Factors Related to the Participation of Mothers’ Toddlers in the Stunting Prevention Program at Sicanang Health Center Medan City

**ABSTRACT**

One of the wholesome issues in the world nowadays is the issue of hindering which is being experienced by toddlers, especially in developing and poor countries. Malnutrition during the growth and development of toddlers will hinder their physical development, increase morbidity, hinder children’s mental development, and can cause death. Based on data of Medan City Health Office or Dinas Kesehatan Kota Medan, stunting cases in 2022 as of August reached 555 cases. The sub-district with the highest stunting cases was in Secanang Sub-District with the number of verified cases as of August 2022 of 61 (6.40%) cases of stunting under five. This study aims to analyze the Factors Associated with the Participation of Mothers under Toddlers in the Stunting Prevention Program in the Working Area of the Sicanang Health Center, Medan City. This research is a quantitative analytic survey research with a cross sectional design. The sample used amounted to 100 people. Data analysis used univariate and bivariate analysis. The outcomes about appeared that the related factors were Eagerness (p=0.018), Capacity (p=0.026), Opportunity (p=0.037) and Social Back (p=0.001) with the Cooperation of Moms Little children within the Stunting Avoidance Program within the Work Range of the Sicanang City Wellbeing Center Medan. Suggestions for this research are that the stunting prevention program officers are expected to conduct education about the stunting prevention program for mothers of toddlers who have stunted children or not, so that it can be prevented and treated early so that stunting rates can be reduced and nutrition can be improved from an early age. And also stunting prevention program officers can make improvements to the program by conducting socialization on how to prevent counseling in health-based community activities to coordinate with each other and have good communication.

**KEYWORDS**

willingness; ability; opportunity; social support; participation

INTRODUCTION

One of the wholesome issues in the world nowadays is the issue of hindering or stunting which is being experienced by toddlers, especially in developing and poor countries. The problem of stunting could be a frame of development and advancement disappointment in toddlers which growth disorder from the accumulation of insufficient nutrients for a very long time, namely from the time in the womb until the age of two. Malnutrition during the growth and development of toddlers will hinder their physical development, increase morbidity, hinder children's mental development, and can cause death. Toddlers with
stunting nutritional problems will have risks, namely decreased intellectual Capability, productivity and the possibility of being at risk of developing degenerative diseases in the future, so that it becomes a major threat to the quality of human resources in Indonesia (Kementerian Kesehatan RI, 2020).

The prevalence of stunting under five according to Basic Health Research (Riset kesehatan Dasar) stated that in 2018 the prevalence of stunting reached 30.8 percent, which means that one out of three under five has experienced a stunting problem. Indonesia is a country that contributes the second highest prevalence rate of stunting cases in the Southeast Asia region and ranks fifth in the world (Kementerian Kesehatan RI, 2022).

Indonesian Nutritional Status Study (Permenkes, 2010) was reported that the prevalence of stunting under five in Indonesia in 2007 was 36.8 percent, in 2010 it was 35.6 percent, in 2013 it was 37.2 percent, in 2018 it was 30.8 percent, in 2019 it was 27.7 percent, in 2020 it was 26.9 percent and it will continue to decrease in 2021 by 24.4 percent. Even though the prevalence of stunting has decreased, this figure is still considered high because the target of stunting according to the World Health Organization (WHO) should not be more than 20 percent (Kementerian Kesehatan RI, 2022).

The government continues to formulate and implement strategies by trying to reduce the number of stunting cases by issuing Presidential Regulation (Perpres, 2021) Number 72 of 2021 concerning Accelerating the Reduction of Stunting. This regulation is the legal basis for the national strategy carried out in an effort to accelerate the reduction of stunting which has been implemented since 2018. Based on the presidential regulation, it is explained that in order to accelerate the reduction of stunting, the ministries or agencies together with the common territorial government, regency/city territorial government to village government will carry out a program and create activities through strengthening planning and budgeting, increasing the quality of its implementation and increasing the quality of monitoring, ending with evaluation, reporting and improving human resources so that the target of the 2020-2024 National Medium Term Development Plan (RPJMN) is for efforts to reducing the prevalence of stunting can be realized, namely 14 percent. The team for the Acceleration of Stunting Reduction consists of a steering team and an implementing team. The chairman of the steering team is the vice president who is assisted by the coordinating minister for human development and culture and several other ministers while the chief executive is the head of the National Population and Family Planning Agency (BKKBN). Strategy from the Ministry of Health of the Republic of Indonesia for tackling stunting through specific and sensitive nutrition interventions. Specific nutrition interventions, namely directly targeting children starting from the first 1,000 days of life (HPK), including providing food to giving medicine to pregnant women and babies aged zero to 24 months. Sensitive nutrition interventions are carried out from various activities in the non-health sector development, such as improving sanitation in the environment to food security and nutrition education. Good coordination needs to be carried out between the central government and regional governments to achieve maximum through this strategy (Kementerian Kesehatan RI, 2018).

Indonesian Nutrition Status Study (SSGI) the percentage of toddlers experiencing stunting in North Sumatra Province in 2015 was 33.2 percent, in 2016 it was 24.44 percent, in 2017 it was 28.5 percent, in 2018 it was 32.4 percent, in 2019 it was 30.11 percent, in 2020 it was 29.2 percent, and it tends to decrease in 2021 by 25.8 percent (Munira, Syarifah Liza, 2023). Even though the prevalence of stunting in North Sumatra Province is decreasing every year, the government of North Sumatra must not be careless in tackling stunting cases, must always optimize stunting prevention programs so that North Sumatra does not contribute a high prevalence of stunting so that it can help the Government of Indonesia to reduce the prevalence of stunting up to figure of 20 percent according to WHO provisions.
North Sumatra Province has several districts or cities that have become the focus of stunting reduction locations, one of which is Medan City. The Regional Government of Medan City issued a policy through Medan Mayor Regulation No. 18 of 2020 concerning Convergence for Prevention of Stunting in Medan City which is carried out in an integrated, coordinated and jointly targeted geographic area and priority households to prevent stunting through nutrition interventions specific and sensitive. Efforts to improve nutrition carried out are activities carried out on an ongoing, integrated and integrated basis to maintain and improve the nutritional status of the community (Yulianti, Y., 2012). Collaboration between the health sector and the non-health sector is an effort to reduce stunting cases through preventive efforts, promotive efforts, rehabilitative efforts, as well as curative efforts carried out by the local government and the entire community (Peraturan Wali Kota Medan, 2020).

The stunting prevention program is carried out routinely and actively by the Medan City Health Office with the implementer through the Nutrition Executor (TPG) of the Public Health Center in Medan City with the target of mothers of toddlers as the direct person in charge of toddlers. The prevalence of stunting in Medan City in 2020 is 11.69 percent. However, in 2021 the prevalence of stunting is 19.90 percent through Indonesian Nutrition Status Study (SSGI) for Medan City, which has increased the prevalence of stunting by 8.21 percent (Dinas Kesehatan Kota Medan, 2021).

Medan City has 21 sub-districts with a total of 151 sub-districts. Based on data obtained from the Medan City Health Office in the Public Health Sector, stunting cases in 2021 as a verification have decreased from 491 cases to 368 cases spread across 25 sub-districts in Medan City which are the priority for stunting treatment. Whereas in 2022 as of August stunting cases have increased to reach 555 stunting cases spread across 63 sub-districts which have been designated as implementing integrated stunting reduction interventions in Medan City. The sub-districts with the highest stunting cases are in Secanang Sub-District with the number of verified cases as of August 2022 of 61 (6.40%) cases of stunting under five (Dinas Kesehatan Kota Medan, 2021).

The implementation of the stunting prevention program in Secanang Village through specific interventions was carried out by cadres who collaborated with the person in charge of stunting from the puskesmas. The program carried out by the person in charge of stunting assisted by cadres is in the form of providing additional food in the form of rice, bread and processed foods such as green bean porridge for stunted toddlers and giving milk to pregnant women with chronic energy deficiency (KEK) and to mothers who are breastfeeding under six month.

Based on the statement of the person in charge of stunting, to find cases of stunting, there must be a house-to-house search to obtain data on stunted children by checking the height and weight of the children according to age. This is because many of the mothers who have stunted children do not want to come to the posyandu so it is difficult to monitor the growth and development of their toddlers, there are some fathers of these toddlers who do not allow their children to carry out immunizations because after immunization the toddlers have a fever and some are caused by the distance and time of implementation of the posyandu (Notoatmodjo, S. 2012). according to the mother or father who works so they don’t have time to come to the posyandu.

Based on a subsequent survey conducted by researchers in Secanang Village, few of the mothers who had toddlers participated in the posyandu, such as at Posyandu Melati that from the data there were mothers who had as many as 100 toddlers but around 30 mothers were present at the posyandu, and many of the mothers were very late came to do posyandu.
Based on the background that has been described, it is necessary to conduct research on the Factors Associated with the Participation of Mothers under Toddlers in the Stunting Prevention Program in the Work Area of the Sicanang Health Center, Medan City.

**RESEARCH METHODS**

This research is a quantitative study with a Cross Sectional Study design. The population in this study were toddlers living in the Working Area of the Sicanang Health Center. The sample size in this study was 100 people. Inclusion criteria: 1). Mothers of toddlers who are willing to be interviewed and answer questionnaire questions from researchers. Exclusion criteria: 1). Mothers of toddlers who are not at home, who are sick or are being treated in hospital, and who do not have a MCH book (pink book).

Method of collecting data use primary and secondary data. Primary data was obtained directly from structured interviews with respondents using a questionnaire including willingness, Capability, opportunity, social support (community leaders, cadres, family) and the respondent's participation in the stunting prevention program. The secondary data used by the researchers were KMS books for toddlers at the research locus, data from the research locus of the puskesmas, data from the Medan City Health Office, data from the sub-district which was the locus of research and a search of literature related to scientific research.

**Dependent Variable**

1. Participation of mothers under five in the stunting prevention program:
   - High
   - Low

**Independent Variable**

1. Will:
   - High
   - Low
2. Capability;
   - High
   - Low
3. Occasion:
   - High
   - Low
4. Social Support:
   - High
   - Low

Data analysis method used Univariate analysis carried out to get an overview of the variables of Participation, Willingness, Capability, Opportunity and Social Support for Toddler Mothers' Participation in the Stunting Prevention Program in the Work Area of the Sicanang Health Center, Medan City. Bivariate analysis is useful to see the relationship between the independent variables (Willingness, Capability, Opportunity and Social Support) with the dependent variable (Participation).
RESULTS AND DISCUSSION

Table 1. Univariate Analysis Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>n=100</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>Low</td>
<td>61</td>
<td>61</td>
</tr>
<tr>
<td>Capability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Low</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Occasion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td>Low</td>
<td>59</td>
<td>59</td>
</tr>
<tr>
<td>Social Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>Low</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td>Participation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Low</td>
<td>70</td>
<td>70</td>
</tr>
</tbody>
</table>

In the Willingness variable, the respondents who have a high willingness are as many as 39 people (39%), and low willingness is as many as 61 people (61%). Based on the Capability variable, 40 people (40%) have high abilities and 60 people (60%) have low abilities. Based on the Opportunity Variable Most of the respondents had a low Occasion of 59 people (59%), while respondents who had a high Occasion were 41 people (41%). Based on the Social Support variable, it was found that most of the respondents had low social support, namely as many as 57 people (57%), while high social support was as many as 43 people (43%). Based on the variable Participation of mothers under five in the stunting prevention program, it was found that the majority of respondents lowered the participation of mothers under five in the stunting prevention program, namely 70 people (70%), while participation was high, namely as many as 30 people (30%).

Table 2. Results of Bivariate Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Participation of Toddler Mothers in the Stunting Prevention Program</th>
<th>p. value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Will</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>17</td>
<td>43,6</td>
</tr>
<tr>
<td>Low</td>
<td>13</td>
<td>21,3</td>
</tr>
<tr>
<td>Capability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>17</td>
<td>42,5</td>
</tr>
<tr>
<td>Low</td>
<td>13</td>
<td>21,7</td>
</tr>
<tr>
<td>Occasion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>17</td>
<td>41,5</td>
</tr>
<tr>
<td>Low</td>
<td>13</td>
<td>22</td>
</tr>
<tr>
<td>Social Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>18</td>
<td>41,9</td>
</tr>
<tr>
<td>Low</td>
<td>12</td>
<td>21,1</td>
</tr>
</tbody>
</table>
The results of the chi-square test show that of the 4 independent variables, all variables have a significant relationship with the participation of mothers under five in the stunting prevention program, namely willingness (p-value = 0.018), Capability (p-value = 0.026), opportunity (p-value = 0.037) and Social Support (p-value = 0.025). This is indicated by the sig-p values of the 4 variables whose p.value is less than 0.05.

The Relationship between Will and Toddler Mother's Participation in the Stunting Management Program in the Work Area of the Sicanang Health Center, Medan City

It showed that there is a relationship between willingness and the participation of under-five mothers in the stunting prevention program with a p-value = 0.018. The results of this study concluded that the willingness of mothers of toddlers to participate is still low.

The low participation of mothers in the stunting prevention program, presumably because mothers do not understand the risks of their children when they do not participate in immunizations, as in the field, mothers do not participate in immunizations because they are busy taking care of housework, no family accompanies or escorts mothers to carry out immunizations. Mothers who are sick or their children who are sick, and mothers who are told that their child is stunted no longer want to attend for immunizations.

This is due to the mother's poor understanding of the stunting program, the mother only checks or carries out immunization without knowing the benefits of the immunization until the mother believes that the child is stunted due to genetic or hereditary factors from the child's parents and the mother also says bringing her child to the health center is only only when sick. Besides that, the majority of mothers said they had never monitored their child's height properly, only asked more about their weight.

Septamarini et al (2019), that the mother’s lack of understanding about stunting is clearly related to the mother's willingness to work on her actions in dealing with stunting. In this study, mothers wanted to carry out health service checks such as routine immunization because it was for the health of their children without understanding that not only immunization was required, but starting from 1000 HPK, carrying out IMD, giving colostrum to exclusive breastfeeding until toddlers aged six months and providing food nutritional supplements must also be considered properly so that specific nutritional interventions can run optimally.

Nurbaiti's research (2017) it is also in line with this study, where the mother's will affects participation. One of the reasons is the level of mastery of information about the program is a factor that can cause a person's willingness to participate. According to research by Nurbudiwati, et al (2020), which states that the community's willingness to participate in preventing stunting is based on the fact that the community knows the impact of stunting which can pose a risk to their children's future, so that the community is motivated to want to participate in programs regarding stunting prevention, because people don't want the effects of stunting to happen to their children. With this willingness, the community abandoned things that could hinder the community from participating and the community prioritized participating in programs regarding stunting.

The hope of getting benefits from the activities participated in is a source of motivation for mothers of toddlers so that they can continue to actively participate in dealing with stunting, so that it can be concluded that with high maternal willingness, the stunting program should be implemented properly so that it can reduce stunting rates even lower.

It is stated that one's participation should be based on one's own awareness, belief and will, because this will benefit him, because he does not feel forced so that participating in activities can be carried out voluntarily (Chandra, Bastian Rahmadi and Humaedi., 2020).
Correlation between Capability and the Participation of Mothers under Toddlers in the Stunting Management Program in the Work Area of Sicanang Health Center, Medan City

There is a relationship between Capability and the participation of under-five mothers in the stunting prevention program with a p-value = 0.026. Capability is measured using nine questions on the questionnaire and it can be concluded from the questions that dominate the answer is not willing so that the Capability is declared low. It could be concluded that the Capability of mothers under five in participation is still low.

Community Capability is indirectly influenced by community education (Waryana, 2017). Education is an effort so that humans can develop their potential through a learning process to improve their cognitive and physical abilities. The higher the level of one's education, the higher the Capability of self-potential, changes in attitude and behavior. A high level of education also increases the Capability to process thought in accepting new things in society, has the Capability to choose to act based on knowledge (Sujarwo., Tristanti., and Santi, Fitta Ummaya. 2017).

Nurbudiwati, et al (2020) which states that the community's Capability to participate is influenced by their level of education. The higher a person's education level, the easier it will be to understand the information provided about health such as information about good nutrition or information about stunting prevention, so that people have the Capability to apply the information they have obtained to their daily lives. This is proven that most mothers whose children are stunted in Leuwigoong Village have low education.

Cognitive abilities in understanding an object can come from various sources such as social media, informal and formal education, so that the Capability to understand stunting helps to improve children's nutrition in order to achieve a child's normal height so that stunting incidents do not easily arise (Robinson, Peter. 2012). Mother's cognitive Capability also determines for mothers to behave well in implementing health behaviors for their families such as toddlers having to get exclusive breastfeeding, selection and processing of additional food for toddlers, and good nutritional intake for toddlers.

Somebody will take an interest on the occasion that they feel that the issue or movement is imperative. This strategy can be successfully accomplished on the occasion that the individuals themselves have been able to decide issues or activities, and have designated their interface, not from untouchables telling them what to do (Chandra, Bastian Rahmadi., and Humaedi., 2020).

The Relationship between Opportunity and the Participation of Mothers under Toddlers in the Stunting Management Program in the Work Area of the Sicanang Health Center, Medan City

There is a relationship between Opportunity and the Participation of Under-five Mothers in the Stunting Prevention Program with a p-value = 0.037. The low participation of mothers in the stunting prevention program in the city of Medan is due to the lack of opportunities given to respondents to participate so that this influences whether mothers can participate or not. Opportunity is measured using nine questions on the questionnaire and it can be concluded from the questions that dominate the answers do not want so that the opportunity is declared low. The results of this study concluded that the opportunity for mothers of toddlers to participate is still low.

It is influenced, among other things, because mothers who have toddlers in the city of Medan so far feel that they have not been given individual information from health workers about how to deal with stunting properly and have not been given the opportunity to all...
mothers who having toddlers to participate in stunting counseling, only mothers whose children are recorded as stunting can experience stunting-related programs, while stunting prevention programs must be exposed to all mothers who have toddlers so that they can prevent and overcome stunting optimally to reduce stunting rates in Sicanang Community Health Center Work Area, Medan City.

Nurbudiwati, et al (2020), this opportunity is inseparable from the program organizers, namely health workers and across sectors in providing space for the community to participate in stunting prevention. In addition, there is an opportunity to participate due to environmental conditions or conditions where the community is aware that the community has the opportunity or opportunity to participate in stunting prevention programs, such as mothers who are not too preoccupied with work so they have the opportunity to participate, such as participating in activities cleaning the environment, diligently going to posyandu and so on. This statement was also expressed that the delivery of information is not comprehensive and not fully understood by mothers of toddlers as there are still many mothers of toddlers who are unfamiliar with the term stunting so that this becomes one of the obstacles in dealing with stunting if it is not given proper attention. So that mothers must be exposed and given equal opportunities to optimize the handling of stunting (Asmariyah, A., Novianti, N., & Suriyati, S. 2021).

The Relationship between Social Support and the Participation of Mothers Under Five in the Stunting Management Program in the Work Area of the Sicanang Health Center, Medan City

It show that there is a relationship between social support and the participation of mothers under five in the stunting prevention program with a p-value = 0.025. Social and family support factors have a significant relationship with the provision of specific nutritional interventions (Cahyani, et al, 2019). This social support includes social support in the form of expressions of empathy, care and concern for the person concerned, support in the form of awards, informative support and instrumental support. This will be a good support for respondents to carry out activities that are needed by toddlers and can overcome health problems in toddlers (Muthia, Gina., Edison, Edison., Eny, Yantri. 2019).

Where cadres encourage mothers of toddlers to participate by informing them of invitation letters for activity notifications, direct invitations to mothers of toddlers, notifications through groups on social media, and can place one Posyandu cadre in each alley as a mover stunting (Asmariyah, A., Novianti, N., & Suriyati, S. 2021).

The effect of social support from the family which states that family support for mothers' participation in preventing stunting in their toddlers at the Nanga Mau Health Center shows a direct effect of 19.66 percent while for the indirect effect between family support on participation mothers in preventing stunting in their toddlers at the Nanga Mau Health Center through mother's motivation of 11.48 percent (Ife, J. & Tesoriero, F. 2006). The T-statistic value is 2.579292 and is significant at $\alpha = 5$ percent. The value of the T-statistic is $> (1.96)$. It can be explained that the direct effect of family support is greater in value than the indirect and significant positive influence of the two variables.

CONCLUSIONS

1. There is a relationship between Willingness and the Participation of Under-five Mothers in the Stunting Management Program in the Working Area of the Sicanang Health Center, Medan City.
2. There is a relationship between Capability and the participation of under-five mothers in the stunting prevention program in the working area of the Sicanang Health Center, Medan City.
3. There is a relationship between Opportunity and the Participation of Under-five Mothers in the Stunting Management Program in the Working Area of the Sicanang Health Center, Medan City.
4. There is a relationship between Social Support and the Participation of Under-five Mothers in the Stunting Management Program in the Working Area of the Sicanang Health Center, Medan City.

Suggestion
1. It is trusted that the stunting control program officers will conduct education regarding the stunting prevention program for mothers of toddlers who have stunted children or not, so that it can be prevented and treated early so that stunting rates can be reduced and nutrition can be improved from an early age. And also stunting prevention program officers can make improvements to the program by conducting socialization on how to prevent counseling in health-based community activities to coordinate with each other and have good communication.
2. To the Medan City Government, the implementation of the program that has been implemented is good enough to reduce stunting rates even lower, but to prevent stunting we must be able to change the behavior of stunting targets, especially mothers in their understanding of stunting prevention and overcoming, so that we are able to complete stunting problem together. By increasing supervision of the implementation of the program so that it can make improvements if the program is not running well.

REFERENCES


