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Evaluation of the Influence of Social and Biological Factors on the Success of Exclusive Breastfeeding and Increased Baby Weight in Jakarta, West Java and Banten

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Abstract: Exclusive breastfeeding is crucial for the health and development of babies, reducing the risk of diseases such as respiratory infections, diarrhea, malnutrition, and even death. This study aims to evaluate the impact of social and biological factors on the success of exclusive breastfeeding and weight gain in babies in Jakarta and Banten. Using an analytical observational design with a case-control approach, 60 babies were involved (30 exclusively breastfed, 30 not). Chi-square analysis revealed significant influences on exclusive breastfeeding success from family knowledge (p=0.020), breastfeeding beliefs/culture in Jakarta (p=0.009), maternal nutrition (p=0.000), breastfeeding patterns (p=0.018), family support (p=0.000), and baby weight gain (p=0.000). However, beliefs/culture in Lebak Banten (p=0.429) and West Java (p=0.605) had no significant effect. These results highlight the importance of family support, proper maternal nutrition, and effective breastfeeding practices for exclusive breastfeeding success. Exclusive breastfeeding ensures optimal nutrition, boosts immunity, supports cognitive development, and lowers the risk of infant mortality and health complications.

Keywords: Baby weight; Exclusive breastfeeding; Nutrition; Biological Factors.

Introduction

Breastfeeding is an important factor in a child's health and survival. Breast milk (ASI) is recognized as the best food for babies because of its safety, cleanliness and content which contains antibodies to protect babies from various diseases(Mokhlesi et al., 2024; Ryan et al., 2024; Ulfa et al., 2023). Breast milk contains all the nutrients a child needs, is easy to digest, and is sufficient to meet nutritional needs up to six months of age. Low coverage of exclusive breastfeeding is a global public health problem. According to WHO, around 66.67% of babies do not receive exclusive breast milk, and this figure has not changed in the last two decades. Indonesia's exclusive breastfeeding coverage in 2022 is only 67.96%, down from 69.7% in 2021, indicating the need for more intensive support so that this coverage can increase (WHO, 2023).

Providing breast milk from an early age and exclusively has a major impact on a child's survival and health(de Jager et al., 2015; Meedya et al., 2015; Ra, 2021). Low levels of exclusive breastfeeding for babies 0-6 months can cause an increased risk of diseases such as ARI 35.09%, diarrhea 38.07%, and malnutrition 49.2%. This can have a negative impact on slow body growth, easy disease, decreased intelligence, and mental disorders in children, and can even cause death (Chen et al., 2020; Davie et al., 2021; Yang et al., 2018). The reasons for not giving exclusive breast milk to children involve several factors, namely: Insufficient breast milk production can be a major challenge for mothers; When breast milk is not available immediately after delivery, supplementary feeding may be considered a quick

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solution; The mother's perception of the baby's satisfaction also influences the decision, especially if the baby looks fussy; External factors such as the mother's busy work or studies can hinder the ability to provide exclusive breastfeeding, causing the caregiving role to be taken over by other family members; Cultural factors that emphasize providing additional food since ancestral times also have an influence. This highlights the need for a holistic approach in increasing understanding and support for exclusive breastfeeding, paying attention to cultural, social, economic and individual aspects.

Various studies have been conducted to determine the factors that influence the success of exclusive breastfeeding. Factors that influence exclusive breastfeeding coverage, including family support, support from health workers, regulations that have not been implemented optimally, as well as the mother's level of education and understanding (Davidson & Ollerton, 2020; Karimi et al., 2019; Petrova et al., 2020). That's data is evealed that key factors in successful breastfeeding include individual, cultural and socio-economic aspects. The importance of support from health workers in building mothers' confidence to breastfeed successfully. Habibi et al. (2018) suggest that the success of early breastfeeding can be influenced by several things, such as inappropriate position and attachment, infrequent frequency of breastfeeding, ineffective milk production, poor breastfeeding management, and nipple problems. milk. Rosenbaum et al. (2022) concluded that successful breastfeeding requires collaboration between health facilities, medical personnel, mothers and the surrounding environment. Based on these considerations, this research aims to determine the factors that influence exclusive breastfeeding, namely knowledge, beliefs/culture, breastfeeding patterns, family support, and nutrition of breastfeeding mothers. It is hoped that this research will provide a better understanding of the risks associated with non-exclusive breastfeeding, such as an increased risk of infectious diseases, diarrhea, and disorders of children's growth and development. Breast milk contains nutrients that suit the baby's needs and is available in the right quantities, so exclusive breastfeeding from birth is expected to support the baby's growth and development.

Method

This research employs an analytical observational design, specifically using a case-control approach to thoroughly investigate the impact of various factors on the success of exclusive breastfeeding and the subsequent weight gain of infants. In this study, the sample size was meticulously determined using a 1:1 ratio, ensuring that both groups were balanced in terms of numbers. Each group consisted of 30 infants who were exclusively breastfed and 30 infants who were not exclusively breastfed. The objective was to compare these two distinct groups to assess the influence of exclusive breastfeeding on infant growth and development. To achieve this, the study utilized the Chi-square statistical test for analysis, a robust method for examining the relationships between categorical variables and assessing the significance of observed differences. By employing this rigorous analytical approach, the research aimed to provide a clear and reliable understanding of how exclusive breastfeeding affects infant weight gain compared to non-exclusive breastfeeding practices (Christian et al., 2021; Silva et al., 2017; Wen et al., 2020).

The Chi-square test facilitated the evaluation of associations between exclusive breastfeeding and various factors, helping to reveal the impact of breastfeeding practices on infant health outcomes. This methodological approach ensures that the findings are based on a comprehensive analysis of empirical data, allowing for a nuanced interpretation of how exclusive breastfeeding contributes to healthier weight trajectories in infants. The case-control design, combined with the precise statistical testing, provides a solid foundation for understanding the effectiveness of exclusive breastfeeding and highlights the importance of breastfeeding practices in promoting optimal infant growth and development.

Result and Discussion

Results

Table 1. Frequency Distribution of Family Knowledge Breast-feed Year 2024

Family Knowledge	F	%
Good	32	53.30
Not enough	28	46.70
Total	60	100

Based on the data in table 1, looking at the frequency distribution, it is clear that the majority of respondents have good knowledge, namely 32 people (53.30%).

Table 2. Cultural Frequency Distribution of Breastfeeding in Jakarta in 2024

Breastfeeding Culture	F	%
Of	35	58.30
No	25	41.70
Total	60	100

Based on the data in Table 2, looking at the frequency distribution, it is clear that the majority of respondents believe that there is a breastfeeding belief/culture in Jakarta, namely 35 people (58.30%).

Table 3. Cultural Frequency Distribution of Breastfeeding in Lebak Banten in 2024

Breastfeeding Culture	F	%
Of	36	60
No	24	40
Total	60	100

Based on the data in Table 3, looking at the frequency distribution, it is clear that the majority of respondents have a breastfeeding belief/culture in Lebak Banten, namely 36 people (60%).

Table 4. Cultural Frequency Distribution of Breastfeeding in West Java in 2024

Breastfeeding Culture	F	%
Of	29	48.30
No	31	51.70
Total	60	100

Based on the data in Table 4, looking at the frequency distribution, it is clear that the majority of respondents have no belief/culture in breastfeeding in West Java, namely 31 people (51.70%).

Table 5. Nutrition Frequency Distribution of Breastfeeding Mothers Year 2024

Nutrition for Breastfeeding Mothers	F	%
Enough	36	60
Not enough	24	40
Total	60	100

Based on the data in Table 5, looking at the frequency distribution, it is clear that the majority of respondents in the adequate nutrition category are 36 people (60%).

Table 6. Frequency Distribution of Breastfeeding Patterns Year 2024

Breastfeeding Patterns	F	%
Good	36	60
Not good	24	40
Total	60	100

Based on the data in Table 6, looking at the frequency distribution, we get a picture of the majority of respondents with good breastfeeding patterns, namely 36 people (60%).

Table 7. Frequency Distribution of Family Support in 2024

Family Support	F	%
Good	33	55
Not enough	27	45
Total	60	100

Based on the data in Table 7, looking at the frequency distribution, it is clear that the majority of respondents received good support from their families, namely 33 people (55%).

Table 8. Frequency Distribution of Baby Weight Gain in 2024

Variable	F	%
Baby Weight		
Go up	31	51.70
No	29	48.30
Total	60	100

Based on the data in Table 8, looking at the frequency distribution, it is clear that the majority of respondents with an increase in baby weight increased by 31 people (51.70%).

Table 9. Frequency Distribution of Exclusive Breastfeeding in 2024

Variable	F	%
Exclusive breastfeeding	30	50
Of	30	50
No		
Total	60	100

Based on the data in Table 9, looking at the frequency distribution, it is clear that 30 people (50%) received exclusive breastfeeding and 30 people (50%) did not receive exclusive breast milk.

Based on the Table 10, it shows that there were more respondents who had good family knowledge in the exclusive breastfeeding group, namely 21 people (70%) than those who were not exclusively breastfed, namely 11 people (36.70%). Meanwhile, family knowledge was more or less-greater in the non-exclusively breastfed group, namely 19 people (63.30%) than in the exclusively breastfed group, namely 9 people (30%). Test results *chi square* shows that there is an influence of family knowledge of breastfeeding on the success of exclusive breastfeeding (*p-value* 0.020). The results of the OR calculation show that respondents who have good family knowledge are 4,030 times more likely to get exclusive breastfeeding than those who have less family knowledge.

Table 10. The Influence of Family Knowledge of Breastfeeding on Success Exclusive ASI in 2024

Family Knowledge	Exclusive breastfeeding						*P Value*	*OR*
	Of		No		Total			
	f	%	f	%	f	%		
Good	21	70	11	36.70	32	53.30	0.020	4.030
Not enough	9	30	19	63.30	28	46.70		
Total	30	100	30	100	60	100		

Table 11. The Influence of Breastfeeding Culture on the Success of Exclusive Breastfeeding in Jakarta in 2024

Breastfeeding culture	Exclusive breastfeeding						*P Value*	*OR*
	Of		No		Total			
	f	%	f	%	f	%	0.009	0,203
Of	12	40	23	76.70	35	58.30		
No	18	60	7	23.30	25	41.70		
Total	30	100	30	100	60	100		

Based on the Table 11, it shows that there are more respondents who have breastfeeding culture in the no exclusive breastfeeding group, namely 23 people (76.7%) than those who do (exclusive breastfeeding), namely 12 people (40%). Meanwhile, there were more respondents who had no culture in breastfeeding in the yes group (exclusive breastfeeding), namely 18 people (60%) than those who did not exclusively breastfeed, namely 7 people (23.3%). Test results *chi square* shows that there is an influence of breastfeeding culture on the success of exclusive breastfeeding (*p-value* 0.009). The OR calculation results show that respondents who are yes or have a breastfeeding culture have a 0.203 chance of not getting exclusive breastfeeding compared to those who do not have a breastfeeding culture.

Table 12. The Influence of Breastfeeding Culture on the Success of Exclusive Breastfeeding In Lebak Banten in 2024

Breast feeding culture	Exclusive breastfeeding						*P Value*	*OR*
	Of		No		Total			
	f	%	f	%	f	%		
Of	16	53.3	20	66.70	36	60	0.429	0.571
No	14	46.7	10	33.30	24	40		
Total	30	100	30	100	60	100		

Based on the Table 12, it shows that there are more respondents who have breastfeeding beliefs/culture in the no exclusive breastfeeding group, namely 20 people (66.70%) than those who do (exclusive breastfeeding), namely 16 people (53.30%). Meanwhile, there were more respondents who had no belief/culture in breastfeeding in the yes group (exclusive breastfeeding), namely 14 people (46.70%) than those who did not exclusively breastfeed, namely 10 people (33.3%). Test results *chi square* shows that there is no influence of breastfeeding culture on the success of exclusive breastfeeding (*p-value* 0.429). The OR calculation results show that respondents who yes or have a breastfeeding culture have a 0.571 chance of not getting exclusive breastfeeding compared to those who do not have a breastfeeding belief/culture.

Table 13. The Influence of Breastfeeding Culture on the Success of Exclusive Breastfeeding in West Java in 2024

Breastfeeding culture	Exclusive breastfeeding						*P Value*	*OR*
	Of		No		Total			
	f	%	f	%	f	%		
Of	13	43.3	16	53.30	29	48.30	0.60	0.66
No	17	56.7	14	46.70	31	51.70		
Total	30	100	30	100	60	100		

Based on the Table 13, it shows that there are more respondents who have breastfeeding culture in the non-exclusive breastfeeding group, namely 16 people (53.3%) than those who do (exclusive breastfeeding), namely 13 people (43.3%). Meanwhile, there were more respondents who had no belief/culture in breastfeeding in the yes group (exclusive breastfeeding), namely 17 people (56.7%) than those who did not exclusively breastfeed, namely 14 people (46.7%). Test results *chi square* shows that there is no influence of breastfeeding culture on the success of exclusive breastfeeding (*p-value* 0.605). The OR calculation results show that respondents who are yes or have a breastfeeding culture have a 0.669 times chance of not getting exclusive breastfeeding

compared to those who do not have a breastfeeding culture.

Table 14. The Influence of Breastfeeding Mothers' Nutrition on the Success of Exclusive Breastfeeding Year 2024

Nutrition for Breastfeeding Mothers	Exclusive breastfeeding						*P Value*	*OR*
	Of		No		Total			
	f	%	f	%	f	%		
Enough	26	86.7	10	33.30	36	60	0.000	13,000
Not enough	4	13.3	20	66.70	24	40		
Total	51	100	29	100	60	100		

Based on the table above, it shows that respondents with sufficient nutrition for breastfeeding mothers were more in the exclusively breastfed group, namely 26 people (86.7%) than those who were not exclusively breastfed, namely 10 people (33.3%). Meanwhile, more or less respondents in the nutritional category of breastfeeding mothers were in the non-exclusive breastfed group, namely 20 people (66.7%) compared to those who were exclusively breastfed, namely 4 people (13.3%). Test results *chi square* shows that there is an influence of breastfeeding mothers' nutrition on the success of exclusive breastfeeding (*p-value* 0.000). The result of the OR calculation shows that respondents who have sufficient nutrition have 13,000 times the opportunity to get exclusive breastfeeding compared to those who lack nutrition.

Table 15. The Influence of Breastfeeding Patterns on the Success of Exclusive Breastfeeding Year 2024

Breastfeeding Patterns	Exclusive breastfeeding						*P Value*	*OR*
	Of		No		Total			
	f	%	f	%	f	%		
Good	23	76.7	13	43.3	36	60	0.018	4.297
Not good	7	23.3	17	56.7	24	40		
Total	30	100	30	100	60	100		

Based on the table above, it shows that there were more respondents in the category of good breastfeeding patterns in the exclusive breastfeeding group, namely 23 people (76.70%) than those who were not exclusively breastfeeding, namely 13 people (43.30%). Meanwhile, there were more respondents in the category of poor breastfeeding patterns in the not exclusively breastfed group, namely 17 people (56.70%) than those who were exclusively breastfed, namely 7 people (23.30%). Test results *chi square* shows that there is an influence of breastfeeding patterns on the success of exclusive breastfeeding (*p-value* 0.018). OR calculation results show that respondents with good breastfeeding patterns are 4,297 times more likely to provide exclusive breastfeeding compared to poor breastfeeding patterns.

Table 16. The Influence of Family Support on the Success of Exclusive Breastfeeding Year 2024

Family Support	Exclusive breastfeeding						*P Value*	*OR*
	Of		No		Total			
	f	%	f	%	f	%		
Good	24	80	9	30	33	55	0.000	9,333
Not enough	6	20	21	70	27	45		
Total	30	100	30	100	60	100		

Based on the table above, it shows that there were more respondents who had good family support in the exclusive breastfeeding group, namely 24 people (80%) than those who did not exclusively breastfeed, namely 9 people (30%). Meanwhile, more or less respondents who had family support were in the non-exclusive breastfed group, namely 21 people (70%) than those who were exclusively breastfed, namely 6 people (20%). Test results *chi square* shows that there is an influence of family support on the success of exclusive breastfeeding (*p-value* 0,000). The OR calculation results show that respondents who have good family support are 9.333 times more likely to get exclusive breastfeeding than those who have less family support.

Table 17. Influence of Infant Weight Gain with Exclusive Breastfeeding Year 2024

Increase in Baby's Weight	Exclusive breastfeeding						*P Value*	*OR*
	Of		No		Total			
	f	%	f	%	f	%		
Go up	27	90	4	13.30	31	51.70	0.000	58,500
Not up	3	10	26	86.70	29	48.30		
Total	30	100	30	100	60	100		

Based on the table above, it shows that respondents who gained more weight were in the exclusive breastfeeding group, namely 27 people (90%) than those who were not exclusively breastfed, namely 4 people (13.30%). Meanwhile, there were more respondents who did not gain weight in the group who were not exclusively breastfed, namely 26 people (86.70%) than those who were exclusively breastfed, namely 3 people (10%). Test results *chi square* shows that there is an effect of increasing the baby's weight with exclusive breastfeeding (*p-value* 0,000). OR calculation results show that respondents with an increase in baby's weight are 58,500 times more likely to receive exclusive breastfeeding compared to those with an increase in baby's weight who do not.

Discussion

Relationship between breastfeeding family knowledge and exclusive breastfeeding

Chi-square test results show that family knowledge about breastfeeding has a significant effect on the success of exclusive breastfeeding (p-value 0.020). Respondents with good knowledge have a 4,030 times greater chance of providing exclusive breastfeeding than those with less knowledge. This finding is in line with research (Thorisdottir et al., 2019; Wesolowska et al., 2019), which also showed a significant relationship between knowledge and exclusive breastfeeding (p-value 0.028) with an odds ratio (OR) of 5.906, indicating that good knowledge is closely related to exclusive breastfeeding practices. According to Green's theory, knowledge is a predisposing factor for action, which in this context is related to exclusive breastfeeding. Shukri et al. (2019) stated that a lack of understanding about the importance of exclusive breastfeeding can reduce mothers' motivation to provide exclusive breastfeeding. This is consistent with the research results of (Wijenayake et al., 2023) which found a significant relationship between maternal knowledge and exclusive breastfeeding (p-value 0.002). Mother's knowledge influences the action of exclusive breastfeeding, with education, information from social media, culture, economics, environment, and individual experience playing a role in increasing this knowledge. Good knowledge about exclusive breastfeeding is an important basis for families to understand and implement correct breastfeeding practices, so that it is hoped that it can improve parenting patterns and baby health.

The relationship between breastfeeding beliefs/culture in Jakarta and exclusive breastfeeding

Chi-square test results show that breastfeeding culture significantly influences the success of exclusive breastfeeding (p-value 0.024), in line with research (Pérez-Escamilla et al., 2019), who also found a cultural influence on exclusive breastfeeding with a p-value of 0.005. Culture and traditions, both those that support and those that do not support the practice of exclusive breastfeeding, influence the implementation of breastfeeding. Cultural and social standards differ in each region, so public health policies should consider local culture to support breastfeeding practices. (Aldana-Parra et al., 2020; Moimaz et al., 2017; Wang et al., 2019) identified that national, organizational and individual culture influences breastfeeding habits. These cultural traditions often form inherited behaviors and influence individuals in their breastfeeding practices.

Relationship between breastfeeding beliefs/culture in Lebak Banten and exclusive breastfeeding

The results of bivariate analysis show that breastfeeding culture has no significant effect on the success of exclusive breastfeeding (p-value 0.429), there is no cultural influence on the success of exclusive breastfeeding (p-value 0.422). Individual beliefs influence the decision to provide exclusive breastfeeding. Mothers who exclusively breastfeed believe that breast milk is sufficient to meet their babies' needs, while mothers who do not breastfeed may be influenced by traditional beliefs, such as the belief that babies who cry frequently need additional formula milk (Gillen et al., 2021). This research shows that although traditional culture influences breastfeeding practices, modern culture and information from social media also play an important role. The open flow of information and promotion of formula milk can influence mothers' decisions regarding feeding their babies, making breastfeeding inseparable from the broader socio-cultural context.

Relationship between breastfeeding beliefs/culture in West Java and exclusive breastfeeding

Chi-square test results show that breastfeeding culture does not have a significant influence on the success of exclusive breastfeeding (p-value 0.605), which is different from the findings of Husaini et al. (2018) which shows a significant influence of culture on exclusive breastfeeding (p-value 0.005). Culture in this context refers to habits that can hinder exclusive breastfeeding, such as giving honey or other foods before the baby reaches 6 months of age. The majority of respondents in this study did not indicate cultural beliefs that inhibit the practice of exclusive breastfeeding. The practice of exclusive breastfeeding in Indonesia is influenced by various socio-cultural factors, including maternal education, employment status, family support, support from health workers, myths and traditions of feeding babies (O'Sullivan et al., 2015). Research by Raiten et al. (2014) shows that mothers from cultural groups that do not support exclusive breastfeeding tend to provide lower levels of exclusive breastfeeding (94.4% do not provide exclusive breastfeeding). This research concludes that the influence of culture on the success of exclusive breastfeeding may not be significant because a family environment that supports flexible parenting can facilitate the practice of exclusive breastfeeding. Family support, including mother and mother-in-law, plays an important role in the success of exclusive breastfeeding, while belief in certain myths can be an obstacle.

The relationship between breastfeeding mothers' nutrition and exclusive breastfeeding

The results of bivariate analysis show that there is a significant influence of breastfeeding mothers' nutrition on the success of exclusive breastfeeding (p-value 0.000). Respondents with adequate nutrition have a 5.382 times greater chance of successfully providing exclusive breastfeeding compared to respondents who lack nutrition. This research is consistent with the findings of (Krebs et al., 2023)which shows a significant relationship between maternal nutritional status and exclusive breastfeeding (p-value 0.002). Nagel et al. (2022)also found that the mother's nutritional status and diet were related to smooth breast milk production. Raissian & Su (2018) explains that nutritional deficiencies can disrupt maternal health and reduce the production and quality of breast milk. Adequate good nutrition is very important to increase breast milk production and meet the baby's needs. Factors that influence the nutritional adequacy of breastfeeding mothers include the family's economic level. The respondent's food menu usually consists of rice, side dishes, vegetables, fruit and milk. Awareness of the importance of nutrition during breastfeeding is influenced by knowledge, previous experience, and the ability to purchase nutritious food. Family income influences food choices; Low income often results in the consumption of foods high in fat and low in protein. Eating habits, income, and education influence the nutritional status of breastfeeding mothers and, in turn, the success of exclusive breastfeeding.

Relationship between breastfeeding patterns and exclusive breastfeeding

The results of bivariate analysis showed that there was a significant influence of breastfeeding patterns on the success of exclusive breastfeeding (p-value 0.018). Respondents with good breastfeeding patterns have a 4.297 times greater chance of providing exclusive breastfeeding compared to those with poor breastfeeding patterns. Non-smooth breast milk production can cause failure in breastfeeding, with internal factors such as the mother's physical condition, psychology, knowledge about breastfeeding, and external factors such as early initiation of breastfeeding and frequency of breastfeeding affecting breast milk production. High breastfeeding frequency stimulates the production of prolactin, a hormone that is important for breast milk production. A good breastfeeding pattern, including optimal breastfeeding frequency, is very important to ensure sufficient breast milk production. Factors such as the mother's physical and emotional health and the baby's ability to suck influence breastfeeding patterns. A good breastfeeding pattern is directly related to the success and duration of breastfeeding, as well as the baby's weight growth.

Family Support Relationships Breastfeeding with exclusive breastfeeding

The results of the chi-square test show that there is a significant influence of family support on the success of exclusive breastfeeding (p-value 0.000). Respondents who received good family support had a 9.333 times greater chance of providing exclusive breastfeeding compared to respondents whose family support was lacking. Supports this finding, showing a positive relationship between family support and exclusive breastfeeding. Good family support, including informational, emotional and instrumental support, has a significant effect on exclusive breastfeeding practices. Emotional support, such as attention and appreciation from family, is considered the most effective. Strong family support from husband, older siblings and in-laws plays an important role in the success of exclusive breastfeeding. Adequate support, including informational and instrumental support, as well as sufficient family income, increases a mother's chances of providing exclusive breastfeeding. According to researchers, family support influences exclusive breastfeeding by increasing maternal motivation and

ensuring consistent breastfeeding practices. Emotionally and practically supportive families can increase the prevalence of exclusive breastfeeding.

The relationship between increasing baby weight and exclusive breastfeeding

The results of the chi-square test showed that there was a significant influence between increasing baby weight and exclusive breastfeeding (p-value 0.000). Respondents whose babies were gaining weight had a 58,500 times greater chance of getting exclusive breastfeeding compared to babies who were not gaining weight. This finding is consistent which shows a significant relationship between exclusive breastfeeding and increased baby weight. Exclusive breastfeeding supports the baby's weight growth according to postnatal development.

Exclusive breastfeeding had a positive effect on increasing the baby's weight. Exclusive breast milk, according to WHO (2023), contains complete nutrition that supports body weight growth better than formula milk or less nutritious additional food (Bernardi et al., 2024). The researchers' assumption states that exclusive breast milk affects the baby's weight gain because it contains growth factors, hormones and antibodies that are not present in formula milk. These factors not only support the baby's physical growth but also strengthen the immune system, reduce disease and infection, and increase appetite and weight growth.

Conclusion

The conclusion of this study confirms that social and biological factors influence the success of exclusive breastfeeding and increase in baby weight in Jakarta and Banten. Exclusive breastfeeding, which is crucial for the health and survival of babies, reduces the risk of diseases such as ARI, diarrhea and malnutrition, as well as other negative impacts such as slow growth, decreased intelligence and mental disorders. This study used a case-control design with 60 babies, consisting of 30 babies who received exclusive breast milk and 30 babies who did not. The results of the analysis show that family knowledge about breastfeeding has a significant effect on the success of exclusive breastfeeding (p=0.020). Cultural factors also play a role; in Jakarta, there was a significant effect (p=0.009), while in Lebak Banten and West Java, no significant effect was found (p-value 0.429 and 0.605). The nutrition of breastfeeding mothers shows a strong influence on the success of breastfeeding exclusive (p=0.000), with mothers who have good nutrition having a 5.382 times greater chance of providing exclusive breastfeeding. Good breastfeeding patterns also contribute to the success of exclusive breastfeeding (p=0.018), and family support is proven to be very important, with a significant effect (p=0.000). In addition, increasing baby weight showed a significant relationship with exclusive breastfeeding (p=0.000), indicating that babies who were exclusively breastfed tended to experience better weight gain. Overall, this research emphasizes the importance of family support, adequate knowledge, good nutrition, and effective breastfeeding patterns in supporting the success of exclusive breastfeeding and baby growth. Public awareness regarding the benefits of exclusive breastfeeding is very important to improve baby health and reduce the risk of death and health complications.

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Author Contributions

The following statements should be used Conceptualization, IH, M, RW, RS, RGUK, V, WR, M contributed to the data collection process, data processing, article writing.

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Conflicts of Interest

The authors declare no conflict of interest.

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