ORIGINAL ARTICLE

Influence of social capital on the stunting incidence: a cross-sectional study

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ABSTRACT

Introduction: The problem of stunting is caused by many factors, including geographical, social, and political problems. The role of social capital has been shown to impact economic development and health in some countries, including the problem of stunting, but has not been widely studied. The purpose of this study is to analyze the effect of social capital on the incidence of stunting. **Methods:** The type of study is observational with a cross-sectional design. The population had 106 neighborhoods as respondents, with simple random sampling technique, and a total sample of 91 people. The research instrument uses a questionnaire whose validity and reliability have been tested. The independent variables studied were 7 variables. Univariate in the form of frequency distribution, Bivariate analysis using chi square followed by logistic regression to obtain a predictive model using SPSS Version 24. **Result:** 65.9% of neighborhoods have stunting rates in their area. This figure is still above the government's target. Of the 7 variables studied, all of them are related to the incidence of stunting. Suprastructure variables with p=0.001, community participation with p=0.004, community empowerment in development with p=0.001, community control in development and stunting events with a value of p=0.001, motives of empowerment in development with p=0.004, the existence of cadres as agents of change with p=0.001, involvement of various stakeholders with p=0.001. The most dominant factor is the suprastructure of various stakeholders, with p=0.001. The most dominant factor is the t variable, with OR=49.398 at 95% of CI (3.623–673.6). Predictive models are produced so that preventive efforts are expected to reduce the incidence of stunting. **Conclusion:** The high incidence of stunting in the neighborhood area shows that the social capital of the community still needs to be improved in handling stunting. Community groups in the neighborhoods that have poor suprastructure will be at risk of their area having a stunting incidence.

KEYWORDS

social capital, stunting, incidence

INTRODUCTION

Stunting will disrupt cognitive and motor development as well as metabolic disorders in adulthood. Stunting is now widely recognized as having exceptionally high individual and social costs, including both child morbidity and mortality, delayed cognitive development and poor schooling outcomes, and lower productivity and wages in adulthood that ultimately retard economic growth. Amounting to 2-3% of GDP. For example, if Indonesia's GDP is IDR 13,000 trillion, the loss could reach IDR 260–390 trillion per year. [1] Stunting hampers the possibility of a demographic transition in Indonesia, which will occur when the

ratio of the non-working age population decreases compared to the working age population. In addition, there is a threat of reducing intelligence from 5 to 11 points.[2] Importantly, stunting is a major contributor to child morbidity and mortality; thus, providing evidence for more effective policies and programs to prevent child undernutrition, and its associated lifelong disabilities is crucial to achieving the global nutrition targets for 2025, which were adopted by the World Health Assembly.[3]

Stunting is not just an indicator of health; it is a picture of the accumulation of problems from the child in the womb up to the age of two years.[4] On the other hand, stunting shows an accumulation of problems that involve many factors when viewed as a whole.[5] If viewed in a complex manner, the problem of stunting shows an accumulation of problems involving many factors, because stunting is an illustration of the accumulation of problems from children in the womb up to the age of two years, not only health or nutritional indicators, but also social, economic, and political problems. This shows that there are big problems that must be resolved comprehensively.[6]

Cases of death, including infant deaths, are proven to be closely related to the social capital that exists in society, such as a lack of care, assistance, justice, and social distrust. Cultural influences and other social forces influence a person's behavior.[7] Social capital is a person's ability to gain benefits from their membership in a social network or other social structure. Social capital consists of all elements that encourage and are created to facilitate a person's actions in a social structure. Social capital consists of institutions, social relationships, networks, integrity, the application of high standards, and quality in social interactions in society.[8]

Social capital represents one of the most powerful and popular metaphors in social science research today.[9] Social capital has been used to explain a large number of phenomena, from voting patterns to health to the economic success of a country. Many journals use a social capital approach to understanding individual and group differences.[10] More broadly, it is explained that successful public policy design needs to take into account the impact of policies on the formation of social capital.[11]

Disruption of social capital, such as lack of concern, beliefs, and norms, will cause many health problems, including stunting in children.[12] Social capital should be the main source of strength in family development so that the family structure can survive and carry out its functions as a whole. [13] However, damage to social capital raises the threat of stunting and child malnutrition. Without strong social ties and the existence of values (cultural, social, and moral) as social capital, civil society cannot exist.[14]

To increase the strength of social capital, village government participation should be better, including providing facilities for 1000 First Day of Life families/ First 1000 Days of Life.[15] Several literary figures say that the village government prioritizes physical development programs over stunting alleviation.[12] If families in one community no longer pay attention to and help each other, then local values that contain the common good will no longer be an inspiration for the family to carry out daily life practices.[16] This emerged as a result of the rapid absorption of the values of modernity and belief in the role of family building in social interactions has declined as a result of the emergence of individualist attitudes among members of society.[17]

Stakeholders must be involved in handling stunting by increasing collective awareness about the impact of stunting on the future of children and the development of human resources for the nation's future.[18] Community leaders in the village must encourage this effort by showing an example that all village residents can follow.[19] Village community social organizations and village

governments should be mobilized by district/city governments to reach an agreement on implementing stunting prevention programs. Apart from that, the community empowerment program aims to enable every First 1000 days of life to practice in accordance with health standards.[12]

To reorganize society socially, the focus must be directed at two human capacities: awareness of human nature and the human tendency to self-organize.[20] The first functions as a source of value, and the second functions as an operational area for social capital. So, human nature must remain the basis for structuring social life, no matter how advanced technology and new innovations become. Human nature must remain the foundation for structuring social life.[21]

The families really believe in myths as a source of truth, so the desire to restore nature as a compass in organizing social life can actually be intervened through internalizing local values.[17] This means that this irrational family typology can be extracted well by combining mythological beliefs with the truth of science, so that positive (affirmative) extraction of social capital leads to stunting-free families through effective management of the three basic components of social capital, namely networks, trust, and norms.[7]

The aim of this research is to analyze the role of social capital in the incidence of stunting in Cikarang Selatan sub-district, Bekasi Regency, so that it is hoped that the strength of community social capital will be known, which will have an impact on the neighborhood to prevent stunting. In addition, it is also expected that this research can produce a predictive model of the influence of social capital on the incidence of stunting. From several studies that have been done, many have proven that social capital has a significant influence on health problems. One of them is research conducted by Castreota et al. in 2023. The relationship between social capital and health has received extensive attention in fields such as public health, medicine, epidemiology, gerontology, and other health-related disciplines.[22]

Another study from Luong *et al.*,[23] shows that the effect of social capital during a pandemic remains temporarily stable (multiplication effect) despite pandemic restrictions. Both social capital constructs remained consistent and stable between genders before and during the pandemic. The stability of social capital may indicate that socialization remains important despite the restrictions imposed. Good social capital affects people's resilience and ability to face the pandemic.[23] The purpose of this study is to analyze the effect of social capital on the incidence of stunting.

METHODS

This investigation employed a cross-sectional observational study design.[24] The research instrument referred to the documents used in monitoring and evaluating MCH nutrition at the Ministry of Health that had been carried out previously. These documents were developed in a collaboration between the Faculty of Public Health at the University of Indonesia and the Ministry of Health. However, modifications were made according to the research context.

The validity of the instrument was assessed using an Alpha Cronbach value of 0.9. The research instrument used a close-ended question format, which consisted of five provided answer-choice options (Likert scale modification). The research variables comprised social capital, the independent variable, including supra structural factors, community participation, community empowerment in development, community control in development, empowerment motives in development, cadres serving as agents of change, and the involvement of various stakeholders. The dependent variable is the incident of stunting.

The sample is part of the population that has the same characteristics as the population and is considered representative of the population.[25] The study was

conducted in South Cikarang from February to June 2023. The samples used in this research were the neighborhoods of all 7 villages in South Cikarang, namely: Serang Village, Sukadami Village, Sukasejati Village, Sukaresmi Village, Ciantra Village, Cibatu Village and Pasirsari Village. The total number of neighborhoods was 106 nearby. The sampling technique was carried out using sample calculations according to a finite sample formula, with the results of a sample calculation of 91 neighborhoods.[25]

The sampling procedure was carried out using the simple random sampling technique.[25] Stunting incidents data were obtained from secondary sources, specifically Public health centers (Puskesmas) and the Bekasi district health department. The primary data was collected directly by the researchers assisted by the trained 20 enumerators. The data analysis phase involved the application of univariate, bivariate, and multivariate analysis. After conducting bivariate analysis using the Chi Square test, Multivariate Analysis was performed employing the multiple logistic regression test.

RESULTS

In accordance with the research objectives, the results were analyzed in three stages: univariate, bivariate, and multivariate analysis. Multivariate analysis was carried out to produce a predictive model of factors that influence the stunting incidents in the south region Cikarang sub- at Bekasi regency in 2022.

Table 1. Frequency Distribution of Stunting Incidents in Toddlers in 2022

Variable	Categori	F	%
Incidence of Stunting in Toddlers	Cases	60	65.9
	No Cases	31	34.1
Total		**91**	**100**

Note: The measurement of the Stunting category refers to the standards set by the Ministry of Health. Data taken from Community Health Center data.

According to Table 1, the study involved 91 neighborhoods, with the largest number of neighborhoods (65.9%) comprising residents who were stunted.

Table 2. Frequency Distribution of Social Capital Factors (n=91)

No	Variable	Categori	F	(%)
1.	Suprastructure	Poor	59	64.8
		Supportive	32	35.2
2.	Community Participation	Poor	50	54.9
		Supportive	41	45.1
3.	Empowerment Maturity	Poor	53	58.2
		Supportive	38	41.8
4.	Community Control In Development,	Poor	60	65.9
		Supportive	31	34.1
5.	Empowerment Motives In Development	Poor	58	63.7
		Supportive	33	36.3
6.	The Existence Of Cadres As Agents Of Change	Poor	58	63.7
		Supportive	33	36.3
7.	Involvement Of Various Stakeholders	Poor	57	62.6
		Supportive	34	37.4

According to Table 2, the seven variables were studied based on the condition of social capital in society. The suprastructure variable reveals that the group with the highest percentage of poor suprastructure comprises 59 people (64.8%), while the community participation variable shows that the highest percentage is the group with poor community participation: 50 people (54.9%).

For the community empowerment variable in development, the highest percentage was in the less well-off group, namely 53 people (58.2%). For the

community control variable in development, the highest percentage was in the unfavorable group, 60 people (65.9%). For the empowerment motive variable in development, the highest percentage was in the disadvantaged group, namely 58 people (63.7%).

The variable for the existence of cadres as agents of change, the highest percentage is in the less active group, 58 people (63.7%). The variable involving various stakeholders, the highest percentage was in the less supportive group, 57 people (62.6%).The number of independent variables is 7 variables. Based on the results of bivariate analysis, presented in the following table:

Table 3. Results of a bivariate analysis on the incidence of stunting in toddlers

No	Variable	*Stunting*				Total		p-value	OR (CI 95%)
		Cases		No Cases					
		F	%	f	%	f	%		
Suprastructural									
1	Poor	49	83.1	10	16.9	59	100		
2	Supportive	11	34.4	21	65.6	32	100	0.001	9.55 (3.45 to 25.36)
	Total	60	65.9	31	34.1	91	100		
Community participation									
1	Poor	40	80.0	10	20.0	50	100		
2	Supportive	20	48.8	21	51.2	41	100	0.004	4.20 (1.67 to 10.59)
	Total	60	65.9	31	34.1	91	100		
Empowerment Maturity									
1	Poor	44	83.0	9	17.0	53	100		
2	Supportive	16	42.1	22	57.9	38	100	0.001	6.72 (256 to 17.62)
	Total	60	65.9	31	34.1	91	100		
Community control in development									
1	Poor	52	86.7	8	13.3	60	100		
2	Supportive	8	25.8	23	74.2	31	100	0.001	18.69 (6.25 to 55.92)
	Total	60	65.9	31	34.1	91	100		
Empowerment motives in development									
1	Poor	45	77.6	13	22.4	58	100		
2	Supportive	15	45.5	18	54.5	33	100	0.004	4,154 (1,65 to 10.45)
	Total	60	65.9	31	34.1	91	100		
The presence of cadres as agents of change									
1	Poor	50	86.2	8	13.8	58	100		
2	Supportive	10	30.3	23	69.7	33	100	0.001	14,37 (5,02 to 41.19)
	Total	60	65.9	31	34.1	91	100		
Involvement of various stakeholders									
1	Poor	51	89.5	6	10.5	57	100		
2	Supportive	9	26.5	25	73.5	34	100	0.001	23,61 (7.56 to 73.71)
	Total	60	65.9	31	34.1	91	100		

Notes: p<0.05 indicates a significant relationship on the Chi Square Test; The OR value of > 1 indicates that there is a difference in risk in 2 groups

From Table 3, it is known that all variables have a p<0.05, meaning they have a relationship with the number of stunting incidents, namely suprastructure variables, community participation, maturity of community empowerment in development, community control in development, motives for empowerment in development, the presence of cadres as agents. of change and the involvement of various stakeholders.

The results of bivariate analysis show that there is a relationship between supra structural variables and the incidence of stunting in toddlers, with a value of p=0.001, and OR=13 9.355 (3.451- 25.361). There is a relationship between community participation and the incidence of stunting in toddlers, with a value of p=0.004 and OR=participation. There is also a relationship between the maturity of community empowerment in development and the incidence of stunting in toddlers, with a value of p=0.000 and OR=6.722 (2.564–17.623).

The relationship between community control in development and the incidence of stunting in toddlers showed a P value = 0.000 and OR=18.688 (6.245–55.917), and the relationship between the empowerment motive in development and the incidence of stunting in toddlers showed a P value of 0.004

and OR=4.154 (1.652–10.446). While the relationship between the presence of cadres as agents of change and the incidence of stunting in toddlers showed a P value of 0.000 and OR value of 14.375 (5.017–41.190). Finally, the relationship between the involvement of various stakeholders and the incidence of stunting in children under five reveals a P value of 0.000 and OR value of 23.611 (7.563–73.712).

Table 4. Final multivariate modeling of Social Capital Variables on the incidence of stunting among toddlers

No	Variable	Coef	SE	Sig	OR	95% CI	
						Lower	Upper
1	Suprastructure	3.900	1.333	0.003	49.398	3.623	673.6
2	Community Participation	3.018	1.388	0.030	0.049	0.003	0.742
3	Community control in development	1.911	0.913	0.036	6.759	1.130	40.431
4	The presence of cadres as agents of change	2.189	0.825	0.008	8.924	1.770	44.997
5	Involvement of various stakeholders	1.816	0.896	0.043	6.145	1.060	35.611
	constant	-3.459	0.735	0.000	0.031		

Notes: The p-value value of <0.05 in binary logistic regression shows a significant effect

Social Capital modeling with the incidence of stunting in toddlers. The final model in the Multivariate analysis explained that the incidence of stunting is influenced by the suprastructural, community Participation, community control in development, Cadres serving as agent of change, and the involvement of various stakeholders with the largest flow from the suprastructure variable.

The suprastructure variable has OR= 49.398, which means that when tested simultaneously, the variable having the highest contribution to the incidence of stunting is the suprastructure. This indicates that areas with less supportive supra structures are likely to have a higher stunting incidence rate. In this test, the model formed is a fit model (seen from the P. Value model in the omnibus test of model coefficient 0.001 <0.05), so that it is able to predict the incidence of stunting in toddlers

DISCUSSION

According to Table 1, we can get information that the highest percentage is the neighborhoods who have residents with stunting incidence. It is known that in this study there were 91 neighborhoods and the largest number of neighborhoods were those with stunted residents at 65.9%. The results of this study are in line with research conducted by Setiawan and Machsus in 2023. Bekasi city, as a buffer city for the capital city of DKI Jakarta, has a higher prevalence of stunting than Bekasi City and Depok City, which are the other two buffer cities. According to the data presented in the graph above, the prevalence of stunting in Bekasi district in 2019 was 20.2 percent, which was 0.6 percent higher than Bekasi city, and 3.4 percent higher than Depok city.[1] In addition, according to research conducted by Astuti and Idealistiana in 2023, 22.9% of 70 respondents, consisting of mothers with toddlers and children, were affected by stunting in the work area of the Setu II Health Center, Bekasi Regency.[2]

The study produced higher data than previous studies. This means that the majority of neighborhoods have stunting incidents in their area, although there are not many. Several neighborhoods share a small number of stunting incidents. There are several factors that influence the prevalence of stunting, and the most significant intervention is in the First 1,000 HPK/1000 Days of Life.[29] Poor parenting practices and insufficient understanding of health and nutrition before and during pregnancy are contributing factors to the prevalence of stunting: 60%

of children aged 0-6 months do not receive exclusive breastfeeding, and 2 out of 3 children aged 0-24 months do not receive the breast milk substitute.[30]

In addition, limited health services include antenatal care: two out of three pregnant women have not consumed nutritional supplements and adequate iron; postpartum care: a decreasing number of children attending Posyandu (from 79% in 2007 to 64% in 2013) and inadequate access to immunization services; and early childhood education: one out of three children aged 3-6 years are not registered in Early Childhood Education, and.[31] In regards to the limited availability of nutritious food one third of pregnant women, according to the data, suffer from anemia due to their inability to afford nutritious food. The study indicates that 20% of households still defecate in the open, while 33% of families do not have access to clean drinking water.[32]

Households experiencing food insecurity are at risk of having stunted children due to the double nutritional burden associated with parental income.[33] To avoid the double burden of malnutrition, a food security system is essential. Households with poor water and sanitation can increase the risk of stunting in children under two years old by 4.6 times, compared to households with good sanitation. Some families use public toilets every day because they do not have household toilets. Fathers who do not work increase their children's risk of stunting by 1,045 times compared to fathers who do.[34] Good social capital supports the resolution of problems within the family structure. Neighborhoods are a social environment that is very close to family life. Often, when looking for a solution, families will look to neighbors first before families who live far away.[35]

According to Table 2, there are seven independent variables investigated in this study. All variables, such as: the superstructure, the community participation, the empowerment maturity, the community control in development, the empowerment motive in development, the cadre serving as agent of change, and the involvement of various stakeholders are related to the incidence of stunting. The results of bivariate analysis show that there is a connection between suprastructural variables and the incidence of stunting in toddlers, with the values of p=0.001 and OR=9.35 (3.45 to 25.36). This is in accordance with the research conducted by Thamrin in 2023, which indicates there is evidence of disruption in the suprastructure, values, or ideas related to preventing stunting or improving efforts to to overcome the problem of stunting.[3]

Local values that promote the common good are no longer an inspiration for families in carrying out daily life practices as a result of the rapid influence of modern values. Trust as the main value of family building in the process of social interaction experiences degradation following the development of individualist attitudes among family members in the first 1000 days of life.[3]

One of the social capitals for health is related to the health suprastructure in society, namely how the community is involved in policy formulation at the regional level. The community is involved in contributing ideas on how to optimize policy support from the government at the village level, the Community Health Center, the District Health Service and others, which will have an impact on policy alignment in helping to optimize potential and also overcome existing obstacles in the community.[7]

Thoughts and ideas for strengthening policies are optimized for problems that trigger stunting. Abraha's research, analyzing habits and culture that need to be improved, included home birth, limiting the mother's movement after giving birth, and hiding infant deaths, prohibiting the use of health services from pregnancy to the neonatal period. This cultural phenomenon contributes to the high risk of maternal and newborn mortality, because it hinders early diagnosis and treatment in health facilities, including other infant health problems.[36]

Development in all fields is comprehensive and harmonizes government infrastructure with government suprastructure.

There is a relationship between community participation and the incidence of stunting in toddlers with a P value of 0.004 and an OR of4,20 (1,67 to 10.89). The neighborhood's role in caring for pregnant women has disappeared, so that families experiencing pregnancy struggle independentlyMothers' independent struggle results in giving birth to LBW children, which is a risk factor for stunting in many cases.

The results of this research are in line with research conducted by Thamrin, 2023. The role of the neighborhood in caring for pregnant women has disappeared, so that families experiencing pregnancy struggle independently. In many cases, mothers' independent struggle results in giving birth to LBW children as a risk factor for stunting. Village government participation in preparing convenience facilities for 1000 HPK families is still relatively low. In general, village governments prioritize physical development programs compared to stunting alleviation programs.[3]

Community participation plays a very important role in overcoming the problems among the community members.[37] This research demonstrates a connection between community participation and the incidence of stunting. Community participation can be realized in the form of ideas, energy or objects that can be useful in overcoming the stunting issues.[17] The community participation in preventing and controlling stunting is greater in staff participation as a good category. The community contributes to government programs that help overcome the problem of nutritional deficiencies and provide clean water and other services facilities is currently insufficient and in needs of improvement.[38] The community participation shows how much the community cares and is willing to take part in overcoming existing problems.[39] A good level of community participation shows a high sense of solidarity from community members regarding the suffering or problems of other people.[40] An individual who is interested in lending a helping hand and participating in addressing existing problems can be a solution for some obstacles in society.

Table 1 demonstrates that there is a connection between the maturity of community empowerment in development and the incidence of stunting in toddlers, with a P value of 0.001 and an OR of 6.72 (2.56 to 17.62). The results of this research are in line with Thamrin's study in 2023. The social capital influences the incidence of stunting in society. The movement of this affirmative social capital category is internalized through a community empowerment program, which aims to enable every 1000 HPK family to carry out practices that comply with health rules.[3]

Empowerment maturity describes the next form/level of community participation.[37] If the level of community participation is high, it shows the process of maturity of community empowerment, but it does not necessarily mean that the level of community participation continues to show the maturity level of empowerment if this form of participation is not carried out on a voluntary basis and positive awareness is formed within its citizens.[18]

A high level of internal understanding and encouragement that is able to trigger community participation develops into a high level of empowerment maturity.[41] Maturity of empowerment results from the process of awareness of needs, confidence in one's own abilities and the desire to optimize one's potential to overcome all existing problems.[27] The maturity of empowerment will result in the capacity of self-reliant in overcoming health issues, both within the family and the community.[20]

Communities with a good level of the maturity of empowerment will produce appropriate solutions to overcome social problems in their environment.[42] What is

being measured in this maturity of empowerment is the community involvement in health development, especially in overcoming the problem of stunting in their area. The community members play a crucial role in protecting, maintaining and ensuring the continuity of efforts that have been initiated both independently and in collaboration with the government and other organizations.

From table 1 we can see the relationship between community control in development and the incidence of stunting in toddlers, with the p-value of 0.001 and an OR of 18.69 (6.24 to 55.91). The results of this research are in line with Thamrin's research in 2023, indicating that the community's involvement in development characterizes the level of community contribution and awareness of development goals: stunting reduction and prevention programs. The institutionalization of stunting prevention for children has become a new norm, achieved through a joint consensus between village community social organizations and the village government, which is legitimized by the district/city government. The government can provide significant space and opportunities for the community to get involved in stunting reduction programs.

One form of community control in the development is that residents are involved in planning the development of their area without experiencing obstacles/constraints.[10] The implementation of development planning must be based on the basic principles of regional development, namely from, by and for the regional community itself. Therefore, the community must be capable of identifying and resolving all the existing problems in the area, as well as exploring its potential for further utilization in development activities.[27]

The task of health development is the responsibility of all components of society and not just the government's task; therefore, the government must involve the community in development planning and its implementation must be downward oriented, through granting authority for planning and implementing development at the regional level.[26]

According to Table 1, there is a relationship between the empowerment motive in development and the incidence of stunting in toddlers with a Pvalue of 0.004 and an OR of 4.15 (1.65 to 10.45). The results of this research are in line with research conducted by Thamrin in 2023. The disruption of social capital, such as networks, trust, and norms, has resulted in stunting in children. Ideally, social capital serves as the primary source of strength in family development, enabling the family structure to experience resilience and effectively carry out its functions as a whole. In fact, disruptive social capital actually turns into a source of threats to stunting and malnutrition for children.[12]

There are four determinant causes of disruption of 1000 HPK family social capital. What causes stunting in children is family disorientation, exposure to technology, belief in myths, and pragmatic family behavior in meeting life's needs. The current family posture is experiencing both structural and functional changes. These changes were initiated by a change in family orientation, from an orientation that fulfills complex needs to a simplification of needs based solely on economic needs. This influences the motive for community empowerment in development.[12]

The empowerment motive in development will influence the extent to which the empowerment of the community is mature, which can ultimately influence community control in development and overcome the problem of stunting. Both internal and external motives can drive a person's involvement and participation in development, as demonstrated by their independence in health development.[20]

Internal motives are impulses that arise from within oneself and are based on awareness and belief and are not based on elements of compulsion. This usually has a long-lasting impact and creates a sense of responsibility in the individual.[39] External motives are impulses that arise because there is influence

from outside, for example, because of regulations, because of community agreement, because of punishment, because of social sanctions, or because of orders from certain respected figures.

This usually does not have a long-term impact because there are control factors from outside, not from within the person. As long as there are external control factors, it will persist, but as long as external control is lost, the behavior will disappear again.[20] Internal motives will have a much longer-lasting impact than external motives, and will have a positive influence on reducing stunting.[27]

There is a connection, according to Table 1, between the cadres serving as agents of change and the incidence of stunting in toddlers, with a P=0.001 and OR=14.375 (5.017–41.190). The results of this research are in line with research conducted by Nisbett, et al., in 2017, which explains that cadres play a very important role in increasing information on the importance of nutrition. The challenges to specific nutrition programs are growing. The programs and policies in the health sector shows the success of dedicating concerted efforts and significant resources to specific issues. Specifically, as shown in a special series in the Lancet on the topic and according to the stakeholders interviewed in the research, the success of the previous vertical program was also achieved by having dedicated cadres in providing household support to the community.[4]

This is still a big challenge in delivering stunting prevention programs through existing community health workers. Although the 'mainstream' approach to the areas of nutrition and stunting prevention may be welcome from the perspective of moving towards a more mature and less isolated health system, initial reports indicates that community clinic workers, or health cadres, have little knowledge of the tasks expected. Overall, this suggests that further prioritization or rationalization of the role of health cadres may be necessary if they are to continue to be key to success at the community level.[4]

Under the guidance of health workers, a health cadre is someone who is willing and able to carry out efforts to improve the level of public health with self-awareness and without any strings attached.[43] The specific objectives of having health cadres are: Implementation of promotional and preventive efforts towards health problems by the community itself; early detection of health problems in the area with knowledgeable and active cadres; communities being able to take the initiative to solve health problems in their area independently; and coordination between health workers and the community (cadres) to implement public health efforts.[44]

So far, the cadres involved in overcoming the problem of stunting include: Posyandu (Integrated Healthcare Center) Toddler Cadres, Nutrition Cadres, KPKIA Cadres, Family Planning Cadres, PHBS Cadres, and UKS Cadres. We hope that with the presence of cadres can address the community issues related to risk factors and determinants of stunting.

When supported by the involvement of various stakeholders, social capital will be strong. Stakeholder boundaries are people, groups, or institutions who are likely to be affected by a program/project activity, whether that influence is positive or negative, or vice versa, which may have an influence on the outcome of the program orproject.[30]

There is a relationship between the involvement of various stakeholders and the incidence of stunting in children under five, as indicated in Table 1, with a P value of 0.001 and an OR of 23.611 (7.563 – 73.712). The findings of this research are in line with research by Bhutta, et al., in 2020. The study explained, based on the case study findings and existing evidence, the findings from the report must be discussed among many parties or the key stakeholders (e.g. donors, governments, non-governmental organizations, private sector actors, etc.) to identify gaps.

"Stop stunting in South Asia" ([36]), has highlighted the importance of strong leadership, political and institutional commitment to change, and strategic investments that target the most vulnerable groups and address the greatest risk factors for child development. These findings support and emphasize the importance of this supporting factor, namely the involvement of various stakeholders in accordance with their roles and authorities to maintain improvements in cases of malnutrition in children.[5]

They also emphasized the importance of multisectoral action plans to address malnutrition, although the level of importance of these sectors varies depending on context. Governments can commit to ending all forms of malnutrition through the Scaling Up Nutrition (SUN) movement, which offers a collaborative and multisectoral framework, provided these plans are aligned with the evidence base.

The WHO has also developed an evidence-based list of Essential Nutrition Actions that countries can use to address the determinants of malnutrition, taking into account local context and progress in achieving global nutrition targets. At the end of the nutrition decade, accelerating activities in nutrition programs is very necessary so that countries can achieve the targets set by the WHO and the SDGs. The series of actions offered by them in this research is a pragmatic approach in accordance with the authority and roles of various stakeholders, based on evidence to carry out these acceleration efforts.[5]

It is very important in health development to optimize stakeholder involvement, so that we can mobilize resources (manpower, funds, and facilities) to support the success of development as well as to facilitate program acceptance by stakeholders. Good stakeholder relations and stakeholder involvement in development programs will increase stakeholders' sense of responsibility for the success of development.[29] Utilization of social networks in the community can be done in the form of involving stakeholders in dealing with stunting, which is carried out in an organized manner by forming stakeholder forums.[45]

The problem of stunting can be caused by complex and multifactorial problems. There needs to be synergy with all stakeholders including the government, academics, industry/entrepreneurs, mass media, and society, to overcome the problem of stunting.[5] Pentahelix can reduce stunting cases in Indonesia if it optimizes its contribution. The governments of West Java and Bekasi Regency, which are proclaiming zero new cases of stunting, really need program synergy with all stakeholders and working together to reduce the risk factors for stunting from all aspects.[29]

According to Table 3, it can be inferred that when a multivariate analysis was conducted, the results showed that only 5 variables influenced the incidence of stunting, namely: suprastructure, community participation, community control in development, the presence of cadres as agents of change and the involvement of various stakeholders. The purpose of this study is to produce a prediction model of stunting incidence in terms of social capital. The final model equation is formed: Logit stunting incidence in children under five = 3.9 * suprastructure + 3.018 * Community participation + 1.911 *Community control in development + 2.189 *Existence of cadres as agents of Change + 1.816 *stakeholder involvement.

The most dominant factor was the superstructural variable with an OR of 49.398 at a 95% CI (3.623–673.6). Community groups in neighborhood areas that have poor suprastructures will be at risk of experiencing stunting rates. In this test, the model formed is a fit model (seen from the P-Value model on the omnibus test model coefficient of 0.001 <0.05) so that it is able to predict the incidence of stunting in toddlers.

The limitation of this study is that it is an observational study with a population correlation approach, so there may be bias in assessing parameters in the population. An ecological fallacy is very likely to occur in research carried out

on a group of people in the region. However, researchers have attempted to address this issue by selecting samples that represent the population from people who have a deep understanding of the conditions, specifically the neighborhood who have lived there for at least 5 years.

CONCLUSION

Social capital affects the incidence of stunting in neighborhood areas. The high incidence of stunting in the neighborhood area shows that social capital of the community still needed to be improved in handling stunting. Community groups in the RT area that have poor suprastructure will be at risk of their area having a stunting incidence rate. Implications of research of social capital are consisting of superstructure, community participation, empowerment maturity, community control in development, empowerment motives in development, the existence of cadres as agents of change, involvement of various stakeholders influences the incidence of stunting in society. The still high incidence of stunting shows that the community's social capital, especially in matters related to nutrition and the incidence of stunting, is experiencing degradation. This requires efforts to realign and increase existing values in society so that efforts to prevent stunting can be achieved optimally.

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