

THE INFLUENCE OF KNOWLEDGE LEVEL OF MOTHERS WHO HAVE BABIES AGED 6-11 MONTHS IN GROWTH SPURT ON THE FEEDING OF EARLY COMPLEMENTARY FOOD IN THE WORKING AREA OF WARUNGGUNUNG PUSKESMAS LEBAK DISTRICT 2022

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Abstract

Background: Breast Milk is a perfect nutrient intended for babies with complete ingredients for baby intake and has antibodies against disease prevention. Even though breastfeeding has many benefits, it turns out that the achievements of exclusive breastfeeding are still lacking. Failure to give exclusive breastfeeding is influenced by many factors, one of which is knowledge. The knowledge possessed by the mother will greatly influence the success and failure of exclusive breastfeeding. Many mothers do not know that one day the baby will experience a phase of accelerated growth from normal conditions which is called a growth spurt. At this time a mother will be worried and think that her breast milk is lacking, so she finally gives formula milk or early solids so that her baby is calm.

Writing purpose: The effect of the level of knowledge of a mother who has a baby aged 6-11 months regarding growth spurt on the provision of early complementary food (MPASI) at the Warunggunung Health Center, Lebak Regency, is known in 2022.

Research methods: Research method analytic observational case control design. The study sample consisted of 74 mothers with babies aged 6-11 months who were divided into a case group (mothers with babies who were given early solids) and a control group (mothers with babies who were not given early solids) with a ratio of 1:1. Sampling technique with purposive sampling. The instrument used is a questionnaire. Bivariate analysis via Chi-Square test.

Research result: In the case group (babies who were given early solids) the majority or as many as 87.5% of mothers had a low level of knowledge, while in the control group (babies who were not given early solids) the majority or 78.6% of mothers had a good level of knowledge. Mothers with a good level of knowledge, only 21.4% of mothers gave Early Solids to their babies and 78.6% of mothers did not give Early Solids. Whereas in mothers with a low level of knowledge, as many as 87.5% gave Early Solids and only 12.5% did not give Early Solids to their babies. There is an influence on the level of knowledge of mothers with babies aged 6-11 months about growth spurts on early complementary feeding (p value = 0.000).

Keywords: Mother's Knowledge, Growth Spurt, Complementary Foods for Breastfeeding.

PRELIMINARY

Breast milk is the most ideal food for babies because breast milk contains nutrients and antibodies that are most needed by a baby to prevent various diseases. The first 2 years of life or the first 1000 days is a very decisive period because if the nutrition a child gets is optimal in this phase it will be able to reduce morbidity and mortality, prevent the risk of chronic disease, and make growth and development optimal overall. Therefore, optimal breastfeeding for children aged 0-23 months is necessary because this will be able to prevent the deaths of children less than 5 years of age which occur more than 820,000 every year (WHO, 2020).

In the global strategy for feeding infants and children, the World Health Organization (WHO) and the United Nations of Children's Fund (UNICEF) suggest ways to prevent infant mortality, namely by providing proper feeding, namely for 6 months exclusive breastfeeding and complementary feeding (MP). ASI is safe and nutritious at the age of 6 months and continues breastfeeding until the age of 2 years or more (WHO, 2020).

In 2020 WHO issued global data on the number of exclusive breastfeeding, namely around 44% worldwide of infants aged 0-6 months received exclusive breastfeeding in the 2015-2020 period of the 50% target of exclusive breastfeeding. In Indonesia in 2021 the Ministry of Health (Kemenkes) stated that the achievement of exclusive breastfeeding for infants aged 0-5 months was 71.58%.

Even though breastfeeding has a million benefits, it turns out that the achievements of exclusive breastfeeding are still lacking. Various factors influence the failure of exclusive breastfeeding. Green (2005) in Notoatmodjo's research (2013) suggests factors that influence the formation of a behavior, namely predisposing factors including: aspects of age, level of knowledge, attitude, type of work, level of education, and socio-culture.

Research by Susi Hartini (2014) regarding the level of education and knowledge of mothers that significantly influence the success or failure of exclusive breastfeeding. According to Sandra 2015, many mothers do not know that one day the baby will experience an accelerated growth phase called a growth spurt. The timing of growth spurts in infants varies, but generally occurs at the age of 7-10 days, 2-3 weeks, 4-6 weeks, 3 months, 4 months, and 6 months. In this phase the baby becomes fussy due to hunger. Usually mothers say that the baby's duration of breastfeeding is longer and the frequency increases. Usually during these times a mother will be worried and think that her milk is lacking, so she ends up giving formula milk or early solids so that the baby is calm.

Research by Fatimah (2015) found that mothers with good knowledge tend to have a good understanding of the benefits and advantages of breastfeeding. This makes a strong encouragement for mothers to consistently practice exclusive breastfeeding for babies, whereas mothers with less knowledge and understanding will influence behavior. who do not support breastfeeding due to a lack of understanding of the benefits and advantages of exclusive breastfeeding.

Research methodology

Analytic observational research methods and case control design approach. The research was conducted in the Work Area of the Warunggunung Health Center, Lebak Regency, Banten Province. The research was conducted in December 2022. The study population was mothers who had babies aged 6 to 11 months in the working area of the Warunggunung Health Center, namely 286 people.

The research sample was 74 respondents using purposive sampling technique, with a comparison of cases and controls of 1:1. Cases were mothers with babies aged 6-11 months who were given early solids (not exclusively breastfed), while controls were mothers with babies aged 6-11 months who were not given early complementary foods (exclusively breastfed). Data collected by questionnaire. Data analysis with univariate and bivariate using chi-square test.

Research result

Univariate analysis

Table 1. Description of the Research Respondent Group, Mothers with babies aged 6-11 months in the Warunggunung Health Center Area

	F	%
Early MPASI was not given (Control Group)	37	50.0
Early MPASI was given (Case Group)	37	50.0
Total	74	100.0

Based on Table 1 above, it shows that this study used a 1: 1 sample between the case group and the control group, namely 37 respondents each with a total of 74 respondents.

Table 2. Characteristics of mothers who have babies aged 6-11 months in the Warunggunung Health Center area

1. Age of Mother	Frequency (F)	%
20-30	44	59.5
30-40	27	36.5
>40	3	4.1
Total	74	100.0
1. Mother's Education Level	Frequency (F)	%
finished elementary school	28	37.8
finished junior high	22	29.7
finished high school	20	27.0
graduated college	4	5.4
Total	74	100.0
2. Mother's work	Frequency (F)	%
Trader	1	1.4
Government employees	1	1.4
private employees	3	4.1
Housewife	69	93.2
Total	74	100.0

Based on Table 2, it can be seen the characteristics of the respondents, namely out of 74 mothers with babies aged 6-11 months at the Warung Gunung health center, most of the mothers were aged, 20-30 years, namely 44 people or 59.5%, with the education level of the majority graduating from elementary school as many as 28 people or 37.8%, and with mother's occupation the majority of housewives are 69 people or 93.2%.

Table 3. Description of the knowledge of mothers who have babies aged 6-11 months regarding Growth Spurt in the Warunggunung Health Center Area

	Frequency (F)	%
Good	42	56.8
Not enough	32	43.2
Total	74	100.0

Based on Table 3, it can be concluded that as many as 56.8% of mothers have a good level of knowledge about growth spurts, and 43.2% of mothers with less knowledge about growth spurts.

Table 4. Description of the level of knowledge of mothers who have babies aged 6-11 months regarding Growth Spurt in the case group and the control group in the Warunggunung Health Center area

Mother's Knowledge Level * Giving Early Solids Cross Tabulation					
			Giving Early MPASI		Total
			Not given right	That's right	
Mother's Knowled ge Level About Growth Spurt	Good	F	33	9	42
		%	78.6%	21.4%	100.0%
	Not enough	F	4	28	32
		%	12.5%	87.5%	100.0%
Total		F	37	37	74
		%	50.0%	50.0%	100.0%

In Table 4 it is known that the majority of the case group (mothers with babies who were given early solids) or as many as 87.5% of mothers had a lack of knowledge, while in the control group (mothers of babies who were not given early solids) the majority or 78.6% of mothers with a good level of knowledge.

Bivariate Analysis

Table 5. Results of the Chi Square Test. The effect of the knowledge level of mothers who have babies 6-11 months about growth spurts on early complementary feeding at the Warunggunung Health Center

Level Mapper huan Mother About growth Spurts	Giving Early MPASI				Total		OR 95 %	CL	P Value
	No Given MPASI Early		Given MPASI Early						
	F	%	F	%	F	%			
Good	33	78.6	9	21,4	42	100			
Not enough	4	12.5	28	87.5	32	100			
Total	37	50	37	50	74	100			

In the table above it is known that mothers with a good level of knowledge, only 21.4% of mothers gave early solids to their babies and 78.6% of mothers did not give early solids. Meanwhile, 87.5% of mothers with less knowledge gave early solids and only 12.5% did not give early solids to their babies. This shows that the giving of early solids is mostly done by mothers with a level of knowledge. The Chi Square test obtained a P value of 0.000 ($0.000 < 0.05$),

Discussion

This research was conducted on 74 respondents who were divided into the case group, namely mothers who gave early solids, 37 respondents and the control group, namely mothers who did not give early solids, 37 respondents.

The results of the study found that there was a significant relationship between the level of knowledge of mothers about growth spurts and giving early solids, where mothers with less knowledge would give more early solids to their babies than mothers with good knowledge. Similar research by E. Faristasari (2019) stated that the level of mother's knowledge about growth spurts is related to the attitude of breastfeeding mothers towards breastfeeding and solids.

Mother's level of knowledge is one of the influencing factors on success/failure in implementing exclusive breastfeeding. Green (2005) in Notoatmodjo's research (2013) suggests that behavior becomes a predisposing factor, which means that this factor facilitates the emergence of a person's attitude and behavior, for example: age factors, level of knowledge, attitude, type of work, level of education, and social culture.

A similar study by Susi Hartini (2014) examined the education level of mothers and mother's knowledge which had a significant relationship to the success and failure of exclusive breastfeeding. This means that there is a significant relationship between the mother's level of knowledge about growth spurt and the administration of early solids. So it can be said that the lack of knowledge of mothers about growth spurts will increase the incidence of giving Early Solids, and a good level of knowledge of mothers will reduce the incidence of giving Early Solids to babies.

From the table above, it is known that the odds ratio or OR is 25,667 (with a Confidence Interval / CI 7,130 – 92,400), this means that mothers with a lack of knowledge have a 25,667 chance of giving early solids to their babies.

According to Sandra 2015, many mothers do not know that once upon a time the baby experienced an accelerated phase of growth or growth spurt. Growth spurts are generally experienced by infants at the age of 7-10 days, 2-3 weeks, 4-6 weeks, 3, 4 and 6 months. In this phase the baby usually becomes more fussy due to hunger. Generally, mothers complain because their babies breastfeed more frequently and for a long duration. Usually during these times a mother will be worried and think that her breast milk is lacking, so she ends up giving formula milk or early solids so that the baby is calm. Research in Semarang by Fatimah (2015) found that mothers with good knowledge will have a correct understanding of the benefits of exclusive breastfeeding so that they can produce consistent behavior in giving exclusive breastfeeding.

Conversely, mothers with relatively less knowledge tend to have incorrect attitudes and behaviors towards exclusive breastfeeding due to a lack of understanding of the benefits of exclusive breastfeeding. Based on the research results that have been obtained and the theories and results of previous research, the researchers argue that the level of knowledge of a mother is an important factor and can influence attitudes/actions towards her baby. With good knowledge a mother can provide the best for her baby. The limitations of this study are the small number of samples and the presence of other factors such as habits or customs, as well as beliefs that can cause a mother to give early solids to her baby.

In the case group (babies who were given early solids) the majority or as many as 87.5% of mothers had a low level of knowledge, while in the control group (babies who were not given early solids) the majority or 78.6% of mothers had a good level of knowledge. Mothers with a good level of knowledge, only 21.4% of mothers gave Early Solids to their babies and 78.6% of mothers did not give Early Solids. In mothers with a low level of knowledge, as many as 87.5% gave Early Solids and only 12.5% did not give Early Solids to their babies. This shows that the giving of early solids is mostly done by mothers with less knowledge.

Results $p = 0.000$ ($0.000 < 0.05$). There is a significant relationship between the variable level of mother's knowledge about growth spurt and the provision of early solids. OR 25,667 (with Confidence Interval / CI 7,130 – 92,400), this means that mothers with a low level of knowledge are 25,667 times more likely to give early solids to their babies.

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