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# Early weaning food for infants (0-6 months old) in madurese people based on transcultural nursing theory

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**Abstract.** The World Health Organization recommend weaning food is given to infants aged 6-24 months. In Madura culture still exist the practice of giving weaning food before infants reach six months old. The purpose of this study was to analyze the factors of giving weaning food for infants (0-6 months old) based on transcultural nursing theory. Design used was descriptive with cross-sectional approach. Population was Madurese mothers who have infants (0-6 months old) who has been given early weaning food. A total of 61 respondents were chosen by cluster sampling method. Variables in this study were education, economic, political and legal, cultural values and lifestyles, kinship and social, religious and philosophical, and technology. Data were collected by using structured interview and described by using frequency and percentage distribution. The results had showed educational mostly were primary and middle education (92%). Economic mostly come from low economic status (70%). Political and legal mostly positive (54%). Cultural values and lifestyles mostly negative (62%). Kinship and social mostly negative (64%). Religious and philosophical mostly positive (64%). Technology factor dominantly low (56%). Based on transcultural nursing theory it is shown a diversity in positive and negative values. Further research was suggested to reduce the practice of giving weaning food behavior of Madurese mothers which suits with local culture.

**Keywords:** *early weaning food, transcultural nursing theory, infant (0-6 months old)*

## 1. Introduction

WHO recommend to exclusively breastfed infants for the first six months of life to achieve optimal growth in development and health. Thereafter, to meet their evolving nutritional requirements, infants should receive nutritionally adequate and safe complementary foods while breastfeeding continues for up to two years of age or beyond [1]. But, in Madura culture still exist the practice of giving weaning food before infants reach six months old [2].

The target of exclusive breastfeeding program in Indonesia based on Ministry of Health's Strategic Plans on 2016 was 42%. At the end of 2016, it was nationally reached 54% for exclusive breastfeeding during 0-5 months old. But, the target was still unreal for exclusively breastfeeding infants until six months old (only 29,5%). While East Java coverage for breastfeeding infants during 0-5 months old was 48,1% (below national target) and 31,3% for six months old (over national target) [3]. Based on health survey in 2015, exclusive breastfeeding coverage for infants 0-6 months old at Kabupaten



Pamekasan was only 59,8%. It was below East Java coverage (69,1%). While data from Community Health Center (Puskesmas) at Proppo, Pamekasan, had shown that at the same year, the exclusive breastfeeding coverage for infants 0-6 months old was only 31,4%. The low coverage of exclusive breastfeeding in this area was caused by Madurese tradition called *lotek* (Madurese language, means giving soft foods) which given before infants reach six months old. They believe this tradition can make baby's stomach full, then the baby can sleep tight [4].

Transcultural nursing theory emphasizing on the nurse's role in giving intervention based on client's culture. Bridging gap between client's folk and professional behavior in maintaining health [5]. Based on this theory, there are seven factors which influence individuals, families, groups, and communities' health behavior, includes: 1) technological; 2) religious and philosophical; 3) kinship and social; 4) cultural values and lifeways; 5) political and legal; 6) economic; and 7) educational [6]. The research result showed that kinship, cultural values, lifeways, and philosophical beliefs influence Puerto Rican infant feeding practices [7]. Research on Javanese mothers had shown that all factors in transcultural nursing influence their infant feeding practices, except education [8]. There were overwhelming research which examine factors affecting infant feeding practices, but rare using transcultural nursing theory as a conceptual framework.

Various efforts have been made by the government to improve exclusive breastfeeding [8]. However, Madurese tradition in early weaning food still hasn't solved yet. Therefore in this paper, we analyze the factors of giving weaning food for infants (0-6 months old) based on transcultural nursing theory on Madurese mothers at Puskesmas Proppo, Pamekasan. So nurses can develop interventions or health promotion strategies which culturally sensitive, in order to promote exclusive breastfeeding and prevent early weaning food before an infant reach 6 months old at Madurese society.

## 2. Method

Design used was descriptive with cross-sectional approach. Population was Madurese mothers who have infants (0-6 months old) who has been given early weaning food at Puskesmas Proppo Pamekasan. A total of 61 respondents were chosen by cluster sampling method from 16 different village. Variables in this study were education, economic, political and legal, cultural values and lifeways, kinship and social, religious and philosophical, and technology. Data were collected by using structured interview and described by using frequency and percentage distribution.

Table 1. Demographic characteristics of mother and child (n=61)

Variables	Category	n	%
Mother's age	>20 years old	4	7
	20-35 years old	52	85
	>35 years old	5	8
Working status	Yes	31	59
	No	30	41
Number of children	1	23	38
	2	20	33
	3	15	25
	>3	3	5
Number of family's member	3	2	3
	4	9	15
	5	16	26
	>5	34	56
Type of family	Nuclear family	19	31
	Extended family	42	69

### 3. Result and Discussion

Table 1 presents the characteristics of respondents, mothers who have infants (0-6 months old) who has been given early weaning food. It shows that, mostly mothers' age was classified as young adulthood (20-35 years old), as many as 85% mothers. More than a half was a working mother (51%). Many of them only have one infant (0-6 months old), as many as 38%. Most mothers who have been given early weaning food to their infant were living in an extended family (69%), with more than five family members in one house (56%).

Table 2 Frequency and percentage distribution of respondents based on variables (n=61)

Variables	Category	n	%
Level of education	Primer	30	49
	Middle	26	43
	High	5	8
Level of economy	Low	43	70
	High	18	30
Political and legal	Negative	28	46
	Positive	33	54
Cultural values and lifeways	Negative	38	62
	Positive	23	38
Kinship and social	Negative	39	64
	Positive	22	36
Religiousity and philosophies	Negative	27	44
	Positive	34	56
Technology	Low	34	56
	Fair	15	25
	Good	12	20

Table 2 present that mostly mothers who has been giving weaning food to their infants before 6 months old, had attended primary and middle schools (92%). Mother's level of education can influence their knowledge. Knowledges were important domain to form one's action [9]. As higher as their education, an individual would think by using their rational which supported with scientific evidence. They also can easily adopt a behavior to maintain their health [6]. More information their get, healthier action expected. Based on data, there were mothers with high educational level who has been given early weaning food to their infant before 6 months old. Although the frequency was lower as their level of education was increasing. The transcultural nursing theory had explained that health behavior was formed not only by educational factors, but also various factors which contribute together [5]. Mothers' level of education doesn't specify their behavior in giving early weaning food to their infant (0-6 months old). If there were other factors that more suppress mothers, so their health behaviors were decreasing [10].

Majority mothers came from low economics' level (70%). Their family incomes were lower than standart family monthly incomes at Propopo District. Family incomes mostly obtained from father, because almost all respondents were housewives and only few become entrepreneur (selling goods at their home). Transcultural nursing theory had explained that individuals will use their own resources to maintain health, such as money [6]. In case of infant feeding practice, family financial condition will influence mother's ability to provide good nutrition for themselves [11], to maintain the quality of their breastmilk. Based on interview while fulfill the questionnaire, mothers had said their breastmilk seems not enough to feed their infants. So they add soft food to make baby's stomach full, then the baby can sleep tight [4]. There were 30% mothers from good economics' level who give early weaning food to their infant. It can happen because there were several factors which influence one's

health behavior, such as education, occupation, and cultural background [12]. Mothers with high economic level will tend to choose formula milk, instant porridge or biscuits with good quality and nutritious content [13], while families with less economic status will tend to choose rice or bananas as soft food because it was economically cheaper and locally appropriate.

Indonesian government has published regulation Kepmenkes RI No.450, 2014 about breastfeeding that promoted exclusive breastfeeding. Most samples have positive view about the regulation but still giving early weaning food for the infants. According to transcultural nursing theory, rule, and regulation can affect healthy behavior [5]. Mother's knowledge about breastfeeding regulation need to be inquisitive with their outlook and implementation of the exclusive breastfeeding. Mothers with good knowledge about breastfeeding and the regulation still failed to practice exclusive breastfeeding [15]. The same result with this research about breastfeeding can be a sign that a positive view about regulation was not directly affected mother decision about exclusive breastfeeding implementation.

The distribution data of cultural value and life style show the sixty-two percent of samples have negative cultural value and life style in early weaning food for infant. Negative cultural value and life style of early weaning food such as giving coconut water or they called it *ro-moro* to newborn baby in order to make the infant stronger and healthier. Other negative behavior done by most samples was giving smoothed banana or they call it *lotek* to stop the baby crying and sleep faster. Other than that, they also provide infant's formula before the infant reached six months old. People share the culture they learnt and use it as part of their think, act, and decision making [6]. Former research revealed the correlation between cultural value and providing weaning food on infants less than six months old [13].

The result of this research showed 38% respondent have positive cultural value and lifeways about early weaning food for infants. Positive cultural value and lifeways among respondents were belief about breast milk is good for baby's growth and development, breastfeeding was natural way, and performed abstinence was dangerous for baby. However, those respondents also gave early weaning food for their infants. There were several reasons why they still committed early weaning. The first reason was working mother who spent most of the time at their office than at home and their office have less facility to support breastfeed mother. Working mothers usually has less time to interact and breastfeeding their baby, thus made them prefer infant's formula than breast milk. The other reason was some of the respondents didn't finish primary school and had deficient knowledge about breastfeeding.

Negative cultural value promote mother in early weaning for infants. It is usually the parents who teach common cultural values and lifeways they believed to their children. Cultural negotiation might become the right intervention and nursing implementation and help mothers adapt to certain cultures that are more beneficial to their health. Nurses can help clients to choose and define other cultures that are more supportive to reduce the behavior of early breastfeeding and increase exclusive breastfeeding.

Respondent's distribution on kinship and social factor showed that more than half of respondents have negative value toward social and family about early weaning for infants. Community and other family members should function as a support system to improve the health and adapt to changes in the health status of a family members [5]. Community and family support provided could be implied as providing time, attention, and all support required by mother and baby [13].

Negative support from social and family about early weaning might cause by low awareness of women achievement as mother. Negative family concerns caused mothers have negative traits in determining the form and mode of treatment of infants, including in the provision of early weaning. Mother usually obey all family information about baby treatment. There was a correlation between family promotion about early weaning and early weaning behavior on mother with baby under six months old [16]. Negative social and family supports in this study included family who rarely listens to maternal complaints during breastfeeding, always encourage early weaning, and rarely accompanied mothers in consultation to health workers about infant care. Most of the time social and family

supports still related with the habits, customs, and beliefs of the family. This resulted in mother's behavior on early weaning.

More than half of respondents come from nuclear family and extended family have negative support from their social and family members. Children from small families receive more attention than children from large families [12]. However, the results of this research have contradictive outcome comparing to Friedman opinion.

From the data distribution we also found respondents who have positive social and family support. Forms of positive support provided were enough food for mother; taking care of the infant while the mother is working; and taking the infant to the health care center for monitoring infant's health. Still those supports did not preclude mother in doing early weaning in infants. The age and number of children may also cause the mother to have less experience with breastfeeding.

Positive support from social and family members is an important part on building up mother role, especially in the Madurese where the family culture is quite strong. Madurese families and communities plays important role in child care especially in the care of babies. Information on exclusive breastfeeding and breastfeeding should not only be given to mothers but also husbands and the other family member. Communities and families need to receive education and training about exclusive breastfeeding in order to provide support for mothers and prevent early weaning for infants less than six months old.

Respondent's distribution based on religiosity and philosophy showed that most of respondents have positive religiosity a philosophy about early weaning, approximately 56% of respondents. According to the theory of transcultural nursing, religiosity provides a powerful motivation for placing truth above all, even above one's own life and lead one's to have a humble and open nature [5]. There are three dimensions in Madurese religiosity. First, the Dimension of experience where man feeling calm with performing religious actions. Secondly, the dimension of religious knowledge, where belief and faith were illustrated by traditions. The last was the dimension of the consequences after performing religious action, between bad and good impacts [17]. In this study the positive religiosity a philosophy of respondents in early weaning such as their perspective about medical treatment, in this case was the early weaning; how the respondent wish for the health of their baby, and providing nutritious food as a form of gratitude and the peace they felt for having the baby. A person's religiosity can affect their behavior including breastfeeding and food weaning.

In this study most of the respondents have positive religiosity & philosophy value, but they still performed early weaning. This was because in this study, religiosity influence more on mother's tranquility when taking care of child, not what being given by mothers to their baby. Maternal behavior in early breastfeeding is not only influenced by maternal religiosity, but there are 6 other factors that influence the mother's behavior based on the culture they choose [6]. There always needs to be modification on other factors influencing mother's behavior about early weaning.

Technology factor dominantly low (56%) on mothers who has been given early weaning food to their infant (0-6 months old). Technology was one of factors which influence an individual's behavior based on their culture [6]. Technology refers to all forms of things or system used to create, store, change, and use information and all its forms. The use of health technology was influenced by health worker's attitudes and the community's need and interest [14]. The development of modern technology can be useful to disseminate information about exclusive breastfeeding, but it also can give a negative impact if the technology was used to advertise formula milk and instant porridge. There was a correlation between technology and mothers' behavior in giving early weaning food on infant (0-6 months old). Less utilization of technology will increase mother's behavior in early weaning food practice [13]. Less technology utilization in Madurese mothers based on research's result was the lack of using printed and electronic media to access information about health, especially about exclusive breastfeeding; lack of using the health service center; and lack of electronic devices to support exclusive breastfeeding, such as breast pump for a working mom, and freezer to store breast milk.

#### 4. Conclusion and Suggestion

Based on transcultural nursing theory, factors which influence the practice of giving weaning food before infants reach six months old in Madurese people were low maternal education, low family economic level, negative cultural values and lifeways, negative kinship and social, and low technology to access correct information about exclusive breastfeeding and the availability of supporting facilities to breastfeed exclusively. Otherwise, positive political and legal factors and positive religiosity and philosophical factors can be the strength of Madurese people to prevent the early weaning food practice.

Madurese mothers and families with infants (0-6 months old) should be more active in accessing information about exclusive breastfeeding. Community health nurses were expected to develop health promotion strategies based on research findings to reduce the practice of giving weaning food behavior of Madurese mothers which suits with local culture.

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