

Family Resilience With Stunted Children Aged Below 5 Years: A Qualitative Study in Depok City, Indonesia

Global Qualitative Nursing Research
Volume 11: 1–10
© The Author(s) 2024
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/23333936231221753
journals.sagepub.com/home/gqn



Dwi Cahya Rahmadiyah¹ , Junaiti Sahar¹ , Widyatuti¹,
Ratu Ayu Dewi Sartika¹, and Hamidah Hassan²

Abstract

Stunting is influenced by family and household factors that affect toddler nutrition. As the primary provider of both physical and psychological resources to prevent health problems, the family has a significant role in preventing stunting. Family resilience in supporting child health is mediated by family functioning. A qualitative descriptive study explored the influence of family resilience in fulfilling the nutritional needs of stunted children. This study involved in-depth interviews with 23 mothers of stunted children aged 24 to 59 months. Through content analysis, we identified three main themes: (1) family belief that stunting is hereditary, (2) family belief that stunted children will “grow up,” and (3) lack of communication between family members in discussing stunting. Future studies should explore intervention models to increase family resilience and prevent stunting in children under five.

Keywords

stunting, family resilience, children, inadequate nutrition, Indonesia

Received January 16, 2023; revised December 1, 2023; accepted December 5, 2023

Introduction

World Health Organization (WHO, 2022) global stunting statistics indicate that there were 149.2 million children aged below 5 years suffering stunting in 2020, and about 22.0% of all toddlers in the world are estimated to be stunted. According to the WHO classification, Indonesia has a high prevalence of stunting. A total of 37.2%, or nearly 9 million children, were stunted in 2013, and 30.8% of children aged below 5 years in Indonesia were stunted in 2018, according to the Ministry of Health Republic of Indonesia (2018). Stunting is defined as ≤ -2 standard deviations (SD) below the WHO (2018) growth standard length/height-for-age, and severe stunting is defined as ≤ -3 SD length/height for age. Stunting represents chronic malnutrition, and the effects are mainly irreversible (Soliman et al., 2021).

Stunting is a serious problem because it can lead to poor child development and learning capacity, increased risk of infection, and noncommunicable diseases in adulthood, and decreased productivity and economic capacity (Stewart et al., 2013). Toddlers who experience stunting have significantly lower cognitive scores (-2.10 [95% CI: $-3.85, -0.35$]) compared to toddlers who had never experienced stunting (Alam et al., 2020), low immunity, less than optimal brain

function, and impaired development of various organs. In addition, stunting can cause long-term impacts that can affect the quality of human resources and a nation's future productivity.

Stunting in children below 5 years cannot be separated from the factors that influence it. The UNICEF Undernutrition Conceptual Framework identified family and household factors as the proximal causes of malnutrition in children under five (UNICEF, 1990; WHO, 2013). Building on this work, the World Health Organization (WHO, 2013) provided a framework for childhood stunting, highlighting four major causes: household and family factors, inadequate complementary feeding, breastfeeding, and infection. Causes related to family and household factors include maternal factors (e.g., poor nutrition prior to and during pregnancy, short maternal stature) and environmental factors (e.g., inadequate

¹Universitas Indonesia, Depok, West Java, Indonesia

²Universiti Tunku Abdul Rahman, Selangor, Malaysia

Corresponding Author:

Junaiti Sahar, Faculty of Nursing, Universitas Indonesia, Jalan Prof. Dr. Bahder Djohan, Kampus UI Depok, West Java 16424, Indonesia.

Email: junsr@ui.ac.id



child stimulation and activity, poor care practices, food insecurity, poor sanitation) (WHO, 2013).

According to the WHO conceptual framework on childhood stunting (Stewart et al., 2013), the causes of stunting are categorized into Proximal Causes and Contextual Determinants. Proximal causes can be interpreted as factors that can directly cause stunting, which include family factors and household conditions, breastfeeding practices, inappropriate supplementary feeding practices, and infections. Contextual Determinants can be interpreted as risk factors that can indirectly cause stunting related to the context of cultural politics, health services, education, social, food systems, and the environment. In a study conducted in four stunting locus villages in East Nusa Tenggara province, Indonesia, researchers analyzed the relationship of determinants of stunting prevalence in children aged below 5 years (Atamou et al., 2023). Gender, birth spacing, history of infectious diseases, maternal knowledge, maternal parenting, parental income, utilization of health services, and household sanitation were found to have a significant relationship with the prevalence of stunting.

Other family members, especially grandmothers who live with mothers, have also been reported to play an important role in decision-making regarding child feeding in a qualitative study conducted in Nairobi informal settlements where there are high rates of stunting (Faye, Fonn, & Kimani-Murage, 2019). In this study, fathers, however, were found to be described as providers of food and rarely involved in child feeding decisions. The role and influence of other family members, such as fathers and grandmothers, has received limited attention in other studies. In a quantitative study conducted in the same setting in Niorbi, Faye, Fonn, Levin, and Kimani-Murage (2019) explored the influence of child and maternal factors as determinants of children's linear growth, and in a cross-sectional study conducted in Indonesia researchers focused on maternal knowledge and maternal parenting, along with a number of other factors such as parental income and utilization of health services as social determinants of child nutrition.

Although mothers often play a primary role in toddler feeding, a review of 20 studies, the majority conducted in the US and the UK, indicates that fathers consider themselves responsible for some aspects of feeding their children (Khandpur et al., 2014). Initial evidence suggests a relationship between fathers' nutritional care practices and toddlers' eating patterns and behavior (Khandpur et al., 2016). In a Canadian study, Watterworth et al. (2017) found that father involvement during meal preparation, such as modeling eating behavior and providing a healthy home environment, was associated with lower child nutritional risk. These findings suggest that fathers potentially important influence on children's nutritional status and should be included in future research on family factors influencing child-feeding practices.

A study in Indonesia reported a significant relationship between the father's participation and the mother's practice in feeding toddlers at a health service center in Bundelan Village, Central Java (Nurlaila & Suryati, 2021). In Indonesia, there have been several government programs that involve families. Existing nutrition programs focusing on the family include KADARZI (family nutrition awareness) and nutrition posts (Depkes Dirjend BKM Direktorat Bina Gizi Masyarakat, 2007). However, both programs are providing nutrition education to mothers and have yet to involve the role of family members (especially fathers and grandmothers) in nutritional care for toddlers. Based on the explanation above, the role of other family members, namely the father, is important consideration in strengthening child-feeding practices.

The role of family members in fulfilling young children's nutritional needs may be related to family resilience. As conceptualized by Walsh (2016a), family resilience focuses on the ability of the whole family as a functional unit to overcome adversity and cope more successfully with stressful situations. Resilient families will be able to adapt to and manage life's challenges, withstand stress, and grow in the face of life's pressures in the future (Walsh, 2016b).

The family resilience conceptual framework proposed by Walsh (2012) consists of three key processes, as follows: family beliefs (giving meaning to crises, positive outlook, transcendence, spirituality); organizational processes (flexibility, connectedness, social resources, economics); and communication processes (clarity, emotional expression, collaborative problem-solving). A family's belief system entails its way of looking at problems, influencing how the family chooses to solve problems with effective or dysfunctional coping mechanisms (Walsh, 2016b). Such a belief system helps a family orient itself to gain a shared understanding of a problem (Walsh, 2016b). Furthermore, a belief system influences a family's perceptions of the growth and development of toddlers, which is an essential factor in addressing nutritional problems such as stunting.

Family belief systems can be critical in addressing stunting, particularly among families that lack knowledge of children's growth patterns and have low access to health services. Focus groups with mothers and alternative caregivers in Bangladesh were conducted to understand how they interpreted their children's linear growth (Hossain et al., 2018). In the context of a limited understanding of linear growth in children and prevalent stunted growth, beliefs about child height attainment were related to hereditary (e.g., comparisons to siblings) and normative patterns of short stature. Similarly, in a related study conducted in Tanzania, caregivers with children under five believed that height was unrelated to nutrition, health, or overall growth (Mchome et al., 2019). They also normalized the short stature, believing it to be something they could not influence. Family belief systems like these reflect how families make sense of their situations and shape their coping responses.

The second key process of family resilience is an organizational pattern in which there is connectedness in dynamic processes involving strengths and resources that families can access and obtain to increase family resilience (Walsh, 2012). Organizational patterns indicate how families organize themselves (family members) to carry out daily tasks. Organizational patterns include flexibility, connectedness, and skills to mobilize social and economic resources (Walsh, 2016a). Such organizational patterns include mutual support, teamwork, commitment, and respect for differences between family members. The involvement of family members (teamwork) and mutual support between family members is necessary to fulfill the child's nutritional needs to prevent stunting in toddlers.

The third key process for family resilience relates to communication processes. Good communication can facilitate all aspects of family functioning and resilience. Communication involves transmitting beliefs, exchanging information, emotional expression, and problem-solving processes in the family (Walsh, 2016a). Clear and open communication can help families identify children under five years of nutritional problems and discuss problem-solving strategies. Good communication between family members about child feeding can help families avoid chronic nutritional problems in toddlers so that stunting can be prevented.

Drawing on this conceptual framework of family resilience, the present study set out to use a qualitative methodology to gain a better understanding of family resilience concerning fulfilling nutritional needs to address stunting in children under 5 years old and, more specifically, to explore the factors and conditions that affect family resilience. The study assumes that strengthening family resilience is an essential avenue for stunting prevention to decrease the incidence of stunted growth among children.

Methods

Study Design

This study used a qualitative descriptive design. Qualitative descriptive research studies aim to discover and understand phenomena, processes, or the perspectives and worldviews of the people involved (Bradshaw et al., 2017; Caelli et al., 2003). This study aimed to describe family beliefs, organizational processes, and communication processes underpinning family efforts to fulfill the nutritional needs of their children in the context of stunted growth.

Participant Selection

Recruitment in this study used a purposive technique of sampling in which researchers deliberately chose cases or types of cases that would best contribute to research information needs (Bradshaw et al., 2017). Written information and

consent forms were sent to participants who met eligibility criteria; (1) participants included families with stunted children aged 2 to 5 years who could read and converse in Bahasa Indonesia, and (2) were willing to participate in a subsequent qualitative interview. Families with children with congenital diseases were excluded from participation. When signed consent forms were returned, participants were contacted to schedule interviews and confirm eligibility. There are no established criteria or numbers for qualitative sample size. Thus, it was determined that data adequacy, as indicated by the aim of the study, can be achieved with sufficient confidence (Bengtsson, 2016).

Data Collection. Data collection took place in the area of the Health Centre in the Bojongsari sub-district, Depok City. The selection of the area was based on the data available from the Ministry of Health's Directorate of Community Nutrition indicating high levels of stunting in children aged below 5 years in Depok. We visited the homes of families with stunted children aged below 5 years based on information regarding weighing data per month at the health service center. Reminder texts were sent to the families the day before the home visit.

Data were collected through in-depth interviews using a semi-structured topic guide with open-ended questions to stimulate the disclosure of family experiences. The primary source of data collection in qualitative description research is often semi-structured in-depth interviews (Nayar & Stanley, 2015). The interview included questions about three key processes of family resilience. Examples of questions for belief system processes were: What is the family's perception/view of stunting? Does the family view stunting as a crisis/problem? How does the family view the crisis? How do families deal with family difficulties? Questions related to organizational processes focused on flexibility (e.g., How will the family adjust to new challenges?) and connectedness (e.g., Can you tell whether the family can rely on other family members to help each other in facing difficulties?). Finally, questions were included to capture communication processes (e.g., How does the family try to clarify the problem and what options are available to deal with it?). Although the goal was to interview mothers and fathers as a family unit, only mothers were available for interviews. The interviews were conducted by a research team (DC) member. All interviews were audio recorded, and field notes were used to record participants' non-verbal responses. All interviews were conducted in Bahasa Indonesia, the national language understood by participants and researchers. Data collection ran from early January to March 2022. A professional copyist transcribed the recordings verbatim and then reread them by researchers to ensure accuracy. The interviews were anonymized, and each participant was assigned a unique study ID.

Data Analysis

The study used an inductive qualitative analysis approach to describe family experiences related to the three key family resilience processes (Walsh, 2012). This content analysis usually reports on categories, is closer to the data, and is generally less interpretive. In other words, categories include similar data topically (Creswell & Poth, 2018). To begin the analysis process, we read all transcriptions and then listened to and reread interview transcripts several times. Data on the three key family resilience processes were identified and grouped into three categories. With the definitions of the key process of family functioning in mind, these data were then analyzed to identify and organize collections of meanings formulated into themes. Descriptions were written to capture family experiences and illustrated with representative quotes. The findings were shared with 23 participants to determine if their experiences were captured accurately.

The methods used in this study supported the validity of the findings (Creswell & Poth, 2018). To support the credibility of the study findings, we validated the results and the themes generated from the research with participants to check whether they accurately captured experiences. Confirmability of the results was supported by keeping an audit trail of all decisions, taking detailed notes about the results of the interviews and field notes, and involving supervisors in conducting a comparative analysis to validate research results. To support the dependability of the study methods and findings, an audit was carried out by the lead author's team. Strategies to support transferability included providing details about the study setting and participants, as well as a detailed presentation of the findings.

Ethics

Ethical approval for the study was obtained by the Faculty of Nursing at Universitas Indonesia (number: *Ket-211/UN2.F12.D1.2.1/PPM.00.02/2021*). After being briefed on the study, the participants agreed to participate by signing a voluntary participation confirmation form outlining the confidentiality and data protection of the study.

Results

Sample Characteristics: Twenty-three mothers took part in in-depth interviews. The average number of children in the participant families was two, with a range of 1 to 5 children. A summary of participants' demographic characteristics is presented in Table 1.

The average age of the father did not differ significantly from that of the mother. The education level for most mothers was at the high school level (48%). For the majority,

Table 1. Description of Participating Families (n = 23).

Characteristics	Mean	Range
Mother's age (years)	33	21–45
Father's age (years)	38	26–49
Number of children	2	1–5
Number of family members	4	1–6
<hr/> N <hr/>		
Mother's education		
Elementary	2	
Junior high school	10	
Senior high school	11	
Family income in one month		
<minimum wage	17	
≥minimum wage	6	
Child experiencing stunting		
Child's age		X = 40 months (range 30–58 months)
Child's sex		
Male	9	
Female	14	
Child breastfed at all		
Yes	19	
No	4	
Child's immunization status		
Complete	13	
No	10	

reported family income was below minimum wage (74%), indicating that most of the participants (families) were at a low economic level.

Themes

The qualitative findings include themes identified through the process of data analysis. The conversations with mothers about their families' experiences revealed strengths and resources that family members mobilize in fulfilling nutritional needs, especially in feeding their young children (Table 2).

Belief Systems

The Family Belief That Stunting is Hereditary. Most mothers reported that their family shared the belief that the cause of stunting is heredity. They explained that it is natural for children to be stunted when their parents are also short. For example, one mother stated: "The fact that his mother is small means that no matter how much he eats, he cannot grow big." (Participant 16, 32 years). Other participants compared siblings to explain a child's short stature, as illustrated by this mother: "People indeed say that her older sister was also small." (Participant 1, 35 years).

Table 2. Summary of Family Experiences Contained in the Key Processes of Family Resilience.

Key processes of family resilience	Themes
Belief systems	1.1 The family belief that stunting is hereditary
	1.2 The family belief that stunted children will “grow up”
	1.3 The family belief that giving other foods such as milk and snacks is better than an empty stomach
Organizational processes	2.1 Cultural influences on feeding practices
	2.2 Father has less of a role in feeding
	2.3 Lack of economic status is related to the providing of nutritious food
Communication processes	3.1 Lack of communication between family members in discussing stunting in children aged below five years
	3.2 Mothers are the <i>main</i> decision-makers concerning children’s health problems related to stunted growth

The Family Belief That Stunted Children Will “grow up.” Pre-dominant among most mothers was the belief that stunted children will “grow up” in time. Furthermore, they believed that stunting was not a severe problem because the standard for measuring family health was relegated only to sickness related to physical illness/weakness. Most mothers face problems by surrendering to Allah (God), trusting that over time, children will recover from health problems. This belief was evident as mothers anticipated their young children would overcome growth delays. For example, one mother stated: “Yes, it’s okay when she grows up like her sister, she [will] want to eat; at least it will change when she grows up.” (Participant 12, 30 years). Another participant stated: “Maybe later, when circumcised, his body will bloom, right? When children are circumcised, their bodies will look good; sometimes someone says that” (Participant 22, 28 years).

The Family Belief That Giving Other Foods Such as Milk and Snacks is Better Than an Empty Stomach. Most mothers considered the most important thing was that the child was drinking or eating something rather than having an empty stomach, regardless of whether the food was milk or snacks. One participant stated: “If he (child) does not want to eat, I will give the milk, but milk is better to replace food than him not eating” (Participant 9, 26 years). Another mother also viewed this as an accepted practice: “If he does not want to eat, I give him milk instead of not eating; it is okay” (Participant 16, 28 years). Other participants explained how they relied on snacks to feed their stunted children when they were hungry:

Sometimes he does not have time to “want to eat” yet, so he is already hungry. Okay, so I snacked [him] on biscuits. Basically, the ones in the house are usually wafers and biscuits; yes, I will give him the ones there. In the afternoon, he eats snacks like that, snacking. (Participant 14, 27 years).

Organizational Processes

Cultural Influences on Feeding Practices. Cultural beliefs and practices could influence how families manage situations where their children do not want to eat. For example, one 25-year-old mother (Participant 11) explained that when

children aged below 5 years do not want to eat, the parents should prepare a glass of water and read a prayer, followed by rinsing their mouths with water and spraying it on the young child’s face to encourage them to want to eat. Another cultural belief was related to the value of “force feeding herbs” to young children to encourage them to eat. In addition, there was a belief, following the advice of the elderly parents, that children should not eat at night to protect them from “intestinal worms.” For example, one mother stated: “Yes, follow old parents’ words; for example, children below five years cannot eat at night. Toddlers are not given food at night; they (grandmother) say if children aged below five years eat at night, they can get worms” (Participant 17, 36 years).

Father has Less of a Role in Feeding. Fathers were reported to advise mothers instead of taking part in feeding children. Some mothers said that fathers were impatient in feeding their children. Usually, the father follows the child’s wishes—if the child does not want to eat, the father will follow the child’s will. For example, one mother stated: “Oh, help in bathing children but in giving food rarely, the father is impatient if the child does not want to eat, it is okay, he said that.” (Participant 14, 32 years). Another mother said: “When father comes home in the afternoon, sometimes he often buys food for him (child), such as vegetables, fried chicken, food that the child likes” (Participant 20, 28 years).

Lack of Economic Status is Related to the Providing of Nutritious Food. Most mothers recognized that economic conditions greatly affected their ability to provide nutritious food for their children and left them with little choice about what to feed their families. For example, one mother stated: “Yes, because there is no finance, there is nothing to give proper food to a child. So yes, [we have] our economic limitations.” (Participant 15, 37 years). Another participant stated: “Yes, it is not that we do not want it. Sometimes we also do not have enough money; it is limited, but that is okay. Today we eat as is” (Participant 12, 32 years). A 35-year-old mother also shared: “It is sobering, sometimes we cannot get it [good food], it is fine, you just eat soy sauce.” (Participant 13).

Communication Processes

Lack of Communication Between Family Members in Discussing Stunting in Children Aged Below 5 years. Some participants recognized that stunting was a problem. For example, one participant (25 years old) stated: “Actually, if you are malnourished, it is a problem because nowadays height is essential; it is essential to deal with stunting” (Participant 8, 25 years). However, most mothers said that they rarely discussed the stunting condition of their children with others, including the child’s father. One 32-year-old mother stated: “Me, if there is a problem, I never talk about it with people; I just keep it secret; I also rarely talk to my husband about stunting” (Participant 5). Mothers shared their reasons for not talking about their stunted child. One mother explained, “Yes, I am afraid of the future, afraid of being insinuated by others” (Participant 15, 30 years). Another participant stated: “We are discouraged to say that our children are stunted; how do I feel like I am not able to take care of my child” (Participant 2, 36 years). The repercussions of talking about stunting were similarly felt by one mother who stated: “Yes, I am ashamed that my child is not big. I am afraid of being talked about like that; it is better to avoid it than to hear that kind of talk, afraid of being insinuated by others” (Participant 5, 29 years).

Mothers are the Main Decision-Makers Concerning Children’s Health Problems Related to Stunted Growth. Concerning problem-solving in the family, mothers explained that they took the lead in making decisions about their children’s health problems, being the primary caregivers who best understood their children’s conditions; typically, the fathers would follow the mothers’ decisions. For example, one mother stated: “Who decided—me (the children’s mother) because they are my children.” (Participant 11, 25 years). Another mother also stated: “[My] husband just follows me [the children’s mother].” (Participant 21, 32 years). When mothers were concerned about how well their children were eating, grandmothers sometimes gave mothers advice. For example, one mother said: “Grandmother often advises to make dishes that child likes, [but] sometimes I try giving vitamins” (Participant 14, 30 years). In addition to challenges in accessing nutritious food for their children and concerns that children were not eating enough, it was not uncommon for mothers to resort to vitamins.

One of the decisions that mothers make is to give their children vitamins. One mother stated, “Yes, toddlers should be helped with vitamins so they can eat well” (Participant 4). However, this strategy was not always successful, as one mother explained: “I’ve been giving appetite vitamins too, [but the child is] still eating a little” (Participant 5, 29 years).

Discussion

To our knowledge, little data exists about family resilience in fulfilling nutrition for toddlers and the association between

family resilience and the incidence of stunting. This qualitative study explored perceptions, beliefs, and knowledge regarding stunting and infant feeding practices in families with a stunted child. The findings point to key areas to support family resilience in meeting children’s nutritional needs.

Our findings revealed that the families believed heredity to be the leading cause of stunting in children. These findings are consistent with several studies in Indonesia that have found a moderate to strong relationship between maternal short stature and stunting in children (Beal et al., 2018). Moreover, Rachmi et al. (2016) found a strong association between paternal short stature and stunting in children 24 to 59 months. Although heredity is a factor that causes stunting, other studies have found that the dominant factor causing wasting is the fulfillment of a minimum acceptable diet. Based on a recent study conducted by Andina et al. (2021) in Indonesia, the fulfillment of the minimum acceptable diet was found to be the dominant factor in wasting after controlling for education level, mother, and family income level. This study showed that supporting the family in providing adequate nutrition and care for their children is necessary.

A 30-month cohort study conducted by Som et al. (2021) showed that children who adhered to proper feeding, with adequate frequency and quantity of food intake according to age, could reduce the risk of stunting by 6.4%. The findings support family beliefs that genetics affects children’s height status, but it is not the only factor that causes stunting. Adequate environmental nutrition and health factors are essential in optimizing children’s height.

After passing the age of 2 years or the first thousand days of life, most stunting conditions become irreversible, such that a child’s height cannot be changed in the same way weight can be regained (Roediger et al., 2020). Even in some cases, chasing growth, known as catch-up growth, tends not to be optimal, and if excessive nutrition or overfeeding is carried out, stunted children can experience excess weight with a fixed height (Holdsworth & Schell, 2018). In our study, to the contrary, the families assumed that stunting would be “cured”/changed by the time a child had finished growing.

Stunted children may never achieve total linear growth and have long-term impacts on individuals and society, especially their growth and development (UNICEF, 2020; WHO, 2014). The families’ views that stunting is not problematic are contrary to the reality of the problems caused by stunting. This finding could be due to a lack of family knowledge about stunting, especially regarding its attendant dangers or consequences. Family knowledge was shown to be closely related to feeding practices. The results of this study indicate that cultural values still influence the practice of fulfilling the nutritional needs of toddlers—for example, toddlers should not be fed at night. Health education and counseling are needed to increase family knowledge about stunting and feeding practices to prevent stunting in children under 5 years.

Researchers have studied the effects of educational intervention on complementary feeding practices and a child's physical growth (Zhang et al., 2013). The intervention group achieved better knowledge and practices related to complementary feeding and significantly higher Infant Child Feeding Instrument scores at each follow-up point. Children in the intervention group achieved higher z-scores for weight-for-age (WAZ) and weight-for-height (WHZ) than the controls at 18 months old and were less likely to have stunted growth. These results indicated that an educational intervention delivered through local health services can enhance caregivers' knowledge and practices of complementary feeding and ultimately improve children's growth (Zhang et al., 2013).

This study found that the snacking habits of children under five may contribute to stunting. Families assume that the main meal can be replaced with snacks if the child does not want to eat. Sometimes, parents, especially mothers as the primary caregivers, often indulge the child's desire for snacks to prevent the child from becoming fussy. There is a lack of knowledge about children's nutritional requirements (including healthy snacks). Without adequate knowledge, mothers are focused on keeping their children from having an "empty stomach" in any way they can. Providing education/knowledge, in this case, related to young children's nutritional needs and appropriate low-cost nutritional food/snacks for young children, is a way to influence family beliefs related to feeding their children and strengthen family resilience.

Mothers in this study played an essential role in feeding their young children. The fulfillment of nutrition for toddlers was associated with the mother's role as the primary caregiver. In contrast, the father's role was the provision of financial and logistical resources to the family only. This was also consistent with previous findings that other family members, such as fathers and grandmothers, usually only provide moral support or advice (Faye, Fonn, & Kimani-Murage, 2019). Currently, community-based interventions focusing on improving nutrition practices at the household level are starting to adopt a broader approach by involving other influential household actors, such as grandmothers, grandfathers, and fathers, among other family members (WHO, 2013).

Although our study found that other family members, including the father, have less of a role in feeding, several studies have shown that a father's involvement positively impacts the growth and development of toddlers (Sethna et al., 2017; Watterworth et al., 2017). Children with fathers who are consistently involved in childcare, such as in food preparation and feeding, assisting with psychosocial stimulation, hygiene practices, and caring for sick children, have been shown to have higher cognitive scores, better emotional regulation, and more vital language skills (Sethna et al., 2017). In studies conducted in Indonesia, there are indications of ways fathers can play a role in preventing stunting. On the basis of their findings, Faye, Fonn, and Kimani-Murage

(2019) suggest that if fathers of stunted children knew more about what foods children need to eat for healthy growth, they may be more likely to provide appropriate foods within the financial resources they have available. Another approach is suggested in study at Puskesmas (Public Health Center) Maronggela, East Nusa Tenggara, Indonesia showed fathers' behavior in preventing stunting in toddlers is related to their perception of a disease and cues that can trigger decision-making processes related to actions to prevent child stunting (Has et al., 2022).

Our study also found that there was a lack of communication between family members regarding stunting in children. Talk about stunting in families and with others was avoided because it called into question participants' ability as mothers and carried the risk of the blame for the child's health problems. The stigma associated with food insecurity may have also played a role. Others have reported that Indonesian caregivers of malnourished children under 5 years who received home visits as part of a nutritional assistance program expressed similar concerns and this often resulted in their reluctance to accept these visits and offers of supplemental food (Dewi Satiawati & Januraga, 2018). Stigma reduction will be important in supporting communication within the family and their willingness to access community services offering families assistance. Communication is a key process that builds family resilience. Well-functioning families can effectively continue discussions and plan actions for problem-solving. On the other hand, unclear communication or a lack of communication in the family can create problems, trigger anxiety, and block understanding of what is happening and what the family can do to address it (Walsh, 2016a). Intervention models to strengthen family resilience will need to address stigma and blame in ways that are appropriate for this sociocultural context to enable families to work together to support children's growth and development.

The results of this study indicate that mothers are the main decision-makers in childcare, although previous studies have stated that other family members, such as grandmothers, influence mothers' decisions. Grandmothers also have a key role in the feeding process of toddlers. Most mothers acknowledge and respect their child's grandmother's advice, whether they have stunted children or not (Faye, Fonn, & Kimani-Murage, 2019). Programs to support family resilience with respect to child nutrition should be inclusive of grandmothers.

Economic stability is also a key factor influencing family resilience (Walsh, 2012). Economic pressures influence parenting practices and food security (Black et al., 2008). Tamir et al. (2022), in their latest study conducted in Ethiopia in 2019, found that households with the poorest wealth status were more likely to have stunted children compared to families in high-wealth households. This is consistent with the findings of this study that economic status and access to nutritious food influenced feeding practices. Some families

recognized that they could not meet their children's nutritional needs by buying healthy food due to inadequate family income. Access to food security programs will be a key factor in intervention models to strengthen family resilience so they have the resources to prevent child stunting.

Study Limitations

This study offers a novel perspective on family resilience in fulfilling children under 5 years nutritional needs. Even though the call for participation was open for families, only mothers could be recruited in the locations chosen for this study. Alternative strategies and locations need to be considered by researchers who wish to recruit fathers and other members of the family, which might offer a more holistic picture of the parental and family members' views about factors influencing child feeding practices.

Conclusions

This study presents qualitative findings regarding a family approach to exploring the resilience of families with stunted children. The study results show that the components of belief systems, organizational processes, and communication provide insights into aspects of family resilience that are influential in contributing to the problem of stunting in early childhood. Belief systems about stunting held by the families in the study influenced infant feeding practices. Families believed the cause of stunting to be hereditary, that stunting is not a problem when toddlers are not physically sick, and that stunted children can grow normally when they are larger. These beliefs can weaken family resilience in preventing stunting in children aged below 5 years. In addition, the findings support the importance of organizational processes in family units, including prescribed roles and economic stability, as well as communication in supporting family resilience and their efforts to address stunting among young children.

The present study findings can be used to inform future education interventions in areas of children's nutrition that families find most challenging. By addressing these areas and approaching families from various educational and economic statuses, there is an incredible potential for future interventions to improve complementary feeding practices. A family-based approach to supporting resilience allows nurses to prevent stunting in toddlers and support the whole family's health. The findings of this research reinforce the importance of understanding local knowledge and beliefs related to stunting, providing education about linear growth and children's nutritional requirements tailored to family needs, and linking families to food security programs where household income may place family units at risk for food insecurity. Public health nurses are ideally situated to carry out this work.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Data for this study was generated in a project funded by Universitas Indonesia (PUTI grants 2022) for funding this research, no: NKB-1188/UN2.RST/HKP.05.00/2022.

ORCID iDs

Dwi Cahya Rahmadiyah  <https://orcid.org/0000-0002-5468-0027>

Junaiti Sahar  <https://orcid.org/0000-0003-4056-3724>

References

- Alam, M. A., Richard, S. A., Fahim, S. M., Mahfuz, M., Nahar, B., Das, S., Shrestha, B., Koshy, B., Mduma, E., Seidman, J. C., Murray-Kolb, L. E., Caulfield, L. E., & Ahmed, T. (2020). Impact of early-onset persistent stunting on cognitive development at five years of age: Results from a multi-country cohort study. *PLoS One*, *15*(1), e0229663. <https://doi.org/10.1371/journal.pone.0227839>
- Andina, E., Madinar, M., & Achadi, E. L. (2021). Fulfillment of minimum acceptable diet as a dominant factor in wasting in children aged 6-23 months in Central Jakarta. *Indonesian Journal of Public Health Nutrition*, *1*(2), 32-39.
- Atamou, L., Rahmadiyah, D. C., Hassan, H., & Setiawan, A. (2023). Analysis of the determinants of stunting among children aged below five years in stunting locus villages in Indonesia. *Healthcare*, *11*(6), 810. <https://doi.org/10.3390/healthcare11060810>
- Beal, T., Tumilowicz, A., Sutrisna, A., Izwardy, D., & Neufeld, L. M. (2018). A review of child stunting determinants in Indonesia. *Maternal & Child Nutrition*, *14*(4), e12617. <https://doi.org/10.1111/mcn.12617>
- Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus Open*, *2*, 8-14. <https://doi.org/10.1016/j.npls.2016.01.001>
- Black, R. E., Allen, L. H., Bhutta, Z. A., Caulfield, L. E., de Onis, M., Ezzati, M., Mathers, C., & Rivera, J.; Maternal and Child Undernutrition Study Group. (2008). Maternal and child undernutrition: Global and regional exposures and health consequences. *Lancet (London, England)*, *371*(9608), 243-260. [https://doi.org/10.1016/S0140-6736\(07\)61690-0](https://doi.org/10.1016/S0140-6736(07)61690-0)
- Bradshaw, C., Atkinson, S., & Doody, O. (2017). Employing a qualitative description approach in health care research. *Global Qualitative Nursing Research*, *4*, 233339361774228. <https://doi.org/10.1177/2333393617742282>
- Caelli, K., Ray, L., & Mill, J. (2003). 'Clear as mud': Toward greater clarity in generic qualitative research. *International Journal of Qualitative Methods*, *2*(2), 1-13. <https://doi.org/10.1177/160940690300200201>
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (pp. 1-459). Sage.

- Depkes Dirjend BKM Direktorat Bina Gizi Masyarakat. (2007). *Pedoman Strategi KIE Keluarga Sadar Gizi (KADARZI)* [Guidelines for IEC Strategies for Nutrition Aware Families (KADARZI)]. pada tanggal Oktober 25, 2018, <http://gizi.depkes.go.id/wp-content/uploads/2012/05/strategiKIE-Kadarzi.pdf>
- Dewi Satiawati, K. D. K., & Januraga, P. P. (2018). Attitudes toward supplemental nutrition assistance programs in caregivers of children with moderate–Acute malnutrition younger than 5 years in Denpasar, Bali: A qualitative study. *Food and Nutrition Bulletin*, 39(3), 465–474. <https://doi.org/10.1177/0379572118788663>
- Faye, C. M., Fonn, S., & Kimani-Murage, E. (2019). Family influences on child nutritional outcomes in Nairobi's informal settlements. *Child: Care, Health and Development*, 45(4), 509–517. <https://doi.org/10.1111/cch.12670>
- Faye, C. M., Fonn, S., Levin, J., & Kimani-Murage, E. (2019). Analysing child linear growth trajectories among under-5 children in two Nairobi informal settlements. *Public Health Nutrition*, 11, 2001–2011. <https://doi.org/10.1017/S1368980019000491>
- Has, E. M., Asmoro, C. P., & Gua, W. P. (2022). Factors related to father's behavior in preventing childhood stunting based on health belief model. *Jurnal Keperawatan Indonesia*, 25(2), 74–84. <https://doi.org/10.7454/jki.v25i2.847>
- Holdsworth, E. A., & Schell, L. M. (2018). Stunting. In W. Trevathan, M. Cartmill, D. Dufour, C. Larsen, D. O'Rourke, K. Rosenberg, & K. Strier (Eds.), *The international encyclopedia of biological anthropology* (pp. 1–3). John Wiley & Sons, Inc. <https://doi.org/10.1002/9781118584538.ieba0223>
- Hossain, M., Ickes, S., Rice, L., Ritter, G., Naila, N. N., Zia, T., Nahar, B., Mahfuz, M., Denno, D. M., Ahmed, T., & Walson, J. (2018). Caregiver perceptions of children's linear growth in Bangladesh: A qualitative analysis. *Public Health Nutrition*, 21(10), 1800–1809. <https://doi.org/10.1017/S136898001700427X>
- Khandpur, N., Blaine, R. E., Fisher, J. O., & Davison, K. K. (2014). Fathers' child feeding practices: A review of the evidence. *Appetite*, 78, 110–121. <https://doi.org/10.1016/J.APPET.2014.03.015>
- Khandpur, N., Charles, J., & Davison, K. K. (2016). Fathers' perspectives on co-parenting in the context of child feeding. *Childhood Obesity*, 12, 455–462. <https://doi.org/10.1089/chi.2016.0118>
- Mchome, Z., Bailey, A., Darak, S., & Haisma, H. (2019). "A child may be tall but stunted." Meanings attached to childhood height in Tanzania. *Maternal & Child Nutrition*, 15(3), e12769. <https://doi.org/10.1111/mcn.12769>
- Ministry of Health Republic of Indonesia. (2018). Hasil Riset Kesehatan Dasar Tahun 2018 [Indonesia Basic Health Research]. *Kementerian Kesehatan RI*, 53(9), 1689–1699.
- Nayar, S., & Stanley, M. (2015). *Qualitative research methodologies for occupational science and therapy*. Routledge. <https://doi.org/10.4324/9780203383216-12>
- Nurlaila, U., & Suryati, S. (2021). Partisipasi ayah dengan praktik ibu dalam pemberian makan balita. *Community of Publishing in Nursing (COPING)*, 9(6), 647–656.
- Rachmi, C. N., Agho, K. E., Li, M., & Baur, L. A. (2016). Stunting, underweight and overweight in children aged 2.0-4.9 years in Indonesia: Prevalence trends and associated risk factors. *PLoS One*, 11(5), e0154756. <https://doi.org/10.1371/journal.pone.0154756>
- Roediger, R., Taylor Hendrixson, D., & Manary, M. J. (2020). A roadmap to reduce stunting. *American Journal of Clinical Nutrition*, 112(Suppl. 2), 773S–776S. <https://doi.org/10.1093/ajcn/nqaa205>
- Sethna, V., Perry, E., Domoney, J., Iles, J., Psychogiou, L., Rowbotham, N. E. L., Stein, A., Murray, L., & Ramchandani, P. G. (2017). Father-child interactions at three months and 24 months: Contributions to children's cognitive development at 24 months. *Infant Mental Health Journal*, 38(3), 378–390. <https://doi.org/10.1002/imhj.21642>
- Soliman, A., De Sanctis, V., Alaaraj, N., Ahmed, S., Alyafei, F., Hamed, N., & Soliman, N. (2021). Early and long-term consequences of nutritional stunting: From childhood to adulthood. *Acta Biomedica Atenei Parmensis*, 92, e2021168. <https://doi.org/10.23750/abm.v92i1.11346>
- Som, S. V., Van Der Hoeven, M., Lailou, A., Poirot, E., Chan, T., Polman, K., Ponce, M. C., & Wieringa, F. T. (2021). Adherence to child feeding practices and child growth: A retrospective cohort analysis in Cambodia. *Nutrients*, 13(1), 1–16. <https://doi.org/10.3390/nu13010137>
- Stewart, C. P., Iannotti, L., Dewey, K. G., Michaelsen, K. F., & Onyango, A. W. (2013). Contextualizing complementary feeding in a broader framework for stunting prevention. *Maternal Child Nutrition*, 9(Suppl. 2), 27–45. <https://doi.org/10.1111/mcn.12088>
- Tamir, T. T., Techane, M. A., Dessie, M. T., & Atalell, K. A. (2022). Applied nutritional investigation spatial variation and determinants of stunting among children under 5 y in Ethiopia: A spatial and multilevel analysis of Ethiopian Demographic and Health Survey 2019. *Nutrition*, 103–104, 11786. <https://doi.org/10.1016/j.nut.2022.111786>
- UNICEF. (1990). *Strategy for improved nutrition of children and women in developing countries*. Author.
- UNICEF. (2020). *Nutrition, for every child: UNICEF nutrition strategy 2020–2030*. www.unicef.org
- Walsh, F. (2012). *Normal family processes: Growing diversity and complexity* (4th ed.). The Guilford Press.
- Walsh, F. (2016a). Family resilience: A developmental systems framework. *European Journal of Developmental Psychology*, 13(3), 313–324. <https://doi.org/10.1080/17405629.2016.1154035>
- Walsh, F. (2016b). Strengthening family resilience: Overcoming serious life challenges. In P. C. Dias, A. Gonçalves, Â. Azevedo, & F. Lobo (Eds.), *Novos Desafios, Novas Competências: Contributos Atuais Da Psicologia* (pp. 11–22). Axioma - Publicações da Faculdade de Filosofia. https://doi.org/10.17990/AXI2016_9789726972679_011
- Watterworth, J. C., Hutchinson, J. M., Buchholz, A. C., Darlington, G., Simpson, J. A. R., Ma, D. W. L., & Haines, J. (2017). Food parenting practices and their association with child nutrition risk status: Comparing mothers and fathers. *Applied Physiology, Nutrition and Metabolism*, 42(6), 667–671. <https://doi.org/10.1139/apnm-2016-0572>
- World Health Organization (WHO). (2013). *Childhood stunting: Context, causes, and consequences: Conceptual framework*.

- Retrieved March 31, 2020, from <https://www.who.int/publications/m/item/childhood-stunting-context-causes-and-consequences-framework>. (accessed on March 31, 2020).
- World Health Organization (WHO). (2014). *Global nutrition targets 2025: Stunting policy brief*. Author. Retrieved March 2020, from <https://apps.who.int/iris/handle/10665/149019>
- World Health Organization (WHO). (2018). *Reducing stunting*. Retrieved March 31, 2020, from <https://www.who.int/nutrition/publications/severemalnutrition/reducing-stunting-children-equity/en/>
- World Health Organization (WHO). (2022). *World health statistics 2022: Monitoring health for the SDGs, sustainable development goals*. <http://apps.who.int/bookorders>
- Zhang, J., Shi, L., Chen, D. F., Wang, J., & Wang, Y. (2013). Effectiveness of an educational intervention to improve child feeding practices and growth in rural China: Updated results at 18 months of age. *Maternal and Child Nutrition*, 9(1), 118–129. <https://doi.org/10.1111/j.1740-8709.2012.00447.x>

Author Biographies

Dwi Cahya Rahmadiyah, S.Kep., M.Kep., Sp.Kep.Kom., is a lecturer at the Faculty of Nursing, Universitas Indonesia, Depok, West Java, Indonesia

Junaiti Sahar, S.Kp., M.App.Sc., Ph.D., is a Professor at the Faculty of Nursing, Universitas Indonesia, Depok, West Java, Indonesia

Widyatuti, S.Kp., M.Kes., Sp.Kom., is an Associate Professor at the Faculty of Nursing, Universitas Indonesia, Depok, West Java, Indonesia

Ratu Ayu Dewi Sartika, Apt., M.Sc., is a Professor at the Faculty of Public Health, Universitas Indonesia, Depok, West Java, Indonesia

Hamidah Hassan, Prof, Dr., is a Professor at Department of Nursing, Faculty of Medicine and Health Sciences, Unversiti Tunku Abdul Rahman, Bandar Sungai Long, Kajang 4300, Selangor, Malaysia