

# Effectiveness of Health Counseling to Cadres and Pregnant Women to Prevent Stunting in Amplas Village, Deli Serdang Indonesia

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**Abstract:** *The low Human Development Index (HDI) in Indonesia was heavily influenced by the lack of nutritional status and population health. This evident from the still high mortality rate of infants, toddlers, and maternal mortality. Based on the above, the problem formulation activities of community devotion through the Health counseling of cadres about stunting and health cadres who have been trained to provide health counseling to pregnant women about stunting and feeding of additional food in pregnant women to prevent stunting in infants and can improve the knowledge of cadres and pregnant women in Amplas village, Deli Serdang district? Activity implementation method: Stage I conducted pretest on Cadres; Stage II health counseling of the Cadres; Stage III posttest Cadres. After skilled cadres then the Cadres do Health counseling to Pregnant women about stunting and feeding of additional foods to prevent stunting infants. Stage IV pre-test the Pregnant woman; stage IV health counseling to Pregnant women 3 times; Stage IV post-test to Pregnant women. The target Cadres of 10 people and Pregnant women as many as 30 people in the village Amplas Deli Serdang Regency. Result: Before in the give the Health counseling Cadres have knowledge of approximately 4 people (40%) Whereas after being given a cadence of knowledge increased to 10 people (100%) good category. Knowledge of Pregnant women before Health counseling in the category of fewer than 27 people (16.30 %) After providing Health counseling knowledge of pregnant women increased to a good category as much as 25 people (83.30%). Conclusion: Health counseling to cadres can increase knowledge. Cadres are able to provide Health counseling to Pregnant women and increase knowledge and provide additional food to Pregnant women to prevent stunting in infants under five years. Advice: Health counseling to Cadres needs to be done for every health problem in the community. Cadres can be empowered as an extension of the medical personnel to provide Health counseling to Pregnant women.*

**Keywords:** Health counseling, preventing stunting

## 1. Introduction

The SDGs (Sustainable Development Goals), one particular concern in the health sector was improving nutrition. One of the goals of SDGs ' in 2030 was to end all forms of malnutrition, including reaching an international target of 2025 for stunting and wasting in infants being < 5% (Kemenkes, 2015). Nutrition plays an important role in the human life cycle. The low Human Development Index (HDI) in Indonesia was heavily influenced by the lack of nutritional status and population health. This was seen from the high mortality rate of infants, toddlers, and maternal mortality (Kemenkes, 2014).

Efforts to improve the nutritional status of the public will contribute to the achievement of the goals of national development, especially the decrease in the prevalence of nutrition less especially in pregnant women, which can enhance the quality of human resources. Based on the provision of additional food that focuses on both macronutrients and micronutrients for pregnant women was indispensable in the framework of the prevention of low birth weight babies and stunting (Kemenkes, 2017).

Stunting was a failure to achieve optimum growth caused by less nutritional conditions that last a long time. Stunting will cause toddlers to grow short and have an impact on low levels of child intelligence. This child with low intelligence was feared to be a burden in the future. The impact of stunting in adulthood, among them was the limited working capacity due to reduction of body activity and in women can cause risk of content complications because it has a small

pelvic size and risky give birth to babies with low birth weight (Shrimpton, 2006).

Cadres participation for direct home visits as a target monitoring that has not received health services, especially in pregnant women to perform the Antenatal Care (ANC) as an early examination and detection and Health counseling about nutrition in pregnant women to prevent stunting in infants. Studies on risk factors of children stunting one of them is an irregular ANC visit. The ANC visit conducted regularly to detect the early pregnancy risk of 25 pregnant women, there are 18 pregnant women, especially related to their nutritional problems. The results of the study found that mothers who made the ANC visit only one time (less than the minimum standard that is four times) have the risk of having children stunting 2.4 times compared to mothers who do the standard ANC visit of 4 visits ( Ni'amah, 2014). Research of Sitorus et al (2018) that Cadres knowledge increased by education in two provinces, namely in Deli Serdang North Sumatra and in Aceh Besar Banda Aceh

Based on this then the Department of Health Polytechnic conducting one of Tri Dharma colleges, namely devotion to the community with the form of helping efforts to prevent stunting. In Amplas village found from 10 toddlers, there are 6 children who have problems with nutritional status. Community service was done through the Health counseling of Cadres to give additional food to pregnant women. Providing additional food was expected for infants in the womb to obtain nutritional adequacy during pregnancy. The problem formulation based on the above, the problem of the issue: whether the activities of community dedication

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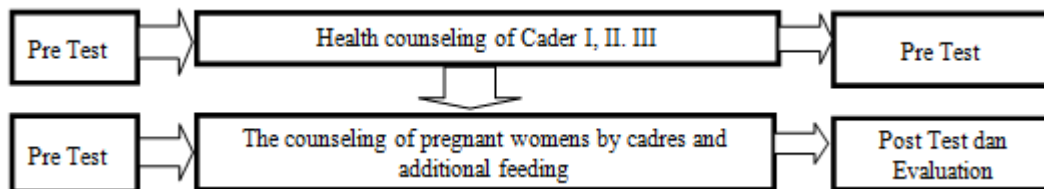
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through cadence Health counseling to prevent stunting and Cadres to give back health counseling to pregnant women and feeding additional food to pregnant women to prevent stunting problems in toddlers and can increase the knowledge of Cadres and pregnant woman Trisemester III in Amplas village, Deli Serdang district?

Purpose of community service

- 1) Realizing one of the activities of Tri Dharma Colleges
- 2) To improve the nutritional knowledge of pregnant women through Cadres training and the provision of additional food for pregnant women in preventing stunting



Based on the stunting problem found in the village of Amplas Deli Serdang, the effort to solve the problem was the training of cadres and cadres are able to share the material with pregnant women to prevent stunting. In this case, there are various ways that will be done. The efforts are:

- 1) To know the knowledge of cadres and pregnant women before conducting Health counseling in the do/share pretest sheet to cadres and pregnant women
- 2) The Health counseling of cadres a month about stunting and feeding of additional foods to prevent stunting
- 3) Health counseling by cadres to pregnant women and provision of additional food to pregnant women in the village Amplas Deli Serdang
- 4) After completion of Health counseling than do/share questionnaires for post-test

### 2.2 Target Audiences

Cadres of 10 people and pregnant women of 30 people in Amplas village of Deli Serdang Regency. The activities of community devotion to be implemented as a series of activities that are arranged in a plan tailored to the situation and condition of society. This activity begins with the initial survey in Amplas village, Deli Serdang Regency. This initial survey was conducted to:

- 1) Obtaining permission from the head of Amplas village
- 2) View the situation and conditions and determine the number of goals
- 3) Knowing the facilities and infrastructure to support the implementation of activities
- 4) Determine the time of implementation of activities to suit the situation of cadres and pregnant women in the community.

### 3. Activity Implementation Method

Implementation stage

- 1) Pretest to Cadres
- 2) The Health counseling of cadres by 3 times
- 3) Post Test to Cadres

- 3) Improving the knowledge of Cadres and cadres is able to share stunting material to pregnant women and feeding food that must be consumed by pregnant women and feeding in pregnant women during pregnancy to prevent stunting
- 4) Increase the participation of cadres and pregnant women to be able to know and campaign the importance of balanced nutrition while pregnant to prevent stunting.

## 2. Implementation of activities

### 2.1 Troubleshooting Frameworks

- 4) After a skilled cadre then provide Health counseling to the pregnant women about stunting and feeding of additional foods to prevent stunting
- 5) Pre Test to pregnant women
- 6) Cadre conducting Health counseling to pregnant women as much as 3 times
- 7) Post Test to pregnant women
- 8) Post Test/Evaluation to know the knowledge eability of cadres and expectant mothers about stunting and nutritious food and feeding of additional food for stunting prevention.

## 4. Results and Discussion

### 4.1 Health Cadres Characteristics

**Table 4.1:** Characteristic of Cadres with Stunting Health Counseling in Amplas Village, Deli Serdang Regency

No	Characteristics of Health cadres	f	Percentage
1	Age		
	20-30 years	5	50 %
	30-40 years	3	30%
	Lebih 40 years	2	20 %
	Total	10	100%
2	Education		
	High School	8	80%
	School first	2	20%
	Total	10	100
3	Job		
	Factory	3	30 %
	Housewives	7	70%
	Total	10	100

Based on the table above, there can be known characteristics of health cadres based on a majority of 20-30 years much as 5 people (50.00), most of the school was educated as much as 8 people (80%) worked as a housewife as much 7 people (70%).

**4.2 Characteristics of Pregnant Women**

Based on the data collected through questionnaires in 30 pregnant women, data was obtained as shown in the following table:

No	Knowledge of pregnant women	Pretest		Posttest	
		f	%	f	%
1	Good	3	10	25	83,30
2	less	27	90	5	16,70
	Total	30	100	30	100,00

**4.3 Characteristics of Pregnant Womens**

**Table 4.2:** Characteristic Distribution of Pregnant Womens in Amplas Village, Deli Serdang District

No	Family characteristics		f	%
1	Age pregnant women	18 – 35 years	15	50,00
		> 35 years	15	50,00
		Total	30	100,00
2	Distance to health facilities	Near	20	66,70
		Much	10	33,30
		Total	30	100,00
3	Family Status Amount	Small (2 children)	25	83,30
		Large(>2children)	5	16,70
		Total	30	100,00
4	Economic Status (Family income)	≤1.000.000 (Low )	25	83,30
		> 1.000.000 (High )	5	16,70
		Total	30	100,00
5	Education	Low	20	66,70
		High	10	33,40
		total	30	100,00
6	Job	Housewives	20	66,6
		Farmer/Worker	7	23,4
		teacher	3	10,0
		total	30	100,00

Based on the table above can be seen the characteristics of pregnant women that most of the age of 18-35 year was 15 people (50.00), > 35 years as many as 15 people (50.00), mostly located close to health facilities as much as 20 people (66.70%), most of them have a small family category (2 children) as much as 25 people (83.30%), most of the family income was ≤ Rp. 1 million as much as 25 people (83.30%), most of them are low as much as 20 people (66.60%) And mostly worked as a housewife as much as 20 people (66.6%).

**4.4 Health Cadres Knowledge**

**Table 4.3:** Knowledge distribution of cadres before and after Health counseling in Amplas Village district of Deli Serdang

No	Health Cadres Knowledge	Pretest		Posttest	
		F	%	F	%
1	Good	5	50,00	10	100,00
2	less	5	50,00	0	0,00
3	Total	10	100,00	10	100,00

The majority of cadre knowledge before the Health counseling of the category was less 5 people (50.00%) After knowledge Health counseling cadres increased a good category as much as 10 people (100.0%).

**4.5 Knowledge of Pregnant Women Trisemester III Before and After Counseling**

**4.6 Table of Knowledge Distribution of Pregnant Women Before and After Health Counseling in Amplas village, Deli Serdang Regency**

The knowledge of pregnant women Tri semester III before the Health counseling in the category was less 27 people (90%), after the knowledge of pregnant women tri semester III increased to a good category as much as 25 people (83.30%).

**5. Discussion**

Pre-test results obtained that the level of knowledge of cadres and pregnant women. After the Health counseling then the knowledge of cadres and pregnant women tri semester III into good categories

This was in accordance with the opinions of Notoadmojo and Simon Merton (2003), that knowledge is an introduction to the reality, principle, and meaning of an object, knowledge can also be generated from the stimulation of the information seen and remembered. The knowledge that a person receives can start from reading, watching television, and listening to the radio, and so on.

This was in accordance with the opinion of Soekanto and the Rogers theory that the group of peers that can form a close click or meeting among peers, the click was very influential about the members both positively and negatively, then with the knowledge Enough to have in the group will give a response to positive attitude anyway. Knowledge gained will stimulate attitudes and behaviors that pose a change of attitude of accepting, responding, appreciating, and responsible.

Mahfoedz theory, 2012 factors that affect the knowledge of the person who was the family Welfare Education (PKK), Village Community Resilience Institute, newspaper/magazine, television, education/solicit and Puskesmas. This media factor gives teenagers information.

According to the author's knowledge, respondents can be influenced by the desire to read and understand. So that information about stunting can be understood by cadres and pregnant women in Tri semester III. The provision of additional food to pregnant women will increase the nutritional status of pregnant women so that the fetus in the womb grows and develops perfectly so that it can give a chance to prevent stunting.

The health and nutrition of pregnant women was an indispensable condition for the fetus to be healthy. If not, then from the beginning of human life will be problematic in the next life. The pregnancy period was a period that determines the quality of the born baby. The nutritional condition of mothers who are poor before pregnancy and at the time of pregnancy tends to give birth to infants with a low birth baby weight (BBLR), even the possibility of infants passed away. The child-born quality Human Resources (SDM) was heavily influenced by various factors at the beginning of the fetal life in the maternal womb, even

since the preconception phase. The health and nutritional status of pregnant women were very influential in the growth of fetuses and pregnancy outcomes. Inadequate intake of insufficient maternal nutrients will adversely affect the growth of the fetus. Nutrient intake in pregnant women will affect the birth process, and babies up to 2 years are a "critical" phase, infants need to gain special attention in fulfilling the quality and quantity of nutrient intake to maintain the rate of growing its growth. This period is referred to as the "golden period", and the World Bank mentions it as a window of opportunity because at that age there was rapid growth and the time for improvement was very short the importance of the pregnancy period in determining Human quality, (World Bank, 2006). Pre-test results obtained that the level of knowledge of cadres and pregnant women. After the Health counseling then the knowledge of cadres and pregnant women tri semester III into good categories

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## 6. Conclusion and Suggestion

### 6.1 Conclusion

- 1) Cadres education can improve cadre knowledge about stunting prevention.
- 2) Education of pregnant women by cadres can improve the knowledge of pregnant women about the prevention of Stunting in infants.
- 3) Provision of additional food to pregnant women can increase the weight of pregnant women and improve the nutritional like of pregnant women.

### 6.2 Suggestions

- 1) It is hoped that Kader actively educate pregnant women
- 2) To the village and Public health center so that the community to educate the cadres because they live together with pregnant mothers and toddlers in the village

## References

- [1] BadanPenelitian Dan Pengembangan Kesehatan. Riset kesehatan dasar RIKESDAS) tahun 2010:Jakarta: Kementerian Kesehatan Republik Indonesia: 2010.
- [2] Faber M, BenadeAJS. 1998. Nutritional status and dietary practices of 4–24-month-old children from a rural South African community. *Public Health Nutrition: 2*(2), 179–185.
- [3] Kementerian Kesehatan Republik Indonesia. Keputusan Menteri Kesehatan Republik Indonesia No.1995/MENKES/SK/XII/2010 tentang standar antropometri penilaian status gizi anak.
- [4] Kementerian Kesehatan Republik Indonesia. Petunjuk Teknis Pemberian Makanan Tambahan (Balita, Ibu Hamil, Anak Usia Sekolah) Jakarta; 2017. Direktorat Jenderal Bina Gizi dan Kesehatan Ibu dan Anak.
- [5] Ni'amah, S. 2014. Hubungan Kualitas Pemenuhan Konsumsi Tablet FE dengan Kejadian Anemia Pada Ibu Hamil Trimester III. *Jurnal Ilmu Kebidanan & kesehatan. 5* (2) : 13-19.
- [6] Riyadi H, Khomsan A, Sukandar D, Faisal A & Mudja-janto ES. 2006. Studi tentang status gizi

- padarumah tangga miskin dan tidak miskin. *Jurnal Indonesia Food*, 29(1), 33—46.
- [7] Riskesdas. 2013. Laporan Nasional Riset Kesehatan Dasar (Riskesdas Tahun 2013). Jakarta : Badan Penelitian dan Pengembangan Kesehatan Departemen Kesehatan RI.
- [8] Schmidt MK et al. 2002. Nutritional Status and Linear Growth of Indonesian Infants in West Java Are Determined More by Prenatal Environment than by Postnatal Factors. *J. Nutr.* 132: 2202–2207.
- [9] Sitorus S et al. 2019. Model Edukasi untuk mencegah stunting di Kabupaten Deli serdang Sumatera Utara dan Aceh besar Aceh
- [10] Shrimpton R, Victora CG, de Onis M, Lima RC, Blossner M, Clugston G. 2006 Worldwide timing of growth faltering: implications for nutritional interventions. *Pediatrics*
- [11] Semba RD, de Pee S, Sun Kai, Sari M, Akhter N, Bloem MW. Effect of parental formal education on risk of child stunting in Indonesia and Bangladesh: a cross-sectional study. *Lancet*. Available from: <http://www.science>.
- [12] United Nation Children’s Fund. Progress For Children Achieving (2010) The MDGs With Equity [internet]: Eradicate Extreme Poverty and Hunger. New York: UNICEF; Available from: <http://www.unicef.org>.
- [13] World Health Organization, Department of Nutrition for Health and Development (2010) WHO Global Database on Child Growth and Malnutrition <http://www.who.int/nutgrowthdb/en/>.
- [14] World Bank. 2006. Repositioning Nutrition as Central to Development. A Strategy for Large-Scale Action. World Bank, Washington DC.
- [15] World Health Organization. 2009. Anthro Plus. Version 3.
- [16] Zulkifli, 2003 Posyandu dan Kader Kesehatan .USU : FKM (Fakultas Kesehatan Masyarakat).