



THE RELATIONSHIP BETWEEN EXCLUSIVE BREASTFEEDING HISTORY AND THE INCIDENCE OF STUNTING AMONG CHILDREN AGED 0–24 MONTHS AT JOHAR BARU DISTRICT PRIMARY HEALTH CENTER, INDONESIA

HUBUNGAN ANTARA RIWAYAT MENYUSUI EKSKLUSIF DAN KEJADIAN STUNTING PADA ANAK USIA 0–24 BULAN DI PUSKESMAS KECAMATAN JOHAR BARU, INDONESIA

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Abstract

This study was conducted to examine the association between exclusive breastfeeding history and stunting among children aged 0–24 months at the Johar Baru District Primary Health Center. A correlational study design with a cross-sectional approach was employed. The study involved 83 mothers with children aged 0–24 months, who were selected through random sampling. Data were obtained via structured interviews using a master table and subsequently analyzed using the chi-square test with a significance level set at 5%. The findings indicated that the majority of mothers were between 20 and 35 years of age (81.9%), did not have paid employment (68.9%), and had attained secondary to higher levels of education (78.3%). More than half of the respondents reported providing exclusive breastfeeding (56.6%), and most children were classified as not stunted (75.9%). Bivariate analysis revealed a statistically significant association between maternal age and the occurrence of stunting ($p = 0.039$). However, no significant associations were identified between maternal occupation ($p = 0.159$), maternal educational attainment ($p = 0.203$), or exclusive breastfeeding history ($p = 0.925$) and stunting incidence. The study concludes that stunting is influenced by multiple interrelated factors, indicating that its prevention cannot rely solely on exclusive breastfeeding. Comprehensive strategies involving sustained nutritional interventions, improved environmental sanitation, and appropriate caregiving practices are essential to effectively reduce stunting. Therefore, health professionals are encouraged to continue promoting exclusive breastfeeding while simultaneously addressing other contributing factors that support optimal child growth and development.

Keywords : Exclusive breastfeeding, Stunting, children aged 0–2 years, Risk factors.



Abstrak

Penelitian ini bertujuan menganalisis hubungan antara riwayat pemberian ASI eksklusif dengan kejadian stunting pada anak usia 0–2 tahun di Puskesmas Kecamatan Johar Baru. Desain penelitian menggunakan analitik korelasi dengan pendekatan cross-sectional. Sampel berjumlah 83 responden ibu yang memiliki anak usia 0–2 tahun, diambil dengan metode random sampling. Data dikumpulkan melalui wawancara menggunakan master tabel dan dianalisis dengan uji chi-square pada taraf signifikansi 5%. Hasil penelitian menunjukkan bahwa sebagian besar ibu berusia 20–35 tahun (81,9%), tidak bekerja (68,9%), memiliki tingkat pendidikan menengah hingga tinggi (78,3%), memberikan ASI eksklusif (56,6%), dan memiliki anak yang tidak mengalami stunting (75,9%). Uji bivariat menunjukkan adanya hubungan yang signifikan antara umur ibu dan kejadian stunting ($p = 0,039$). Sementara itu, tidak ditemukan hubungan yang signifikan antara pekerjaan ibu dengan kejadian stunting ($p = 0,159$), tingkat pendidikan ibu dengan kejadian stunting ($p = 0,203$), maupun pemberian ASI eksklusif dengan kejadian stunting ($p = 0,925$). Penelitian ini menyimpulkan bahwa stunting merupakan masalah multifaktorial, sehingga pencegahannya memerlukan pendekatan komprehensif melalui perbaikan gizi lanjutan, kebersihan lingkungan, serta pola asuh yang tepat, selain pemberian ASI eksklusif. Disarankan tenaga kesehatan tetap memberikan edukasi ASI eksklusif disertai penekanan pada faktor pendukung lain untuk mencegah stunting.

Kata Kunci : ASI eksklusif, Stunting, Anak usia 0–2 tahun, Johar Baru, Faktor risiko.

1. INTRODUCTION

Stunting is a condition of impaired growth characterized by a child's length or height being below minus two standard deviations according to the World Health Organization (WHO) growth standards. It results from chronic nutritional deficiencies, often accompanied by recurrent infections and inadequate environmental stimulation, particularly during the first 1,000 days of life, from conception to the age of two years. Stunting not only affects physical growth but also has long-term consequences on cognitive development, motor skills, productivity, and the risk of non-communicable diseases in adulthood (UNICEF et al., 2025).

Globally, stunting remains a major public health concern. According to WHO, the global prevalence of stunting reached 22.3%. In Indonesia, the prevalence of stunting in 2022 was reported at 21.6%, exceeding the WHO threshold of less than 20%. Data from the Indonesian Health Survey (SKI) 2023 showed that the national stunting prevalence was 21.5%, which has not yet met the target set in the National Medium-Term Development Plan (RPJMN) 2020–2024 of 14%. In DKI Jakarta Province, the stunting prevalence was recorded at 17.6%, with variations across districts, indicating the need for continued targeted interventions, particularly in urban settings such as Central Jakarta (Kementerian Kesehatan, 2023; Kementerian Perencanaan Pembangunan Nasional, 2025).

To address this issue, the Indonesian government issued Presidential Regulation No. 72 of 2021 on the Acceleration of Stunting Reduction, emphasizing a holistic, integrated, and multisectoral approach. One of the key strategies in stunting prevention is ensuring optimal nutrition during early life, including exclusive breastfeeding during the first six months. Breast milk is the most appropriate source of nutrition for infants, as it contains complete nutrients, immunological components, and bioactive substances that support growth and protect against



infections (Peraturan Presiden Republik Indonesia Nomor 72 Tahun 2021 Tentang Percepatan Penurunan Stunting, 2021).

Breast milk contains essential nutrients that are easily digested and well tolerated by the infant's immature digestive system. Currently, many infant formula manufacturers have developed products designed to be digestible and nutritionally adjusted to meet infants' needs. Nevertheless, breast milk remains the most appropriate and optimal source of nutrition for infants. The well-established benefits of breastfeeding for infant growth and health make breast milk a crucial factor in efforts to reduce the prevalence of stunting (Primihastuti et al., 2022; Purkiewicz et al., 2025).

The United Nations Children's Fund (UNICEF) and the World Health Organization (WHO) (2024) recommend exclusive breastfeeding during the first six months of life, with initiation within the first hour after birth. Exclusive breastfeeding should be continued without the introduction of any additional foods or liquids during this period. Exclusive breastfeeding in the first six months plays a vital role in supporting sensory and cognitive development and in protecting infants from infectious and chronic diseases (UNICEF et al., 2025).

One of the contributing factors to stunting is inadequate nutritional intake during early childhood, particularly during infancy, when exclusive breastfeeding serves as the primary source of nutrition that fulfills an infant's needs during the first six months of life. Stunting has both short-term and long-term consequences, affecting a child's future development, including cognitive, motor, and verbal abilities. Children who experience stunting are at a significantly higher risk of developing non-communicable diseases (NCDs) in adulthood, such as obesity, hypertension, diabetes, and cancer. These long-term health outcomes may adversely impact productivity, income potential, and social skills, ultimately placing a substantial economic burden on the state due to increased risks of economic loss (Hadi et al., 2021; Maila Putri & Andarini, 2024).

Although previous studies have demonstrated the protective role of exclusive breastfeeding in reducing the risk of stunting, the condition remains multifactorial, influenced by socioeconomic, environmental, and caregiving factors. Given the persistent prevalence of stunting and the importance of exclusive breastfeeding in early childhood nutrition, this study aims to analyze the relationship between exclusive breastfeeding history and the incidence of stunting among children aged 0–24 months in the working area of the Johar Baru District Primary Health Center.

2. RESEARCH METHOD

This study employed an analytic correlational design with a cross-sectional approach. The study population consisted of 300 infants aged 0–2 years registered at the Johar Baru District Health Center. The sample size was determined using the Slovin formula with a 10% margin of error and a 90% confidence level, resulting in a minimum sample of 75 infants. To anticipate potential dropouts, an additional 10% was added, yielding a total sample of 83 infants. Participants were selected using a random sampling technique. Inclusion criteria



included mothers who consented to participate, mothers with infants aged 0–2 years, and infants with normal birth weight. Exclusion criteria comprised mothers who declined participation, infants older than two years, and participants who withdrew during the study.

Data collection was conducted at the Johar Baru District Health Center from April to June 2025 using a structured observation sheet (master table). Primary data included maternal characteristics (age, occupation, education), infant characteristics (weight, length/height, head circumference), and history of exclusive breastfeeding. Data entry and processing were performed using SPSS software, including data coding, cleaning, and tabulation. Univariate analysis was conducted to describe the frequency distribution of each variable. Bivariate analysis was performed using the chi-square test to assess the association between exclusive breastfeeding history and stunting incidence, with a significance level set at $p < 0.05$.

3. RESULT AND DISCUSSION

a. Frequency Distribution of Respondents' Characteristics

Characteristics	Frequency	Presentase (%)
Age		
<20 or >35 years	15	18,1
20-35 years	68	81,9
Occupation		
Unemployed	58	68,9
Employed	25	30,1
Education		
Low educational attainment	18	21,7
Secondary to higher education	65	78,3
Exclusive Breastfeeding		
Non-exclusive	47	56,6
Exclusive	36	43,4
Stunting		
Stunting	20	24,1
Normal Growth	63	75,9

Table 1 presents the distribution of the characteristics of the respondents included in this study. The majority of mothers were aged between 20 and 35 years, accounting for 81.9% of the sample, while 18.1% of mothers were either younger than 20 years or older than 35 years. This suggests that most respondents were within the reproductive age range generally considered optimal for pregnancy and childcare.

In terms of occupation, most mothers were unemployed (68.9%), whereas only 30.1% were employed. This indicates that a significant proportion of the respondents may have more time to dedicate to childcare and breastfeeding practices, which could influence infant feeding patterns and nutritional outcomes.



Regarding educational attainment, 78.3% of the mothers had completed secondary to higher education, while 21.7% had low educational attainment. Higher maternal education is often associated with better health literacy, improved knowledge of infant feeding practices, and greater access to healthcare services, which can positively impact child growth and development.

Concerning infant feeding practices, 43.4% of the infants received exclusive breastfeeding, whereas 56.6% did not receive exclusive breastfeeding during the first six months of life. Exclusive breastfeeding is recommended by the World Health Organization as it provides optimal nutrition and protective factors that support growth and reduce the risk of infectious diseases and growth faltering.

Finally, the nutritional status of the children showed that 24.1% were classified as stunted, while 75.9% had normal growth. This highlights that nearly one in four children in the study population experienced growth retardation, emphasizing the need for targeted nutritional interventions and education regarding exclusive breastfeeding and other supportive childcare practices.

b. The Relationship Between Exclusive Breastfeeding and the Incidence of Stunting

Characteristics	Stunting Category						P-Value
	Normal	%	Stunting	%	Severely stunted	%	
Age							
<20 or >35	10	66,7	4	26,7	1	6,7	0,039
20-35	53	77,9	4	5,9	11	16,2	
Occupation							
Unemployed	44	75,9	6	10,3	8	13,8	0,159
Employed	19	76	2	8	4	16	
Education							
Low educational attainment	14	77,8	0	0	4	22,2	0,203
Secondary to higher education	49	75,4	8	12,3	8	12,3	
Exclusive Breastfeeding							
Non-exclusive	28	77,8	3	8,3	5	13,9	0,925
Exclusive	35	74,5	5	10,6	7	14,9	
Stunting							0,925

Table 2 presents the distribution of stunting categories according to maternal and infant characteristics and the results of the chi-square analysis. The stunting status was classified into three categories: normal growth, stunted, and severely stunted.

Regarding maternal age, children of mothers aged 20–35 years had a higher proportion of normal growth (77.9%) compared to those with mothers aged under 20 or over 35 years (66.7%). The prevalence of stunting was higher among children of mothers aged under 20 or over 35 years (26.7%) compared to those aged 20–35 years (5.9%). Severely stunted children were also more common in the <20 or >35 years group (6.7%) compared to the 20–35 years



group (16.2%). The chi-square test showed a significant association between maternal age and stunting status ($p = 0.039$), indicating that maternal age may influence child growth outcomes.

For maternal occupation, children of unemployed mothers had normal growth in 75.9% of cases, with 10.3% stunted and 13.8% severely stunted. In comparison, children of employed mothers showed normal growth in 76%, stunting in 8%, and severe stunting in 16%. The association between maternal occupation and stunting was not statistically significant ($p = 0.159$).

In terms of maternal education, 77.8% of children of mothers with low educational attainment had normal growth, whereas 22.2% were severely stunted. Children of mothers with secondary to higher education showed 75.4% normal growth, 12.3% stunted, and 12.3% severely stunted. The chi-square analysis revealed no significant relationship between maternal education and stunting status ($p = 0.203$).

Regarding exclusive breastfeeding, 74.5% of infants who received exclusive breastfeeding had normal growth, compared to 77.8% among non-exclusively breastfed infants. The prevalence of stunting was 10.6% in exclusively breastfed infants and 8.3% in non-exclusively breastfed infants, while severely stunted cases were 14.9% and 13.9%, respectively. There was no significant association between exclusive breastfeeding and stunting ($p = 0.925$).

Overall, the results indicate that among the variables studied, only maternal age showed a significant relationship with stunting status, while maternal occupation, education level, and exclusive breastfeeding did not demonstrate statistically significant associations with stunting or severe stunting in this sample.

c. Discussion

This study examined the relationship between maternal characteristics, exclusive breastfeeding, and stunting among children aged 0–2 years in the jurisdiction of Johar Baru District Health Center. The findings indicate a multifactorial nature of stunting, in which maternal age showed a statistically significant association with stunting, while maternal occupation, education level, and exclusive breastfeeding did not demonstrate significant relationships.

The results showed that children born to mothers aged under 20 or over 35 years had a higher prevalence of stunting (26.7%) compared to those born to mothers aged 20–35 years (5.9%). Nearly all children of mothers aged 20–35 years exhibited normal growth patterns (77.9%). The chi-square test confirmed a significant association between maternal age and stunting ($p = 0.039$), indicating that non-ideal maternal age may contribute to adverse growth outcomes in offspring. This finding is consistent with prior research suggesting that younger mothers (<20 years) may lack biological maturity and psychosocial preparedness, leading to suboptimal prenatal care, poor nutritional status, and increased risks of low birth weight a known risk factor for stunting (Soliman et al., 2021). Older mothers (>35 years) are similarly at risk due to higher incidences of pregnancy complications such as gestational hypertension and diabetes, conditions that negatively impact fetal development (ACOG, 2022). Thus,



maternal age appears to be a key determinant in early childhood growth trajectories. Maternal age is one of the factors contributing to stunting because a woman should be within a biologically and socially appropriate age range at the time of marriage. If a woman is not ready and is forced to marry, she may not adequately attend to her pregnancy, which can negatively affect the birth weight of the baby and subsequently increase the risk of stunting (Astuti et al., 2022).

This study is in line with previous research conducted by Hazrun, N in Kendari, which found that maternal age has a significant relationship with the incidence of stunting in children under five. Most cases of stunting occurred in children born to mothers aged <20 and >35 years. Mothers under 20 years old tend to be biologically and psychologically immature. The immaturity of reproductive organs, along with insufficient mental preparedness and limited knowledge regarding pregnancy and nutrition, makes these mothers more vulnerable to pregnancy and delivery complications, such as severe anemia and low birth weight (LBW), which are direct risk factors for stunting. Meanwhile, mothers over 35 years old are at higher risk of developing conditions such as hypertension and gestational diabetes, which also negatively affect fetal growth. Therefore, maternal age is an important indicator of a child's growth and development success (Hasrun, 2024).

Other studies also support these findings. A Spearman rank statistical test using SPSS showed a probability value (p) smaller than the alpha level ($0.33 < 0.05$). Thus, the null hypothesis (H_0) was rejected and the alternative hypothesis (H_1) accepted, indicating a significant relationship between maternal age and the incidence of stunting. Fitriana reported that mothers with non-ideal ages are more likely to face barriers in accessing healthcare services, have limited quality prenatal care, and possess insufficient knowledge about nutritional needs during pregnancy. This directly impacts fetal health, which, if not properly addressed, can result in growth disturbances leading to stunted birth outcome (Fitriana, 2021).

Although a slightly higher proportion of stunted children was observed among mothers who were unemployed (10.3%) compared to employed mothers (8.0%), the association between maternal occupation and stunting was not statistically significant ($p = 0.159$). This suggests that employment status alone does not directly determine child nutritional outcomes. Some studies report that maternal employment may influence time available for childcare and infant feeding practices, but its effects are heavily mediated by factors such as socioeconomic status, access to childcare support, and workplace policies. Additionally, unemployment does not inherently imply improved childcare quality, as unemployed mothers may still lack adequate nutrition knowledge or access to health information.

In the family, the mother plays a crucial role. She is responsible for childcare, ensuring the child's well-being, and managing the family's food intake, particularly to improve nutritional status. Working mothers immediately after childbirth may face challenges that limit the infant's access to breast milk. Although employed mothers often have better economic access, their limited time for childcare can affect breastfeeding practices and nutritional attention. This finding aligns with research by Hasrun, N. (2024) in Kendari, which showed



that the incidence of stunting was higher among children of non-working mothers, reaching 20.9%. This may be because non-working mothers do not necessarily possess sufficient knowledge, practical skills, or access to information regarding child nutrition and healthy dietary practices, leaving their children at continued risk of stunting (Hasrun, 2024).

The present study did not find a significant relationship between maternal education level and stunting ($p = 0.203$), despite the differing proportions of normal growth and stunting among education categories. Although mothers with higher education are generally expected to have better health literacy and greater access to information, this did not translate into statistically significant differences in stunting prevalence in this population. This result aligns with research indicating that formal education alone may not be sufficient to influence child nutritional status if not accompanied by access to relevant health education and resources (Haile & Legisso, 2024). In urban settings such as Johar Baru, mothers with lower formal education may still obtain health and nutrition knowledge through community health services, digital media, and maternal support programs, which can mitigate the effect of education level on child growth outcomes.

This finding is consistent with the study conducted by Shodikin, A.A., M.M., and M.N.L. (2023), which reported no significant association between maternal formal education level and the incidence of stunting. The results suggest that maternal formal education alone does not directly determine a child's nutritional status, particularly in relation to stunting. This may be explained by the influence of other contributing factors, such as access to non-formal sources of information (including health education at *posyandu*, community health workers, social media, and personal experience), economic conditions, family support, environmental factors, and caregiving practices. These factors may play a more substantial role in stunting prevention than formal educational attainment alone (Shodikin et al., 2023).

The study found that stunting is influenced by multiple factors, including regional characteristics, access to health information, and variations in nutritional intervention programs across different areas. In Johar Baru, an urban setting, mothers with lower formal education levels may still have adequate access to health information through primary healthcare facilities (puskesmas), digital media, and routine health education sessions. This access enables mothers with lower educational attainment to maintain sufficient knowledge regarding child nutrition (Ayue et al., 2025).

These findings indicate that accessible and up-to-date health information plays a more critical role in preventing stunting than formal educational level alone. In line with this, Aryani et al. (2023) demonstrated that direct health education interventions significantly improved maternal knowledge regarding stunting prevention ($p < 0.001$). Therefore, health literacy initiatives delivered through community-based interventions—such as health counseling, mother-child classes, and nutrition promotion programs—are essential forms of non-formal education that have a substantial impact. Maternal education plays an important role in shaping childcare practices and child feeding behaviors. However, the findings of this study are consistent with those reported by Wardani and Manungkalit (2022), who found no significant association



between maternal education level and the incidence of stunting ($p > 0.05$). This indicates that although higher educational attainment is often associated with better knowledge, it does not necessarily guarantee optimal caregiving practices or appropriate nutritional provision for children. Notably, this study found that a considerable proportion of stunting cases occurred among mothers with higher levels of education

This finding is in line with the argument proposed by Iswati et al. (2019), who stated that mothers with higher education do not always possess adequate nutritional knowledge, particularly if they are employed and delegate childcare responsibilities to caregivers or family members who may lack sufficient understanding of balanced nutrition. Conversely, mothers with lower educational attainment who do not work outside the home may participate more frequently in posyandu activities and health education sessions, thereby maintaining adequate access to nutrition-related information. Therefore, not only formal educational level but also direct maternal involvement in childcare and access to nutrition information play a crucial role in determining the risk of stunting in children. ntial impact on stunting prevention (Haryani et al., 2023).

Maternal education plays an important role in shaping childcare practices and child feeding behaviors. However, the findings of this study are consistent with those reported by Wardani and Manungkalit (2022), who found no significant association between maternal education level and the incidence of stunting ($p > 0.05$). This indicates that although higher educational attainment is often associated with better knowledge, it does not necessarily guarantee optimal caregiving practices or appropriate nutritional provision for children. Notably, this study found that a considerable proportion of stunting cases occurred among mothers with higher levels of education (Wardani & Eviyani Margaretha Manungkalit, 2022).

This finding is in line with the argument proposed by Wardani, 2022 who stated that mothers with higher education do not always possess adequate nutritional knowledge, particularly if they are employed and delegate childcare responsibilities to caregivers or family members who may lack sufficient understanding of balanced nutrition. Conversely, mothers with lower educational attainment who do not work outside the home may participate more frequently in posyandu activities and health education sessions, thereby maintaining adequate access to nutrition-related information. Therefore, not only formal educational level but also direct maternal involvement in childcare and access to nutrition information play a crucial role in determining the risk of stunting in children (Lailatul & Ni'mah., 2015; Rahmawati & Agustin, 2020).

Although children who received exclusive breastfeeding showed a slightly higher prevalence of stunting (10.6%) compared to those who did not (8.3%), this difference was not statistically significant ($p = 0.925$). This finding suggests that while exclusive breastfeeding is an important early life nutrition practice, it alone may not be a strong predictor of stunting when examined in isolation. The World Health Organization (WHO) and UNICEF recommend exclusive breastfeeding for the first six months of life due to its benefits in providing essential nutrients and immunological protection (UNICEF et al., 2025). However, multiple studies have



demonstrated that exclusive breastfeeding primarily protects against infectious diseases and supports early growth, but cannot fully prevent stunting in the absence of adequate complementary feeding and optimal living conditions (Hadi et al., 2021). For example, in similar contexts, equilibrium between exclusive breastfeeding and the transition to nutrient-dense complementary foods is crucial; failure to provide adequate complementary feeding can blunt the long-term growth benefits of early exclusive breastfeeding (Yuliawati et al., 2025). Environmental factors such as poor sanitation, repeated infections, and inadequate dietary quality further compound the risk of stunting even when exclusive breastfeeding is practiced (Woldesenbet et al., 2023).

The statistical analysis of this study revealed that the association between exclusive breastfeeding and the incidence of stunting in children aged 0–2 years yielded a p-value of 0.925 at a 5% significance level ($p > 0.05$). Therefore, the null hypothesis (H_0) is accepted, indicating that there is no significant relationship between exclusive breastfeeding and the severity of stunting in children aged 0–2 years within the Johar Baru Primary Health Care working area.

The study by Novayanti, L. H., Armini, N. W., & Mauliku, J. (2021) similarly found no significant relationship between exclusive breastfeeding and the occurrence of stunting. This is because exclusive breastfeeding alone does not guarantee adequate long-term nutrition for a child if it is not followed by the provision of nutrient-rich complementary foods appropriate for the child's developmental needs. In addition, feeding practices, environmental hygiene, and the frequency of infectious diseases play a major role in determining a child's nutritional status. Therefore, even children who receive exclusive breastfeeding remain at risk of stunting if these other factors are not adequately addressed (Novayanti et al., 2021).

The results of this study underscore the multifactorial nature of stunting. Maternal age, childcare practices, environmental sanitation, dietary quality beyond exclusive breastfeeding, and socioeconomic context jointly contribute to child growth outcomes. As supported by earlier research, stunting prevention requires integrated action beyond promoting exclusive breastfeeding alone. These findings highlight the need for comprehensive strategies that address maternal health, nutrition education, optimal complementary feeding practices, and environmental conditions. Interventions should not only focus on promoting exclusive breastfeeding but also on strengthening maternal support systems, expanding access to health information regardless of educational background, and improving overall child care practices in community settings (Ayue et al., 2025).

4. CONCLUSION

The results of this study, conducted on 83 mothers with children aged 0–2 years in the working area of Johar Baru District Health Center, can be summarized as follows:

- a. There was a significant relationship between maternal age and the incidence of stunting. Mothers who were in non-ideal age groups (<20 years or >35 years) had a higher



tendency to give birth to stunted children compared to mothers aged 20–35 years ($p = 0.039$).

- b. No significant relationship was found between maternal occupation and stunting ($p = 0.159$). This indicates that a mother's employment status, whether employed or unemployed, does not directly determine a child's nutritional status, although maternal involvement in childcare remains important.
- c. No significant relationship was observed between maternal education level and stunting ($p = 0.203$). Nevertheless, maternal engagement in childcare and access to nutritional information remain crucial factors in stunting prevention, regardless of formal education level.
- d. No significant relationship was found between exclusive breastfeeding and stunting ($p = 0.925$). These results suggest that, while exclusive breastfeeding is important, other factors such as complementary feeding quality, environmental hygiene, and continued feeding practices also play a significant role in child growth.

Overall, this study emphasizes that stunting is a multifactorial problem influenced not only by a single factor, such as exclusive breastfeeding or maternal occupation, but by a combination of maternal age, childcare practices, complementary feeding, and environmental factors. Therefore, stunting prevention requires a comprehensive and integrated approach.

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