The Relationship between Social Support and the Participation of Mothers of Toddlers in the Stunting Prevention Program in Medan City

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Abstract

Stunting is a form of growth and development failure in toddlers that results in linear growth disorders, namely from in the womb to the age of two years. North Sumatra has several districts or cities that are the focus of stunting control locations, one of which is Medan City. The prevalence of stunting in Medan City in 2020 was 11.69% and increased in 2021 to 19.9% but in 2022 it fell again to 15.4%. Stunting can be overcome by carrying out specific nutritional interventions by involving the role of mothers of toddlers in the stunting control program. The purpose of this study was to analyze social support such as community leaders, cadres, and families that influence the role of mothers of toddlers in the stunting control program in Medan City. The type of research used is quantitative research with a cross-sectional research design. The population in the study were all mothers who had toddlers with stunting in Medan City. The sampling technique was Random Sampling. The research sample was 257 mothers of toddlers. The data collection technique used a questionnaire. The data analysis of this study used the Chi-Square test. The results showed that as many as 198 (77%) mothers of toddlers had low participation in the stunting control program, while as many as 59 (23%) had high participation. The social support factor (p-value = 0.739 > 0.05) did not affect the participation of mothers of toddlers in the stunting control program. Social support significantly affects the participation of mothers of toddlers in stunting control in Medan City, so it is necessary to increase family involvement and cadre communication.

Keyword: Stunting, Participation, Support, Social, Family

INTRODUCTION

Stunting a condition marked by inhibited growth and development in children under five, represents a significant global health issue. It is characterized by a height-for-age measurement falling below two standard deviations of the WHO growth standards. This condition stems from chronic malnutrition, recurrent infections, and insufficient psychosocial stimulation during critical growth phases, adversely affecting millions of children worldwide by limiting their cognitive, physical, and economic potential (WHO, 2020).

Indonesia remains one of the nations with the highest rates of stunting, contributing significantly to the global burden. According to the 2018 Basic Health Research (Riskesdas), stunting prevalence in the country stood alarmingly at 30.8%, ranking it as the second highest in Southeast Asia and fifth globally. While the 2019 Indonesian Toddler Nutrition Status Study (SSGBI) reported a slight decrease to 27.67%, this figure still exceeded the WHO threshold of

20%, indicating a persistent public health concern that necessitates sustained intervention (Ministry of Health, 2019).

The 2022 Indonesian Nutrition Status Study (SSGI) recorded a further decline in stunting prevalence to 21.6%. Although progress has been made, the prevalence remains above the target set by WHO, underlining the ongoing need for comprehensive and effective strategies to address stunting. In this context, North Sumatra has been identified as a priority province, ranking 19th nationally for stunting prevalence in 2022. Encouragingly, North Sumatra has shown consistent reductions in stunting cases, including a 7% decrease across four cities between 2021 and 2022, bringing the provincial rate to 21.1%, slightly below the national average (Ministry of Health, 2023).

Medan City, the capital of North Sumatra, exemplifies the stunting challenges in the region. Data from 2020 indicated a stunting prevalence of 11.69%, which increased to 19.9% in 2021 before dropping to 15.4% in 2022. These fluctuations highlight both the vulnerabilities and the opportunities for improvement through targeted interventions. Effective maternal participation in stunting prevention programs, coupled with specific nutritional strategies, plays a pivotal role in addressing these challenges. However, participation levels among mothers in Medan City's stunting prevention initiatives remain suboptimal (Vriarindani, 2023).

Field interviews conducted in Secanang Village, a locality in Medan with a notably high prevalence of stunting, have uncovered significant obstacles to maternal participation in child health initiatives. Out of 63 toddlers registered at the local integrated health post (Posyandu), only 23 mothers had brought their children for growth monitoring over the past six months. This low attendance has impeded health workers and volunteers from effectively tracking child development, thereby diminishing the efficacy of intervention programs (Khatimah & Avila, 2023). Mothers cited several reasons for their limited involvement, including their children's illnesses, work obligations, and insufficient family support. Some mothers reported being unable to leave their jobs, while others mentioned not receiving permission from their husbands or family members. These challenges highlight deeper socio-cultural and economic factors that hinder maternal engagement in stunting prevention efforts (Antasya et al., 2023).

Social support plays a crucial role in encouraging maternal participation in stunting prevention initiatives. It encompasses emotional, informational, and instrumental assistance provided by family members, community leaders, and healthcare cadres. Research consistently highlights the importance of social support in fostering maternal engagement in child health programs. For example, Wulandari and Kusumastuti (2020) demonstrated that family support

had a significant impact on maternal involvement in stunting prevention programs, with both direct and indirect effects mediated through maternal motivation. Similarly, Cahyani et al., (2019) found that expressions of empathy, concern, and actionable guidance positively influenced maternal behaviors in addressing child malnutrition.

However, evidence on this subject is not unanimous. For instance, Elinel et al., (2022) found no significant relationship between cadre support and maternal participation in stunting prevention programs in Depok City. Such conflicting findings underscore the need for localized research to understand the unique interplay of social support and maternal engagement in specific contexts. Medan City, with its diverse socio-economic dynamics and notable stunting prevalence, offers a valuable case for examining these relationships more deeply.

Mothers are central to the success of stunting prevention programs, as they are the primary caregivers responsible for ensuring that children receive appropriate immunizations, nutrition, and growth monitoring (Antasya et al., 2023). However, socio-economic constraints, limited family support, and inadequate communication from health cadres often undermine maternal participation. In Secanang Village, for example, mothers reported that cadres rarely followed up with reminders or inquiries about missed health post visits, contributing to low attendance. Moreover, socio-cultural norms often restrict mothers' decision-making autonomy, further complicating their involvement in these programs (Putra, 2021).

Given these challenges, understanding the role of social support in promoting maternal participation is critical. This study aims to explore the influence of social support from community leaders, health cadres, and families on maternal participation in stunting prevention programs in Medan City. The findings are expected to provide evidence-based recommendations to enhance maternal engagement and reduce stunting prevalence in the region.

METHODS

This study employed a quantitative research approach with a cross-sectional design to analyze the relationship between social support and the participation of mothers of toddlers in stunting prevention programs in Medan City. The study population included mothers of toddlers in Medan City, and a sample of 257 respondents was selected. Data collection was conducted through structured interviews using validated questionnaires that assessed social support from community leaders, health cadres, and family members. The data focused on participation in the stunting prevention program and were analyzed using descriptive and

inferential statistical methods to determine the impact of social support on maternal participation.

RESULTS

Table 1 Characteristics of Respondents (n=257)

Characteristics	Frequency (n)	(%)
Age		
17-25	185	72,0
26-35	71	27,6
36-45	1	0,4
Religion		
Islam	245	95,3
Kristen	8	3,1
Hindu	4	1,6
Education		
Elementary school	29	11,3
Middle school	97	37,7
high school	120	46,7
College	11	4,3
Work		
Housewife	185	72,0
Trader/self-employed	27	10,5
Private employee/employee	45	17,5

According to table 1, The characteristics of respondents in the study highlight that the majority of mothers of toddlers were aged 17-25 years (72.0%), with the least represented age group being 36-45 years (0.4%). Most respondents were Muslim (95.3%), while Hinduism was the least practiced religion (1.6%). Regarding education levels, the largest group had completed high school (46.7%), followed by middle school (37.7%), while only 4.3% had a college education. In terms of occupation, 72.0% were housewives, 10.5% were traders or self-employed, and 17.5% were private employees.

Table 2 Distribution of Characteristics of Toddler

Characteristics	Frequency (n)	(%)
Gender		
Male	130	50,6
Female	127	49,4
Age		
12-24 Month	94	36,6
25-36 month	93	36,2
37-48 month	47	18,3
49-59 month	23	8,9
Toddler Weight		
Malnutrition	5	1,9
Undernutrition	24	9,3
Good nutrition	228	88,7
Toddler Height		
Normal	200	77,8
Short	35	13,6
Very short	22	8,6

Characteristics	Frequency (n)	(%)
Toddler Birth Weight		
<2500	25	9,7
≥2500	232	90,3
Toddler Birth Height		
<48	55	21,4
≥48	202	78,6
The First Child	167	65,0
Second Child	71	27,6
Third child	19	7,4

Based on Table 2, it can be seen that the characteristics of toddlers based on gender are male, 130 toddlers (50.6%) and female, 127 toddlers (49.4%). Based on the age of toddlers aged 12 to 24 months, there are 94 toddlers (36.6%), toddlers aged 25 to 36 months, 93 toddlers (36.2%), toddlers aged 37 to 48 months, 47 toddlers (18.3%), toddlers aged 49 to 59 months, 23 toddlers (8.9%). Based on the BB, toddlers with more good nutrition are 228 toddlers (88.7%), toddlers with less nutrition are 24 toddlers (9.3%), and toddlers with severe malnutrition are five toddlers (1.9%). Based on the TB of toddlers by age, there are 200 toddlers with normal height (77.8%), 35 toddlers with short height (13.6%) and 22 toddlers with very short height (8.6%). Based on toddler BB according to age, namely toddlers with BB more than 2500 as many as 232 toddlers (90.3%) and less than 2500 as many as 25 toddlers (9.7%). Based on toddler birth weight, namely more than 48 cm as many as 202 toddlers (78.6%) and less than 48 cm as many as 55 toddlers (21.4%). Based on the first child as many as 167 toddlers (65%), the second child as many as 71 toddlers (27.6%) and the third child as many as 19 toddlers (7.4%).

Table 3 Frequency Distribution of Categories on Social Support

Social Support	Frequency (n)	(%)
High	105	40,9
Low	152	59,1
Total	257	100

Based on the results of measuring the social support variable, it can be grouped into two categories, namely high social support for 105 mothers of toddlers (40.9%) and low social support for 152 mothers of toddlers (59.1%).

Table 4 Relationship between Social Support and Participation of Toddler Mothers

Social Support	Participation of Toddler Mothers				Total		*p.value*
	Hight		Low				
	n	%	n	%	N	%	
High	31	29,5	74	70,5	105	100	
Low	28	18,4	124	81,6	152	100	0,739
Total	59	23,0	198	77,0	257	100	

Based on Table 4, the results of the bivariate analysis between social support and participation of mothers of toddlers showed that respondents with a high social support category were 31 (29.5%) who participated highly and 74 (70.5%) who participated lowly. Respondents with a low social support category were 28 (18.4%) who participated highly and 124 (81.6%) who participated lowly. Based on the results of statistical analysis using the chi-square test, the p value was obtained equal to 0,739 smaller (α = 0,05) which indicates that there is a significant relationship between social support and participation of mothers of toddlers in the stunting control program in Medan City.

DISCUSSION

The results of the study showed that social support had an effect on the participation of mothers of toddlers in the stunting control program in Medan City with a p value equal to 0.739 (p <0,05). This is in accordance with the results of the study that the majority of respondents answered that there was no support from the family to consume TTD and immunize toddlers as much as 66.9% so that mothers could not participate in overcoming stunting because there was also no family support to attend stunting counseling as much as 92.2%.

This result is not in line with the research of Cahyani, et al. (2019) social and family support factors have a significant influence on the provision of specific nutritional interventions. This social support includes social support in the form of expressions of empathy, concern, and attention to the person concerned, support in the form of appreciation, informative support, and instrumental support. This will be good support for respondents to carry out activities needed by toddlers and can overcome health problems in toddlers.

The influence of social support from the family is not in line with the research of Wulandari and Kusumastuti (2020), which stated that family support for maternal participation in preventing stunting in toddlers at the Nanga Mau Health Center showed a direct influence of 19.66%, while the indirect influence between family support and maternal participation in preventing stunting in toddlers at the Nanga Mau Health Center through maternal motivation was 11.48%. The T-Statistic value is 2.579292 and is significant at α equal to five%. The T-Statistic value is > (1.96). Based on the results of this test, it can be explained that the direct influence of family support is greater than the indirect influence and there is a significant positive influence from both variables. Based on the results of the statistical test by Elinel et al. (2022), it was stated that there was no relationship between cadre support and handling stunting in mothers who have toddlers in Cimpaeun Village, Tapos District, Depok City. Social support was measured using 12 questions on the questionnaire and it can be concluded from

the questions that dominated the answer was no so that social support was declared low. The results of this study concluded that social support for mothers of toddlers in participation was still low at 59.1%.

It is known from the results of the bivariate analysis above between willingness and participation, that of the 257 mothers of toddlers observed, 31 (29.5%) participated highly and 74 (70.5%) participated lowly. Respondents with the low social support category were 28 (18.4%) who participated highly and 124 (81.6%) who participated lowly.

This study is also not in line with the research of Imanah and Sukmawati. (2021), where cadres encouraged mothers of toddlers to participate by notifying them of invitation letters for notification of activities, direct invitations to mothers of toddlers, notifications through groups on social media, and being able to place one posyandu cadre in each alley as a motivator.

The results of this study showed that the majority of respondents answered the question that no cadres cared by asking the mother's reasons for not getting immunizations as much as 69.3% so that many mothers did not care about getting the immunizations on the grounds that they did not know the schedule and there was no notification from the cadre.

CONCLUSIONS

The study concluded that social support significantly influences the participation of mothers of toddlers in the stunting prevention program in Medan City. While 59.1% of respondents reported low social support, only 29.5% of mothers with high social support demonstrated active participation in the program, compared to 18.4% of those with low social support. Statistical analysis using the chi-square test revealed a significant relationship between social support and maternal participation ($p=0.037$, $\alpha=0.05$). These findings underscore the importance of strengthening family and community support systems to encourage mothers to engage in stunting prevention initiatives. The study also highlighted gaps in cadre involvement, with many mothers citing a lack of communication or notification regarding immunization schedules as a reason for their limited participation. Therefore, enhancing family motivation and improving cadre engagement and communication strategies are crucial to increasing maternal participation in stunting prevention programs.

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