

DETERMINANT OF NEONATAL VISIT COVERAGE RATE IN SERDANG BEDAGAI REGENCY NORTH SUMATRA INDONESIA

By Novita Br Ginting Munthe



DETERMINANT OF NEONATAL VISIT COVERAGE RATE IN SERDANG BEDAGAI REGENCY NORTH SUMATRA INDONESIA

Novita Br Ginting Munthe¹, Rizanda Machmud^{2*}, Rima Semiarty³,
Joserizal Serud², Adang Bachtiar⁵, Finny Fitry Yani⁶, Denas Symond⁷, Nelwat⁵

^{1,2,3}Department of Public Health, Faculty of Medicine, Universitas Andalas, Limau Manis, Padang, West Sumatera-25163, Indonesia.

⁴Sub Division of Maternal-Fetal Medicine, Obstetrics and Gynecology Department, Faculty of Medicine, Universitas Andalas, Dr. M. Djamil Central General Hospital Padang

⁵Department of Public Health, Faculty of Public Health, Universitas Indonesia, Depok, West Java-16424, Indonesia.

⁶Department of Child Health, Faculty of Medicine, Universitas Andalas/Dr. M. Djamil General Hospital, Padang, West Sumatera-25163, Indonesia

⁷Department of Nutrition, Faculty of Public Health, Universitas Andalas, Limau Manis, Padang, West Sumatera-25163, Indonesia.

⁸Department of Nursing Science, Faculty of Nursing, Universitas Andalas, Limau Manis, Padang, West Sumatera-25163, Indonesia.

Correspondence Author: rizandamachmud@med.unand.ac.id, 08126623467

ARTICLE INFO

Article History:

Received : October 3, 2024

Accepted : November 5, 2024

Published: November 10, 2024

DOI:

<https://doi.org/10.26553/jikm.2024.15.3.371-370>

Available online at

<http://ejournal.fkm.unsri.ac.id/index.php/jikm>

ABSTRACT

Neonatal mortality is a leading cause of infant deaths, particularly in developing countries. In Serdang Bedagai Regency, the coverage of neonatal visits remains low, contributing to the high neonatal mortality rate and causing economic losses. This study aims to identify factors related to the neonatal visit coverage rate in Serdang Bedagai Regency, North Sumatra, Indonesia. This study used a cross-sectional design with multivariate analysis. Data were collected from 200 mothers with babies aged 0-28 days in five health centers in Serdang Bedagai Regency. The variables analyzed include age, education, economic status, knowledge, maternal attitudes, culture, family support, midwife attitudes, access to health facilities, and service quality. The data were analyzed using logistic regression. The results showed that the variables consistently and significantly affecting the increase in neonatal visit coverage were maternal education, knowledge about neonatal visits, local culture, husband/family support, and the quality of visit services. Factors that significantly contributed to increasing coverage of neonatal visits were maternal education (p-value = 0.004, OR = 14.285), maternal knowledge (p-value = 0.000, OR = 75.920), local culture (p-value = 0.000, OR = 57.105), husband/family support (p-value = 0.000, OR = 77.763), and service quality (p-value = 0.000, OR = 47.474). These factors have a major influence in supporting the success of the neonatal visit program, with maternal knowledge and family support being the most dominant factors. Efforts to increase coverage should involve educating mothers, involving families, and enhancing services while considering local wisdom.

Keywords: Neonatal visits, maternal education, knowledge, culture, service quality

Introduction

Neonatal mortality remains a significant health concern globally, particularly in developing countries. The first 28 days of a newborn's life are critical, as infants are highly vulnerable to health complications that, if undetected or untreated, can result in death.¹ The WHO estimates that 75% of neonatal mortality occurs during the neonatal period, making neonatal healthcare quality improvement crucial. The 2022 North Sumatra Province Health Profile recorded the neonatal mortality rate at 2.3 per 1000 live births.²³ Meanwhile, 2023 Serdang Bedagai District Health Profile data shows the neonatal mortality rate is 2.8 per 1000 live births.²⁴ In Serdang Bedagai District, the primary causes of neonatal mortality include Low Birth Weight⁹ and Prematurity (11 cases), Asphyxia (6 cases), Congenital Abnormalities (1 case), and Other Causes (8 cases).²

Neonatal who do not undergo neonatal monitoring are at higher risk of undetected health issues such as infections, asphyxia, and other complications that can lead to death. In Indonesia, for example, high neonatal mortality rates are largely due to low coverage of neonatal visits, compounded by limited maternal awareness, lack of family support, and insufficient healthcare workers in remote areas. The long-term consequences of this situation are extensive, impacting economic, social, and health domains. Economically, the rising neonatal mortality and morbidity rates add to the financial burden of long-term care for families and the healthcare system.⁴ Socially, high mortality rates affect family well-being, cause psychological stress, and reduce parental productivity, as parents must care for children with preventable complications. From a health perspective, infants who do not receive neonatal visits are more vulnerable to long-term health problems, including recurrent infections and developmental delays, which may affect their quality of life into adulthood.⁷ Thus, low neonatal visit coverage is not only a short-term health issue but also impedes the development of a high-quality human resource base and has widespread impacts on society and the economy overall.^{3,4}

Neonatal visits are an important intervention in reducing neonatal mortality because they allow health workers to assess the growth of newborns and detect potential health problems early.⁵ This examination is crucial to ensure immediate intervention if indications of health problems are found. Unfortunately, coverage of neonatal visits in Indonesia, including in Serdang Bedagai Regency, is still low.¹ Many mothers do not understand the importance of this examination or face various obstacles, such as difficult access to health facilities, lack of family support, and suboptimal service quality.^{6,7}

Various social, economic and cultural factors influence a mother's decision to have a neonatal visit. Educational factors, economic status, knowledge, and family support play a significant role in shaping the health behavior of mothers and babies.¹⁰ Mothers with higher education and adequate family support tend to better understand the importance of neonatal examinations. On the other hand, mothers with limited knowledge or not supported by the family

are at risk of not having regular visits, which can increase the baby's vulnerability to health problems. In addition, cultural norms are also an important factor influencing maternal behavior regarding neonatal visits.⁸ Certain traditions or beliefs may hinder the utilization of health services during the neonatal period. Another obstacle is the accessibility of health services in remote areas, which are often difficult to reach due to lack of infrastructure.⁹

Suboptimal coverage of neonatal visits indicates serious gaps in the health system that can have fatal consequences. If not treated immediately, this can increase the mortality rate of neonatal significantly, which is certainly very worrying. Without better efforts to increase coverage of neonatal visits, many babies will remain at high risk, especially in remote areas that face various barriers such as difficult access to health facilities, lack of maternal knowledge, and minimal family support.¹⁰

This study aims to analyze the factors influencing the low coverage of neonatal visits in Serdang Bedagai District, to provide solutions for improving maternal awareness, access to healthcare services, and serving as a basis for effective policies to reduce neonatal mortality.^{11, 12}

Method

This research employed quantitative methods with observational analysis using a cross-sectional research design. The population in the study were mothers who had neonates (babies aged 0-28 days) in Serdang Bedagai Regency. The sample size is 200 mothers who have newborns and live in the sub-districts of Dolok Merawan, Tebing Syahbandar, Kotarih, Naga Kesiangan, and Pon Village, taking into account that the coverage rate for neonatal visits in these sub-districts is the August 2023. The sample size was estimated using the Lemeshow formula to determine the proportion and population of the study. In a preliminary study, the prevalence of neonatal mortality rate in Serdang Bedagai Regency was reported to be 82%, taking into account ($Z = 1.96$ for $\alpha = 0.05$ and error = 10%), the calculation results obtained from 200 samples in this study.²

$$n = \frac{\{Z1-\alpha/2 \sqrt{2 \cdot P2(1-P2)} + Z1-\beta \sqrt{P1(1-P1) + P2(1-P2)}\}^2}{(P1-P2)^2}$$

$$n = \frac{\{1,96 \sqrt{2 \cdot 0,82 \times 0,18} + 0,842 \sqrt{0,901 \times 0,099 + 0,82 \times 0,18}\}^2}{(0,901-0,82)^2} = 200$$

The respondents criteria were mothers who had neonates aged 0-28 days and lived in Dolok Merawan, Tebing Syahbandar, Kotarih, Naga Kesiangan, and Pon Villages in Serdang Bedagai Regency. Meanwhile, exclusion criteria include mothers who have neonatal complications, mothers who have impaired communication and cognitive function, and mothers who do not agree to participate in the study.

The research was carried out as follows: 1) Developing a questionnaire designed by the researcher after reviewing relevant literature, and 2) Validating the questionnaire in the early stages,

where face validity was conducted to ensure that the questions could be easily understood. The validity and reliability tests were conducted on 30 respondents. Based on the validity test, all items showed a correlation coefficient greater than the table correlation value (0.361), and the reliability test yielded a Cronbach's Alpha value greater than 0.6. Data was collected using a two-part questionnaire. The first part included questions/statements about age, education, economic status, knowledge, attitudes, culture, husband/family support, access to healthcare services, midwife attitudes, service delivery, and the quality of neonatal visits. The second part measured compliance with neonatal visits.

The variables in this study were measured using Guttman and Likert scales. Maternal age was categorized as "at risk" if <20 years or >35 years and "not at risk" if between 20–35 years. Education was classified as "low" if the mother had not completed high school and "high" if she had a diploma or higher degree. Economic status was assessed based on income, categorized as "not prosperous" if below the regional minimum wage and "prosperous" if equal to or above the regional minimum wage. Knowledge was measured using a 10-statement questionnaire and categorized as "good" if the score was $\geq 50\%$. Maternal attitudes and cultural factors were assessed using Likert scales and categorized as "positive" if the score was $\geq 50\%$. Family support was evaluated through 23 statements, categorized as "supportive" if the score was $\geq 50\%$. Access to healthcare facilities was categorized as "near" if the score was $>50\%$. At the same time, the quality and coverage of neonatal visit services were assessed through questionnaires and observations, categorized as "up to standard" and "compliant" if the score was $\geq 50\%$. Midwife attitudes were also measured using a Guttman scale and categorized as "positive" if the score was $>50\%$.

The Ethics Committee of the Faculty of Medicine, Andalas University approved this study with Approval Letter No. 44/UN.16.2/KEP-FK/2023. The researchers obtained verbal and written consent from all respondents before distributing the questionnaires. The collected data was carefully managed to maintain confidentiality and accuracy, and all research procedures were carried out following applicable ethical guidelines.

Data was processed using Microsoft Excel and the SPSS version 24 program. Descriptive statistics were used to describe the characteristics of respondents. The chi-square test is used to assess the relationship between the independent variable and the dependent variable. Multivariate analysis uses logistic regression to identify variables that significantly influence increasing coverage of neonatal visits. The significance level was set at a value of less than 0.05.

Results

The following are the results of univariate analysis that serve to describe the distribution of the variables in this study, which can be seen in table 1.

Table 1. Respondents Characteristic and Factor of Neonatal Visit Coverage in Serdang Bedagai

| Variable Category | Frequency (n=200) | Percentage (%) |
|--|-------------------|----------------|
| Age | | |
| Risk | 105 | 52.5 |
| No Risk | 95 | 47.5 |
| Education | | |
| Low | 108 | 54.0 |
| High | 92 | 46.0 |
| Economic Status | | |
| Prosperous | 108 | 54.0 |
| not prosperous | 92 | 46.0 |
| Knowledge | | |
| Less | 73 | 36.5 |
| Good | 127 | 63.5 |
| Attitude | | |
| Negative | 102 | 51.0 |
| Positive | 98 | 49.0 |
| Culture | | |
| Negative | 105 | 52.5 |
| Positive | 95 | 47.5 |
| Husband's support /family | | |
| Not very support | 102 | 51.0 |
| Support | 98 | 49.0 |
| Access to Health Service Facilities | | |
| Far | 107 | 53.5 |
| Near | 93 | 46.5 |
| Midwife's Attitude | | |
| Negative | 96 | 48.0 |
| Positive | 104 | 52.0 |
| Visiting Services | | |
| Limited | 108 | 54.0 |
| Unlimited | 92 | 46.0 |
| Visiting Quality | | |
| Not accordance | 79 | 39.5 |
| in accordance | 121 | 60.5 |
| Neonatal visit | | |
| Obedient | 104 | 52 |
| Not Obey | 96 | 48 |

The table 1 analysis highlights several key factors influencing neonatal health service utilization. A majority of mothers fall within the risk age category (52.5%), with low education levels (54%) and a slight economic advantage for those in prosperous households (54%). Good knowledge about neonatal health is evident in 63.5% of respondents, suggesting a positive influence on service use. However, attitudes remain mixed, as 51% hold negative views, and cultural barriers persist, with 52.5% influenced by negative cultural norms. Family or husband support is limited for 51% of mothers, potentially impacting motivation to seek care. Access to facilities poses a challenge, with 53.5% facing distance issues, though midwives' positive attitudes (52%) could improve service engagement. Visiting services are often limited (54%), but the quality of those visits is generally good (60.5%), fostering trust. In summary, improving neonatal visit coverage will require attention to education, family support, accessibility, and service quality to

encourage greater use of neonatal health services. The majority of respondents (52%) are compliant with neonatal visits, while 48% are not

Table 2. Factors Related to Compliance with Neonatal Visits

| Variable Category | Neonatal Visit | | | | Total | | p-value | Odds Ratio (OR) | CI 95% | |
|-------------------------------------|----------------|------|------|------|-------|-----|---------|-----------------|--------|---------|
| | Not obey | | Obey | | N | % | | | Lower | Upper |
| | N | % | n | % | | | | | | |
| Age | | | | | | | | | | |
| Risky | 64 | 61 | 41 | 39 | 105 | 100 | 0.012 | 2.146 | 1.219 | 3.778 |
| No Risk | 40 | 42.1 | 55 | 57.9 | 95 | 100 | | | | |
| Education | | | | | | | | | | |
| Low | 78 | 72.2 | 30 | 27.8 | 108 | 100 | 0.000 | 6.600 | 3.554 | 12.258 |
| High | 26 | 28.3 | 66 | 71.7 | 92 | 100 | | | | |
| Economic Status | | | | | | | | | | |
| Not Prosperous | 62 | 57.4 | 46 | 42.6 | 108 | 100 | 0.129 | 1.605 | 0.916 | 2.809 |
| Prosperous | 42 | 45.7 | 50 | 54.3 | 92 | 100 | | | | |
| Knowledge | | | | | | | | | | |
| Not Enough | 68 | 93.2 | 5 | 6.8 | 73 | 100 | 0.000 | 34.378 | 12.815 | 92.220 |
| Good | 36 | 28.3 | 91 | 71.7 | 127 | 100 | | | | |
| Attitude | | | | | | | | | | |
| Negative | 81 | 79.4 | 21 | 20.6 | 102 | 100 | 0.000 | 12.578 | 6.438 | 24.574 |
| Positive | 23 | 23.5 | 75 | 76.5 | 98 | 100 | | | | |
| Culture | | | | | | | | | | |
| Negative | 91 | 86.7 | 14 | 13.3 | 105 | 100 | 0.000 | 41.000 | 18.207 | 92.326 |
| Positive | 13 | 13.7 | 82 | 86.3 | 95 | 100 | | | | |
| Husband's Support /Family | | | | | | | | | | |
| Not Very Supportive | 73 | 71.6 | 29 | 28.4 | 102 | 100 | 0.000 | 5.440 | 2.970 | 9.966 |
| Support | 31 | 31.6 | 67 | 68.4 | 98 | 100 | | | | |
| Access To Service Facilities | | | | | | | | | | |
| Far | 80 | 74.8 | 27 | 25.2 | 107 | 100 | 0.000 | 8.519 | 4.504 | 16.110 |
| Near | 24 | 25.8 | 69 | 74.2 | 93 | 100 | | | | |
| Midwife's Attitude | | | | | | | | | | |
| Negative | 58 | 60.4 | 38 | 39.6 | 96 | 100 | 0.032 | 1.924 | 1.096 | 3.380 |
| Positive | 46 | 44.2 | 58 | 55.8 | 104 | 100 | | | | |
| Visiting Services | | | | | | | | | | |
| Limited | 66 | 61.1 | 42 | 38.9 | 108 | 100 | 0.008 | 2.233 | 1.266 | 3.938 |
| Unlimited | 38 | 41.3 | 54 | 58.7 | 92 | 100 | | | | |
| Visiting Quality | | | | | | | | | | |
| Accordance | 74 | 93.7 | 5 | 6.3 | 79 | 100 | 0.000 | 44.893 | 16.594 | 121.451 |
| Not Accordance | 30 | 24.8 | 91 | 75.2 | 121 | 100 | | | | |

Table 2 showed that most variables had a significant influence on the frequency of neonatal visits. Maternal age, education, knowledge, attitude, culture, family support, access to health facilities, midwife attitude, visit service, and visit quality were statistically significant with a p-value below 0.05. This means that these factors are important components in encouraging families to conduct neonatal visits. Parental education and knowledge about the importance of neonatal visits were significant in increasing the number of visits, as were positive attitudes from mothers, families, and midwives. Family support and a supportive culture are also strong drivers for the frequency of these visits. In addition, easy access to health facilities and good quality of care during neonatal visits were shown to play an important role in increasing family participation in visits.

However, economic status did not show a statistically significant effect on the frequency of neonatal visits, but was still considered in the multivariate analysis where the test p-value was <0.25.

In this study, multivariate analysis helps us identify the most dominant factors affecting neonatal visit coverage by considering the effect of each independent variable while controlling for all other variables, as shown in Table 3.

Table 3. Multivariate Modelling Analysis Factors Influencing the Improvement of Neonatal Visit Coverage Rate

| Variabel | Modelling | | |
|------------------------|-----------|------|---------|
| | B | Sig | Exp (B) |
| Education | 2.659 | .004 | 14.285 |
| Knowledge | 4.330 | .000 | 75.920 |
| Culture | 4.045 | .000 | 57.105 |
| Husband/family support | 4.354 | .000 | 77.763 |
| Quality of visit | 3.860 | .000 | 44.74 |

Table 3 shows that the education variable indicates that mothers with higher education levels are 14.285 times more likely to attend neonatal visits compared to mothers with lower education levels. This suggests that education plays an important role in increasing mothers' awareness of the benefits of neonatal visits. Additionally, knowledge is a very strong factor, where mothers with good knowledge are 75.920 times more likely to improve neonatal visit attendance.

Culture also has a significant influence, with a 57.105 times higher likelihood of increased neonatal visits in communities with cultural practices that support health. This emphasizes that local wisdom that promotes health is crucial in encouraging positive behaviors. Support from husbands or families is the most influential variable, increasing the likelihood by 77.763 times. This support includes emotional motivation, logistical assistance, and facilities that enable mothers to attend neonatal visits regularly. Finally, the quality of healthcare services also plays an important role, with an increased likelihood of 47.474 times.

Discussion

Education has been proven to be one of the most important factors in determining the frequency of neonatal visits. The OR value for the education variable is 14.285, indicating that mothers with higher education levels are more likely to attend neonatal visits. This aligns with the theory that individuals with better education typically have a deeper understanding of the importance of health and child care and are better able to access information about healthcare services. Interventions focusing on improving maternal education, particularly health education, can have a significant impact on increasing neonatal visit coverage.^{13,14}

Culture also has a highly significant influence in this study, as evidenced by the OR value of 57.105. This indicates that cultural norms and practices within the community play a crucial role in decision-making regarding neonatal visits. In many communities, cultural beliefs and values can

influence health behaviors, including the willingness to access healthcare services. A culture that supports child health will encourage families to make more frequent neonatal visits. Therefore, interventions that are sensitive to local culture, as well as involving traditional or community leaders, are essential to improve neonatal visit coverage.¹⁵

Support from husbands and families proved to be highly significant in the modeling. The high OR value (77.763) indicates that family support, particularly from husbands, plays an essential role in increasing the frequency of neonatal visits. Family support can take the form of emotional, logistical, or financial encouragement, all of which are crucial to ensuring that mothers can access healthcare services for their babies. Intervention programs targeting increased husband involvement in maternal and child healthcare can yield significant results in improving neonatal visit rates.¹⁶

The quality of care during neonatal visits showed a highly significant influence in all models. The OR value of 47.474 indicates that the quality of care received during neonatal visits greatly affects families' decisions to make subsequent visits. This highlights the importance of health services that are friendly, effective, and responsive to the needs of mothers and babies. To increase the coverage of neonatal visits, improvements in the quality of healthcare services are needed, including enhancing the competence of midwives, providing better facilities, and offering more family-centered services.^{7,17}

Age appears to have little impact on neonatal visits and may not always be a primary determinant in decision-making. However, in policy interventions, it remains important to focus on specific age groups, such as adolescent mothers or older mothers, who may require additional support to ensure they can access healthcare services optimally.^{18, 7} Economic status does not statistically have a significant impact on neonatal visits. While there is a general assumption that economic status greatly influences access to healthcare services, these findings suggest that other factors, such as education, knowledge, and family support, may have a greater influence. This also indicates that access to neonatal healthcare services in the study area may be fairly equitable, making economic status not a major barrier.^{19, 20}

Maternal or family attitudes towards health and neonatal visits were also not significant in most models, despite positive attitudes theoretically being important in motivating health behaviour. These results indicate that while favourable attitudes remain relevant, this variable may not be strong enough on its own to influence the frequency of neonatal visits if not supported by other factors such as knowledge, culture, and family support.^{21, 22} Access to health facilities was not significant in all models, indicating that the availability of health facilities may not be a major barrier in this study area. This could mean that health facilities in the area are quite accessible to most families, so access is not a major determinant of the frequency of neonatal visits.²³

From this discussion, it appears that the factors that are highly significant in influencing the frequency of neonatal visits are education, knowledge, culture, family support, and quality of visits. Interventions that focus on improving maternal education, more effective health counseling, promotion of cultural norms that favor child health, increased family support, and improved quality of health services will be instrumental in increasing neonatal visit coverage.⁵ In contrast, age, economic status, attitudes, and access to health facilities were not shown to have a consistently significant effect, although they remain relevant in the broader context of health policy.^{24,25}

This study has several limitations, such as the limited scope of the study area, which was confined to a few health centers in Serdang Bedagai Regency, making the findings potentially ungeneralizable. Additionally, the use of self-reported data poses the risk of information bias. Furthermore, external factors such as local policies and healthcare infrastructure were not thoroughly examined. However, the findings of this study have significant implications, including the need for education- and knowledge-based interventions to enhance maternal awareness, strengthening family support, particularly from husbands, culturally sensitive approaches involving community leaders, and improving the quality of healthcare services by ensuring family-friendly facilities and adequate competence of medical personnel. These findings can serve as a foundation for local governments in designing evidence-based policies to sustainably increase neonatal visit coverage.

14

Conclusion

Based on the results of this study, it can be concluded that the factors that have the most influence on increasing neonatal visit coverage rates are education, knowledge, culture, family support, and quality of health services. Health interventions that focus on improving maternal education and knowledge, engaging communities in promoting cultural norms that support neonatal health, and improving the quality of health services can significantly increase neonatal visit coverage. Although variables such as age, economic status, attitudes, and access to health facilities are also relevant, their influence is not as great as the other factors mentioned. Holistic and comprehensive efforts are needed to improve neonatal visit coverage and ultimately reduce neonatal morbidity and mortality.

12

Acknowledgement

I would like to express my sincere appreciation to all parties who have contributed to the process of compiling this research, especially to the Foundation Advisor, Chairperson of the Lubuk Pakam Medistra Foundation, Chancellor of the Lubuk Pakam Medistra Lubuk Pakam Health Institute, and all respondents who participated in this research.

Funding:

This research was funded by the Chairman of the Medistra Foundation, Lubuk Pakam, North Sumatra, Indonesia.

Conflict of Interest:

No conflict interest

Reference

1. Wallengren E, Guthold R, Newby H, Moller AB, Marsh AD, Fagan L, et al. Relevance of the Sustainable Development Goals (SDGs) to Adolescent Health Measurement: A Systematic Mapping of the SDG Framework and Global Adolescent Health Indicators. *Journal of Adolescent Health* [Internet]. 2024 Jun 1 [cited 2024 Dec 16];74(6):S47–55. Available from: <https://doi.org/10.1016/j.jadohealth.2024.01.004>
2. Profil Kesehatan Kabupaten Serdang Bedagai. 2020 Nov 28;1–151. Available from: https://dinkes.serdangbedagaikab.go.id/wp-content/uploads/2022/08/Profil-kes.Kab_-Serdang-Bedagai-Tahun-2020.pdf
3. Labrie NHM, Straver P, van Kempen AAMW, van Veenendaal NR. Communication at work: A survey to explore the relationships between healthcare providers' communication competence and professional quality of life in neonatal care. *PEC Innovation* [Internet]. 2024 Dec [cited 2024 Feb 16];5:3–10. Available from: <https://doi.org/10.1016/j.pecinn.2024.100341>
4. Abera HG. The Role of Education in Achieving the Sustainable Development Goals (SDGs): A Global Evidence Based Research Article. *International Journal of Social Science and Education Research Studies* [Internet]. 2023 Jan 12 [cited 2023 Dec 28];03(01 Januari):67–81. Available from: <https://doi.org/10.55677/ijssers/V03I1Y2023-09>
5. Maria RD, Fellina M, Prima S, Bukittinggi N. Gambaran Pengetahuan Ibu Yang Mempunyai Bayi Usia 1-7 Hari Tentang Kunjungan Neonatus Di Puskesmas Padan Kandi Kabupaten 50 Kota [Internet]. Vol. 5, *Jurnal Kesehatan STIKes Prima Nusantara Bukittinggi*. Bukit Tinggi; 2014 Jul [cited 2024 Dec 16]. Available from: <https://doi.org/10.35730/jk.v5i1.212>
6. Damerow SM, da Goia Mendes Lopes H, Russo G, Skovdal M, Sørensen JB, Fisker AB. Barriers and facilitators to the utilization of facility births during a national health system strengthening initiative: A mixed-methods assessment from rural Guinea-Bissau. *SSM - Health Systems* [Internet]. 2024 Dec [cited 2024 Dec 16];3:1–13. Available from: <https://doi.org/10.1016/j.ssmhs.2024.100015>
7. You W. The nursing-midwifery workforce size significantly influences the reduction of neonatal mortality rate. *Journal of Neonatal Nursing* [Internet]. 2024 Jul [cited 2024 Oct 10];30(6):789–97. Available from: <https://doi.org/10.1016/j.jnn.2024.07.006>

8. Nurhayati I, Wulan RP, Kebidanan S, Madani Y. Faktor Yang Mempengaruhi Ibu Nifas Dalam Melakukan Kunjungan Neonatal. *Jurnal Kesehatan Madani Medika (JKMM)* [Internet]. 2019 May 9 [cited 2024 Dec 16];9(1):21–30. Available from: <https://doi.org/10.36569/jmm.v9i1.26>
9. Direktorat Kesehatan Keluarga. Laporan Kinerja Direktorat Kesehatan Keluarga Tahun 2021 [Internet]. 2021 [cited 2023 Nov 16]. 1–69 p. Available from: <https://gizikia.kemkes.go.id/assets/file/pedoman/LAKIP%20KESGA%202021.pdf>
10. Haldane V, Chuah FLH, Srivastava A, Singh SR, Koh GCH, Seng CK, et al. Community participation in health services development, implementation, and evaluation: A systematic review of empowerment, health, community, and process outcomes. Mulsby C, editor. *PLoS One* [Internet]. 2019 May 10 [cited 2024 Dec 16];14(5):1–25. Available from: <https://doi.org/10.1371/journal.pone.0216112>
11. Bektas G, Boelsma F, Seidell JC, Dijkstra SC. Development of a health promotion action with mothers aiming to support a healthy start in life for children using Participatory Action Research. *Int J Qual Stud Health Well-being* [Internet]. 2023 Dec 31 [cited 2024 Dec 16];18(1):1–16. Available from: <https://doi.org/10.1080/17482631.2023.2223415>
12. Rahmawati A. Faktor-Faktor Yang Berhubungan Dengan Perilaku Ibu Dalam Kunjungan Neonatal Di Wilayah Kerja Puskesmas Kedungmundu Semarang. *Jurnal Kesehatan Masyarakat (e-Journal)* [Internet]. 2019;7(2):64–72. Available from: <https://doi.org/10.14710/jkm.v7i2.24782>
13. Harrell T, Howell EA, Balbierz A, Guel L, Pena J, Janevic T, et al. Improving Postpartum Care: Identifying Opportunities to Reduce Postpartum Emergency Room Visits Among Publicly-Insured Women of Color. *Matern Child Health J* [Internet]. 2022;26(4):913–22. Available from: <https://doi.org/10.1007/s10995-021-03282-5>
14. Nurhayati I, Purnami RW. Faktor Yang Mempengaruhi Ibu Nifas Dalam Melakukan Kunjungan Neonatal. 2018 [cited 2024 Oct 9]; Available from: <https://doi.org/10.36569/jmm.v9i1.26>
15. Situmorang HE, Not applicable S, Rustina Y, Novieastari E. Pengalaman Ibu dalam Merawat Bayi Berat Lahir Rendah (BBLR) Sesuai Nilai-Nilai Budaya Sunda, Jawa Barat. *MAHESA : Malahayati Health Student Journal* [Internet]. 2024 Jun 1 [cited 2024 Dec 16];4(6):2496–518. Available from: <https://doi.org/10.33024/mahesa.v4i6.14686>
16. King BC, Mowitz ME, Zupancic JAF. The financial burden on families of infants requiring neonatal intensive care. *Semin Perinatol* [Internet]. 2021 Apr 1 [cited 2022 Oct 16];45(3):151394. Available from: <https://doi.org/10.1016/j.semperi.2021.151394>
17. Brekke M, Småstuen MC, Glavin K, Amro A, Solberg B, Øygarden AMU, et al. The impact of New Families home visiting program on first-time mothers' quality of life and its association with social support: a non-randomized controlled study. *BMC Public Health* [Internet]. 2023 Dec 8 [cited 2024 May 6];23(1):2457. Available from: <https://doi.org/10.1186/s12889-023-17285-0>

18. Gagliardi L, Grumi S, Gentile M, Cacciavellani R, Placidi G, Vaccaro A, et al. The COVID-related mental health load of neonatal healthcare professionals: a multicenter study in Italy. *Ital J Pediatr* [Internet]. 2022 Dec 1 [cited 2024 Dec 16];48(1). Available from: <https://doi.org/10.1186/s13052-022-01305-7>
19. Meregaglia M, Croci I, Brusco C, Herich LC, Di Lallo D, Gargano G, et al. Low socio-economic conditions and prematurity-related morbidities explain healthcare use and costs for 2-year-old very preterm children. *Acta Paediatr* [Internet]. 2020 Sep 6 [cited 2022 Sep 6];109(9):1791–800. Available from: <https://doi.org/10.1111/apa.15183>
20. Prędkiewicz P, Bem A, Siedlecki R, Kowalska M, Robakowska M. An impact of economic slowdown on health. New evidence from 21 European countries. *BMC Public Health* [Internet]. 2022 Dec 23 [cited 2023 Dec 6];22(1):1405. Available from: <https://doi.org/10.1186/s12889-022-13740-6>
21. Dukuzumuremyi JPC, Acheampong K, Abesig J, Luo J. Knowledge, attitude, and practice of exclusive breastfeeding among mothers in East Africa: a systematic review. *Int Breastfeed J* [Internet]. 2020 Dec 14 [cited 2023 Feb 16];15(1):70. Available from: <https://doi.org/10.1186/s13006-020-00313-9>
22. Majumder S, Najnin Z, Ahmed S, Bhuiyan SU. Knowledge and attitude of essential newborn care among postnatal mothers in Bangladesh. *J Health Res* [Internet]. 2018 Dec 6 [cited 2023 Nov 19];32(6):440–8. Available from: <https://doi.org/10.1108/JHR-05-2018-0015>
23. Fajar F, Ambar K, Faizah S I, Rahayuningsih B. International Summit on Science Technology and Humanity (ISETH) 2022 Academic Improvement for Recovery Acceleration Husband's Support for Postpartum Mothers: A Correlation Study Between Characteristics and Husband's Support For Postpartum Mothers. 2015; Available from: <https://proceedings.ums.ac.id/index.php/iseth/article/view/2641>
24. Gizaw Z, Astale T, Kassie GM. What improves access to primary healthcare services in rural communities? A systematic review. *BMC Primary Care* [Internet]. 2022 Dec 6 [cited 2024 Dec 16];23(1):313. Available from: <https://doi.org/10.1186/s12875-022-01919-0>
25. Lawn JE, Bhutta ZA, Ezeaka C, Saugstad O. Ending Preventable Neonatal Deaths: Multicountry Evidence to Inform Accelerated Progress to the Sustainable Development Goal by 2030. *Neonatology* [Internet]. 2023 Aug 1 [cited 2024 Dec 16];120(4):491–9. Available from: <https://doi.org/10.1159/000530496>

DETERMINANT OF NEONATAL VISIT COVERAGE RATE IN SERDANG BEDAGAI REGENCY NORTH SUMATRA INDONESIA

ORIGINALITY REPORT

13%

SIMILARITY INDEX

PRIMARY SOURCES

| | | |
|---|--|-----------------|
| 1 | jurnal.globalhealthsciencegroup.com Internet | 52 words — 1% |
| 2 | ejournal.fkm.unsri.ac.id Internet | 36 words — 1% |
| 3 | perpustakaan.poltekkes-malang.ac.id Internet | 30 words — 1% |
| 4 | mdpi-res.com Internet | 28 words — 1% |
| 5 | "Posters", <i>Pediatric Pulmonology</i> , 2018 Crossref | 27 words — 1% |
| 6 | jurnalobgin.fk.unand.ac.id Internet | 24 words — 1% |
| 7 | Muthmainah, Hanik Badriyah Hidayati, Budi Yanti. "Improving Health for Better Future Life: Strengthening from Basic Science to Clinical Research", CRC Press, 2023 Publications | 22 words — 1% |
| 8 | 1library.net Internet | 18 words — < 1% |

-
- 9 Chrysa Falina, Iis Tri Utami, Riyani Handayanti, Yenni Susanti. "Continuity of care (COC) With Labor Pain and Breast Milk That Has Not Been Out In The Public Period", JKM (Jurnal Kebidanan Malahayati), 2024
Crossref 18 words — < 1%
-
- 10 [ijelr.in](#)
Internet 18 words — < 1%
-
- 11 Ade Gafar Abdullah, Isma Widiaty, Cep Ubad Abdullah. "Medical Technology and Environmental Health", CRC Press, 2020
Publications 17 words — < 1%
-
- 12 Davood Sotoude, Mohammadreza Hoseinkhani, Amin Amiri Tehranizadeh. "Context-aware fusion of transformers and CNNs for medical image segmentation", Informatics in Medicine Unlocked, 2023
Crossref 17 words — < 1%
-
- 13 Putri Dafriani, Ratna Indah Sari Dewi, Eliza Trisnadewi, Harinal Afri Resta, Roza Marlinda. "Stress, family support, and spiritual adaptation as predictors of the quality of life of pregnant women during the covid-19 pandemic", Jurnal Aisyah : Jurnal Ilmu Kesehatan, 2023
Crossref 17 words — < 1%
-
- 14 [e-jurnal.unisda.ac.id](#)
Internet 16 words — < 1%
-
- 15 [apps.fkm.undip.ac.id](#)
Internet 13 words — < 1%
-
- 16 Amina Messaoudi, Fatiha Labdelli, Nazih Rebouh, Malika Djerbaoui et al. "Investigating the Potassium Fertilization Effect on Morphological and

Agrophysiological Indicators of Durum Wheat under Mediterranean Rain-Fed Conditions", Agriculture, 2023

Crossref

| | | |
|----|---|-----------------|
| 17 | ejournal.unisba.ac.id Internet | 11 words — < 1% |
| 18 | f1000research.com Internet | 11 words — < 1% |
| 19 | jurnal.polibatam.ac.id Internet | 11 words — < 1% |
| 20 | www.e-journal.unair.ac.id Internet | 11 words — < 1% |
| 21 | 123dok.com Internet | 10 words — < 1% |
| 22 | eprints.poltekkesjogja.ac.id Internet | 9 words — < 1% |
| 23 | jogh.org Internet | 9 words — < 1% |
| 24 | pmc.ncbi.nlm.nih.gov Internet | 9 words — < 1% |
| 25 | www.astesj.com Internet | 9 words — < 1% |
| 26 | www.ncbi.nlm.nih.gov Internet | 9 words — < 1% |
| 27 | "Proceedings of the Andalas International Public Health Conference 2017", BMC Public Health, 2017 Crossref | 8 words — < 1% |

28 Siti Rahmah Hidayatullah Lubis, Indri Hapsari Susilowati. "Prediction of individual characteristics and lactation facilities in the workplace on the sustainability of working mother's exclusive breastfeeding", Riset Informasi Kesehatan, 2022 8 words — < 1%
Crossref

29 Zuraida Zuraida. "FAKTOR-FAKTOR YANG BERHUBUNGAN DENGAN KUNJUNGAN NEONATUS DI WILAYAH KERJA PUSKESMAS LUBUK KILANGAN", Human Care Journal, 2018 8 words — < 1%
Crossref

30 openpsychologyjournal.com 8 words — < 1%
Internet

31 Dahyunir Dahlan, Siti Khatijah Md Saad, Ade Usra Berli, Abdil Bajili, Akrajas Ali Umar. "Synthesis of two-dimensional nanowall of Cu-Doped TiO₂ and its application as photoanode in DSSCs", Physica E: Low-dimensional Systems and Nanostructures, 2017 5 words — < 1%
Crossref

EXCLUDE QUOTES OFF
EXCLUDE BIBLIOGRAPHY ON

EXCLUDE SOURCES OFF
EXCLUDE MATCHES OFF