

Behavior of Pregnant Women in Using Posyandu to Check ANC (Anteatal Care) at Eka Sriwahyuni Clinic Medan 2023

Kamaliah*

Prodi D3 Kebidanan, STIKes Sehat Medan, Indonesia

Article Info

Article history:

Received December 30, 2023

Revised January 13, 2024

Accepted January 18, 2024

Corresponding Author:

Kamaliah

Prodi D3 Kebidanan, STIKes Sehat
Medan, Indonesia

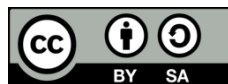
Email: ma_yah23@yahoo.com

ABSTRACT

Antenatal care is crucial for the survival of both the mother and fetus during pregnancy and childbirth. ANC services consist of observation, education, and treatment for pregnant women. The objective of this research is to identify the factors that affect maternal compliance with Antenatal Care Visits at the Eka Sriwahyuni Clinic in Medan. The research design is analytical observation. The study population comprised of 17 pregnant women who attended Posyandu Klinik Eka Sriwahyuni Medan. The sample was selected using total sampling technique. Data was collected through a questionnaire and analyzed using the Chi Square test (p value <0.05). The study found that 64.7% of respondents had sufficient knowledge, 70.6% had attitudes in the sufficient category, and 52.9% had husband support in the sufficient and partial categories. Additionally, 64.7% of respondents had good compliance with visits. The chi-square test results indicate a relationship between knowledge, attitudes, and husband's support factors and compliance with Antenatal Care Visits at the Eka Sriwahyuni Clinic in Medan. To further explore factors that may influence ANC visit compliance, future researchers should consider economic factors and distance from health facilities. This research involved visiting respondents individually, which may have been less effective.

Keywords: behavior, antenatal care, posyandu

This article is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/).



1. INTRODUCTION

Antenatal Care (ANC) services aim to improve the physical and mental health of pregnant women so that they can undergo pregnancy until delivery safely. According to [38], ANC services are provided to pregnant women during their pregnancy. Antenatal services are crucial for ensuring the safety of both the mother and the fetus during pregnancy and delivery. ANC services are a planned program that includes observation, education, and treatment for pregnant women.

The Maternal Mortality Rate (MMR) is a benchmark and indicator used to measure the success of efforts to maintain the health of pregnant women. In Indonesia, nearly 20,000 maternal deaths occur each year due to complications during pregnancy or childbirth. According to data from the 2015 Indonesian Demographic and Health Survey (SDKI) conducted by the Survey Implementing Agency (BPS), the maternal mortality rate (MMR) in Indonesia was 305 deaths per 100,000 live births. This figure exceeds the target of 102 deaths per 100,000 live births set by [41].

Pattipeilohy (2017) defines an ANC visit as a pregnant woman's visit to health services as soon as possible after becoming pregnant to receive appropriate care. This antenatal service aims to prevent obstetric complications whenever possible, detect complications early, and provide adequate treatment. Antenatal care (ANC) is crucial for early detection of high-risk pregnancy and childbirth, which can reduce maternal mortality and monitor fetal condition. In addition, regular ANC provides counseling and examination for genetic diseases to ensure the health of both mother and baby.

Research from the Ministry of Health (2013) indicates that the number of visits for first trimester ANC ranged from 72.3% (2010) to 81.3% (2013), and for third trimester (K4 coverage) ranged from 61.4% (2010) to 70.0% (2013). These figures fall short of the national target of at least 95%. This indicates that individuals' behavior in monitoring

their pregnancies does not align with national expectations and goals of 95% compliance. Given the significance of regular pregnancy check-ups, as outlined by national targets, it is crucial to investigate the factors that impact pregnant women's adherence to Antenatal Care.

According to [41], there are several factors that influence visits by pregnant women. Compliance with ANC visits is influenced by characteristics, behavior, and poor service quality, including facilities, human resource competency, socio-economic, and socio-cultural factors. Green (2005) suggests that individual behavior is influenced by three domains: knowledge, attitudes, and practices. Pregnant women require interpersonal support from their husbands to achieve compliance with Antenatal Care (ANC) visits, in addition to practicing healthy behaviors [43]. This study aims to identify the factors that influence maternal compliance with ANC visits.

According to Purwoastuti and Walyani (2015), healthy behaviors during pregnancy are influenced by three factors: predisposing, supporting, and driving factors. Predisposing factors are related to knowledge. According to Wibisono & Dewi (2009), decisions and actions towards problems cannot be made without someone's knowledge. Supporting factors include the physical environment and access to health facilities for pregnant women, such as affordable Posyandu. According to Purwoastuti & Walyani (2015), health workers, family support, and community leaders play important roles in determining pregnancy conditions. Health workers are crucial in assessing the needs of families and supporting mothers to increase their confidence and reduce anxiety during childbirth. Community figures also serve as determinants of pregnancy conditions. Subaris (2016) suggests that social capital can influence pregnant women to adopt healthy behaviors, preparing them for pregnancy and childbirth.

Posyandu, or integrated service post, is a community-based health initiative managed and organized by the community with the assistance of health workers in a Puskesmas work area. Its purpose is to empower the community and provide convenient access to basic health services, particularly for pregnant women, in order to accelerate the reduction of maternal and infant mortality rates. The program can be implemented in village halls, city halls, and other easily accessible locations. This information is based on Ismawati's narrative (2010)..

The purpose of Antenatal Care is to monitor pregnancy progress, maintain maternal and fetal health, and promote physical, mental, and social well-being. Additionally, it can detect pregnancy complications early on, allowing for adequate preparation for labor and safe delivery. This includes preparing mothers for the postpartum period, promoting normal walking, and facilitating good breast milk production. Additionally, Antenatal Care can help prepare the mother and family for the arrival of the baby.

Antenatal care services play a crucial role in ensuring a healthy pregnancy and maintaining the well-being of both the mother and baby. It is important to maintain a clear and logical structure, use precise language, and avoid biased or emotional language. The text should also adhere to formatting guidelines and be free of grammatical errors and spelling mistakes. Around 15% to 20% of pregnant women are estimated to have a high risk of obstetric complications that can affect both the mother and fetus if not treated early. The risk is particularly high for women under 20 or over 35 years old, as well as those with a height of less than 145 cm and a body weight of less than 45 kg. Additionally, birth spacing can also pose a significant risk.

2. METHOD

The research uses a cross-sectional design. All variables were measured simultaneously at the Eka Sriwahyuni Clinic in Medan. The data used in this research is primary data obtained from distributing questionnaires to 17 pregnant women at the Eka Sriwahyuni Clinic in Medan. The research employed total sampling as the sampling technique. The independent variables considered were knowledge, attitudes, and husband's support, which are known to influence maternal behavior. The dependent variable in this study was ANC compliance. The study was conducted at the Eka Sriwahyuni Clinic in Medan in June 2021. The study examines the relationship between ANC compliance and Factors Influencing Maternal Behavior, which include knowledge, attitudes, and husband's support. The research instrument used to measure ANC compliance was a questionnaire. The questionnaire collection sheet was used to measure compliance with Antenatal Care visits.

3. RESULT & DISCUSSION

The study includes information on the characteristics of the respondents, such as their age, education, gender, length of service, position, and employment status..

Tabel 1. Respondent Frequency

Variabel	Category	Freq	(%)
Age	22 – 25 years	3	17,6
	26 – 30 years	5	29,4
	31 - 35 years	6	35,3
	36 - 40 years	3	17,6
Education	Elementary	4	23,5
	Junior High School	8	47,1

	High School	3	17,6
	Bachelor	2	11,8
Occupation	Housewives	12	70,6
	Employee	1	5,9
	Entrepreneurs	4	23,5
Trimester	Trimester I	10	58,2
	Trimester II	5	29,4
	Trimester III	2	11,7
Pregnancy	First Pregnancy	5	29,4
	Second Pregnancy	8	47,1
	Third Pregnancy	3	17,6
	Fourth Pregnancy	1	5,9
	Total	17	100

Table 1 shows that 35.3% of the respondents were aged 31-35 years. Additionally, around 47.1% of the mothers had at least a junior high school education. The majority of the respondents worked as domestic workers (70.6%). Furthermore, 58.2% of the respondents were in their 1st trimester, while almost half (47.1%) were in their 2nd trimester.

Tabel 2. Knowledge and Behavior Variables of Pregnant Women

Variable	Category	Freq	(%)
Knowledge	Good	4	23,5
	Enough	11	64,7
	Not Good	2	11,8
Behavior	Good	3	17,6
	Enough	12	70,6
	Not Good	2	11,2
Family Support	Good	3	17,6
	Enough	9	52,9
	Not Good	5	29,9
Total		17	100

Table 2 shows that 64.7% of the respondents have sufficient knowledge, 70.6% have sufficient attitudes, and 52.9% have the support of their husbands.

Tabel 3. Prenatal Care Appointment Variable

Variable	Kategori	F	%
Prenatal Care Appointment	Accurate	11	64,7
	Not Accurate	6	35,3
Total		17	100

Table 3 shows that 64.7 percent of the respondents have visited a Posyandu or a clinic.

Tabel 4. Influencing Factors of Maternal Behavior towards Antenatal Care (ANC)

Knowledge	Visit Accuracy		Total	Odds Ratio	P
	Accurate	Not Accurate			
Good	1 (5,9 %)	3 (17,6%)	4 (23,5%)		
Enough	5 (29,4%)	6 (35,3%)	11 (64,7%)	2,250	0,027
Not Good	0 (0,0%)	2 (11,8%)	2 (11,8%)		
Total	6 (35,3%)	11 (64,7%)	17 (100%)		

According to Table 4, the majority of respondents had good knowledge (11, or 64.7%), which influenced their compliance with ANC visits. Of those, 5 (29.4%) were accurate and 6 (35.3%) were inaccurate. The results of the Chi

Square test showed a significant relationship between knowledge and compliance with ANC visits, with $p = 0.027$, indicating a statistically significant result.

Table 5. Factors Influencing Maternal Behavior in Compliance with Antenatal Care (ANC) Visits

Behavior	Visitation accuracy		Total	Odds Ratio	P
	Accurate	Not Accurate			
Good	1 (5,9 %)	2 (11,8%)	3 (17,6%)		
Enough	4 (23,5%)	8 (47,1%)	12 (70,6%)	1,550	0,031
Not Enough	1 (5,9%)	1 (5,9%)	2 (11,8%)		
Total	6 (35,3%)	11 (64,7%)	17 (100%)		

According to Table 5, the majority of the respondents' attitudes fell into the fair category, with 12 (70.6%) indicating this. This attitude had an impact on compliance with ANC visits, with 4 (23.5%) indicating non-compliance and 8 (47.1%) indicating compliance. There was a significant relationship between attitudes and compliance with ANC visits, with $p = (0.031) < (0.050)$, according to the results of the chi-squared test.

Table 6. Factors that influence mother's behavior towards husband's support (ANC)

Family Support	Visitation accuracy		Total	Odds Ratio	P
	Accurate	Not accurate			
Good	1 (5,9 %)	2 (11,8%)	3 (17,6%)		
Enough	4 (23,5%)	5 (29,4%)	9 (52,9%)	3,320	0,01
Not Good	1 (5,9%)	4 (23,5%)	5 (29,4%)		
Total	6 (35,3%)	11 (64,7%)	17 (100%)		

According to Table 6, the majority of the respondents' husbands provided sufficient support (52.9%). This influenced compliance with ANC visits (23.5% and 29.4%). The results of the chi-squared test showed a significant relationship between the support of the husband and the compliance with ANC visits ($p = 0.01$, which is less than the significance level of 0.05).

The research results also indicate a correlation between the knowledge of pregnant women and adhering to ANC visits. There is a correlation between the level of knowledge and compliance with ANC visits at the Eka Sriwahyuni Clinic in Medan, as evidenced by the value $(0.027) < (0.05)$. The language used is clear, objective, and value-neutral, avoiding biased, emotional, figurative, or ornamental language. This correlation is observed in the compliance of pregnant women with ANC visits. The passive tone and impersonal construction are used, and the first-person perspective is avoided unless necessary. The text is free of grammatical errors, spelling mistakes, and punctuation errors. Knowledge is a factor that influences changes in behavior, providing rational thinking or motivation for an activity, and facilitating a person's behavior. This study examines the compliance behavior of ANC visits that may be influenced by the level of knowledge. Research data shows that out of the 17 mothers who had sufficient knowledge about ANC visit compliance, 64.7% carried out ANC checks correctly. This indicates a correlation between the level of knowledge about ANC visit compliance and correct ANC examination.

Furthermore, a correlation was found between how pregnant women behave and how they feel about complying with ANC visits. This section discusses the factors that can influence knowledge, with age and education playing a significant role. According to Patel's (2016) research, higher levels of education are associated with better knowledge, which can help in the selection of relevant information to support that knowledge. This statement is in line with the research conducted by Ismainar et al. (2020), which suggests that education and knowledge levels influence the mindset that contributes to compliance with antenatal care. Age is also a factor that influences a person's knowledge, and the research results indicate that the majority of respondents were between the ages of 24-30 years (early adulthood) (60.0%). According to the research conducted by Subekti and Sulistyorini (2018), a person's age does not influence their behavior and knowledge when it comes to seeking information about new or unknown things. Both young and old people have the motivation to live healthy and pay attention to their health.

The research findings are consistent with Astuti's (2015) study, indicating a significant correlation between pregnant women's knowledge level and their visits to the Duren Community Health Center in Semarang Regency ($p = 0.008 \leq 0.05$; $OR = 15.0$). These results align with the research conducted by Syamsiah and Pustikasari (2014). The study found a significant correlation between knowledge and ANC visits for pregnant women in West Jakarta ($p = 0.032 \leq 0.05$; $OR = 3.83$).

Additionally, the results showed that attitudes also play a role in compliance with ANC visits, as evidenced by the value $(0.031) > (0.05)$. These findings suggest that a mother's attitude can influence her compliance with ANC visits. Attitude refers to a person's reaction or response to a stimulus or object, which is still closed. Pregnant women's behavior is influenced by two factors: external and internal. Experiential factors shape and influence stimuli.

Attitude formation is influenced by personal experience, culture, important individuals, mass media, educational and religious institutions, as well as emotional factors within the individual. To enhance mothers' understanding of the significance of antenatal care, health education, community leader involvement, and religious organizations can be utilized.

However, research findings indicate that attitudes are influenced by various factors, including education and age. The majority of respondents have a positive attitude, which is influenced by educational factors. Education has a significant impact on a person's attitudes and actions, as noted by Notoadmodjo (2012). Notoadmodjo (2012) states that individuals with higher levels of education are more likely to accept and adapt to new ideas, as reflected in their attitudes and actions.

Age is a significant factor that can influence a person's attitude. Age is a significant factor that can influence a person's attitude. It is important to note that subjective evaluations have been excluded from this analysis. Research has shown that older individuals, with higher levels of ability and maturity in thinking and receiving information, tend to acquire new knowledge more easily. Additionally, a person's socio-economic status can also play a role in this process. These findings are consistent with the research conducted by Chaerunnisa and Darmawansyah (2014), which indicated a correlation between attitudes and the utilization of antenatal care services among pregnant women at the Mamajang Community Health Center in Makassar City in 2014 ($\rho = 0.043 \leq 0.05$). Similarly, Rahman (2017) found a significant association between pregnant women's attitudes towards the importance of antenatal care and its utilization ($p = 0.039$).

Meanwhile, this research shows a correlation between a husband's support and compliance with ANC visits for pregnant women. The correlation is proven by the value $(0.010) < (0.05)$. Additionally, the study found that husbands who provided accurate schedules for antenatal care visits during the third trimester had a higher compliance rate in Bagi Village, Madiun District/Regency in 2017 ($\rho = 0.012 \leq 0.05$). These results are consistent with previous research indicating a positive correlation between husband support and ANC visits for pregnant women at the Kembangan District Health Center in West Jakarta ($\rho = 0.038 \leq 0.05$; OR = 3.92) (Syamsiah and Pustikasari, 2014).

The data shows that 17 mothers received sufficient support from their husbands to attend ANC visits. Six mothers correctly carried out the ANC examination, indicating that husband's support is a positive factor. Such support reflects attitudes, actions, and acceptance of the wife's condition, making proper ANC examination necessary to determine the pregnancy's condition.

Husbands can provide various forms of support during their wives' pregnancies, including informational support, which involves providing advice, guidance, ideas, or other necessary information about proper ANC testing. In addition, husbands can provide appreciative support by acknowledging and paying attention to the state of their wives' pregnancies (Laksono et al., 2020). Finally, instrumental support can be provided by taking the wife for a check-up and paying for the ANC test. Apart from that, emotional support is also necessary through attentive listening, sympathy, and empathy for the wife's condition.

4. CONCLUSION

The study concludes that there is a correlation between the level of maternal knowledge and compliance with ANC visits at the Eka Sriwahyuni Clinic in Medan. Additionally, there is a correlation between the mother's attitude and compliance with ANC visits at the same clinic, as well as a correlation between husband's support and compliance with ANC visits at the Eka Sriwahyuni Clinic in Medan.

ACKNOWLEDGEMENTS

The team thanks the parties who assisted in participant recruitment and equipment provision for this activity. Additionally, we express gratitude to our school institutions for their support in this research.

REFERENCES

- [1] Abraham, C. and Sheeran, P. (2014) 'The health belief model', Cambridge Handbook of Psychology, Health and Medicine, Second Edition, (June 2015), pp. 97–102. doi: 10.1017/CBO9780511543579.022.
- [2] Agustina, Nora (2018). *Perkembangan Peserta Didik*. Yogyakarta: Deepublish. <https://opac.perpusnas.go.id/DetailOpac.aspx?id=1037033>
- [3] Alimul. 2009. *Metode Penelitian dan Keperawatan dan Teknik Analisa Data*. Jakarta: Salemba Medika. <https://opac.perpusnas.go.id/DetailOpac.aspx?id=3225>.
- [4] Alomar MJ (2014). Factors affecting the development of adverse drug reactions (Review article). *Saudi Pharmaceutical Journal*, 22(2), 83–94. <https://doi.org/10.1016/j.jsps.2013.02.003>.
- [5] Alzboon, G. and Vural, G. (2021) 'The experience of healthy pregnancy in high parity women: A phenomenological study in north Jordan', *Medicina (Lithuania)*, 57(8), pp. 1–9. doi: 10.3390/medicina57080853.

- [6] Ariestanti, Y., Widayati, T. and Sulistyowati, Y. (2020) 'Determinan Perilaku Ibu Hamil Melakukan Pemeriksaan Kehamilan (Antenatal Care) Pada Masa Pandemi Covid -19', *Jurnal Bidang Ilmu Kesehatan*, 10(2), pp. 203–216. doi: 10.52643/jbik.v10i2.1107.
- [7] Asmariyah., Novianti. and Suryati. (2021) 'Pregnant Women Anxiety Levels in the Pandemic Time Covid-19 Inthe City of Bengkulu', *Jounal of Midwifery*, 9(1), pp. 1–8. Available at: <https://jurnal.unived.ac.id/index.php/JM/article/view/1341/1079>.
- [8] Astuti, T. (2015). *Gambaran Pengetahuan Ibu Hamil pada Pelaksanaan Kunjungan Pelayanan Antenatal Care di Puskesmas Jetis II Bantul (Doctoral dissertation, STIKES Jenderal A. Yani Yogyakarta)*. <https://medika.respati.ac.id/index.php/Medika/article/view/280>
- [9] Berthelot, N. et al. (2020) 'Uptrend in distress and psychiatric symptomatology in pregnant women during the coronavirus disease 2019 pandemic', *Acta Obstetricia et Gynecologica Scandinavica*, 99(7), pp. 848–855. doi: 10.1111/aogs.13925.
- [10] Catalano PM, Shankar K (2017). Obesityand pregnancy: Mechanism of short term and long term adverse conse-quences for mother and child. *BMJ*, 356. <https://doi.org/10.1136/BMJ.jl>.
- [11] Cetin I, Alvino G (2009). Intrauterine growth restriction: Implications for placental metabolism and transport. *A Review. Placenta*, 23, 77–82. <https://doi.org/10.1016/j.placenta.2008.12.006>.
- [12] Cetin I, Berti C, Calabrese S (2010). Role of micronutrients in the periconception- al period. *Human Reproduction Up- date*, 16 (1), 80–95. <https://doi.org/- 10.1093/humupd/dmp025>.
- [13] Cohen BE, DurstenfeldA, Roehm PC(2014). Viral causes of hearing loss: Areview for hearing health profession-als. *Trends in Hearing*, 18, 1-17.<https://doi.org/10.1177/23312165145 41361>.
- [14] Corbett, G. A. et al. (2020) 'Health anxiety and behavioural changes of pregnant women during the COVID-19 pandemic', *European Journal of Obstetrics and Gynecology and Reproductive Biology*, 249, pp. 96–97. doi: 10.1016/j.ejogrb.2020.04.022
- [15] Denny, H. M. et al. (2022) 'The Determinants of Four or More Antenatal Care Visits Among Working Women in Indonesia', *Asia-Pacific Journal of Public Health*, 34(1), pp. 51–56. doi: 10.1177/10105395211051237.
- [16] Diyan Indriyani dan Asmuji. 2014. *Buku Ajar Keperawatan Maternitas: Upaya Promotif dan Preventif Dalam Menurunkan Angka Kematian Ibu dan Bayi*. Yogyakarta: Ar-Ruzz Media. <https://library.unismuh.ac.id/opac/detail-opac?id=1714>
- [17] Du Li, Gu Yibin, Cui Mengqing, et al. Investigation on the demand for maternal health care services among 2 002 pregnant women in Shanghai during the epidemic of novel coronavirus pneumonia [J] . *Chinese Journal of Obstetrics and Gynecology*, 2020, 55(3) : 160-165. DOI: 10.3760/cma.j.cn112141- 20200218-00112.
- [18] Ehrenstein V, Pedersen L, Grijsa M, Niel- sen GL, Rothman KJ, Sorensen HT (2009). Association of apgar score at five minutes with long-term neuro- logic disability and cognitive function in a prevalence study of Danish Con scripts. *BMC Pregnancy and Child-birth*, 9(1). <https://doi.org/10.1186/-1471-2393-9-14>.
- [19] Fitriyeni, F., Suryati, S., & Faranti, R. M. (2017). Penyebab rendahnya kelengkapan kunjungan antenatal care ibu hamil di Wilayah Kerja Puskesmas Pegambiran. *Jurnal Kesehatan Masyarakat Andalas*, 10(1), 101-107. <https://doi.org/10.24893/jkma.v10i1.170>
- [20] Han Z, Mulla S, Beyene J, Liao G, Mc- Donald SD (2011). Maternal under- weight and the risk of preterm birth and low birth weight: A systematic review and meta-analyses. *Interna- tional Journal of Epidemiology*, (40), 65–101. <https://doi.org/10.1093/ije/- dyq195>.
- [21] Hurlock, Elizabeth B (2013). *Perkembangan Anak, Edisi keenam*. Jakarta: Erlangga. <https://opac.perpusnas.go.id/DetailOpac.aspx?id=97807>
- [22] Hutahaean, S. 2013. *Perawatan Antenatal*. Jakarta Selatan: Salemba Medika. <https://lib.ui.ac.id/detail?id=20397958>
- [23] Irianto K (2014). *Biologi Reproduksi*. Bandung: Alfabeta. <https://opac.perpusnas.go.id/DetailOpac.aspx?id=898533>
- [24] Ismainar, H., Subagio, H. W., Widjanarko, B., & Hadi, C. (2020). To What Extent Do Ecological Factors of Behavior Contribute to the Compliance of the Antenatal Care Program in Dumai City, Indonesia. *Risk management and healthcare policy*, 13 1007–1014. <https://doi.org/10.2147/RMHP.S242724>.
- [25] Kementerian Kesehatan Republik Indo- nesia. (2011). *Profil Kesehatan Indo- nesia 2010*. Jakarta: Kementerian Kesehatan Republik Indonesia. <http://www.depkes.go.id/resources/download/pusdatin/profil-kesehatan-indonesia/profil-kesehatan-indonesia-20-10.pdf>.

- [26] L. F., Mustika, I., & Matahari, R. (2020). Socioeconomic Difference of Husband's Involvement in Antenatal Care in Rural Indonesia. <https://doi.org/10.21203/rs.3.rs-114665/v1>
- [27] Littletan LY, Engebretson J (2012). Maternal, neonatal, and women's health nursing. New York: Delmar Cengage Learning. Page 878. https://www.researchgate.net/publication/292607773_Maternity_Neonatal_and_women's_health_nursing
- [28] Luyckx VA, Brenner BM (2015). Birth weight, malnutrition and kidney-associated outcomes—a global concern. *Nature Reviews Nephrology*, 11(3), 135–149. <https://doi.org/10.1038/n-rneph.2014.251>.
- [29] Mariyana, K., Jati, S. P. and Purnami, C. T. (2017) 'Faktor Yang Berpengaruh Terhadap Kepatuhan Ibu Hamil Preeklamsia Dalam Pemanfaatan Layanan Anc', *Unnes Journal of Public Health*, 6(4), pp. 237–244. doi: 10.15294/ujph.v6i4.17736.
- [30] Menezes PR, Lewis G, Rasmussen F, Zammit S, Sipos A, Harrison GL, Tynelius P, Gunnell D (2010). Paternal and maternal ages at conception and risk of bipolar affective disorder in their offspring. *Psychological Medicine*, 40 (03): 477. <https://doi.org/10.1017/s-003329170999064x>
- [31] Nisingizwe, M. P. et al. (2020) 'Are perceived barriers to accessing health care associated with inadequate antenatal care visits among women of reproductive age in Rwanda?', *BMC Pregnancy and Childbirth*. *BMC Pregnancy and Childbirth*, 20(1), pp. 1–10. doi: 10.1186/s12884-020-2775-8.
- [32] Notoatmodjo, S. (2012). Promosi kesehatan dan perilaku kesehatan. <https://onsearch.id/Record/IOS3409.slims-1574>
- [33] Notoatmodjo, S. 2003. Pendidikan dan Perilaku Kesehatan. Jakarta: Rineka Cipta <https://opac.perpusnas.go.id/DetailOpac.aspx?id=50667>
- [34] Nursalam dan Pariani. 2003. Metodologi Riset Keperawatan. Jakarta: Salemba Medika. <https://api.penerbitsalemba.com/book/books/08-0284/contents/fc506312-5e09-4027-a661-9ba646dced46.pdf>
- [35] Papalia DE, Feldman RD (2014). Menyelami perkembangan manusia; Experience Human Development. Jakarta: Salemba Humanika. <https://onsearch.id/Record/IOS3107.UMS:56217/Details>
- [36] Parsa P, Besharati F, Maghsodi SH, Afshari M, Emdadi S (2018). Factors influencing the behavior of pregnant women towards using prenatal care services in Iranian Healthcare Center. *Journal of Midwifery and Reproductive Health*, 6 (1), 1141-1148. <https://doi.org/10.22038/jmrh.2017.9972>.
- [37] Patel, B. B., Gurmeet, P., Sinalkar, D. R., Pandya, K. H., Mahen, A., & Singh, N. (2016). A study on knowledge and practices of antenatal care among pregnant women attending antenatal clinic at a Tertiary Care Hospital of Pune, Maharashtra. *Medical Journal of Dr. DY Patil University*, 9(3), 354. DOI: 10.4103/0975-2870.182507
- [38] Pattipeilohy, M. Y. (2017). Faktor-faktor yang mempengaruhi perilaku ibu terhadap ketepatan kunjungan antenatal care di Puskesmas Rekas Kabupaten Manggarai Barat Nusa Tenggara Timur Tahun 2017. *J Chem Inf Model [Internet]*, 53(9), 1689-99. <https://doi.org/10.30651/jkm.v7i2.12611>
- [39] Proverawati A (2011). Anemia dan Anemia Kehamilan. Yogyakarta: Nuha Medika <https://onsearch.id/Record/IOS3605.INLIS00000000006903/Description>
- [40] Qomar, U. L., Na'mah, L. U. and Yelvin, B. K. D. V. W. (2021) 'Hubungan Paritas, Umur Dan Usia Kehamilan Dengan Jarak Kunjungan Antenatal Care Trimester Iii Di Masa Pandemi Covid 19 Di Pmb Brides Kitty Dinarum Vwy', *Jurnal Ilmiah Kesehatan Keperawatan*, 16(2), pp. 133–136. doi: 10.26753/jikk.v16i2.512.
- [41] Rachmawati, A. I., Puspitasari, R. D., & Cania, E. (2017). Faktor-faktor yang memengaruhi kunjungan antenatal care (anc) ibu hamil. *Jurnal Majority*, 7(1), 72-76. <https://juke.kedokteran.unila.ac.id/index.php/majority/article/view/1748>
- [42] Rahman, F. (2017). Hubungan Pengetahuan Dan Sikap Ibu Hamil Terhadap Pentingnya Pemeriksaan Antenatal Care Di Puskesmas Namtabung Kec. Selaru Kabupaten Maluku Tenggara Barat. *Global Health Science*, 2(1), 64-69. <http://dx.doi.org/10.33846/ghs.v2i1.65>
- [43] Rimer, B. K., & Glanz, K. (2005). Theory at a glance: a guide for health promotion practice. US Department of Health and Human Services, National Institutes of Health, National Cancer Institute. <https://cancercontrol.cancer.gov/sites/default/files/2020-06/theory.pdf>
- [44] Rosenstock, I.M., 1974. Historical Origins of the Health Belief Model. *Health Education Monographs* 2, 328–335. <https://doi.org/10.1177/109019817400200403>
- [45] S, Shibuya K (2016). Maternal anemia and risk of adverse birth and health outcomes in low- and middle-income countries: Systematic Review and Meta-Analysis. *American Journal of Clinical Nutrition*, 103, 485-504. <https://doi.org/10.3945/ajcn.115.107896>

- [46] Sadler TW (2012). *Langmans's Medical Embryology*, 12th Ed. Philadelphia: Lippincott Williams & Wilkins. <https://www.ncbi.nlm.nih.gov/nlmcatalog/101562744>
- [47] Saifuddin, A.B. 2002. *Buku Acuan Nasional Pelayanan Kesehatan Maternal dan Neonatal*. Jakarta: JNPKR-POGI. <https://onesearch.id/Record/IOS5479.ai:slims-1155>
- [48] Santrock JW (2011). *Masa perkembangan anak*. (Terjemahan Verawaty Pakpah-an). New York: McGraw-Hill. <https://pustaka.unm.ac.id/opac/detail-opac?id=42634>
- [49] Subekti, R., & Sulistyorini, D. (2018). Analisis faktor risiko penyebab anemia pada ibu hamil di puskesmas wilayah kabupaten Banjarnegara Tahun 2018. *Jurnal Ilmiah Medsains*, 4(1), 34-39. <https://doi.org/10.31101/jkk.988>
- [50] Sudargo T, Aristasari T, Afifah A (2018). *1.000 hari pertama kehidupan*. Yogyakarta: Gadjah Mada University Press. ISBN: 978-602-386-233-7. <https://ugmpress.ugm.ac.id/id/product/kedokteran-umum/1000-hari-pertama-kehidupan>
- [51] Sudirjo E, Alif MN (2018). *Pertumbuhan dan perkembangan motorik*. Jawa Barat: UPI Sumedang Press. ISBN: 978-602-643821-8. https://ecampus-fip.umj.ac.id/pustaka_umj/main/item/15705
- [52] Syamsiah, N., & Pustikasari, A. (2014). Faktor-faktor yang berhubungan dengan kunjungan antenatal care pada ibu hamil di Puskesmas Kecamatan Kembangan Jakarta Barat tahun 2013. *Jurnal Ilmiah Kesehatan*, 6(1), 15-8. <https://dx.doi.org/10.33862/citradelima.v4i1.101>
- [53] Tamirat, K. S., Tessema, Z. T. and Kebede, F. B. (2020) 'Factors associated with the perceived barriers of health care access among reproductive-age women in Ethiopia: A secondary data analysis of 2016 Ethiopian demographic and health survey', *BMC Health Services Research*. *BMC Health Services Research*, 20(1), pp. 1–8. doi: 10.1186/s12913-020-05485-y.
- [54] Warri, D. and George, A. (2020) 'Perceptions of pregnant women of reasons for late initiation of antenatal care: A qualitative interview study', *BMC Pregnancy and Childbirth*. *BMC Pregnancy and Childbirth*, 20(1), pp. 1–12. doi: 10.1186/s12884-020-2746-0.
- [55] Washio Y, Humphreys M (2018). Maternal behavioral health: fertile ground for behavior analysis. *Journal of Association for Behavior Analysis International*. <https://doi.org/10.1007/s40-614-018-0143-z>.
- [56] Wawan (2011). *Teori dan pengukuran pengetahuan, sikap dan perilaku manusia*. Yogyakarta: Nuha Medika.
- [57] Weir Z, Bush J, Robson SC, McParlin C, Rankin J, Bell R (2010). Physical activity in pregnancy: A qualitative study of the beliefs of overweight and obese pregnant women. *BMC Pregnancy and Childbirth*. <https://doi.org/10.1186/1471-2393-10-18>.
- [58] WHO NCD Alliance (2011). *NCD Alliance Annual Report 2009 – 2011*. United Nation: NCD Alliance. <https://ncd-alliance.org/resources/ncd-alliance-annual-report-2009-2011>