

Factors Associated With Giving Formula Milk To Babies 0-6 Months In Kota Baru Tanjungkarang Timur

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ABSTRACT

Giving formula milk to infants 0-6 months can cause diarrhea, Acute Respiratory Infection (ARI) and malnutrition. This high incidence is due to formula feeding. It is essential to explore the factors that cause parent giving formula milk. To explore the factors associated with giving formula milk to babies 0-6 months. This type of research is quantitative with analytical methods and uses a cross sectional approach. The population of this study were all mothers at Kasih Ibu Soesrini who had babies 0-6 months with a total 222 people with 143 people who meet the inclusion criteria. The sample was taken using a systematic random sampling technique, the method of collecting data was by questionnaire through a questionnaire. The independent variables of this study are education, work and knowledge while the dependent variable is formula feeding in infants 0-6 months. Data analysis used univariate and bivariate analysis using the Chi Square test. The results of the statistical test analysis showed that 78.3% of mothers who had babies 0-6 months had given formula milk, the highest proportion of mothers' education was in the basic education category (74.8%), the highest proportion of mothers in the working category (68.5%), the highest proportion of mothers' knowledge was in the category of poor knowledge (71.3%). The results of bivariate analysis of the relationship between education and formula feeding in infants 0-6 months obtained a P Value = 0.028 so that H_0 was rejected and H_a was accepted, the employment relationship with formula feeding in infants 0-6 months obtained P Value = 0.038 so that H_0 was rejected H_a accepted, and the relationship between knowledge and formula feeding in infants 0-6 months was obtained P Value = 0.012 so that H_0 was rejected and H_a was accepted. The conclusion of the study is that there is a relationship between education, work and knowledge with formula feeding in infants 0-6 months in Kasih Ibu Soesrini.

Keywords: Formula milk, babies 0-6 months

INTRODUCTION

Currently, there has been a rapidly increase in science and technology nowadays. Ironically, the basic knowledge of breastfeeding is sometimes forgotten. Formula feeding can reduce a mother's confidence in her ability to breastfeed on her own. Over 50 percent baby aged 6-11 months in Indonesia drink formula milk. It is also stated that Indonesian families spend Rp. 3 trillion per year to buy formula milk. This figure can swell if the breastfeeding program is hampered. Giving formula milk to babies 0-6 months is very dangerous, because it can cause various diseases and disorders such as diarrhea and ARI. Giving formula milk besides causing morbidity in infants can also cause malnutrition in children which results in malnutrition (WHO, 2020).

Early and exclusive breastfeeding helps children survive and provides them with antibodies that protect against many common childhood illnesses, such as diarrhoea and pneumonia. Evidence suggests that breastfed children perform better on intelligence tests, are less likely to be obese or overweight, and are less prone to diabetes later in life. Increasing breastfeeding rates globally could save the lives of more than 820,000 children under the age of 5 every year and could also prevent an additional 20,000 cases of breast cancer in women annually. In Indonesia, however, only 1 in 2 infants under 6 months of age are exclusively breastfed, and by 23 months of age, slightly more than half of children continue to be breastfed, meaning that nearly half of all Indonesian children are not receiving the nourishment they need during their first two years of life. More than 40 per cent of babies are introduced to complementary foods too early, before reaching 6 months, often with foods that do not meet their nutritional needs (UNICEF, 2021).

Due to the COVID-19 pandemic, access to essential services such as breastfeeding counselling through hospitals, clinics and home visits, as well as the Baby Friendly Hospital Initiative has been disrupted. Misinformation about the safety of breastfeeding has led to decreases in the practice by women who fear it could harm babies (Alianmoghaddam, 2017). Health Organization World or the World Health Organization (WHO) recommends that new babies born exclusively breastfed (without any additions) for 6 months. One reason is because breast milk contains balanced and perfect nutrition and this also complies with World Health Resolutions Assembly (WHA 2021). To achieve developmental growth and health optimally, the baby should be exclusively breastfed for the first 6 months, thereafter for infant nutritional adequacy must be started Complementary food for breast milk is sufficient and safe continued

breastfeeding until age 2 years or more. The health sector needs more definitive evidence about the factors for giving formula milk and the nutritional factors. Therefore, this study will systematically summarize the factors associated with giving formula mil to babies 0-6 months (Ariani, 2018).

METHOD

This type of research is quantitative with analytical methods and uses a cross sectional approach. The population of this study were all mothers at Kasih Ibu Soesrini who had babies 0-6 months with a total 63 people with 30 people who meet the inclusion criteria. The sample was determined with an error degree of 5% so that 28 samples were obtained and the sample was taken using a systematic random sampling technique, the method of collecting data was by questionnaire through a questionnaire. The independent variables of this study are education, work and knowledge while the dependent variable is formula feeding in infants 0-6 months. Data analysis used univariate and bivariate analysis using the Chi Square test.

RESULT

The Following data are the characteristics presented by the respondents, univariate analysis and bivariate analysis. The characteristics of the respondents can be presented below:

Table.1 Frequency Distribution of Respondent Characteristic			
NO	RESPONDENT CHARACTERISTIC	TOTAL	PRESENTAGE (%)
1.	AGE		
	a. <20 years	41	28,7
	b. 20-35 years	87	60,8
	c. >35 years	15	10,5
	Jumlah	143	100
2.	NUMBER OF CHILDREN		
	a. 1	29	20,3
	b. 2-3	86	60,1
	c. > 3	28	19,6
	Total	143	100

Table 2 above shows the age characteristics of the most respondents in the age group of 20-35 years, namely 81.8% (117 respondents) and with the highest number of children in children more than 2 with 79.7% (114 respondents).

Table.2 Frequency Distribution of Respondent Who Give Formula Milk

Variabel	Frequency (f)	Presentage (%)
Mothers on Her Baby		
Giving Formula Milk	112	78,3
Not Giving formula Milk	31	21,7
Education		
Base	107	74,8
Advances	36	25,2
Occupation		
Work	98	68,5
Doesn't work	45	31,5
Knowledge		
Not Good	102	71,3
Good	41	28,7

Based on Table 2 above, It is known that most of the respondents gave formula milk, namely 78.3% (112 respondents) and with the base education with 74.8% (107 respondents). It is stated that most of the respondents work with 68.5% (98 respondents) and did not have a good knowledge 71.3% (102 respondents).

Table.3 Relationship Between Mother's Education with Formula Feeding to Infant 0-6 Months

Education	Formula Feeding to Infant 0-6 Months						P (Value)	OR (CI 95%)
	Giving		Not Giving		Total			
	N	%	N	%	N	%		
Base	89	83,2	18	16,8	107	100	0.028	2,795 (1,197- 6,525)
Advaced	23	63,9	13	36,1	36	100		
Total	107	74,8	36	25,2	143	100		

Observing on Table 3 above, It is known that 107 respondents with basic education there were 83.2% (89 respondents) who gave formula milk and 36 respondents with advanced education there were 63.9% (23 respondents) who gave formula milk. The results of the analysis of the relationship between education and formula feeding in infants 0-6 months at through the chi-square test obtained a p value = 0.028, which means the p value $\leq \alpha$ (0.05), thus it can be concluded that there is a significant relationship between education and formula feeding in infants 0-6 months at Kasih Ibu Soesrini. Based on the results of the analysis, the value of OR = 2.8 was obtained, which means that respondents in the basic education

category had a 2.8 times greater chance of giving formula milk than respondents in the advanced education category.

Table.4 Relationship between Mother's Occupation and Formula Feeding to Infant 0-6 Months

Occupation	Formula Feeding to Infant 0-6 Months						P (Value)	OR CI (95%)
	Giving		Not Giving		Total			
	N	%	N	%	N	%		
Work	82	83,7	16	16,3	98	100	0.038	2,562 (1,130- 5,813)
Doesn't Work	30	66,7	15	33.3	45	100		
Total	112	78.3	31	21.7	143	100		

Observing on Table 4, It is known that 98 respondents who worked there were 83.7% (82 respondents) who gave formula milk and of the 45 respondents who doesn't work there were 66.7% (30 respondents) who gave formula milk. The results of the analysis of the relationship between occupation and formula feeding in infants 0-6 months through the chi-square test obtained a p value = 0.038, which means the p value $\leq \alpha$ (0.05), thus it can be concluded that there is a significant relationship between occupation and formula feeding in infants 0-6 months at Kasih Ibu Soesrini. Based on the results of the analysis, the value of OR = 2.6 was obtained, which means that respondents in the working category had a 2.6 times greater chance of giving formula milk than respondents in non-working category.

Table.5 Relationship between Mother's Knowledge and Formula Feeding to Infant 0-6 Months

Knowledge	Formula Feeding to Infant 0-6 Months						P (Value)	OR CI (95%)
	Giving		Not Giving		Total			
	N	%	N	%	N	%		
Not Good	86	84,3	16	15,7	102	100	0.012	3,101 (1,352- 7,110)
Good	26	63,4	15	36,6	41	100		
Total	112	78,3	31	21,7	143	100		

Observing on Table 5, It is known that 102 respondents who with not good knowledge there were 84.3% (86 respondents) who gave formula milk and of the 41 respondents with good knowledge there were 63.4% (26 respondents) who gave formula milk. The results of the analysis of the relationship between knowledge and formula feeding in infants 0-6 months through the chi-square test obtained a p value = 0.012, which means the p value $\leq \alpha$ (0.05), thus it can be concluded that there is a significant relationship between knowledge and formula feeding in infants 0-6 months at Kasih Ibu Soesrini. Based on the results of the analysis, the value of OR = 3.1 was obtained, which means that respondents with not good knowledge have the opportunity give formula milk 3.1 times greater than respondents with good knowledge.

DISCUSSION

Formula Feeding

Formula Milk variable analysis of 143 breastfeeding mothers who have babies 0-6 months at Kasih Ibu Soesrini which is divided into 2 categories, namely not giving formula milk and giving formula milk.

The Relationship between Mother's Education and Formula Milk Feeding in Infants 0-6 Months

The results of the analysis conducted by the researchers showed that there was a relationship between education and giving formula milk to infants 0-6 months at Kasih Ibu Soesrini because p Value = 0.028 which means p Value $\leq \alpha$ (0.028 $\leq$ 0.05) with OR = 2.8, which means that respondents in the basic education category have a 2.8 times greater chance of giving formula milk than respondents in the advanced education category.

Parental education is an essential factor in the growth and development of children, because with good education, parents can receive all information from outside, especially good parenting methods to maintain the health of their children. Highly educated families will

quickly be aware of changes in their family's health. Those with higher education will immediately seek help from health workers or health service units. Families with low education generally when health problems befall their family, they will ask for help when health problems are severe. Low education affects mothers in accepting the information provided, so there are still many mothers who do not understand the impact of using formula milk in infants 0-6 months. This low maternal education has resulted in many babies being given formula milk before the age of 6 months at Kasih Ibu Soesrini. This low education can be reduced by increasing future education.

The Relationship between Mother's Occupation and Giving Formula Milk to Babies 0-6 Months

The results of the analysis conducted by the researchers showed that there was a relationship between work and formula feeding in infants 0-6 months because the p value is 0.038 which means $p \text{ value} \leq \alpha$ ($0.038 \leq 0.05$) with OR = 2.6, which means that respondents in the working category have the opportunity to give formula milk 2.6 times greater than respondents in the non-working category.

Occupational factors greatly affect the mother's ability to breastfeed. Breastfeeding mothers who are busy working or work more than 8 hours have little time to interact with their babies so that mothers switch to using formula milk more than exclusive breastfeeding. Working mothers affect the number of babies who are given formula milk before the age of 6 months at Kasih Ibu Soesrini Kota Baru Tanjung Karang Timur. Providing counseling and motivation by health workers regarding the management and administration of expressed breast milk or pumped breast milk to working mothers can improve optimal breastfeeding for infants.

Relationship between Mother's Knowledge and Formula Milk Feeding in Infants 0-6 Months

The results of the analysis carried out by the researchers showed that there was a relationship between knowledge and formula feeding in infants 0-6 months at Kasih Ibu Soesrini Tanjungkarang Timur Lampung because the p value is 0.012 which means the $p \text{ value} \leq \alpha$ ($0.012 \leq 0.05$) with OR = 3.1, which means that respondents with less knowledge have the opportunity to give formula milk 3.1 times greater than respondents with good knowledge.

Giving formula milk to infants 0-6 months is influenced by several factors, one of which is knowledge. The lack of knowledge of mothers about the content of formula milk is proven by

many mothers answering incorrectly 66.4% answered incorrectly on the question "The content of formula milk is in accordance with the growth of the baby". The high giving of formula milk is due to the fact that many mothers think that the shape of the breast will change quickly if the mother breastfeeds so that the breasts are less attractive. Knowledge is essential for human survival, but increasing knowledge can affect basic old knowledge such as breastfeeding, which is sometimes forgotten so that many give formula milk to babies 0-6 months.

Mothers' poor knowledge about giving formula milk to babies 0-6 months resulted in many babies being given formula milk before the age of 6 months at Kasih Ibu Soesrini Kota Baru Tanjungkarang Timur. Lack of knowledge makes mothers imitate the environment around them who also give formula milk. Providing counseling and motivation by health workers and health cadres for mothers who have babies is expected to increase mother's knowledge about formula milk in infants before the age of 6 months and reduce husband's support for mothers to continue giving exclusive breastfeeding.

CONCLUSION

The conclusion of the study is that there is a relationship between education, work and knowledge with formula feeding in infants 0-6 months in Kasih Ibu Soesrini.

Strengths and Limitations

Strength

As a review conducted systematically in summarizing the risk factors for giving formula milk, this study can be used as the best evidence for the data of formula milk

Limitation

The articles included in this review are only in English, so there is a potential for language bias.

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