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THE EFFECT OF THE OTOF (ONE TEAM STUDENT ONE FAMILY) MODEL ON KNOWLEDGE OF MOTHERS AND TODDLERS TO PREVENT STUNTING

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ABSTRACT

The incidence of stunting is caused by several factors, one of which is the family factor. Mothers as the main caregivers for toddlers have a very important role in preventing stunting in children. Efforts to improve mothers' knowledge and skills in preventing stunting in toddlers continue to be carried out, but innovation is needed to increase mothers' understanding of the growth and development of toddlers so that stunting in toddlers can be prevented. One of the educational method innovations that can be carried out effectively is based on empowerment, namely 1 student 1 family, but there has been no research on a student team 1 family. The purpose of this study was to determine the effect of the OTOF (One Team Student One Family) model on the level of knowledge among mothers of toddlers. This research was conducted in the working area of the Kertosari Public Health Center, Banyuwangi Regency from the beginning of June to the end of October using a pre and post test Quasy Experiment with group control and using an independent t test. The population is all mothers who have toddlers. Sampling with stratified random sampling technique 61 respondents consisting of 31 interventions and 30 controls. The data collection instrument in the form of a questionnaire that has been declared valid and reliable the intervention used is to empower Health students (Nursing, Analyst, Midwifery, Pharmacy and Nutrition) according to their ability to carry out Health Education to 1 family. The instruments used in this study were Questionnaires and SOPs . The results showed that after giving the OTOF Model treatment the knowledge of the mother of toddlers increased and after being tested with the Paired T Test, the result was p = 0.00 which means that there is an effect. The conclusion is the results of the study show that there is an effect of the OTOF Model on the knowledge of mothers of children under five.

Keywords: mother knowledge; otof; stunting

INTRODUCTION

Stunting is a condition of failure to thrive experienced by toddlers in today's world as a result of chronic malnutrition so that children are too short for their age (Simanjuntak & Georgy, 2020). In 2017, 22.2% or around 150.8 million children under five in the world were stunted. Indonesia is one of the countries with a high incidence of stunting under five. The Nutrition Status Monitoring Report (PSG) for the last three years shows that short toddlers have the highest prevalence compared to other nutritional problems such as undernutrition, underweight, and obesity.

The prevalence of short toddlers has increased from 2016, which was 27.5% to 29.6% in 2017. In 2020, short toddlers reached 24.2%. Nutritional problems especially stunting in toddlers can hinder children's development with negative impacts that will take place in later life such as intellectual decline, vulnerability to non-communicable diseases, decreased productivity leading to poverty and the risk of giving birth to babies with low birth weight (Widianti & Yusnita, 2020). A very important effort to reduce the incidence of stunting is the fulfillment of nutrition in the First 1,000 Days of Life (HPK) of children under five. In more detail, several factors that cause stunting are described by the National Team for the Acceleration of Poverty Reduction in 2017 in their book 100 Priority Districts/Cities for Stunting Intervention as follows: (1) Poor parenting practices,

including lack of mother's knowledge regarding health and nutrition before and during pregnancy, as well as after the mother gives birth. (2) Limited health services including ANC-Ante Natal Care (health services for mothers during pregnancy) Post Natal Care and quality early learning. Information gathered from Ministry of Health and World Bank publications states that child attendance at Posyandu has decreased from 79% in 2007 to 64% in 2013 and children have not received adequate access to immunization services; (3) There is still a lack of household/family access to nutritious food. Evaluation of the implementation of the stunting program stated that all implementation and data collection was carried out manually including the input component; there is no special fund for specific nutrition interventions, there is still a lack of nutrition workers and there are no guidelines and SPOs regarding handling growth faltering. Process components; planning has not been carried out bottom up and not all specific nutrition interventions have recorded reporting. output components; toddlers who receive vitamin A capsules and pregnant women with Chronic Energy Deficiency (CED) who receive PMT have met the achievement targets and there are still specific nutrition intervention programs implemented that cannot be evaluated. (Muthia & Yantri, 2019).

According to the Ministry of Health, the handling of stunting consists of 3 strategies consisting of diet, parenting and sanitation (Ministry of Health, 2020). In the parenting strategy, the family is a part that has an important role in handling stunting with the family support system in a sense of control in stunting prevention. Families that have high power will be followed by better feeding practices, (Inurreta-Díaz et al., 2021). Providing health education with the theme of family empowerment-based nutrition has also been shown to improve cognition, affection, and feeding practices for infants and children (Galasso et al., 2019). Family empowerment is the key so that the resources owned by the family can be optimally utilized to provide proper nutrition for toddlers (Inurreta-Díaz et al., 2021). Health students as prospective scientists have the potential to change the family paradigm in understanding stunting. Families will understand better if health education is given by someone who is closer to them (Brener & Demissie, 2018).

One approach is with health students in their fields such as nursing students, midwifery students, nutrition students and pharmacy students (Galasso et al., 2019). Students will become a team to provide education to families with the aim of improving family education and skills in preventing stunting (Galasso et al., 2019). OTOF (One Team Student One Family) is a form of health intervention to empower families with toddlers aged 6-23 months, in providing proper nutrition for toddlers, so they avoid stunting. The model aims to strengthen internal systems so that they are able to use the resources they have to meet toddler nutrition appropriately. This model combines the concepts of Friedman's Family Health Care Nursing, Pender's Health Promotion Model, and Alhani's Family-Centered Empowerment Model. It is hoped that OTOF Assistance can reduce the prevalence of stunting in Indonesia and create a healthy Banyuwangi free of stunting.

METHOD

This research is a quasy pre post experiment with a control group. The experimental group in this study received the OTOF Model Treatment and Online training by means of 1 family receiving assistance 1 group of students (Nursing, Medical Laboratory Technology (TLM), Midwifery, Pharmacy and Nutrition) with a total of three meetings. The first meeting assessed the knowledge level of the second meeting is the implementation and the third meeting is an evaluation of the material provided is about Health Education according to student competence. Nursing students

about family management in providing nutrition to children, midwifery students about child development, Pharmacy students about drug supplements or vitamins, nutrition students about good nutrition for mothers with stunting.

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The sampling technique used stratified random sampling by means of taking samples by paying attention to a level (strata) in the population elements according to the inclusion and exclusion criteria and taking using the slovin formula so that 61 respondents were found consisting of 31 intervention groups and 30 control groups. Prior to data analysis, the researcher carried out the Kolmogorov-Smirnov test to find out the distribution of data in each group. The collected data were then analyzed using paired T-test, unpaired T-test and determining the effect size

RESULTS

Table 1.
Social Demographics(n=61)

Social Demographics		Total	%
Age	17-25	0	0
	26-35	40	66
	36-45	18	30
	46-55	3	4
Education	No School	0	0
	primary school	5	8
	Junio high school	9	14
	High school	32	52
	College	15	26
Religion	Islam	59	97
	Christian	2	3

Table 1 shows that most of the respondents are aged 26-35 years or about 66% of the total respondents. Most of the respondents' education was high school with a total of 32 people or around 52%.

Table 2.
Pre-post test in intervention group

		Mean	t	df	Sig. (2-tailed)
Pre-test x Post-test	Intervention	-7.226	-7.099	30	.000
	Group	-4.3333	-.264	29	.794

Table 2 states that the Intervention Group. Based on the results of the paired t-test, the sig. (2-tailed) = 0.000, so it can be concluded that sig. (2-tailed) = 0.000 < α = 0.05, then H1 is accepted which means "There is" a significant effect. In the control group, the results of the paired t-test obtained a sig. (2-tailed) = 0.794, so it can be concluded that sig. (2-tailed) = 0.794 <α = 0.05, then H1 is rejected which means "There is no" significant effect

Table 3.
Difference between groups that are given intervention and not given intervention.

Independent Samples Test				
Post-test	Levene's Test for Equality of Variances	t	df	Sig. (2-tailed)
	.014	7.047	59	.000

Table 3 shows the value of Sig. Levene's Test for Equality of Variances is 0.014 <0.05, it means that the variance of the data between the two data is not homogeneous. Based on the Independent Samples Test output table, it is known that the Sig. (2-tailed) of 0.000 <0.05, then as the basis for decision making in the independent sample t test it can be concluded that H1 is accepted which means there is a significant difference between groups that are given intervention and not given intervention.

DISCUSSION

The results of this study stated that there was an effect of the One Team Student On Family (OTOF) Model Treatment on Mother's Knowledge in Preventing Stunting in Toddlers with a p value of 0.000. All health workers and health students consisting of nurses, midwives, nutritionists, analysts and pharmacists have a very important role in handling stunting. their babies so that mothers understand the importance of exclusive breastfeeding compared to formula milk. This can also be done by pleasing the mother's feelings from the pre-conception period when the baby is born until at least 6 months old and continues until the second child's birthday (Tambunan et al., 2021). Exclusive breastfeeding for babies is very important considering that breast milk contains very complete nutrients and is needed by babies to grow and develop optimally (Wilujeng, 2021).

Stunting that occurs in children is a reflection of conditions where children do not receive adequate nutrition for a long time resulting in sub-optimal growth. Food intake is closely related to children's eating habits at an early development stage and depends entirely on the food provided by parents (Bustami and Ampera, 2020). Factors that cause stunting are grouped into three, namely community factors, family factors and individual factors. Community factors consist of the economic system, education, health and sanitation systems. Family factors include inadequate quality and quantity of food, family income, structure of family members, parenting and health

services, while individual factors that cause stunting are inadequate nutritional intake, low birth weight and a history of infectious diseases (Hasanah et al., 2020)).

Researchers are of the opinion that health workers and health students care for mothers who have babies aged 6-24 months. Health education that can be done is to provide training to mothers on how to prepare menus for toddlers. Several studies have shown that complementary feeding interventions in the form of fish substitute snacks can improve nutritional status in children under five. Complementary foods in the form of biscuits and tempeh flour cakes for 30 days can increase the weight and height of children under five years old. Children under five with malnutrition and malnutrition who consumed catfish biscuits for 88 days experienced an increase in nutrition.

CONCLUSION

The results of this study stated that there was an effect of the One Team Student On Family (OTOF) Model Treatment on Mother's Knowledge in Preventing Stunting in Toddlers with a p value of 0.000. Based on the description above, it can be concluded that nursing students, midwifery students and nutrition students further increase mothers' knowledge in preventing stunting in toddlers by improving health services in the form of health education about the benefits of balanced nutrition with training in preparing MPASI menus, having ASI motivators and ASI counselors for mothers -mothers whose breastfeeding is not smooth or mothers who experience obstacles in breastfeeding. Apart from that, health workers also need to increase efforts to empower families in order to support the success of exclusive breastfeeding. In addition, there is a need for follow-up from related parties in an effort to prevent stunting in toddlers in the form of positive cognition and affection, strong commitment, support from all family members.

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