

Correlation Between Breastfeeding *Self-Efficacy* and Sociocultural Practices vs. Exclusive Breastfeeding in Children Aged 6 Times 24 Months in Tengger Tribe

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Abstract: Exclusive breastfeeding refers to the practice of feeding infants only breast milk for the first 6 months of life. Several factors, including maternal, infant, and environmental influences, impact exclusive breastfeeding. This study aimed to analyze the correlation between breastfeeding self-efficacy and sociocultural practices with exclusive breastfeeding among children aged 6 to 24 months in the Tengger Tribe. The research employed an analytical observational with case-control study design involving sample size of 57 respondents selected through total sampling. The case group consisted of 29 nonexclusively breastfed mothers, while the control group consisted of 28 exclusively breastfeeding mothers. Data collection included interviews using questionnaires on mother's characteristics, exclusive breastfeeding history, sociocultural practices, and breastfeeding self-efficacy scale short form (BSES-SF). The study results revealed a higher level of breastfeeding self-efficacy and sociocultural practices during breastfeeding among the control group. Conversely, sociocultural practices during childhood were found to be higher in the case group. The study indicated that sociocultural practices during the first 2 years of life (OR=0.13), and breastfeeding self-efficacy (OR=2.93) were associated with exclusive breastfeeding in children aged 6-24 months. In conclusion, there is a correlation between breastfeeding self-efficacy and sociocultural practices with exclusive breastfeeding among children aged 6 to 24 months in the Tengger Tribe. Mothers who receive less information from family members, engage in sociocultural practices during childhood, and have lower breastfeeding self-efficacy are at a higher risk of not exclusively breastfeeding. Families should provide more support to breastfeeding mothers, and healthcare workers should offer additional education on the risks of early complementary feeding practices for children.

1 INTRODUCTION

Tengger Tribe is known for its strong cultural and religious traditions of Hinduism, which profoundly shape the daily life of the people, including breastfeeding and infant nutrition practices. Infants within the Tengger Tribe encounter obstacles in obtaining exclusive breastfeeding. Several sociocultural nutrition practices, such as the provision of sugar water and mashed bananas to newborns, affect mothers' understanding and concerns about exclusive breastfeeding (Dyson, 2016). Furthermore, the colostrum avoidance practices due to sociocultural reasons or misconceptions and the dietary restrictions on fish, chili, and green vegetables for breastfeeding mothers also influence the patterns of exclusive breastfeeding (Notoatmodjo, 2012).

Maternal knowledge of the benefits and importance of exclusive breastfeeding plays a crucial role in its success. Mothers with higher knowledge of exclusive breastfeeding tend to practice more consistently. However, research indicates that a significant number of mothers in the Tengger Tribe lack adequate knowledge about exclusive breastfeeding and even doubt that breast milk alone is sufficient to meet their babies' nutritional needs (Bandura, 1997).

Family support, especially from spouses and immediate family members, also performs a vital role in the success of exclusive breastfeeding (WHO, 2018). Support in the form of information, practical assistance, and emotional encouragement from the family can help mothers overcome any breastfeeding

challenges and ensure the continuation of exclusive breastfeeding (Friedman, 2013).

Moreover, a psychosocial factor, namely breastfeeding self-efficacy, also serves as a contributory factor influencing the success of exclusive breastfeeding. Mothers with high self-efficacy are more likely to practice exclusive breastfeeding and more easily overcome potential barriers during the breastfeeding period (Dennis, 2003).

Consequently, the current study is expected to identify factors contributing to the low coverage of exclusive breastfeeding in The Tengger Tribe. The present research aims to understand the relationship between maternal knowledge, family support, breastfeeding self-efficacy, and sociocultural practices of exclusive breastfeeding among infants in the Tengger community. The findings of this study serve as a basis for designing more effective programs and policies to increase awareness and advocacy of exclusive breastfeeding. Thus, it is hoped that the rate of exclusive breastfeeding in The Tengger Tribe will rocket, resulting in significant benefits for the health growth and development of the infants in the region.

2 METHODS

A quantitative research method underpinned the analytical observational design of this case-control study. The research was conducted on Tengger Tribe mothers residing in Wonokitri Village, Tosari District, Pasuruan Regency, East Java. The sample size was 57 mothers, consisting of 28 in the exclusive breastfeeding group (control) and 29 in the nonexclusive breastfeeding group (case). The sample comprised the whole population.

Data were collected through interviews using a questionnaire to assess variables: exclusive breastfeeding practices, breastfeeding self-efficacy, and sociocultural nutrition practices. The collected data were analyzed using a descriptive analysis technique to present the characteristics of the respondents. In addition, bivariate analyses were performed to explore the relationships between these variables. Furthermore, a multivariate analysis was also done to identify the influence each independent variable exerts on the dependent variable.

This research yielded valuable insights into the relationship between breastfeeding self-efficacy, sociocultural nutrition practices, and exclusive breastfeeding practices among the Tengger Tribe mothers in the research area. The findings revealed the

factors influencing exclusive breastfeeding and provided information to guide future interventions in promoting breastfeeding practices within the community.

3 RESULTS

The research outcomes revealed a multitude of pertinent results that bear significance to the subjects under investigation. These identified findings encompassed diverse insights, as outlined in Table 1.

Table 1: The Distribution of Children's Characteristics in Wonokitri Village in 2022.

Children characteristics	Exclusive breastfeeding		Non-exclusive breastfeeding	
	N	%	n	%
Age				
6-12 months	10	35.7	8	27.6
13-24 months	18	64.3	21	72.4
Total	28	100	29	100
Gender	N	%	n	%
Male	11	39.3	14	48.3
Female	17	60.7	15	57.1
Total	28	100	29	100

Table 1 presents the statistical distribution of children's characteristics. The table summarizes data on two key aspects: exclusive and non-exclusive breastfeeding, categorized by age and gender. In the 6 to 12-month age group, 35.7% of children were exclusively breastfed, while 27.6% were not exclusively breastfed. A much more significant percentage of distribution occurred in the 13 to 24 months age group; 64.3% of children received only breast milk, and 72.4% received any other foods or fluids in addition to breast milk. Looking at the gender distribution, 39.3% of boys received exclusive breastfeeding, while 48.3% did not receive exclusive breastfeeding. Among girls, 60.7% were exclusively breastfed, and 57.1% were not exclusively breastfed. These statistics provide insights into the prevalent breastfeeding practices in the village, highlighting variations in breastfeeding patterns based on age and gender factors.

Table 2: The Distribution of Parents' Characteristics in Wonokitri Village in 2022.

Parents characteristics	Exclusive breastfeeding		Non-exclusive breastfeeding	
	n	%	n	%
Mothers' age				
<20 years	3	10.7	7	24.1
20-34 years	23	82.1	22	75.9
≥35 years	2	7.2	0	0
Total	28	100	29	100
Fathers' education				
Not going to school	1	3.6	1	3.4
Not completing elementary school	3	10.7	3	10.3
Graduated from elementary school	5	17.9	1	3.4
Graduated from junior high school	13	46.4	14	48.3
Graduated from senior high school	5	17.9	8	27.6
Graduated from university	1	3.6	2	6.9
Total	28	100	29	100
Mothers' education	n	%	n	%
Not completing elementary school	3	10.7	2	6.9
Graduated from elementary school	3	10.7	2	6.9
Graduated from junior high school	15	53.6	16	55.2
Graduated from senior high school	6	21.4	6	20.7
Diploma/ bachelor	1	3.6	3	10.3
Total	28	100	29	100

Table 2 informs the distribution of parents' characteristics. It outlines the percentages of exclusive and non-exclusive breastfeeding based on parents' age ranges and educational backgrounds. The data reveals that mothers aged 20 to 34 had the highest rates of exclusive breastfeeding (82.1%), and those aged under 20 years had the lowest (10.7%). Regarding fathers' education, junior high school graduates had the highest exclusive breastfeeding rates (46.4%), while those with no formal education and having college degrees similarly had the lowest (3.6%). Concerning mothers' education, junior high school graduates had the highest exclusive breastfeeding percentages (53.6%). These interpretations provided a snapshot of the relationship

between parents' characteristics and breastfeeding practices in Wonokitri Village.

3.1 The Relationship Between Breastfeeding Self-Efficacy And Exclusive Breastfeeding

The results indicated a positive correlation, suggesting that as confidence in breastfeeding increased, so did the practice of exclusive breastfeeding. The odds ratio (OR) of 2.93 further supported these findings, implying that mothers with higher confidence in breastfeeding were 2.93 times more likely to breastfeed exclusively than those with lower self-confidence.

In this study, the majority of mothers in the exclusive breastfeeding group had high breastfeeding self-efficacy (60.7%). In contrast, most mothers who did not practice exclusive breastfeeding had moderate self-efficacy (58.6%). The results suggested that breastfeeding self-efficacy occupied an essential role in promoting the practice of exclusive breastfeeding. It highlighted the importance of empowering and supporting mothers to build their breastfeeding self-efficacy, as this could significantly contribute to the success of exclusive breastfeeding initiatives. Therefore, healthcare providers should focus on interventions to improve self-efficacy to raise exclusive breastfeeding rates among new mothers in the Tengger community.

This relationship is also explained in Table 3. The table illustrates the distribution of exclusive and non-exclusive breastfeeding among mothers based on the breastfeeding self-efficacy level. The analysis of the relationship between breastfeeding self-efficacy and exclusive breastfeeding revealed interesting findings.

Mothers with high self-efficacy demonstrated a significantly higher rate of exclusive breastfeeding (60.7%) and a relatively lower percentage of non-exclusive breastfeeding (34.5%).

In contrast, among mothers with medium breastfeeding self-efficacy, the percentage of exclusive breastfeeding dropped to 39.3%, while the proportion of non-exclusive breastfeeding increased to 58.6%.

Table 3: Relationship Between Breastfeeding Self-Efficacy and Exclusive Breastfeeding in Wonokitri Village in 2022.

Mothers' breastfeeding self-efficacy	Exclusive breastfeeding		Non-exclusive breastfeeding		OR
	n	%	n	%	
High	17	60.7	10	34.5	2.93
Moderate	11	39.3	17	58.6	
Low	0	0	2	6.9	
Total	28	100	29	100	

Interestingly, no mother in the low self-efficacy category practiced exclusive breastfeeding. Instead, 6.9% of mothers with low self-efficacy provided non-exclusive breastfeeding.

These observations suggested a clear relationship between breastfeeding self-efficacy and exclusive breastfeeding practices. Mothers with higher breastfeeding self-efficacy were more likely to breastfeed their infants exclusively than those with medium or low self-efficacy.

3.2 Relationship Between Sociocultural Nutrition Practices and Exclusive Breastfeeding

Based on the results of the analysis, the study investigated the relationship between several sociocultural factors and exclusive breastfeeding among infants in the Tengger ethnic community. The first factor examined was cultural practices during childbirth. The findings indicated that cultural practices during childbirth had an insignificant influence on exclusive breastfeeding. The data did not show any differences between the two groups, suggesting that cultural practices during delivery did not play a role in determining exclusive breastfeeding practices among the Tengger mothers.

The second factor explored was cultural practices during breastfeeding. While a higher percentage of mothers in the exclusive breastfeeding group practiced sociocultural nutrition during breastfeeding, the analysis implied no significant correlation between sociocultural practices and exclusive breastfeeding.

Lastly, the present study also investigated cultural practices during infancy. The data revealed that a higher proportion of mothers in the non-exclusive breastfeeding group practiced sociocultural nutrition practices during infancy. The analysis demonstrated a significant negative correlation between sociocultural practices during infancy and exclusive breastfeeding. The correlation coefficient of -0.473

suggested a relatively strong negative relationship between the two variables. The odds ratio (OR) of 0.13 indicated that mothers practicing sociocultural nutrition practices in their infant care were 0.13 times less likely to achieve exclusive breastfeeding success than those who did not follow such practices. Thus, sociocultural nutrition practices in infant care were a protective factor in achieving exclusive breastfeeding.

Therefore, these findings highlighted a complex interplay of sociocultural factors influencing exclusive breastfeeding practices among Tengger mothers. While some cultural practices during breastfeeding and infancy showed associations with exclusive breastfeeding, cultural practices during childbirth did not demonstrate any significant impact on exclusive breastfeeding rates. Understanding these relationships helped to create targeted interventions and support systems to promote exclusive breastfeeding among the Tengger Tribe and other similar cultural contexts.

After conducting a regression analysis, the results revealed that the independent variable most strongly associated with exclusive breastfeeding is the sociocultural nutrition practices during infancy. On the other hand, the family emotional support did not emerge as the variable with the closest relationship to exclusive breastfeeding since it lacked a descriptive association with the dependent variable. This relationship is also explained in the following tables.

Table 4: The Relationship Between Sociocultural Nutrition Practices during Childbirth and Exclusive Breastfeeding in Wonokitri Village in 2022.

Child birth culture	Exclusive breastfeeding		Non-exclusive breastfeeding	
	n	%	n	%
With cultural influences	0	0	0	0
No cultural influence	28	100	29	100
Total	28	100	29	100

Table 5: The Relationship Between Sociocultural Nutrition Practices during Breastfeeding and Exclusive Breastfeeding in Wonokitri Village in 2022.

Breastfeeding culture	Exclusive breastfeeding		Non-exclusive breastfeeding	
	n	%	n	%
With cultural influences	17	60.7	15	51.7
No cultural influence	11	39.3	14	48.3
Total	28	100	29	100

Table 6: The Relationship Between Sociocultural Nutrition Practices in Children Under Two and Exclusive Breastfeeding in Wonokitri Village in 2022.

Infancy (under two years old) culture	Exclusive Breastfeeding		Non-exclusive breastfeeding		OR
	n	%	n	%	
With cultural influences	8	28.6	22	75.9	0.13
No cultural influence	20	71.4	7	24.1	
Total	28	100	29	100	

The provided tables presented the distribution of exclusive breastfeeding and non-exclusive breastfeeding among Tengger Tribe mothers in Wonokitri Village, based on whether their sociocultural nutrition practices during different periods (childbirth, breastfeeding, and infancy) were influenced by culture or not.

Regarding infant birth culture, it is evident that mothers who were influenced by culture during this period did not practice exclusive breastfeeding at all. On the contrary, all mothers not influenced by culture exclusively breastfed their infants. This indicates a strong association between infant birth culture and exclusive breastfeeding practices.

Looking at the relationship between breastfeeding period culture and exclusive breastfeeding, mothers whose breastfeeding practices were influenced by culture had a higher percentage of exclusive breastfeeding than those who were not.

For the infant period culture, the data indicates that mothers not influenced by culture had a significantly higher percentage of exclusive breastfeeding than those affected by culture.

4 DISCUSSION

The study establishes a strong link between breastfeeding self-efficacy and exclusive breastfeeding. Maternal confidence, a core aspect of self-efficacy, emerges as pivotal (Dennis, 2003). Self-efficacy is influenced by personal experiences and societal feedback and impacts exclusive breastfeeding outcomes (Bandura, 1997).

Challenges affecting self-efficacy are evident; mothers stop breastfeeding due to perceptions of breast milk insufficiency and social beliefs that exclusive breastfeeding leaves their babies hungry. External pressures, such as family advocating formula milk, hinder exclusive breastfeeding, particularly within the Tengger Tribe.

Conversely, the success of exclusive breastfeeding practices stems from healthcare professionals' recommendations and infants' version to formula milk. Such professional guidance acts as verbal persuasion, augmenting maternal self-efficacy. These findings align with Listiani's study, corroborating the relationship between breastfeeding self-efficacy and exclusive breastfeeding (Listiani, 2021). Similarly, Chinese research highlighted that low milk supply erodes self-efficacy, while personal experiences and external support enhance it (Li et al., 2022).

The present study also demonstrates a significant association between sociocultural nutrition practices during infancy and exclusive breastfeeding. Cultural norms significantly influence breastfeeding practices. Habits stemming from these norms affect decisions and choices (Kasmini, 2012). Contradictory practices during pregnancy and breastfeeding persist due to beliefs and misconceptions. The early introduction of complementary feeding, driven by perceptions of inadequate milk supply, is also evident, echoing findings in Aceh and Indragiri (Safri & Putra, 2013; Sari & Sari, 2022).

To end this discussion, the study emphasizes the intricate interplay between breastfeeding self-efficacy and sociocultural nutrition practices. It highlights the pivotal role of maternal confidence and cultural influences in shaping exclusive breastfeeding behavior.

5 CONCLUSIONS

As addressed in the current research analysis, several conclusions can be drawn. Firstly, the exclusive and non-exclusive breastfeeding groups primarily consist of male infants aged 13 to 24 months, with parents having completed junior high school education, working as farmers, and living below the regional minimum wage income.

Of the 57 infants in the Tengger ethnic community in Wonokitri village, 28 received exclusive breastfeeding. Most mothers in exclusive and non-exclusive breastfeeding groups demonstrate good knowledge of breastfeeding.

Both exclusive and non-exclusive breastfeeding groups receive adequate emotional, instrumental, and appraisal support from their families. The informational family support for the exclusive breastfeeding group is primarily high, but low in the non-exclusive breastfeeding group.

The majority of mothers in the exclusive breastfeeding group have high breastfeeding self-efficacy, while most mothers in the non-exclusive

breastfeeding group have moderate breastfeeding self-efficacy.

Furthermore, sociocultural practices during childbirth are generally positive, and no significant cultural influence is observed. During breastfeeding, the most common practices are colostrum avoidance and dietary restrictions. Early complementary feeding is the most common sociocultural practice during the infant phase. During infancy, breastfeeding self-efficacy and sociocultural nutrition practices establish significant and moderately strong correlations with exclusive breastfeeding.

Based on these findings, healthcare providers in Wonokitri Village are advised to enhance education for breastfeeding mothers and their families about the importance of exclusive breastfeeding and the risks of early complementary feeding.

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