

# Parents' Knowledge of 'Tarak' Breastfeeding Mothers in Indonesia

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#### Abstract

**Objective:** To analyse the relationship between the level of knowledge of parents about 'tarak' on eating patterns in breastfeeding mothers.

**Methods:** This study uses a descriptive correlational design with a cross-sectional approach. The sample in this study was determined by the krejcie and morgan sample size table as many as 99 pairs of breastfeeding mothers and mother in-laws were selected using a purposive sampling technique in East Java, Indonesia. The Spearman test was performed in the final test for knowledge of parents about 'tarak' (independent variable) and eating patterns in breastfeeding mothers (dependent variable).

**Results:** The results informed that there was no relationship between the level of parental knowledge about 'tarak' on eating patterns in nursing mothers, with p = 0.154.

**Conclusion:** There was no relationship between knowledge of 'tarak' and the eating pattern of breastfeeding mothers. Although the mother's diet is not influenced by knowledge of 'tarak', it is still necessary to educate parents about 'tarak' and the proper diet for breastfeeding mothers to prevent misinformation. So that breastfeeding mothers can increase nutritional intake during breastfeeding.

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### Introduction

The eating pattern of the Indonesian people is influenced by the culture and beliefs that develop in the community, which is passed down from generation to generation. Dietary practices are related to culture from the provision of food-to-food conversion, preparation, consumption, and even disposal.1 The choice of what is good to eat (diet) is determined by the culture and norms of each society.<sup>2</sup> The rules of dietary practice in Java are called 'tarak'. According to the Indonesian Dictionary, 'tarak' means the containment of lust (on fasting, abstinence, etc.).3 'Tarak' can be understood as a limitation or recommendation in dietary practice based on knowledge of what is believed and passed down from generation to generation from parents. This 'tarak' culture is widely applied in Javanese society, including breastfeeding mothers in an effort to fulfill nutrition. However, knowledge about dietary restrictions or 'tarak' applied to breastfeeding mothers is often not based on scientific evidence.

According to data from the Indonesian Central Statistics Agency, the coverage of exclusive breastfeeding mothers in Indonesia has increased from 66.69% in 2019 to 69.62% in 2020, and risen to 71.58% in 2021. The number of breastfeeding mothers in infants aged less than six months

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in East Java also increased from 66.90% in 2020 to 69.61% in 2021.<sup>4</sup> According to preliminary study data at the Sugio Public Health Center in 2018, there were 1,201 mothers breastfeeding children aged 0-2 years. According to a cadre of integrated healthcare centers in Kedungbanjar Village, Sugio District, Lamongan Regency, there is still a belief in taboo foods or 'tarak' during breastfeeding.

Nutrition is considered an important behaviour that affects health and well-being.<sup>5</sup> In infants, nutrition can be obtained through breast milk, especially in the first six months of life in accordance with the WHO global nutrition target number five which aims to increase the rate of exclusive breastfeeding to 50% globally by 2025.<sup>6</sup> Balanced nutrition is also needed for breastfeeding mothers to optimize breastfeeding. According to the Indonesian Ministry of Health (2014), breastfeeding mothers must receive balanced nutrition in order to meet their needs in breastfeeding so that the growth and development of infants and children can run well. The nutritional needs of breastfeeding mothers are more than mothers who are not breastfeeding, so that food consumption must be varied and balanced in quantity and proportion.<sup>7</sup>

The 'tarak' culture is inherited by breastfeeding women living with their families, mothers/grandmothers. The existence of restrictions on foods 'tarak' by parents is not based on scientific knowledge about the nutritional needs of breastfeeding mothers and can cause nutritional deficiency in breast milk.<sup>8</sup> This study was therefore conducted to determine the relationship between

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knowledge on 'tarak' and eating patterns in breastfeeding mothers

## **Subjects and methods**

This study used a descriptive correlational design with a cross-sectional approach. The study identified the relationship between the level of knowledge of mothers' parents about 'tarak' on eating patterns in breastfeeding mothers.

The population in this study included 131 parents of breastfeeding mothers and all breastfeeding mothers of children aged 0-2 years in Kedungbanjar Village, Sugio District, Lamongan Regency, East Java, Indonesia. Purposive sampling method was used and 99 pairs were obtained. The respondents were recruited by selecting each house at random with the criterion of a nursing mother living at home with her parents; if, during the home visit, the criterion was not met, other respondents with the required criterion were searched. The inclusion criteria in this study were parents of breastfeeding mothers and mothers of breastfeeding infants aged 0-2 years who lived at home with their biological mothers/mother-in-law.

A questionnaire on parental knowledge about 'tarak' and a questionnaire on the eating pattern of breastfeeding mothers. The knowledge questionnaire contains 20 statements measured on an ordinal scale with right and wrong answer choices. This questionnaire consists of seven positive questions and 13 negative questions. After the questionnaire was answered correctly, it was categorized with a total score range of 0-11 poor knowledge, 12-15 sufficient knowledge and 16-20 good knowledge.

The measurement of eating patterns of breastfeeding mothers was measured using a questionnaire containing 20 statements. There were 16 positive questions and four negative questions. After completing the documents, results of the total score were categorized based on the range, namely improper eating patterns (mothers abstain from food) a total score of 0-32 and proper eating patterns (mothers do not abstain from food) a total score of 33-40. The validity test and the reliability test of the knowledge questionnaire were tested on parents of breastfeeding mothers, while the eating pattern questionnaire was tested on mothers breastfeeding infants 0-2 years.

After approval from the institutional ethics review board, the researcher went to each respondent door-to-door (February until July 2019) and explained the purpose and steps of the research to the respondent, who gave a signed informed consent to participate in the research. Breastfeeding mothers and parents of breastfeeding mothers who were willing to become research respondents

filled the questionnaires for data collection with selfadministered and interviews (closed answered). The researcher would help the respondent in filling out the questionnaire until it was completed. After that, the researcher checked the questionnaire to ensure that all the questions had been answered The collected data were processed and analyzed to obtain the results.

Data analysis in this study used the SPSS 16 application with descriptive analysis and the Spearman correlation (rs) test. The data were described and summarized scientifically in the form of tables or graphs. Observations made by researchers were the level of knowledge of parents about food abstinence and eating patterns of breastfeeding mothers in Kedungbanjar Village.

### Results

Table 1 shows that 51(51.6%) people of the total 99 respondents were parents of breastfeeding mothers aged 51-60 years. The status of parents who lived in the same house as breastfeeding mothers was almost entirely biological mothers, 78(78.8%). A large majority of respondents 81(81.8%), parents of breastfeeding mothers, worked as farmers, while the rest were teachers and housewives. The level of education in this group was elementary school in 75(75.8%) parents and only three people out of 99 had received high school and college education. The remaining did not finish elementary school or had finished junior high school.

The demographic results of breastfeeding mothers showed that most mothers 66(66.7%) were aged 21-30 years, 51(51.5%) had two children 57(57.6%) did not work and 42(42.4%) worked as farmers, entrepreneurs, teachers, nurses and health analysts. Most of the breastfeeding

**Table-1:** Demographic Characteristics of Respondents (Parents of Breastfeeding Mothers and Breastfeeding Mothers) in the Kedungbanjar Village area, Sugio District, Lamongan Regency in July 2019

Category	n (%)
Parents of Breastfeeding Mothers	
Age	
30-40 years	12 (12.1)
41-50 years	30 (30.3)
51-60 years	51 (51.6)
61-70 years	3 (3)
>70 year	3 (3)
Parent Status	
Mother-in-law	21 (21.2)
Biological mother	78 (78.8)
Profession	
Housewife	15 (15.2)
Farmer	81 (81.8)
Teacher	3 (3)

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**Table 1:** continued from previous page

Category	n (%)
Level of education	
Did not finish elementary school	9 (9.1)
Elementary school	75 (75.8)
Junior high school	9 (9.1)
Senior High School	3 (3)
College	3 (3)
Total	99 (100)
Breastfeeding Mothers	
Age (years)	
<21	6 (6)
21-30	66 (66.7)
31-40	27 (27.3)
Number of children	
<2 children	48 (48.5)
2 children	51 (51.5)
>2 children	0 (0)
Number of family members	
4 persons	42 (42.4)
5 persons	48 (48.5)
>5 persons	9 (9.1)
Family form	
Nuclear family	0 (0)
Extended family	99 (100)
Job status	
Does not work	57 (57.6)
Work	42 (42.4)
Income	
< The regional minimum wage	69 (69.7)
of Lamongan	
= The regional minimum wage	9 (9.1)
of Lamongan	
> The regional minimum wage	21 (21.2)
of Lamongan	
*The regional minimum wage of Lamongan in 2019 = Rp 2	2.233.641
Food allergy status	. ( )
Food allergy	6 (6.1)
Don't have any food allergies	93 (93.9)
Level of education	2 (2)
Did not finish elementary school	0 (0)
Elementary school	0 (0)
Junior high school	24 (24.2)
Senior High School	48 (48.5)
College	27 (27.3)
Total	99 (100)

**Table-2:** Cross-tabulation of Parental Knowledge with Eating patterns for Breastfeeding Mothers

Variable	Breastfeeding Mother's Eating Pattern			
	Inappropriate n (%)	Appropriate n (%)	Total n (%)	
Knowledge of				
Parents about 'Tarak':				
a. Less	27 (75)	9 (25)	36 (100)	
b. Sufficient	28 (58.3)	20 (41.7)	48 (100)	
c. Good	9 (60)	6 (40)	15 (100)	

**Table-3:** The Relationship of Parent's Knowledge with Eating Patterns in Breastfeeding Mothers.

			Parental Knowledge	Eating Patterns of Breastfeeding Mothers
Spearman's rho	Parent's Knowledge	Correlation Coefficient	1.000	.144
	-	Sig. (2-tailed) n	99	.154 99
	Eating Patterns of Breastfeeding	Correlation Coefficient	.144	1.000
	Mothers	Sig. (2-tailed) n	.154 99	99

mothers 69(69.7%) had family income below the regional minimum wage of Lamongan, almost all breastfeeding mothers (93.9%) had no history of food allergies, and only six (6.1%) people had a history of food allergies, with seafood and chicken. Almost half of the total 99 respondents 48(48.5%) who were breastfeeding had their last education at senior high school.

Table 2 shows that most 27(75%) parents with less knowledge have inappropriate eating patterns as breastfeeding mothers, most parents 20(41.7%) with sufficient knowledge had appropriate eating patterns in breastfeeding mothers. Based on the table results, the significant value is 0.154, which indicates that there was no relationship between parental knowledge and eating patterns in breastfeeding mothers (Table 3).

#### Discussion

Meeting the nutritional needs of mothers is limited to the Javanese culture of 'tarak,' where a small variety of food makes the complex nutritional needs of breastfeeding mothers. Breastfeeding mothers need adequate nutrition to produce breast milk. Breastfeeding increases the nutritional needs of the mother mainly because of the loss of nutrients through colostrum and through breast milk. Breast milk has a constant composition that is influenced by the mother's diet. Therefore, to meet the nutritional needs of breastfeeding mothers, it is necessary to have a good eating pattern by stopping the culture of food 'tarak' without scientific evidence (such as not consuming spicy food, cold drink, mutton, seafood, chicken, basil and pineapple). In addition, the culture of 'tarak' can also interfere with the mother's mental health.

Adequacy of nutrition can be maintained by the eating pattern. Nutrition intervention planning requires the identification of nutritional problems, high-risk groups, and influencing factors. The human diet is complex and focusses on food without taking into account the complexity of other nutritional needs that are also

needed.<sup>12</sup> Complex nutrition planning is also needed for breastfeeding mothers and for adequate knowledge to support complex nutrition planning.

In this study, it was found that there was no relationship between knowledge of 'tarak' and eating pattern. Table 3 In parents who have less knowledge about 'tarak', it usually shows that the eating pattern of breastfeeding mothers is not right. There is no relationship between knowledge about food and diet eating patterns<sup>13</sup> where research in China and Korea<sup>14</sup> showed that the nutritional knowledge of Korean postpartum mothers was higher than that of Chinese postpartum mothers, but a healthy eating pattern was higher in Chinese postpartum mothers. This shows that knowledge about the parental 'tarak' of breastfeeding mothers is not necessarily applied in daily dietary practices by nursing mothers. Eating habits and eating patterns of parents and children are positively related as in the results of the study that parents who have less knowledge about 'tarak' then the eating pattern of breastfeeding mothers are also not appropriate, and those who do not receive nutrition education have a low-quality diet. But this is not continuously correlated during the course of life. 15,16

Knowledge is required for taking decisions on maternal diet intervention.<sup>11</sup> Research in Indonesia<sup>17</sup> and Ethiopia<sup>18</sup> showed that good dietary practice is influenced by the education level, knowledge about diet, income, non-adherence, family size, experience, occupation and culture. This shows that acquiring a good eating pattern is not only influenced by the level of knowledge but there are other factors that also play a role in the formation of an eating pattern.

Education level significantly affects eating patterns. Individuals with higher levels of education have higher levels of nutritional intake than individuals with lower levels of education.<sup>19</sup> The education level of parents of breastfeeding mothers is mostly elementary school education, while the education level of breastfeeding mothers is mostly high school. The high level of education of breastfeeding mothers is not able to change the mother's eating pattern for the better because of the influence of parents of nursing mothers who have low levels of education, although the effect is not too significant but still has an impact on the decision of breastfeeding mothers.

Family income affects diet diversity.<sup>20</sup> Families with higher incomes tend to have a more diverse diet than families with lower incomes. However, families with low-income levels have very little influence on an individual's eating pattern.<sup>19</sup>

Family members also play a role in an individual's

consumption patterns. In large families that have many members, the diet is more varied because each family member does not necessarily have the same taste and will influence each other.<sup>17</sup> Breastfeeding mothers who live with their parents will be affected in terms of eating patterns, including the implementation of the culture of 'tarak.' However, the presence of other family members and the appetite of breastfeeding mothers also play a role in the mother's eating pattern.

Mothers who breastfeed their second child understand more about their nutritional needs than mothers who breastfeed their first child. The more children, the more is the experience and information about nutrition during lactation, but this does not affect the mother's eating pattern.<sup>21</sup> Adhering to previous breastfeeding experiences is not enough. Mothers should continue to improve and update their knowledge of lactation nutrition and apply it.

Work affects the eating pattern of the father but does not affect the eating pattern of the mother.<sup>22</sup> This shows that work does not affect the eating pattern of breastfeeding mothers. This means that there is no difference in eating patterns between breastfeeding mothers who are working or non-working mothers.

Education about nutrition is essential to promote healthy nutrition.<sup>23</sup> However, efforts to increase knowledge alone are not enough to shape the eating pattern of breastfeeding mothers and can cause mothers not to exclusively breastfeed.<sup>24</sup> A person's eating patterns are influenced by extrinsic factors, namely factors that come from outside humans such as natural environmental factors, social environmental factors, economic environmental factors, cultural and religious environmental factors, and intrinsic factors are factors that come from within humans, which include associated factors as emotional, physical, and mental state factors (healthy or sick) and more assessment factors of food quality.<sup>25</sup>

More research is needed to explore how 'tarak' is in other areas, as Indonesia has many tribes and cultures.

## **Conclusion**

The results showed that there was no relationship between knowledge of 'tarak' and the eating pattern of breastfeeding mothers. It is necessary to provide education from health workers about the nutrition and eating patterns of breastfeeding mothers during posyandu activities to provide information to parents and breastfeeding mothers about 'tarak,' so that breastfeeding mothers can increase their nutritional intake during breastfeeding without any dietary restrictions.

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