Vol 4 No 2, July 2025

THE RELATIONSHIP OF PREGNANT WOMEN'S ATTITUDE, BEHAVIOR, AND ANTENATAL CARE (ANC) VISITS AFTER THE COVID-19 PANDEMIC AT THE PLUMPANG HEALTH CENTER, PLUMPANG, TUBAN DISTRICT

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ABSTRACT

Following the COVID-19 pandemic, numerous restrictions have been imposed on almost all routine services, including maternal and neonatal health services. For example, 8 out of 10 pregnant women are reluctant to go to community health centers or other health service facilities because they are afraid of being infected. There are recommendations to postpone pregnancy checks and classes for pregnant women. Lack of ANC visits can cause danger to the mother and fetus, such as bleeding during pregnancy, because danger signs are not detected. This study aims to investigate the relationship between the behavior of pregnant women and their attendance at ANC visits following the COVID-19 pandemic at the Plumpang health center. This research was carried out using a correlational analytical research design method, which tests whether there is a relationship between variables with a cross-sectional approach. The sample in this study was obtained by simple random sampling of 55 third-trimester pregnant women who had ANC. The instrument in this research uses a questionnaire. Result. The results of this study used the Spearman rank test with a significance level of α = 0.01, the result was ρ = 0.000 and where ρ = 0.000 < 0.01, the value of r= 0.505 which shows the strength of the strong relationship that there is a significant relationship between the behavior of pregnant women and ANC visits after during the Covid-19 pandemic. The COVID-19 pandemic does not prevent pregnant women from carrying out routine prenatal checks.

Keywords: Antenatal Care; Behavior; Pregnant Women.

1. INTRODUCTION

Pregnant women need to be informed about everything about their pregnancy, especially regarding the condition of their pregnancy, related to the health of the mother and the fetus in the womb. (Tanjung, Effendy, and Utami, 2024). Maternal mortality is still a serious problem that needs to be addressed. The key to preventing maternal mortality is by providing comprehensive, quality antenatal care (ANC) services, and by standards that aim to prepare for a safe, clean, and healthy delivery. (Sudaryo and Sam, 2022). Antenatal Care (ANC) is a planned program in the form of observation, education, and medical treatment for pregnant women to obtain a safe and satisfying pregnancy and childbirth process. ANC visits should be done at least 4 times during pregnancy, namely K1 to K4

(Siwi and Saputro, 2020). Antenatal care visits are an activity to check the condition of the mother and fetus regularly during pregnancy and at the same time detect any irregularities. Antenatal care visits must be carried out at least 4 times during pregnancy, namely 1 time in the first trimester, 1 time in the second trimester, and 2 times in the third trimester. Antenatal care is useful for monitoring the development of pregnancy in improving maternal health, and normal fetal development. Ante Natal also aims to identify and handle complications that may be encountered in pregnancy, childbirth, and postpartum (Ujung and Nainggolan, 2022). A study showed a significant relationship between the history of ANC visits and the incidence of stillbirth. Based on the place of delivery, the group of pregnant women who gave birth in health

facilities with unscheduled ANC visits had a 5 times greater chance of stillbirth (Hairani, 2021).

It is very important to pay attention to maternal services so that maternal morbidity and mortality no longer increase. There are limitations to maternal services after the COVID-19 pandemic, such as pregnant women not wanting to go to health care facilities for fear of infection and delays in prenatal check-ups and prenatal classes. In a study, it was found that 79.4% of pregnant women did not comply with ANC visits during the COVID-19 pandemic at the West Denpasar Ш Health Center. (Dewanggayastuti, Surinati and Hartati, 2022)

Pregnancy check-up activities are a form of health behavior. Health behavior is grouped into three, namely health behavior, illness behavior, and illness role behavior. Antenatal care visits are grouped into healthy behavior, namely behavior shown by a person to maintain and improve their health (Notoatmodjo, 2014). Based on data from the Tuban District Health Service regarding reports of pregnant women, it shows K1 coverage is 98.40% and K4 is 93.72% (Dinkes Tuban, 2020). The data at the Plumpang Community Health Center in the Pregnant Mother Report shows the K1 figure is 102.15% and the K4 coverage is 102.65%. From the results of a preliminary survey conducted at the Plumpang Community Health Center through interviews with 10 pregnant women who visited ANC. As many as 80% of them have poor visiting behavior. and the other 20% of pregnant women have good visiting behavior. Pregnant women say they are still hesitant about going for a pregnancy check-up because they are afraid of contracting the virus after the COVID-19 pandemic. This shows that visiting behavior in utilizing ANC health services after the COVID-19 pandemic has not been stable enouah.

ANC visits can be influenced by several other factors, including age, occupation,

knowledge, and attitude. Apart from these factors, other factors influence the behavior of pregnant women which including the availabilitv of existing facilities infrastructure or health facilities. The strongest factor influencing ANC visits by pregnant women is the availability of health service facilities in the village. (Suriani. 2024). There is a significant relationship between the husband's support and ANC visits. (Yuliawati et al., 2022). Based on the problems above, researchers want to conduct research on the relationship between the behavior of pregnant women and Antenatal Care (ANC) visits after the Covid-19 pandemic at the Plumpang Plumpang Community Health Center, District, Tuban Regency.

2. RESEARCH METHOD

This research is an analytical study with a cross-sectional design. The cross-sectional approach is a type of research that emphasizes measuring or observing data on independent variables and dependent variables only once at a time. The population in this study was all pregnant women in the third trimester at the Plumpang Community Health Center, with a total of 124 people. The sample for this study was 55 pregnant women in their third trimester of pregnancy at the Plumpang Community Health Center.

RESULTS AND DISCUSSION
 Table 1. Characteristic of Respondents.

No.	ltem	Frequency	Percent
1.	Education	•	
	1. High School	45	82%
	2. Elementary	10	18%
	School		
2.	Age (Years)		
	1. 20-30	50	91%
3.	2. 41-50	5	9%
	Job		
	 Housewife 	45	82%
	2. Trader	10	18%

The majority of pregnant women who undergo ANC in the Plumpang Community Health Center area have a high school education level, are 20-30 years old, and have the status of housewives.

Table 2. Attitude and Behavior of Pregnant Women at Plumpang Health Center.

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No.	Attitude	f	Percent
	Behaviour		(%)
1.	Good	45	82
2.	Not Good	10	18
	Total	55	100

The majority of pregnant women have good behavioral attitudes towards the implementation of ANC.

Table 3. ANC Visit of Pregnant Women at Plumpang Health Center.

No.	ANC Visit	Frequency	Percent
1.	Completed	45	82
2.	Not	10	18
	completed		
	Total	55	100

The majority of pregnant women have carried out complete antenatal care visits to ensure the health of the mother and baby.

Table 4. Relationship Between Behavior and ANC Visit of Pregnant Women at Plumpang Health Center.

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No.	Attitude	Antenatal Care Visits		Total
	Behaviour	Completed	Not	
			Completed	
1	Good	40	5	45
2	Not Good	5	5	10
	Total	45	10	55

The majority of pregnant women in the Plumpang Community Health Center working area have good behavioral attitudes and continue with the implementation of complete antenatal care visit behavior.

Based on the results of the Spearman correlation analysis, it was found that the behavioral attitude of antenatal care visits in pregnant women had a positive relationship with the implementation of complete

antenatal care visit behavior after the COVID-19 outbreak, with a value of R=0.5.

Attitude Behaviors of Pregnant Women at the Plumpang Health Center

Most pregnant women have a good attitude and behavior during pregnancy by carrying out routine check-ups. One of the things that supports this behavior is the complete health facilities owned by the Plumpang Community Health Center. Behavior is a reaction or response that is still closed from a person to a stimulus or object. Behavior is also readiness or willingness to act and the implementation of certain motives. Behavior is influenced by internal and external factors, one of which is the experience of what we have experienced and are currently experiencing, which will also shape and influence our appreciation of the stimulus (Notoatmodio, 2010).

Many factors influence health behavior; in this case, Lawrence Green (1980) tried to analyze a person's behavioral factors from the level of health. A person's or community's health is influenced by two main factors, namely self-factors and external factors environment, then the behavior itself is determined or formed from three factors (predisposing factors, supporting factors, and driving factors) so that a certain stimulus will produce a certain reaction or behavior so that they influence each other.

Health behavior will be achieved optimally if all three factors have optimal conditions. In a study conducted in the work area of the Simpang Empat Tasaman Community Health Center involving a sample of 115 respondents, it was found that there was a significant relationship between the attitudes of pregnant women towards the 6th ANC visit at health services. (Zjubaidi and Chairiyah, 2024).

In a study conducted in the Banyumas area, it was explained that maternal and child health is influenced by individual behavioral factors. The MBKM (Merdeka Belajar Kampus Merdeka) Program is one of

the Holistic Village Development and **Empowerment Programs** (PHP2D) bv establishing learning houses and health centers. Its activities include antenatal care examinations, adolescent mental health programs, oxytocin massage, first aid training for febrile seizures in children, toddler development measurements, baby massage, stunting prevention education, and hypertension prevention education. The results showed a positive impact of the MBKM program on changes in village community behavior towards changes in behavior in maternal and child health services. (Kurniati et al., 2022).

post-COVID-19 ln this pandemic situation, there are many restrictions on almost all routine services, including maternal and neonatal health services. For example, pregnant women are reluctant to go to health centers or other health service facilities for fear of contracting the pandemic; there are recommendations to postpone pregnancy check-ups and pregnancy classes. The lack of ANC visits can cause danger to the mother and fetus, such as bleeding during pregnancy due to undetected danger signs. Predisposing factors for pregnant women that influence visits by pregnant women in the third trimester are age, education, knowledge, and attitudes of pregnant women. (Ariestanti, Widayati and Sulistyowati, 2020). The formation of good attitudes towards ANC behavior is influenced by the high level of education of pregnant women. There is a significant relationship between the level of education of pregnant women and ANC visits, where pregnant women with higher education tend to visit ANC more often and regularly compared to those with lower education. (Sandalayuk, Hano and Pakaya, 2023). There are various determinants in the use of ANC services in developing countries. These factors not only come from individual pregnant women but are also related to service providers. The level of education of pregnant women is the most influential factor among other factors. The level of education is positively related to the use of ANC services. The higher the level of education of pregnant women, the higher the frequency of ANC visits (Nurlaili, 2019).

ANC Visits for Pregnant Women in the 3rd Trimester in the Plumpang Health Center Working Area

Most pregnant women have had their 3rd trimester ANC visit. Antenatal care visits are an activity to check the condition of the mother and fetus regularly during pregnancy and, at the same time, detect any irregularities (Retno & Heri, 2019). Antenatal care visits must be carried out at least 4 times during pregnancy, namely 1 time in the first trimester. I time in the second trimester. and 2 times in the third trimester (Kemenkes. 2020). Pregnant women should make 4 ANC visits. In this study, pregnant women did not regularly make ANC visits because pregnant women felt lazy about coming to health services. Factors that can influence the scope of visits by pregnant women include factors predisposing (age, education, occupation, knowledge, and attitudes of pregnant women). reinforcing factors (attitudes and behavior of health workers, religious leaders, and community leaders, husband's support) in conducting ANC visits at health services. (Hutomo, 2021). The role of midwives is very important in encouraging visits by pregnant women. Internal factors of midwives in continuous midwifery services include knowledge, training, attitudes, motivation. and skills in continuous midwifery services. (Maita, 2021).

The Relationship Between Pregnant Women's Behavioral Attitudes and ANC Visits

The results of data analysis and data interpretation in research conducted by researchers on pregnant women in the third trimester at the Plumpang Community Health Center, Plumpang District, Tuban Regency in 2021 showed that the majority of ANC visits were in the less visiting category,

namely 7 (70.0%) had the poor behavior category.

Based on the results of the Spearman's Rho test using SPSS with a significance of α = 0.05, the value of r = 0.505 and sig (2 tailed) p = 0.000. So that p < α , it can be concluded that H1 is accepted, which means there is a relationship between the behavior of pregnant women with ANC visits to pregnant women at the Plumpang Community Health Center, Plumpang District, Tuban Regency.

This is reinforced by the theory from Notoadmodjo (2010), which explains that behavior can be differentiated from its characteristics, such as better behavior is behavior that shows or displays, accepts, approves. respects. and intends to implement the norms that apply where the individual is located. Meanwhile, behavior is behavior that shows rejection of a norm that applies where the individual is located. Researchers assume that behavior can influence a person, but does not directly manifest in an action. The importance of the level of knowledge is a very important domain in shaping a person's actions, through 6 stages. namelv knowina. understanding, application, synthesis. analysis, and evaluation. To turn behavior into real action, other driving factors are needed, namely personal experience. culture, other people who are considered important, and mass media. The behavior of pregnant women regarding ANC visits. Pregnant women have the awareness and willingness to carry out ANC visits. This can be implemented if pregnant women have an understanding obtained through educational activities on the management of ANC visits obtained from midwives and local posyandu cadres. Pregnant women with better attitudes towards ANC visits will decide to make regular ANC visits by meeting the minimum standards for ANC visits and by forming a positive attitude towards the importance of ANC visits. ANC pregnant women can carry out pregnancy checks with health workers so they can monitor

conditions and pay more attention to the health of the mother and fetus, so that K1 and K4 coverage is achieved according to the target. There is a significant relationship between compliance with ANC visits and the method of delivery at Sukaindah Health Center. Pregnant women who comply with ANC visits are more likely to give birth normally compared to pregnant women who do not comply with ANC visits. Mothers who do not comply with ANC visits are 4 times more at risk of giving birth by cesarean section. (Sunarto et al., 2025).

4. CONCLUSION

Based on research on the relationship between pregnant women's behavioral attitudes and antenatal care (ANC) visits after the Covid-19 pandemic at the Plumpang Community Health Center, Plumpang District, Tuban Regency, it can be concluded as follows: Most pregnant women at the Plumpang Community Health Center, Plumpang District, Tuban Regency have good ANC visit status. There is a significant relationship between behavioral attitudes and ANC visits for pregnant women at the Plumpang Community Health Plumpang District, Tuban Regency.

5. SUGGESTION

Pregnant women are expected to care more about the health of the mother and fetus by carrying out ANC visits appropriately, so that they can reduce MMR and IMR. When visiting ANC at health services, pregnant women are expected to wear a mask as personal protective equipment to prevent disease transmission.

6. REFERENCES

1. Ariestanti, Y., Widayati, T. Sulistvowati. Y. (2020) 'Determinan Perilaku lbu Hamil Melakukan Pemeriksaan Kehamilan (Antenatal Care) Pada Masa Pandemi Covid -19'. Jurnal Bidang Ilmu Kesehatan, 10(2), pp. Available 203-216. at:

- https://doi.org/10.52643/jbik.v10i2.1107.
- Dinas Kesehatan dan P2KB Kabupaten Tuban. Profil Kesehatan Tuban Kabupaten, 2020
- 3. Dewanggayastuti, K.I., Surinati, I.D.A.K. and Hartati, N.N. (2022) 'Kepatuhan Ibu Hamil Melakukan Kunjungan Antenatal Care (ANC) pada Masa Pandemi Covid-19', *Jurnal Gema Keperawatan*, 15(1), pp. 54–67. Available at: https://doi.org/10.33992/jgk.v15i1.1910.
- 4. Hairani, L.K. (2021) 'Hubungan Antara Riwayat Kunjungan Antenatal Care (ANC) dengan Kejadian Lahir Mati di Indonesia', *Jurnal Epidemiologi Kesehatan Indonesia*, 5(2). Available at: https://doi.org/10.7454/epidkes.v5i2.408 5.
- Hutomo, W.M.P. (2021) 'Hubungan parietas dengan kunjungan Antenatal Care (ANC) di Puskesmas Dum Distrik Sorong Kepulauan Kota Sorong', *Jurnal Ilmiah Kesehatan Diagnosis*, 16, pp. 61– 66.
- 6. Kemenkes RI. Profil Kesehatan Masyarakat. Jakarta, 2020.
- 7. Kurniati, C.H. *et al.* (2022) 'Impact Of Implementation Of The MBKM Program On Change Of Community Behavior In Maternal And Child Health Services', *Kebidanan Indonesia*, 13(1), pp. 61–67. Available at: https://jurnal.stikesmus.ac.id/index.php/JKebIn/article/download/565/384.
- Maita, L (2021) 'Analisis Faktor Internal Kinerja Bidan Dalam Pelayanan Kebidanan Berkelanjutan', Jurnal Kebidanan Malahayati, 7(3), pp. 359–364. Available at: https://doi.org/10.33024/jkm.v7i3.3639.
- 9. Notoamodjo, S., (2010). Pendidikan dan Perilaku Kesehatan. Jakarta: Rineka Cipta
- Notoatmodjo, S. (2014). Promosi kesehatan dan perilaku kesehatan. Jakarta: Rineka Cipta
- 11. Nurlaili, H. (2019) 'Determinan Penggunaan Pelayanan Anc Di Negara

- Berkembang: Tinjauan Pustaka Tradisional', *PLACENTUM: Jurnal Ilmiah Kesehatan dan Aplikasinya*, 7(2), p. 1. Available at: https://doi.org/10.20961/placentum.v7i2. 29718.
- Sandalayuk, M., Hano, Y.H. and Pakaya, R. (2023) 'Determinan Kunjungan Antenatal Care Pada Ibu Hamil Di Wilayah Kerja Puskesmas Paguyaman Pantai Kabupaten Boalemo Tahun 2022', Ahmar Metastasis Health Journal, 3(1), pp. 18–25. Available at: https://doi.org/10.53770/amhj.v3i1.179.
- 13. Siwi, R.P.Y. and Saputro, H. (2020) 'Analisis Faktor Yang Mempengaruhi Rendahnya Kunjungan Antenatal Care (ANC) Terpadu Pada Ibu Hamil Di Wilayah Kerja Puskesmas Sukodono Kabupaten Lumajang', *Journal for Quality in Women's Health*, 3(1), pp. 22–30. Available at: https://doi.org/10.30994/jqwh.v3i1.45.
- 14. Sudaryo, M.K. and Sam, A.Q. (2022) 'Hubungan Kunjungan Antenatal Care (ANC) dengan Kejadian Komplikasi Obstetri di Indonesia: Analisis Data Sekunder Survei Demografi dan Kesehatan Indonesia (SDKI) Tahun 2017', Jurnal Epidemiologi Kesehatan Komunitas, 7(2), pp. 587–595. Available at:
 - https://doi.org/10.14710/jekk.v7i2.11866.
- Sunarto, A. et al. (2025) 'Hubungan Kepatuhan Kunjungan Antenatal Care dengan Cara Persalinan di Puskesmas Sukaindah Kabupaten Bekasi', 5(1), pp. 77–86. Available at: https://doi.org/10.24853/myjm.5.1.77-86.
- 16. Suriani, R. (2024) 'Faktor-Faktor Yang Mempengaruhi Kunjungan Perawatan Antenatal', *Jurnal Kesehatan Akimal, Vol.2 No.2 Edisi Januari, Tahun 2024, ISSN: 2615-0573*, 2(2).
- Tanjung, F., Effendy, I. and Utami, T.N. (2024) 'Analisis Faktor Yang Mempengaruhi Kunjungan Antenatal Care (Anc) di Wilayah Kerja Puskesmas

- Pelabuhan Sambas Kota Sibolga Tahun 2022', *Jurnal Kebidanan Khatulistiwa*, 10(2), pp. 79–90.
- 18. Ujung, R.M. and Nainggolan, D.R. (2022) 'Hubungan Karakteristik Ibu Hamil Terhadap Kunjungan Antenatal Care (ANC) Di Wilayah Kerja Puskesmas Siatas Barita', *Jurnal Maternitas Kebidanan*, 7(1), pp. 20–30. Available at: https://doi.org/10.34012/jumkep.v7i1.188 9.
- Yuliawati, E. et al. (2022) 'Faktor-Faktor yang Berhubungan dengan Kunjungan ANC Pada Ibu Hamil Selama Masa

- Pandemi Covid-19 Di Wilayah Kerja Puskesmas Gunung Medan Tahun 2022', Journal of Noncommunicable Diseases, 2(2), p. 64. Available at: https://doi.org/10.52365/jond.v2i2.539.
- 20. Zjubaidi, A.M. and Chairiyah, R. (2024) 'Analisis Hubungan Kunjungan Antenatal Care Berdasarkan Pengetahuan, Sikap, Karakteristik, Dan Akses Fasilitas Kesehatan', *Binawan Student Journal*, 6(2), pp. 153–161. Available at: https://doi.org/10.54771/dxvq3d66.