Needs of Pregnant Women

Participants stated that there was a role given by community leaders, namely the tradition of mambosuri and giving sasalin to pregnant women.

The participant's statements are as follows:

"When I was pregnant with my first child, the traditional and religious figures only came during the mambosuri event, where they gave advice and upa-upa tondi so that we would not be afraid when giving birth. At that event there was also a mambutongi event (feeding chickens and goldfish) the aim was to increase our appetite, whereas the cadre mothers usually only took us to the integrated health post and gave us bread from the health center."

"For us as community leaders, we usually only participate when the woman's family comes to the pregnant woman's house for the mambosuri event. In my opinion, that is a good role, because there we usually provide food, encouragement and prayers for the pregnant woman. Usually, the pregnant woman will feel happy because not only is she given mambutongi but she is also given sasalin (new clothes)."

"Usually, we cadres only monitor pregnant women, such as inviting them to go to the integrated health post. Even if there are pregnant women who are malnourished, cadres only give them PMT biscuits from the health center. There is no further monitoring, such as monitoring whether the biscuits are eaten by the mother or not. We don't know."

3. Theme: The Influence of Culture on the Nutrition of Pregnant Women

Based on the results of the participant interviews, it was revealed that culture influences the nutrition of pregnant women through ceremonies/rituals performed during pregnancy. The culture of food taboos also influences the nutrition of pregnant women, because there are food taboos that are appropriate and inappropriate.

Ceremonies or rituals performed during pregnancy and affecting the nutrition of pregnant women, the statements of the participants were:

"At the Mambosuri event, we give pregnant women nutritious food, there is chicken rendang and carp. There are some pregnant women who rarely eat meat, so at the Mambosuri event, pregnant women can enjoy meat."

Usually, 1 chicken is placed on the mother's plate."

"Mambosuri is called mambutongi mangan, the hope is that after the upa-upa, mothers will be healthier and have an increased appetite for food "

The culture of abstaining from eating can also affect the nutrition of pregnant women, as stated by participants such as:

"There are definitely food taboos, the usual ones before pregnancy are allowed, but not allowed after pregnancy, like eating pineapple and durian, they say if you eat them in early pregnancy, you could have a miscarriage. Yeah, things like that. "

"They say you are not allowed to eat bamboo shoots, even though there are many bamboo shoots in the garden. They say if you eat them, the baby will have a lot of hair. There is also a myth that pregnant women are not allowed to come and eat where someone has died. So, if someone dies, pregnant women don't dare to come and eat. "

"If you eat vegetables, you are told to eat a lot, the most common thing you hear about is fruits like pineapple and durian, they say it's hot for the stomach, and you're afraid the baby will fall out."

4. Theme: Response Of Community Leaders to Their Efforts to Involve Them in Nutrition Education for Pregnant Women

Community leaders gave positive and negative responses to efforts to involve them in providing nutrition education for pregnant women.

Positive responses given by community leaders such as supporting the effort if their involvement is needed in handling nutritional problems in pregnant women.

The participant statements are as follows:

"It is true that what is conveyed by hatobangon (traditional leaders) and malim (religious leaders) will usually be listened to by the community, so even if we can help by providing explanations to pregnant women or their families, what's wrong with participating, maybe it can be conveyed during traditional events, right?"

"Although it feels odd, but if the involvement of

community leaders is considered helpful, it's okay, but I think that religious leaders who are directly exposed to pregnant women should only be religious leaders who are mothers, because they often meet in community religious studies. That's good, so pregnant women will understand more about nutrition. In addition to pregnant women, other mothers will also know, right? "

"As a cadre, I would actually be willing to accompany these pregnant women. It's just that we still don't know much about nutrition for pregnant women. If I were given guidance, I would be happy to do it."

Negative responses given by community leaders in their involvement in handling nutritional problems in pregnant women. The participant statements are as follows:

"The health of pregnant women is the responsibility of health workers. I think that the food taboos that have been passed down from generation to generation are comprehensive and do not harm pregnant women."

"For me personally, it's actually a taboo thing to do, because we don't know who is pregnant in our environment, even if we know, we feel reluctant to give information about maternal nutrition to our husbands."

"We have handed over the matter of pregnant women to the cadres in this village, so we don't know anything about these malnourished pregnant women."

4. DISCUSSION

1. Theme: Socio-Cultural Aspects in Pregnancy Care

Theme: Socio-cultural aspects in pregnancy care consists of 2 sub-themes, namely the values of pregnant women and myths related to the behavior of pregnant women. The first aspect in this study shows that pregnant women have a noble value in the eyes of society and pregnant women need special attention regarding their pregnancy. Pregnant women are people who are in the process of fertilization to continue their offspring. In the body of a pregnant woman there is a growing fetus that grows in the womb. Pregnancy is an important period of life. A pregnant woman must prepare herself as well as possible so as not to cause problems with the health of the mother, baby, and during the birth process. The noble value in this study can be seen from the role of community leaders in caring for pregnant women starting from the implementation of several traditions and the existence of behavioral taboos and dietary taboos that have been preserved since ancient times (11)

The results of this study show that there are several socio-cultural aspects that carried out in pregnancy care by the Batak Angkola community, both in the form of Food taboos for pregnant

women and several myths related to certain behavior during pregnancy pregnancy and special rituals during pregnancy. The culture of pregnancy and childbirth in some areas has shifted, but in others it is still maintained. However, in some communities there are times when compromises occur where new values and rituals are carried out without eliminating old values and rituals. Culture in the sense of a comprehensive view that concerns outlook on life, attitudes, and values (12)

The myth of pregnant women's behavior is not only in Indonesia, similarly, research conducted by Ansong in Ghana stated that pregnancy, childbirth, and care are cherished moments in most communities in Ghana. However, certain beliefs tend to make these moments vulnerable to certain rituals and concealments, all done in an effort to ensure that nothing bad happens during these times. Given this, there are certain socio-cultural beliefs and practices that are considered to be able to prevent unwanted things from happening (13).

Myths related to fear of miscarriage due to witchcraft force pregnant women to stay at home, which has implications for antenatal visits. Indonesia, for example, in the Nuaulu tribe, is known to have a "high perception" of the practice of pregnancy in isolation. They assume that with isolation they will be safe. A study conducted in Zambia also found that women deliberately postpone *antenatal care* (ANC) visits to avoid myths related to the evil eye, so that the first ANC schedule is carried out at 7 months of pregnancy (8)

Important health services in early pregnancy such as monitoring the growth of the fetus in the womb, giving TT immunization, and giving Suphadoxine-pyrimethamine (SP) to help reduce malaria during pregnancy should be given during ANC. Therefore, pregnant women who start ANC late may not be able to complete the services according to the standard such as pregnant women are expected to take at least 8 doses of prophylaxis according to the latest recommendations from *the World Health Organization* (WHO) (14).

In opara's (2025) research in Nigeria also showed that women said that pregnancy is a time when women are vulnerable to attacks from witches and sorcery from people, they believe have evil powers to harm pregnant women or unborn children. According to informants, attacks related to sorcery always occur during pregnancy especially in the early period of pregnancy. Women said that such attacks can also come from neighbors, in-laws, relatives who seem friendly, and even from known

enemies.

In contrast to Ayers' (2019) study, the responses of Marshall Island mothers showed a mix of culturally specific beliefs and Western beliefs about the meaning of prenatal care and when and why to seek prenatal care. These findings are similar to previous studies of prenatal care access among Pacific Islander subgroups in that they showed an increased understanding of the importance of seeking prenatal care, but unlike other studies, participants in this study discussed seeking prenatal care earlier now that they were living in the United States (14) (15) .

The same research results were also presented by Srivastava (2021), where the results showed that there was an influence of local culture and perspectives on pregnancy on antenatal care in selected villages, resulting in underutilization of ANC services. From the research results, it is hoped that health service providers will highlight these socio-cultural practices during pregnancy and also design targeted interventions to change the community paradigm regarding early pregnancy care to support the Sustainable Development Goals (SDGs) (16) .

2. Theme Of The Role Of Community Leaders In Fulfilling The Nutritional Needs Of Pregnant Women

The theme of the role of community leaders in fulfilling the nutrition of pregnant women, from the results of this study it can be seen that traditional leaders and religious leaders have a role in supporting pregnant women, namely in the mambosuri tradition. Mambosuri is a traditional activity carried out during the seventh month of pregnancy, where in the mambosuri tradition food is prepared with the aim of maintaining the health of the mother and fetus. Based on this, a study is needed in the mambosuri cultural process and what nutritional elements are contained in the food (17) .

Traditional ceremony for women pregnancy which is still often carried out in the Batak Angkol tradition is the Mambosuri tradition. The term Mambosuri, which means making yourself full, is a ritual of giving food from the wife's parents to the child. prospective mothers whose pregnancy has entered its seventh month. Symbolically, this tradition gives meaning to maintain the health and safety of the prospective mother and the baby she is carrying, as well as other family members featured in various traditional ceremonies (17) .

In this study, the role of traditional and religious figures can only be seen from the Mambosuri

traditional event, while other roles that can improve the nutritional behavior of pregnant women through these figures were not found. The role of cadres is also known to be limited to accompanying pregnant women when there is a pregnant women's health post, and is not obtained continuously following the development of pregnant women in each trimester.

According to Syafitri (2023) Based on findings in the community, it was found that there were pregnant women who had not checked their pregnancy (ANC) at health service facilities such as Community Health Centers/Posyandu, and where mothers who did not make ANC visits, there was a possibility of suffering from malnutrition, so a method was needed to be able to detect/find pregnant women with malnutrition in the community so that it was necessary to optimize the role of cadres to find pregnant women with nutritional problems (17) .

The role of cadres is the action of cadres in helping the community related to health such as being an advocate, namely helping pregnant women in coordinating with midwives to maintain their health. Cadres can also act as educators and motivators, namely providing direction and instructions on maintaining pregnancy from malnutrition during pregnancy. The role of cadres is related to the behavior of mothers in fulfilling nutrition according to the behavioral theory put forward by Lawrence Green that the role of cadres is a strengthening factor for pregnant women so that they behave well in preventing the occurrence of KEK. (18) .

3. Theme: The Influence Of Culture On The Nutrition Of Pregnant Women

On the theme of cultural influence on nutrition of pregnant women, researchers found two sub-themes, namely ceremonies or rituals during pregnancy and food taboos for pregnant women. Ceremonies or rituals during pregnancy in various countries have diversity. In this study, it was found that the rituals performed by Batak Angkola for pregnant women were called mambosuri and sasalin.

Feeding at the Mambosuri ceremony has an impact on improving the nutritional status of pregnant women where in the first trimester the appetite of pregnant women has not increased due to morning sickness experienced by pregnant women. Pregnant women who have been given prayers and encouragement by all members of the dalihan natolu family, traditional leaders and

religious leaders at the mambosuri ceremony will grow the spirit to consume healthy and nutritious food that is good for themselves and for the nutritional needs of the baby they are carrying. Fulfillment of nutrition during pregnancy is very important to meet the metabolic needs of pregnant women and fetal development. Pregnant women need various kinds of nutrients that can be obtained from foods that can be consumed by pregnant women, such as protein, carbohydrates, fat, and vitamins and minerals. The types of food found in traditional food at the mambosuri ceremony are able to meet the nutritional needs of pregnant women, such as fish, meat, eggs and so on which contain various kinds of nutrients (19).

Ashriady (2022) socio-cultural aspects of pregnancy care in the coastal community of Mamuju Regency also have a Cera' ritual which is carried out at 7-9 months of pregnancy is a ritual carried out by every pregnant woman in the coastal area. Based on the results of the study, the purpose of this ritual is to facilitate the delivery process and is only carried out on the first child. The results of this study are in accordance with previous studies which revealed the habit of pregnant women to go to a shaman in the third trimester by the Bugis Tribe, which is called the ma'cera wettang ritual (Nisa U, 2021). Usually carried out at seven months of pregnancy to make the fetus' position perfect and make childbirth run smoothly without any interference from spirits (20,21).

Yunanda's research (2022) shows that the Bireuen Regency Government is carrying out efforts to overcome or prevent stunting incidents through a program to formalize traditions as the "Bu Gateng" Village Qanun. Formalization of traditions in the form of Village Regulations has succeeded in changing the tradition from twice during pregnancy to every month until the end of pregnancy, and this condition has resulted in the fulfillment of nutrition for mothers and babies so that babies are protected from stunting (21).

The cultural and traditional understanding of health among women in Zambia is also evident through various beliefs, activities and practices. Trust closely associated with African religion, spirits, rituals and ceremonies. This study shows that understanding culture has a preventive and protective effect for pregnant women. Physical and psychological complications and social problems that occur during pregnancy, labor and delivery are considered signs of neglected relationships with ancestral spirits. Zambian cultural traditions can be both detrimental and beneficial to public health (22)

The theme of food prohibitions in pregnant women can also affect the nutrition of pregnant women, in studies on nutrition, food, and health, many problems are found related to beliefs, myths, prohibitions and taboos that prohibit people from consuming certain types of food. Eating behavior during pregnancy is often packaged in social recipes that provide instructions on what foods pregnant women may or may not consume. However, sometimes the prohibition on consuming certain types of food can cause pregnant women to experience malnutrition or KEK (22).

Adane Tafaye's research (2023), interview results showed that informants knew that the quantity and variety of food for pregnant women could affect the health of the child and mother, however in practice, what was reported showed low intake of animal foods consumed, the same food every day, and low consumption of fruit and vegetables in some respondents. My husband also stated that my wife did not eat according to her needs because she had to focus on caring for and sharing food with the other children in the family (23).

Social pressures to influence pregnant women's eating patterns also occur in Zambia, where cultural traditions dictate that meat, fish and bird eggs should also be avoided during pregnancy. Vegetables and fruits, rice, and Shima (corn flour) on the other hand are recommended foods. Perceptions of malnutrition and unhealthy eating patterns can affect fetal development. Rituals, cultural practices and traditional beliefs related to health also experienced by Zambian women and their children (24).

In this study, there are several food taboos that were mostly mentioned by informants, namely the taboo on eating pineapple, durian, bamboo shoots, meat and raw eggs. Of these taboos, some are good for pregnant women, such as not being allowed to eat raw meat and eggs. However, the understanding expressed by informants was only fear that the baby would smell fishy. When viewed from a health perspective, food that is not processed properly can affect the health of pregnant women which can cause the mother to be exposed to toxoplasma.

4. Theme: Response Of Community Leaders To Their Efforts To Involve Them In Nutrition Education For Pregnant Women

On the theme of Community Leaders' Responses to Their Involvement Efforts in Pregnant Women's Nutrition Education, two different responses were obtained, where initially they gave a negative

response because they felt that the health and nutrition of pregnant women had nothing to do with traditional leaders. They said that this was the responsibility of health workers who had been placed in the community. After being told that they had a role that was quite helpful for the health of pregnant women, they gave a positive response by stating that they were willing if they needed to be involved in optimizing the reduction in malnutrition rates in pregnant women.

In several literature studies, a significant role was found in the involvement of community leaders with a traditional and cultural approach. Research by Evi Pratami, Sukesu Sukes and Suparji Suparji (2022), this study developed a behavioral model based on transcultural care (Sunrise Model) in caring for pregnant women, it was concluded that Transcultural Care and Preced Methods were proven to be effective in improving maternal health behavior in caring for their pregnancies (25).

Research conducted by Azza and Susilo (2017) also showed that there was an influence of the application of the *transcultural nursing* model in improving the behavior of breastfeeding mothers. The application of cultural modifications carried out was able to increase breast milk production so that

good cooperation was needed for all components of society in supporting breastfeeding mothers by modifying local cultures that are less beneficial to health (26).

5. CONCLUSION AND SUGGESTIONS

1. Conclusion

The behavior of caring for pregnant women is still influenced by perceptions, culture and traditions that have been passed down in society. Changes in food restrictions or abstinence Eating among the Batak Angkolans has indeed shifted along with the times and changes in mindset society, but in this way abstinence from eating is still implemented by a number of people who make this belief one sign or rule in life.

2. Suggestion

The advice given to the Padangsidempuan City Health Service is to coordinate with the Padangsidempuan City Regional Government or primary health service officers to optimize the use of the role of traditional leaders, religious leaders and cadres in improving nutritional awareness behavior in pregnant women.

Ethical clearance: This research has obtained Ethical clearance from the research ethics commission of the Faculty of Public Health, Hasanuddin University, Makassar with no. 6924093061 dated October 15, 2024 to October 15, 2025.

REFERENCES

- WHO. World Health Statistics 2017: monitoring health for the SDGs, Sustainable Development Goals. 2017.
- Almatsier. Basic Principles of Nutrition Science, second edition. main library, editor. Gramedia; 2014.
- Utami K, Setyawati I, Ariendha DSR. Chronic Energy Deficiency in First Trimester Pregnant Women Based on Age and Gravidity. *J Health Prim.* 2020;18(1):18–25.
- Riskesdas. National Report of Riskesdas 2018. Jakarta; 2018.
- Padangsidempuan City Health Office. Padangsidempuan City health profile. Padangsidempuan; 2022.
- Ministry of Health of the Republic of Indonesia. Public Health Program Indicators in the RPJMN and Rentra of the Ministry of Health 2020-2024. Catalog in the Publication of the Ministry of Health of the Republic of Indonesia [Internet]. 2020;1–99. Available from: <https://kesmas.kemkes.go.id/assets/uploads/contents/attachments/ef5bb48f4aaae60ebb724caf1c534a24.pdf>
- Muryani N, Afrika E, Rahmawati E. The Relationship between History of KEK Disease, Diet, and Hyperemesis Gravidarum with the Incidence of Chronic Energy Deficiency in Pregnant Women at the Dana Mulya Health Center, Pulau Rimau District, Banyuasin Regency in 2021. *J Ilm Univ Batanghari Jambi.* 2022;22(1):319.
- Fibrila F, Ridwan M, Lestari GI, Widiyanti S. Increasing Knowledge of KEK and Utilization of Yards as a Source of Family Nutrition for Pregnant Women. *Seandanan J Community Service.* 2022;1(2):46–51.
- Pastuty R, KM R, Herawati T. Effectiveness of Supplemental Food-Recovery Program for Pregnant Women with Chronic Energy Deficiency in Palembang City. *J Public Health Science.* 2018;9(3):179–88.
- Esegbona, Adeibege. *Transcultural Midwifery Practice Concept, Care, and Challenges.* Elsevier; 2022.
- Lilis Mamuroh, Sukmawati Sukmawati, Restu Widiasih. Pregnant Women's Knowledge of Nutrition During Pregnancy in a Village in Garut Regency. *J Ilm Keperawatan Sai Betik.* 2019;15(1).

- Choudhury N, Moran AC, Alam MA, Ahsan KZ, Rashid SF, Streatfield PK. Beliefs and practices during pregnancy and childbirth in urban slums of Dhaka, Bangladesh. *BMC Public Health* [Internet]. 2012;12(1):1. Available from: BMC Public Health
- Ansong J, Asampong E, Adongo PB. Socio-cultural beliefs and practices during pregnancy, child birth, and postnatal period: A qualitative study in Southern Ghana. *Cogent Public Heal* [Internet]. 2022;9(1). Available from: <https://doi.org/10.1080/27707571.2022.2046908>
- World Health Organization. Trends in maternal mortality 2000 to 2017: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division: executive summary. 2019.
- Ayers BL, Purvis RS, Bing WI, Ritok M, Iban A, Capelle L, et al. Maternal Health Beliefs, Perceptions, and Experiences in a US Marshallese Community. *J Transcult Nurs*. 2020;31(2):144–52.
- Srivastava R, DR Sahu. Antenatal Care Visits and Local Culture. *Indian Anthropol*. 2021;51(1).
- Silaban I, Sibarani R. The tradition of Mambosuri Toba Batak traditional ceremony for a pregnant woman with seven months gestational age for women's physical and mental health. *Gac Sanit*. 2021;35:S558–60.
- Lawrence W Green, Marshall W. Kreuter. *Health Program Planning: An Educational and Ecological Approach*. 4th. New York: McGraw-Hill Higher; 2005.
- F Paramita. *Nutrition in Pregnancy*. Malang: Wineka Media; 2019.
- Islam A, Islam N, Bharati P, Aik S, Hossain G. Socio-economic and demographic factors influencing nutritional status among early childbearing young mothers in Bangladesh. *BMC Women's Health* [Internet]. 2016;16(1):1–9. Available from: <http://dx.doi.org/10.1186/s12905-016-0338-y>
- Ashriady A, Mariana D, Tiyas AH, Supriadi RF. Socio-Cultural Aspects in Pregnancy Care in Coastal Communities in Mamuju Regency. *J Kesehat Terpadu (Integrated Heal Journal)*. 2022;13(1):53–65.
- Leena Honkavuo. Women's experiences of cultural and traditional health beliefs about pregnancy and childbirth in Zambia: An ethnographic study. *Health Care Women Int*. 2021;42.
- Tesfaye A, Wondimagegne YA, Tamiru D, Belachew T. Exploring dietary perception, beliefs and practices among pregnant adolescents, their husbands and healthcare providers in West Arsi, Central Ethiopia: a phenomenological study. *BMJ Open*. 2023;13(12):1–10.
- Jarrah SS, Halabi JO, Bond AE, Abegglen J. Iron Deficiency Anemia (IDA) Perceptions and Dietary Iron Intake Among Young Women and Pregnant Women in Jordan. *J Transcult Nurs*. 2007;18(1):19–27.
- Pratami E, Sukesu S, Suparji S. Model of Maternal Behavior in Pregnancy-Based Care Transcultural Care Theory (Sunrise Model) and Precede-Based. *Open Access Maced J Med Sci*. 2022;10(G):619–24.
- Rika, Harahap RA. National Proceedings of FORIKES 2022: Multidisciplinary Health Development Page 12 Published by the Health Scientific Forum (FORIKES). 2022;1(5):12–8.