PHARMACOLOGY, MEDICAL REPORTS, ORTHOPEDIC, AND ILLNESS DETAILS (COMORBID)
Volume 1 Issue 1 (2022)

EFFORTS TO PREVENT STUNTING IN FAMILIES WITH TODDLERS BASED ON THE PLANNED BEHAVIOR THEORY APPROACH IN LAMPULO VILLAGE, BANDA ACEH CITY

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Abstract

Malnutrition in young individuals can have severe consequences, including complex issues such as short stature and stunting. Stunting during early childhood can negatively impact intelligence quotient (IQ), psychomotor development, motor skills, and neurosensory integration. Therefore, the role of parents in preventing stunting is crucial. The aim of this research is to investigate strategies for preventing stunting among families with newborns using the Planned Behavior Theory approach in Lampulo Village, Banda Aceh City, in 2019. This research is a descriptive correlation study with a cross-sectional approach, conducted from August 7th to 31st, 2019. The study's population consisted of all mothers at risk of stunting in Lampulo Village, Banda Aceh City, with a sample size of 74 people selected through proportional sampling. The study's results indicated that there was a significant influence of behavioral beliefs (p=0.011), normative beliefs (p=0.021), and control beliefs (p=0.020) on stunting prevention in families with young children. It is hoped that this research can provide valuable insights to healthcare providers and community health centers (posyandu) in delivering information on stunting prevention.

Keywords: *Behavioral Belief, Control Trust, Family of Toddlers, Normative Beliefs, Stunting Prevention*

1. INTRODUCTION

Children are the nation's assets and the future generation that will carry forward the aspirations of the nation. Healthy children are the desire of every parent. However, not all children are in good health, and one common issue that occurs in children is malnutrition (Nutrisiani, 2010). Malnutrition problems in children are often the result of the lack of awareness among family members about nutrition (RI, 2007), errors in selecting food items for consumption, nutritional imbalances, or vice versa, which can lead to various consequences such as chronic illnesses, underweight and overweight, pica, dental caries, and allergies (Arisman, 2004).

Malnutrition issues in toddlers can have complex and far-reaching effects, including short stature or stunting (Narendra et al., 2002). Stunting is a form of linear growth disturbance that can prevent children from reaching their genetic potential. It indicates long-term consequences and cumulative impacts of insufficient nutrient intake, inadequate health conditions, and caregiving practices. Moreover, stunting in early childhood affects intelligence quotient (IQ), psychomotor development, motor skills, and neurosensory integration (Sibagariang, 2010).

Globally, more than 2 million child deaths under the age of 5 are directly related to poor nutrition, especially wasting and stunting. Approximately 178 million children living in poor and developing countries suffer from stunting, with 111.6 million in Asia

and 56.9 million in Africa, according to data from the United Nations International Children's Emergency Fund (UNICEF) (Wiyogowati, 2012).

The Basic Health Research results for 2018 showed that the prevalence of stunting in Indonesian toddlers remains high, reaching 30.8% in 2018 (comprising 11.5% severely short and 19.3% moderately short), down from 37.2% in 2013 (with 18% being severely short and 19.2% moderately short) (Aditianti et al., 2020). Public health problems are considered severe when the prevalence of short stature is between 30-39% and critical when it exceeds 40%. Stunting is a very serious issue, with the World Health Organization tolerating only a 20% prevalence rate for stunting in a country.

Based on data from the Aceh Provincial Health Office, in 2018, the prevalence of short stature or stunting in Aceh reached 40.3%. Meanwhile, data from the Banda Aceh City Health Office reported that 30.8% of toddlers were short, with Puskesmas Lampulo having the highest number of stunted children among its supervised areas, with 31 children (17.1%) (Aceh, 2019). There are several underlying factors for stunting, including basic factors like economic status and maternal education, intermediate factors such as family size, maternal height, maternal age, and the number of children, and proximal factors like exclusive breastfeeding, child's age, and low birth weight (Rochmah & Fitriahadi, 2017). The impact of stunting goes beyond physical growth issues and also affects a child's brain development. More children with stunting have low IQ compared to those who grow normally. Stunting has a lifelong impact on children, raising concerns about their long-term development.

The role of parents in providing appropriate education is crucial in helping children. Children are highly dependent on parental care and guidance, particularly in terms of their growth and development. Thus, parents, especially mothers, need to have knowledge on how to carefully monitor, observe, and nurture their children, particularly regarding growth and development (Darteh et al., 2014). To enhance knowledge about child nutrition, health education is necessary. Health education is part of health promotion, a process that enhances people's abilities to maintain and improve their health. It is not only about improving knowledge, attitudes, and health practices but also improving the environment, both physical and non-physical, to maintain and improve health (Notoatmodjo, 2011).

Based on preliminary studies conducted at Puskesmas Lampulo, Banda Aceh, it was found that in 2018, out of 1,078 toddlers, 31 of them experienced malnutrition and stunting. The highest prevalence of stunting in the Puskesmas Lampulo's work area was found in Gampong Lampulo, with 7 toddlers affected. The initial survey also revealed that there were 283 toddlers in Gampong Lampulo, and through interviews with three mothers of stunted toddlers, they mentioned that their children had poor eating habits, preferred snacks, and ate only according to their children's tastes, which led to slow growth. Based on these background findings, the researcher is interested in investigating "Efforts to Prevent Stunting in Families with Toddlers Based on the Planned Behavior Theory Approach in Gampong Lampulo, Banda Aceh, in 2019."

2. RESEARCH METHODS

This research falls into the category of a descriptive correlation study, employing a cross-sectional approach and design. The study focuses on the entire population of mothers who have toddlers at risk of stunting in Gampong Lampulo, Banda Aceh City,

and utilizes a proportional random sampling method, selecting a total of 74 participants. Data collection is carried out through the administration of questionnaires, and data analysis is performed using the Chi-Square Test.

The primary objective of this investigation is to identify the factors that contribute to the occurrence of stunting in toddlers and examine their association with maternal behaviors. By employing the cross-sectional method, this study aims to provide a comprehensive overview of the factors that warrant attention in the endeavor to prevent stunting among toddlers in Gampong Lampulo, Banda Aceh City.

3. RESULTS AND DISCUSSION

3.1. Result

Table 1. Effect of Behavioral Beliefs on the Prevention of Stunting in Families with Toddlers in Gampong Lampulo, Banda Aceh City in 2019 (n=74)

No	Behavioral Belief	Prevention of Stunting				Total		p-Value
		Good		Good				
		f	%	f	%	f	%	
1	Good	21	67,7	10	32,2	31	100	0,011
2	Less	15	34,9	28	65,1	43	100	
	Total	35	59,3	24	40,7	59	100	

Based on table 1 above, it is obtained that of the 31 respondents who have good behavioral beliefs, more respondents tend to prevent stunting well as many as 21 respondents (67.7%) and only 10 respondents (32.2%) who are less likely to prevent stunting, compared to 43 respondents who have less of behavioral beliefs, more respondents tend to prevent stunting as many as 28 respondents (65.1%) and only 15 respondents (34.9%) who are good at preventing stunting.

After statistical testing using Chi-Square with a confidence level of 95%, the p-value is 0.011, this means that the p-value is < = 0.05, so it can be concluded that there is an effect of behavioral belief on the prevention of stunting in families with toddlers in Gampong Lampulo, Banda Aceh City.

Table 2. Effect of Normative Beliefs on Stunting Prevention in Families with Toddlers in Gampong Lampulo, Banda Aceh City in 2019 (n=74)

No	Normative Beliefs	Prevention of Stunting				Total		p-value
		Good		Good				
		f	%	f	%	f	%	
1	Good	21	65,6	11	34,4	32	100	0,021
2	Less	15	35,7	27	64,3	42	100	
	Total	35	59,3	24	40,7	59	100	

Based on table 2 above, it is obtained that of the 32 respondents who have good normative beliefs, more respondents tend to prevent stunting well as many as 21

respondents (65.6%) and only 11 respondents (34.4%) who are less likely to prevent stunting, compared to 42 respondents who have less normative beliefs, more respondents tend to prevent stunting as many as 27 respondents (64.3%) and only 15 respondents (35.7%) who are good at preventing stunting.

After statistical testing using Chi-Square with a 95% confidence level, the p-value is 0.021, this means that the p-value is < = 0.05, so it can be concluded that there is an effect of normative belief on the prevention of stunting in families with toddlers in Gampong Lampulo, Banda Aceh City.

Table 3. Effect of Control Beliefs on the Prevention of Stunting in Families with Toddlers in Gampong Lampulo, Banda Aceh City in 2019 (n=74)

No	Control Beliefs	Prevention of Stunting				Total		p-value
		Good		Good				
		f	%	f	%	f	%	
1	Good	24	63,2	14	36,8	38	100	0,020
2	Less	12	33,3	24	66,7	36	100	
	Total	35	59,3	24	40,7	59	100	

Based on table 3 above, it is obtained that of the 38 respondents who have good control beliefs, more respondents tend to prevent stunting well as many as 24 respondents (63.2%) and only 14 respondents (36.8%) who are less likely to prevent stunting, compared to 36 respondents who have less control beliefs, more respondents tend to prevent stunting as many as 24 respondents (66.7%) and only 12 respondents (33.3%) who are good at preventing stunting.

After statistical testing using Chi-Square with a confidence level of 95%, the p-value is 0.020, this means that the p-value is < = 0.05, so it can be concluded that there is an effect of control belief on the prevention of stunting in families with toddlers in Gampong Lampulo, Banda Aceh City.

3.2. Discussion

3.2.1. The Influence of Behavioral Beliefs on Stunting Prevention in Families with Toddlers in Gampong Lampulo, Banda Aceh

Based on the research results in Table 1 above, it was found that among the 31 respondents who had positive behavioral beliefs, a higher number, consisting of 21 respondents (67.7%), tended to practice good stunting prevention. In contrast, only 10 respondents (32.2%) did not engage much in stunting prevention. Conversely, among the 43 respondents with negative behavioral beliefs, the majority, 28 respondents (65.1%), were less inclined to practice stunting prevention, while only 15 respondents (34.9%) practiced it well. After conducting statistical tests using the Chi-Square method with a 95% confidence level, a p-value of 0.011 was obtained. This means that the p-value is less than or equal to 0.05, indicating that there is an influence of behavioral beliefs on stunting prevention in families with toddlers in Gampong Lampulo, Banda Aceh.

The research conducted by Wijayanti in 2017, titled "Analysis of the Influence of Family Nutrition Awareness Behavior on Stunting in West Kalimantan Province," yielded results that households with poor nutrition awareness behavior (KADARZI) were

1.22 times more likely to increase the risk of stunting in toddlers compared to households with good nutrition awareness behavior (Hariyadi & Ekayanti, 2012).

Stunting refers to a condition where an individual's height is below the normal range for their age and gender. Stunting is a symptom, not a disease, and can be considered a variation within the normal range. An individual is considered stunted when their height falls below -2 standard deviations. Stunting also represents a form of linear growth retardation and is widely used as an indicator to measure the nutritional status of individuals and communities (Sudiman, 2008). Behavior is related to the improvement and maintenance of health (health promotion behavior).

The Planned Behavior Theory is a social psychology model frequently used to predict an individual's behavior. The theory predicts behavior more accurately because it is driven by the intention to perform a behavior (Wati, 2016). Behavioral intention is influenced by three factors, one of which is behavioral beliefs. Behavioral beliefs are an individual's beliefs about the outcomes of a behavior and the evaluation of those outcomes (beliefs strength and outcome evaluation). An individual will intend to exhibit a specific behavior when they have a positive assessment of it. An individual's attitude is determined by their beliefs about the consequences of performing a behavior (behavioral beliefs), weighed against their evaluation of the consequences (outcome evaluation). These attitudes are believed to have a direct impact on behavioral intentions, and in this study, it is related to family behavior in stunting prevention for toddlers. Furthermore, someone who believes that a particular behavior will lead to positive outcomes will have a favorable attitude towards exhibiting that behavior. Conversely, if an individual believes that a behavior will lead to negative outcomes, they will have an unfavorable attitude (Hill et al., 1977).

The researcher posits that behavioral beliefs have an influence on stunting prevention in families with toddlers. The research findings indicate that respondents with positive behavioral beliefs tend to practice stunting prevention more frequently compared to those with negative beliefs. This is because respondents with strong beliefs about the importance of stunting prevention tend to engage in positive behaviors, such as monitoring the growth of toddlers, providing exclusive breastfeeding for infants, breastfeeding until the age of 2, providing toddlers with vitamin-rich foods, and meeting their nutritional needs, all of which help prevent stunting. Conversely, respondents with weaker beliefs tend to exhibit negative behaviors and are less inclined to engage in stunting prevention efforts for toddlers.

3.2.2. The Influence of Normative Beliefs on Stunting Prevention in Families with Toddlers in Gampong Lampulo, Banda Aceh

Based on the research results in Table 2 above, it was found that among the 32 respondents with positive normative beliefs, a higher number, consisting of 21 respondents (65.6%), tended to practice good stunting prevention. In contrast, only 11 respondents (34.4%) did not engage much in stunting prevention. Conversely, among the 42 respondents with negative normative beliefs, the majority, 27 respondents (64.3%), were less inclined to practice stunting prevention, while only 15 respondents (35.7%) practiced it well. After conducting statistical tests using the Chi-Square method with a 95% confidence level, a p-value of 0.021 was obtained. This means that the p-value is

less than or equal to 0.05, indicating that there is an influence of normative beliefs on stunting prevention in families with toddlers in Gampong Lampulo, Banda Aceh.

The results of the research conducted by Suryagustina (2018), titled "The Influence of Health Education on Stunting Prevention on Maternal Knowledge and Attitudes in Pahandut Sub-District, Palangka Raya," indicated that health education had a significant effect on knowledge (p-value 0.000 < 0.05) and attitudes (p-value 0.000 < 0.05) among mothers. Behavioral beliefs, normative beliefs, and control beliefs are three factors that combine to determine an individual's behavior. After these three factors are determined, individuals enter the intention stage, followed by the final stage, which is behavior. The intention stage is where individuals decide their intention to perform a behavior, and the behavior stage is where individuals enact the behavior. Intention, as a cognitive and conative aspect of an individual's readiness, is used to explain behavior. Specifically, the intention to engage in behavior indicates an individual's inclination to perform a behavior, which is a direct antecedent of that behavior (SARI, 2018).

Normative beliefs refer to beliefs about normative expectations held by others and the motivation to meet those expectations (normative beliefs and motivation to comply). Beliefs included in subjective norms are also called normative beliefs. An individual intends to perform a particular behavior if they perceive that important others expect them to do so. These important others could be spouses, friends, doctors, and so on.

The researcher believes that normative beliefs influence stunting prevention in families with toddlers. The research findings suggest that respondents with positive normative beliefs tend to practice stunting prevention more frequently compared to those with negative beliefs. This is because respondents with strong normative beliefs will develop positive behaviors, leading them to pay special attention to monitoring their toddlers' growth by regularly measuring their weight and height, and controlling the toddlers' food intake. Conversely, respondents with weaker normative beliefs tend to exhibit negative behaviors and are less likely to take their toddlers to *posyandu* (integrated health post) or provide proper nutrition, putting their toddlers at risk of stunting.

3.2.3. The Influence of Control Beliefs on Stunting Prevention in Families with Toddlers in Gampong Lampulo, Banda Aceh

Based on the research results in Table 3, it was found that among the 38 respondents with positive control beliefs, a higher number, consisting of 24 respondents (63.2%), tended to practice good stunting prevention. In contrast, only 14 respondents (36.8%) did not engage much in stunting prevention. Conversely, among the 36 respondents with negative control beliefs, the majority, 24 respondents (66.7%), were less inclined to practice stunting prevention, while only 12 respondents (33.3%) practiced it well. After conducting statistical tests using the Chi-Square method with a 95% confidence level, a p-value of 0.020 was obtained. This means that the p-value is less than or equal to 0.05, indicating that there is an influence of control beliefs on stunting prevention in families with toddlers in Gampong Lampulo, Banda Aceh.

The results of research conducted by Wijayanti in 2017, titled "The Relationship between the Application of Kadarzi Behavior (Nutrition-Aware Family) and the Nutritional Status of Toddlers in Tulungagung District," found that there was a relationship between Kadarzi behavior and the nutritional status of toddlers based on weight-for-age (p=0.010) and height-for-age (p=0.000) but not weight-for-height (p=0.368). The better the application of Kadarzi behavior, the better the nutritional status

of toddlers in terms of weight-for-age and height-for-age. Mothers and all family members should apply Kadarzi behavior to prevent nutritional problems (Wijayanti & Nindya, 2017).

Control beliefs refer to beliefs about the presence of factors that can support or hinder a behavior and the perception of how strongly these factors support or hinder the behavior (perceived power). Perceived behavioral control is a function based on beliefs called control beliefs, which are an individual's beliefs about the existence or absence of factors that support or hinder them from performing a behavior. These beliefs are based on an individual's past experiences with a behavior, the information they have about the behavior from observing their own or others' knowledge, and various other factors that can increase or decrease an individual's perception of the difficulty of performing a behavior.

The more individuals perceive that there are many supporting factors and few hindering factors for a behavior, the greater their perceived control over that behavior, and vice versa. The fewer supporting factors and more hindering factors individuals perceive for a behavior, the more they will perceive it as difficult to perform. The research suggests that control beliefs influence stunting prevention in families with toddlers. Respondents with positive control beliefs tend to engage in stunting prevention more often than those with negative control beliefs. This is because respondents with strong control beliefs believe that factors supporting the monitoring of their child's growth will lead to positive behaviors, such as regularly taking their toddler to *posyandu*, providing nutritious meals, and ensuring their toddler's nutritional needs are met, all of which help prevent stunting. Conversely, respondents with weaker control beliefs tend to exhibit negative behaviors, making it less likely for them to take their toddlers to *posyandu* or provide proper nutrition, increasing the risk of stunting.

4. CONCLUSION

The results of this study indicate that there is a significant influence of behavioral belief, normative belief, and control belief on the prevention of stunting in families with toddlers in Gampong Lampulo, Kota Banda Aceh. The statistical analysis showed that all three factors had p-values less than 0.05, indicating a significant influence on stunting prevention efforts. Therefore, this research strongly supports the Planned Behavior Theory approach in promoting stunting prevention behaviors in families with toddlers.

Furthermore, there are several recommendations that can be drawn from this study. First, for researchers, it is expected that this research can enhance their skills in conducting more in-depth studies on stunting prevention in families with toddlers based on the Planned Behavior Theory approach. Second, for educational institutions, this research can serve as a reference for students to improve their skills in providing nursing care to families with a Planned Behavior Theory approach to prevent stunting in toddlers. Third, for Puskesmas Lampulo Kota Banda Aceh, this research can provide valuable input for healthcare professionals in raising awareness about the factors causing stunting and its prevention, ultimately reducing illness and mortality rates due to stunting. Lastly, for future researchers, it is hoped that this research can provide insights for those who wish to explore factors related to stunting using different variables to achieve better results in the future.

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