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Original Research Article

THE ANALYSIS OF HEALTH PROMOTION STRATEGIES ON COMMUNITY PARTICIPATION IN PREVENTING STUNTING FOR MOTHERS WITH TODDLERS AT BANGUN PURBA SUB-DISTRICT

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ABSTRACT

Introduction. Stunting is a growth disorder in children under five due to chronic malnutrition and recurrent infections. Therefore, efforts are needed to increase community participation in preventing stunting and the strategy to implement a health promotion strategy. Bangun Purba sub-district has been included in the stunting locus since 2020. This study aimed to analyze health promotion strategies (advocacy, partnerships, and community empowerment) on community participation in stunting prevention. **Method.** This type of research was a mixed method with an explanatory sequential design with a quantitative approach of interviewing 131 respondents and qualitative with in-depth interviews with 10 informants. The data were analyzed using univariate, bivariate and multivariate analysis (logistic regression). **Result & Analysis.** The results showed that 49.6% of respondents stated that advocacy was not good, there was an influence between advocacy and community participation (p=0.046), but the implementation of advocacy was good enough, along with public commitment and government support. The partnership was stated by 72.2% of respondents in the not good category because partnerships in stunting prevention not implemented optimally, there was an influence between partnerships on community participation (p=0.042). Community empowerment was stated by 72.5% of respondents in not good category due to activities not running actively, there was an influence between community empowerment on community participation (p=0.038). The community empowerment variable was the greatest variable influence on community participation with OR = 0.536. **Discussion.** Good coordination and synergize well in the prevention and control of stunting so that Deli Serdang Regency becomes a stunting-free Regency.

Keywords: Health Promotion Strategies, Participation, Stunting.

INTRODUCTION

Stunting is become a global problem, including in Indonesia. Inadequate nutritional fulfillment from the womb until the baby is born can cause various health problems that affect the mother and baby. Stunting will impact the human resources quality. Based on data collected by WHO, 149.2 million toddlers' under-fives years old worldwide are stunted and shows that Indonesia is one of the three countries with the highest prevalence in Southeast Asia region. Since the differences between normal and stunted children are not very obvious at that age, stunting in children

under the age of five is typically not recognized (Aprihatin *et al.*, 2022).

Based on SSGI data, the stunting rate in Indonesia in 2022 is 21.6%. This is still above the target of reducing stunting prevalence in RJPMN 2020-2024 which is below 14%. In accordance with the targets of the SDG'S, the development of public health and nutrition in Indonesia for 2020-2024 is directed to support the Healthy Indonesia Program by improving the health status and nutritional status of the community through the health efforts and community empowerment.

Based on SSGI data in 2021, the prevalence of stunting in North Sumatra Province was 25.8%, and turn into one of the three provinces with still-concerning stunting rates. Out of a total of 33 districts and cities, 15 cities are in red category with a prevalence of over 30%. One of them is Deli Serdang, which is included in 15 cities that are prioritized for overcoming stunting cases. Based on Deli Serdang District Health Profile, the stunting prevalence rate was 22.1% in 2021. It was found that Bangun Purba Sub-district is the only sub-district that has the highest stunting rate out of 25 districts in Deli Serdang, which is 18.78%. This is the main reason that the researchers are interested in conducting research on stunting problem in Bangun Purba Sub-district.

According to Rahayu, et al (2018), stunting is associated with birth weight, diarrhea, maternal knowledge and education level, family income, and sanitation. optimal nutrient intake supports the growth and development of toddlers in physically, psychologically, and motorically (Natanagara and Putu Wiliska Wilasitha, 2022). According to Olsa, et al (2018) maternal attitudes and knowledge have a significant relationship with stunting. The decrease in stunting prevalence rate can be achieved when the all levels of society put their best effort. Th efforts to reduce stunting require nutrition interventions that are integrated, including nutrition-specific and nutrition-sensitive interventions. Several domestic and foreign studies have shown that the success of integrated approaches conducted on priority targets in focus locations to prevent and reduce stunting. These efforts require behavior change through a health promotion strategy.

Health promotion strategies are ways or steps needed to facilitate or accelerate the achievement of health promotion goals. There are 3 basic health promotion strategies including advocacy, partnerships and community empowerment. These three strategies are the training for the community to be able to participate and take an active role in preventing the problem of stunting in their environment.

This is in line with Rezeki (2013) which shows that there is a significant relationship between advocacy and the PHBS program in Seikijang Health Center area, Pelalawan that PHBS in the area is less effectively implemented as a result of improperly socializing advocacy. The problems in the implementation of health promotion strategies are the low creativity and innovation of health workers, lack of attention and responsibility from health workers, village midwives, cadres as well as PKK. According to Anggraini (2020), the lack of community involvement or participation in efforts to prevent stunting toddlers can lead to community dependence on government programs.

It is necessary to prevent stunting in children under five, either directly (specific nutrition intervention) or indirectly involving cross-sectors and communities in the provision of food, clean water and sanitation, poverty alleviation, education, social, and so on (Wahyuningsih et al., 2022). Health promotion strategies cannot implement well when there is no public awareness to participate in efforts to prevent the stunting in their village. Based on the description above, the researcher is interested in conducting research on the analysis of health promotion strategies on community participation in preventing stunting in mothers with toddlers in Bangun Purba District.

METHOD AND ANALYSIS

This type of research uses a combination method (mixed method) with an explanatory sequential research design. According to Creswell (2011), mixed research method is a research approach that combines quantitative research with qualitative research. The first stage is conducted by collecting and analyzing quantitative data, and the second stage is collecting and analyzing qualitative data based on the preliminary results of quantitative data. This research was conducted in Bangun Purba Subdistrict, Deli Serdang.

The sample in this research was 131 respondents that consists of mothers with toddlers (0-59 months). The sample determination was conducted using Isaac and Michael formula. In this research, the method used to obtain the distribution of research samples is the acquisition of a class random sample (Cluster Random Sampling), where a group of analysis units are geographically close to each other. The class division can be measured by taking 25% of the total villages in Bangun Purba Sub-district in 24 villages. Therefore, 6 villages were obtained as sample clusters in this research that conducted using purposive sampling technique (Sugiyono, 2019).

Informants in this research are those who know and have various key

information needed in the research with the principle of suitability until reaching data saturation consisting of Head of P2KBP3A Division of Deli Serdang Regency, the Head of Bangun Purba Sub-District, UPTD KB, Head of Puskesmas Sialang PLKB, Toma and Toga and mother participants with toddlers.

The variables in this research consist of dependent and independent variables. The dependent variable in this research is community participation in preventing stunting in mothers with toddlers under five, while the independent variables include advocacy, including policies, facilities and infrastructure, human resources, data and funds. The partnerships are meetings, information dissemination and cross-sector cooperation, and the community empowerment includes the formation of nutrition posts, nutrition cadres, KPM and organizing health groups.

The data collection methods in this research include primary data and secondary data. The quantitative data was obtained by interviewing respondents using questionnaires, while data collection in qualitative research was conducted by in-depth interviews with key informants and guided by interview guidelines that was previously prepared. The measurement method in this research is the measurement of independent variable, called health promotion strategy which includes advocacy, partnership, community empowerment to determine its influence on dependent variable, namely community participation in stunting prevention efforts. The categories and variable measurement scales can be seen in the following table:

Table 1. The Categories and Measuring Variables Scale

Variable	Categories	Measurement Scale
Advocacy	Good, when score >7 Not good, when score ≤ 7	Ordinal
Partnership	Good, when score >7 Not good, when score ≤ 7	Ordinal
Community Empowerment	Good, when score >7 Not good, when score ≤ 7	Ordinal
Community Participation	Good, when score >7 Not good, when score ≤ 7	Ordinal

Quantitative data analysis was conducted by univariate analysis, bivariate using the chi-square test and multivariate by logistic regression test. Qualitative data analysis was analysed by identifying similarities and differences in answers from informants through content analysis to make conclusions. The steps of

qualitative data analysis are to use four related components, including data collection, data reduction, data presentation and conclusion or verification.

RESULTS

The Overview of Research Location

Geographically, Bangun Purba Sub-district is one of 22 sub-districts in Deli Serdang and has an approximately area of 129.95 km2. The population in Bangun Purba Sub-district is generally inhabited by Simalungun Batak ethnic group, the Karo Batak ethnic group, and the Javanese ethnic group. The geographical location of Bangun Purba Sub-district is at 3º30' - 3º42' North latitude 98º74' - 98º85' East longitude. Demographically, Bangun Purba Sub-district has a total population of 26,146 with a female population that almost equal to male population of 13,057 people and a female population of 13,089 people. The population density in each village in Bangun Purba Sub-district is quite diverse with Sialang Village with highest density of 14.39 people/km2 and the lowest area in Sibaganding Village at 0.23 people/km2.

Table 2. The Distribution of Respondents' Characteristics

Characteristic	n	%
Age		
Teenagers (17-25 years)	32	24.4
Early adult (26-35 years)	77	58.8
Late adult (36-45 years)	20	15.3
Early elderly (46-55 years)	2	1.5
Education		
Elementary School	22	16.8
Junior High School	36	27.5
Senior High School	56	42.7
Diploma	11	8.4
Bachelor Degree	6	4.6
Occupation		
Housewife	88	67.2
Self-employed	11	
Farmer	15	11.5
Civil Servant	7	5.3
Seller	10	7.6
Number of Toddlers		
1 toddler	102	77.9
2 toddlers	24	18.3
3 toddlers	5	3.8
Toddler Age		
< 24 Month	89	67.9
≥ 24 Month	42	32.1

Respondents' Characteristics

Respondents in this research were mothers with toddlers and resided in Bangun Purba District, totaling 131 people. The distribution of respondent characteristics based on the table 2 above, it is known that most respondents are in the early adult age group (26-35 years) with 77 people (58.8%), with high school education of 56 people (42.7%), work as a housewife with 88 people (67.2%). 102 mothers (77.9%) are having one toddler with 89 moms (67.9%) have toddlers aged <24 months

Health Promotion Strategy

The health promotion strategies are advocacy, partnerships and community empowerment are as follows:

Advocacy

The category of respondents' advocacy for community participation in stunting prevention among mothers with toddlers under five years old can be seen in the following table:

Table 3. Frequency Distribution of Advocacy Categories

Advocacy	n	%
Good	66	50.4
Not Good	65	49.6
Total	131	100.0

Based on the table above, it is known that 66 respondents (50.4%) stated that advocacy was good in preventing stunting and 65 respondents (49.6%) stated that advocacy was not good in preventing stunting.

Partnership

The category of respondents' partnership towards community participation in the prevention of stunting among mothers in with toddlers under five years old can be seen in the following table:

Table 4. Frequency Distribution of Partnership

Partnership	n	%
Good	23	17.6
Not Good	108	82.4
Total	131	100.0

Based on the table above, it is known that most of the respondents who stated that the partnership was not good are 108 people (82.4%) and respondents who stated that the partnership was good are 23 respondents (17.6%).

Community Empowerment

The category of respondents' partnership towards community participation in the prevention of stunting among mothers with toddlers under five years old can be seen in the following table:

Table 5. Frequency Distribution of Community Empowerment Categories

Community Empowerment	n	%
Good	36	27.5
Not Good	95	72.5
Total	131	100.0

Based on the table above, it is known that most respondents stated that community empowerment was not good are 95 people (72.5%) and respondents

who stated that community empowerment was good are 36 people (27.5%).

Community Participation

The category of respondents' partnership towards community participation in the prevention of stunting among mothers with toddlers under five years old can be seen in the following table:

Table 6. Frequency Distribution of Community Participation

Community Participation	n	%
Good	42	32.1
Not Good	89	67.9
Total	131	100.0

Based on the table 6, it is known that most respondents stated that community participation was not good with 89 respondents (67.9%) and respondents who stated that advocacy was good are 42 respondents (32.1%).

The Influence of Advocacy on Community Participation

The frequency distribution and percentage of the influence of advocacy with community participation in stunting prevention among mothers with toddlers under five years old in Bangun Purba Sub-district can be seen in the table 7.

Table 7. Frequency Distribution of the Influence of Advocacy with Community Participation

Advocacy	Community participation				Total		*P*
	Good		Not Good				
	n	%	n	%	N	%	
Good	27	40.9	39	59.1	66	100.0	0.046
Not Good	15	23.1	50	76.9	65	100.0	

Based on the table above, it is known that 66 respondents stated advocacy in the good category, 27 people (40.9%) had community participation in preventing stunting in toddlers in good category, while of the 65 respondents who stated advocacy in not good category, 50 people (76.9%) had community participation in preventing stunting in toddlers in not good category. The results of the analysis with the chi-square test obtained a value of p = 0.04, indicating that there is a significant influence between advocacy and community participation in the prevention of stunting among mothers with toddlers in Bangun Purba District.

The Influence of Partnerships on Community Participation

The frequency distribution and percentage of the influence of partnerships with community participation in stunting prevention among mothers with toddlers under five years old in Bangun Purba sub-district can be seen in the table 8.

Table 8. Frequency Distribution of Partnership Influence with Community Participation

Partnership	Community participation				Total		*P*
	Good		Not Good				
	n	%	n	%	N	%	
Good	12	52.2	11	47.8	23	100.0	0.042
Not Good	30	27.8	78	72.2	108	100.0	

Based on the table above, it is known that 23 respondents who stated that the partnership was in good category, there were 12 people (52.2%) who had community participation in preventing stunting in toddlers in good category, while 108 respondents stated that the partnership was in bad category, there were 78 people (72.2%) who had community participation in preventing stunting in toddlers in bad category. The results of the analysis with chi-square test obtained a value of p = 0.04, indicating that there is a significant influence between partnership and community participation in the prevention of stunting in mothers with toddlers in Bangun Purba District.

The Influence of Community Empowerment on Community Participation

The frequency distribution and percentage of the influence of community empowerment with community participation in preventing stunting in mothers with toddlers in Bangun Purba Subdistrict can be seen in the following table:

Table 9. Frequency Distribution of the Influence of Community Empowerment with Community Participation

Community Empowerment	Community participation				Total		*P*
	Good		Not Good				
	n	%	n	%	N	%	
Good	17	47.2	19	52.8	36	100.0	0.038
Not Good	25	26.3	70	73.7	95	100.0	

Based on the table above, it is known that of the 36 respondents who stated that community empowerment was in good category, there were 17 people (47.2%) who had community participation in preventing stunting in toddlers in good category, while 95 respondents who stated that community empowerment was in bad category, there were 70 people (72.2%) who had community participation in

preventing stunting in toddlers in the bad category. The results of the analysis with chi-square test obtained a value of p = 0.03, indicating that there is a significant influence between community empowerment and community participation in the prevention of stunting in mothers with toddlers in Bangun Purba District.

Most Influential Variables on Community Participation

Based on the results of logistic regression test, the two variables that have the most influence on community participation in stunting prevention are community empowerment. The following multivariate logistic regression analysis results can be seen in the table below:

Table 10. Logistic Regression Multivariate Analysis Results

Independent Variable	B	P value	Exp (B)
Constant Community Empowerment	1.624	0.008	0.536
	-1.387	0.000	-

Based on the table above, it is known that the variable that has the most influence on community participation is community empowerment with a regression coefficient (B) value of 1.624 with an odds ratio (OR) value of 0.536. Thus, well implemented community empowerment will have a chance to boost community involvement in stunting prevention among mothers of young children by 0.536 times more than inadequately implemented community empowerment.

DISCUSSION

Advocacy

It is recognized that advocacy has not been optimally implemented based on the results of the interviews with various informants. This is due to the fact that despite a commitment from the regional head, such as that contained in Deli Serdang Regent Decree No. 9 of 2020, which calls for the establishment of a team to accelerate the reduction of stunting, it has not bound the regional regulation that can boost community involvement. There is funding or budget support from the local government, but it is more for countermeasure activities for stunting toddlers than for prevention programs. The availability of facilities and infrastructure to support the program is sufficient, but the appropriate category for stunting is unequal. The availability of human resources is sufficient, but for nutrition officers is still lacking. The data collection and reporting of village midwife reports the number of pregnant women and toddlers.

Government program to stunting prevention is start from pregnant woman. Therefore, pregnant woman, postpartum mother with exclusive breastfeeding is need to increase knowledge level same as research by Syaiful et.al (2022) and Bakar et.al (2018).

Partnership

Based on the interview results with several informants, it is known that partnerships in preventing stunting in toddlers have not been well coordinated. This is due to the lack of coordination between cross-sectors to hold special activities or programs for stunting prevention. The implementation of meetings and dissemination of information of health promotion to toma and toga is rarely implemented to provide information and education about stunting prevention, cross-sector cooperation has not been conducted optimally because each agency does its own job. This research result had similar stated that it is necessary to increase implementation and cooperation between parents, the community, health worker, and the government to prevent stunting (Arirahmat, 2022).

Community Empowerment

Based on the interview results with several informants, it is known that empowerment in preventing stunting in toddlers has been implemented but not evenly distributed. This is evident from the establishment of 53 Integrated Healthcare Center in 24 villages and 120 cadres, but no specific community empowerment initiatives to stop stunting have ever been established. The equipment such as anthropometry is available only in some Integrated Healthcare Center, not evenly provided in each Integrated Healthcare Center.

Community Participation

Based on the interview results with several participants, it is known that there is still a lack of active role when invited to socialization for stunting prevention, and there are still participants who do not bring their toddlers to be weighed to Integrated Healthcare Center and do not give their toddlers exclusive breastfeeding from infancy. It is known that 2 out of 3 participants have never heard information related to stunting prevention from Toma or Toga. It is known that 2 out of 3 participants stated that they never knew of a nutrition post in their neighborhood, they only knew of Integrated Healthcare Center. One of the participants said that she had heard of nutrition posts in the past. But there are no longer any such activities held in the community lately, especially in the area where they live. This research is similar with previous research that mother action to give nutrition as enough nutrition value (abbreviated as AKG) is important to

preventing stunting in children (Qomariah et.al, 2013).

CONCLUSION

Based on the research that has been conducted on the analysis of health promotion strategies consisting of advocacy, partnership and community empowerment towards community participation in stunting prevention for mothers with toddlers in Bangun Purba District, it can be concluded that:

1. Respondents who stated that the advocacy conducted was good are 66 people (50.4%). Based on qualitative research results, advocacy in stunting prevention has not been maximized.
2. The respondents stated that the partnership was not good are 108 people (72.2%). The results of qualitative research indicate that partnerships in stunting prevention are not well coordinated.
3. The respondents stated that the empowerment implemented was not good are 95 people (72.5%). Based on qualitative research results, the community empowerment in stunting prevention has not been evenly distributed.
4. The influence of advocacy on community participation in preventing stunting in mothers with toddlers in Bangun Purba Subdistrict that the p value = 0.046.
5. There is an impact of partnership on community participation in preventing stunting in mothers with toddlers in Bangun Purba District that the p value = 0.042.
6. There is an influence of community empowerment on community participation in the stunting prevention for mothers with toddlers in Bangun Purba District that the p value = 0.038.
7. The community empowerment variable is the most dominant variable that affecting community participation in stunting prevention among mothers with toddlers under five years old in Bangun Purba Sub-district with an odds ratio value of 0.536 and an exponent B value of 1.624.

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