Social-Cultural Aspect of Stunting: A Systematic Review

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Abstract--- Stunting is a priority concern in developing countries because it harms children's health and development. The WHO's conceptual framework for stunting states that socio-culture is one of the factors causing it. The purpose of this systematic review was to summarize the previous studies that provide an overview related to the socio-cultural aspects of the incidence of stunting. This systematic review used the guidance from the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA). The article search was carried out using 8 databases (Scopus, ProQuest, Springerlink, ScienceDirect, PubMed, SAGE, Medline and CINHAL) with the help of Boolean Operators and keywords such as culture OR culture OR "cultural beliefs" OR transcultural OR "growth disorder" OR stunted OR stunting. The initial findings totaled 430,679 documents. There were 24 studies included in the review after they were limited by the criteria for the study such as being published between 2015 and 2020. Other criteria were that they were English-language articles, journal articles, that the children's age ranged from birth to 5 years and that they used the interview method in their study to explore the socio-cultural picture related to stunting. The analysis of the findings from each study was grouped according to the 4 main themes: nutritional practices, family support systems, views on stunting and the barriers to providing interventions. This covers the socio-cultural aspects related to stunting. This systematic review has limitations such as where all of the information recorded was done so using the interview method or an FGD. This means that the participants may give answers that they think are the most generally accepted rather than the truth. The results of the study form the basis for the development of sociobased stunting care.

Keywords--- Social Culture; Stunting; Child Growth

### I. Introduction

Stunting is a worldwide concern and a priority program in developing countries because it harms children's health and development. The WHO's (World Health Organization) conceptual stunting framework states that the social culture is one of the contextual factors that is the cause[1]. Systematic reviews that focus on the socio-cultural aspects relating to the occurrence of stunting have not been done much.

The WHO estimates that 45% of deaths of children under the age of 5 are related to malnutrition. In 2016, an estimated 155 million children suffered from stunting. This problem mostly occurs in low and middle-income countries [2]. Stunting

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sufferers are present in many countries but most of these problems occur in developing countries. The WHO, with the relevant countries, seeks to work together to reduce the prevalence and impact.

A study examining the prevalence and trends of stunting in pre-school children from 1990 to 2020 concluded that in 2010, there were an estimated 171 million children who were stunted of which 167 million were in developing countries. Every year, this percentage has decreased gradually around the world. In 2020, it is estimated that there will be a decline to 142 million children [3].

In Indonesia, based on the results of the Basic Health Research (Riskesdas) in 2018, the proportion of children with very short nutritional status reached 11.5% and children with short nutritional status reached 19.3%. When compared with the Riskedas in 2013, the proportion of children with a very short nutritional status has decreased where previously it was still in the position of 18%. The percentage of children with short nutritional status is relatively unchanged[4].

The influence of stunting on subsequent child growth and development varies greatly. The cognitive, motor, language and socio-emotional abilities of stunted children are much lower than in non-stunted children[5][6]. Research from various countries shows there to be a correlation between stunting and child development[7]. Nutritional problems have an impact on the occurrence of neurodevelopmental deficits which in turn affects school performance and behavioral problems [8][9]. The barriers that occur in stunted children in school are usually in early childhood[10]. Stunted children also experience significant barriers to memory performance (atlantis and number recall), spatial abilities (conceptual thinking, facial recognition, and triangles), general cognition and attention with small effect sizes compared to children who are not stunted[11]. Stunting conditions also affect the fine motor skills, social independence, and other skills[12]. Stunting affects IQ scores (champions, math scores, vocabulary tests)[13], and has many other negative effects. In general, the problem of malnutrition will add to the cost of health care, decrease productivity and slow down the economy. Eventually, the accumulation of these impacts will prolong the cycle of poverty and poor health[2].

Women, infants, children, and adolescents are at risk of experiencing malnutrition. They are increasingly at risk if they have economic problems. Poverty increases the risk of malnutrition[2]. The factors that cause stunting are very diverse. Mothers who do not give exclusive breastfeeding to infants during the first 6 months, the low socioeconomic status of the family, children born prematurely, their length at birth, maternal height, education, the availability of healthy latrines in the household, good drinking water treatment, and difficulty accessing the health services are all factors[14][15][16]. Nutritional problems in children can also occur due to a lack of counseling during pregnancy, a lack of iron supplements, a lack of extra food, anemia, and a less varied diet[17][18][19]. Other factors such as a lack of food supply in the household[20][21], the age of the child, residence, the mother's body mass index, the sex of the child, family size[22][23], and mothers who often experience domestic violence are also present[24].

Based on the WHO conceptual framework on stunting, one aspect that affects the child's growth is socio-culture[25]. Various intervention efforts to prevent and handle stunting problems have been made. The WHO targets that in 2025, it can reduce the prevalence of stunting by up to 40%. These targets must be interpreted by each country by considering the nutrition profiles, risk factor trends, demographic changes, experience with development and the implementation of nutrition policies, and the level of the health system development. Every nutritional intervention given must be evidence-based and adapted to the local conditions[26].

The management of the stunting problem must be adjusted to the factors that cause it. The interventions provided are multi-sectoral, ranging from agriculture to food security; providing education or education especially for women; ensuring the availability of good water, sanitation and hygiene; the protection of the poor with direct cash assistance; providing adequate health care facilities; and other interventions that are national or local in scale[27].

Nutrition and other interventions aimed at reducing nutrition problems do not always run smoothly. There are so many obstacles that occur in the field. One interesting obstacle to discuss is how the socio-cultural aspects of an area can accept or reject any nutrition intervention given. What is the socio-cultural view of the interventions to reduce stunting? This systematic review aims to summarize the previous studies that provide an overview related to the socio-cultural aspects of stunting.

### II. METHOD

#### Database

The source of the articles used in this systematic review were research databases such as Scopus, ProQuest, Springerlink, Science Direct, PubMed, SAGE, Medline, and CINHAL. Additional articles were selected through the citations of the papers included in this systematic review.

### Keywords and Search Terms

The search for the articles in the chosen databases was done with the help of Boolean Operators with a combination of keywords and search terms as follows: culture OR cultural OR "cultural beliefs" OR transcultural AND "growth disorders" OR "stunted growth" OR stunted OR stunting.

## Article Selection

The systematic review follows the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyzes) guidelines [28]. We got 430,679 articles in the initial search. The first screening left 421 appropriate documents. The selection of the articles followed the inclusion criteria such as the range of studies being between 2015 and 2020, articles in English, journal articles, the age of the child from birth up to the age of 5 years, and using the interview method in their study to explore the socio-cultural aspects of stunting. The second screening got 24 articles that are relevant to the question or research objective. Three reviewers chose the relevant titles, abstracts, and keywords. They noted the reasons why the study was considered to be feasible. The other two reviewers re-matched the selected studies with the questions or purpose of the systematic review. All of the reviewers had a discussion to get to a point of agreement if there were any doubts. The article selection process has been described in the 2009 PRISMA Flow Diagram (see Figure I).

### • Data analysis

Three reviewers extracted 24 articles that fit the criteria. The reviewers summarized the content of the articles in a table. The information collected from each article included data such as the country/region of study, year of publication, type of study, population studied, and the description of the research results. The author analyzed the main findings of each study to produce the appropriate themes.

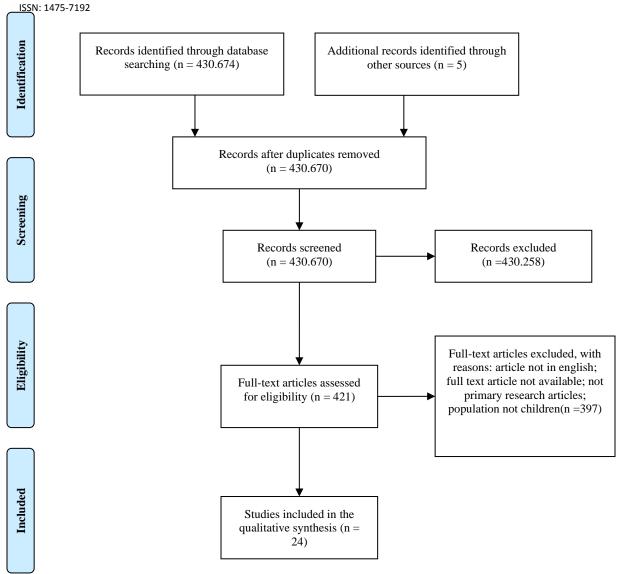


Figure 1: PRISMA Flow Diagram Showing the Process for the Article Selection for Systematic Review

# III. RESULTS

All of the articles selected are the results of the research conducted in developing countries. When categorized by continent, most of the study results were from the African continent (n = 14) followed by the Asian continent (n = 8) and the American continent (n = 2). The analysis of the findings of each study was grouped into 4 main themes: nutritional practices, family support systems, views on stunting, and barriers to providing interventions. The theme and distribution of each article has been discussed in detail below.

### Nutritional Practices

Nine articles discuss the socio-cultural aspects in the practice of providing nutrition to groups of pregnant women and infants. Some studies explain the beliefs or culture in certain areas that does not follow the nutritional recommendations for pregnant women. In an area of Ethiopia, pregnant women are advised to avoid animal-sourced foods such as milk (including cheese, milk/buttermilk, yogurt, and whey), liver, meat, fish, and vegetable foods such as bananas, avocados, kale, sweet potatoes, and sweet potatoes [29]. In Mount Sindoro, Wonosobo Regency, Central Java, Indonesia, they have beliefs about

food taboos and certain actions taken by pregnant women. They are prohibited from consuming fried rice, durian, jackfruit, pineapple, and sugar cane[30].

The practice of providing nutrition to children is also unique. People make their choices based on their beliefs or habits. There are different types of food eaten based on age[31]. The mothers are more convinced of the advice of their mother, in-laws or husband rather than the advice of health workers related to breastfeeding practices[32]. The mother believes that breast milk (ASI) can make a baby sick[33]. The mother believes that leafy vegetables, fish, and eggs make her child active and not susceptible to disease[34]. Some people believe that colostrum is dangerous for babies[35]. Some people have a habit of choosing foods based on affordability, their preferred foods, or the foods that are considered to be suitable for certain stages of life (pregnant, breastfeeding, and not breastfeeding)[36]. Mothers in certain places give their children water or water mixed with sugar especially in summer to beat the heat[37].

### Family Support System

Eight articles focus on the family or community support system. Older mothers (their mothers or in-laws) and the members of church groups influence the young mothers in the practice of exclusive breastfeeding[38]. The husband or grandmother on the father's side has greater autonomy in matters of purchasing food or matters of child nutrition[39]. The public overheard the armpit community leaders state that there is health counseling[40]. Fathers support the mother by providing food to ensure the availability of breast milk[41]. Cross-sectoral cooperation in the community contributes to the nutritional situation of the children[42]. There are groups who feel that nutrition-related diseases are less prominent and more threatening than other diseases[43]. The matrilineal system makes men lazy when it comes to caring for their children[44]. The mothers-in-law influence their pregnant daughters-in-law to eat less animal food and to not consume extra food because they will become too heavy[45].

## Views on Stunting

Four articles describe the general group views on stunting. People believe that a short stature is not necessarily linked to nutrition intake[46]. Some believe that the children's health can be seen from their height measurements[47]. Some consider stunting to be a gift from the Creator[48]. Some believe that stunting is due to hereditary and genetic factors[49].

#### Obstacles in the Provision of Interventions

Three articles report several socio-cultural barriers when implementing nutrition interventions. Some studies report obstacles in the exclusive breastfeeding program because of the cultural practices of feeding water, the early introduction of rice or both[50]. Some mothers express concern over the malnutrition of their children and short stature but they do not discuss the failure of the children to achieve their growth potential[51]. Some believe that traditional healers are the preferred source of information for families regarding child illness and breastfeeding deficiency[52].

## IV. DISCUSSION

The results of the studies that reveal the socio-cultural aspects of stunting above all come from developing countries. This proves that the problem of a lack of nutrition is closely related to the economic capacity of the community in a region. Each theme from all of the studies included in this review will be analyzed descriptively as follows.

The first theme is about the practice of providing nutrition. There are at least 2 sub-themes that need to be discussed, namely nutrition for pregnant women and the exclusive breastfeeding of infants. The results of the study show that there are community beliefs (socio-cultural) related to taboos or prohibitions concerning the eating of certain foods by pregnant women. This condition is certainly contrary to the principles of nutrition of pregnant women associated with the growth and

development of infants. The condition of maternal malnutrition, both malnutrition and excess nutrition (obesity), harms children and can even develop into a chronic disease when entering adulthood. Malnourished mothers, especially adolescent girls and multigravida, tend to give birth to low birth weight babies (LBW) with a risk of giving birth to children with stunted growth[53].

The barriers to exclusive breastfeeding for 6 full months are also heavily influenced by certain community beliefs. Breast milk is the main source of nutrition for the growth and development of infants. Breastfed babies have different growth patterns compared to babies given formula milk or other food/drinks which are considered to be optimal growth patterns. Breastfed babies increase more in weight, length, and BMI during the first 2-3 months of life[54]. We argue that the efforts to ensure that pregnant women and babies get their optimal nutrition needs met needs to be done consistently. The sociocultural-based approach should not be ignored because it is one of the most important parts of the general public.

The second theme is related to the family support system. This support system is not limited to the nuclear family members, but also to other colleagues from the community such as the church. The findings show that many decisions made by pregnant and lactating mothers are related to nutrition and influenced by their mothers, in-laws, husbands, close relatives, and other support systems. The role of the support system is important because it can provide comfort for the mothers. For example, a study concluded that the physical absence of the fathers in the care of children contributes negatively to the child's emotional, social, psychological and physical development. The mothers will be stressed and depressed if they carry out many responsibilities without their husband's assistance[55]. We believe that the support system of pregnant or breastfeeding women can be the main target when providing health information. This support group can influence the mothers' decisions, including those related to beliefs about stunting. Providing health education will be more effective if it involves them.

The third theme is on the views about stunting in general. There are still groups of people who consider stunting as something natural and not a problem that must be overcome by a medical intervention. They consider the condition of such a body to be a gift from God to be thankful for or that happened because that was the way that it was meant to be. Such beliefs certainly have an impact on the practice of providing nutrition for pregnant women and infants. The pattern of nutrition provision depends on many factors, one of which is influenced by culture or certain community views on the issue of nutrition (stunting)[56]. We think that this wrong view of nutritional status (stunting) must be corrected before giving an intervention. If not, then the effort given will end in vain.

The fourth theme is the obstacles when providing interventions, especially those related to nutrition. For a long time, various interventions were prepared to reduce the various rates of malnutrition. Even so, the program did not run smoothly. There are various obstacles or rejection from certain communities because it does not follow the local socio-cultural conditions. Research evidence shows that the relationship between socio-cultural factors with nutritional interventions such as supplementary feeding has a strong influence[57]. We believe that every nutrition intervention should not be uniform in all regions. Before implementing it, it is necessary to conduct a socio-cultural study of the local community and then to modify the intervention according to the characteristics of the local community.

#### Limitation

This systematic review has several limitations. No research explored how the socio-cultural aspects are related to stunting in developed countries. The majority of participants interviewed in the study were women (mothers), while the number of male participants was very limited. All of the information was recorded using the interview method or FGD, so the confidence in the information presented in the article varies greatly. The participants may give answers that they think are

the most generally accepted rather than the truth. Even so, this systematic review is still made with the assumption that the data displayed in each article is reliable and valid.

### V. CONCLUSION

Stunting is still a major problem in many developing countries to this day. The WHO together with related countries has created many policies and programs aimed at reducing the stunting rate to at least 40% in 2025. The step towards that dream is not easy. Socio-culture is one of the risk factors that influences or slows down these targets. The socio-cultural aspects that become obstacles when implementing cultural interventions consist of 4 themes, namely the practice of providing nutrition, family support systems, views on stunting, and obstacles when providing interventions. Policymakers need to identify the characteristics of the people targeted by the intervention so then the program implemented can be successful according to the target. Further research into the family experiences of caring for children with stunting also needs to be done because the family as a support system influences every decision.

### **CONFLICT OF INTEREST**

No conflicts of interest have been declared.

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# **APPENDIX**

Table 1. Summary of the findings on the socio-cultural aspects of stunting

	Author, Year, Journal and Country/Continent	Methodology	Major findings relevant for review
1.	Zobrist et al., 2017, Food and Nutrition Bulletin, Northern Senegal	Ethnographic Study for Infant and Young Child Feeding Manual employed in the interviews. 126 key informants and	Identified 6 food clusters: heavy foods, light foods, snack foods, foraged foods, packaged foods, and foods that are good for the body.
2.	Bruyn, Bagnol, Thomson, Alders, & Hill, 2018, <i>Maternal</i> & <i>Child Nutrition</i> , Tanzania	caregivers. Mixed methods research. Using an explanatory sequential design, there was a quantitative phase and a subsequent qualitative phase	Reasons for crying was to offer liquids and foods other than breast milk No other women reported having sought advice from health staff about the difficulties associated with breastfeeding. They more commonly discussing breastfeeding difficulties with their mother, mother-in-law or, in one case, their husband.
3.	Nduna, Marais, & Wyk, 2015, ICAN: Infant, Child, & Adolescent Nutrition, Zimbabwe	This study explored the factors that enable and hinder exclusive breastfeeding in a rural district of Zimbabwe. Ten mothers and 5 key informants with breastfeeding experience were interviewed	Barriers to Exclusive breastfeeding (EBF):  • Traditional Beliefs, Myths, and Misconceptions Around Breastfeeding: mothers give their infants <i>imithi yesintu</i> (herbal infusions and concoctions) to drink. Breast milk from a pregnant mother is believed to make a baby sick, and this negatively affects the length of breastfeeding. Baby burping while latching on the breast—referred to as <i>ukubhodlela ibele</i> in the local language.
4.	Ersino, Zello, Henry, & Regassa, 2018, <i>PLOS ONE</i> , Ethiopia	A cross-sectional design, where the mothers (Habala n: 630; South Ethiopia n: 413; Zeway n: 217) were interviewed via a questionnaire.	<ul> <li>The most common foods that the mothers avoided during pregnancy were animal source foods such as dairy (including cheese, milk/butter milk, yoghurt, and whey), liver, meat, fish and plant source foods such as banana, avocado, kale, sweet potato, and yam.</li> <li>The mothers reported dietary consumption patterns that were "same as usual" or "less than usual" during their most recent pregnancy compared to the times of non-pregnancy or lactation.</li> </ul>
5.	Armar-klemesu et al., 2018, Food and Nutrition Bulletin, Ghana	They interviewed 80 caregivers of children aged 6 to 23 months using ethnographic methods, including free listing, guided discussions and cognitive mapping techniques, and 24-hour dietary recall.	<ul> <li>Leafy vegetables, fish, and eggs, for example, are believed to "give" blood which ensures good growth and health in children and makes them active and not prone to sickness.</li> <li>Similarly, "heavy" foods such as staple dishes with accompaniments (e.g. TZ and ayoyo soup, rice, and stew) are thought to build strength and promote growth.</li> </ul>
6.	Atyeo, Frank, Vail, Sperduto, & Boyd, 2017, <i>Journal of Human Lactation</i> , Guatemala	They created a series of semi- structured interview questions to document breastfeeding practices and the beliefs among mothers	<ul> <li>Mothers held a variety of beliefs about the value of colostrum, and these beliefs were associated with the village.</li> <li>Another mothers believed that colostrum was harmful for the baby. Among these mothers, they reported delayed breastfeeding initiation. Some noted that the milk was dirty, a different color, or not real milk.</li> </ul>
7.	Triratnawati, 2019, Ethno Med, Indonesia	Ethnographic study. The data was collected through observations and interviews with 21 informants, including pregnant women, the mothers of toddlers, health providers, TBA's, cadre and local leaders.	Food taboos are linked to the consumption of fried rice, durians, jackfruits, pineapples, and sugarcane.

- 8. Kavle et al., 2017, Maternal & Child Nutrition, Egypt
- Ravindranath, Trani, & Iannotti, 2019, International Journal for Equity in Health, India
- Mushaphi et al., 2017, Food and Nutrition Bulletin, South Africa
- 11. Brown et al., 2016, *Maternal* and Child Nutrition, Guatemala
- 12. Kodish et al., 2015, Food and Nutrition Bulletin, Mozambique
- 13. Matare et al., 2019, Food and Nutrition Bulletin, Tanzania
- 14. S. R. Kodish et al., 2019, Nutrients, Kiribati
- S. Kodish, Aburto, Hambayi, Kennedy, & Gittelsohn, 2015, Food and Nutrition Bulletin, Malawi
- Ene-Obong, Onuoha, & Eme, 2017, Maternal & Child Nutrition, Nigeria
- 17. Collison et al., 2015, Food and Nutrition Bulletin, India
- 18. Mchome, Bailey, Darak, & Haisma, 2019, *Maternal and Child Nutrition*, Tanzania

This study used in-depth interviews with pregnant women, lactating women, and non-lactating women

Using the UNICEF framework on malnutrition, we examined the underlying causes of poor nutritional outcomes among this group of children with the help of qualitative methods.

Nested qualitative study among mothers in an ongoing birth cohort study was conducted; structured and semi-structured interviews were used to collect the data.

A mixed-methods assessment of feeding practices and food purchasing behaviors focused around infants and young children aged 6–36 months in 2 rural indigenous Guatema-lan communities.

Ethnographic methods including in-depth interviews, direct observations, free lists, and pile sorts were used to collect data from the community leaders, caregivers and children 6 to 23 months.

We conducted the Trials of Improved Practices in 36 households with infants <6 months. The fathers participated in the focus group discussions focused on the ways to support breast-feeding.

This 2-phase formative research study had an emergent and iterative design using the socioecological model as the guiding theoretical framework.

With a three-phase emergent research design, this study utilized ethnographic methods including in-depth interviews, direct meal observations, and full-day child observations. A cross-sectional descriptive study was conducted. The qualitative and quantitative data collection methods were adopted, namely focus group discussions and questionnaires. We conducted 16 focus group discussions and 8 key informant

An ethnographic study was conducted using cultural schemas theory. The data for the

interviews.

- The study findings reveal that food choice is driven by affordability, favored foods, or foods considered to be appropriate for a specific life stage (pregnant, lactating, and non-lactating).
- While the socio-cultural beliefs and a lack of information influenced breastfeeding, other factors such as the inability to take breaks or a lack of space further impaired infant feeding practices more broadly.
- Most mothers reported giving their children water or water mixed with sugar, especially in summer to beat the heat.
- Common reasons for introducing non-breast milk foods included the insufficiency of breast milk production, going back to work or school, and influence by elderly women (mothers/mothers-in-law) and church members.
- Despite a moderate adherence to exclusive breastfeeding and the timing of complementary food introduction, their diets had poor diversity and inadequate meal frequency.
- Biological mothers often lacked autonomy when it came to food purchasing and nutritional decisions because of the power exerted by their husbands and paternal grandmothers.
- Geographic differences drive the sociocultural characteristics.
- Small-quantity lipid-based nutrient supplement did not fall into the existing food classification systems of either community, and the participants preferred its promotion through the community leader channels.
- The fathers saw their role as providing food to the mothers to ensure sufficient breast-milk and encouraging new practices.
- Dominant gender roles and work away from home were barriers even if the fathers were willing to help with the household chores.
- Fathers mostly provided emotional support or encouraged others to help with chores
- We found that a combination of interrelated structural, community, interpersonal and individual-level factors contributed to the early child nutrition situation in Kiribati.
- Despite the widespread knowledge of nutritious food of young children among the community members, the households made their dietary decisions based not only on food availability and access but also on the longstanding traditions and social norms.
- The community members felt that nutrition-related illnesses were less salient and threatening than other illnesses. The food quality was less important than food quantity.
- The health education and communications are tailored to the local understanding of nutrition and health which is necessary to ensure its appropriate utilization.
- The matrilineal system known as ikwu nne or iri ala a nne (inheritance through mothers' lineage) is still in place but it is changing.
- Akanu men generally agree that the matrilineal system made men in the past "lazy" when it came to training their children.
- Interestingly, pregnant women in both urban and rural communities received counseling from their mothers- in-law concerning eating less animal-protein food and not consuming extra food while pregnant because they would "become too heavy."
- They referred to short stature as a normal condition that caregivers cannot influence. It is a function of God's will and/or is heredity.

		study was collected through 19 focus group discussions	<ul> <li>Culturally, a child can be tall but also stunted. Traditional rather than biomedical care was used to remedy the growth problems of children.</li> </ul>
19.	Roesler, Smithers, Winichagoon, Wangpakapattanawong, & Moore, 2018a, Food and Nutrition Bulletin, Thailand	Qualitative research was undertaken with 8 hill tribe villages. In-depth interviews were conducted with 20 villagers and 2 volunteers who had children 0 to 5 years old. Eight other health workers were also interviewed.	<ul> <li>The villagers considered the strength and independence of the children to be the hallmarks of health. The size of children featured rarely.</li> </ul>
20.	Ipa, Wirjatmadi, Devy, &Hartono, 2018, <i>Indian</i> <i>Journal of Public Health</i> <i>Research and Development</i> , Indonesia	Focus Group Discussion (FGD) method. FGDs were performed with the primary children caregivers aged 0 to 24 months.	<ul> <li>The concept of the body that is considered important is one that is capable of activity that is normal and productive.</li> <li>People also feel resigned because of their child's body stunting because according to them, it is a gift from the Creator and they should be grateful.</li> </ul>
21.	Kavle et al., 2015, Maternal & Child Nutrition, Egyp	This study utilized the trials of improved practices (TIPs) methodology to gain an understanding of the cultural beliefs and perceptions related to the feeding practices of infants and young children aged 0–23 months.	<ul> <li>A commonly held belief is that stunting is hereditary and 'genetic'.</li> <li>Breastfeeding is valued yet the prelacteal feeding of herbal drinks is common</li> <li>Prelacteal feeding is an entry point to mixed feeding and the early introduction of junk foods</li> </ul>
22.	Roesler, Smithers, Winichagoon, Wangpakapattanawong, & Moore, 2018, Public Health Nutrition, Thailand	A 2-day workshop and 30 indepth interviews were undertaken in June 2014.	Non-EBF was due to the cultural practice of feeding the child water or due to the early introduction of rice and both.
23.	Hossain et al., 2018, <i>Public Health Nutrition</i> , Bangladesh	Three investigators from Bangladesh conducted 12 focus group discussions.	• The mothers expressed concern over their children's malnutrition and short stature, but they did not discuss the children's failure to attain a 'growth potential' or to distinguish between an inherited short stature and stunting.
24.	Kavle et al., 2019, <i>Maternal &amp; Child Nutrition</i> , Democratic Republic of Congo	This scientific and qualitative implementation study aimed to identify the gaps and opportunities available to strengthen the service delivery of nutrition within the integrated community case management (iCCM).	<ul> <li>Most families seek modern and traditional medicine to remedy child illness dependent on the type of disease, its severity and cost.</li> <li>Traditional healers are the preferred source of information for families on certain childhood illnesses and breastmilk insufficiency.</li> </ul>