

Factors Associated with Vitamin A Consumption in Postpartum Mothers in Lubuk Buaya Community Health Center, Padang City

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ABSTRACT

Vitamin A deficiency remains a significant public health issue impacting maternal and child health, particularly in developing countries. This study aimed to examine factors influencing vitamin A capsule consumption among postpartum mothers at Lubuk Buaya Community Health Center (Puskesmas), Padang City. A cross-sectional analytical survey was conducted on 57 postpartum mothers selected using purposive sampling. Data were collected using a valid and reliable questionnaire, and analyzed with chi-square tests at a 0.05 significance level. The study found that 56.1% of respondents did not consume vitamin A capsules. Education level and knowledge significantly influenced consumption behavior (education: $p=0.000$; knowledge: $p=0.003$), with mothers having higher education and better knowledge more likely to consume vitamin A. However, the role of health workers did not show a significant effect ($p=0.855$). These findings indicate that increasing education and improving health literacy should be prioritized in strategies to boost vitamin A consumption among postpartum mothers. Health interventions need to focus on nutrition education and active community involvement to ensure better health outcomes and meet national vitamin A supplementation goals.

Keywords: Vitamin A, Postpartum Mothers, Education, Knowledge, Health Workers



INTRODUCTION

Vitamin A is an important micronutrient that plays a role in maintaining vision, growth, reproduction, and the body's immune system. Vitamin A deficiency (VAD) has long been identified as a major cause of morbidity and mortality in mothers and children, especially in developing countries (Endy Bebasari, 2023). (The World Health Organization (WHO), 2019) reports that more than 190 million children under five worldwide are at risk of VAD, which results in increased susceptibility to infection, night blindness, and even permanent blindness. Postpartum mothers are among the vulnerable groups because the need for vitamin A increases after delivery to support the recovery of the body's condition and the quality of breast milk (ASI).

Postpartum vitamin A supplementation is often underreported, as it is not mandatory, especially compared to child vitamin A distribution, which has a robust reporting system. There is no national program or research evaluating the short- and long-term effects of postpartum vitamin A supplementation on maternal and infant morbidity and mortality in Indonesia, which could inform the continuation of postpartum vitamin A supplementation programs (UNICEF, 2023).

The Indonesian government has made preventive efforts by launching a vitamin A supplementation program for postpartum mothers since 1996. This supplementation is given through high-dose vitamin A capsules (200,000 IU) to postpartum mothers twice after delivery (Dona Martilova & Lely Indriany Saragih, 2025). This policy is expected to meet the vitamin A needs of infants aged 0–6 months through exclusive breastfeeding (Indriana, 2024). However, despite this long-running program, the coverage of vitamin A provision to postpartum mothers in several regions has still not reached the national target, with data from the 2018 Basic Health Research (Riskesdas) recording a coverage rate of only 80.4%, while the WHO target is 100% (Ministry of Health of the Republic of Indonesia, 2018). This indicates that there are challenges in program implementation that need to be evaluated and improved.

In particular, West Sumatra Province is also facing similar problems. According to the report (West Sumatra Provincial Health Office, 2017), the coverage of postpartum mothers who received vitamin A capsules was only 84%, lower than the national target. In Padang City, postpartum mothers who received vitamin A capsules in 2023 were 99.12%. Almost all Community Health Centers achieved 100% coverage except for Nanggalo Community Health Center (99.8%), Air Tawar Community Health Center (95.37%), and Ambacang Community Health Center (87.99%)(Dinas Kesehatan Kota Padang, 2024). This figure is far from the city average and the national target. This condition indicates a disparity in achievement between regions, which indicates the need to identify causal factors. The Lubuk Buaya Community Health Center's working area consists of four sub-districts: Libuk Buaya, Batang Kabuang Gantiang, Pasie Nan Tigo, and Parupuak Tabiang. Based on the survey, the sub-district with the lowest coverage was Pasie Nan Tigo, with 118 people (50.4%).

Several factors that may influence vitamin A consumption in postpartum mothers include education level, knowledge level, and the role of health workers. This can be seen from Previous research has shown that mothers with higher levels of education and better knowledge of nutrition tend to be more compliant with postpartum vitamin A consumption recommendations. Conversely,



mothers with lower education and limited knowledge often ignore these recommendations, even after vitamin A capsules have been given. Furthermore, the role of health workers in providing nutritional counseling and monitoring after vitamin A administration is also considered important, although several studies have shown varying results regarding their impact on postpartum mothers' consumption behavior (Contesa, 2024; Martina & Yuli, 2023). Mothers with good education and knowledge tend to be more compliant with health recommendations, while limited information and minimal follow-up from health workers can hinder program implementation. Furthermore, sociocultural factors such as community beliefs also have the potential to influence vitamin A consumption behavior. Based on this background, this study was conducted to analyze factors associated with vitamin A capsule consumption among postpartum mothers in the Lubuk Buaya Community Health Center (Puskesmas) working area. The focus of this study was three main variables: education level, knowledge level, and the role of health workers. The results are expected to form the basis for promotive and preventive interventions to increase vitamin A consumption among postpartum mothers and support the achievement of national nutrition program targets in Indonesia.

MET HODS

This study employed a cross-sectional analytical design. The research was conducted in Pasie Nan Tigo Village, within the working area of Lubuk Buaya Community Health Center (Puskesmas), Padang City.

The study population consisted of all postpartum mothers with infants aged 1–2 months who were registered at the Community Health Center during the study period (N = 139). A total of 57 respondents were included in the study. The sample was obtained using purposive sampling, based on predefined inclusion criteria and the availability of respondents during the data collection period.

The inclusion criteria were postpartum mothers aged 18–45 years, mothers who had given birth prior to the study period, and mothers recorded in the Public Health Center postpartum register, regardless of whether they had consumed vitamin A capsules. Mothers who were not reachable after repeated visits or declined participation were excluded.

To achieve the required sample size, active home visits were conducted using the postpartum mother register obtained from the Community Health Center. Data collection continued until 57 eligible postpartum mothers who met the inclusion criteria and provided informed consent were successfully recruited. Home visits were used as a data collection strategy because many postpartum mothers did not routinely return to health facilities after delivery, ensuring that the required number of respondents could be fulfilled and minimizing non-response bias.

Data were collected using a structured questionnaire that had been tested for validity and reliability (Cronbach's Alpha > 0.6). Prior to data collection, respondents received an explanation of the study objectives and provided informed consent. The dependent variable was vitamin A capsule consumption, while the independent variables included education level, knowledge level, and the



role of health workers. Data analysis consisted of univariate and bivariate analyses using the chi-square test with a significance level of $\alpha = 0.05$.

RESULTS

1. The Relationship Between Education Level and Vitamin A Consumption in Postpartum Mothers

This study used a chi-square statistical test to determine the significance of the relationship between two variables. The results showed that of the 57 respondents, 24 had basic education and 16 (66.7%) did not consume vitamin A, compared to 8 (33.3%) who did consume vitamin A. In the secondary education group, a similar pattern was observed, with 16 respondents (69.6%) not consuming vitamin A and 7 respondents (30.4%) consuming it. Meanwhile, in the higher education group, all respondents (100%) were recorded as consuming vitamin A, meaning no mothers with higher education were absent from vitamin A supplementation.

Based on the chi-square test results, the p-value was 0.000 (p-value <0.05), indicating a relationship between respondents' education and vitamin A consumption in postpartum women. This can be interpreted into categories with the following results:

Table 1. Relationship between Education Level and Vitamin A Consumption in Postpartum Mothers

Level of education	Vitamin A Consumption				Total	p-value
	Not consumed	Consumed				
a. Basic education	16	66.7 %	8	33.3 %	24	100 %
b. Secondary education	16	69.6%	7	30.4%	23	100 %
c. High education	0	0	10	100%	10	100 %
Total	32	56.1%	25	43.9%	57	100

2. The Relationship Between Knowledge Level and Vitamin A Consumption

The study results showed that In the group of mothers with low knowledge, the majority of respondents did not consume vitamin A, totaling 26 people (72.2%), while 10 people (27.8%) did. This is the opposite of the group of mothers with high knowledge, where only 6 people (28.6%) did not consume vitamin A and 15 people (71.4%) did.

Table 2. Relationship between Knowledge Level and Vitamin A Consumption in Postpartum Mothers

Level of Knowledge	Vitamin A Consumption				Total	p-value
	Not consumed	Consumed				
a. Low	26	72.2%	10	27.8%	36	100
b. High	6	28.6%	15	71.4%	21	100
Total	32	56.1%	25	43.9%	57	100



3. The Relationship Between the Role of Health Workers and Vitamin A Consumption in Postpartum Mothers

The tables above show that comparing the gestational age of 57 respondents, 27 respondents stated that health workers played no role, and 16 (59.3%) respondents did not consume vitamin A, compared to 11 (40.7%) respondents who did consume vitamin A. Bivariate analysis in this study used the analysis of the results of the chi-square statistical test, which concluded that the relationship between the two variables was insignificant. The chi-square test's p-value results = 0.855 (p-value > 0.05).

Table 3. Relationship between the Role of Health Workers and Vitamin A Consumption in Postpartum Mothers

Health Workers	Vitamin A Consumption				p-value	
	Not consumed	Consumed	Total			
a. Does not play a role	16 16	59.3% 53.3%	11 14	40.7% 46.7%	27 30	100 100
b. Playing a role						
Total	32	56.1%	25	43.9%	57	100

DISCUSSION

1. The Relationship Between Education Level and Vitamin A Consumption

The study results showed a significant relationship between postpartum mothers' education level and vitamin A capsule consumption ($p=0.000$). Mothers with primary education were more likely to not consume vitamin A than mothers with secondary and higher education. This suggests that the higher the education level, the more likely mothers are to understand the importance of postpartum vitamin A consumption. This condition can be caused by several factors, such as a high sense of independence in making health decisions, exposure to invalid information from social media, and the belief that vitamin A needs are already met thru daily food.

Previous research also found similar findings. A study conducted by (November, 2023) reported that the results of the statistical test obtained a p value of $0.003 \leq 0.05$, which means that there is a significant relationship between education and postpartum women in consuming vitamin A. Research by (Herzaladini et al., 2022) showed a significant relationship between education and postpartum mothers who consumed vitamin A capsules, statistically proven and the odds ratio (OR) value of 19,000 means that respondents with high education are 19,000 times more likely to consume vitamin A capsules compared to respondents with low education. However, these results align with previous research, which found that postpartum mothers with secondary and higher education were 4.8 times more likely to consume vitamin A capsules than mothers with primary education. Higher formal education increases mothers' understanding of the benefits of postpartum vitamin A supplementation and the risks of vitamin A deficiency to maternal and infant health. Education also



influences how mothers receive and interpret health information from medical professionals (Dona Martilova & Lely Indriany Saragih, 2025).

others with higher education were more likely to consume vitamin A, as they tend to have better health knowledge and are more receptive to medical advice. In contrast, mothers with lower education levels often lack awareness of the benefits of vitamin A, which leads to lower consumption. Previous studies support these findings, showing that mothers with higher education are more likely to comply with health recommendations (Besi & Oktarina, 2023; Herzaladini et al., 2022). However, even mothers with secondary education may face barriers such as work schedules that affect their adherence to health guidelines (Angraini et al., 2025). Mothers with basic education are less likely to understand the importance of vitamin A and may rely on family or community advice, which can lead to non-compliance (Martina & Yuli Zuhkrina, 2023). Therefore, improving health literacy, particularly for mothers with lower education, is crucial in increasing vitamin A consumption.

Education influences a person's health behavior. According to Notoatmodjo (2018), education is an important predisposing factor in the health behavior model because it plays a role in accelerating the acceptance and understanding of health information (Notoatmodjo, 2018). Highly educated mothers are more proactive in participating in postpartum supplementation programs and show a compliance rate of up to 92%. Meanwhile, mothers with low education rely more on the opinions of family or community leaders in determining their health behavior (Alamri et al., 2025).

In theory, this aligns with Notoatmodjo's (2023) health behavior model, which states that education is a key predisposing factor in behavioral change. Adequate education enables individuals to understand the benefits and risks of health interventions, including vitamin A consumption. Research in the Lubuk Buaya Community Health Center (Puskesmas) found that low levels of education make it more difficult for postpartum mothers to understand the benefits of vitamin A, leading them to ignore recommended consumption even when capsules are available.

2. Relationship between Knowledge Level and Vitamin A Consumption

Bivariate analysis showed a significant relationship between postpartum mothers' knowledge level and vitamin A consumption ($p=0.003$). Mothers with low knowledge were more likely to not consume vitamin A compared to those with high knowledge. Knowledge about the benefits, how to consume, and the consequences of vitamin A deficiency was shown to influence maternal behavior.

The results of this study are consistent with a study conducted by Lusiana (2020), which found Based on the results of chi square statistical tests with a meaningful limit of 95% (0.05) obtained a p -value of $0.03 < \text{sig } \alpha 0.05$, which means there is a relationship between the knowledge of respondents with an interest in consuming vitamin A in the Helvetia Medan Health Center. In line with research by Betty and Friends also showed a relationship between knowledge and the



provision of Vitamin A with a p-value of 0.03. Where good knowledge has a 1.7 times chance for mothers to provide Vitamin A compared to sufficient knowledge (Simanjuntak & Br Barus, 2023).

Postpartum mothers' knowledge of the benefits of vitamin A has been shown to be a highly influential variable. Mothers with good knowledge have a higher awareness of the importance of consuming vitamin A twice after giving birth to support breast milk quality and improve body immunity. This is supported by research (Ayu et al., 2024) based on the *Health Belief Model (HBM)*, which explains that knowledge not only shapes the perception of benefits (*perceived benefits*) but also reduces psychological barriers to taking action (*perceived barriers*). Knowledge shapes mothers' perceptions of health benefits and risks, which in turn determine behavior. In the context of this study, the low knowledge of postpartum mothers can be caused by limited access to health information, minimal counseling, and the lack of use of the KIA book as an information source. Understanding that vitamin A can improve breast milk quality and infant immunity is the main driver of consumption behavior.

According to (Besi & Oktarina, 2023), knowledge is acquired through experience and sensory input, such as through health education. Good knowledge is often associated with more consistent and lasting behaviors, especially regarding health. Lack of knowledge about the importance of vitamin A capsules can reduce mothers' willingness to consume them. Additionally, research from Lina Contesa found that low knowledge is often caused by a lack of active outreach from health workers and limited access to digital information, especially in rural areas (Lina Contesa, 2024). Simanjuntak & Barus's (2023) research also shows that well-informed mothers are 1.7 times more likely to give vitamin A to themselves or their babies compared to those with only sufficient knowledge.

Low knowledge leads postpartum mothers to not understand the importance of consuming vitamin A twice after delivery, causing them to consider supplementation not very important. Some mothers are also unaware that vitamin A plays a role in supporting body recovery, boosting immunity, and improving breast milk quality, so they don't see the urgency in consuming it. This condition aligns with the views of researcher, who stated that low health knowledge directly impacts the lack of preventive measures and health behaviors.

Therefore, strengthening digital literacy and distributing information through public health social media is considered effective in reaching young mothers. The researchers assume that low knowledge is reinforced by the local culture, which still lacks literacy and relies more on verbal information from health workers.

3. The Relationship between the Role of Health Workers and Vitamin A Consumption

The study results showed no significant relationship between the role of healthcare workers and vitamin A consumption ($p=0.855$). Although some respondents considered healthcare workers to be insignificant, this did not necessarily influence vitamin A consumption behavior. Some mothers continued to take the capsules because they were given with their postpartum medication, despite the lack of adequate explanation.



In the Lubuk Buaya PHC work area, vitamin A is often administered simultaneously with postpartum medication without adequate education, so mothers do not understand the importance of consuming vitamin A twice after childbirth. Additionally, a high workload means healthcare professionals cannot always provide optimal nutritional counselling, while mothers' low knowledge levels lead to the information not being well internalized. Not all mothers return for postpartum visits, so they don't receive follow-up education, and disparities in healthcare worker competency regarding vitamin A supplementation further weaken the effectiveness of the intervention. The dominance of family influence in health decision-making also makes healthcare professionals' advice less impactful. Thus, this insignificance indicates that the role of healthcare workers has not been optimal because it is influenced by a combination of systemic, individual, and cultural factors (Notoatmodjo, 2018; Contesa, 2024; Wondie et al., 2025).

This finding differs from a study by Martina & Yuli Zuhkrina (2023) , which found that the role of health workers influenced postpartum mothers' vitamin A consumption in the Indrapuri Community Health Center. However, research by Wondie et al. (2025) in Ethiopia showed that despite active health workers distributing vitamin A, vitamin A consumption remained low without increased maternal nutritional literacy.

The role of health workers is not only limited to providing vitamin A capsules, but also includes education about the importance of consuming vitamin A during the postpartum period. According to Setiawan et al. (2020), health workers must actively provide counseling and provide clear information about the benefits of vitamin A, as well as the correct method of consumption. Effective education can increase postpartum mothers' understanding and encourage them to consume vitamin A as recommended. In line with research (Angraini et al., 2025) , there is a relationship between the role of cadres and knowledge of vitamin A administration. Based on the results of the study, it was found that cadres do not regularly visit homes to discuss integrated health posts (Posyandu) and the provision of vitamin A. This results in mothers with babies/toddlers not receiving sufficient information about vitamin A administration.

According to Green's Model of Health Behavior, the role of health workers is a reinforcing factor that will only be effective if predisposing factors (knowledge, education) have been established (Notoatmodjo, 2018). Health workers who actively conduct *home visits* and provide direct education can increase vitamin A consumption by up to 85% in postpartum mothers in Aceh Besar. Meanwhile, (Wondie et al., 2025) in a meta-analysis in *Frontiers in Public Health* explained that health worker interventions that only focus on distribution without personal counseling are not effective enough to increase vitamin A supplementation coverage in Ethiopia and Indonesia.

The role of health workers is to facilitate communication between the community and healthcare providers, so that those in need can receive the treatment they need. Furthermore, health workers are the backbone of integrated health service post (Posyandu) development. Providing information to respondents regarding Posyandu programs and implementation is the responsibility of health workers during the Posyandu. This will encourage mothers to attend Posyandu, and the total number of visits by mothers of toddlers will reach the desired target.



Health workers play an optimal role when equipped with a digital monitoring system (for example, the *Posyandu Online application*) that records vitamin A consumption and provides automatic reminders to postpartum mothers. This demonstrates the need to modernize the healthcare approach to be more proactive and data-driven (Yurita Mailintina, 2025) .

Conceptually, the relationship between education, knowledge, and the role of health workers is mutually reinforcing in influencing vitamin A consumption behavior. Education forms the basis for knowledge formation, while knowledge strengthens mothers' beliefs and intentions to adopt healthy behaviors. Health workers act as a *reinforcing factor* in *Green's PRECEDE-PROCEED behavioral model* , which encourages the adoption of healthy behaviors through social support and ongoing motivation. Therefore, a single intervention such as capsule distribution is insufficient without being accompanied by increased nutritional literacy and family support. The success of a vitamin A supplementation program depends heavily on the synergy between education, communication, and equitable access to services at the community level.

This research also has important policy implications. Integration of postpartum maternal nutrition programs with *digital health record systems* is needed to monitor vitamin A consumption in real time. Community health centers (Puskesmas) can utilize simple applications such as *Posyandu Online* or *SiPandu Gizi* to detect postpartum mothers who have not received their vitamin A capsules and send automatic reminders. Furthermore, health cadres need to be trained to become community educators who can explain the benefits of vitamin A using simple and contextual language. This effort will help increase vitamin A consumption coverage towards the national target of 100% and support efforts to reduce maternal and infant morbidity and mortality in Indonesia.

Researchers believe that in the Lubuk Buaya area, some healthcare workers, especially those working in non-community health centers, still don't understand the obligation to provide vitamin A to postpartum mothers. This results in suboptimal education and monitoring, resulting in a lack of significant impact on maternal behavior.

CONCLUSIONS

This study concluded that education and knowledge factors have a significant relationship with vitamin A consumption behavior in postpartum mothers, where respondents with low education and limited knowledge tend not to consume vitamin A capsules. In contrast, the role of health workers did not show a significant influence on this behavior. These results emphasize that increasing the coverage of postpartum vitamin A consumption should focus on educational interventions through nutritional counseling, the provision of easy-to-understand information media, and the active involvement of health cadres in the community. Thus, it is hoped that postpartum mothers' awareness of the importance of vitamin A can increase, thereby supporting the achievement of national targets in efforts to reduce the risk of maternal and child morbidity and mortality.



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REFERENCE

Alamri, N. N., Kasim, V. N. A., & Mohamad, R. W. (2025). *Description of pregnant women's knowledge, attitudes, and behaviors regarding multiple micronutrient supplement (MMS) tablets in the working area of Botumoito Community Health Center, Boalemo Regency*. *Jurnal Keperawatan*, 8(02). <https://doi.org/10.46233/jk.v8i2.1394>

Angraini, W., Oktavianti, E., Febriawati, H., Husin, H., Sarkawi, S., & Agustinawati, Z. (2025). F Factors Related to Vitamin A Administration. *MAHESA : Malahayati Health Student Journal*, 5(5), 2254–2269. <https://doi.org/10.33024/mahesa.v5i5.16682>

Ayu, D. P., Fajar, N. A., Munadi, M. C., & Ananingsih, E. S. (2024). Analysis of Perception of Barriers Based on the Health Belief Model Theory with Exclusive Breastfeeding in Stunting Prevention. *Health Information : Jurnal Penelitian*, 16(1), e1365. <https://doi.org/10.36990/hijp.v16i1.1365>

Besi, A. P., & Oktarina, D. (2023). The Influence of Knowledge Level on Self-Medication for Diarrhea. *Jurnal Farmasi Abdurrahman*, 1(1), 23–27.

Contesa, L. (2024). Analysis of Postpartum Mother Factors Related to Compliance in Consuming Vitamin A in the Independent Practice of Midwife Andina Primitasari. *Al-Su'aibah Midwifery Journal*, 1(2), 52–61. <https://doi.org/10.69597/amj.v1i2.10>

Dinas Kesehatan Kota Padang. (2024). *Padang City Health Profile*.

Dinas Kesehatan Provinsi Sumatera Barat. (2017). Profile of the West Sumatra Health Service in 2017. *Germas*, 145. Retrieved from www.dinkes.sumbarprov.go.id

Dona Martilova, & Lely Indriany Saragih. (2025). Factors Affecting Vitamin A Consumption in Postpartum Mothers in the Pandau Jaya Community Health Center Work Area. *Al-Tamimi Kesmas: Jurnal Ilmu Kesehatan Masyarakat (Journal of Public Health Sciences)*, 13(2), 281–287. <https://doi.org/10.35328/kesmas.v13i2.2817>

Endy Bebasari, D. (2023). Nutrition and Food Science (Theory and Application). In *MEDIA SAINS INDONESIA*. Retrieved from <https://zlibrary-id.se/book/26086279/fae0cf>

Herzaladini, S., Sari, E. P., Hamid, S. A., & Chairunnah, C. (2022). Factors Related to Postpartum Mothers Consuming Vitamin A Capsules at the Pengandonan Community Health Center UPTD, Pengandonan District, OKU Regency. *Jurnal Ilmiah Universitas Batanghari Jambi*, 22(1), 84. <https://doi.org/10.33087/jiubj.v22i1.1701>

Indriana, N. (2024). Healthy with Vitamin A. *Kemenkes RI*, 1–60.

Kemenkes RI. (2018). *Indonesian Health Profile 2018*. Jakarta.

Martina, M., & Yuli, Z. (2023). The Influence of Maternal Knowledge and the Role of Health Workers on Vitamin A Consumption in Postpartum Mothers in the Working Area of the Indrapuri



Community Health Center, Aceh Besar, in 2022. *Sehat Rakyat: Jurnal Kesehatan Masyarakat*, 2(1), 141–147. <https://doi.org/10.54259/sehatrakyat.v2i1.1508>

Notoatmodjo, S. (2018). *Health Promotion and Behavioral Sciences*. Jakarta: Rineka Cipta.

November, Y. E. (2023). *Factors Influencing Post Partum Mothers In Consuming Vitamin A at Mekarsari District Health Center Barito Kuala*. 14(02), 850–854.

Simanjuntak, B., & Barus, B. (2023). The Relationship Between Knowledge and Mother's Visits with Vitamin A Consumption in Postpartum Mothers in the Working Area of the Aek Parombunan Community Health Center, Sibolga City in 2023. *Jurnal Riset Ilmu Kesehatan Umum Dan Farmasi (JRIKUF)*, 1(4), 58–64. <https://doi.org/10.57213/jrikuf.v1i4.102>

UNICEF. (2023). Maternal Nutrition in Indonesia: Landscape Analysis and Recommendations. In *UNICEF Indonesia*. Retrieved from https://www.unicef.org/indonesia/media/21766/file/Gizi_Ibu_di_Indonesia - Analisis_Lanskap_dan_Rekomendasi.pdf.pdf

Wondie, W. T., Zemariam, A. B., Gedefaw, G. D., Lakew, G., Getachew, E., Mengistie, B. A., ... Mekonnen, G. B. (2025). Vitamin A supplementation coverage and its associated factors among children 6–59 months of age in Ethiopia: a systematic review and meta-analysis. *Frontiers in Public Health*, 13(April), 1–16. <https://doi.org/10.3389/fpubh.2025.1496931>

World Health Organization (WHO). (2019). *Global prevalence of vitamin A deficiency* (Vol. 17).

Yurita Mailintina, D. (2025). Women's Health and Family Planning. In *PT Sada Kurnia Pustaka*.