

Original Research

## Food Consumption Beliefs of Torajanese Pregnant Mother



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Article Info	Abstract
Article history: Received: 6 May 2024 Accepted: 18 July 2024	<p><i>Introduction:</i> Various factors impact the health of pregnant women, including access to healthcare facilities and a nutritious diet. Cultural norms and beliefs prevalent in Indonesian society may influence food consumption patterns.</p> <p><i>Purpose:</i> This study explores dietary restrictions and preferred food choices during pregnancy among Toraja ethnic pregnant women.</p> <p><i>Methods:</i> Employing a qualitative research methodology, specifically a descriptive phenomenological approach, this study was conducted within the jurisdiction of the Ge'tengan Community Health Center, Mengkendek District, Tana Toraja, Indonesia. The research adopted purposive sampling, involving eight pregnant women as participants. Data was collected through individual interviews, lasting 45 to 60 minutes for each participant.</p> <p><i>Results:</i> The findings revealed three overarching themes: prohibited foods during pregnancy, reduced staple food intake, and the influence of elders on dietary practices and beliefs.</p> <p><i>Conclusion:</i> Leveraging traditional wisdom regarding dietary recommendations can serve as valuable input in designing nutritional education programs tailored to meet the needs of Toraja ethnic pregnant women. Meanwhile, there are some foods that mothers need as support in fulfilling nutrition, and this is contrary to health. Therefore, it is very important to raise public awareness by disseminating accurate information about nutrition for pregnant women in the Toraja tribe by maintaining culture if it is not contrary to health, then helping people to adapt to cultures that benefit health called negotiation, and changing or replacing culture if the culture or habit is detrimental.</p>
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## INTRODUCTION

Meeting the mother's and fetus's energy and nutritional requirements is crucial, particularly during pregnancy, a period marked by a significant increase in nutritional needs. Nutritional guidelines tailored for pregnant women offer recommendations to enable them to fulfill their requirements for both the quantity and quality of nutrition. This includes ensuring adequate intake of energy, fats, proteins, vitamins, and minerals obtained through consuming diverse food groups. These food groups encompass grains, vegetables, fruits, nuts, dairy products, meats, and fish [1]. To enhance the nutritional status of pregnant women, they must incorporate various food groups into their diet, including green vegetables, meat, fish, nuts, seeds, and fruits [2].

Despite adequate food intake, pregnancy can be influenced by various factors, including food consumption, access to healthcare facilities, and dietary taboos. Taboo foods have been identified as a contributing factor to malnutrition among pregnant women, especially in rural areas. Malnutrition, notably among pregnant women and adolescents, heightens the risk of maternal and infant mortality, low birth weight, stunted growth, and cognitive impairment [3]. However, there exists a misconception among pregnant women regarding certain foods, particularly those considered taboo. Consequently, some nutritious foods are intentionally restricted. For instance, in African countries, food intake is often reduced under the assumption that this practice can decrease the size of the baby, potentially complicating the birth process [2].

Moreover, several developing countries continue to adhere to food taboos. In Ethiopia's Oromia region, pregnant women commonly avoid flax seeds, honey, milk, or yogurt due to the belief that consuming these foods may cause the fetus's head to be covered. Furthermore, meat and dark green leafy vegetables are avoided out of concern for potential infection [4], [5].

The findings of a study conducted by Omer [6], it was revealed that maternal mortality in Pakistan is attributed to various factors. These include poor socioeconomic status, limited awareness about maternal care, challenges in accessing healthcare services, the prevailing male-dominated societal structure diminishing women's empowerment, early marriage practices, and inadequate family planning influenced by societal norms, religious beliefs, and traditions. Additionally, the influence of traditional or spiritual healers often hinders young women from seeking proper healthcare [7]. Cultural beliefs and practices among pregnant women, including dietary restrictions, personal hygiene habits, daily routines, limitations on family interactions, prohibition of sexual relations, and even restrictions on sharing pregnancy-related information, have been investigated through both quantitative and qualitative methodologies in Asia and Africa [8].

A prevalent nutritional challenge among pregnant women in Indonesia is chronic energy deficiency and anemia. Based on the results of Basic Health Research [9] in 2018, the proportion of anemia among pregnant women in Indonesia was 48.9%, marking an increase from the previous year, 2013, when

it stood at 37.1%. Anemia in pregnant women can elevate the risk of mortality and morbidity. Moreover, as Indonesia is an archipelagic nation with over 300 ethnic groups and more than two languages spoken, this diversity contributes to variations within the population. Maternal and child health in Indonesia, akin to other Asian nations, is intricately intertwined with cultural beliefs and traditional practices. Recommended dietary options for pregnant women encompass rice, corn rice, skipjack, tilapia, milkfish, eggs, moringa leaves, apples, and coconut water. Conversely, there are certain whole foods deemed taboo, including squid, shrimp, pineapple, ambarella, cabbage, cold water, and instant noodles [10].

Moreover, beliefs in myths and taboos concerning specific foods persist in Tana Toraja, South Sulawesi, renowned for its adherence to tribal traditions. Adherence to customs is deemed crucial, as violating them is considered taboo; this encompasses practices surrounding birth, marriage, death, and traditional ceremonies, which must be upheld without exception. Despite the Toraja people embracing contemporary religions and beliefs, their ancestral culture endures [11]. Therefore, the purpose of this study is to explore food taboos among pregnant women in the Toraja community.

## **METHODS**

This research employed a qualitative approach using descriptive phenomenology. It was conducted within the jurisdiction of the Ge'tengan Community Health Center, Mengkendek District, Tana Toraja, Indonesia,

in March 2023. Purposive sampling was utilized, involving eight pregnant women who fulfilled the inclusion criteria, specifically those who adhered to cultural beliefs regarding food consumption during pregnancy and for exclusion criteria were mothers who were not in the Toraja tribe. Data saturation was reached as participants ceased providing novel insights. Ethical approval for the research was obtained from the Faculty of Public Health, Hasanuddin University in Indonesia, with the reference number 612/UN4.14.1/TP.01.02/2023, enabling the researchers to proceed with the study.

The researchers adhered to principles of anonymity, beneficence, fairness, and nonmaleficence during the data collection process. Data collection involved interviews focusing on phenomena, objectives, and research concepts. Semi-structured questions were utilized, including inquiries such as, "Which foods do you believe pregnant women should avoid? What are the potential consequences of not adhering to these dietary restrictions?" Informed consent was obtained from participants before data collection. Each interview lasted 45-60 minutes per participant, and a tape recorder was employed to facilitate accurate documentation of discussions with participants.

The data obtained from participants was analyzed using the Colaizzi method [12], although in phenomenological research, there are several methods of approaching data analysis, such as Giorgi and Van Kaam. According to the Colaizzi method is deemed appropriate for analyzing a phenomenon,

allowing for flexibility in the sequential steps of analysis [13]. The seven stages outlined by Colaizzi (1978) are as follows: transcribing interviews, extracting significant statements, formulating meanings from the important statements, organizing the aggregated formal sense into theme groups, writing a comprehensive description of the phenomenon, identifying the fundamental structure, and validating the entire narrative with each participant.

The research remains attentive to the principles of validity, encompassing credibility, transferability, dependability, and confirmability, as articulated by Afiyanti and Rachmawati [14]. The researcher invited participants to review the data transcripts, thereby enhancing credibility. Subsequently, the researcher provided a detailed account of the research process, promoting what is commonly referred to as transferability. Additionally, the researcher systematically conducted the research, thoroughly reviewing and analyzing the literature in alignment with the established research objectives, ensuring dependability. Finally, the researcher consulted with expert researchers, including the second and third authors, to validate the findings obtained.

## RESULTS

### *Participant Characteristics*

The participants in this research were all pregnant women from the Toraja community residing in Tana Toraja and mothers who still practiced food restrictions from the first pregnancy onwards. The interviews

conducted in this study were conducted in the regional language, namely Toraja, and subsequently translated into Indonesian.

### *Themes and Subthemes*

*Theme I: Foods to avoid during pregnancy.*

Theme I comprises seven subthemes, as illustrated in the following quotations:

*"I don't take traditional medicine because I'm afraid of miscarriage" (P3)*

*"I don't take traditional medicine because I'm afraid of miscarriage" (P5)*

*"When I was pregnant... aged 1 to 3 months, I couldn't drink coconut water because it caused a miscarriage" (P2)*

*"I was advised not to consume chili peppers, spicy food, or pineapple during pregnancy due to their potential to cause miscarriage" (P5)*

*"I don't want to eat pineapple...it's a delicious fruit, but I'm afraid of miscarriage" (P8)*

I refrain from consuming banana blossoms because it is believed that they contribute to larger babies, which may eventually lead to smaller babies over time" (P1)

*"I avoid drinking ice and cold water because it is believed to contribute to larger baby size at birth. However, if I desire a male child, it is recommended*

*that I consume banana blossoms" (P3)*

*"I refrain from consuming chili peppers because it is believed to result in the baby having red skin at birth" (P8)*

*"I consume more vegetables such as gedi and ferns because they are believed to aid in facilitating labor" (P1)*

*"I prefer to consume gedi vegetables because they are believed to assist in facilitating a smooth delivery" (P7)*

*"I refrain from consuming chili peppers because it is believed that they may cause babies to have red skin at birth" (P2)*

*"I'm afraid to eat sour and spicy food.. I'll have diarrhea later, uh.. I'm afraid I'll miscarry" (P1)*

*"ee..I don't want to eat pineapple either, uhh.. the fruit makes me abort"(P4)*

#### *Theme II: Reducing staple foods*

Theme II comprises one subtheme, which can be described in the following quote:

*"I cannot eat all types of food. "Before I became pregnant, I ate normally, but when I reached two months of*

*pregnancy, I could only manage two meals with a small amount of rice, and I developed a preference for eating anchovies." (P1)*

*"I ate less rice when I was pregnant...I had no appetite" (P8)*

*"I eat less rice because I'll get fat if I eat too much" (P3)*

#### *Theme 3: The influence of older adults on food practices and beliefs*

Theme III contains one subtheme, which can be described in the following which is quote:

*"During my pregnancy, my mother exerted control over me, and I continued to obey her, such as adjusting my diet according to pregnant women's dietary habits" (P3)*

*"My mom said I don't eat spicy food" (P4)*

*"My grandmother told me not to eat spicy food and pineapple."*

*"Since I am temporarily residing with my mother-in-law, she assumes various roles. I endeavor to comply with her directives due to her wealth of experience" (P8).*

**Table 1**  
Participant Characteristics

<b>Demographic characteristics</b>	<b>n</b>	<b>%</b>
<b>Age (years)</b>		
20 – 30	3	37.5
31 – 40	5	62.5
<b>Education</b>		
Elementary	2	25
Junior high school	2	25
Senior high school	4	50
<b>Job</b>		
Housewife	5	62.5
Civil servants	3	37.5

**Table 2**  
Themes and Subthemes

<b>Theme</b>	<b>Sub Theme</b>
Foods to avoid during pregnancy.	<ol style="list-style-type: none"> <li>1. Traditional medicine can cause miscarriage.</li> <li>2. Drinking coconut water can cause miscarriage.</li> <li>3. Eating spicy foods and pineapples can cause miscarriage.</li> <li>4. Eating banana blossoms or ice or ice water can affect the baby's size.</li> <li>5. Eating chilies or chilies can affect the baby's skin color.</li> <li>6. Eating gedi vegetables and ferns can help facilitate the birth of a baby.</li> <li>7. Eating spicy and sour foods can cause diarrhea.</li> </ol>
Reducing staple foods	Pregnant women should not eat rice
The influence of older adults on food practices and beliefs	Mothers, mothers-in-law, and grandmothers influence pregnant women's cultural practices and beliefs.

## **DISCUSSION**

Several foods are avoided and considered taboo during pregnancy by Toraja pregnant women. This is corroborated by research findings indicating that certain foods, including dairy products, fruits, green leafy vegetables, meat, and honey, are taboo. Meanwhile, there are some foods that mothers need as support in fulfilling nutrition,

and this needs to be reviewed by maintaining the culture if it does not conflict with health, then helping the community to adapt to a culture that benefits health called negotiation and changing or replacing the culture if the culture or habit is detrimental. Additionally, other research findings reveal that the most common types of taboo foods originate from four main food groups: protein, fat, fruit, and

vegetables. These include green chilies, spinach, lettuce, kale, broccoli, flax seeds, cabbage, bananas, pimento, peanuts, sugar cane, pumpkin, fatty meats, eggs, honey, and certain cereal products. Vegetables, fruits, and fatty foods, such as meat and dairy products, are types of food deemed taboo and are prohibited from consumption by pregnant women in the state of Ethiopia, as indicated by research findings [5], [15], [16]. Meanwhile, research from Akbar [17] revealed several types of foods categorized as taboo, such as catfish, moringa, pineapple, stingrays, moringa leaves, squid, and mangoes. Most participants concurred that they were merely adhering to parental advice, which may seem nonsensical given that all those foods contain many nutritional ingredients. Food prohibited for children includes duck, rice, cassava, lamb, moringa leaves, purple sweet potato, corn, kale, and cassava leaves. At the same time, pregnant women are advised against consuming brown sugar, pineapple, durian, sticky rice, mango, yellow pumpkin, and banana stems. Foods prohibited for both groups encompass sago, squid, shrimp, crab, fish, jackfruit, and eggplant. Food taboos for pregnant women primarily pertain to fruit and protein for children [18].

Moreover, the most frequently avoided during pregnancy include dairy products such as milk, cheese, and yogurt; fruits such as bananas, avocados, and eggs; and vegetables such as cabbage, pumpkin, taro, and sugar cane. Most foods identified as taboo are rich sources of essential micronutrients crucial for maternal health and the growth and development of the child [19]. Additionally, reasons for adhering to these taboos include

concerns about the size of the newborn, obstructed labor, the evil eye, physical deformities, and miscarriage. Research conducted in Shashamane and Addis Ababa revealed that the adherence to food taboos and pregnancy-related myths stems from apprehensions about delivering a large baby, experiencing labor complications, and the notion of food becoming stuck to the fetus' head. Pregnant women are instructed to avoid certain foods to monitor their health and regulate the weight of both themselves and their babies [5], [20]. Similarly, the findings of this study indicate that pregnant women refrain from consuming carbohydrate-based food groups due to the perceived risk of causing obesity and excessive weight gain in the mother. This aligns with research from Egypt, which suggests that pregnant women avoid carbohydrate-based food groups due to the perceived risk of bloating and excessive weight gain in the mother [21]. Food taboos exert a detrimental impact on pregnant women and their fetuses by restricting their intake of essential foods. Dairy products, certain fruits, green leafy vegetables, meat, and honey are among the taboo foods. The most commonly cited reasons for adhering to these taboos include the fear of delivering a large fetus, which may lead to complications during childbirth, concern about food sticking to the fetus's body or head, and apprehension regarding fetal abnormalities [15]. Research conducted by Acire [3] produced three themes; the first focuses on foods considered taboo in Acholi society and the associated reasons. Participants identified offal, chicken, wild birds, smoked meat and fish, sugarcane, garden eggs ('Tula'), peanuts, bush meat,

mushrooms, honey, tamarind fruits, as well as various fruits (orange, mango, passion fruit, lemon, tamarind, 'Malakwang'), mutton, 'Lalaa' (bitter green leafy vegetable), and 'Lamola' (*Hyptis spicigera*) as the primary taboo foods. The second theme delves into the underlying reasons for adherence to food taboos and misconceptions. Cultural norms, individual characteristics, and social context are the primary reasons for adhering to food taboos. The third theme explores additional misconceptions and taboos during pregnancy. It was discovered that pregnant women were prohibited from touching grave grounds, shaving their heads, walking on anthills, slaughtering chickens or birds, engaging in sexual activity during pregnancy, sitting on animal skins or furs, and touching needles. Furthermore, the results of research from Abera [22] showed that the prevalence of food taboo practices among pregnant Ethiopian women is 27.5%. Most foods avoided during pregnancy include meat, honey, milk, fruits, and cereals. The rationale behind avoiding these foods is the belief that consumption may lead to the fetus becoming too large, making childbirth more difficult. The study highlighted a high prevalence of food taboos during pregnancy. The implications of this study underscore the need to enhance the nutritional counseling component of antenatal care (ANC) follow-up, and health professionals should develop and implement strategic health communications aimed at dispelling misconceptions and myths surrounding food taboos for pregnant women.

Family members such as grandmothers and parents are influential figures with

experience related to cultural values that impact pregnant women. This research reveals that mothers, mothers-in-law, and grandmothers influence maternal cultural practices and beliefs during pregnancy, such as prohibiting the consumption of spicy and sour foods. This statement is supported by research Vasilevski and Carolan [23], they stated that Information concerning taboo foods is disseminated by individuals regarded as highly influential, including experienced grandmothers, parents, and mothers. These esteemed community members hold central roles in promoting the adoption of taboo foods by disseminating information about specific dietary restrictions. Community leaders or traditional elders, religious figures, and family members aim to perpetuate customs and traditions surrounding taboo foods across generations. It is hoped that husbands can oversee their wives' pregnancies by ensuring that they abstain from consuming culturally prohibited foods [2].

The results of a study conducted by Bala [24], he revealed that of the 180 women who participated in this study, 98% of women believed that they should have a good diet and increase calorie intake during pregnancy. Still, most (90%) participants held some form of belief or superstition related to food during pregnancy. Most protein-rich foods are avoided, as they are believed to induce abortion and premature birth. Oranges and bananas, considered cold foods, are avoided due to the belief that they may cause sore throat and cough. Dried fruits are also avoided because of the belief that they may increase the birth weight of the fetus. Furthermore, the

results of research from Solomon and Tesyafa [25], it was found that mothers have experience with traditional practices, particularly abdominal massage, the use of herbs, restrictions on certain types of food, and strenuous physical exercise during pregnancy and childbirth. These practices are undertaken to facilitate labor, alleviate discomfort, and prevent the birth of an overly large fetus.

Pregnant women require additional energy, including protein, vitamin A, folate, potassium, iron, and iodine, which are obtained from animal products, nuts, and vegetables [10]. Avoiding these foods can compromise the dietary intake of pregnant women, as they require a diverse range of nutrients. Additionally, there is a risk of adverse outcomes such as premature birth, low birth weight, and suboptimal growth and development of children if pregnant women have inadequate nutritional status [1].

The results of research [26] on Bugis tribal mothers explained that Pregnant women seek early treatment by consulting shamans and participating in a ritual known as "makkatenni sanro". In the final phase, all pregnant women typically host an event called "maccera' wettang" as they enter the third trimester. Additionally, shamans and families play closely interrelated roles, as observed in aspects of regulating food and taboo behaviors during pregnancy. Then, the results of research [27] on Toraja tribal mothers stated that Pregnant women in Toraja continue to hold beliefs in dreams, spirits, and ghosts. Additionally, if a pregnant woman harbors many desires, her family must listen to her and fulfill her wishes

attentively. Failure to comply with her requests may result in her children drooling when they grow up. Often, eggs are given to the mother during pregnancy. She is encouraged to interact with attractive, intelligent, and physically fit individuals other than her husband, as it is believed that these characteristics will positively influence the fetus.

### ***Limitations***

The results of this study are saturated but have several limitations, namely the lack of respondents; researchers did not involve community leaders and religious leaders. Therefore, researchers hope to increase the number of respondents and use a triangulation approach to increase the depth of research and reduce bias.

### **CONCLUSION**

Certain foods are considered taboo for pregnant women due to socio-cultural reasons, and this is often recommended by their closest family members and traditional leaders. Some mothers adhere to these taboos and avoid certain foods out of fear that it could negatively impact their health and the health of their baby. The research results show that in the modern era, culture still strongly influences the world of health, especially in Indonesia, which is rich in culture because it consists of many tribes. Meanwhile, there are some foods that mothers need as support in fulfilling nutrition, and this is contrary to health. Therefore, it is very important to raise public awareness by disseminating accurate information about nutrition for pregnant

women in the Toraja tribe by maintaining culture if it is not contrary to health, then helping people to adapt to cultures that benefit health called negotiation, and changing or replacing culture if the culture or habit is detrimental. Health workers are expected to encourage using affordable and readily available food sources that offer equivalent or superior nutritional value compared to taboo foods.

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#### CONFLICT OF INTEREST

There is no conflict of interest.

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