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Original Reseacrh

The Relationship Between Sociocultural Determinants with Exclusive Breastfeeding Practices in Parigi Moutong Regency

Hubungan Antara Determinan Sosial Budaya dengan Pemberian ASI Eksklusif di Parigi Moutong

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Abstract: *The coverage of exclusive breastfeeding in Indonesia has reached only 66.1%, falling short of the global target of 70% by 2030. This indicates that breastfeeding practices remain suboptimal. This study aims to analyze the relationship between maternal knowledge, educational level, family support, and food taboos with exclusive breastfeeding practices in the working area of Sigenti Public Health Center, Tinombo Selatan Subdistrict, Parigi Moutong Regency. A quantitative method with a cross-sectional approach was employed. The study population consisted of 126 mothers, from which a sample of 95 respondents was obtained using the Slovin formula and purposive sampling technique. Data were analyzed using the chi-square test with a significance level of p < 0.05. The results revealed a significant association between maternal knowledge and exclusive breastfeeding practices (p = 0.001). However, no significant relationships were found between educational level (p = 0.454), family support (p = 0.267), and food taboos (p = 0.513) with exclusive breastfeeding practices. The study concludes that maternal knowledge plays a crucial role in determining exclusive breastfeeding practices, highlighting the need for targeted educational interventions to improve mothers' understanding of exclusive breastfeeding.*

Key word: Exclusive Breastfeeding, Maternal Knowledge, Sociocultural factors

1. INTRODUCTION

Breast milk is a biological fluid produced by mothers that contains all the essential nutrients required for an infant's optimal growth and development. Exclusive breastfeeding refers to the practice of feeding infants solely with breast milk for the first six months of life, without the addition of any other foods or liquids, except for medications, vitamins, and minerals. This definition aligns with the provisions stipulated in Government Regulation No. 33 of 2012 (1).

The provision of exclusive breastfeeding during the first six months of life is crucial in supporting infant growth, development, and immune system function. Breast milk contains a complete array of nutrients, antibodies, enzymes, and hormones that cannot be substituted by any other food or liquid. Several studies have demonstrated that exclusive breastfeeding significantly reduces the risk of respiratory tract infections, diarrhea, and chronic conditions such as type 2 diabetes and obesity later in life (2). In addition, breast milk contributes to enhanced cognitive development and fosters a strong emotional bond between mother and child. The absence of exclusive breastfeeding has been associated with increased risks of malnutrition, stunting, recurrent infections, and even infant mortality, particularly in developing countries (3).

Introducing complementary foods prematurely or the use of formula milk may also lead to gastrointestinal disturbances and insufficient nutritional intake.

According to the 2020 Performance Report of the Indonesian Ministry of Health, the national coverage of exclusive breastfeeding had only reached 66.1% (4). In Central Sulawesi Province, the trend in exclusive breastfeeding coverage for infants under six months old has shown fluctuating progress: 54.7% in 2019, increasing to 61.9% in 2020, then declining to 53.5% in 2021, and slightly rising to 54.0% in 2022 (5). In Parigi Moutong Regency, exclusive breastfeeding coverage improved from 52.4% in 2019 to 65.7% in 2021, although it experienced a slight decrease to 62.6% in 2022 (Central Sulawesi Provincial Health Office, 2024). Meanwhile, in the service area of Sigenti Primary Health Center, the rate remains relatively low and stagnant, recorded at 52.4% in 2022 and declining further to 50.8% in 2023 (6).

Various studies have indicated that multiple factors contribute to exclusive breastfeeding practices. Maternal knowledge plays a significant role in shaping attitudes toward breastfeeding; higher levels of knowledge are associated with more positive perceptions of the importance of exclusive breastfeeding (7). Additionally, the level of education influences a mother's ability to comprehend and accept new information, including appropriate breastfeeding practices. Mothers with higher educational attainment tend to be more receptive to health information and possess greater awareness of the benefits of exclusive breastfeeding (8). Family support also serves as a critical factor, influencing the mother's psychological readiness and providing encouragement to sustain breastfeeding for the full six-month period (9). Conversely, the presence of dietary restrictions or food taboos can limit the nutritional intake of lactating mothers, potentially affecting postpartum recovery and the quality of breast milk produced (10).

Based on these findings, it is evident that sociocultural determinants such as maternal knowledge, educational background, family support, and dietary taboos play a crucial role in shaping exclusive breastfeeding practices. Therefore, this study aims to analyze the relationship between these factors and exclusive breastfeeding behavior in the service area of Sigenti Primary Health Center, South Tinombo Subdistrict, Parigi Moutong Regency.

2. METHODS

This study employed an analytical survey design with a cross-sectional approach, conducted from June to July 2024 in the working area of Sigenti Public Health Center, Tinombo Selatan Subdistrict, Parigi Moutong Regency. The objective was to examine the relationship between maternal knowledge, education, family support, and food taboos with exclusive breastfeeding practices.

The study population consisted of 126 mothers with infants aged 6–11 months. Using Slovin's formula, a sample of 95 respondents was determined. The sampling technique applied was purposive sampling, based on inclusion criteria (mothers with infants aged 6–11 months who were willing to participate) and exclusion criteria (those who were unable to attend or were ill).

Data were collected using a structured questionnaire that had been tested for validity and reliability, along with brief interviews. Data processing included editing, coding,

and tabulation, followed by univariate analysis (frequency and proportion) and bivariate analysis using the chi-square test, with a significance level set at $p < 0.05$.

3. RESULTS

1. Univariate Analysis

Table 1. Distribution of Maternal Characteristics at Sigenti Primary Health Center, Parigi Moutong, 2024

Variable	Frequency (n)	Percentage (%)
Exclusive Breastfeeding		
Yes	34	35,8
Not	61	64,2
Mother's Education		
Tall	29	30,5
Low	66	69,5
Mother's Knowledge		
Good	38	40,0
Pretty Good	30	31,6
Not Good	27	28,4
Family Support		
Support	72	75,8
Not Supported	23	24,2
Food Taboo		
Yes	32	33,7
Not	63	66,3
Total	**95**	**100**

Based on Table 1, it is known that out of 95 respondents, the majority of mothers do not give exclusive breastfeeding to their babies (64.2%), while those who give exclusive breastfeeding are 35.8%. In terms of education level, most respondents have low education (69.5%), and only 30.5% are highly educated. Based on the level of knowledge, as many as 40% of mothers have good knowledge, 31.6% are quite good, and 28.4% are not good regarding exclusive breastfeeding. In the family support variable, the majority of mothers received support (75.8%), while 24.2% did not receive support. As for the food taboo variable, 33.7% of mothers apply eating taboos during breastfeeding, while 66.3% do not have a food taboo.

2. Bivariate Analysis

The results of bivariate analysis showed that there was a significant relationship between the mother's level of knowledge and exclusive breastfeeding practices ($p = 0.001$). More mothers with good knowledge gave exclusive breastfeeding (58.8%) than mothers with sufficient knowledge (32.4%) and less (8.8%). This suggests that the higher the mother's level of knowledge, the more likely she is to apply exclusive breastfeeding.

Table 2. The Relationship of Maternal Characteristics with Exclusive Breastfeeding Behavior

Characteristics of Mothers	Exclusive Breastfeeding				Total		*P-Value*
	Exclusive Breast Milk		Exclusive Breast Milk				
	n	%	n	%	N	%	
Mother's Education							0,454
Tall	12	35,3	17	27,9	29	69,5	
Low	22	64,7	44	72,1	66	30,5	
Mother's Knowledge							0,001
Good	20	58,8	18	29,5	38	40,0	
Enough	11	32,4	19	31,1	30	31,6	
Less	3	8,8	24	39,3	27	28,4	
Family Support							0,267
Support	28	82,4	44	72,1	72	75,8	
Not Supported	6	17,6	17	27,9	23	24,2	
Food *Taboo*							0,513
Implementing *Food Taboo*	10	29,4	22	36,1	32	33,6	
Not Implementing *Food Taboo*	24	70,6	39	63,9	63	66,3	

Meanwhile, no significant relationship was found between maternal education level and exclusive breastfeeding (p = 0.454). Although highly educated mothers showed a slightly higher proportion of exclusive breastfeeding (35.3%) than poorly educated mothers (27.9%), the difference was not statistically significant. Similarly, family support showed no significant association (p = 0.267), although mothers who received family support tended to provide more exclusive breastfeeding (82.4%) than those who did not receive support (17.6%).

In addition, the variable of food taboo was also not significantly related to exclusive breastfeeding (p = 0.513). Although mothers who did not apply dietary restrictions were slightly more likely to breastfeed exclusively (70.6%) than those who did (29.4%), these results were not statistically significant. Thus, only the maternal knowledge variable was shown to have a significant relationship with exclusive breastfeeding behavior in this study.

4. DISCUSSION

Exclusive breastfeeding during the first six months of a baby's life has been proven to be the most effective nutritional intervention to improve the health and survival of the child. Breast milk not only meets all of the baby's nutritional needs, but also protects against infections and supports cognitive development. International studies show that exclusive breastfeeding lowers the risk of respiratory infections and diarrhea, as well as improves children's intelligence (2). However, exclusive breastfeeding coverage in Indonesia is still low, only 37.3% according to Riskesdas 2018 (11). Previous research revealed that breastfeeding success is strongly influenced by maternal knowledge, family support, the role of health workers, and maternal working conditions (12).

The Relationship of Maternal Education with Exclusive Breastfeeding Behavior

Although education theoretically influences health behaviors, this study found no significant relationship between maternal education level and exclusive breastfeeding ($p = 0.454$). This suggests that formal education alone does not necessarily guarantee better breastfeeding practices. In the study area, most mothers had only low levels of formal education (69.5%), yet the proportion of exclusive breastfeeding between higher- and lower-educated mothers did not differ substantially (35.3% vs 27.9%). This finding may reflect that even mothers with higher education have limited access to updated breastfeeding information or counseling. In rural areas such as the working area of Sigenti Health Center, health literacy often depends more on direct interactions with health workers rather than formal education. Consequently, education may not act as a strong predictor of breastfeeding behavior if not complemented by practical knowledge and community-based health promotion.

These results are consistent with reported that breastfeeding success is determined more by direct counseling and community health engagement than by educational attainment (13). However, they differ from Laksono et al. (2021), who found that higher education increases the likelihood of exclusive breastfeeding at the national level. The discrepancy may arise from differences in study scope, study covered diverse socioeconomic conditions across Indonesia, whereas the current study focuses on a rural population where sociocultural factors and limited healthcare access may reduce the influence of education on breastfeeding behavior (14)

The Relationship of Maternal Knowledge with Exclusive Breastfeeding Behavior

This study revealed a significant association between maternal knowledge and exclusive breastfeeding ($p = 0.001$). Mothers with good knowledge were far more likely to exclusively breastfeed (58.8%) than those with limited understanding (8.8%). This confirms that knowledge directly affects mothers' decisions and confidence in practicing exclusive breastfeeding. Mothers who clearly understand the benefits, duration, and proper techniques of breastfeeding are better prepared to overcome physical and social challenges. These findings are consistent with Hegazi et al. (2019), who reported that good knowledge enhances maternal readiness and the likelihood of breastfeeding success (15).

In the context of the Sigenti area, this significant relationship may reflect the effectiveness of local health counseling programs. However, the persistence of traditional beliefs and rural living conditions could limit the dissemination of accurate information. Many mothers rely on verbal guidance from midwives or community cadres, which may vary in accuracy and consistency. Therefore, strengthening structured counseling and outreach in rural areas is essential to improve mothers' understanding of exclusive breastfeeding. Recent studies in Indonesia emphasize that maternal knowledge, when supported by consistent health education, can substantially

increase exclusive breastfeeding rates, even among mothers with low formal education (16) (17).

The Relationship of Family Support to Exclusive Breastfeeding Behavior

Although family support is often considered a critical factor for breastfeeding success, this study found no significant association between family support and exclusive breastfeeding (p = 0.267). The absence of statistical significance may be explained by variations in the quality of support—emotional encouragement alone may not be sufficient without accurate understanding of breastfeeding principles. In many rural families, older generations still hold cultural beliefs that discourage exclusive breastfeeding, such as early introduction of water or complementary foods. Thus, family "support" may sometimes reinforce traditional practices rather than promote optimal breastfeeding behavior.

This finding contrasts which found significant effects of family support on exclusive breastfeeding (18) (19). However, it aligns with the study by Kristianti (2018), which reported that family support was not significantly related to breastfeeding success (20). These variations highlight that the influence of family support depends on the *quality* of communication and the family's awareness level. In rural communities, involving husbands and elders in breastfeeding education may be crucial to transform family support into a more informed and constructive influence.

The Relationship between *Food Taboo* and Exclusive Breastfeeding Behavior

Food taboos during breastfeeding are commonly observed cultural practices that can indirectly influence maternal nutrition and milk production. In this study, no significant association was found between food taboos and exclusive breastfeeding (p = 0.513). This indicates that while cultural food restrictions exist, they may not directly determine whether mothers practice exclusive breastfeeding. Nevertheless, persistent beliefs about avoiding certain foods (such as fish, eggs, or spicy dishes) could affect maternal diet quality and indirectly reduce breastfeeding confidence (21)(22)(23).

This finding corresponds to research in Southeast Asia showing that cultural beliefs around "hot" and "cold" foods persist in many rural areas, often inherited through generations (24). In the context of the Sigenti community, such taboos are generally moderate and do not prevent mothers from continuing to breastfeed. However, continued education by health workers remains important to correct misconceptions and promote adequate nutrition for breastfeeding mothers.

5. CONCLUSION

Overall, this study highlights that maternal knowledge is the most influential factor determining exclusive breastfeeding practices in the studied rural setting. Meanwhile, formal education, family support, and food taboos showed no significant association, likely due to

contextual factors such as limited access to health counseling and persistent local cultural norms. Strengthening maternal education through community-based health promotion, counseling, and involvement of family members in breastfeeding programs could improve exclusive breastfeeding rates in similar rural populations.

REFERENCES

1. Kementerian Kesehatan Republik Indonesia. Profil Kesehatan Indonesia Tahun 2019. 2019.

2. Victora CG, Bahl R, Barros AJD, França GVA, Horton S, Krasevec J, et al. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. Lancet [Internet]. 2016 Jan;387(10017):475–90. Available from: https://linkinghub.elsevier.com/retrieve/pii/S0140673615010247

3. Black RE, Victora CG, Walker SP, Bhutta ZA, Christian P, de Onis M, et al. Maternal and child undernutrition and overweight in low-income and middle-income countries. Lancet [Internet]. 2013 Aug;382(9890):427–51. Available from: https://linkinghub.elsevier.com/retrieve/pii/S014067361360937X

4. RI KK. Profil Kesehatan Indonesia 2020. 2021.

5. Dinkes Provinsi Sulawesi Tengah. Profil dinas kesehatan provinsi sulawesi tengah tahun 2019, 2020, 2021, & 2021. 2024.

6. Puskesmas Sigenti. Laporan Bayi Yang Di Recall ASI Eklusif Kabupaten Parigi moutong 2022-2023. 2024.

7. Berutu H. FAKTOR-FAKTOR YANG BERHUBUNGAN DENGAN PEMBERIAN ASI EKSKLUSIF DI WILAYAH KERJA PUSKESMAS SITINJO KABUPATEN DAIRI TAHUN 2020. J Ilm Keperawatan Imelda [Internet]. 2021 Mar 30;7(1):53–67. Available from: https://jurnal.uimedan.ac.id/index.php/JURNALKEPERAWATAN/article/view/512

8. Fauziyah A, Dewi Pertiwi F, Avianty I. FAKTOR – FAKTOR YANG BERHUBUNGAN DENGAN PEMBERIAN ASI EKSKLUSIF PADA BAYI DI PUSKESMAS TEGAL GUNDIL KOTA BOGOR TAHUN 2020. PROMOTOR [Internet]. 2022 Feb 2;5(2):115–25. Available from: https://ejournal.uika-bogor.ac.id/index.php/PROMOTOR/article/view/6146

9. Kurniawati R, Sari WI, Islamiah D. Hubungan antara Dukungan Keluarga dengan Perilaku Ibu dalam Pemberian ASI Eksklusif DI Desa Trenyang Wilayah Kerja Puskesmas Sumberpucung. Borneo J Med Lab Technol [Internet]. 2020 Apr 30;2(2):155–60. Available from: http://journal.umpalangkaraya.ac.id/index.php/bjmlt/article/view/1389

10. Noprianti I, Wati DA, Nurhayati A, Abdullah A. Hubungan Pantang Makan (Food Tabu) Dan Pendidikan Ibu Dengan Keberhasilan Pemberian ASI Esklusif Di Wilayah Kerja UPT Puskesmas Rawat Inap Bumidaya Kabupaten Lampung Selatan Tahun 2022. J Gizi Aisyah [Internet]. 2023 Sep 30;6(2):121–31. Available from: https://journal.aisyahuniversity.ac.id/index.php/JGA/article/view/PANTANGMAKAN

11. Kementerian Kesehatan RI. Hasil Utama Riskesdas 2018. 2018.

12. Siregar AYM, Pitriyan P, Walters D. The annual cost of not breastfeeding in Indonesia: the economic burden of treating diarrhea and respiratory disease among children (< 24mo) due to not breastfeeding according to recommendation. Int Breastfeed J [Internet]. 2018 Dec 2;13(1):10. Available from: https://internationalbreastfeedingjournal.biomedcentral.com/articles/10.1186/s13006-018-0152-2

13. Bengough T, Dawson S, Cheng H, McFadden A, Gavine A, Rees R, et al. Factors that influence women's engagement with breastfeeding support: A qualitative evidence synthesis. Matern Child Nutr [Internet]. 2022 Oct 25;18(4). Available from: https://onlinelibrary.wiley.com/doi/10.1111/mcn.13405

14. Laksono AD, Wulandari RD, Ibad M, Kusrini I. The effects of mother's education on achieving exclusive breastfeeding in Indonesia. BMC Public Health [Internet]. 2021 Dec 6;21(1):14. Available from: https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-020-10018-7

15. Hegazi MA, Allebdi M, Almohammadi M, Alnafie A, Al-Hazmi L, Alyoubi S. Factors associated with exclusive breastfeeding in relation to knowledge, attitude and practice of breastfeeding mothers in Rabigh community, Western Saudi Arabia. World J Pediatr [Internet]. 2019 Dec 18;15(6):601–9. Available from: http://link.springer.com/10.1007/s12519-019-00275-x

16. Paramashanti BA, Dibley MJ, Huda TM, Alam A. Breastfeeding perceptions and exclusive breastfeeding practices: A qualitative comparative study in rural and urban Central Java, Indonesia. Appetite [Internet]. 2022 Mar;170:105907. Available from: https://linkinghub.elsevier.com/retrieve/pii/S019566632100814X

17. Bali FARK, Laia F, Gulo IM, Rangkuti Ifrina, Nababan T, Duha Y. Hubungan Tingkat Pendidikan, Pengetahuan, dan Dukungan Suami dengan Praktik Pemberian ASI Eksklusif pada Ibu Bekerja di Klinik Pratama Sunggal. J Pharm Sci [Internet]. 2025 Jul 31;1511–23. Available from: https://journal-jps.com/new/index.php/jps/article/view/973

18. Ratnasari, Dewi, Bunga Astria Paramashanti, Hamam Hadi, Anafrin Yugistyowati, Dewi Astiti EN. Family support and exclusive breastfeeding among Yogyakarta mothers in employment. Asia Pac J Clin Nutr. 2017;26:S31–5.

19. Fadjriah RN, Krisnasari S, Gugu Y. Relationship between Family Social Support and Exclusive Breastfeeding Behavior at Talise Health Center, Indonesia. Open Access Maced J Med Sci [Internet]. 2021 Apr 28;9(E):312–6. Available from: https://oamjms.eu/index.php/mjms/article/view/5987

20. Shinta Kristianti SP. The Family Support and Provider Support to Increase Exclusive Breastfeeding Coverage. Heal Notions. 2018;2(1):113–7.

21. de Diego-Cordero R, Rivilla-Garcia E, Diaz-Jimenez D, Lucchetti G, Badanta B. The role of cultural beliefs on eating patterns and food practices among pregnant women: a systematic review. Nutr Rev [Internet]. 2021 Aug 9;79(9):945–63. Available from: https://academic.oup.com/nutritionreviews/article/79/9/945/5942734

22. Diana, Rian, Riris D. Rachmayanti, Faisal Anwar, Ali Khomsan, Dyan F. Christianti RK. Food taboos and suggestions among Madurese pregnant women: a qualitative study.

J Ethn Foods. 2018;5(4):246–53.

23. Meher C, Zaluchu F. Cultural Influences of Early Food Introduction on Exclusive Breastfeeding Rates in the Nias Islands, Indonesia. J Multidiscip Healthc [Internet]. 2024 Nov;Volume 17:5653–63. Available from: https://www.dovepress.com/cultural-influences-of-early-food-introduction-on-exclusive-breastfeed-peer-reviewed-fulltext-article-JMDH

24. Harmayani E, Anal AK, Wichienchot S, Bhat R, Gardjito M, Santoso U, et al. Healthy food traditions of Asia: exploratory case studies from Indonesia, Thailand, Malaysia, and Nepal. J Ethn Foods [Internet]. 2019 Jul 17;6(1):1. Available from: https://journalofethnicfoods.biomedcentral.com/articles/10.1186/s42779-019-0002-x