

Community Service on Counselling on the Dangers of Stunting for Toddler Growth and Development

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ABSTRACT Stunting is a condition of failure to thrive toddlers (infants under five years old) due to chronic malnutrition and exposure to repeated infections, especially in the first 1000 days of life (HPK), namely from fetus to two-year-old child. The condition of stunting only appears after the baby is 2 years old which is indicated by the standard deviation value (SD) of the z unit (z-score) height according to age (TB / U) < -2 SD for short toddlers and <-3 elementary school for very short toddlers (Ministry of Health RI, 2016). Various factors can cause stunting in toddlers either directly or indirectly. Some rubberistics such as social status, economy, family, family care patterns and family health care are factors that influence the incidence of stunting in toddlers (TN2PK, 2017). The incidence of stunting in 2017 in the world is 22.2% or around 150.8 million toddlers. More than half of stunted children under five in the world are from Asia 55%, while more than a third of stunted toddlers live in Africa. Of the 83.6 million stunted toddlers in Asia, the highest proportion comes from south Asia, namely 58.7% stunted toddlers and the least proportion in central Asia 0.9% stunted toddlers. Data on the prevalence of stunting toddlers collected by the World Health Organization (WHO).

Keywords: *Stanting, Toddler*

1. INTRODUCTION

Reducing health disparities and leaving no one behind is part of the Sustainable Development Goals (SDGs) and the 2030 SDG agenda (SDGs, 2018). WHO in its latest program with a target of reducing 40% of cases of stunting children under 5 years old (toddlers), has compiled a series of The Equity consideration for achieving global nutrition target 2025. The nutrition intervention approach is one of the main programs that is expected to reduce and prevent stunting cases throughout the world, especially Indonesia.

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namely from fetus to two-year-old child. The condition of stunting only appears after the baby is 2 years old which is indicated by the standard deviation value (SD) of the z unit (z-score) height according to age (TB / U) < -2 SD for short toddlers and < -3 elementary school for very short toddlers (Ministry of Health RI, 2016). Various factors can cause stunting in toddlers either directly or indirectly. Some rubberistics such as social status, economy, family, family care patterns and family health care are factors that influence the incidence of stunting in toddlers (TN2PK, 2017

The incidence of stunting in 2017 in the world is 22.2% or around 150.8 million toddlers. More than half of stunted children under five in the world are from Asia 55%, while more than a third of stunted toddlers live in Africa. Of the 83.6 million stunted toddlers in Asia, the highest proportion comes from south Asia, namely 58.7% stunted toddlers and the least proportion in central Asia 0.9% stunted toddlers. Data on the prevalence of stunting toddlers collected by the World Health Organization (WHO).

In 2020 it is estimated to decrease to 26.92%. The decrease in this figure is predicted to be 0.75% compared to 2019 (27.67%). In 2021, the stunting prevalence rate was 24.4% (kemkes.go.id, December 28, 2021). When viewed by province, referring to the results of the 2021 Indonesian Nutritional Status Study (SSGI), East Nusa Tenggara is the area with the highest stunting prevalence, which is 37.8%. Furthermore, West Sulawesi Province (33.8%), Aceh (33.2%), West Nusa Tenggara (31.4%), and Southeast Sulawesi (30.2%). Meanwhile, when viewed per district, referring to data from the National Population and Family Planning Agency (BKKBN), the district with the highest prevalence of stunting toddlers in Indonesia is South Central Timor Regency, East Nusa Tenggara Province (cnnindonesia.com, March 23, 2022). Based on SSGI2021, the stunting prevalence rate in South Central Timor Regency reached 48.3% (kemkes.go.id, December 28, 2021). The data shows that areas with high poverty rates and low levels of education contribute more stunting cases than other regions. West Java Province, Bekasi City received a stunting prevalence rate in 2021 with a rate of 13.8% with targets in 2022 (11.8%), 2023 (9.73), and 2024 (7.67%).

As for efforts to reduce stunting rates in the region, Puskesmas Kras held several programs including the availability of ADD (village fund budget) for malnourished toddlers, stunting and pregnant women, PMT (supplementary feeding) in the form of biscuits and milk for pregnant women, conducting home visits and collaborating with KESLING (environmental health) program holders.

Reducing stunting prevalence is a priority of Sustainable Development Goals (SDG's) in Indonesia until 2030 to reduce as much as 40% of the number of stunting toddlers (Ministry of Health of the Republic of Indonesia, 2018; WHO, 2018). Stunting is directly caused by food intake

and infectious diseases determined by maternal parenting (Pratiwi, Masrul, and Yerizel, 2016). Various studies show that the application of balanced nutrition during the pregnancy period and nutritional parenting especially in the First 1000 Days of Life will affect the incidence of stunting in toddlers. In addition, maternal health status plays an important role in determining the nutritional status and health of toddlers (Altare, et al., 2016; Huicho, et al., 2017; Kismul, et al., 2018). The choice of contraceptive method as an effort to regulate further pregnancy is also positively correlated with optimal growth and development in toddlers. However, several studies have proven that the level of understanding of mothers regarding the selection of contraceptive methods is still low, including exclusive breastfeeding which in addition to acting as a natural contraceptive method also plays a role in preventing stunting in toddlers (Ministry of Health, 2013; Kusumawardhani, 2017).

The main problems that cause the high stunting rate in Indonesia are a combination of low awareness about stunting, policies that have not converged in providing support for stunting prevention, and communication problems in behavior change at the individual level, community level, and health service level. The roles and responsibilities of various stakeholders in communication activities to accelerate stunting prevention still need to be improved. Stunting prevention requires integrated handling efforts, including specific and sensitive nutritional interventions. Global experience shows that the implementation of integrated interventions to target priority groups is the key to successful improvement of nutrition, child development, and stunting prevention.

Various intervention models to prevent stunting in toddlers have been widely carried out. However, the prevalence of stunting has not decreased significantly. This can be because generally the new models used target changes in knowledge and attitudes. One of the models used is Emotional Demonstration (Emo Demo), which is a method of educating the public through a new approach that refers to the theory of Behavior Centered Design (BCD) (Markulis and Strang, 2015; Amareta and Ardiyanto, 2017). The model developed by the Global Alliance for Improved Nutrition (GAIN) from Switzerland is considered lacking with the characteristics of Indonesian people.

The EZIPRO intervention model was developed through a combination of nutrition education and reproductive health with a psychomechanical approach. This model was also developed from the results of modifications from a combination of several behavioral theories namely Behavior Centered Design (BCD) and Theory of Planned Behavior (Ajzen, 2005) and Precede-Proceed theory developed by Green and Ottoson (2006). Nutrition and reproductive health education can increase maternal awareness in the implementation of balanced nutrition practices, parenting and

improving reproductive health through the selection of appropriate contraceptive methods within the First 1000 Days of Life (1000HPK) (Krause, et al., 2016). While psycho-emotional is an approach that touches the psychological and emotional aspects of mothers by increasing the potential and confidence of mothers in the implementation of balanced nutrition, parenting and reproductive health which is given interactively and applicatively (Markulis and Strang, 2015; Hoorn, et al., 2016). Operational research in providing solutions to population problems, the most decisive interventions to reduce the prevalence of stunting need to be carried out in the first 1,000 days of life (HPK) of toddlers. The Government of Indonesia in addressing the problem of stunting is through nutrition-specific interventions and nutrition-sensitive interventions. Specific nutrition interventions are generally carried out in the Health sector targeting pregnant women, breastfeeding mothers and infants under five while nutrition-sensitive interventions are carried out through various development activities outside the Health sector (Kemendes, Development of Disadvantaged Regions and Transmigration, 2018).

A program certainly needs participation from the surrounding community so that the program can succeed or run as planned. Participation from the community can also show whether a program can be accepted or not by the surrounding community. Stunting that occurs in toddlers can have an impact on children's growth and intellectual development. Indirectly, this impact can result in decreased productivity, increased risk of degenerative diseases, increased birth of babies with low birth weight in the future. This impact can increase poverty in the future and will indirectly affect family food security. Stunting in toddlers in developing countries can be caused by genetic factors and environmental factors that are inadequate for optimal child growth and development. One of the environmental factors that can affect the occurrence of stunting in toddlers is parental income. Adequate parental income will support children's growth and development because parents can provide all children's needs, both primary and secondary. Meanwhile, if the parents' income is low, most of the income will be used to meet food needs, which can cause food insecurity. Families with low incomes and food insecurity can inhibit stunting.

2. METHOD

A. Solutions Offered

The solutions offered in Community Service activities are carried out by:

1. Community service conducts counseling about stunting and provides education and assistance in the form of healthy food, which will be carried out by STIKes Medistra Indonesia Students and accompanied by lecturers by providing material that is easy to understand and uses language that is easily digested by the target.

2. Perform examinations such as weight weighing and height measurement in children, HB (hemoglobin) examination and blood pressure measurement in pregnant women.
3. Community service is carried out directly to the community. The participants will be pregnant women and parents who have toddlers.

In order to achieve the goals listed above, the following steps are taken: Contact:

- a. Stunting Toddler Family Coordinator
- b. Counseling Supervisor
- c. Kras Health Center

B. Method of Approach

In order to achieve the goals listed above, the following steps are taken:

1. Conduct an assessment in the Kras Health Center area
2. Coordinate with the Kras Health Center
3. Approach of parents of stunted toddlers at Puskesmas Kras

C. Partner Participation

Puskesmas Karangbahagia along with village officials as partners in this service activity have participation in:

1. Approve and socialize the plan of community service activities carried out by D3 TLM, S1 Kesmas and S1 Nutrition.
2. Provide time, place, facilities and infrastructure for this kegatana
3. Provide input or evaluation of community service activities carried out

D. Exterior

By carrying out this counseling activity, it is hoped that it can provide benefits:

1. Contribute to reducing stunting prevalence into Sustainable Development Goals (SDG's) priorities in Indonesia by 2030 to reduce as much as 40% of the number of stunting toddlers.
2. Participate in increasing knowledge in an effort to provide support for mothers who have toddlers who are stunted.
3. It is expected to contribute ideas to academics, as well as the community in finding solutions for stunting prevention efforts through the results of community service activities (reports / articles).

3. RESULT AND DISCUSSION

To measure participants' understanding, pre-test and post test were conducted. Pre-test is carried out to find out the initial understanding of the participants regarding the material to be delivered. Conversely, the post-test is carried out to determine the level of understanding of the material presented.

Tabel 1 Result pre-test dan post-test

	Nama Peserta	Pre-	Post-
	Tinah	6	8
	Dini	7	9
	Milawati	5	8
	Elkan	7	9
	Rahmawati	7	9
	Elsa	7	8
	Nia	7	9
	Mardiah	7	8
	Munawaroh	6	7
	Siti Muniroh	4	8
	Heni	4	9
	Rohaeni	7	8
	Lia	4	7
	Siti Nurjanah	6	8
	Dina	8	8
	Kurniasih	9	1
	Tuty	6	6
	Intan Purnama Sari	8	7
	Yayah	7	9
	Epa Putri	7	6
	Nur Martianah	7	1
	Fuzi	8	7
	Sri Daryani	5	2
	Dian Ika M	5	9
	Iriyanti S	6	7
	Yuli	1	2

	Anggita	5	9
	Linda Susi L	5	9
	Lili Apritasa	4	5
	Anisa	6	8
	Dahira	5	5
	Lia Soleha	6	6
	Silah Arsinah	4	8
	Dina	3	8
	Rosidah	6	9
	Tusrini	2	6
	Mimin	2	8
	Mega	1	6
	Mimin	5	6
	Yais	4	8
	Dwi Istona	7	9
	Siti Aropah	7	7
	Lia	1	8
	Kanih	3	9
	Rohani	5	7
	Dewi	4	6
	Yuki	7	9
	Yuli	6	9
	Diah Agustin	6	8

Based on the table of pre-test and post-test results, as many as 39 participants (78%) experienced an increase in knowledge. This is indicated by an increase in scores on post-test results. Meanwhile, as many as 11 participants (22%) did not experience an increase, allegedly because participants did not focus on listening to material exposure. **A. Solutions Offered**

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Tabel hasil pre-test dan post-test peserta.

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	Dian Ika M	5	9
	Iriyanti S	6	7
	Yuli	1	2
	Anggita	5	9
	Linda Susi L	5	9
	Lili Apritasa	4	5

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	Dahira	5	5
	Lia Soleha	6	6
	Silah Arsinah	4	8
	Dina	3	8
	Rosidah	6	9
	Tusrini	2	6
	Mimin	2	8
	Mega	1	6
	Mimin	5	6
	Yais	4	8
	Dwi Istona	7	9
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4. RESULT AND DISCUSSION

Relevant documentation with a focus on community empowerment activities. The minimum resolution of photos and images is 300 dpi with JPEG extensions (.jpg). Results must be presented correctly and accompanied by an explanation without reference to the literature. Original and important findings must be stated. Results must be illustrated with numbers or tables if necessary,

but must be kept to a minimum. Detailed discussion, speculation, and interpretation of data are not included in the results, but in the discussion section. Each sub-titles have to be written in sentence case. For example “4.3 The relationship between disease activity and depression and anxiety score in patients with SLE”.

Table 2. The mean of LDL-cholesterol

Group	Mean±SD, mg/dl	
	Pre-test	Post-test
Control	50±6 ^a	24.23±4 ^a
Non-exercise	51±4 ^a	97.99±4 ^b
Exercise	54±6 ^a	29.40±2 ^a
p	0.013	< 0.001

^{a,b} Significant ($p > 0.05$).

Should be relevant with the study. Graphs created with Microsoft Excel should also be sent in their original Excel file. Present graphs in 2D (not 3D), without shadows or other effects, and without gridlines.

3.3 Photos and figures

All figures and photos included in this manuscript have to be cited and integrated with analysis and/or its justification/significance with the programs/activities of the community engagement. All photos and figures should be relevant with the study. If a group of photos or figures shows a process, the group is considered 1 (one) figure. Each group of figures have to be prefaced with a description which links the figures. Relevant documentation with a focus on community



Figure 8. The appearance of Desa Bondowoso: **(a)** Majority of house type owned by the community; **(b)** Grass appearance of the community field.

CONCLUSION

Aware of the measurement results, there was an increase in participants' understanding of the material presented, this can be seen from the increase in pre-test scores on the post-test conducted.

Suggestion

Participants should apply the knowledge and understanding gained in daily family life, so that they are expected to become educators, facilitators and stimulators in community empowerment in implementing care and intake

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