The Effect Of Training Using The Stunting Module On The Knowledge And Skills Of Cadres About Prevention And Handling Of Stunting At Tanoyan Health Center, Lolayan Regency, Bolaang Mongondow Regency

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ABSTRACT

Posyandu cadres are the main driver of all activities carried out at posyandu. The existence of cadres is important and strategic, when the services provided get sympathy from the community, it will have positive implications for community awareness and participation. The purpose of this study was to measure the effect of training using modules on the knowledge of cadres in the prevention and treatment of stunting. The research method is quasi-experimental with a pre-test and post-test design. This research was conducted in the working area of the Tanoyan Health Center with the subjects selected using the total sampling method, namely all 30 posyandu cadres. The variables studied were the knowledge and skills of cadres before and after the intervention. The data were then analyzed by univariate and bivariate. Results: The data shows that before being given training, a pre-test was carried out with the results that 50.0% of cadres had less knowledge and 60.0% less skills after intervention in the form of training and post-test for knowledge and good practice was 76.7%. The paried t test statistic test showed that there was a significant increase in the knowledge and attitudes of posyandu cadres after the intervention p = 0.000, value (p <0.05). The conclusion there is an effect of training using modules on the knowledge and skills of cadres in the prevention and treatment of stunting in the Tanayon Health Center Work area, Lolayan District, Bolaang Mongondow Regency. Suggestion And the puskesmas are expected to always monitor the work of posyandu cadres by assisting and providing education about stunting problems and correct anthropometric measurements.

Keywords: ***Capacity Building, Stunting, Module, Posyandu Cadre***

INTRODUCTION

Globally, 3.1 million children under the age of five die each year due to malnutrition, which is almost half of all deaths that occur in children under 5 years of age (Bhutta et al., 2008)). The World Health Organization (WHO) highlights that stunting is the most dominant form of malnutrition among children under 5 and it is estimated that globally around 161 million children under the age of 5 are stunted (de Onis & Branca, 2016). Stunting increases globally as a health burden contributing 45% of all under-five deaths. More than two million children under five die each year due to malnutrition worldwide ((García Cruz et al., 2017). The other impact of stunting is disease, lack of intelligence and productivity which is certainly very beneficial for future generations (Yisak et al., 2015).

Stunting is a very important problem, so community-based interventions must be formulated and implemented to improve children's health. At the individual level, interventions should focus on educating mothers about the basics of proper nutrition and the need to take advantage of available health services. At the community level, health systems that facilitate public health interventions include: maternal and child health programs that need to be made accessible to women in rural areas. This intervention will improve the nutritional status of children under five so that the WHO global target of 2025 can be achieved (Akombi et al., 2017).

Several studies have shown that the risk caused by stunting has a negative effect on cognitive abilities in children, such as lower IQ and lack of academic achievement (Daracantika et al., 2021) : (Ekholuenetale et al., 2020), increasing the risk of obesity and a low quality of life increasing the risk of obesity and a lower quality of

life (Reinhardt & Fanzo, 2014) and increased risk of degenerative diseases (Picauly & Toy, 2013) : (Crookston et al., 2013).

The role of posyandu cadres is to obtain various health information beforehand and more completely. Take a real role in the development of growth and development of children under five and maternal health. One of the functions of posyandu is as a medium for promoting health and nutrition, monitoring the growth of children under five. Therefore, providing information about stunting prevention for posyandu cadres is very important, because then the cadres have the provisions to carry out their role in providing counseling to mothers in posyandu, so it is hoped that the incidence of stunting can be reduced (Maywita, 2018).

Research by (Masyita Haerianti, 2018) to increase the knowledge of cadres in detecting stunting from the results of interviews conducted with several participants showed that the knowledge of cadres about stunting was still very low, even most of the participants did not know what stunting was.

Training with the KMS-2008 companion module can significantly increase the accuracy of cadres, and has better effectiveness than training without the use of modules in interpreting the results of weighing children under five at the Posyandu in the working area of the Darul Imarah Health Center, Aceh Besar District (Al-rahmad, 2015)

This is evidenced in the research of (Juniarti, 2021) show that the level of skill, accuracy and accuracy of the data collected by a posyandu cadre is still very low, 90.3% of posyandu cadres are not correct in weighing.

The problem above is also in line with the research of (Husniyawati & Ratna, 2016) . The results of the observation of weight measurement are quite good, but some cadres still forget to take off the attributes worn by children when weighing and do not repeat the measurement 3 times.

METHODS

The research design used was quasi-experimental with a non-equivalent control group design. with a pre-test-post-test design. The population used in this study were posyandu cadres in the working area of the Tanoyan Health Center, Lolayan District, Bolaang Mongondow Regency. According to data from the Puskesmas, there were 30 active Posyandu cadres spread over 7 villages. The sampling technique used is total, where each member or unit of the population is taken as a sample in this study as many as 30 posyandu cadres.

The number of subjects is all posyandu cadres as many as 30 people from 7 villages in the Tanoyan Health Center area, Lolayan District, Bolaang Mongondow Regency.

The independent variable in this study is the Training Module on stunting prevention and control. The dependent variable in this study is the level of knowledge and skills.

Posyandu cadres are given training for 4 days with a total of 30 hours of lessons referring to the training curriculum and modules. The training module developed by the researcher has gone through the development stages before this research was carried out with a curriculum structure consisting of three parts, namely: 1) Basic Materials containing Introduction to the First 1000 Days of Life, 2) Core Materials containing Stunting, Teenage Girls Nutrition, Preconception Nutrition, Nutrition Pregnant Women, Infant and Breastfeeding Nutrition, Community Based Total Sanitation, Supplementary Food Manufacturing Practices based on local food and Stunting Prevention and Management Practices. 3). Supporting Materials on Nutritional Issues in the Research Area and Follow Up Plans'

The measurement of the knowledge level of posyandu cadres begins with a pre-test questionnaire instrument and after training a post-test is carried out with 40 questions, each correct answer is given a score of 1 and the wrong answer is given a score of 0. The scores are then grouped into three categories, namely "less if the score is less than 60%, Enough if the value is between 60-80%, and good if the value is above 80% (Khomsan, 2004). Practical measurements are carried out with posyandu cadres who practice measuring nutritional status including Measurement of Height and Weight, Upper Arm Circumference and Head Circumference which are observed and assessed by the evaluator if carried out according to the procedure given a value of 1 and not appropriate given a value of 0.

Data processing is done using SPSS software. Furthermore, descriptive data analysis was carried out, namely univariate analysis (descriptive statistics) and bivariate analysis. Bivariate analysis used is parametric test (paried t test), because the data is normally distributed (Based on the results of the normality test with saphiro Wilk p value > 0.05). aims to test (Ha): there is an effect of training using modules on knowledge and skills of cadres in stunting prevention and treatment and Ho: There is no effect of training using modules on knowledge and skills of cadres in stunting prevention and treatment.

This research has been declared ethically worthy by the Health Research Ethics Committee of the Health Polytechnic of the Ministry of Health Manado KEPK. 01/03/038/2021 March 17, 2021.

RESULTS

Subject Characteristics

This posyandu cadre training was held for four days on March 29 – April 1, 2021 at the Tanoyan Health Center.

The characteristics of the subjects in this study include gender, age, marital status, education, length of service as cadres are presented in table 1. The results show that all subjects are female (100%). In this study, the age range was dominated by early adults (26-35 years) as much as 33.3%.

Posyandu cadres work 82.3% as housewives, the majority of posyandu cadres with high school education are 40% with marital status as much as 28% have been married and 30% have been posyandu cadres in the range of 6-10 years.

Table 1. Characteristics of Subject

Subject Characteristics	Total	
	n	%
Age (years)		
20 – 25 (Late Adolescence)	2	6.7
26 – 35 (Early Adult)	10	33.3
36 – 45 (Late Adults	9	30.0
46 – 65 (Early Elderly)	9	30.0
Profession		
Housewife	25	82.3
Honorary	3	10
Trader	2	6.7
Education		
Primary school	5	16.7
junior high school	9	30.0
high school	12	40.0
College	4	13.3
Marital status		
Marry	28	93.3
Divorced	2	6.7
Length of time as a cadre (years)		
< 5	8	26.6
6 - 10	9	30.0
11 - 15	3	10.0
16 – 20	3	10.0
> 21	4	13.3

The general description from table 2 shows that before being given training the level of knowledge of posyandu cadres regarding the stunting prevention and handling training module as much as half of the sample (50%) was in the less category and after being given the training it was in the good category namely 76.7%.

Regarding of the skills of posyandu cadres in measuring and determining the results of weighing measurements, there are still many subjects did this task incorrectly, it is proven by the results that 40.0% of cadres are included in the less category and only 2.7% are included in the good category. After the training and practice there was an increase in the skills of cadres in taking measurements, as many as 76.7% of cadres were included in the good category as shown in table 2 below:

Table 2. Distribution of Pre-Test and Post Test Results of Cadre Knowledge and Practice Tests about the contents of the Training Module

Category	Pre - Test		Pos - Test	
	n	%	n	%
Knowledge				
Less ≤ 60%,	15	50.0	0	0
Enough 60-80%	15	50.0	7	23.3
Good ≥ 80%	0	0	23	76.7
Amount	30	100	30	100
Practice				
Less ≤ 60%,	12	40.0	2	6.7
Enough 60-80%	16	53.3	5	16.7
Good ≥ 80%	2	2.7	23	76.7
Amount	30	100	30	100

Bivariate Analysis

The results of the comparison of knowledge and practice of posyandu cadres through training before and after can be seen in table 3 below ;

Table 3. Test the Differences Pre-Test and Post-Test Knowledge and Posyandu Cadre Practice

Variable	n	Pre Test	Post Tes	Average ± SD	Value P
		Mean ± SD	Mean ± SD		
Knowledge	30	22.7 ± 3.7	33.5± 2.5	-10.8 ± 4.4.	0.0000
Practice	30	5.7 ± 1.7	8.2 ± 1.7	2.5 ± 1.6	0.0000

Normality test with Shapiro-Wilk obtained data with normal distribution. Based on table 3 as the result of parametric test (paried t test). For both variables, p value = 0.000 (<0.05) which means that there is a significant difference in knowledge before and after the training. There is an increase in the average shown from knowledge before training, an average of 22.7 was obtained and after training an average of 33.5 was obtained. The average shown from the skills before training, obtained an average of 5.7 and after training obtained an average of 8.2. So that it can be concluded that there is a difference in the average knowledge and skills before and after training.

DISCUSSION

This study aims to measure the effect of training using modules on the knowledge and skills of cadres in the prevention and treatment of stunting. The modules used have been developed before this research was carried out.

Based on table 3, it can be seen that the pre-test and post-test results show that there are differences in the skills of posyandu cadres in practicing the stunting prevention and handling training module, this can be seen at the p value <0.05, which means there is an increase in the average skill and practice score. significant after the training.

The results of this study are in line with research by (Yuliana,dkk 2019) which shows the level of knowledge of posyandu cadres in anthropometric measurements is in the high category with a value of 53.3% and the low category of 20%.

The skills of health cadres, one of which includes the ability to carry out weighing stages, where health cadres usually carry out weighing activities are still not in accordance with anthropometric measurement procedures, so the results obtained from weighing are not precise. Anthropometric measurements carried out

by cadres included measurements of weight and height in infants, toddlers, and the elderly. Body weight is an important anthropometric measure and is most often used in infants and toddlers. In infancy and toddlerhood, body weight can be used to see the rate of physical growth and nutritional status (Supariasa, 2001).

Research by (Adistie et al., 2018) regarding the provision of integrated posyandu modules increases the attitude of cadres to carry out posyandu functions. Attitude is said to be an evaluative process that arises when individuals are faced with a stimulus that requires an individual reaction. Attitudes arise based on the evaluation process within the individual which concludes the stimulus in the form of good or bad values, positive negative, pleasant or unpleasant. The attitude structure consists of three mutually supportive components, namely cognitive, affective, and conative components. The cognitive component is a representation that is believed by the individual possessing the attitude, the affective component is a feeling related to the emotional aspect, and the conative is an aspect of the tendency to behave in a certain way in accordance with a person's attitude.

The results of the research from (Fitri dan Mardiana, 2011) showed an increase in the pretest to posttest scores. It can be concluded that the training provided to posyandu cadres regarding the skills of cadres in anthropometric measurements has succeeded in improving the skills of posyandu cadres.

The provision of nutrition education can affect the increase in knowledge scores, attitudes and skills of cadres. However, the most influential among the three variables is the knowledge score. (Imansari et al., 2021).

The combination of nutrition education techniques with simulations and practices and supporting media such as modules has proven to be effective in increasing the knowledge and skills of cadres (Hastuti & Sembiring, 2017). The nutrition education provided aims to improve the mastery of skills and techniques for implementing cadres' work in detail and routine, so that gaps in the skills of cadres in carrying out their duties such as counseling can be resolved (Alfina et al., 2015).

In addition to knowledge and motivation, the skills of posyandu cadres are one of the keys to the success of the service system at Posyandu. Posyandu cadres' skills in carrying out posyandu activities will increase trust and positive responses from mothers of children under five who come to posyandu, which in turn will have an impact on increasing D/S coverage of toddlers in posyandu. The skills of posyandu cadres will also increase the confidence of cadres and assist cadres in solving various problems faced in carrying out posyandu activities (Purwanti, 2019).

CONCLUSIONS

There is an effect of training using modules on the knowledge and skills of cadres in the prevention and treatment of stunting in the Tanayon Health Center Work area, Lolayan District, Bolaang Mongondow Regency and the suggestion are health care at Health Center expected to always monitor the posyandu cadres by assisting and providing education about stunting problems and correct anthropometric measurements.

The limitation in this study is the condition of filling out the questionnaire which has not been properly conditioned where there are still cadres who are working on filling out the questionnaire together so that it can produce a bias in the information that the researcher receives. The practice of measuring height and weighing weight and head circumference of children under five and measuring mid upper arm circumference of pregnant women was only carried out in a simulation in the training class because the posyandu implementation had been carried out before the research

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