HUBUNGAN PERAN KELUARGA DENGAN PRAKTEK PEMBERIAN MAKANAN PENDAMPING ASI PADA BAYI UMUR 6-24 BULAN DI KABUPATEN JEMBER
(CORRELATION BETWEEN FAMILY OF ROLES AND COMPLEMENTARY BREAST FEEDING PRACTICES AMONG CHILDREN AGED 6-24 MONTHS IN JEMBER)

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ABSTRACT

Family have an essential roles to fulfill the growth and development of their children, in particularly for requiring of daily complementary breast feeding practices (CBFP). The aimed of study was to examine the correlation between family of roles and CBFP among children aged 6-24 months in Jember. A cross-sectional design was performed 113 of mothers cluster random sampling. A self-administered questionnaire was used to measure of sociodemographic of mothers and their children, while Family Assessment Device was performed to measure family of roles. Then, complementary feeding practices questionnaire was used to measure CBFP. Spearmen Rank test was used to analyze the data. Among 113 of mothers, the median score of family of role and CBFP were 29 (Z = 1.870; p-value = 0.002) and 22 (Z = 1.94; p-value = 0.001), respectively. The CBFPs was categorized enough (89.4%). There were a significantly correlation between the family of role and CBFP among children aged 6-24 months (r = 0.297; p-value = 0.001). Family of role is correlation with CBFP among children aged 6-24 months. Therefore, family roles should be involved to practice complementary breast feeding. Furthermore, health care provider in community health centers (Puskesmas) could give counseling regarding complementary feeding according to the age of the baby.

Keyword: family of role; complementary breast feeding; children

ABSTRAK

Keluarga memiliki peranan penting dalam pertumbuhan dan perkembangan anak, terutama dalam pemenuhan praktek pemberian makanan pendamping ASI. Tujuan penelitian ini adalah untuk mengkaji hubungan peran keluarga dengan praktek pemberian makanan pendamping ASI pada anak umur 6-24 bulan di Kabupaten Jember. Desain penelitian cross-sectional dilakukan pada 113 ibu yang memiliki anak umur 6-24 bulan secara cluster random sampling. Kuesioner digunakan untuk mengukur variabel sosiodemografi ibu dan anak. Kuesioner Family Assessment Devices digunakan untuk mengkaji peran keluarga, dan kuesioner complementary feeding practices digunakan untuk mengukur praktek pemberian makanan pendamping ASI. Uji Spearmen rank digunakan untuk menganalisis data dalam penelitian ini. Hasil penelitian menunjukkan skor median dari peran keluarga dan praktek pemberian makanan pendamping ASI adalah 29 (Z = 1.870; p-value = 0.002) dan 22 (Z = 1.94; p-value = 0.001). Praktek pemberian makanan pendamping ASI dikategorikan cukup (89.4%). Lebih lanjut, peran keluarga berhubungan dengan praktek pemberian makanan pendamping ASI (r = 0.297; p-value = 0.001). Dapat disimpulkan peran keluarga berhubungan dengan pemberian makanan pendamping ASI. Oleh karena itu, peran keluarga sebaiknya dilihatkan dalam praktek pemberian makanan pendamping ASI. Lebih lanjut, petugas kesehatan di Puskesmas dapat memberikan konseling terkait praktek pemberian makanan pendamping ASI sesuai dengan umur anak. [Penel Gizi Makan 2019, 42(2):57-64]

Kata kunci: peran keluarga, makanan pendamping ASI, anak
INTRODUCTION

Complementary breast feeding (CBF) are foods that contain nutrients and are referred to as a substitute for breast milk that is given to babies from the age of 6 months. The CBF that given correctly and completely will contribute optimally to the growth and development of children. Providing of CBF is performed precisely according to the type, frequency, and method of administration regarding on the aged of children, although the provision of CBF is not performed properly it will have an impact on the children. The effect of CBF will impact on malnutrition which can increase the risk of infection and a negative impact on mental and physical development of children. Providing of CBF should be given regarding the stages of children, including form and amount based on the children's ability to digest. Sufficient quantity and quality during providing CBF can help physical growth and intelligence development of children rapidly. Furthermore, the increasing the age of children, the increasing the nutritional needs of children. Therefore, the nutritional needs should be added in order to fulfill the energy for growth and development optimally of the children.

Recently, many parents is not appropriately for providing complementary feeding, including the meaning and typing of CBF, the right time for providing, suitable CBF regarding the aged of children, and advantages and disadvantages of providing CBF. An appropriated of CBF is met the requirements of children needs, including on time, fully nutritious, sufficient and balanced, safe, and given on the right way. On the other hand, proving CBF too early will increase the risk of diarrhea and other infections. Then, it effected the decreasing of amount of breast milk that received the children, although the nutritional composition of the milk during the first 6 months is very suitable for the children's needs, consequently the children's growth will be disrupted. Furthermore, the earliest providing CBF can lead to acute respiratory infections, because the immune system among under six months of children is still not perfect. Therefore, earlier providing CBF can facilitate the entry of various types of germs that can cause disease among children.

The Indonesian Demographic and Health Survey in 2012 showed that around 91 percent of children aged 6-8 months in Indonesia started to provide a getting solid, semi-solid, and soft food. Here in, there are a lot of incidents that the provision of CBF has been given since children aged less than 6 months in Indonesia, such as giving a solid food, like a rice and bananas. Then, in Jember Regency, especially in the Panti Subdistrict the providing of CBF has been given since the new child was born. This is due to the habit that arose from long ago. Based on preliminary study data obtained from the Panti of Public Health Center, there are 1,916 infants aged 0-24 months who have received CBF.

The structure of the role of family as one indicator of the family structure. Family of role describes the role of each family members among the role in society, both formal and informal of roles. Fathers have roles as family leaders, breadwinners, educators, protectors, security providers for family members, as well as community members or certain social groups. Meanwhile, the mother has the role of housekeeper, caregiver, child educator, family protector, and additional breadwinner. Thus, the role among the family is needed, in particularly for fulfilling the CBF of children during their daily of life. In addition to being responsible for childcare, the family also plays an important role for meeting the nutritional needs of children's growth and development.

The role of the family for selection of CBF is influenced by the social support system, including spouse, family, friends, and the community of environment. Social support systems can be provided through social interaction and social support. Social interaction can be carried out by families or communities, especially health care providers who have the ability to provide information about how to provide CBF correctly and appropriately. Meanwhile, social support can be provided by the community with a number of facility activities, such as Posyandu or counseling carried out by health care provider about CBF through the activities of mothers who are in each place of residence. In addition, family of role is determined providing CBF for children. Therefore, families must also play an active role as information seekers to health care provider or health cadres who are deemed successful in providing CBF.

The emergence of health problems due to ineffectiveness in the providing of CBF indirectly affects the nutritional status of infants, because the CBF has an important role for fulfilling the nutritional needs of children. The impact that occurs if CBF is given too early will result in short-term and long-term risks. Short-term risks result in gastrointestinal obstruction and babies are more susceptible to diseases such as diarrhea, coughing, constipation and heat. While the long-term risk of causing excessive kidney burden, because food given at an early age contains...
high levels of sodium chloride (NaCl) which will add to the kidney’s burden\(^{14}\). Therefore, the aimed of this study want to examine the correlation between the role of family and complementary feeding practices among children aged 6-24 months in the Panti District of Jember.

**METHOD**

A correlational research design using a cross-sectional approach was conducted among 113 mothers who have children aged 6-24 months in Panti district. This study wanted to examine the correlation between the role of family and the CBF practices among children aged 6-24 months in the Panti District, Jember.

The population in this study consisted of 7 villages in Panti Subdistrict, namely the villages of Serut, Suci, Kemiri, Panti, Glagahwero, Kemuning, and Pakis. Each village has a different number of children aged under five. The total number of babies aged 6-24 months who have received CBF is 1,463 of children. The sample was determined using 95 percent of confidence interval and precision of 10 percent. Therefore, among 113 of samples of mothers including in this study. The samples is performed using the cluster random sampling. The sampling in each village was carried out randomly by the researcher coming to one of the Posyandu cadres in each village, then the researcher asked for baby names that fit the inclusion criteria for the number of samples needed in each village.

The inclusion criteria in this study were followed: 1) families who have babies aged 6-24 months; 2) babies aged 6-24 months who are still breastfeeding (still receiving breast milk); and 3) babies aged 6-24 months who are active or registered in posyandu. Sampling in each village was carried out randomly by the researcher coming to one of the Posyandu cadres in each village, then the researcher asked for baby names that fit the inclusion criteria for the number of samples needed in each village. While the exclusion criteria in this study are families who are sick both acute and chronic and families who are moving out of town. This research was conducted in December 2018 to January 2019.

A self-administered questionnaire was used to collect the data, including sociodemographic of mother (age, education, occupation, income per month of family) and children (age, gender, height and weight). Then, Family Assessment Device (FAD) questionnaire was used to measure family of roles\(^{15}\). This questionnaire was consisted 7 subscale, including problem solving, communication, roles, affective responsiveness, affective involvement, behavior control, and general function. This questionnaire is consisted 60 of question with Likert scale (strongly agree= 4, agree= 3, disagree= 2, strongly disagree= 1). The questionnaire uses a total score with the lowest score of 60 and the highest score of 240. The highest score is indicated the functional of family of role. However, in this study, the researchers only were took subscale roles of family which consisted of 8 questions. The FAD (questionnaire was very reliable with a Cronbach alpha value of 0.7. In addition, a reliability test on the role subscale in the FAD questionnaire is 0.971 with a Cronbach alpha value\(^{16}\). The score used in the questionnaire uses a range of scores between 8 to 32, where a minimum score of 8 and a maximum score of 32\(^{17}\). This questionnaire has been carried out reliability test id 0.81.

Questionnaire sheet about CBF which consists of 6 parts, including the type of material, texture, age, number/portion, frequency, and principle of implementation. This questionnaire is included 32 items with dichotomous scales (yes= 1, no= 0). The maximum score of the observation sheet is 32 and the minimum score is 0. The CBF questionnaire sheet was adopted from the concept of CBF learning\(^{18}\). The researchers conducted a consent validity index (CVI) test to 4 lecturers who are experts in child nursing with a result of 0.91 (valid). It is said to be valid if the relevant CVI results are 0.80-10\(^{19}\). Then the researchers conducted a reliability test on 113 participants in the Panti District with an alpha cronbach value of 0.99 (very reliable).

The procedure related to data collection techniques in this study is that the researcher submits a permit application through the academic section to the Faculty of Nursing at the University of Jember addressed to the LP2M of the University of Jember for an introduction to the National Unity and Political Agency (Bangkesbangpol) of Jember Regency, the Health Office of Jember Regency, and the District House.

After licensing the Panti Puskesmas and Panti District, the researchers coordinated with the Midwives, Nurses and Posyandu Cadres in the Panti District area to obtain data related to 6-24 months old baby. Then the researcher held a meeting with the respondent to explain the intent and purpose of conducting the study and gave an informed consent sheet to the respondent as a sign of being willing to be a respondent in this study accompanied by Posyandu cadres, RT / RW, and Kasun in each
After the respondent is willing, the researcher contracts the time and place to conduct the research. After the respondent understands the purpose and objectives of the research, and knows the procedures carried out in the study, the researcher then gives a questionnaire sheet about the role of the family (Family Assessment Device) and a questionnaire sheet about CBF to the respondent and explains the filling procedure with language that is easily understood and understood. Before the study ended, the researchers thanked respondents who were willing to take part in the study from beginning to end.

Data analysis in this study was carried out using a software application, for univariate analysis in which categorical data used frequency distributions with a percentage measure. Whereas if numerical data with abnormal distribution are presented in the form of medians, percentiles, Z-values, and p-values with the Kolmogorov Smirnov Test. For bivariate data analysis using the Spearman Rank test. In addition, nursing research that uses human subjects must understand ethical principles or research ethics. Research on the role of families with the provision of CBF in 6-24 months old baby in the Panti Sub district has been conducted an ethics test at the Faculty of Dentistry, University of Jember with an ethical number 350/UN25.8/KEKP/DL/2019.

**RESULTS**

Table 1 shows the characteristics of study participants (family) and the characteristics of children under five in Panti District, it can be seen that the age of respondents with a mean value of 2 in terms of the average age of respondents is 26 to 35 years. Based on the characteristics of the latest education it can be seen that the highest level of participant education is elementary school (SD) of 53.1 percent. As for the highest occupational characteristics of participants, namely not working or housewives (IRT) as much as 76.1 percent. And for the distribution of respondents based on income level shows that 50.4 percent earn more than 1,000,000 IDR. The results of the analysis of the distribution of infant characteristics are known that the age of infants with a mean value of 2 in terms of the average age of toddlers is 13 to 24 months and the highest sex of toddlers is male as much as 53.1 percent.

<table>
<thead>
<tr>
<th>Participant Characteristics</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age of Participants (Family)</strong></td>
<td></td>
</tr>
<tr>
<td>Md (P&lt;sub&gt;25&lt;/sub&gt;-P&lt;sub&gt;75&lt;/sub&gt;)</td>
<td>2 (2-3)</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
</tr>
<tr>
<td>No School</td>
<td>7 (6.2)</td>
</tr>
<tr>
<td>Elementary School</td>
<td>60 (53.1)</td>
</tr>
<tr>
<td>Junior High School</td>
<td>37 (32.7)</td>
</tr>
<tr>
<td>Senior High School</td>
<td>8 (7.1)</td>
</tr>
<tr>
<td>College</td>
<td>1 (0.9)</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
</tr>
<tr>
<td>Not Working</td>
<td>86 (76.1)</td>
</tr>
<tr>
<td>Farmers</td>
<td>22 (19.5)</td>
</tr>
<tr>
<td>Entrepreneur</td>
<td>2 (1.8)</td>
</tr>
<tr>
<td>Merchant</td>
<td>2 (1.8)</td>
</tr>
<tr>
<td>Others</td>
<td>1 (0.9)</td>
</tr>
<tr>
<td><strong>Family Income</strong></td>
<td></td>
</tr>
<tr>
<td>≤1,000,000</td>
<td>56 (49.6)</td>
</tr>
<tr>
<td>&gt;1,000,000</td>
<td>57 (50.4)</td>
</tr>
<tr>
<td><strong>Baby Age</strong></td>
<td></td>
</tr>
<tr>
<td>Md (P&lt;sub&gt;25&lt;/sub&gt;-P&lt;sub&gt;75&lt;/sub&gt;)</td>
<td>2 (1-2)</td>
</tr>
<tr>
<td><strong>Baby Gander</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>60 (53.1)</td>
</tr>
<tr>
<td>Female</td>
<td>53 (46.9)</td>
</tr>
</tbody>
</table>

Note: n (%) = number of participants (percentage); Md = Median; P<sub>25</sub>-P<sub>75</sub> = Percentiles 25-75
Table 2 shows that the distribution of data for weight and height for infants is abnormal, so the results of the study are presented using median values and P_{25}-P_{75} percentiles. Thus the general picture of a toddler based on body weight has a middle value of 9.50 kg while height has a middle value of 76 cm. The role of the family in the Panti District, it can be seen that the mean value of the family role of having a baby aged 6-24 months in the Panti District is 29 and shows that the family role of 113 participants in the Panti District is well estimated, this is evidenced by the Z value= 1.870 and p-value = 0.002. The complementary feeding (MP-ASI) for 6-24 months old baby in the Panti District. The results of analysis of the distribution a complementary feeding (MP-ASI) for 6-24 months old baby in Panti District are shown in Table 2, in that table it is show that the mean value of the complementary feeding variables (MP-ASI) is 22, another data shows that giving of MP-ASI from 113 different participants (Z = 1.944; p-value = 0.001).

From this it can be seen that the estimated value shows that participants in Panti district did provide CBF with sufficient categories (Figure 1). The results show that the administration of complementary feeding to 6-24 months old baby in the majority of sub-districts takes place giving CBF with the sufficient category is 109 (89%), but there are some participants who give the MP-ASI well which is 12 (11%).

Figure 2 shows the results of statistical tests obtained based on the Spearman Rank test that p <α (0.001 <0.05) can be concluded that there is a significant correlation between the role of the family with the provision of CBF in 6-24 months old baby in the Panti District. The strength of correlation seen through r is 0.297 which means that the strength of the relationship between variables is weak. And the direction of the correlation in the results of this study is positive (+) so the better the role of the family, the better the provision of CBF to infants.

### Table 2
Characteristics of Weight and Height of Children, Family Roles, and Complementary Breast Feeding Practices (n = 113)

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Md (P_{25}-P_{75})</th>
<th>Z</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight of children</td>
<td>9.50 (8.30-10.30)</td>
<td>1.155</td>
<td>0.13</td>
</tr>
<tr>
<td>Height of children</td>
<td>76 (71-80)</td>
<td>1.258</td>
<td>0.08</td>
</tr>
<tr>
<td>Role of the Family</td>
<td>29 (28-30)</td>
<td>1.870</td>
<td>0.002</td>
</tr>
<tr>
<td>Providing complementary feeding</td>
<td>22 (21.5-23.5)</td>
<td>1.944</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Note: Md = Median; P_{25}-P_{75} = Percentiles 25-75; Z = Calculated value of Kolmogorov Smirnov test

![Figure 1](image_url)

**Figure 1**
Complementary Breast Feeding Practices among 113 of Mothers
DISCUSSION

Our finding showed that there is a significantly correlation between the role of family and CBF practices among children aged 6-24 months in Panti District. The direction of correlation was positive correlation which meant that the better role of the family, the better the providing of CBF for children aged 6-24 months. The study shows the role of families in the Panti District is well estimated. In this study the assessment of the role of the family includes formal and informal roles. In each indicator contained in the role of the average family is always carried out by participants so that the results of this study indicate that the implementation of the role of the family is estimated good. This is in line with previous study that a role in a family is said to be good because family members, especially mothers have free time or always accompany when children eat. The family has an important role in matters relating to children's food ranging from the preparation of food menus, purchasing food, feeding children, eating patterns of children, and frequency of eating children, it is said to be important because it is very influential on the child's growth and development. The family is responsible for child care including fulfilling the nutritional needs for the growth and development of children. In addition to having a role as a determinant in feeding children, families must also play an active role as information seekers to health workers or health cadres in each posyandu who are deemed successful in giving CBF to children.

The finding showed that the providing of CBF for children aged 6-24 months in the Panti District is sufficiently estimated. This is in line with other studies that show related problems of parental behavior in feeding children, for example, often using sweet foods. Previous study shows that parents do not determine the foods that should be eaten by children, although tend to obey the wishes of children and force children to keep eating even though the child is not willing to eat. Meanwhile, previous study found that education influences the provision of CBF where low education tends to provide inappropriate CBF both in quality and quantity of CBF. Therefore, it can worsen the nutritional status of children in the process of growth. This is in line with this study that on average family education, namely elementary school, families do not really understand the types of materials and the implementation of appropriate CBF, so that the provision of CBF for 6-24 months old baby is considered sufficient.

Some families give early breastfeeding (less than 6 months), this is not in accordance with the theory that CBF should be recommended to infants after the age of 6 months because after 6 months of age the digestive system is relatively perfect and ready to receive CBF. Starting to give CBF at the right time will be very beneficial for meeting the nutritional needs and growth and development of children. CBF is given so that the child suffers from sufficient energy, protein, and other nutrients for normal growth and development. The CBF should have several criteria including having a high energy value and protein content, having the appropriate vitamin and mineral values, and being well received by digestion.
The final results of this study indicate that the provision of CBF for 6-24 months old baby is still considered sufficient, therefore it is necessary to have follow-up conducted by health care providers or Posyandu cadres in each village to make promotional and preventive efforts. Promotive efforts can be in the form of counseling and counseling about CBF that is appropriate for the baby’s age, starting from the type and material in making CBF, texture, age, frequency, as well as the implementation in giving the right CBF. While preventive measures can be in the form of prevention of problems of nutritional status of infants. In addition it is expected for families to be more active in finding important information related to the provision of CBF, so that the family truly understands that CBF is very influential for the growth and development of infants. To increase knowledge and understanding of the family, especially mothers in terms of providing CBF to infants, groups or groups that discuss the fulfillment of CBF in infants and appropriate nutritional needs can be formed. The family must also increase the implementation of the role of the family in giving CBF to the baby so that the nutrients needed by the baby can be fulfilled in accordance with growth.

CONCLUSION

The role of the family is correlated with CBF practices in Panti District. The family of roles is well estimated and CBF practiced is sufficiently estimated (89.4%). Therefore, family roles should be involved to practice complementary breast feeding. Furthermore, health care provider in community health centers (Puskesmas) could give counseling regarding complementary feeding according to the age of the baby. Then, public health nursing and pediatric nursing should improve health education for teaching CBF practices among mothers during 6-24 months children in Posyandu.

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