

ISSN 2354-8428
e-ISSN 2598-8727

JURNAL KEPERAWATAN

KOMPREHENSIF

COMPREHENSIVE NURSING JOURNAL

Published by :

Vol. 9 Special Edition, June 2023

**Sekolah Tinggi Ilmu Keperawatan
PPNI Jawa Barat**



JURNAL KEPERAWATAN KOMPREHENSIF	VOL. 9	Special Edition	Bandung June 2023	ISSN 2354-8428	e-ISSN 2598-8727
------------------------------------	--------	--------------------	-------------------------	-------------------	---------------------



Research Article

The Effect of Sigembul Innovation (Mother Action Care on the Health of Together) on the Reduction of Stunting Cases in Olak-Olak Village, Kubu in 2021

Kosmiati Kosmiati^{1*}Novita Novita²

^{1,2}Sekolah Tinggi Ilmu
Kesehatan Abdi Nusantara
Jakarta - Indonesia

*contact

Miamidwife111@gmail.com

Received : 03/06/2023

Revised : 06/06/2023

Accepted : 06/06/2023

Online : 06/06/2023

Published : 30/06/2023

Abstract

Aims: Data on stunting in Indonesia is considered very high, although it is decreasing compared to 2012. Based on UNICEF estimates (31.8%) children experience stunting in Indonesia, thus achieving the very high predicate (very high). With this figure, Indonesia ranks higher than South Korea (2.2%), Japan (5.5%), Malaysia (20.9%), China (4.7%), Thailand (12.3%), Philippines (28.7%), and Kenya (19.4%). Even so, the percentage of stunting in Indonesia is lower than in Congo (40.8%), Ethiopia (35.3%), and Rwanda (32.6%). More intensive efforts will be needed if the world is to achieve the global target of reducing stunting children to 104 million by 2025, and to 87 million by 2030 (UNICEF, 2021)

Method: The research method used is a quantitative type of research which uses a questionnaire data collection technique, the sample in this research is 72 toddlers.

Result: SIGEMBUL's innovation flow in reducing stunting rates in Olak-Olak Kubu Village is by creating a whatsapp group which is followed by collecting data on toddlers who do not come to the posyandu then informing mothers of toddlers regarding the names of those who are not present at posyandu via whatsapp group, then mother together with the Balit, they come to the residence of the midwife/cadre to measure and weigh body weight. After that, it was continued by sending the results of the toddler's measurement to the SIGEMBUL whatsapp group and the posyandu cadre doing the recording of the toddler's measurement data, lastly, the posyandu cadre reporting the measurement results of the required agencies (villages and health centers).

Conclusion: The result of a significance value of 0.000 means H_a is accepted and H_0 is rejected so it can be concluded that there is an effect of sigembul innovation (Action for Mothers Care for Scales and Toddler Health) on the reduction of stunting cases in Olak-olak Kubu Village.

Keywords:

Stunting, Innovation, SIGEMBUL

INTRODUCTION

Data on stunting in Indonesia is considered to be very high, although it has decreased compared to 2012. Based on UNICEF estimates (31.8%), children are stunted in

Indonesia, thus earning the title of very high. With this figure, Indonesia ranks higher than South Korea (2.2%), Japan (5.5%), Malaysia (20.9%), China (4.7%), Thailand (12.3%), Philippines (28.7%), and Kenya (19.4%). Even so, the percentage of stunting in

Indonesia is lower than in Congo (40.8%), Ethiopia (35.3%), and Rwanda (32.6%). More intensive efforts will be needed if the world is to achieve the global target of reducing stunted children to 104 million by 2025, and to 87 million by 2030 (1).

West Kalimantan Province has a value above the national prevalence of 38.6%, occurring in children aged 0-24 months (14.85%) and children 24-59 months (23.75%) (2). Then as the capital city (Pontianak) it has a stunting prevalence value of 17.72% (Pontianak City Health Office, 2020). Based on the results of Monitoring Nutritional Status (PSG) for very thin and emaciated babies aged two years, several areas in the interior of West Kalimantan still show high cases of stunting (3)

Based on the results of monitoring the nutritional status of Kubu Raya in October (4) the projected target number of toddlers is 49,431. This number is divided into 20 sub-districts where Batu Ampar has 649 toddlers with 28 (4.3%) stunting, Padang Mat 724 with 189 (26.1%) stunting, Sungai Kerawang 292 with 36 (12.3%) stunting, spanning 241 with 76 children under five (31.5%), river radak 671 with 161 (24.0%) stronghold 1394 with 191 (13.7%) stunting, water 1690 with 72 (4.3%) stunting, Teluk Pakedai 1416 with 220 (15.5%) stunting, snapper 2139 with 131 96.1 stunting, punggur 918 with 313 (34.1%) stunting, Sungai Rengas 1691 with 80 (4.7%), rasau jaya 1742 with 18 toddlers (1.0%) stunting, river deep 2608 with 71 (27%) stunting, Olak-Olak Kubu 47 (19%), river durian 3179 with 564 (17.7%) stunting, river tamarind in kec. Kubu that the prevalence of stunting is 17.0%.

Olak-olak Village is a developing village that has 3 Posyandu toddlers with a target number of 279 toddlers, namely Posyandu Pelita with a target of 73 toddlers, Posyandu Handayani 60 toddlers and Posyandu Danu Harapan 146 toddlers. Even though there are already 3 Posyandu in each hamlet, the 100% weighing target has not been achieved due to the lack of awareness of parents to

come to the Posyandu in each of these areas. This causes the target coverage to decrease and the stunting rate to increase. The low D/S (coming/target) coverage of Olak-Olak Village until the end of 2019 was on average less than 50% of the posyandu target. With this figure, village midwives and Posayandu cadres work together with the village head to reduce stunting by creating an innovative program, namely SIGEMBUL (Action for Mothers Care for Toddler Scales and Health).

The main strategy undertaken to reduce the prevalence of malnutrition under five is to increase prevention activities through monitoring the growth of children under five at posyandu and the efforts of the Kubu Raya district government to encourage villages to make innovations aimed at reducing stunting cases in Kubu Raya district. Growth monitoring aims to educate mothers of toddlers and as an effort to detect and intervene early on growth disorders, so that mothers, cadres and health workers can provide guidance so that children do not fall short of malnutrition (5).

To increase the scope and sustainability of toddler growth monitoring activities, Posyandu Olak-Olak in the area under the guidance of the Kubu Health Center holds a Toddler Weighing Month (BPB) activity which is held once every 1 month and creates the SIGEMBUL innovation program (Action for Mothers Care for Toddler Weights and Health). This SIGEMBUL activity was created in 2020 to tackle the stunting rate in Olak-Olak Village, which has increased in recent years.

Innovation is Innovation is an activity or activities of research, development, and or engineering carried out to be able to develop practical applications of new values and scientific contexts, or new ways to apply existing knowledge and technology in products or production processes (UUD). no. 23 of 2014)

Sigembul is an acronym for Action for Mothers Care for 'Toddlers' Weights and Health, this program was created by the Olak-Olak Village government in early 2020,

this activity aims to meet the targets for weighing babies and toddlers, this program bides invite cadres to go around and visit babies/toddlers to do weighing and measuring body weight who have difficulty coming to the posyandu with several obstacles such as the absence of a vehicle to go to the posyandu, and with this sigembul it is able to support the weighing target to 100%.

Stunting is malnutrition in infants in the first 1000 days of life which lasts a long time and causes delays in brain development and child development, due to chronic malnutrition, stunted babies grow shorter than the standard height of toddlers for their age, stunting grows short and not all of them grow short is stunting (6,7)

METHODS

This type of research is a quantitative research. In this research, the method of implementing activities will be divided into two, namely 'SIGEMBUL' and the method of evaluating the results of these activities. The implementation method is by home visits/visits to babies and toddlers' homes and interaction in groups via WhatsApp. Home visit activities are carried out to provide education about the importance of measuring and weighing babies/toddlers so that they are expected to know about the problems they are facing. These activities are then monitored and evaluated. The sample used was 72 toddlers. With the help of power collection techniques in the form of questionnaires. The type of data collection used is primary data and secondary data.

RESULTS

Table 1. Characteristics of Mothers by Age

Age (years)	Frequency	Percentage (%)
21 - 26	21	29,2
27 - 32	27	37,5
33 - 38	15	20,8
39 - 45	9	12,5
Total	72	100

Based on the table above, it can be seen that the age of the mother under five is dominated between 27-32 years with a total of 27 people (37.5%).

Table 2. Characteristics of Mothers Based on Last Education

Last Education	Frequency	Percentage (%)
SMP	15	20,8
SMA	45	62,5
S1	12	16,7
Total	72	100

Based on the results of the table above, it can be seen that the characteristics of mothers based on their last education are mostly high school graduates, in which case it is found that the percentage value is 62.5%.

Tabel 3. Characteristics of Mothers Based on Occupation

Profession	Frequency	Percentage (%)
private sector employee	45	62,5
housewife	15	20,8
Employee	12	16,7
Total	72	100

Based on the table of characteristics of mothers based on work, the majority are private employees, namely with a frequency of 45 with a percentage value of 62.5%.

Table 4. Characteristics of Toddlers by Age

Age (months)	Frequency	Percentage (%)
24 - 35	34	47,2
36 - 47	20	27,8
48 - 59	18	25,0
Total	72	100

Based on the results of table 4 on the characteristics of toddlers by age, it can be seen that the 24-35 month age range dominates the most. Which percentage value in this study is 47.2%.

Table 5. Characteristics of Toddlers Based on Gender

Gender	Frequency	Percentage (%)
Woman	39	54,2
Man	33	45,8
Total	72	100

Based on the results of the table above, it can be seen that the most common characteristics of toddlers are girls. Which, the total frequency of research is 39 with a percentage value of 54.2%.

Table 6. Characteristics of Toddlers Based on Body Weight

Weight (Kg)	Frequency	Percentage (%)
8,7 - 9,8	34	47,2
9,9 - 11,6	21	29,2
11,7 - 13,8	17	23,6
Total	72	100

Based on the results of table 6 above, it can be stated that the most dominant weight-based characteristics of toddlers are the body range of 8.7 kg - 9.8 kg with a frequency value of 34 and a percentage of 47.2%.

Table 7. Characteristics of Toddlers Based on Body Weight

Height (Cm)	Frequency	Percentage (%)
75 – 78	34	47,2
79 – 86	21	29,2
87 – 95	17	23,6
Total	72	100

Based on the results of table 7 above, it can be seen that the most dominant characteristics of toddlers based on their height are 75-78 cm with a frequency value of 34 and a percentage of 47.2%.

Table 8. Test Results

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	without_innovation	4.61	72	.683	.080
	with_innovation	8.18	72	.954	.112

Based on the table above, it can be seen that the average knowledge of mothers before using the Sigembul innovation is 4.61 while the average knowledge of mothers after using the Sigembul innovation is 8.18. So it can be said that mother's knowledge using Sigembul innovation is better than without using Sigembul innovation.

Table 9. Paired Sample Test Results**Paired Samples Test**

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	tanpa_inovasi - dengan_inovasi	3.569	1.149	.135	-3.839	-3.300	26.372	71	.000

Based on the table above, a significance value of 0.000 is obtained, meaning that H_a is accepted and H_0 is rejected, so it can be concluded that there is an influence of Sigembul's innovation (Action for Mothers Care for Scales and Toddler Health) on the reduction of stunting cases in Olak-olak Kubu Village. After that, a series of activities carried out by the Puskesmas/Posyandu

were related to the SIGEMBUL activities. The flow of SIGEMBUL's innovation in reducing the stunting rate in Olak-olak Kubu Village is by creating a whatsapp group which is followed by collecting data on toddlers who do not come to the posyandu and then informing the mothers of toddlers regarding the names of those who are not present at the posyandu via the WhatsApp group, then

the mothers Together with Balit, visit the midwife/cadre's residence to take measurements and weigh the body. After that, it was continued by sending the results of the toddler measurements to the SIGEMBUL whatsapp group and the posyandu cadres did the recording of the toddler measurement data, finally, the posyandu cadres reported the results of the measurements of the required agencies (Villages and Health Centers).

DISCUSSION

Stunting is a chronic nutritional problem or malnutrition in toddlers where the height is less than the height in normal children of their age so that they are prone to getting degenerative diseases after adulthood and can become a problem of the level of intelligence in children. Stunting is certainly a matter of great concern in the growth of toddlers. Because if stunting is not paid attention to, what will happen is a disturbance in the child's growth and development which will later be different from the growth of other children (8,9).

Based on the results of research that has been carried out by researchers, a significance value of 0.000 is obtained, meaning that H_a is accepted and H_0 is rejected so that it can be concluded that there is an influence of Sigembul innovation (Actions of Mothers Caring for Scales and Toddler Health) on reducing stunting cases in Olak-olak Kubu Village. mother's knowledge before using the Sigembul innovation was 4.61 while the average mother's knowledge after using the Sigembul innovation was 8.18. So it can be said that mother's knowledge using Sigembul innovation is better than without using Sigembul innovation. According to the KBBI, innovation is the process and result of developing the utilization or mobilization of knowledge, skills (including technological skills) and experience to create or improve new goods or services, processes or systems that provide significant or significant value, especially economic and social.

This research is in line with research conducted by (10) stating that Innovation is a different activity to solve a problem. In his research, (11) made a similar activity namely "Si Mamah Riang" which also aims to reduce stunting cases, in his research he managed to prove that this activity has succeeded in increasing public awareness and knowledge about the potential of local food which can be used to help overcome stunting problem. The results of the activity evaluation show that the "Si Mamah Riang" activity has an encouraging positive trend so that this activity has great potential to be developed. This is the same as the SIGEMBUL activity which was pioneered by the Community Health Center in Olak - Olak Kubu Village which was successful in reducing cases of stunting in children.

In addition, (12,13) states that the problem of stunting needs to be taken seriously through family-based prevention and treatment schemes. Starting from the family as the smallest social unit and as the reproduction of new members in society, with this it can be stated that good innovation can reduce or decrease stunting cases.

(14) in his research also revealed that quality stunting innovations will have a positive impact on healthy family life, which can prevent cases of stunting in children. In addition, nutritious food also affects health maintenance. Innovation is an activity or activities of research, development, and/or engineering carried out to be able to develop practical applications of new values and scientific contexts, or new ways to apply existing knowledge and technology in products or production processes (Constitution No. 23 of 2014).

In this case it can be concluded that the SIGEMBUL Innovation (Action for Mothers Care for Scales and Toddler Health) has had an influence on reducing stunting cases in Olak-olak Kubu Village. This is because this innovation can reduce stunting cases in Olak - Olak Kubu Village. Apart from that, the SIGEMBUL innovation flow in reducing

stunting rates in Olak-Olak Kubu Village is by creating a whatsapp group which is followed by collecting data on toddlers who do not come to the posyandu and then informing the mothers of toddlers regarding the names of those who are not present at the posyandu through the group whatsapp, then the mother and Balit come to the midwife/cadre's residence to take measurements and weigh the weight. After that, it was continued by sending the results of the toddler measurements to the SIGEMBUL whatsapp group and the posyandu cadres did the recording of the toddler measurement data, finally, the posyandu cadres reported the results of the measurements of the required agencies (Villages and Health Centers).

CONCLUSION

Based on research that has been conducted by researchers, the conclusions in this study are:

1. The result of a significance value of 0.000 means that H_a is accepted and H_0 is rejected so that it can be concluded that there is an influence of Sigembul's innovation (Action of Mothers Care for Scales and Toddler Health) on reducing stunting cases in Olak-olak Kubu Village.
2. The flow of SIGEMBUL's innovation in reducing stunting rates in Olak-Olak Kubu Village is by creating a whatsapp group which is followed by collecting data on toddlers who do not come to the posyandu and then informing the mothers of toddlers regarding the names of those who are not present at the posyandu via the whatsapp group, then the mother and Balit come to the midwife/cadre's residence to take measurements and weigh the body. After that, it was continued by sending the results of the toddler measurements to the SIGEMBUL whatsapp group and the posyandu cadres did the recording of the toddler measurement data, finally, the posyandu cadres reported

the results of the measurements of the required agencies (Villages and Health Centers).

REFERENCES

1. Unicef. UNICEF programme guidance for early childhood development. 2017.
2. Suryagustina S, Araya W, Jumielsa J. Pengaruh pendidikan kesehatan tentang pencegahan stunting terhadap pengetahuan dan sikap ibu di kelurahan Pahandut Palangka Raya. *Dinamika Kesehatan: Jurnal Kebidanan Dan Keperawatan*. 2018;9(2):582-91.
3. Probosiwi H, Huriyati E, Ismail D. Stunting dan perkembangan anak usia 12-60 bulan di Kalasan. *Berita Kedokteran Masyarakat*. 2017;33(11):559.
4. Permatasari TAE. Pengaruh Pola Asuh Pembrian Makan Terhadap Kejadian Stunting Pada Balita. *Jurnal Kesehatan Masyarakat Andalas*. 2021;14(2):3.
5. Hendrayati, Asbar R. Faktor Determinan Kejadian Stunting. *Media Gizi Pangan*. 2018;25(1):39-50.
6. Wahyudi R. Pertumbuhan Dan Perkembangan Balita Stunting. *Jurnal Keperawatan*. 2018;IV(1):56-62.
7. Ramdhani A, Handayani H, Setiawan A. HUBUNGAN PENGETAHUAN IBU DENGAN KEJADIAN STUNTING. 2020;28-35.
8. Dhama MV, Ogbo FA, Osuagwu UL, Agho KE. Stunting and severe stunting among infants in India: the role of delayed introduction of complementary foods and community and household factors. *Glob Health Action*. 2019;12(1).
9. Megawati G, Wiramihardja S. Peningkatan Kapasitas Kader Posyandu Dalam Mendeteksi Dan Mencegah Stunting. *Dharmakarya*. 2019;8(3):154-9.

10. Soekatri MYE, Sandjaja S, Syauqy A. Stunting was associated with reported morbidity, parental education and socioeconomic status in 0.5–12-year-old Indonesian children. *Int J Environ Res Public Health*. 2020;17(17):6204.
11. Laksono AD, Megatsari H. Determinan Balita Stunting di Jawa Timur: Analisis Data Pemantauan Status Gizi 2017. *Amerta Nutrition*. 2020;4(2):109.
12. Mulyaningrum FM, Susanti MM, Nuur UA. FAKTOR – FAKTOR YANG MEMPENGARUHI STUNTING PADA. 2021;74–84.
13. Ni`mah Khoirun, Nadhiroh SR. Faktor Yang Berhubungan Dengan Kejadian Stunting Pada Balita. *Media Gizi Indonesia*. 2015;10(1):13–9.
14. Hartati S, Nurhaeni N, Gayatri D. Faktor Risiko Terjadinya Pneumonia pada Anak Balita. *Jurnal Keperawatan Indonesia*. 2012;15(1):13–20.