

KNOWLEDGE AND ATTITUDE CONCERNING COMPLIMENTARY FEEDING AFFECTING NUTRITIONAL STATUS OF CHILDREN UNDER TWO YEAR OLD HEALTH WORKING AREA PERCUT SEI TUAN DISTRICT DELI SERDANG 2015

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ABSTRACT

Riskesdas 2013 stating that malnutrition in Indonesia is still quite high. The prevalence of malnutrition increased from 17.9% in 2010 to 19.6% in 2013. It appears when the baby is entering the age of 6 months-2 years old. Design research is cross sectional, the independent variable was the mother's behavior regarding the provision of breast milk and the dependent variable is the nutritional status of the children under two years old. Data collection was through the questionnaire. The populations are mothers and children under two years old who visited Posyandu. The sample size is using Lemeshow (1997) formula, with 102 sampling collected as accidental sampling. Data is analyzed through univariate, bivariate and multivariate analysis. The variables related to the nutritional status of children under two years old are knowledge with p value of 0.049, 0.015 pvalue on attitudes and actions' P value of 0.190. Logistic regression significantly influenced the nutritional status of children under two years which is knowledge with B Expected 3,662 and 0,201 on attitude. Knowledge of the dominant factors affecting the nutritional status. It is expected for the officers to conduct training on complementary feeding.

Keywords ; Breast Milk Complimentary Feeding

INTRODUCTION

According to the World health report, children in a country with low and medium income had 10 times higher chances to die before reaching the age of 5 years old compared to those who live in industrial country. In 2002, the Infant Mortality Rate of 46 countries was more than 100 per 1,000 live births (KEMENKES, 2012).

The *target of Millennium Development Goals* (MDG 4) - Target 4a: Reduce Child Mortality Rate Up to 2/3 In Time Period of 1990-2015; the Infant Mortality Rate is 32 per 1,000 and 23 per 1,000 live births in 2015 (KEMENKES, 2012).

Based on *Millennium Development Goals report*, the MDGs 4 target associated with the Infant Mortality Rate, Infant and Neonatal continued to decline. The data of 2007 Indonesian Demographic and Health Survey (IDHS) showed that the Child Mortality Rate of 44/1000, 34/1000 on Infant Mortality and Neonatal Mortality of 19/1000 (KEMENKES, 2011).

Although there is a significant decrease in the number of deaths in the last decade, approximately 10.6 million children die each year before reaching the 5th birthday. Almost all of these deaths occur in countries with low and middle incomes. 35% of toddler deaths caused by malnutrition; diarrhea (17.2%), Pneumonia (13.2%). *Malnutrition increases the risk of death from the disease. More than half of child deaths occur in children with less weight* (KEMENKES, 2012).

According to data compiled by Indonesia Demographic Health Survey on 2007, the province of North Sumatra's infant mortality rate in 2007 was 46 per 1,000 live births and children under five years old mortality rate was 67 per 1000.

North Sumatra Provincial Government noted there are five areas that experience the highest prevalence of malnutrition, especially in infants. Th areas are; two areas in Nias which ranks highest with the district of Nias (13.3 percent) and South Nias (10.1 percent). While the other three areas are South Tapanuli (6.1 percent), Central Tapanuli (5.9 percent), and Mandailing Natal (5.2 per cent) (Fardianto, 2014).

Fulfilling the nutrition in children under five years old (toddlers) is a factor to consider in maintaining health, since childhood is a vulnerable period on development of nutrition. Malnutrition starts from ideal weight loss of a child until it looks very bad. Health Department reported throughout Indonesia malnutrition case decrease with 76,178 recorded cases and then dropped to 50,106 cases in 2006 and 39,080 cases occurred in 2007. The decline in malnutrition over the years have not been established for their cases unreported (Fidiantoro and Setiadi, 2013).

Infections, particularly frequent and persistent diarrhea, pneumonia, measles and malaria reduces the nutritional status. Poor feeding practices, insufficient breastfeeding, the wrong foods in less amounts and with no guarantee that the child will spend its portion, may impact on malnutrition. Children with malnutrition become more susceptible to disease.

Based on data obtained from Indonesia health profile in 2010, the percentage of infants of 4-12 months of age who received complementary feeding tend to have increased of 34.44% in 2006 and an increase of 68.8% in 2007 and reached 73.5% in 2008 (KEMENKES, 2010).

Based on the above description, researchers interested in conducting research on the influence of maternal behavior on breast feeding to the nutritional status of children under two years old in Puskesmas of Percut Sei Tuan subdistrict, Deli Serdang.

METHODS

This research was conducted in Puskesmas of Percut Sei Tuan from May to November 2015, the data collection conducted from June to August 2015. This research is an analytical, cross sectional design. The population is all mothers who have children under two years old. The amount of samples taken by the Lemeshow formula was as many as 85 people. **Data analysis** was performed through *Univariate Analysis*, *Bivariate Analysis* and *Multivariate* by using *Logistic Regresion* test.

RESULT

Tabel 1 Respondent Characteristic Distribution in Puskesmas Percut Seituan Kabupaten Deli Serdang Regency on 2015

No	Respondent Characteristic	F	Total %
1	Age		
	< 25 yo	59	69,41
	≥ 25 yo	26	30,59
2	Education		
	High education	6	7,06
	Medium education	28	32,94
	Low education	51	60
3	Occupation		
	Employed	6	7,06
	Unemployed	79	92,94
	Total	85	100

The characteristic feature can be seen in Table 1, the respondents' with age less than 25 years old had more of the nutritional status children under two years compared to the age of more than 25 years. Distribution of educational respondents with higher education, secondary and low had more malnutrition status of children under two years old and mother who works had better nutritional status.

Tabel 2 Respondent Overview Based on Mother Behaviour About Giving Children Under two years old MP-ASI in Puskesmas Subdistrict Percut Sei Tuan, Deli Serdang regency in 2015

No	Respondent Behaviour	Total	
		f	%
1	Respondent Knowledge		
	Good		
	Lack of knowledge	31	36,47
		54	63,53
2	Respondent behavior		
	Support	71	85,53
	Not supporting	14	16,47
3	Action		
	Adequate	45	52,94
	Inadequate	40	47,06
	Total	85	100

Tabel 2.1 Relationship of Mothers' Knowledge on giving MP-ASI with Children Under Two Years Old Nutrition Status in Puskesmas Percut Sei Tuan, Deli Serdang Regency 2015

Respondent Knowledge	Good Nutrition		Malnutrition		P. value	OR(CI 95 %)
	F	%	F	%		
High	27	87,1	4	12,9	0,049	.664 (1,115-12,037)
Low	35	64,8	19	35,2		
Total	62	72,9	23	27,1		

Based on Bivariate and multivariate analysis the respondents' knowledge P value of 0.049 (<0.05), means that statistically there is significant relationship between mother's knowledge about complementary feeding. This study is consistent with research conducted by Handayani (2014) concerning factors that affect the nutritional status among others, the level of knowledge of mothers about nutrition. The risk factors for causing children under two years old experiencing malnutrition that also stated by Morica (2012). This is consistent with the research of Budijanto (2008) which says the higher mother's level of knowledge will greatly affect the skill level. And also study on Notoatmodjo theory which states that the domain knowledge is very important in shaping a person's actions .

Tabel 2.2 Relationship Mother attitude on the Granting of MP-ASI with the Nutritional Status of Children Under two years in Puskesmas Percut Sei Tuan, Deli Serdang regency in 2015

Respondent Behaviour	Good Nutrition		Malnutrition		P. value	OR(CI 95 %)
	F	%	F	%		
Support	56	78,9	15	21,1	0,015	4,978 (1,496- 16,562)
Not Support	6	42,9	8	57,1		
Total	62	72,9	23	27,1		

Based on bivariate and multivariate analysis of the attitudes of respondents, it obtained p value <0.05, which means there is significant between mother attitude on complementary feeding and nutritional status. This study is consistent with Morica (2012) research and also in accordance with the theory.

The attitude of the majority of the respondents support the provision of complementary feeding in children under two years, the results of this study are consistent with the theory being supportive that fortified with good knowledge, from this research respondent knowledge is lacking.

Tabel 2.3 Relationship Mother Action Toward Granting of MP-ASI with the Nutritional Status of Children Under two years in Puskesmas Percut Sei Tuan, Deli Serdang regency in 2015

Respondent Action	Good Nutrition		Malnutrition		P. value	OR CI 95 %
	F	%	F	%		
Good	36	80,0%	9	20,0	.190	2,154 (.810-5,725)
Not Good	26	65,0%	14	35,0		
Total	62	72,9	23	27,1		

Based on bivariate and multivariate analysis on the actions of respondents regarding the provision of complementary foods obtained p value $< 0,190.99 (> 0.05)$, means that statistically there was no significant effect of maternal action on the provision of complementary feeding and nutritional status of children under two years.

With the increasing of baby age, so does the nutritional needs, therefore, since the age of 6 months, babies need to start given complementary feeding (MP-ASI). Sodikin (2011) stated that complementary foods are foods that are given after the baby is older than 6 months. According Riksani (2012) guiding the provision of complementary feeding in infants are as follows: select a variety of foods rich in nutrients eg rice flour, potato, beef, chicken, fish, fruits and vegetables. The food frequency gradually in accordance with the growth of age, which is 2-3 times a day at the age of 6-8 months and 3-4 times a day at the age of 9-24 months, in addition to a snack 1-2 times if necessary. As much as possible to make your own food given to infants and avoid instant meals.

The difference in the results of this research because mothers with children who classified providing Complimentary Feeding properly for the first time, namely after the child is 6 months old, but the next turn, the child does not get Complimentary Feeding classified both qualitatively and fair frequency.

The study found no significant correlation between the actions of maternal nutritional status of children under two years in Percut Sei Tuan and this is because the principle of a mother giving Complimentary Feeding so that children are not fussy and full, and did not pay attention to the needs of children, did not leave menu balanced, because most mothers deliver a meal consisting of rice with vegetables. This can be seen from 85 mothers studied. 40 mothers (47.06%) providing breast milk complementary food were not in accordance with the provisions and 54 mothers (63.53%) who have less knowledge on breast milk complimentary food, with other possibilities could be due to the weakness of questionnaires that researchers use.

Tabel 3. Results Multivariate Logistic Regression Analysis between Knowledge, Attitude and Action, the administration of MP-ASI Percut Sei Tuan in Deli Serdang

Variable	B	SE	Wald	Sig	B.Exp	95% CI
Knowledge	.058	.600	.009	.923	1.060	0.327-3.436
Behavior	-1.636	.718	5.194	.023	.195	0.048-0.795
Action	1.304	.634	4.230	.040	3.683	1.063-12.760
Constan	-.634	.722	.771			

The results of the above analysis stating that out all of these models have p value variables (sig) below 0.05 that means that the variable attitudes, knowledge influenced significantly by the provision of complementary feeding in children under two years old with Percentage Correct of 77.6% and as a final model determinants of complementary feeding in children under two years old. From this analysis it can be concluded that both variables that influence the provision of complementary feeding in children under two years (77.6%) affected by the Knowledge and Attitude variables, while the most dominant influence is the knowledge of the respondent, in which the highest of B Expected value (3,662).

CONCLUSION

Based on the analysis and discussion of results, it can be concluded about the effect of mother's behavior in the provision of complementary feeding in children under two years in the district of Percut Sei Tuan, Deli Serdang regency. Respondent characterized the majority aged <dfari 25 years as many as 59 people (69.41%), with majority of the mothers with low level education (51 people (60%)), and the majority of women do not work as many as 79 people (92.94%).The influence of mother's knowledge regarding the provision of complementary feeding with nutrition status of children under two years old.The influence of maternal attitudes about giving breast milk to the nutritional status of children under two years old. No effect of maternal action on the provision of complementary feeding with nutrition status of children under two years old.From multivariate test there are 3 variables that affect the nutritional status of children under two years, namely; knowledge, attitude and practice regarding the provision of complementary feeding. Of the three variables mentioned above, a very dominant factor affecting the mother giving complementary foods is knowledge with a value of 3,662 B Exp.

Based on the above conclusions, respondent action on the provision of complementary feeding was not associated with nutritional status, therefore it is expected that the cadres to coordinate with health centers to provide training for mothers by creating classes to improve maternal skills on complementary food management. And the need to further examine the training effectiveness of complementary feeding on volunteers and mothers in improving nutritional status of children under two years old. For the institution of education, so that in the future education D-III and D-IV Midwifery, the theory of giving complementary feeding in children under two years old is emphasized, so after graduating can provide services to the public at the time of carrying out independent midwifery practice.

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