Examining the Impact of Paternal Control Behavior on Exclusive Breastfeeding: A Cross-Sectional Study in Bogor, Indonesia

Ade S. Nasution*, Ida Nuraida, Devia L. Putri, Rezeki T. Raharsari
Darmayanti Waluyo, Eman Rahim

1 Department of Public Health, Universitas Ibn Khaldun, Bogor, Indonesia
2, 3, 4 Department of Midwifery, Institut Kesehatan dan Bisnis Annisa, Bogor, Indonesia
5, 6 Department of Nutrition, STIKes Bakti Nusantara Gorontalo, Gorontalo, Indonesia

DOI: 10.24252/al-sihah.v15i2.41519
Received: 27 September 2023 / In Reviewed: 28 November 2023 / Accepted: 20 December 2023 / Available online: 31 December 2023
©The Authors 2023. This is an open access article under the CC BY-NC-SA 4.0 license

ABSTRACT

Infants who are not exclusively breastfed often have the potential to experience implications for their future quality of life. Furthermore, the extent of this impact is influenced by the concerted efforts of both the father and mother in promoting and implementing exclusive breastfeeding. Several studies have also shown that father’s proactive support is an essential factor in its successful implementation. Therefore, this study aims to determine the relationship between paternal control behavior and exclusive breastfeeding. A quantitative cross-sectional method was used and the sample population comprised 326 fathers with children aged < 2 years old. The procedures were carried out in the working area of the Situ Udik Health Center in July 2023. The sample size was calculated using the Slovin size formula, followed by the selection of 77 respondents based on the random sampling technique. The data obtained were then analyzed using the chi-square test to assess the association between the variables. The results showed that there was a significant relationship between father's knowledge (p=0.001), attitude (0.006), and trust (p=0.000) with exclusive breastfeeding. Meanwhile, breastfeeding fathers (0.339) and intention (0.341) had no significant influence. Based on these results, father played an essential role in providing support during this practice.

ABSTRAK

Bayi yang tidak mendapatkan ASI secara eksklusif akan berdampak pada kualitas hidup dimasa yang akan datang, hal ini dapat dikontrol dari perilaku ayah dan ibu terhadap pemberian ASI eksklusif. Ayah yang mendukung pemberian ASI eksklusif secara cepat dan signifikan diakui sebagai salah satu faktor kunci mencapai sukses dalam melaksanakan pemberian ASI eksklusif. Tujuan dari studi ini adalah untuk mengetahui hubungan perilaku control ayah dengan pemberian ASI eksklusif. Studi ini menerapkan metode cross sectional secara kuantitatif yang menggunakan rumus slovin dan menggunakan teknik random sampling. Sample yang diperoleh adalah sebanyak 77 ayah. Chi-square test digunakan untuk salah satu alat menganalisis data pada statistic untuk melihat hubungan antar variabel. Studi ini menemukan bahwa ada hubungan yang signifikan antara pengetahuan ayah (p=0.001), sikap ayah (0.006), kepercayaan ayah (p>0.000,0) dengan pemberian ASI eksklusif dan tidak terdapat hubungan antara breastfeeding father (0.339) dan niat ayah (0.341) dengan pemberian ASI eksklusif. Peran suami memiliki nilai yang sangat signifikan dalam memberikan dukungan kepada istri dalam praktik pemberian ASI eksklusif. Pengetahuan yang diperoleh oleh suami dapat berperan dalam memotivasi istri dalam hal pengetahuan, sikap, terkait pemberian ASI eksklusif.

GRAPHICAL ABSTRACT

Keyword
breast feeding
control behavior
fathers
intention
trust

* Correspondence
Jl. Sholeh Iskandar KM 2, Bogor 16162, West Java, Indonesia
Email: adenasutioners@gmail.com
INTRODUCTION

According to the World Health Organization (WHO), exclusive breastfeeding is an effective strategy to mitigate child mortality and improve cognitive development, particularly in developing countries (Wallenborn et al., 2021). Furthermore, exclusive breastfeeding comprises the provision of only breast milk for the initial 6 months without introducing any drinks or food (Awang et al., 2023). After 6 months, this practice is still recommended along with the addition of other foods to meet the child's nutrition (Karimah & Nuraeni, 2023). Breast milk has been reported to possess several benefits, serving as a source of energy, enhancing immunity, providing balanced nutrition, and reducing infant illness. Several studies have also shown that it contains carbohydrates, proteins, vitamins, minerals, fats, water, and other nutrients. When assessed based on its content, comprising various important nutrients, (Mabele et al., 2022), breastfeeding has an association with reduced risk of certain diseases, such as ARI, pneumonia, asthma, diarrhea, diabetes, and obesity (Ummah et al., 2022).

Exclusive breastfeeding provides various benefits for mothers, including assistance in helping to overcome baby blues syndrome. New mothers are typically susceptible to baby blues syndrome, characterized by mood swings, such as sadness, fatigue, and anger (Budiati et al., 2022). However, the postpartum trauma tends to decrease with time and mothers acclimate to the practice of breastfeeding their infants (Chipojola et al., 2022). This practice also emerges as a protective factor against breast cancer, contributing to enhanced mental stability and health conditions (Bhattacharyya et al., 2023). Previous studies have also shown that is associated with the process of postpartum maternal weight loss and can also reduce the stress experienced by mothers. Breastfeeding is an alternative to a natural contraceptive by inhibiting the ovulation process to delay the fertile period (Nabi et al., 2023).

WHO reported that only 44% of infants aged 0 to 6 months received exclusive breastfeeding between 2015-2020 period (WHO, 2020). Meanwhile, Indonesia achieved a significant rate of 66.06% in 2020 (Kemenkes RI, 2022). However, data from the Indonesian Demographic and Health Survey (IDHS) from 2012 to 2017 show that the achievement rate is still below 60% nationally (Kemenkes RI, 2022). In 2020-2022, the value experienced a significant decline, indicating the importance of promoting exclusive breastfeeding. This is particularly important due to the benefits of breast milk obtained by babies for growth and development and maternal health (Karimah & Nuraeni, 2023). Despite efforts made by the government, the achievement rate is still below 80% nationally. Consequently, infants who are not exclusively breastfed have a very high risk of threats to their health (Duan et al., 2022).

The success or failure of exclusive breastfeeding is significantly dependent on the support system, including both external and internal factors (Scott et al., 2023). Several studies have established a correlation between its success or failure with social support systems from husbands, parents, friends, health workers, or cadres (Matare et al., 2019). A previous study stated that infants who do not receive exclusive breastfeeding tend to have a weaker immune system compared to others (Schnefke et al., 2023). Therefore, these infants are more susceptible to various diseases caused by infections in the body, including disorders, such as indigestion infections, ear infections, and URIs (Dagla et al., 2023).

Based on the development of the theory of planned behavior (TPB) regarding the practice of exclusive breastfeeding (EBF), it is posited that paternal factors and behavioral control have a significant impact (Ouyang & Nasrin,
Despite the extensive implementation of this theory in Indonesia, the prevailing focus has predominantly centered on the social support system and paternal characteristics, neglecting control behavior (Ichsan et al., 2022). According to previous studies, fathers also have an essential role in the implementation of exclusive breastfeeding for children (Lentina et al., 2021). This influence is exemplified through actions, such as providing support to the mother and helping with household tasks. The father's role in exclusive breastfeeding is equally important as the mother's (Gebremariam et al., 2021), significantly impacting the mother-father relationship and the well-being of the baby (Bulemela et al., 2019).

Karimah's study in Tasikmalaya City showed that father's support influenced exclusive breastfeeding, while parental and in-law support had no significant impact (Karimah & Nuraeni, 2023). Bulemela also examined fathers' knowledge and attitudes toward exclusive breastfeeding and obtained similar results (Bulemela et al., 2019). Awang in East Nusa Tengga only examined the relationship between age, education, employment, and father support with exclusive breastfeeding (Awang et al., 2023). Given the risks associated with the deficiency of exclusive breastfeeding, it becomes imperative to address this issue systematically. A comprehensive approach is needed to ensure the proper resolution of challenges and the attainment of national targets for exclusive breastfeeding. Therefore, this study aimed to examine the association of paternal control behavior factors with exclusive breastfeeding.

METHODS

This study was carried out using a cross-sectional method to determine the influence of paternal control behaviors on exclusive breastfeeding. The procedures were performed in the working area of the Situ Udik Health Center in July 2023. Furthermore, the area was selected due to its low level of exclusive breastfeeding achievement compared to other areas in Bogor Regency, namely 87% in 2022. Several locations were also assessed and Situ Udik Health Center was selected based on data available in the field. The sample population comprised 326 fathers who had babies aged 6 to 12 months. The respondents were selected with the random sampling technique, leading to a total of 77 respondents using the Slovin formula calculation. Data collection commenced from the initiation of research licensing, incorporating preliminary validity and reliability tests before the actual sampling process. The procedure comprised obtaining consent from respondents before collecting data, ensuring ethical considerations were met. Subsequently, the collected data underwent meticulous processing.

In this study, primary data were obtained directly in relation to several independent and dependent variables using questionnaires, which had been previously tested for validity and reliability. The variables examined in this study included knowledge (poor < 10.32 and good knowledge ≥ 10.32), attitude (negative < 26.44 and positive ≥ 26.44), breastfeeding father (not supporting < 19.49 and supporting ≥ 19.49), and value (poor < 12.4 and good ≥ 12.4). Other variables included trust (no trust < 17.1 and yes ≥ 17.1) and exclusive breastfeeding (not exclusive breastfeeding when infants aged 0-6 months were given drinks or other food and exclusive breastfeeding when not given drinks or additional food). The data obtained were then analyzed using the SPSS application univariately and bivariately with the chi-square test. The relationship between the independent and dependent variables was then assessed, with an α value of 0.05. Data were presented in tabular format as well as narrative explanations to provide a concrete
picture. This study was approved by the Health Research Ethics Commission of the STRADA Institute of Health Sciences Indonesia with reference No. 3846/KEPK/VI/2023.

RESULTS

According to Table 1, the majority of fathers were aged 20-35 years, accounting for 61% of the population compared to the least, namely 35 years with a percentage of 39%. Furthermore, most of the respondents had low education at 46.8%, compared to others with high education at 9.1%. The results also showed that most of them worked as private employees, accounting for 39% of the population, compared to those serving as civil servants with a percentage of 3.9%.

Based on Table 2, babies who did not get exclusive breastfeeding had fathers with less knowledge at 50% compared to those with good knowledge at 14.3%. The analysis revealed that a value of 0.001 was obtained, indicating that fathers with less knowledge had a relationship with exclusive breastfeeding. The majority of infants who did not get exclusive breastfeeding had fathers who had an unsupportive father at 40%, compared to those with supportive parents at 28.6%. The analysis showed a value of 0.339, indicating that there was no relationship between a supportive father and exclusive breastfeeding. Most of the toddlers who did not get exclusive breastfeeding had fathers who did not have trust, accounting for 72% of the population, compared to others with trust at 15.4%. A value of 0.000 was obtained, showing that there was a relationship between father's trust and exclusive breastfeeding. The toddlers who did not get exclusive breastfeeding mostly had fathers with poor intentions at 39.5%, compared to those with good intentions at 28.2%. A value of 0.341 was then obtained, indicating that there was no relationship between intention and exclusive breastfeeding.

DISCUSSION

Impact of Father's Knowledge on Exclusive Breastfeeding

Several studies recognized the relevance of fathers' understanding in encouraging mothers to breastfeed. In line with the study findings, fathers' knowledge influenced the im-
Implementation of exclusive breastfeeding. Although breastfeeding an infant was typically the duty of the mother, fathers’ knowledge also played a significant supportive role (Gebremariam et al., 2021). This was because adequate knowledge could provide support to their partners (Ouyang & Nasrin, 2021). While mothers were often influenced by the views of the adults who accompanied them on breastfeeding, the role of their husbands had a long-term nature. Based on these findings, it was assumed that fathers’ adequate knowledge of breastfeeding behavior played a role in enriching mothers’ knowledge and views on breastfeeding behavior (Walters et al., 2023).

Several studies (Khati & Lubis, 2023) had also shown that this factor had a significant impact on exclusive breastfeeding practices in the Siak Hulu Health Center service area. Good knowledge of the benefits of breastmilk, correct techniques, and an active role in supporting mothers could positively influence the success and continuity of exclusive breastfeeding (Ajike et al., 2020). Fathers’ knowledge of the rich nutrients in breast milk could help them understand the importance of these foods for infant growth and development. This could encourage them to support exclusive breastfeeding decisions (Mabele et al., 2022). With adequate knowledge, these individuals contributed to decision-making regarding infant care. This included understanding when and how to start complementary feeding after the first 6 months (Awang et al., 2023). Fathers who understood the importance of exclusive breastfeeding were more likely to provide emotional support in ensuring this practice was carried out effectively. Support from a partner could help reduce maternal stress and provide the necessary confidence in breastfeeding (Duan et al., 2022).

## Impact of Father’s Attitude on Exclusive Breastfeeding

Attitudes towards an action were derived from an understanding of the action. While the role of the father in assisting the mother and caring for the baby was of great significance, the father’s knowledge and views had an important impact (Schnefke et al., 2023). Attitude was a complex phenomenon, where a father’s positive attitude towards

<table>
<thead>
<tr>
<th>Variables</th>
<th>Not Exclusive Breastfeeding</th>
<th>Exclusive Breastfeeding</th>
<th>Total</th>
<th>P-Value</th>
<th>OR (CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Father’s knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less</td>
<td>21</td>
<td>50,0</td>
<td>21</td>
<td>50,0</td>
<td>42</td>
</tr>
<tr>
<td>Good</td>
<td>5</td>
<td>14,3</td>
<td>30</td>
<td>85,7</td>
<td>35</td>
</tr>
<tr>
<td>Father’s attitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negatif</td>
<td>16</td>
<td>53,3</td>
<td>14</td>
<td>46,7</td>
<td>30</td>
</tr>
<tr>
<td>Positif</td>
<td>10</td>
<td>21,3</td>
<td>37</td>
<td>78,7</td>
<td>47</td>
</tr>
<tr>
<td>Breastfeeding Father</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Supportive</td>
<td>14</td>
<td>40,0</td>
<td>21</td>
<td>60,0</td>
<td>35</td>
</tr>
<tr>
<td>Support</td>
<td>12</td>
<td>28,6</td>
<td>30</td>
<td>71,4</td>
<td>42</td>
</tr>
<tr>
<td>Father’s trust</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>18</td>
<td>72,0</td>
<td>7</td>
<td>28,0</td>
<td>25</td>
</tr>
<tr>
<td>Yes</td>
<td>8</td>
<td>15,4</td>
<td>44</td>
<td>84,6</td>
<td>52</td>
</tr>
<tr>
<td>Father’s intention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less</td>
<td>15</td>
<td>39,5</td>
<td>23</td>
<td>60,5</td>
<td>38</td>
</tr>
<tr>
<td>Good</td>
<td>11</td>
<td>28,2</td>
<td>28</td>
<td>71,8</td>
<td>39</td>
</tr>
</tbody>
</table>

Note: *=p<0,05; n = respondent; % = percentage; OR (CI)= odd ratio (confidence interval 95%)
breastfeeding was strongly influenced by an accurate understanding of various aspects, including the benefits, necessity, potential disadvantages of non-compliance, and appropriate strategies (Dagla et al., 2023). Furthermore, the paternal views of the partner could also shape subjective normative views (i.e. individuals' beliefs about how others significant to them view certain actions, such as family) regarding the practice (Merritt et al., 2019). Fathers were considered to be important key players in the family. Therefore, fathers' attitudes in support of breastfeeding had the ability to independently and significantly influence perceived subjective normative views (Sosseh et al., 2023).

The results of this study were in line with the findings of previous studies (Han et al., 2023), where attitude also had a significant influence in Central Taiwan. This was also supported by previous studies that have shown that more father engagement in the context of breastfeeding could make breastfeeding a more desirable infant feeding option, which could shape more positive attitudes towards the practice (Ouyang & Nasrin, 2021). Intervention measures that actively addressed men's increased exposure could be a changeable approach to reduce the feelings of embarrassment arising among couples when breastfeeding in public. Positive attitudes and support from fathers could create a comfortable and relaxed environment at home. This was an important factor in creating an optimal environment, as a tense or stressful atmosphere often affected milk production (Witten et al., 2020). A father's attitude had a major impact on the mother's breastfeeding experience and overall infant development (Ouyang & Nasrin, 2021). Active and emotional support could increase success and comfort during the practice (Mashayekh-Amiri et al., 2023). A father's attitude of support for the mother's decision was important to create a positive and no-pressure environment (Bulemela et al., 2019).

Impact of Breastfeeding Father on Exclusive Breastfeeding

The active engagement of fathers in the breastfeeding process was significant in ensuring that the mother's breastfeeding intention and duration were in line with the guidelines. Fathers could provide various forms of support to their partner (Gebremariam et al., 2021). This comprised sharing knowledge about the practice, helping mothers feel comfortable, providing support in household tasks and infant care, providing emotional support through appreciation and reward, and reducing demands that could interfere (Bulemela et al., 2019). Appropriate support from fathers could help mothers rest more, feel more comfortable, and focus more on breastfeeding their babies (Parker et al., 2023). This could have a positive impact on the overall duration and consistency of the practice. Fathers' adequate knowledge, positive attitudes, and participation in activities that support breastfeeding contributed positively to mothers' views (Ouyang & Nasrin, 2021).

Knowledge and attitudes regarding support performance were often driven by personal attitudes towards the practice. A previous study (Ballesta-Castillejos et al., 2020) identified that support was shaped by knowledge and attitudes and could influence the forms of support offered to wives/partners in decision-making, including practical physical and emotional support. Fathers who understood the importance of exclusive breastfeeding were more likely to be actively engaged in planning and providing support for the mother (Walters et al., 2023). These individuals could also assist in keeping the mother comfortable, providing rest periods, and helping with other household tasks. Fathers who understood the benefits of exclusive breastfeeding were more likely to be actively engaged in
infant care and feeding (Bulemela et al., 2019). This could reduce the burden on the mother and create a stronger bond between father and child (Nomaguchi & Milkie, 2020).

**The Impact of Fathers’ Beliefs on Exclusive Breastfeeding**

Subjective norms refer to an individual's perception of the beliefs and desires of people who were considered important to a particular behavior or activity (Chakona, 2020). This could be thought of as social pressure coming from the surrounding environment, such as peer groups or close individuals, to perform certain actions (Nomaguchi & Milkie, 2020). Furthermore, subjective norms played a role in shaping individual intentions towards certain behaviors. The views and advice given by others, such as spouses, parents, close friends, relatives, neighbors, coworkers, and medical professionals, including doctors and nurses, about infant feeding methods and methods had a significant impact on new mothers (Ouyang & Nasrin, 2021). Perspectives from the peer environment also shaped subjective norms for fathers, which in turn influenced their intentions to provide support in exclusive breastfeeding (Merritt et al., 2019). In particular, norms coming from close friends and family members had a strong influence in shaping fathers' breastfeeding beliefs (Carlin et al., 2019).

The findings of this study were consistent with previous studies (Tombeg et al., 2023) in Tana Toraja illustrates that beliefs could influence exclusive breastfeeding. The relationship between these variables was complex and important in the context of infant feeding (Carlin et al., 2019). Several studies had shown that beliefs influenced parents' choices and actions related to breastfeeding. Belief in the health benefits provided by breastmilk could be a key factor in deciding to exclusively breastfeed (Lestari et al., 2022). When there was a belief that breastmilk had important benefits for infant growth, development, and immunity, parents were more likely to encourage exclusive breastfeeding (Han et al., 2023). Beliefs were a complex phenomenon and were often influenced by a variety of factors, including culture, environment, and available information. To promote exclusive breastfeeding, an educational approach that included accurate information, psychosocial support and respect for cultural values was essential (Ichsan et al., 2022).

**Impact of Father's Intention on Exclusive Breastfeeding**

An individual's view of something, the perceived encouragement from the surrounding environment (subjective norm), and the perception of the level of difficulty or obstacles were the determining factors of intention to perform an action (Rachmawati et al., 2020). The Theory of Reasoned Action (TRA) considered that the intention to perform or not perform a certain action was the main indicator of the action to be taken. This intention was influenced by the individual's attitude towards the action and subjective norms, which together formed behavioral intentions (Ouyang & Nasrin, 2021). Social psychologists suggested that behavioral intentions comprised plans to attempt to perform or not perform certain actions. However, several studies had also highlighted the importance of perceived self-control in shaping an individual's intention to act (Rachmawati et al., 2020).

These findings were inconsistent with a previous study (Ajike et al., 2020) in Ogun, a State in Nigeria, where the intention of the father affected exclusive breastfeeding. Fathers' intentions strongly influenced the formation of attitudes and were also mediated by knowledge obtained from education or others (Ouyang & Nasrin, 2021). This indicated the more positive...
the individual's attitude, the stronger the encouragement from the surrounding environment, and the higher the confidence to overcome obstacles or difficulties in implementing exclusive breastfeeding (Schnefke et al., 2023), the greater the likelihood that a father's intention to support and encourage mothers in exclusive breastfeeding practices was transformed into concrete action (Matare et al., 2019).

Studies on exclusive breastfeeding, as approached through the Theory of Planned Behavior (TPB), comprised several control behaviors. These behaviors extended to fathers and included factors, such as education, experiences, values, income, and self-efficacy. Exploring these facets could provide insights into the specific control behaviors exhibited by fathers that could influence exclusive breastfeeding. Moreover, future reports could consider using a comprehensive methodology that combined quantitative and qualitative approaches. This integrated approach could enable a more in-depth examination of the multifaceted role fathers played in the context of exclusive breastfeeding. The limitations of this study were that the respondents were asked to recall the experience of providing exclusive breastfeeding when the child was aged from 0 to 6 months, leading to the creation of bias. In addition, data were only collected through interviews with fathers, and not mothers.

CONCLUSIONS
In conclusion, this study found that the control behavior of fathers could have an impact on exclusive breastfeeding. Furthermore, knowledge of fathers encouraged mothers to form attitudes and practices of exclusive breastfeeding for children. Along with attitude, it also encouraged mothers to engage in this practice. The father's belief that exclusive breastfeeding was rich in benefits for meeting the needs of the baby, could also encourage mothers to breastfeed exclusively due to knowledge and attitudes obtained.

To strengthen the role of fathers in supporting exclusive breastfeeding, it was necessary to provide health education or education about exclusive breastfeeding. This was expected to enhance the support provided by fathers to mothers, which was mediated by knowledge, attitudes, and beliefs. Studies interested in exploring the influence of fathers' control behavior on exclusive breastfeeding could consider using the Theory of Planned Behavior (TPB) as an analytical framework. This approach provided an overview of various facets related to fatherhood, such as educational background, economic status, previous experiences, and self-efficacy. Future studies could choose to adopt different theoretical perspectives to gain a comprehensive understanding of the factors affecting fathers' control behavior concerning exclusive breastfeeding.

ACKNOWLEDGEMENT
The author would like to express his gratitude to the community and local authorities who were willing to provide permission and access to carry out this research.

FUNDING
The author(s) reported there is no funding associated with the work featured in this article.

AUTHORS' CONTRIBUTIONS
Ade S. Nasution designed the study, formulated the concept, wrote and revised manuscript. Ida Nuraida wrote and reviewed the manuscript, and analyzed the data. Devia L. Putri wrote the manuscript and analyzed the data. Rezeki T. Raharsari analyzed the data and revised manuscript. Darmayanti Waluyo and Eman Rahim revised and approved the final manuscript.

AUTHORS' INFORMATION
Ade Saputra Nasution, SKM., M.Kes. is a a lecturer in Department of Public Health, Universitas Ibn Khaldun, Bogor, Indonesia. Ida Nuraida, S.ST., M.Kes., is an assistant professor in Department of Midwifery, Institut Kesehatan dan Bisnis Annisa, Bogor, Indonesia. Devia Lydia Putri, S.ST., MKM., is a lecturer in Department of Midwifery, Institut Kesehatan dan Bisnis Annisa, Bogor, Indonesia. Rezeki Tri Raharsari, S.Tr., MKM., Institut Kesehatan dan Bisnis Annisa is a lecturer in Department of Midwifery, Institut Kesehatan dan Bisnis Annisa, Bogor, Indonesia. Darmayanti Waluyo, SKM., M.Kes., is a lecturer in Department of Nutrition, STIKes Bakti Nusantara Gorontalo, Gorontalo, Indo-

AL-SIHAYH: THE PUBLIC HEALTH SCIENCE JOURNAL VOLUME 15, NOMOR 2, JULY-DECEMBER 2023
nesia. Eman Rahim, S.Pd., M.Pd is a lecturer in Department of Nutrition, STIKes Bakti Nusantara Gorontalo, Gorontalo, Indonesia.

COMPETING INTERESTS
The authors confirm that all of the text, figures, and tables in the submitted manuscript work are original work created by the authors and that there are no competing professional, financial, or personal interests from other parties.

REFERENCES


