

Beyond Undernutrition: An Ethnography Approach to Breaking Food Choice Barrier on Pregnant & Childbirth Mother in West Sumbawa

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Summary Inadequate nutrition adversely affects pregnancy and birth outcomes, particularly vulnerable group are the rural women in a rural setting. Undernutrition is a common finding in Poto Tano District of West Sumbawa, with prevalence 11.6% pregnant mother. Misconception of certain food during pregnancy and local belief systems were determined factors of their choices. Food choices concept and designing appropriate undernutrition intervention is a key to address this challenges. The study aim to assess food taboo and practices among pregnant and childbirth mother in Poto Tano District, West Sumbawa. The study was conducted during the period of August to December 2017. Mothers believe that prohibition and taboo food exist to protect the health of mothers and their babies. Moreover, Most of the pregnant mother had inadequate dietary energy intake due to the consumption of mixed rice with raw water, low iodine salt, with shrimp crackers. Food taboos were found to be dominant among remote rural residents with little access to nutrition and health services. Information on the importance of adequate food intake during pregnancy and after childbirth both in terms of quantity and quality, are needed.

Keywords

Food taboo · Undernutrition · Madi · West Sumbawa

BACKGROUND

Misconception on food choices during pregnancy are often occurs and caused inadequate nutrition among pregnant mothers and it adversely affects pregnancy and birth outcomes. It can cause anemia, premature,

hemorrhage, postpartum hemorrhage, infectious diseases, low birth weight and less optimum growth for the baby [1].

During pregnancy, mothers should consume the foods that have balanced on macro and micronutrient[2]. However, the

food consumption can be determined by maternal knowledge, attitudes, perceptions about the certain foods and cultural belief as well as food taboo [3,4,5]. Food taboo is prohibition among the pregnant mother to consume the foods that they believe can affect their pregnancy period and birth delivery process even less optimum growth for the baby in the future.

The studies shows that food taboo occurs particularly in developing countries and ASEAN including Indonesia[6]. It mostly found in remote and rural area that has minimum health access services and tradition on belief system are still embedded in most of its society [3,[4,5,6]. Otherwise, the study also shows that the type of foods that prohibited have highly nutrition for mothers [6]. Consequently, most of them had diagnosed undernutrition because lack of information and knowledge concerning nutrition intake during the pregnancy to postpartum.

In Indonesia, pregnant and childbirth mother restricted to consume some food due to food taboo. Most of the restricted food are fruits, vegetables and animal proteins that consists of highly protein as well as shrimp,

stingray, squid, crabs and other fish because of strong belief that they can make the baby's feet grip to mothers and difficult to be born [7,8,9].

In Poto Tano District, West Sumbawa, food taboo was found in three villages; Mantar village, Tua Nanga village, and Omal Sapa village. These villages are classified as remote areas that have limited access to information and health care services. On the on the hand In 2016, there were 11.6 % prevalences of pregnant mother with Chronic Energy Deficiency (CED). In this area, food taboo not only occurs among pregnant mother, but also the child birth mother. Moreover, they more obedient towards the food restriction on childbirth mother rather than pregnant mother. The type of food restriction were fruits, vegetables, eggs, seafood, meat, and other animal protein but with some of provision.

Food choices concept and designing appropriate undernutrition intervention is a key address this challenges. This study aim to assess the food taboo and practices among pregnant and childbirth mothers in Poto Tano District, West Sumbawa.

MATERIALS AND METHODS

Setting

This study was conducted in Pototano Regency, West Sumbawa, Indonesia, from May until December 2017. Pototano Regency is one of eight districts that are located exactly on the western part of Sumbawa Island, West Sumbawa, Indonesia. Pototano Regency is a tropical region which consist of highlands, hills, valleys and lowlanda. The inhabitants of Pototano Regency are mostly Sumbawa Tribe—mainly found in the highlands and migrants from other islands—mainly found in the lowlands and the coast of Sumbawa Island.

Key Informants

The research employed a qualitative study conducted by Pencerah Nusantara. The qualitative data was collected using Ethnographic methods of field observation, in-depth interviews, and document analysis. Thirteen informants were interviewed during August-September 2017. The sampling frame used Snowball sampling and had interviewed 2 shaman in Poto Tano that known as “Sandro”, 3 pregnant mothers, 3 childbirth mothers, 2 family of pregnant and childbirth mothers, 1 head of village, and 2 cadres. Determination of informants were used The interview topic was related to food taboo

culture in West Sumbawa, Dietary intake, and socio-cultural factors that influence inadequate energy intake in pregnant and childbirth mother.

Data Management and Analysis

The qualitative data were collected in the form of notes and recordings. In-depth Interviews were conducted in Samawa language (local language) and Indonesian language, then transcribed into English.

The researcher checked the recording and compared it with the transcript. The researcher also discussed with Pencerah Nusantara, the enumerator regarding the non-English transcript to ensure the meaning and comments were accurate. Transcription of recordings was made, then identified and analyzed for the meaning, value, belief, experience, and practice. Content and source analysis was done to analyze the data.

RESULTS

Food Taboo

Based on the in-depth interviews, food taboos that are widely practiced by pregnant and childbirth mother in West Sumbawa can be

classified into five groups: the nature of the food, the physical part of the food, food processing methods, food consumption time, and the portion of the food consumption.

Type of food

Pregnant mothers were allowed to consume more types of food than childbirth mothers. They still can eat meat and fish though they have to pay attention to their food processing method. Respondent stated:

“in this village, all food is prohibited so that women pregnant are only allowed to eat white rice, salt and leaves of ketujir (turi). Even crackers are not allowed to eat” (Sandro)

“..they(women pregnant) can eat meat but it must be dried process into meat floss and jerked meat” (Sandro)

“ women pregnant only allowed to eat the middle part of the body of fish ” (Sandro)

“ I only allow to eat vegetables, tofu, soy, beef and chicken..” (pregnant mother with Chronic Energy Deficiency (CED))

Food Taboos and Beliefs on Pregnant Women

In Poto Tano District, the pregnant mothers are prohibited to eat some fruits, vegetables, eggs, and seafood during pregnancy. For instance, if they eat seafood, the baby will not grow optimally and even worse as well as fetal death or miscarriage.

“I am not allowed to eat fish, squid, octopus, crabs, head/fish tail, and shrimp” (pregnant mother with CED)

“Octopus should not be eaten, because it will cause the placenta to stick. Squid is also not allowed because later the baby will be difficult to get out, the birth canal will open and close like a squid whose legs open - close.” (Cadre)

“Shrimp also should not be eaten, because it will cause difficulty giving birth like shrimp with a backward path. Crabs also should not be consumed, because it will cause the fetus to be bitten. If eating eggs during pregnancy, later when breastfeeding the baby will often bite the nipple”. (Cadre)

Consumption of eggplant perceived as making the fetus would be wrapped in a thick membrane like the eggplant. Moreover, if they eat the egg, the baby will often bite the mother's nipple during breastfeeding.

Respondent stated:

“Eggplant should not be consumed by pregnant women, because it will be difficult to break the membranes that are likened to thick eggplant skin. Do not eat eggs because it will have an impact on the health of the baby” (Family of Pregnant mother)

Consumption of hot foods and foods contains alcohol and carbonated the mother will have miscarriage.

“pregnant women should not eat hot foods (such as tape, carbonated drinks and alcohol). It is not permissible to eat meat which when slaughtered is a child being conceived by the animal (fetus). According to him, if eaten, pregnant women will miscarry.” (Shaman)

Food Taboos and Beliefs on Childbirth

Mother

Food taboo is not only occurs in pregnancy period, but also after childbirth. Food taboo after child birth more obedient by mother rather than during pregnancy period. Because, the effect will affect the baby directly. Those foods that prohibited will affect baby's health status both physically and mentally. They only can eat white rice, salt, and ketujir (turi) leafs because ketujir leaves will increase the quality of mother's breastmilk. Respondent stated:

"Grilled fish is allowed to eat, but very rare, if it may be eaten just the middle part of it. Because, if the head of fish eaten by me, the baby will lose her/his consciousness and have fever more often. If I eat its tail, the baby will have mental retardation and his/her feet will be shaken more often" (Cadre).

"The fruits that prohibited are cashew, and mango, and bananas because they can cause the baby get cough. The jackfruit is prohibited to eat because it is hot and has contains a lot of latex that will cause the death. Not only that, sawo also prohibited because it will make baby difficult to breath" (Shaman)

"Many foods that are prohibited for consumption by postpartum mothers. Foods that are allowed only by rice, salt, with ketujir leaves, the reason is that ketujir leaves can multiply breast milk" (Childbirth Mother).

" I prefer to be obedient to abstinence during childbirth due to fear if their child is sick. if during childbirth consuming

prohibited foods it will affect breast milk which will also affect the child" (Pregnant Mother)

DISCUSSION

Findings regarding food taboo in West Sumbawa clearly indicated the dominance of the powerful influence of culture and tradition in this area. Some Animal-based protein such as squid, shrimp, octopus, fish, egg and meat goat were prohibited to consumed during pregnancy and post-partum. In some cases, the process of preparation like sliced for the fish was also taboo and believed that the process would make the pregnant mother got pain and difficult to deliver the babies. On the other side, Daun Turi (*Sesbania grandiflora*) were the most commonly mentioned as beneficial food items during pregnancy. Mothers was recommended to eat turi leaves to increase milk production.

The major problem of food taboos is preventing pregnant women from accessing a well-balanced diet. Due to some food taboos, Most pregnant women

In West Sumbawa only consume rice, with water and salt. The dietary intake of pregnant women was low and not meet the requirement. Cultural beliefs on food taboo for pregnant women contributes to the incidence of anemia in many countries [9,10]. For the babies, study showed that food taboo resulting on low body weight and a unhealthier babies [11].

Pregnant and child-birth are two of the most significant phases in life. Both of the conditions required more dietary intake to fulfill baby needs. During the period, a child's brain begins to grow and the foundations for their lifelong health are built. In culture perspective, one of the aims of food taboos is to highlight particular happenings, making them memorable. Thus, the vast majority of all food taboos come under "specific events" such as pregnant and childbirth [12]

Our study revealed that the foods most commonly avoided in pregnancy were shrimp, Octopus, and some protein based food. Shrimp was avoided because

it is believed that mothers who consumed shrimps during pregnancy can difficulty giving birth. Shrimp and octopus are animal that lives at the bottom of the sea and likes to hide in the sand. Based on this theory, people consider that the fetus of the pregnant women who consumed shrimp likes to hide; therefore, the baby will not come out during delivery, making this process difficult. The taboos to eat shrimp and seafood also occurred in Madura Island [14]. Besides seafood, mother were not allowed to eat animal based protein such as egg and goat meat. Eating egg provoke babies to bite mother's nipple. Also, mothers who consumed goat during pregnancy can easily get seizures when they get a fever.

Animal based protein restriction found as some common food taboo in Indonesia [14]. Mother decreased the consumption of protein during pregnancy and post-partum period. The shortage of protein are bound to be problems of protein malnutrition. Respecting these taboos turns

out being a contributing factor to their depletion of essential nutrients [15]. These cultural taboos are not exclusively found in West Sumbawa. Interestingly, eggs, seafood and fish are also considered food taboos during pregnancy in other ethnic groups in Indonesia. [16,17]. The optimal growth and development in childhood requires good nutrition and health protection.

Many food taboos exist for the pregnant women. There were health and sociocultural reasons for the food taboos. Most of the pregnant women obeyed and avoided the foods that were a taboo whether they know the reason or not because they feared it can affect their health and babies' health. Indigenous knowledge about the food suggestions can be good information in supporting nutrition education for the pregnant and childbirth women in West Sumbawa. . Many of the pregnant women avoid the foods that are considered a taboo; therefore, it is important for the health

personnel to encourage the suggested foods that are affordable, highly available, and have a similar nutrient content or more nutritious than the taboo foods.

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