“Just give her a banana”: An ethnographic exploration of causes of stunting in Aceh, Indonesia

"Beri saja dia pisang": Eksplorasi ethnografis terhadap penyebab stunting di Aceh, Indonesia

Nouval Ramadhan¹, Rosaria Indah²*, Marisa³

¹ Fakultas Kedokteran Universitas Syiah Kuala, Banda Aceh, Aceh, Indonesia.
E-mail: nouvalramadhan2000@gmail.com

E-mail: rosariaindah@usk.ac.id

E-mail: marisa@usk.ac.id

*Correspondence Author:
E-mail: rosariaindah@usk.ac.id

Article History:
Received: April 21, 2023; Revised: May 1, 2023 through May 30, 2023; Accepted: June 1, 2023; Published: June 13, 2023.

Abstract

Thirty-seven percent of children in Aceh suffer from stunting. This number is concerning. Several programs offering supplementary nutrition for children in hot areas have been conducted. However, the percentage is decreasing too slowly. It is unclear why those programs were ineffective. The study aims to explore the cause of stunting in children aged 25-59 months in the Kota Sigli Sub-district, Pidie Regency, Aceh, Indonesia. Qualitative research was conducted on January 2022 using ethnographic tools. Data were collected through participant observation, semi-structured interviews with eight (8) mothers of stunted children, and informal interviews with midwives. Result, the findings show that there are various factors that may influence the incidence of stunting in children: failure to provide exclusive breastfeeding, inappropriate complementary feeding, and problems with hygiene and sanitation that affect children’s health. In conclusion, this calls for an integrated approach to engaging the Indonesian government, parents, and communities in overcoming the root of the stunting problem: poverty.

Keywords: Breastfeeding, child, ethnography, malnutrition, poverty

Abstrak


Kata Kunci: Anak, etnografi, kemiskinan, malnutrisi, menyusui
Introduction

Stunting is the failure to grow and develop in children. The stunted child appears shorter and/or thinner than the child’s age. The head circumference was also lower, indicating that the brain size was smaller than that of the other toddlers. Of course, this can reduce the level of intelligence and health of stunted children below that of normal children. Nationally, the high stunting rate is certainly very disturbing because it illustrates the low quality of Indonesian people in the future (Fajariyah & Hidajah, 2020).

Stunting is one of Indonesia’s main public health problems (Kementerian Kesehatan RI, 2020). The prevalence of stunting in Indonesia reached 27.67% in 2019 (Teja, 2019). Aceh Province has a high prevalence of stunting cases. Approximately 41.3% of all children in the province were diagnosed as stunted in 2013, which decreased to 37.3% in 2018 (Anwar et al., 2020).

Several districts in Aceh have the largest number of stunting cases, including the Pidie Regency. The prevalence of stunting in Pidie was 22.06% in 2018, 18.87% in 2019, and 18.50% in 2020. The most recent data from the Pidie Health Office in 2021 revealed that the number is decreasing to 14.73% after serious interventions by the district’s local government (Bappeda Pidie, 2022). This is an achievement. However, there is still limited publication exploring the cause of stunting in this regency.

The causes of stunting in Indonesia

In Indonesia, there are two prominent causes of stunting. First, recurrent infections cause toddlers to be busy fighting disease (Angkat, 2018; Mugianti et al., 2019). The second most common cause is poor nutrition during the vulnerable period of child development (Yanti et al., 2020). This paper explores the second cause by using qualitative approaches, which are discussed in the next section.

Methods

Many studies have investigated stunting in many places worldwide, including Indonesia, using surveys. However, few studies describe stunting by conducting direct observations to understand the factors influencing stunting. Therefore, this study explored the incidence of stunting using an ethnographic approach.

Several quality ethnographic studies have been conducted on stunting and malnutrition. Some studies have been highly praised and considered catalysts for big transformations in managing malnutrition issues. These include “Death without Weeping” that describe severe children malnutrition in Brazil (Scheper-Hughes, 1993), Hunger and Shame (Howard & Milard, 2012), “Dancing with Skeleton” (Dettwyler, 2013), “Children and Youth on the Frontline” (Boyden & De Berry, 2004), and “The Weight of Obesity” (Yates-Doerr, 2015).

There are fewer ethnographic works in the Indonesian context: two ethnographic studies on stunting in West Java (Adriany & Tesar, 2022; Puspitasari, 2019) and only one ethnographic paper in the context of Bireuen, North Aceh (Chalid et al., 2022). This study used two data collection methods: participant observations and interviews. The interviews were guided by a modified version of a dietary history questionnaire published by the Food and Agriculture Organization (FAO) to assess mothers’ experiences of providing food for their children (Food and Agriculture Organization of the United Nations, 2014).

The researchers observed and interviewed 12 mothers of stunted children. The children were diagnosed by local healthcare providers at Kota Sigli, Pidie. This research focused on exploring dietary history. According to 2020 data from the local health center, 21 children aged 25-59 months were diagnosed as stunted in the Kota Sigli Subdistrict. Eight mothers expressed their willingness to be observed and interviewed. The researchers spent up to 70 h participating in the participants’ daily activities (participant observation) and interviewed them.

In addition to interviewing mothers with stunted children, researchers interviewed healthcare providers and community leaders in the mothers’ villages. Voice recorders (audio recorder), notebooks, and mobile phone cameras were used to record data and produce field notes and memos. The research data analysis was conducted using coding processes (Priharsari & Indah, 2021), followed by thematic and ethnographic analysis to produce some themes that are discussed in the following section.
Result and Discussion

After obtaining permission from community leaders at the research site, the researchers were guided by a midwife to visit houses of stunted children who had been diagnosed by healthcare providers in the Kota Sigli subdistrict, Pidie Regency, Aceh Province. Their housing situations may remind researchers of the description of housing in Scheper-Huges’s ethnographic piece: crowded shantytown, where urbanized rural workers live precarious lives without decent housing, sanitation, or clean water (Scheper-Hughes, 1993).

Eight mothers expressed their willingness to be observed and interviewed. The descriptions of their ages and children are illustrated in Table 1.

<table>
<thead>
<tr>
<th>Mother</th>
<th>Mother’s age (year)</th>
<th>Children’s Age (mo)</th>
<th>Children’s Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>27</td>
<td>42</td>
<td>F</td>
</tr>
<tr>
<td>2</td>
<td>36</td>
<td>47</td>
<td>M</td>
</tr>
<tr>
<td>3</td>
<td>38</td>
<td>53</td>
<td>M</td>
</tr>
<tr>
<td>4</td>
<td>43</td>
<td>30</td>
<td>M</td>
</tr>
<tr>
<td>5</td>
<td>32</td>
<td>50</td>
<td>F</td>
</tr>
<tr>
<td>6</td>
<td>39</td>
<td>39</td>
<td>M</td>
</tr>
<tr>
<td>7</td>
<td>35</td>
<td>56</td>
<td>M</td>
</tr>
<tr>
<td>8</td>
<td>37</td>
<td>33</td>
<td>F</td>
</tr>
</tbody>
</table>

Female (F); Male (M)

The results of the participant observation and interviews were described based on the age of the children.

Dietary history of children aged 0-6 Months

The findings showed that seven out of eight mothers did not exclusively breastfeed. Instead, they provided their babies with “bu pisang” or banana rice at an early age (less than four months), plus formula milk and commercial baby food. They believed that bananas were suitable for babies to build their strength and prevent them from becoming crybabies and fussy. According to the mother participants, babies who cannot sit still or cry indicate that they are still hungry even after being breastfed.

She’s fussy. She cries all the time. Maybe she is hungry. Her father said: Just give her a banana. I did and it worked. I gave all my children bananas from the first [child] to the last. (Mother 1)

People suggested [giving banana] to prevent babies from being hungry and crying a lot. When my child cries, I think he does not eat enough. It is possible that breast milk is not enough. This is why I gave him bananas. To keep him quiet. (Mother 5)

Mothers prepared bananas by scraping or crushing bananas using a spoon and mixing them with water until the texture was soft or smooth. Some of these bananas are mixed with smoothed rice. According to the mother, giving bananas may increase the baby’s weight.

Banana, tofu water, and starch water were also provided. Starch/rice water and tofu water are believed to provide good nutrition to children.

One of the nurses on duty at the local health center said that many mothers provided banana rice to their babies when they were less than six months old. They also added that these mothers faced challenges in applying exclusive breastfeeding when it was against their parents’ suggestions.

Health care providers often campaign on the importance of breastfeeding for babies under six months. However, the mothers still did not follow these suggestions. Our sayings are against the local traditions of giving bananas, rice water, etc. (midwife).

In addition to the reasons mentioned above, the mothers also reasoned that there was personal involvement from the health agency. According to one mother, a midwife gave formula milk when the child had just been born at the hospital. Consequently, the mother felt that she needed to continue giving formula milk after she and the baby came home from the hospital.

Regarding how to give breast milk, the mothers prefer to breastfeed directly because this method is more practical and less troublesome. In terms of frequency, some mothers breastfed more than ten times a day when their babies were 0-6 months old. However, three mothers breastfed four to six times per day. One of the mothers, who gave an average of four times per day, reasoned that her baby was too strong and bites the nipple. Therefore, she limited breastfeeding and added bananas and breads.
As for the duration of breastfeeding, none of the mothers remembered how long the breast milk was given for each feeding. Breast milk was given until the baby fell asleep, stopped crying, or when the baby took his mouth off the mother’s nipple.

**Dietary history of babies aged 6-9 Months**

Most mothers still breastfed their babies at 6-9 months but decreased in frequency.

During this period (6-9 months), I breastfed up to four times a day. It was no longer that often because he was a big baby. I breastfed in the morning, for example, 10 o’clock, 2 o’clock, afternoon, and evening. (Mother 3)

However, two of eight mothers with stunted children stopped breastfeeding and provided formula milk to their babies due to swollen and painful breasts. In addition to formula milk, they also provided complementary food with low nutrition, without a specific dose. The researchers observed that the mothers used only various small plastic containers with small portions of food. A common plastic plate they used to feed babies called ‘cheepae,’ which is a small 125 ml plate. However, the researchers observed that the food provided was much smaller than the plate size. On average, babies ate only one to two mouthfuls of food, far less than the size of the plate.

**Dietary history in stunted children aged 9-12 months**

Breastfeeding at this age is significantly reduced. Some of the mothers reasoned that their babies had started to get used to complementary feeding, and they were worried that the baby would be too full if they were given too much breast milk. Breast milk was given only when it was needed, and most of the time, the babies could not sleep, woke up, or were fussy or crying. Breastfeeding is often administered 1–2 h after complementary feeding. According to the mothers, giving too much milk at the age of 9-12 months may cause eating problems.

The mothers provided bananas because they thought that babies were not full enough if they were only given breast milk.

I breastfed up to 6 times per day. I think it is enough because I do not want the baby’s stomach to be too full with food. I breastfed when I think he needed it, usually 1-2 hours after eating. If he cries when it is not an eating time, I give it right away. (Mother 6).

I breastfed when my child finished eating. For example, after lunch at 3 PM, the baby was fussy and sleepy, and I breastfed her. (Mother 1)

Complementary feeding at this age (9-12 months) did not change significantly from the previous age range. Three mothers gave the same main foods, banana rice, avocado, bread, and potatoes, according to their babies’ preferences. The mothers stated that they tried other types of food, but their babies often refused. One mother stated that she only gave rice without any protein sources, like what the rest of the family consumed, due to financial hardship.

Whatever is in the house or what we eat is fed to the baby. (Mother 8)

In addition to the main food, the mothers also provided snacks consisting of bread, fruit, and mung bean porridge. Frequency depends on the financial situation.

Sometimes, I gave her snacks, but this seldom happened. We barely had access to the main food. Let alone some snacks. (Mother 5)

**Dietary history in stunted children age 12-24 months**

The frequency of breastfeeding continues to decrease when a child is 12-24 months of age. Some mothers stopped breastfeeding within this age range. Mothers almost completely stopped breastfeeding when their child was 17 months to 2 years old. However, one mother had stopped breastfeeding when the child was only 7 months old.

Breastfeeding was reduced because the mothers preferred to provide complementary food. According to one mother, breastfeeding was rarely given because the child was older and the mother was busy with household chores. Mothers breastfed on demand without a specific schedule. Usually, breast milk is given between complementary feeding, when the child wakes up from a nap, or at night before going to bed. Similar to the following transcript,

After she was a year old, I seldom breastfed her. I gave her commercial powdered milk 1-2 times a day in the morning or evening, in addition to other food. (Mother 1)
I breastfed if the child suddenly became hungry after mealtime, usually in the morning, at night before sleep, or in the afternoon when she wakes up from nap. Two or 3 times a day. She ate a lot and drank a lot of water. (Mother 8)

Regarding the duration of breastfeeding, mothers describe it as when the child falls asleep, releases itself, and stops crying.

I cannot recall the number of times I breastfed. Sometimes, it occurs two or three times a day. When she is already asleep, I let go or she let go. There are also times when she does not cry anymore and she is quiet. I thought she was full. (Mother 5)

The food for the children aged over one year was prepared as the mother prepared the meal for the entire family. Almost all mothers gave the main food in the form of rice combined with various side dishes, such as vegetables, and animal sources such as chicken, fish, beef, and shrimp. However, the side dish was prepared based on what was available. The researchers observed that mothers prepared rice with sweet soy sauce and eggs, while chicken and beef were very rarely served because of financial hardship.

Sometimes, we gave him eggs. Most of the time, we give baby rice with sweet soy sauce. We do not have much to do. (Mother 5)

Two mothers did not change their children’s feeding arrangements from the age of 6 months. They prepared banana rice, potatoes, avocados, and bread. According to them, their children wanted only particular food. The researcher asked why they did not try the other types first. The mother said that she only followed the child’s preference. The child only started eating other foods when he/she was two to three years old.

When he was one year old, I tried to give him rice with vegetables, but he did not want them. He likes banana rice. (Mother 4)

He didn’t eat much. I gave him potatoes, avocado, and bread, but that is it. There were not many varieties of food because he just wanted them. (Mother 6)

Children rarely consume cow or goat milk. Four out of eight other mothers did not give milk because they felt that the child was well breastfed, and the parents suffered from financial problems. Some mothers let their children consume cheap instant-packaged snacks, such as chocolate, nuts, and crackers, which have a high sugar and sodium composition.

**Dietary History in Stunted Children Age 25-59 Months**

At this age, all mothers discontinued breastfeeding. Mothers focused more on complementary feeding. The type of feeding in children is not significantly different from that in children age 12-24 months. The overall food supply is rice with side dishes that are commonly consumed by families on a daily basis. Some mothers provided rice with chickens, fish, eggs, shrimp, and others. Others preferred affordable and readily available food. One of the mothers said that she often gave rice and eggs and rarely provided chicken, beef, or fish due to financial issues.

The method of preparing food at the age of 25-59 months is simple. Most mothers cooked or steamed rice. As side dishes, they prepared soup such as fish soup accompanied by vegetable stew.

After two years old, almost all children had a habit of consuming street food. The mothers did not have rules to control which food their children ate. It may include packaged cakes, chocolate, sweetened drinks, and street foods, such as meatballs with tomato sauce or soy sauce.

She likes to buy and eat cheap chocolate bars, wafers, or biscuits. She wanted her brother to eat. She has to get it, too, or else she cries. Finally, she was full of snacks and no longer wanted real food. (Mother 8)

Mother 8 knew that it was unhealthy to eat instant food. However, she was too tired of house chores to cook special dishes for her children. Other mothers provided powdered or condensed milk at affordable prices to their children. However, 3 mothers did not provide milk. When the researchers asked for reasons, they said that their child was older and the family was hampered by financial situations. A mother said that her child ‘did not like to drink milk.’

Two aspects of the findings are discussed below: breastfeeding and complementary feeding.
Breastfeeding.
According to the findings, only one in eight mothers exclusively breastfed. Most mothers provided complementary foods when their babies were less than 6 months old. A similar study in Semarang, Indonesia also reported a low number of mothers who successfully breastfed exclusively. Failure to do so was related to the culture of providing early complementary feeding (Pusporini et al., 2021).

Most mothers gave bananas or banana rice, formula milk, rice water, packaged baby foods, and bread at an early age because they think that breast milk alone is not enough to support their babies to grow healthier. This idea was also held by mothers in South Jakarta, who reported that mothers provided their babies under 6 months of age with bananas, formula milk, biscuits, bread, and instant baby foods (Rahmawati, 2014). These mothers aimed to increase their babies' weight and preferred to incorporate food according to local traditions instead of continuing exclusive breastfeeding.

Failure of exclusive breastfeeding does not always occur in mothers. Another factor is the incessant marketing of milk formula products. The findings of this study demonstrate the involvement of health workers who provide complementary feeding early in the form of formula milk to newborns. This is in violation of the WHO Health Organization recommendations for breast milk substitutions. WHO codes are a set of recommendations to regulate the marketing of formula milk to prevent mothers from unethical marketing (World Health Organization, 2017). This inadequate function of healthcare facilities may remind researchers of the ethnographic book on malnutrition in Tanzania (Howard & Millard, 2012).

The results of the study showed that none of the mothers expressed breast milk. They breastfed their babies directly. Direct breastfeeding without the help of tools (such as bottles) is recommended. However, direct breastfeeding requires mothers to ensure the cleanliness of their skin. Unfortunately, none of the mothers participating in this study had a habit of washing their hands before breastfeeding. This habit might expose babies to the risk of diarrhea.

There were also issues regarding the breastfeeding frequency. The findings showed that there were 3 mothers who gave breast milk less than eight times. The recommended breastfeeding duration for children aged 0-6 months is 8-10 times per day (Mufdililah, 2017). The lack of breastfeeding frequency in this very important age range (0-6 months) may contribute to infant malnutrition; thus, later in life, they are diagnosed as stunting sufferers.

Complementary Feeding
Complementary foods are foods given at the age of 6-24 months. Based on the results of the study, almost all mothers gave complementary foods early to their children when they were less than six months old. Some mothers reasoned that they would follow the local traditions and suggestions of their parents. Mothers in Indonesia, or Asia in general, prefer to give early complementary foods to babies, because of the belief in the words of their ancestors (Binns et al., 2020; Lestiarini & Sulistyori, 2020).

One study concluded that early administration of complementary food in combination with short breastfeeding duration elevated child adiposity and cardiometabolic markers (Ong et al., 2023). However, late administration may put babies at risk of anemia (Malako et al., 2018), which may lead to failure to grow and develop (Mugianti et al., 2018).

Based on the results of this study, the type of food provided by the mother was not adequate for children's growth. Mothers provided limited variation in food according to their children's preferences, including bananas. Bananas are available throughout the year and can be found in abundance in this particular context. Bananas are rich in carbohydrates, vitamins A, B6, C, and D, and potassium. However, they are poorly expressed. One hundred grams of banana contains only 1.48 grams of protein (Hapsari & Lestari, 2016) compared to 14 g of protein a one-year old child need every day. Therefore, the use of banana as a daily food must be enriched with other protein-rich foods to compensate for the lack of protein in the fruit.

Unfortunately, the banana rice used by the mother participants as complementary food contains many sugars but lacks the protein...
needed for thriving. This may lead to chronic protein malnourishment. Children with low minimum dietary diversity were more likely to be stunted than is the case with their peers who received the minimum dietary (Masuke et al., 2021).

The consistency of the food provided is another issue. The researchers observed that many mothers provided solid food for their 6-9 babies without proper weaning. Providing food with unmanageable bites can lead to choking and gagging. Gradual feeding or baby-led weaning process aims to make it easier for children to digest their food (Utami et al., 2020).

However, the frequency and amount of complementary feeding are also problematic. Mothers who provided complementary food did not have a specific container size. Complementary food is also not adequately provided to small portions of children of various ages. If calculated, the complementary feeding amount was inadequate according to children’s needs. This might have contributed to their stunted growth and development. Children with a low minimum meal frequency had a higher risk of stunting, wasting, and underweight (Masuke et al., 2021).

Regarding preparation before giving the food, none of the mothers had the habit of washing their hands due to a lack of clean water facilities.

I did not wash my hands; I immediately gave food. Anywhere, I sat; I gave it right away. I did not have time to find water, especially when we were outside the house. Why should I bother washing my hands? (Mother 3).

The frustration in Mother 3’s voice illustrates the way she struggled with her life while raising children.

This ethnographic study is in line with previous ethnographic studies that describe stunted children as underprivileged, with economic, social, political, and emotional disadvantages. It refuses the lens of biopower used by Indonesia’s government, which makes them focus merely on the individual and nutritional aspects and fails to overcome the root of the problem: poverty (Adriany & Tesar, 2022).

Despite the challenges of overcoming stunting problems, some countries have shared their success stories. A study evaluating stunting in nine sub-Saharan African countries revealed a 43% decrease in stunting prevalence after combined efforts of food security, dietary diversification, improved childcare practices, and infectious disease control (Remans et al., 2011). Peru has been successful in decreasing the prevalence of stunting from 28% in 2008 to 14% in 2016 by empowering parents, conditional cash transfer policies, and optimizing media to make the stunting problem visible to everyone (Marini et al., 2017). These success stories have proved that overcoming stunting requires a multipronged strategy and long-term commitment.

**Conclusion**

Almost all the mothers with stunted children in this study failed to breastfeed exclusively. The failure of exclusive breastfeeding practices is partly caused by the culture of providing early complementary food such as banana rice. Even when given at proper ages, the portions and amounts of feeding were very limited due to financial challenges. Adding to the complicated factors is lack of clean water facilities to promote hygiene and sanitation to prevent infectious diseases.

Therefore, this study calls for health agencies to conduct counseling and education for the community to help them overcome problems due to poverty. In addition, this research recommends that the government take serious consideration to optimize and find new ways to support the ‘poverty eradication program,’ which has been campaigned for several years.

This research has described the conditions or phenomena that actually occur in the social environment of the community, which are not fully visible in the quantitative survey. All data generated in this study show things that were not generated in online surveys, so that they can complement the previous data and provide a dearer picture of stunting in Aceh, Indonesia.

**Acknowledgment**

The authors thank the mothers, midwives, and community leaders for their generous contribution to this study. The author confirms that all personal identifiers have been disguised; therefore, the persons described are not
identifiable and cannot be identified through the story’s details.

References


Ong, Y. Y., Pang, W. W., Michael, N., Aris, I. M., Sadananthan, S. A., Tint, M.-T., Choo, J. T. L.,...


