

Model Education Cadres to Overcome Stunting in Health Centers X Deli Serdang North Sumatera Indonesia

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Abstract: ***Background:** Mdg's advanced Program, the SDG's (Sustainable Development Goals), one particular concern in the health sector is improving nutrition. One of the goals of SDG's in 2030 was to end all forms of malnutrition, including reaching an international target of 2025 for stunting and wasting in infants being < 5%. Stunting is a failure to achieve optimal growth caused by a condition of malnutrition in a long time. Toddlers grow short and low child intelligence levels result in the burden of the future, due to the limited working capacity, reduction of body activity and complications of the content in women because it has a small pelvic size as well as Risk of giving birth to babies with low birth weight. The empowerment cadres for the prevention of stunting events, was expected to be achieved through efforts to improve the cadre performance through education delivery by applying various educational models. This research aims to determine the influence of education health cadres to overcome stunting in health center X Deli Serdang Regency North Sumatera Indonesia. **Methods:** The research method is mixed method, quantitative with the design of quasi experiments, qualitative with a rapid approach. Population is an inactive cadre while the sample is a cadre of 20 people. Data Analysis: univariate with frequency distribution, bivariate, with different test (t test). **Results:** Cadres enthusiastically participate in training and can conduct training and are able to share material to mother toddler to prevent stunting. Before the education of the well-knowledge able cadres 40% and after education increased to 100%. Cadres knowledge before and after education was 0.60. This indicates there is an increase in the average value of cadre knowledge before and after education and based on the value of knowledge (0,000) < α (0,05) so that there is an educational influence on the improvement of cadres knowledge. **Conclusion:** Education cadres changes knowledge and sharing material to the community. Advice is expected to the health office to do education to increase cadre knowledge about stunting.*

Keywords: Model Cadre Education, Lower Stunting

1. Introduction

Stunting is a failure to achieve optimal growth caused by a lack of nutritional condition that lasts for a long time. Stunting will cause children under five years (toddlers) to grow short and have an impact on low levels of child intelligence. This toddlers with low intelligence is feared to be a burden in the future (Shrimpton, 2006).

In addition nutritional status also has a close relationship with the death of toddlers. Based on the data in the Lancet journal in 2013, 44.7% of infant and toddler mortality was due to the weight of low birth babies, breast-feeding failure, child stunting, less nutrition and malnutrition and vitamin A deficiency, minerals and zinc. Nutritional problems in children are still a problem in some countries. Recorded one in three children in the world dies every year due to poor nutritional quality.

One of research showed at least 3.5 million children died annually due to the problem of malnutrition and poor quality of food, supported also by malnutrition while still in the womb. Public health problems are taken seriously when the prevalence of malnutrition is up to less than 20.0% to 29.0% and very high prevalence $\geq 30\%$. The stunting Status is calculated using the raw anthropometry for children aged 5-19 years which is to calculate Nila Z-score TB/U each child (UNICEF, 2013). Based on the above, it is necessary to do

the cadres education (health services close to the community and stay close to the child under five years).

The empowerment cadres for the prevention of stunting events, is expected to be achieved through efforts to improve the cadre performance and behavior through education delivery by applying various educational models. As the research (Lubis2015) with the results showed that there is a significant difference in knowledge and action of cadres before and after the training on the growth monitoring of infant children.

The prevalence of stunting in North Sumatra amounted to 43.2% with a very short category of 20.6% and a short 22.6% (Depkes, 2010). North Sumatra ranks eighth out of 20 provinces stunting above the national prevalence and includes serious categories (Kemenkes, 2013). Regional development planning agency data mentions the province of Aceh ranks 10 nationally with a stunting prevalence of 39%. This figure is higher than the national average reaching 35.6% and the World Health Organization (WHO) standard was 20%.

Based on the initial survey that was done in the local health center X of Deli Serdang Regency Indonesia was cadres are more involved in registration and the counseling was not adequate. Cadres knowledge about stunting was still very less than the questions conveyed by the cadres do not know

what stunting so this was an important reason for researchers to conduct education cadres to solve stunting problems

2. Methods

Mixed method: Qualitative research to give cadres knowledge to overcome stunting and quantitative with the design of the quasi experiment. The sample was less-active 20 people cadres in the center health X District Deli Serdang. Data Analysis: univariate analysis with Frequency distribution, bivariate, with different test (T-Test). Qualitative rapid approach.

3. Results

3.1 Overview of research locations

Research was high number of stunting toddlers (exceeding the national prevalence rate). Health centers X in Deli Serdang have an inactive cadres having a stunting toddler. Cadres lack role because to cadres must be a requirement and not get salary or volunteer work. According to the Depkes RI (2010).

The requirement for cadres among others was a person who can read and write, a resident living in the village, derived from local communities and accepted by the local community, do not often leave Place for a long time and still enough time to work for the community in addition to making another living. From the requirements that are preferred by some experts can be concluded that the criteria of selection of cadres, among others, able to work voluntarily, gaining the trust of the community where its behavior becomes a role model of society, has High Soul devotion, have a steady income, clever reading, able to foster the surrounding community.

3.2 Qualitative research results

The results of qualitative research that cadres do not have knowledge about stunting and have not played optimally in carrying out was functions in the activities of Integrated Services at health center X Deli Serdang Regency, cadres was the chosen volunteer for the community, who are tasked with assisting in the smooth health services. Cadres was associated with regular service in Health Center, cadres health should want to work voluntarily and willingly, willing and able to carry out activities and willing and able to move the community to implement and follow the activities of Health Center.

The results of interviews with health cadres in health CenterX DeliSerdang District obtained information that in the activities, Cadres was tasked with only registering toddlers and pregnant women, weighing infants/toddlers and recording weighing results on paper that will be transferred on the card to the health (KMS), filling out, explaining the KMS data or the child's state based on weight gain data depicted in the KMS graph to the mother. In addition to the task that has been done by the health cadres, it was hoped to provide education that refers to the KMS data. Observations of children's problems, especially education on how to overcome stunting. Currently stunting and nutritional

deficiencies in children get special attention from the Government by continuing to encourage the acceleration of stunting and malnourished treatment programs in children by doing cooperation between government agencies synergistic.

3.3 Quantitative research Results

1) Cadres Knowledge

Based on the results of the research can be known cadres before and after education as seen as follows:

Table1 of knowledge distribution of Health Cadres Before and After Education the Health Center X of Deli Serdang Indonesia

No	Knowledge	Pretest		Posttest	
		f	%	f	%
1	Good	8	40,00	20	100,00
2	Less	12	60,00	0	0,00
	Total	20	100,00	20	100,00

Based on the results of research can be noted that the cadres knowledge before education in the category is less (60.00%). After the knowledge education the category of good cadres increased (100.0%).

2) Differences in Health Cadres Before and After Education

Table 2Difference of Knowledge Cadres Before and After Education in the Health Center X Deli Serdang Indonesia

Knowledge	Mean	SD	Mean Different	P value
Before Education	1,40	0,503	0,60	0,000
After Education	2,00	0,000		

Target of the National Medium Term Development Plan until 2019 was sought that the stunting percentage can approach the minimum stipulated by the WHO by 20% of the number of infants in a country. Stunting is not only a nutritional deficiency, but there are also environmental sanitation factors, the availability of clean water, including problems of health services in a region so as to need cooperation and intervention of all ministries of institutions To be coordinated.

According to the government program, referring to the open behavior (overt behavior) of the cadres and mothers of toddlers, conducted a research phase through learning process activities (learning process) with health cadres education to have Knowledge of stunting that will be able to provide counseling to the target group (infant mother) to improve the knowledge, awareness and willingness of the mother, so that it independently participate in preventing stunting. The implementation of education is done by optimizing materials/counseling about matters relating to the stunting (Pocket book Stunting) efforts

Based on the results of a stunting risk factor proposed the action model to address the risk factors of stunting through the empowerment of health cadres close to the family aimed at the community level and health service level. A social perspective understands the level of the community, which

was an individual level to form behaviors, interpersonal levels to provide support, a community level to form the norm, and a level of government to change policies. The health cadres as the first and foremost contractor to the education and health of children, the organizer or food organizer in the family, has a great role in improving the nutritional status of family members (Fertman 2010).

Every individual in the community will certainly behave to support a program that was judged to have a positive influence on his life. The readiness of individuals to participate in the action prevents stunting of course when it gets information and knows the consequences (physical and social) when experiencing. Health cadres that are close to the community are able to share knowledge that has been received during education.

4. Suggestions

It was expected for cadres to continue to improve knowledge and convey health information to the community so as to improve knowledge about better health.

The level of health care and stakeholders, interventions need to be carried out through the intervention of improved nutritional status through a health policy advocacy of prevention efforts and a stunting response to the toddler. Further research need to be done with wider scope and different methods of education cadres

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