



**ANALYSIS OF KNOWLEDGE, PERCEPTION AND SOCIAL CULTURE FACTORS
AFFECTING MOTHER BEHAVIOR IN PROVIDING
WEANING FOOD**

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ABSTRACT

Keywords

Breastfeeding in infants when younger than 6 months occurs because the mother assumes that the weaning food is better than breast milk. The purpose of this study is to analyze the factors of knowledge, perception and social culture that influence the mother's behavior in providing complementary foods in infants aged less than six months.

The research design is correlational analytics with cross-sectional approach. The research population is all mothers of babies aged 7-12 months as many as 40 mothers. The sample is taken by simple random sampling technique as much as 37 respondents .. Data collected by questionnaire and tested linear regression and presented in the form of frequency distribution table.

Regression test results obtained the value of $R = 0.717$ it shows the relationship of independent variables and dependent strong enough, while the value of determination coefficient or R Square shows the value of 0.514 or 51.4%, meaning independent variables influence 51.4% of the dependent variable.

A good mother's knowledge about weaning food can influence mother's behavior in giving breastfeeding because with that knowledge mother can understand and understand how to give the right breastfeeding to the child. Similarly, the perception and social culture that develops in the family or community environment can affect the mother's behavior.

**Knowledge,
Perception,
Socio-Culture,
Behavior,
weaning food**

INTRODUCTION

Exclusive breastfeeding is the provision of breast milk without food and other additives in infants aged 0 to 6 months. Even water is not given at this exclusive breastfeeding stage. The World Health Organization states that exclusive breastfeeding during the first six months of life is best. The fact that there are still many mothers who provide weaning food of milk in infants when aged less than six months,

Early supplementary feeding in infants occurs because the mother is less aware of the proper breastfeeding feeding, in addition to the mother's employment status being the reason the mother provides weaning food too early for lack of time for her child, besides adanyan assumes that the baby will continue crying after breastfeeding means the baby is still hungry, so it should be given additional food, as well as a growing culture in the environment around the mother that has been done for generations such as infant banana in infants when the age of 4 months (Diah, 2011).

The fact that there are still many mothers who provide weaning food in infants when aged less than 6 months, where this occurs because the mother considers that the MPASI is better than breast milk, the mother is also less understanding about how to provide the right MP-ASI and also because mothers follow the advice of the family when the age of 4 months the child must be given banana pulp. Provision of

MP-ASI less than six months can cause a negative impact on the health of infants such as infants become easily affected diarebahkan can increase infant mortality. In 2010 in Indonesia, infants who received breast milk and liquid food (predominant) by 4.5%; breastfed and early-stage breastfed infants (81.54%); while for the coverage of nutritional status of infants 0-6 months in 2010 was 4.2% including malnutrition; 7.2% were included in malnutrition; 82.3% included good nutrition and 6.2% including more nutrition. In 2010 in East Java there were 136 malnutrition-prone sub-districts or 20.54% of the 662 sub-districts in East Java Province. The number of BGM infants in East Java in 2010 was 42,826 or 2.07% of all babies weighed. The coverage of nutritional status in East Java in 2010 was 4.8%, including malnutrition; 12.3% were included in malnutrition, 75.3% including good nutrition and 7.6% including more nutrition. Early MP-ASI in East Java is still high at 69.28%. The low feeding of appropriate age-appropriate feeding for babies is one of the triggers.

Inadequate knowledge causes the family or the mother to be unable to choose the best food that should be given to the baby (Fadilah, 2004). The purpose of this research is to analyze the knowledge, perception and socio-cultural factors that influence mother's behavior in providing weaning food for infants less than six months

MATERIAL AND METHOD

Material

1. Basic Behavioral Concepts

Behavior is an individual response to a stimulus or an action that can be observed and has a specific frequency, duration and purpose either realized or not (Wawan, 2011).

According to Skinner (1938) cited by Notoatmodjo (2011) behavior is the result of the relationship between a stimulus (stimulus) and response (response). He distinguishes the two responses:

2. Respondent response or reflexive response

It is the response required by certain stimuli. Such excitements are called eliciting stimuli because they produce relatively fixed responses. Respondent responses also include emotional behaviors that arise because of an uncomfortable organism in question.

a. *Operant response or instrumental response*

The operant response is a response that arises and develops followed by a certain stimulation. Such stimulation reinforces the response that the organism has made. In everyday life, the operant's response or instrumental response constitutes the lion's share of human behavior and the possibility to modify it is immense or unlimited.

According to Bloom, as quoted Notoatmodjo (2011), divide the behavior

into 3 domains (domain/region), although the areas do not have clear boundaries and firm. The division of this area is done for education, which is developing or increasing the three domains of behavior, which consists of the domain of cognitive (cognitive domain), affective domain (affective domain), and psychomotor domain (psychomotor domain). In subsequent developments by educational experts and to measure outcomes, the three domains were measured from:

1. Knowledge (knowledge)
2. Attitude (attitude)
 - 1) Belief (belief), idea, the concept of an object
 - 2) Emotional life or evaluation of an object
 - 3) The tendency to act (tend to behave)
3. Practice or action (practice)

Rogers's (1974) study cited by Notoatmodjo (2007) reveals that before people adopt new behaviors in a person, there is a sequential process:

1. *Awareness*
2. *Interest*
3. *Trial*
4. *Adaption*

Knowledge according to Wawan (2011) knowledge can show a percentage and interpret with sentences that are qualitative, namely:

- | | |
|---------|--------------|
| a) Good | (76% - 100%) |
| b) fair | (56% - 75%) |
| c) less | (< 56%) |

According to Wawan (2011) one of behavior measurement that is using Likert scale (Method if Summated Ratings)

Likert (1932) showed his method as a simpler alternative than the Thurstone scale. The Thurstone scale of 11 points is simplified into two groups, the favorable and the unfavorable. While neutral items are not included. To overcome this neutral loss, Likert uses another test construction technique. Each respondent is asked to do an agreement or disagreement for each item on a scale consisting of 5 points (Strongly agree, Agree, Doubt Hesitate, Disagree, Strongly Disagree). All the favorable items are then changed in value in the numbers, i.e. to strongly agree on the value of 5 while for the highly disagree the value 1. Conversely, for items that are unfavorable the value of the scale strongly agree on the value of 1 while for the highly disagree the value is 5. Like the Thurstone scale, the Likert scale is arranged and scored according to equal-interval scale.

The basic concept of weaning food

Breastfeeding food is food given to children aged 6-24 months. The role of supplementary food is not at all to replace breast milk but to complement breast milk. Thus, weaning food should be given to the child, at least until the age of 24 months (Yesrina, 2000 in Suparyanto, 2010).

Breastfeeding Foods are foods or beverages containing nutrients given to infants/children to meet their nutritional needs (Utami, 2006).

Additional food starts to be given to infants after six months of age, and breast milk should be given to infants at least until the age of 24 months. Food additives for this baby should be a complement and can meet the needs of the baby. So baby supplements are useful to cover the nutritional deficiencies contained in breast milk (Revelation, 2012).

Method

The design of this research is correlational analytic by using cross-sectional approach that is researcher emphasize time measurement data or research subject is assessed only one time only. Whereonly the factors that influence the mother's behavior in giving the MP-ASI is the factor of knowledge, perception and social culture. The sample of this research is all mothers who have babies aged 7-12 months in Kedungsolo Village, Porong Sub-district, Sidoarjo Regency as many as 37 mothers. The instrument used in this study is a questionnaire which contains about knowledge about MP-ASI as much as 16 questions, mother's perception about MP-ASI as many as 12 problems and socio-culture that developed in the community as much as 1 question and questionnaire about behavior of giving of ASI in baby less than 6 months as many as 10 questions.

Evaluation activities in this study were conducted in the following manner:
1) Knowledge Assessment
To answer the correct given score 1 and wrong answer given score 0. result of the weighted answer, then summed and

compared with the highest score then multiplied 100% according to Setiadi (2007) use formula:

$$P = \frac{f}{n} X 100\%$$

Description

P: Percentage

f: Number of correct answers

n: Maximum score

The results of this study are made in the form of frequency distribution table and then given the interpretation of the data based on the parameters used with qualitative criteria as follows:

- a) Good: Value = 76-100%
- b) Fair: Value = 56-75%
- c) Less: Value = <56%
- d) Perception Measurement

Perception measurements use the same appraisal as follows

Positive statement	Negative statement
Strongly Agree: 4	Strongly disagree: 4
Agree: 3	Disagree: 3
Disagree: 2	Agree: 2
Strongly disagree: 1	Strongly Agree: 1

Results of questionnaire data processing then calculated by using the formula as follows:

$$T = 50 + 10 \left[\frac{x - \bar{x}}{s} \right]$$

Information :

T = Score obtained

X = score of respondents changed to score T

$$\bar{X} A = \frac{\sum X}{\sum n} = \text{average score of}$$

respondents in the group (mean)

$$S = \sqrt{\frac{\sum (X - \bar{X})^2}{\sum n}} = \text{Standard deviation}$$

of group scores

Then the results of questionnaires calculated in interpreted For classification of perception is categorized as follows:

- (1) Positive if score T > T Mean
- (2) Negative If score T < T Mean.

1) Socio-Cultural Measurement

Assessment of socio-cultural aspects that may affect breastfeeding supplementary feeding is done by examining whether there is a tradition of giving breast milk to infants aged less than six months such as banana or other pulp. By classification:

- 1) Yes = 1, if the family advocates the provision of early breastfeeding
- 2) No = 0, if the family has never advocated giving the weaning food

2) Measurement of Mother Behavior

Measurement of behavior using the same way of assessment as follows

Positive statement	Negative statement
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Strongly Agree: 4	Strongly disagree: 4
Agree: 3	Disagree: 3
Disagree: 2	Agree: 2
Strongly disagree: 1	Strongly Agree: 1

Results of questionnaire data processing then calculated by using the formula as follows:

$$T = 50 + 10 \left[\frac{x - \bar{x}}{s} \right]$$

Information :

T = Score obtained

X = score of respondents changed to score T

$$\bar{X} = \frac{\sum X}{\sum n} = \text{average score of respondents}$$

in group (mean)

$$S = \sqrt{\frac{\sum (X - \bar{X})^2}{\sum n}} = \text{Standard deviation}$$

of group scores

Then the results of questionnaires calculated in interpreting for classification of behavior are categorized as follows:

- (1) Positive if score $T > T$ Mean
- (2) Negative If score $T < T$ Mean.

3) Hypothesis testing

To know the influence of knowledge, perception and socio-cultural factors

affecting mother's behavior in giving of breast milk to infant less than six months old by using linear regression test with

Age of feeding	Frequency	Percentage (%)
4 months	11	29,7
5 months	17	45,9
6 months	9	24,3
Total	37	100

assumption if $\rho < \alpha$ and $\alpha = 0,05$ then H_0 is rejected then factor knowledge, perception and social culture influence mother's behavior in giving of breast milk to baby less than six months and vice versa.

RESULT

1. Characteristics of Respondents by the age of Mother

Table 1 Characteristics of Respondents by Mother Age in Kedungsolo Village, Porong Sub-district, Sidoarjo Regency

Age	Frequency	Percentage (%)
< 20 years	0	0
20 – 35 years	27	73
> 35 years	10	27
Total	37	100

Table 1 shows that most respondents aged 20-35 years were 27 respondents (73%).

1. Characteristics of respondents by the age of the child

Table 2 Characteristics of Respondents Based on the age of children in Kedungsolo Village, Porong Sub-district, Sidoarjo District

Table 2 shows that most of the respondent's age is 9-10 months old as 23 respondents (62.2%).

1. Characteristics of respondents based on the age of the first child are given MP-ASI

Table 3 Characteristics of Respondents Based on the age of the first child is given MP-ASI in Kedungsolo Village, Porong Sub-district, Sidoarjo Regency

Age of children	Frequency	Percentage (%)
6-8 month	5	13,5
9-10 month	23	62,2
11-12 month	9	24,3
Total	37	100

Table 3 shows that almost half of the respondents gave the first breastfeeding at the age of 5 months as many as 17 respondents (45.9%).

2. Characteristics of respondents by Work

Table 4 Characteristics of Respondents Based on Mother's Work in Kedungsolo Village, Porong Sub-district, Sidoarjo Regency

Job	Frequency	Percentage (%)
Public servant	7	18,9
Privat employee	7	18,9
Privat employer	6	16,3
jobless	17	45,9
Total	37	100

Table 4 shows that almost half of the respondents did not work or as housewives as much as 17 respondents (45.9%).

2. Characteristics of Respondents by Education

Table 5 Characteristics of Respondents Based on Maternal Education in Kedungsolo Village, Porong Sub-district, Sidoarjo Regency

Education	Frequency	Percentage (%)
Elementary (SD, SLTP)	12	32,4
High school (SLTA)	18	48,6
University (D3, S1, S2)	7	18,9
Total	37	100

Table 5 shows that most mothers have a secondary education background (SLTA, MAN) of 18 mothers (48.6%).

3. Characteristics of Respondents by Number of Children

Table 6 Characteristics of Respondents Based on Number of Children in Kedungsolo Village, Porong Sub-district, Sidoarjo District

Number of children	Frequency	Percentage (%)
1 child	16	43,3
2-4children	15	40,5
>4children	6	16,2
Total	37	100

Table 6 above shows that almost half of respondents have 1 child, 16 respondents (43.3%).

4. Characteristics of Respondents by Total Revenue

Table 7 Characteristics of Respondents Based on Revenue Amount in Kedungsolo Village, Porong Sub-district, Sidoarjo Regency

Income	Frequency	Percentage (%)
< Rp. 2.200.000	3	8,1
Rp. 2.200.000	16	43,3
> Rp. 2.200.000	18	48,6
Total	37	100

Table 7 shows that almost half of respondents have income above Rp. 2,200,000 as many as 18 respondents (48.6%).

5. Characteristics of respondents based on information sources

Table 8 Characteristics of Respondents Based on information sources in Kedungsolo Village, Porong Sub-district, Sidoarjo Regency

Information source	Frequency	Percentage (%)
Health worker	15	40,5
Mass media	10	27
Family/friend	12	32,4
Total	37	100

Table 8 shows that almost half of the respondents obtained information from health workers as many as 15 respondents (40.5%).

5. Knowledge of MP ASI

Table 9 Respondents' knowledge about MP-ASI in Kedungsolo Village, Porong Sub-district, Sidoarjo Regency

Knowledge	Frequency	Percentage(%)
Good	7	18,9
Fair	18	48,6
Less	12	32,4
Total	37	100

Table 9 shows that almost half of the respondents have sufficient knowledge about breastfeeding food as much as 18 respondents (48.6%).

6. Mother's Perception of Breastfeeding Foods

Table 10 Maternal perception of breastfeeding food in Kedungsolo Village, Porong sub-district, Sidoarjo regency

Perception	Frequency	Percentage (%)
Positif	17	45,9
Negatif	20	54,1
Total	37	100

Table 10 shows that most respondents had negative perceptions about breastfeeding food as much as 20 respondents (54.1%).

6. Social Culture on weaning food

Table 11 Social culture that developed in the mother's environment about breastfeeding food in Kedungsolo Village, Porong Sub-district, Sidoarjo Regency

Social culture	Frequency	Percentage (%)
Yes	17	45,9
No	20	54,1
Total	37	100

Table 11 shows that most respondents had negative family or family backgrounds supporting early breastfeeding as much as 20 respondents (54.1%).

7. Mother's behavior in providing weaning food

Table 12 Maternal behavior in providing weaning food of milk in Kedungsolo Village, Porong sub-district, Sidoarjo regency

Attitude	Frequency	Percentage (%)
Positive	14	37,8
Negative	23	62,2
Total	37	100

Table 12 shows that most of the respondents had negative behaviors about

breastfeeding food as much as 23 respondents (62.2%).

DISCUSSION

Mother's Knowledge About Breastfeeding Foods

Respondents in this study indicated that they had sufficient knowledge about complementary feeding. The emergence of consciousness of respondents in this study because the respondents are still lacking in understanding the information about breastfeeding complementary food even though the respondents have obtained information about it so that some of the respondents still have enough knowledge about breastfeeding food. Based on the age of respondents belonging to the age of adulthood where at this age the thinking process of a person already can be said mature where should respondents have a good understanding of complementary foods of milk, but because respondents lack understanding of information received so well that they do not have good knowledge about food breastfeeding companions so that they still have a lot of negative behavior in the provision of MP-ASI early.

Mother's perception of weaning food

Respondents in this study indicated that many mothers considered breast milk supplementary foods may be given to infants under 6 months of age, this is because they followed a growing tradition around the respondents because the people around them gave mashed bananas to children at four years of age does not have

any impact on the baby. So even though mother Apra has good knowledge about breastfeeding food but they still try to provide weaning food as they follow the tradition that has been running and they assume that weaning food will not give bad effect if given to children under six months. Based on the number of respondent's children it can be seen that the respondents still do not have enough experience in providing weaning food of milk in their toddlers, so they still assume that breastfeeding supplements can be given to children according to direction or guidance from parents, so they assume that weaning food Breast milk may be given under 6 months of age. And from the respondent's source of information they should be able to show or have positive perception about weaning food so that they have assumed that the companion breastfeeding supplementary should be given when the child is more than 6 months but apart from the health worker the respondent also get information from health workers will but some of the respondents get information from magazines and from friends or relatives where the information received may influence the perceptions of the respondents about breastfeeding complementary foods, whether they consider whether they are good or not to give to their children. Also, this happens because sometimes the information obtained still can not be verified and many still have not had a good understanding.

Social culture of the mother towards the provision of MP-ASI

The results of this study indicate that most of the respondents follow the traditions or habits that have developed in their environment either family environment or community environment in general, where the culture states that there will be no negative effects if they are given complementary feeding, because if only given ASI children will still feeling hungry, therefore mothers feel confident with the habits that families do about the provision of MP-ASI so they provide early breastfeeding on their babies.

The behavior of Mother against the provision of MP-ASI

The results of this study indicate that most respondents have negative behaviors about breastfeeding food in which respondents provide weaning food at age less than 6 months because respondents assume that at that age there will be no adverse side effects if the child is given MP ASI early, In addition, because the environment around the respondents also support the provision of early breastfeeding MP makes respondents feel confident that children aged 4 months need to be trained or introduced to solid foods other than breast milk. Based on the age of the respondents in this study indicates that the experience they have about the provision of MP-ASI early is not only derived from their personal experience but also from experiences owned by people around respondents such as respondent siblings, parents or other family members, where

the experience obtained by the respondents indicated that early delivery of ASI MP would not have a detrimental effect or effect on their child, so the respondents followed the behavior.

The relationship of knowledge, perception and culture factors to mother's behavior in early breastfeeding

		Weaning food behavior	Knowledge of response	Response perception	Family culture
Pearson Correlation	Weaning food providing	1,000	,467	,511	,623
	knowledge	,467	1,000	,100	,254
	Response perception	,511	,100	1,000	,674
	Family culture	,623	,254	,674	1,000
Sig. (1-tailed)	Weaning food providing		,002	,001	,000
	knowledge	,002		,278	,065
	Response perception	,001	,278		,000
	Family culture	,000	,065	,000	
N	Weaning food providing	37	37	37	37
	knowledge	37	37	37	37
	Response perception	37	37	37	37
	Family culture	37	37	37	37

Based on the result of cross-tabulation between knowledge and behavior of respondents obtained data from 18 respondents who have enough knowledge there are ten respondents (55,6%) who have negative behavior in giving MP-ASI. While the cross-tabulation between perception and the behavior of MP-ASI obtained data from 20 respondents who have negative perceptions there are 17 respondents (85%) who has negative behavior in giving MP-ASI early on their child. And on cross tabulation between

culture and weaning food providing obtained data from 20 respondents mostly have negative behavior also.

The result of linear regression test shows that the value of $R = 0.717$ indicates that the relationship of independent variable and dependent variable is strong enough, while the coefficient of determination or R Square shows the value of 0,514 or 51,4%, meaning independent variable (knowledge, perception, and social culture) has an influence of 51.4% of the dependent variable (mother's behavior in giving MP-ASI), while 48.6% is influenced by other factors such as economic conditions or mother's motivation in giving MP-ASI

Sig value. <0.05 , the regression model shows its linearity, where it can be stated that the regression model can show the independent variable in influencing the dependent variable occurs directly so that the knowledge, perception and behavioral variables directly influence the mother's behavior in giving the MP-ASI. Based on the ANOVA table, we get the value of Sig = 0,000 which means $p < \text{significant criterion}$ (0,05), thus the regression equation model based on the research data is significant meaning the assumption which can be expressed from the result of this regression test indicate that the variables of knowledge, directly influence the mother's behavior in giving the MP-ASI and the result of this linear regression test showed that there is a linear relationship or linierity criterion fulfilled.

The results of this study indicate that the mother's knowledge about good weaning food can influence mother's behavior in giving the breast milk because with that knowledge mother can understand and understand how to give the weaning food appropriately in their abak. Similarly, the perception and socio-culture that develops in the family or community can affect the behavior of the mother, where with a negative perception about the provision of weaning food such as mother assume that if the child is 4 or 5 months may be given weaning food because if only given breast milk they will still feel hungry. While the socio-cultural factors also show the same thing, where if people already have a very strong belief and belief that when the baby is given weaning food since the age of 4 months then the baby will be faster strong and not easy to cry and easily hungry.

CONCLUSION

Mother's knowledge about breastfeeding food in KedungsoloPorong Village of Sidoarjo Regency has enough knowledge. While the perception of a mother about the complementary food of ASI obtained data mostly have a negative perception. Socio-cultural influences on the provision of weaning food of milk obtained data that most of the respondents gave the breast milk to their babies. Maternal behavior in providing weaning food of milk in obtained data mostly have negative behavior. Based on the analysis of the three factors, namely knowledge,

perception and socio-culture shows that there is a relationship between the three factors (knowledge, perception and socio-culture) on the mother's behavior in giving weaning food.

SUGGESTION

The need to develop the material about weaning food in health education institutions so that students can get more information and add literature library and equipped with a simulation of the provision of good weaning food. It is expected that more respondents to improve information about breastfeeding complementary foods such as active in following the counseling conducted by cadres or health personnel so that more understanding about the importance of complementary foods ASI. Health Service Institution (Posyandu and Puskesmas) should be more active in conducting health promotion activities in the community, especially about weaning food so that it can provide better health services and can improve community understanding about complementary foods. Subsequent research can conduct other material assessments such as factors that influence the knowledge and perception of mothers in providing food pendampign ASI so that the results of research can be more helpful in the development of science.

REFERENCES

Almatsier, 2009. Basic Principles of Nutrition Science. Jakarta: Gramedia Main Library

- Arikunto. 2006. Procedure Search Studies Practices. Jakarta: Rineka Cipta
- Azwar, Saifuddin. 2011. Human Attitudes Theory And Its Measurements. Yogyakarta: Pustaka Learning
- Biological. 2009. Building Critic Book. Jakarta: EGC
- Hidayat, 2007. Methods of Nursing and Data Analysis Technique. Jakarta: Salembamedika
- Juwono. 2004. Giving Additional Food: feeding for milk. Jakarta: EGC
- Kristiyanasari. 2009. Breastfeeding, Breastfeeding and BSE. Yogyakarta: Nuha Medika
- Like. 2011. Basic Concepts of Foods Breastfeeders (MP-ASI). Available at <http://www.laksana.blogspot.com>. Diakses date February 23, 2013
- Lituhayu. 2010. A-Z on Foods Breastfeeders. Yogyakarta: Gebius Publisher
- Narbuko. 2009. Research Methodology. Jakarta: Bumi Aksara
- Notoadmojo, S. 2010. Methodology Health Research. Jakarta: Rineka Cipta
- Nursalam. 2008. Concepts and Implementation Methodology of Medical Research Nurses. Jakarta: Salemba Medika
- Prabatini. 2010. Food supplements breast milk. Yogyakarta: Andi Offset
- Prasetyono. 2009. Exclusive ASI Smart Book. Yogyakarta: DIVA Press
- Proverawati. 2009. Textbook for Nutrition for Midwifery. Yogyakarta: Nuha Medika
- Setiadi 2007. Concept And Writing Riset Keperawatan. Yogyakarta: Graha Ilmu
- Setiadi 2013. Concepts And Practice Writing Russian Nrity Writing. Yogyakarta: Graha Ilmu
- Sugiyono. 2007. Statistics For Research. Bandung: Alfabeta