



Joint Action to Prevent Stunting and Obesity in the Tanah Kali Kedinding Health Center, Kenjeran District, Surabaya

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Abstract

Stunting in children is a serious problem because it is associated with the risk of future illness and the difficulty of achieving optimal physical and cognitive development. The prevalence of stunting in Surabaya is found in several working areas of the puskesmas, one of which is at the Tanah Kali Kedinding Health Center at 25.37%. Obesity is a condition in which the accumulation of excess or abnormal fat is bad for health. The World Health Organization (WHO) in 2014 noted that 1.9 billion adults were overweight with a prevalence of 39% having children under five were overweight and obese. The case of obesity in the city of Surabaya itself ranks second highest in East Java Province, which is as many as 98,344 cases. This activity aims to increase knowledge about stunting and obesity prevention for pregnant women and mothers under five. This service method uses increasing knowledge about stunting and obesity in everyday life for pregnant women and mothers of toddlers, measuring nutritional status in Toddlers and cooking demonstrations of healthy snacks using the Risoles menu of Tongkol Ragout Fresh Bread. The results obtained, namely pregnant women and mothers under five experienced an increase in knowledge about stunting and obesity respectively 80% and 82%, both of which were classified as good.

Keyword: Stunting, Obesity, Knowledge, Pregnant mother, Toddler



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1. Introduction

Stunting is a chronic condition of poor growth of a child which is the accumulation of the impact of various factors such as poor nutrition and health before and after the child's birth. Stunting in children is a serious problem because it is associated with the risk of future illness and the difficulty of achieving optimal physical and cognitive development. According to UNICEF, the problem of stunting is caused by two direct causes, namely food intake and infectious diseases. The direct causes are related to factors of parenting, food security, access to health services and environmental sanitation. However, the root cause of these factors is at the individual and household levels such as education level, household income, socio-cultural, economic, and political (Rahayu *et al.*, 2018; Kemenkes RI, 2018).

In toddlerhood, children are not getting breast milk and start choosing the food they want to eat. This should be a concern for parents, especially in the feeding process so that the nutritional needs of children are still met. Aspects of feeding patterns include a history of breastfeeding and complementary feeding and feeding practices affect the incidence of stunting. Toddlers who have a history of poor parenting are 2.4 times more likely to experience stunting compared to toddlers with a history of good parenting (Widyaningsih *et al.*, 2018). Feeding parenting is the dominant factor that affects stunting in toddlers compared to parenting habits, hygiene habits and habits of getting health services. Mothers who have stunted children tend to have a habit of delaying feeding their toddlers and not paying attention to their nutritional needs (Bella *et al.*, 2020).

United Nation Children's Fund (2019) in 2018 nearly 200 million children under 5 years of age suffer from stunting (short) or wasting (UNICEF, 2019). Based on Nutrition Status Monitoring (PSG) data during 2015-2017, stunted toddlers had the highest prevalence compared to other nutritional problems (undernutrition, thinness, and obesity) which was 29.6% wasting (Kemenkes RI, 2018). Result Survei Status Gizi Balita Indonesia (SSGBI) 2019 shows that there has been a decrease in the prevalence of stunting from 30.8% in 2018 to 27.67% in 2019 (Kemenkes RI, 2018). However, this figure is still higher than the WHO target of 20%. The Surabaya City Health Office report noted that the prevalence of stunting in 2015 was 13.89%, while in 2016 there was an increase of 14.86%. The prevalence of stunting in Surabaya is found in several working areas of puskesmas, five of which are in the working area of Tanah Kali Kedinding Health Center 25.37%, Simomulyo Health Center with 17.58%, Kenjeran Health Center 14.78%, Banyu Urip Health Center 15.85% and Putat Jaya Public Health Center by 19.89% (Ernawati & Arini, 2020).

Obesity is a condition in which the accumulation of excess or abnormal fat is bad for health. The World Health Organization (WHO) in 2014 noted that 1.9 billion adults were overweight with a prevalence of 39% having children under five were overweight and obese. Obesity is most common in women with a prevalence of 15% and men 11%. NHANES data in 2009 the prevalence of obesity in adults from 35.7% to 18.5% (Kandinasti & Farapti, 2018). The prevalence of obesity in adults in Indonesia has increased from year to year. The prevalence of obesity in the adult male population in 2013 was 19.7%, which is higher than in 2007 which was 13.9%. The prevalence of obesity in adult women also increased from 2007 to 2013 from 13.9% to 32.9% (Departemen Kesehatan RI, 2013). Riskesdas 2013, the overall prevalence of obese adults is 15.4%, while according to the 2016 National Health Service, the prevalence of obese adults is 20.7%. The case of obesity in the city of Surabaya itself ranks second highest in the province of East Java, which is as many as 98,344 cases (Dinas Kesehatan Provinsi Jawa Timur, 2018). Based on this, we feel the need to hold an educational activity about stunting and obesity that can support the fulfillment of nutritional needs for pregnant women and mothers of children under five in the area.

2. Method

Community service activities are carried out by collaboration between lecturers and students of the Department of Nutrition, Politeknik Kesehatan Kementerian Kesehatan Surabaya and the Nursing Study Program, Universitas Nahdlatul Ulama Surabaya. Community service activities last for 1 month (during January 2022). The location of community service activities is at the Tanah Kali Kedinding Health Center, Surabaya City

Jl. Kedung Cowek No. 226, Tanah Kali Kedinding, Kenjeran District, Surabaya City - East Java. The target of this activity is mothers of toddlers and pregnant women in the Tanah Kali Kedinding Health Center area of Surabaya City with a total of 56 participants. Activities in the form of increasing knowledge about stunting and obesity in everyday life for pregnant women and mothers of toddlers, measuring nutritional status in Toddlers and cooking demonstrations of healthy snacks using the Risoles menu of Tongkol Ragout Fresh Bread.

3. Result and Discussion

Community service activities that have been carried out have resulted in the following achievements. The average results of pre-test and post-tests of knowledge of mothers toddler and pregnant women about knowledge of stunting, presented on Table 1.

Table 1. The average results of pre-test and post-tests knowledge of mothers toddler and pregnant women about knowledge of stunting

No	Stunting Knowledge	Average Score			
		Pre-test		Post-test	
		f	%	f	%
1	Good	6	11	45	80
2	Enough	12	21	11	20
3	Less	38	68	0	0
Total		56	100	56	100

Based on **Error! Reference source not found.**, the results show that the majority of the knowledge level of mothers under five and pregnant women about knowledge of stunting during the pre-test was included in the less category by 68% and increased knowledge to a good category by 80% after being given education to mothers under five and pregnant women. The average result of pre-test and post-test about obesity, shows on Table 2.

Table 2. The average results of pre-test and post-tests of knowledge of mothers toddlers and pregnant women about knowledge of obesity

No	Knowledge of Obesity	Average Score			
		Pre-test		Post-test	
		f	%	f	%
1	Good	5	9	46	82
2	Enough	10	18	10	18
3	Less	42	73	0	0
Total		56	100	56	100

Based on [Table 2](#), the results show that the majority of the knowledge level of mothers under five and pregnant women about knowledge when the pre test was carried out was in the less category of 73% and experienced an increase in knowledge to be in the good category by 82% after being given education to mothers under five and pregnant women.

Community service activities were carried out in 2 (two) meetings, namely on January 28, 2022 and January 30, 2022, which took place at the Tanah Kali Kedinding Village Hall. Community service activities were attended by pregnant women and mothers of toddlers, totaling approximately 56 participants. This activity presented by [Figure 1](#).



[Figure 1](#). Education about stunting and obesity in toddlers

[Figure 1](#) is the first meeting on January 28, 2022, conducted education about: "Stunting and Obesity in Toddlers". Before the activity was carried out, participants were given 10 multiple choice questions representing stunting and obesity in toddlers as a pre-test. The results of the pre-test knowledge of stunting and obesity obtained results of 68% and 73% respectively, both of which belong to the category of Less knowledge. The community service team also carried out a post-test after participants were given material to measure understanding of the material that had been given with the result that there was an increase in participants' knowledge about Stunting and Obesity by 80% and 82%, respectively, belonging to the category of Good knowledge. [Figure 2](#) is the second meeting which was held on January 30, 2022, to measure the nutritional status of children under five and a demonstration of cooking healthy snacks.



[Figure 2](#). Measurement of nutritional status in toddlers

Measurement of nutritional status in the form of measuring the height of toddlers using microtoise and digital scales. A demonstration of cooking healthy snacks using the Risoles Bread Ragout Ikan Tongkol menu with ingredients: potatoes, tuna, garlic, pepper, nutmeg, salt, eggs, bread flour and cooking oil. Toddler period is the most important period in the life cycle, because at the age of 0 to 5 years, toddlers experience physical, mental and behavioral development. Therefore, at that age toddlers need to get special attention in terms of their nutrition (Gunawan & Ash Shofar, 2018).

Mother's knowledge about nutritious food is one of the factors that can affect health, providing high adaptability for children's growth and development (Nugroho & Wardani, 2022). Mothers who have the ability in themselves will increase good and sufficient knowledge to overcome stunting prevention efforts, parents who have received information about stunting certainly understand, interpret and while mothers who have never received insightful information about stunting tend to have less knowledge than mothers who gain insight into stunting both through social media and counseling for posyandu cadres (Rahmwati *et al.* 2019).

At this time to determine the nutritional status of toddlers, Posyandu uses data from anthropometry. Posyandu uses the Towards Healthy Card (KMS) which is filled out once a month to monitor the development of the nutritional status of toddlers (Gunawan and Ash shofar, 2018). Posyandu cadres play a role in weighing toddlers (Nugroho & Wardani, 2022).

Toddler age is a vulnerable age and is very important in determining physical and mental growth and development in adolescence. The introduction of healthy and nutritious food for toddlers is very important so that children can know the benefits of healthy food for the body (Pratiwi *et al.* 2021). One source of protein, namely fish, which is a source of animal protein, can help the growth of brain cells, so fish is often considered as food to support intelligence (Riestamala *et al.*, 2013).

Tongkol is a fish that has complete nutrition and the price is affordable. Tuna fish has advantages, namely high protein content and rich in omega 3 fatty acids and every 100 grams has a chemical composition consisting of 69.40% water, 1.50% fat, 25.00% protein and 0.03% carbohydrates and contains several minerals such as calcium, phosphorus, iron, sodium, vitamin A or retinol and B vitamins or thiamin, riboflavin and niacin (Sanger 2010; Hafiludin, 2011).

After the community service activities were carried out, the results were able to increase knowledge about stunting and obesity in daily life for pregnant women and mothers of children under five, to find out the nutritional status of Toddlers in the Tanah Kali Kedinding Health Center area, Kenjeran District, Surabaya and mothers of toddlers can apply healthy snacks for children. toddlers, so that mothers of toddlers and pregnant women can apply them in their daily lives.

4. Conclusion

Based on community service activities that have been carried out on "Joint Action to Prevent Stunting and Obesity in the Tanah Kali Kedinding Health Center, Kenjeran District, Surabaya" pregnant women and breastfeeding mothers experienced an increase in knowledge about stunting by 80% which was classified as good and knowledge about obesity by 82%. which is good.

The community service activity program that has been implemented is certainly expected to increase knowledge about stunting and obesity in everyday life for pregnant women and mothers of toddlers, find out the nutritional status of Toddlers in the Tanah Kali Kedinding Health Center area, Kenjeran District, Surabaya and can implement healthy snacks for toddlers, so that mothers of toddlers and pregnant women can apply in everyday life.

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