
Relationship Between The Anxiety Of Pregnant Women In Pandemic Time And Antenatal Care Visits In The Uptd Puskesmas Area, Gunungsitoli District

Yusni Widayati Harefa

Magister Kebidanan Fakultas Kedokteran Universitas Padjadjaran Bandung/ Akademi Kebidanan Harapan
Keluarga-Nias

*Corresponding Author

Email : Yusni.widayanti@gmail.com

Abstract

During the Covid-19 pandemic, there were many changes, especially in health services due to efforts to prevent transmission of Covid-19 so that pregnant women experienced anxiety about visiting health facilities for fear of contracting Covid-19 and in health facilities service restrictions were also carried out from the previous schedule. This study aims to analyze the relationship between the anxiety of pregnant women during a pandemic and antenatal care visits in the UPTD area of the Gunungsitoli District Health Center. This research uses quantitative methods and is a type of non-experimental research, with a cross-sectional design. This research was conducted in the working area of the Gunung Sitoli City Health Center, Nias, North Sumatra in December 2022. The subjects of this study were pregnant women. The sampling technique in this study used simple random sampling with a total of 232 pregnant women. The instrument used is a questionnaire. From the results of bivariable analysis using the Chi-square test the relationship between anxiety and the accuracy of ANC visits was obtained $p = 0.015$ ($p < 0.05$). In conclusion, there is a significant relationship between anxiety and the accuracy of ANC visits.

Keywords: Pregnant Women, Anxiety, ANC Visits, Pandemic Covid 19

INTRODUCTION

The mortality rate for mothers, infants and toddlers in Indonesia is still quite high. Maternal and neonatal deaths in Indonesia are still a big challenge, especially during disaster situations. Indonesia is facing the non-natural national disaster Covid-19 so that maternal and neonatal health services are one of the services that have been affected both in terms of access and quality. It is feared that this will lead to an increase in maternal and newborn morbidity and mortality. pregnant, maternity, post-natal and infant women as well as related health workers 4. The Covid-19 pandemic poses major challenges and demands for the state to maintain quality health services, such as health services that are important for the health of mothers and newborns. Pregnant women and mothers with newborns may experience difficulties accessing services due to transportation disruptions and social distancing measures or being limited to visiting health facilities for fear of infection.

Efforts to accelerate the reduction of MMR can be carried out by ensuring that every mother is able to access quality maternal health services, such as health services for pregnant women, delivery assistance by trained health workers at health service facilities, postpartum care for mothers and babies, special care and referrals in the event of complications, ease of obtaining maternity and maternity leave, and family planning services 6. Antenatal care (ANC) during normal pregnancies at least 6 times with details of 2 times in the 1st trimester, 1 time in the 2nd trimester, and 3 times in the 3rd trimester. Examined 2 times by a doctor during the first visit in trimester 1 and during the 5th visit in trimester 3. Assessment of the implementation of health services for pregnant women can be done by looking at the coverage of K1 and K4. K1 coverage is the number of pregnant women who have received antenatal care for the first time by health personnel compared to the target number of pregnant women in one work area within one year. While coverage of K4 is the

number of pregnant women who have received standard antenatal care at least four times according to the recommended schedule in each trimester compared to the target number of pregnant women in one work area within one year. This indicator shows access to health services for pregnant women and the level of adherence of pregnant women in having their pregnancies checked by health workers 6.7.

During the Covid-19 pandemic, there were many changes, especially in health services due to efforts to prevent transmission of Covid-19 so that pregnant women experienced anxiety about visiting health facilities for fear of contracting Covid-19 and in health facilities service restrictions were also carried out from the previous schedule. In the city of Gunungsitoli there has been a change in the number of K1 and K4 visits from the previous number during the pandemic. This was influenced by public awareness of the importance of antenatal care visits during pregnancy and most importantly, people's concern about visiting health facilities during a pandemic. Based on this description, the authors are interested in knowing the relationship between anxiety of pregnant women during a pandemic and antenatal care visits in the UPTD area of the Gunungsitoli District Health Center.

The purpose of this study was to analyze the relationship between the anxiety of pregnant women during a pandemic and antenatal care visits in the UPTD area of the Gunungsitoli District Health Center.

RESEARCH METHODS

This research uses quantitative methods and is a type of non-experimental research, with a cross-sectional design. This research was conducted in the working area of the Gunung Sitoli-Nias City Health Center, North Sumatra in December 2022. The subjects of this study were pregnant women who met the inclusion criteria and were willing to become research subjects after being given an explanation and signing an informed consent form. The sampling technique in this study used simple random sampling with a total of 232 pregnant women. The instrument used to collect data is a questionnaire. Statistical analysis From the results of bivariable analysis using the Chi-square test the relationship between anxiety and the accuracy of ANC visits was obtained $p = 0.015$ ($p < 0.05$). Mothers who had mild anxiety about the punctuality of ANC visits were 74.9%, while mothers who had moderate anxiety had 57.1% punctuality at ANC visits. Furthermore, from the multivariable results of mild maternal anxiety after adjusting for other factors, a prevalence ratio of 2.24 was obtained, meaning that mothers with mild anxiety had a 2.24 times chance of having the right ANC visit when compared to mothers who were moderately anxious. Based on the results of statistical tests using the chi-square test at a significant level of 0.05 (95% confidence level), $p = 0.000$ is less than $\alpha = 0.05$ ($0.015 < 0.05$) meaning that H_0 is rejected and H_a is accepted. This statistically shows that there is a significant relationship between anxiety and the accuracy of ANC visits.

RESULTS AND DISCUSSION

Table 1 Characteristics of Research Subjects

	Characteristics	Amount	%
1	Mother's age (years):		
	<25	103	44,4
	25-35	119	51,3
	>35	10	4,3
2	Gestational age (weeks):		
	<12	52	22,4
	13-27	118	50,9
	28-36	62	26,7
3	Residence:		
	Village	80	34,5
	City	152	65,5
4	Jobs		
	Work	139	59,9
	Doesn't work	93	40,1
5	Parity		
	Primigravida	110	47,4
	Multigravida	122	52,6
6	Family support:		
	There is	142	61,2
	There isn't any	90	38,8
7	Education :		
	Not completed in primary school	14	6,0
	Elementary-Junior High School	58	25,0
	Senior High School	88	37,9
	PT	72	31,0
8	Anxiety		
	Light	183	78,9
	Currently	49	21,1
9	ANC Visit:		
	Appropriate	165	71,1
	Not exactly	67	28,9

Table 1 presents data on the characteristics of the mother's age, gestational age, place of residence, occupation, parity, family support, education, anxiety and ANC visits. From the table it appears that the majority of respondents in the study were working people in urban areas who had an age range of 25-35 years with a high school education level. In addition, it is known that respondents tend to

have multigravida parity with a gestational age of 13-27 weeks and have family support so they have mild anxiety and have accuracy in ANC visits.

Table 2. The relationship between various variables and the accuracy of ANC visits

Variable	ANC visit		Value p*
	Appropriate (n = 165)	Not exactly (n = 67)	
Mother's age (years):			0,771
<25	74 (71,8)	29 (28,2)	
25-35	83 (69,7)	36 (30,3)	
>35	8 (80,0)	2 (20,0)	
Gestational age (weeks):			0,033
<12	44 (84,6)	8 (15,4)	
13-27	82 (69,5)	36 (30,5)	
28-36	39 (62,9)	23 (37,1)	
Residence:			0,005
Village	66 (82,5)	14 (17,5)	
City	99 (65,1)	53 (34,9)	
Jobs:			<0,001
Work	112 (80,6)	27 (19,4)	
Doesn't work	53 (57,0)	40 (43,0)	
Parity:			0,024
Primigravida	86 (78,2)	24 (21,8)	
Multigravida	79 (64,8)	43 (35,2)	
Family support:			0,017
There is	109 (76,8)	33 (23,2)	
There isn't any	56 (62,2)	34 (37,8)	
Education :	7 (50,0)	7 (50,0)	0,026
Not completed in primary school	35 (60,3)	23 (39,7)	
Elementary-Junior High School	66 (75,0)	22 (25,0)	
Senior High School	57 (79,2)	15 (20,8)	
PT			
Anxiety:	137 (74,9)	46 (25,1)	0,015
Light	28 (57,1)	21 (42,9)	
Currently			

To analyze the factors related simultaneously to the appropriateness of ANC visits, an analysis was performed using multiple logistic regression. The variables involved in this multivariable analysis are variables that have p-values from bivariable results (table 4.2). From table 4.2 seven variables are significantly related with $p < 0.05$; except for mother's age which was not significant ($p > 0.05$).

Table 3 Results Of Multivariable Analysis Of Factors Related To The Appropriateness Of Anc Visits

Variable	Koef B	SE (B)	Nilai p	PR _{adj} (IK 95%)
Anxiety	0,806	0,388	0,038	2,24 (1,05 – 4,79)
Age pregnancy * :				
0-12 week	1,390	0,521	0,008	4,02 (1,45 – 11,14)
13-27 week	0,368	0,373	0,323	1,44 (0,70 – 3,33)
Residence (Village)	0,798	0,374	0,033	2,22 (1,07 – 4,62)
Jobs (work)	0,705	0,360	0,050	2,02 (1,00 – 4,09)
Parity (primigravida)	0,713	0,333	0,032	2,04 (1,06 – 3,92)
Support Family (ada)	0,690	0,330	0,037	1,99 (1,04 – 3,81)
Education ** :				
SD-SMP	0,735	0,695	0,290	2,08 (0,53 – 8,14)
SMA	1,164	0,693	0,093	3,20 (0,82 – 12,44)
PT	1,402	0,745	0,060	4,06 (0,94 – 17,51)

Remarks : Model accuracy = 76,3% ; R² (Nagelkerke) = 0,253

PR adj (95% CI) = Prevalence ratio and 95% confidence interval. *) as a comparison of gestational age 28-36 weeks; **) as a comparison, education did not finish elementary school.

From table 3 it appears that mild anxiety has a 2.24 times chance of having the right ANC visit when compared to moderate anxiety. From the magnitude of R² = 0.253, this means that 25.3% of the accuracy of ANC visits to pregnant women is determined by anxiety, gestational age, place of residence, employment, parity, family support, and mother's education, the remaining 74.7% is influenced by other factors that are not researched.

Discussion

The results showed that the anxiety of pregnant women during the Covid-19 pandemic had a relationship with the accuracy of ANC visits in the UPTD Puskesmas Gunungsitoli District, this was seen from the Chi-Square test with the result P = 0.015 (P <0.05), mothers who had anxiety Mild tend to have a higher accuracy of ANC visits than mothers who have moderate anxiety. The test results are in line with the multivariate test which shows a prevalence ratio of 2.24, which means that pregnant women with mild anxiety have a 2.24 times greater chance of making appropriate ANC visits than pregnant women with moderate anxiety.

The decrease in the accuracy of ANC visits to pregnant women with moderate anxiety due to the Covid-19 pandemic is in line with Triyani's research which states that pregnant women's adherence to ANC visits tends to decrease due to anxiety²⁶. Anxiety experienced by pregnant women generally occurs in the third trimester because they are about to give birth, but in certain conditions anxiety in pregnant women can occur in the first or second trimester, one of which is caused by the worry of contracting Covid-19, considering that pregnant women are very at risk of contracting COVID-19 because there are physiological changes that result in a decrease in the body's immunity of pregnant women²⁷

The results of this study were also supported by the research of Sulistyowati and Trisnawati which explained that the decrease in ANC visits from pregnant women during the Covid-19 pandemic was caused by anxiety²⁸. Anxiety in pregnant women is a psychological effect of feeling worried about contracting Covid-19 when they come to do ANC at a health facility. The decrease in the accuracy of ANC visits by pregnant women during the Covid-19 pandemic did not

only occur in Indonesia, this was seen from 25.8% of pregnant women in the United States who stopped making ANC visits for fear of contracting Covid-19.

Referring to the explanation of the research results and their suitability with previous research, then if the anxiety experienced by pregnant women is a determining factor in the decrease in visits to the accuracy of ANC during the Covid-19 pandemic. Therefore, most pregnant women during the Covid-19 pandemic prefer not to visit health facilities for ANC examinations even though the accuracy of ANC visits is important for pregnant women because they can provide information to protect and save mothers and children during pregnancy, childbirth, postpartum, so that the postpartum state is healthy and normal physically and mentally³⁰.

CONCLUSION

The results of the analysis show that pregnant women's anxiety during the Covid-19 pandemic is related to the accuracy of antenatal care (ANC) visits in the UPTD Puskesmas Gunungsitoli District, pregnant women with moderate anxiety have a 2.24 chance of making inappropriate antenatal care (ANC) visits.

REFERENCES

- Antenatal PP. Pedoman pelayanan antenatal, persalinan, nifas, dan bayi baru lahir. 2020.
- Ariestanti Y, Widayati T, Sulistyowati Y. Determinan Perilaku Ibu Hamil Melakukan Pemeriksaan Kehamilan (Antenatal Care) Pada Masa Pandemi Covid -19. 2020;10(2).
- Ariestantidkk. (2020). Determinan Perilaku Ibu Hamil Melakukan Pemeriksaan Kehamilan (Antenatal Care) Pada Masa Pandemi Covid-19. *Jurnal Bidang Ilmu Kesehatan*,10(2),203–216.
- Djannah F. Perawatan Kesehatan Semasa Kehamilan (Antenatal Care).
- E. Antenatal care service utilization of pregnant women attending antenatal care in public hospitals during the COVID-19 pandemic period. *Int J Womens Health*.2020;12:1181–8.
- Eliwarti. (2020). Faktor – Faktor Yang Berhubungan Dengan Kunjungan Antenatal Care Pada Ibu Hamil Di Puskesmas Lubuk Buaya Padang. *Jurnal Ilmu Keperawatan*, 9(1)
- Goyal M, Singh P, Melana N. Review of care and management of pregnant women during COVID-19 pandemic. *Taiwan J Obstet Gynecol [Internet]*. 2020;59(6):791
- Guillaume Favre L o Pomar Xiaolong Qi Karin Nielsen-Saines, Didier Musso, Published online March 3, 2020. 2020;(January):19–21.
- IDI. Siaran Pers Ikatan Dokter Indonesia. Diakses pada 2020. Outbreak Pneumonia Virus Wuhan. 2020.
- Ike, Triyana Harlia Putri dan Fitri Fujiana. 2021. Hubungan Dukungan Keluarga dengan Tingkat Kecemasan Ibu Hamil dalam Melakukan Kunjungan Antenatal Care (ANC) pada Masa Pandemi Covid-19 di Kelurahan Sagatani
- Ikatan Bidan Indonesia. Peran IBI dalam Pelayanan Maternal Neonatal di Era Pandemi COVID-19. In Jakarta; 2020.
- Iryani D, Kebidanan D, Kesehatan P, Sorong K. Faktor Yang Mempengaruhi Cakupan Pemeriksaan K1 Dan. *Nurs Arts*. 2020;XIV(01):42–52.
- Islami, I., Nasriyah, N., & Asiyah, N. (2021). Perbedaan Skor Kecemasan Ibu Hamil Selama Pandemi. *Jurnal Ilmu Keperawatan Dan Kebidanan*, 12(1), 164.
- Liang, H., & Acharya, G. (2020). Novel corona virus disease (COVID-19) in pregnancy: What clinical recommendations to follow? *Acta Obstetrica et*

- Lumempouw, G. A. 2015. Hubungan Antara Pengetahuan, Status Pendidikan, dan Status Pekerjaan Ibu dengan Kunjungan Antenatal Care di Puskesmas Teling Atas Kecamatan Wanea Kota Manado. Fakultas Kesehatan Masyarakat Universitas Sam Ratulangi.
- Learning M, Cookbook R. Kementerian Kesehatan Republik Indonesia. Asuhan Kebidanan Kehamilan Komprehensif. Cetakan I. 2021;1.
- Kahyaoglu Sut H, Kucukkaya B. Anxiety, depression, and related factors in pregnant women during the COVID-19 pandemic in Turkey: A web-based cross-sectional study. *Perspect Psychiatr Care*. 2020;(September).
- Kesehatan K, Indonesia R. Profil kesehatan indonesia 2019.
- WHO. Maternal mortality Evidance brief. *Matern Mortal* [Internet]. 2019;(1):1–4.
- KNEPK. Pedoman Nasional Etik Penelitian Kesehatan 2011. Litbang Kementerian Kesehat [Internet]. 2011;1–134.
- Manuaba. Ilmu Kebidanan, penyakit kandungan dan kb untuk pendidikan bidan. Jakarta: EGC; 2017
- Mandriwati. Asuhan Kebidanan Kehamilan Berbasis Kompetensi Edisi 3. Jakarta: EGC 2017.
- Moyer, dkk (2020). Pregnancy-relate dan xiety during COVID-19 : anation widesurveyo f2740 pregnant women. *Archives of Women’s Mental Health*, 23(6), 757–765.
- Muhaidat N, Fram K, Thekrallah F, Qatawneh A, Al-Btoush A. Pregnancy during COVID-19 outbreak: The impact of lockdown in a middle-income country on antenatal healthcare and wellbeing. *Int J Womens Health*. 2020;12:1065–73.
- Pant S, Koirala S, Subedi M. Access to Maternal Health Services during COVID-19. *Eur J Med Sci*. 2020;2(2):48–52.
- Pelayanan D, Primer K, Jenderal D, Kesehatan P, Kesehatan K. Juklis pelayanan Puskesmas di masa pandemi COVID-19. 2020.
- Prawirohardjo S. Ilmu Kebidanan. Jakarta; 2014.
- Padila, 2014. Buku Ajar Keperawatan Maternitas, Yogyakarta
- Ningrum, dkk. (2019). Faktor yang Mempengaruhi Ibu Hamil Melakukan Kunjungan Antenatal Care. *Proceeding Of Sari Mulia University Midwifery National Seminars*, 1(1), 251–262.
- POGI. Rekomendasi Penanganan Infeksi Virus Corona (Covid-19) Pada Maternal (Hamil, Bersalin Dan Nifas). Penanganan Infeksi Virus Corona Pada Matern [Internet]. 2020;1(3):9–11.
- Rachmawati AI, Puspitasari RD, Cania E. Faktor-faktor yang Memengaruhi Kunjungan Antenatal Care (ANC) Ibu Hamil. *Majority*. 2017;7(November):72–6.
- Rodrigo-Sanjoaquin J, Sevil-Serrano J, Julián-Clemente JA, Generelo Lanaspá E, Pérez- Ordás R, SENA-RIVAS W-R, et al. profil sumut 2018. *J Chem Inf Model*.2013;53(9):1689–99.
- Susanto J. Kunjungan 1 – Kunjungan 4 (K1 – K4) Pada Ibu Hamil Di RSUD Kota.Kesehat Masy. 2016;4:1–7.
- Sulistiyowati & Trisnawati. (2021). Tingkat Kecemasan ibu Hamil Terhadap Kunjungan Antenatal Care di Masa Pandemic COVID-19. *Jurnal Kebidanan*. Vol.13 (01) 1-127.
- Sari, F. S. & N. (2017). Dukungan Keluarga Dengan Kecemasan Primigravida Menjelang Persalinan Trimester III. *Jurnal Ipteks Terapan*, 11(2), 55.
- Syari, M. (2019). Hubungan Dukungan Keluarga Dengan Kepatuhan Kunjungan ANC Pada Ibu Hamil Trimester Iii. *Nursing Arts*, 13(1), 1– 11
- Tahir M, Hasnah, sarmilawati. FaktorFaktor Yang Berhubungan Dengan Motivasi Ibu Hamil Untuk Memeriksa kehamilan. *J Ilm Kesehat Pencerah* [Internet]. 2018;7(Juli):28–36
- Triyani, A. (2021). Hubungan Tingkat Kecemasan Ibu Hamil Pada Masa Pandemi COVID-19 Dengan Kepatuhan Melakukan Antenatal Care Di Puskesmas Batua Dan Puskesmas Sudiang Raya Kota Makassar (Doctoral dissertation, Universitas Hasanuddin)

Yasin Zakiyah, Sumarni Sri, M. N. D. (2019). Hubungan Usia Ibu dan Usia Kehamilan dengan Kecemasan Ibu Hamil dalam Menghadapi Persalinan Di Polindes Masaran Kecamatan Bluto. Prosiding 1st Seminar Nasional “Arah Kebijakan Dan Optimalisasi Tenaga Kesehatan Menghadapi Revolusi Industri 4.0,” 162–168.