



JNK

JURNAL NERS DAN KEBIDANAN
(JOURNAL OF NERS AND MIDWIFERY)

<http://jnk.phb.ac.id/index.php/jnk>



Factors Affecting Mother's Behavior on The Compliance of Antenatal Care Visits



Sirli Mardianan Trishinta¹, Pertiwi Perwiraningtyas², Susmini³
^{1,2,3,4}Nursing Department, Tribhuwana Tunggadewi University Malang, Indonesia

Article Information

History Article:

Received, 29/10/2021

Accepted, 15/12/2022

Published, 30/12/2022

Keywords:

ANC, compliance, pregnant, posyandu

Abstract

Antenatal care is very important in ensuring that both the mother and the fetus will survive during pregnancy and during delivery. ANC service is a planned program in the form of observation, education, and medical treatment for pregnant women. The purpose of the research was to determine the factors that influence the mother's behavior on the compliance of Antenatal Care Visits at the Anggrek and Mawar Posyandu, Tlogomas Village, Malang City. The research design used analytic observation. The population of this research was all pregnant women in Posyandu Anggrek and Mawar, Tlogomas Village, Malang City as many as 17 people. The sample was 17 respondents taken by total sampling technique. The data collection technique used an instrument in the form of a questionnaire. The data analysis method used the Chi Square test (p value <0.05). The results showed that most of the respondents (64.7%) had sufficient knowledge, most of the respondents (70.6%) had the attitude of the sufficient category, and most of the respondents (52.9%) had the husband's support in the sufficient category and most of the respondents (64.7%) had the level of compliance of visits in the right category. The results of the chi square test showed that there was a correlation between knowledge, attitudes and husband's support factors on the compliance of Antenatal Care Visits at the Anggrek and Mawar Posyandu, Tlogomas Village, Malang City. Further researchers are expected to conduct similar research by exploring other factors that can affect the compliance of ANC visits such as economic factors, distance from health facilities and this research is carried out by visiting respondents one by one so that it is less effective.

© 2022 Journal of Ners and Midwifery

✉ Correspondence Address:

Tribhuwana Tunggadewi University Malang – East Java, Indonesia

Email : sirli.shinta@unitri.ac.id

DOI: <https://doi.org/10.26699/jnk.v9i3.ART.p335-342>

This is an Open Access article under the CC BY-SA license (<http://creativecommons.org/licenses/by-sa/4.0/>)

P-ISSN : 2355-052X

E-ISSN : 2548-3811

INTRODUCTION

Antenatal Care (ANC) services are to improve the physical and mental health of pregnant women optimally so that they are able to undergo pregnancy until delivery. According to Pattipeilohy (2017) ANC services are services provided to pregnant women during their pregnancy, Antenatal services are very important in ensuring that both the mother and the fetus she contains will be safe during pregnancy and during delivery. ANC service is a planned program in the form of observation, education, and medical treatment for pregnant women (Fitrayeni, et al.et al., 2015).

Globally, Maternal Mortality Rate (MMR) is used as an indicator to measure the success of maternal health efforts in a country or region. In Indonesia, there are nearly 20,000 maternal deaths due to complications during pregnancy or childbirth every year. Based on data from the 2015 Indonesian Demographic and Health Survey (IDHS) by the Survey Implementing Agency (BPS), the MMR in Indonesia is 305 deaths per 100,000 live births. This figure is quite high because it exceeds the predetermined target, which is 102 deaths per 100,000 live births (Rachmawati et al. 2017).

ANC visits are visits of pregnant women to health services as soon as possible since they feel they are pregnant in order to get the right services. Through this antenatal service, obstetric complications can be prevented if possible and ensure that complications are detected as early as possible and treated adequately (Pattipeilohy, 2017). ANC is very important for early detection of high risks of pregnancy and childbirth can also reduce maternal mortality and monitor the condition of the fetus. In addition, regular ANC is very important to get counseling and to check for genetic diseases so that the health of the mother and baby is good.

The results of the Basic Health Research (Riskesdas) of the Ministry of Health (2013) show that during the 2010-2013 period, for the first trimester ANC the number of visits only ranged from 72.3% (in 2010) to 81.3% (2013), for the third trimester (coverage of K4) the number of visits only ranged from 61.4% (2010) to 70.0% (2013). It is still very far from the national target which should be at least 95%. This shows that the behavior of the community to check their pregnancy has not been in line with the expectations and the national target of 95%. Given the importance of routine pregnancy check-ups, at least according to national targets, it is therefore necessary to examine what

factors influence the behavior of pregnant women on the compliance of Antenatal Care.

There are several factors that influence the visit of pregnant women according to (Rachmawati et al. 2017). There are many factors causing ANC visit compliance, such as characteristics, behavior, poor service quality, including facilities, human resources competencies, socio-economic, and socio-cultural. Based on Green (2005), individual behavior is affected by three domains; knowledge, attitude, and practices. Beside doing the practice, pregnant women need interpersonal factors with husband's support to achieve compliance with ANC (Rimer and Glanz, 2005). This research was to determine the factors that influence the mother's behavior on the compliance of Antenatal Care Visits

METHOD

This research was an observational study with a cross-sectional design. The data from all variables were taken simultaneously at the Posyandu, Tlogomas village. The data used in this research was primary data obtained from the results of data collection through the distribution of questionnaires to respondents. The population of this research were all pregnant women in the posyandu, Tlogomas, Malang City. The number of sample examined in this research were pregnant women in Tlogomas Village, Malang City. The number of sample were 17 pregnant women in the posyandu, Tlogomas, Malang City. The sampling technique used total Sampling. The independent variable in this research was the factor that influences the mother's behavior that was knowledge, attitude, and husband's support. The dependent variable in this research was the ANC compliance. This research was conducted at the posyandu outside Tlogomas Malang City. The research was carried out in June 2021. The independent variable was ANC compliance which consists of Factors Affecting Mother's Behavior which consists of knowledge, attitude, and husband's support. The research instrument for this variable was in the form of a questionnaire. A questionnaire collection sheet was used as the instrument of the dependent variable of the compliance of Antenatal Care visits.

Data Analysis

Data analyzed by computer and SPSS version 17 for Windows program. Univariate analysis was carried out to see the distribution of each variable in the form of frequency distribution data, to see the

maximum value, mean, and standard deviation. correlation between each independent and Bivariate analysis was used to determine the close dependent variable.

RESULTS

Characteristics of respondents in this research include age, education, gender, length of work, position and employment status as follows

Table 1: Frequency distribution of respondents based on age, education, gender, occupation, Trimesetr and Pregnancy at the Mawar and Anggrek Posyandu in 2021

Variable	Category	F	(%)
Age	22-25 years	3	17,6
	26-30 years	5	29,4
	31-35 years	6	35,3
	36-40 Tahun	3	17,6
Last Education	Elementary school	4	23,5
	Junior high school	8	47,1
	Senior high school	3	17,6
	College	2	11,8
Job	Housewife	12	70,6
	Teacher	1	5,9
	Entrepreneur	4	23,5
Trimester	1 st trimester	10	58,2
	2 nd trimester	5	29,4
	3 rd trimester	2	11,7
Pregnancy	1 st pregnancy	5	29,4
	2 nd pregnancy	8	47,1
	3 rd pregnancy	3	17,6
	4 th pregnancy	1	5,9
Total		17	100

Based on table 1, it shows that almost half of the respondents are aged 31-35 years (35.3%), almost half of the respondents have the latest junior high school education (47.1%), all of them are female (100%), most of the respondents have jobs as household workers (70.6%), most of the respondents were in the 1st trimester (58.2%) and almost half of the respondents were in the 2nd pregnancy (47.1%).

Identification of Factors Affecting Mother's Behavior on Compliance of Antenatal Care (ANC) Visits at Posyandu Mawar and Anggrek Tlogomas Village.

Table 2: Results Description of Factors Affecting Mother's Behavior on Compliance of Antenatal Care (ANC) Visits at Posyandu Mawar and Anggrek, Tlogomas Village

Variable	Category	F	(%)
Knowledge	Good	4	23,5
	Moderate	11	64,7
	Lack	2	11,8
Attitude	Good	3	17,6
	Moderate	12	70,6
	Lack	2	11,2
Husband's support	Good	3	17,6
	Moderate	9	52,9
	Lack	5	29,9
Total		17	100

Based on Table 2 above, it shows that most of the respondents (64.7%) have sufficient knowledge, most of the respondents (70.6%) have the attitude of the sufficient category, and most of the respondents (52.9%) have the husband's support in the sufficient category.

Table 3: Results of the Compliance of Antenatan Care Visits at Posyandu Mawar and Anggre in Tlogomas Village, Malang City

Variable	Category	F	%
Visitation accuracy	Accurate	11	64,7
	Not accurate	6	35,3
Total		17	100

Based on Table 3 above, it shows that most of the respondents (64.7%) have the visitation accuracy in the accurate category.

Analysis of Factors Affecting Mother's Behavior on Compliance of Antenatal Care (ANC) Visits at Posyandu Mawar and Anggrek, Tlogomas Village

Table 4: Results of a description of the factors that influence the mother's behavior on the compliance of Antenatal Care (ANC) visits at the Mawar and Anggrek Posyandu, Tlogomas Village

Knowledge	Visitation accuracy		Total	Odds Ratio	P
	Accurate	Not accurate			
Good	1 (5,9 %)	3 (17,6%)	4 (23,5%)	2,250	0,027
Moderate	5 (29,4%)	6 (35,3%)	11 (64,7%)		
Lack	0 (0,0%)	2 (11,8%)	2 (11,8%)		
Total	6 (35,3%)	11 (64,7%)	17 (100%)		

Based on table 4, most of the respondents' knowledge is in the good category 11 (64.7%), this affects the compliance of ANC visits including accurate 5 (29.4%), and not accurate 6 (35.3%). Based on the results of the Chi Sqaure test, $p = (0.027) < (0.050)$ which means that there is a correlation between knowledge and the compliance of ANC visits at Posyandu Mawar and Anggrek, Tlogomas Village.

Table 5: Results of a description of the factors that influence the mother's behavior on the compliance of Antenatal Care (ANC) visits at the Mawar and Anggrek Posyandu, Tlogomas Village

Attitude	The compliance of ANC visits		Total	Odds Ratio	P
	Tepat	Tidak Tepat			
Good	1 (5,9 %)	2 (11,8%)	3 (17,6%)	1,550	0,031
Moderate	4 (23,5%)	8 (47,1%)	12 (70,6%)		
Lack	1 (5,9%)	1 (5,9%)	2 (11,8%)		
Total	6 (35,3%)	11 (64,7%)	17 (100%)		

Based on table 5, most of the respondents' attitudes are in the sufficient category 12 (70.6%), this affects the compliance of ANC visits including 4 (23.5%), and 8 (47.1%). Based on the results of the Chi Sqaure test, $p = (0.031) < (0.050)$ which means that there is a correlation between attitude and the compliance of ANC visits at Posyandu Mawar and Anggrek, Tlogomas Village.

Table 6: Results of the description of the factors that influence the mother's behavior on the compliance of Antenatal Care (ANC) visits at the Mawar and Anggrek Posyandu, Tlogomas Village

Husband's support	Visitation accuracy		Total	Odds Ratio	P
	Accurate	Not accurate			
Good	1 (5,9 %)	2 (11,8%)	3 (17,6%)	3,320	0,01
Moderate	4 (23,5%)	5 (29,4%)	9 (52,9%)		

Lack	1 (5,9%)	4 (23,5%)	5 (29,4%)
Total	6 (35,3%)	11 (64,7%)	17 (100%)

Based on table 6, most of the respondents' husband support is in the adequate category 9 (52.9%), this affects the compliance of ANC visits including 4 (23.5%), and 5 (29.4%). Based on the results of the Chi Square test, $p = (0.01) < (0.050)$ which means that there is a correlation between husband's support and the compliance of ANC visits at Posyandu Mawar and Anggrek, Tlogomas Village.

DISCUSSION

Correlation Between Mother's Knowledge Level and Compliance of ANC Visits

Based on the results of the research, it is known that there is a correlation between the level of knowledge and the compliance of ANC visits at Posyandu Mawar and Anggrek, Tlogomas Village, Malang City, as evidenced by the value of $(0.027) < (0.05)$. This shows that there is a close correlation between the level of knowledge and the compliance of ANC visits at Posyandu Anggrekand Mawar Tlogomas.

Knowledge is one of the factors that influence or predispose to behavior change that provides rational thinking or motivation for an activity, as well as a factor that facilitates the occurrence of one's behavior. In this research, the behavior that may be influenced by the level of knowledge is the behavior of the compliance of ANC visits at the Mawar and Anggrek Posyandu Tlogomas Malang City.

The research data showed that of the 17 mothers who had sufficient level of knowledge about the compliance of ANC visits, there were 64.7% who carried out ANC examinations correctly, so it can be concluded that the level of knowledge about the compliance of ANC visits was indicated by proper ANC examinations.

The factors that influence knowledge are age and education. Research conducted by Patel, et al (2016) reveals that a high level of education has an impact on good knowledge, so the better the information obtained will be. This is also in accordance with research conducted by Ismainar, et al (2020) which states that the level of education and knowledge affected mindset that contributed to Antenatal care compliance, The age factor also affects a person's knowledge, where the results of research prove that most of the respondents are aged 24-30 (early adulthood) years (60.0%). Where at this age is a productive age which makes a person look for more information related to new or

unknown things. However, research conducted by Subekti and Sulistyorini (2018) states that age does not affect a person's actions and knowledge because young or old people have the motivation to live healthy and always pay attention to their health.

These results are in accordance with research conducted by Astuti (2015), which states that there is a significant correlation between the level of knowledge and K4 visits to pregnant women in the working area of the Duren Health Center, Semarang Regency ($\rho = 0.008 < = 0.05$; $OD = 15,0$). This result is also in accordance with Syamsiah and Pustikasari (2014), which states that there is a correlation between knowledge and ANC visits to pregnant women at the Kembangan Health Center, West Jakarta ($\rho = 0.032 < = 0.05$; $OR = 3.83$).

Correlation Between Mother's Attitude and Compliance of ANC Visits

Based on the results of the research, it is known that there is a correlation between attitude and the compliance of ANC visits at the Mawar and Anggrek Health Care Centers of Tlogomas Malang City as evidenced by the value of $(0.031) > (0.05)$. These results prove that the mother's attitude has an effect on the compliance of ANC visits. Attitude is a reaction or response that is still closed from a person to a stimulus or object. Attitude is also a readiness or willingness to act and is also the implementation of certain motives. Attitudes are also influenced by external and internal factors, one of which is the experience of what we have experienced and are currently experiencing will shape and influence our appreciation of the stimulus.

The formation of attitudes is influenced by personal experience, culture, other people who are considered important, the mass media, the institution or educational institution itself and religious institutions, as well as emotional factors within the individual. To increase the mother's positive attitude towards the importance of Antenatal care, it can be done through health

education, approaches to community leaders, religious organizations (recitations, Taklim assemblies, etc.) (Pattipeilohy, 2017). However, based on the results of the research it was found that there are several factors that influence attitudes, namely education and age. Where most of the respondents have a sufficient attitude because it is influenced by one of the factors of education. Where a person's education is good will affect a person's attitudes and actions. Notoadmodjo (2012) revealed that the higher a person's education, the easier it is to accept new things and adapt to new things that can be practiced through their attitudes and actions.

Age is one of the factors that influence a person's attitude. Notoadmodjo (2012) revealed that the age factor can affect a person's attitude, the older he is, the level of ability, maturity of a person in thinking and receiving information, as well as a person's socioeconomic status will also determine the occurrence of a facility needed for certain activities, so that socioeconomic status this will affect one's knowledge. These results are in line with research conducted by Chaerunnisa and Darmawansyah (2014), which states that attitudes are related to the use of antenatal care services for pregnant women at Mamajang Health Center Makassar City in 2014 ($\rho = 0.043 \leq 0.05$). These results are also in line with research conducted by Rahman (2017), there is a correlation between the attitudes of pregnant women to the importance of Antenatal care with a p value of 0.039.

Correlation between Husband's Support and Compliance of ANC Visits

Based on the results of the research, it is known that there is a correlation between husband's support and the compliance of ANC visits at Posyandu Anggrek and Mawar, Tlogomas Village as evidenced by the value of $(0.010) < (0.05)$. husband with the correct schedule of antenatal care visits for third trimester pregnant women in Bagi Village, Madiun District/Regency in 2017 ($\rho = 0.012 \leq 0.05$). This result is also in accordance with the research stating that there is a correlation between husband's support and ANC visits to pregnant women at the Kembangan District Health Center, West Jakarta ($\rho = 0.038 \leq 0.05$; OR = 3.92) (Syamsiah and Pustikasari, 2014)

The research data showed that of the 17 mothers who received sufficient husband support regarding ANC visits, there were 6 mothers who carried out ANC examinations correctly, so it can be

concluded that husbands' support regarding ANC visits was indicated by proper ANC examinations. Husband's support is a form of husband's attitude, action and acceptance of his wife's condition that requires proper ANC examination to determine the condition of her pregnancy. The forms of husband's support that can be provided include information support which includes providing advice, direction, ideas or other information needed related to proper ANC examinations. Then there is a form of appreciation support by giving recognition and attention to the condition of the wife's pregnancy (Laksono. et al, 2020). Furthermore, there is instrumental support, which can be done through taking the wife for a check-up and paying for the ANC examination. In addition, emotional support is also needed, which is done through paying attention, listening to complaints, sympathizing and empathizing with the wife's condition

RESEARCH LIMITATIONS

Researchers did not explore other factors that could affect the compliance of ANC visits such as economic factors, distance from health facilities and this research was conducted by visiting respondents one by one so it was less effective.

CONCLUSION

The conclusion of this research is: 1) There is a correlation between the mother's level of knowledge and the compliance of anc visits at the Posyandu of Mawar and Anggrek of Tlogomas, 2) There is a correlation between the mother's attitude and the compliance of ANC's visit at the Posyandu Mawar and Anggrek from Tlogomas, 3) There is a correlation between husband's support and the compliance of anc's visit at the Posyandu of Mawar and Anggrek from Tlogomas.

SUGGESTION

- 1) The need to increase understanding of the importance of the compliance of the ANC examination in order to reduce unexpected events so that they can be well controlled.
- 2) Conduct health promotion in accordance with health regulations to improve health quality assurance for pregnant women.
- 3) Conduct research related to factors that affect the compliance of ANC visits such as economic factors and distance from health facilities

ACKNOWLEDGMENT

This paper and the research activity behind it would not have been possible without the exceptional support of the team, students of Maternity Department of Nurse Profession Program year 2020/2021, Unitri. We also grateful to respondents the maternal mother at Posyandu of Anggrek and Mawar of Tlogomas, who are willing to be participants in this project.

FUNDING

This research was supported by the Nurse Profession Program Grant year 2020/2021.

CONFLICTS OF INTEREST

This research is part of roadmap research plan of the Department of Maternity, Faculty of Health Science, Tribhuwana Tunggal University. We explained and collected data from respondents on behalf of The Research Team of the Department of Maternity, Faculty of Health Science to avoid conflicts of interest.

AUTHOR CONTRIBUTIONS

Sirli Mardiana Trishinta conceived of the presented idea and contributed to the final manuscript. Pertiwi Perwiraningtyas performed procedural administration and analysis the data. Susmini developed the theory. All authors discussed the results.

REFERENCE

- 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).
- Chaerunnisa, A. R., & Darmawansyah, N. (2014). Hubungan Perilaku Ibu Hamil terhadap Pemanfaatan ANC di Puskesmas Mamajang, Kota Makassar. *Makalah (tidak dipublikasikan)*.
- Fitrayeni, 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.
- Green, L. W. (2005). Health Program Planning. *An educational and ecological approach*.
- 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>.
- Kemenkes, R. I. (2013). Riset kesehatan dasar (Riskesdas) 2013. *Kemenkes RI. Jakarta*.
- Laksono, A. D., Wulandari, R. D., Kumalasari, M. L. F., Mustika, I., & Matahari, R. (2020). Socioeconomic Difference of Husband's Involvement in Antenatal Care in Rural Indonesia.
- Notoatmodjo, S. (2012). Promosi kesehatan dan perilaku kesehatan.
- 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.
- 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.
- 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.
- 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.
- 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.
- BPS. (2012). Survei Demografi dan Kesehatan Indonesia (SDKI) Laporan Pendahuluan. *Kerjasama BPS, BKKBN dan Kementerian Kesehatan. Measure DHS ICF International. Jakarta*.
- 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.
- 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.