The Relationship Between Mileage, Parity, And Occupation With The Frequency Of Antenatal Care Visits According To Standards In The Work Area Of The Wanaya Public Health Center, Lahat Regency In 2021

Novi Meryanti1, Helni Anggraini2, Sendy Pratiwi Ramadhani3

123Undergraduate Study Program in Midwifery, Faculty of Midwifery and Nursing, Kader Bangsa University, Palembang, 30253, Indonesia

ARTICLEINFO

**Keywords:**
Antenatal Care, Mileage, parity, Profession

**ABSTRACT**
ANC or antenatal care is services provided by health workers according to the right standard for pregnant women to check their pregnancy condition. The purpose of this research is to know the relationship between mileage, parity, and profession with the frequency of antenatal care visit according to standard in the working area of Wanaraya Public Health Center, Lahat Regency 2021. This research is observational and analytic characterized with cross sectional approach. The population of this research was maternity women in the working area of Wanaraya Public Health Center, Lahat Regency from January to July 2021 with total number was 45 people. The sampling technique where all of the population became sample with total number was 45 people. The statistical test with chi-square result showed that p value of mileage 0.003 (p<0.05), parity 0.025 (p<0.05), and professions 0.001 (p<0.05). In conclusion, there was a relationship between mileage, parity, and profession with the frequency of antenatal care visit according to standard in Wanaraya Public Health Center, Lahat Regency 2021.

**E-mail:**
novimeryanti13@gmail.com, helniananggraini589@gmail.com, sandy.pratiwi.01@gmail.com

Copyright © 2022 Science Midwifery.

I. Introduction

One of the health status of a country is determined by AKI and IMR, if the AKI and IMR are small, it is said that the health status of the country is good. Health developments in Indonesia today is still colored by the vulnerability of the health status of mothers and children, especially in the most vulnerable groups, namely pregnant women, mothers giving birth, and during the perinatal period. This is marked by the high Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR). (Indonesian health profile, 2014)

*World Health Organization*(WHO) states that to achieve the SDGS data (Sustainable Development Goals) the target by 2030 can reduce the maternal mortality rate to below 70 per 100,000 live births (Kemenkes RI, 2015). Meanwhile, according to the 2015 Indonesian Health Demographic Survey (IDHS), the maternal mortality rate is still quite high, at 305 per 100,000 live births. According to the Health Profile of South Sumatra, the number of maternal deaths in South Sumatra Province in 2014 was 155 people, increased to 164 deaths in 2015 decreased to 142 people in 2016 and fell again to 107 people in 2017 and rose to 119 people in 2018. In 2015, WHO stated that every year around the world more than 585,000 pregnant women die during pregnancy or childbirth (Kemenkes RI, 2015).

Antenatal care is a program that can reduce maternal and infant mortality. Antenatal care programs are able to detect complications early in pregnancy followed by health education and prevention of pregnancy complications. Antenatal care plays an important role in providing quality care because antenatal care contains components of health promotion, screening, diagnosis and
disease prevention. Developments in antenatal care services provide opportunities for pregnant women to communicate and provide support to mothers. Effective communication about physiological, biomedical, behavioral and sociocultural issues, as well as effective support, including social, cultural, Emotional and psychological support for pregnant women is able to provide positive experiences during pregnancy and childbirth as a foundation for realizing a healthy mother. (Sari Priyanti, et al, 2020)

The standard frequency of antenatal care visits based on WHO recommendations in 2016 is 8 times. According to Alexander and Hudayanti (2020) stated that pregnancy check-ups in developing countries are sufficient to be carried out 4 times, namely at least 1 time in the first and second trimesters, and at least 2 times in the third trimester. An assessment of the implementation of health services for pregnant women can be done by looking at the coverage of K1 and K4. (Indonesian Health Profile, 2019) During 2006 to 2019 the coverage of health services for pregnant women K4 tends to increase. When compared with the target of the Ministry of Health’s Strategic Plan (Renstra) in 2019, which was 80%, the 2019 achievement had reached the target of 88.54%. In South Sumatra the coverage of K4 Maternal Health services in 2019 has exceeded the target of 95, 3% of the 2019 strategic plan target, which is 80%. The K4 achievement at the Wanaraya Health Center, Lahat Regency in 2020 has also reached the target of 90%, but from January to June 2021 the K4 coverage at the Wanaraya Health Center has not reached the target, which is only 39.5% of the 95% target, with a total target of 124 pregnant women.

2. Methods

This study is an analytic observational study with a cross sectional design or approach, to determine the relationship between mileage, parity and occupation with the frequency of antenatal care visits according to standards. This research was conducted in 7 villages that belong to the working area of the Wanaraya Health Center (Wanaraya, Bandar Jaya, Lubuk Seketi, Purworejo, Suka Rame, Purnama Sari, Mekar Jaya) and this research was conducted in August 2021.

The population in this study were all mothers who gave birth in January to July in the working area of the Wanaraya Health Center, and the sample in this study was taken by total sampling technique, where all the population was sampled, which was 45 respondents. The dependent variable in this study was Antenatal Care visits and the independent variables in this study were mileage, parity and occupation. Collecting data using primary data, that is, researchers get data directly from the main source, namely respondents through questionnaires, view data records of antenatal care visits through MCH books and conduct interviews with researchers with resource persons. After the data obtained, it was processed using SPSS (Statistical Package For The Social Science) computer facilities. then analyzed into univariate and bivariate analysis.

Univariate analysis is an analysis that aims to explain or describe the characteristics of a research variable. Univariate analysis was carried out descriptively with simple statistical calculations on each research variable to see the distribution of the frequency of antenatal care visits. Bivariate analysis to analyze the relationship between the independent variables (parity, mileage and occupation) and the dependent (ANC visits). The test used in the bivariate study used the chi square test with (alpha) 0.05 (5%) with a 95% confidence level (CI = 95%). If p<0.05, H0 is rejected, meaning that there is a relationship between the independent variable and the dependent variable, and p>0.05, then H0 is accepted, which means that there is no relationship between the independent variable and the dependent variable.a

3. Results and Discussion

The results of the univariate analysis of the dependent variable Antenatal Care can be seen from the table below:

3.1 ANC Kunjungan Visit Frequency Table
Table 1
Distribution of Frequency of ANC Visits at Wanaraya Health Center, Lahat Regency in 2021

| Work                  | %   |
|-----------------------|-----|
| It is not in accordance with Standard | 25  | 55.6 |
| Standard              | 20  | 44.4 |
| Total                 | 45  | 100  |

Based on table 5.1 above, it can be concluded that there are more mothers who have a frequency of antenatal care visits that do not meet the standard, namely 25 people (55.6%) compared to those who meet the standard, which is 20 people (44.4%).

Table 2
Distribution of Frequency of Mileage at Puskesmas Wanaraya, Lahat Regency in 2021

| Mileage | %   |
|---------|-----|
| Close   | 15  | 33.3 |
| Currently | 03  | 6.7  |
| Far     | 27  | 60   |
| Total   | 45  | 100  |

Based on table 5.2, it shows that the frequency of respondents’ distances from the Wanaraya Health Center is in the far category, namely 27 people (60%).

Table 3
Distribution of Parity Frequency at Puskesmas Wanaraya, Lahat Regency in 2021

| Mileage | %   |
|---------|-----|
| Close   | 15  | 33.3 |
| Currently | 03  | 6.7  |
| Far     | 27  | 60   |
| Total   | 45  | 100  |

Based on table 5.3 shows that the parity of respondents at the Wanaraya Health Center is more multipara, namely as many as 30 people (6.7%) from primiparas as many as 15 people (33.3%).

Table 4
Distribution of the Frequency of Work at Puskesmas Wanaraya, Lahat Regency in 2021

| Work      | %   |
|-----------|-----|
| Working   | 25  | 55.6 |
| Doesn’t work | 20  | 44.4 |
| Total     | 45  | 100  |

Based on table 5.4 above, it can be concluded that there are more respondents who work with a frequency of 25 people (55.6%) compared to those who do not work with a frequency of 20 people (44.4%).

3.5 Bivariate Analysis Results
a. Table of Relationship between distance traveled and frequency of antenatal care
The Relationship Between Mileage, Parity, And Occupation With The Frequency Of Antenatal Care Visits According To Standards In The Work Area Of The Wanaya Public Health Center, Lahat Regency In 2021 (Novi Meryanti, et al)

Table 5
relationship between mileage and frequency of antenatal care at Wanaraya Health Center, Lahat Regency In 2021

| Mileage       | Frequency of ANC visits | Total | P. Value |
|---------------|-------------------------|-------|----------|
|               | Not up to standard      | According to standard | F | % |
| Close         | 3                       | 12     | 15       | 33.3% | 0.003 |
| Currently     | 2                       | 1      | 3        | 6.7%  |
| Far           | 20                      | 7      | 27       | 60%   |
| Total         | 25                      | 20     | 45       | 100%  |

In this study, employment status was divided into three categories, namely near (<0.5 km), medium (0.5 km-2 km), and far (>5 km). Based on table 5.5, the frequency of distance traveled by respondents to the Wanaraya Health Center was obtained from 45 respondents, the most in the distant category, namely 27 people (60%), the frequency of antenatal care visits that did not meet the standards, most of them came from respondents who had long distances (44.4%) and frequency of visits. Most standardized antenatal care comes from respondents who have short distances (26.7%). Based on the results of statistical tests using chi-square value 0.003 (p < 0.05), meaning that there is a significant relationship between the distance traveled and the frequency of antenatal care according to the standard. It means that the hypothesis states that there is a relationship between the distance traveled and the frequency of antenatal care according to the standard and is statistically proven.

b. Table of the relationship between parity and frequency of antenatal care

Table 6
the relationship between parity and the frequency of antenatal care at the Wanaraya Health Center, Lahat Regency in 2021

| Parity       | Frequency of ANC visits | Total | P. Value | OR       |
|--------------|-------------------------|-------|----------|----------|
|               | Not up to standard      | According to standard | F | %       |          |
| Primipara    | 8                       | 17.8% | 14       | 31.1     | 48.9%    | 0.025    |
| Multipara    | 17                      | 37.8% | 6        | 13.3     | 22       | 51.1%    | 0.202(0.056-0.720) |
| Total        | 25                      | 55.6% | 20       | 44.4     | 45       | 100%     |

In this study, parity status was divided into two categories, namely primipara (parity 1) and multipara (number of children 2). Based on table 5.6 shows that the percentage of visits antenatal care on-standard is higher in multiparas than in primiparas. The results of statistical tests using chi-square show that there is a parity relationship with the frequency of antenatal care with a p value of 0.025 (p <0.05). With an OR value of 0.202 (0.056-0.720), parity has a 0.202 times greater chance of causing ANC frequency.

c. Table of Employment Relationship with Antenatal Care Frequency

Table 6
the relationship between parity and the frequency of antenatal care at the Wanaraya Health Center, Lahat Regency in 2021

| Work         | Frequency of ANC visits | Total | P. Value | OR       |
|--------------|-------------------------|-------|----------|----------|
|               | Not up to standard      | According to standard | F | %       |          |
| Working      | 8                       | 17.8% | 17       | 37.8%    | 25       | 55.6%    | 0.001 |
| Doesn’t work | 17                      | 37.8% | 3        | 6.7%     | 20       | 44.4%    | 0.083 |
| Total        | 25                      | 55.6% | 20       | 44.4%    | 45       | 100%     |

In this study, employment status was divided into two categories, namely working (other than RT), multipara (RT). Based on table 5.7, it shows that the percentage of antenatal care visits that do not meet the standards is higher in the sample who does not work compared to those who work. The results of statistical tests using chi-square show that there is a relationship between work and the frequency of antenatal care with a p value of 0.001 (p <0.05). With an OR value of 0.083 (0.019-0.368), the job has a 0.202 times greater chance of causing ANC frequency.
3.6 Discussion

a. The relationship between mileage and frequency of antenatal care visits at the Wanaraya Health Center, Lahat Regency in 2021

In this study, employment status was divided into three categories, namely near (<0.5 km), medium (0.5 km-2 km), and far (>5 km). The frequency of the distance traveled by respondents to the Wanaraya Health Center was in the far category, namely 27 people (60%). Based on table 5.5, it shows that the percentage of the frequency of antenatal care visits that do not meet the standard is higher in the sample who have long distances. The results of statistical tests using chi-square show that there is a relationship between mileage and frequency of antenatal care with a p value of 0.003 (p <0.05).

The results of this study are also in line with the results of fitria, lia 2018 research which shows that the distance of respondents who are close (<0.5 km) to health workers and routinely makes pregnancy visits is 87.5%, while those categorized as moderate (0.5 -2 km) and do not routinely make pregnancy visits, there are 16 of 27 respondents (59.2%) and there are 5 of 8 respondents who travel long distances (> 2 km) with health workers and do not routinely make pregnancy visits. Based on the results of the logistic regression test with SPSS, a sig value of 0.002 was obtained, which means p < (0.05) so that H0 was rejected, which means that there is an influence of the distance factor of pregnant women to health workers on pregnancy visits. This is also in line with the research of Ha, B.TT., et. al. (2015) with a p-value of 0.023.

b. The relationship between parity and frequency of antenatal care visits at the Wanaraya Health Center, Lahat Regency in 2021

In this study, parity status was divided into two categories, namely primipara (parity 1) and multipara (number of children 2). Based on table 5.3 shows that the parity of respondents at the Wanaraya Health Center is more multipara, namely as many as 30 people (6.7%) and based on table 5.6 shows that the percentage of antenatal care visits that do not meet standards is higher in multiparas than primiparas. The results of statistical tests using chi-square show that there is a parity relationship with the frequency of antenatal care with a p value of 0.025 (p <0.05). With an odds ratio (OR) value of 0.202 (0.056-0.720), parity has a 0.202 times greater chance of causing ANC frequency. This research is not in line with the research conducted by Palocoi, Najamudin Ali.dkk.2021. namely the results of the analysis of the relationship between maternal parity to antenatal care compliance according to standards. By using the chi-square test, the result is 0.129 (> 0.05). So it can be said that the relationship between maternal parity and ANC compliance shows that there is no significant relationship with the p-value of 0.129. This study is in line with the research conducted by Mujiati, Dian et al. 2015, namely the results of the Pearson chi-square with G value = 0.019 (<0.05), so H0 is rejected, which means that there is a parity relationship with the frequency of ANC visits in the Paninggaran District Health Center Work Area. Pekalongan 2014. So it can be said that the relationship between maternal parity and ANC compliance shows that there is no significant relationship with the p-value of 0.129. This study is in line with the research conducted by Mujiati, Dian et al. 2015, namely the results of the Pearson chi-square with G value = 0.019 (<0.05), so H0 is rejected, which means that there is a parity relationship with the frequency of ANC visits in the Paninggaran District Health Center Work Area. Pekalongan 2014. So it can be said that the relationship between maternal parity and ANC compliance shows that there is no significant relationship with the p-value of 0.129. This study is in line with the research conducted by Mujiati, Dian et al. 2015, namely the results of the Pearson chi-square with G value = 0.019 (<0.05), so H0 is rejected, which means that there is a parity relationship with the frequency of ANC visits in the Paninggaran District Health Center Work Area. Pekalongan 2014.

c. The relationship between work and frequency of antenatal care at the Wanaraya Health Center, Lahat district in 2021

In this study, employment status was divided into two categories, namely working (other than RT), multipara (RT). Based on table 5.7, it shows that the percentage of antenatal care visits that do not meet the standards is higher in the sample who does not work compared to those who work. The results of statistical tests using chi-square show that there is a relationship between working and the frequency of antenatal care with a p value of 0.001 (p <0.05). Occupations have an OR of 0.083 (0.019-0.368), which is a 0.083 times greater chance of causing the frequency of antenatal care.

This research is thickly compared with the research conducted by Sari, et al. (2018) with a p-
value of 0.596, Gamelia, et al (2013) with a p-value of 0.695, Wuryani and Aisyah (2019) with a p-
value of 0.257. Work supports the ability of pregnant women to be able to check their pregnancy
both in terms of cost and time, however, mothers who do not work should also have a greater
opportunity to carry out examinations. Thus it can be said that work has more opportunities to
carry out pregnancy checks.

4. Conclusions

There is a relationship between mileage and frequency of antenatal care visits, There is a
relationship between parity and frequency of antenatal care visits, There is a relationship between
work and frequency of antenatal care visits. So it is recommended to conduct cross-sectoral
collaboration in this case in relation to the village in providing infrastructure such as a place to hold
classes for pregnant women, providing road access and possible transportation of health workers.

References

[1] Almatsier, S., 2009. Basic Principles of Nutrition Science, Jakarta, PT Gramedia Pustaka Utama
[2] Indrayan, SST, 2011 Textbook of Pregnancy Care, Jakarta : Trans Info Media
[3] Dewilia, Nanny Vivian, 2011. Pregnancy Care for Midwifery, Jakarta: Salemba Medika
[4] Dewi, ABFK, Pujiastuti, N., Fajar, I., 2013. Nutrition Science for Health Practitioners,
First Edition, Yogyakarta, Graha Ilmu.
[5] Fitria, Lia, 2018. Analysis of the factors that influence the third trimester pregnant women doing
Antenatal Care K4. Journal of Health Vol.6 No.2
[6] Idawati, Yuliana, Razali, 2020. Factors related to the visit of pregnant women in conducting antenatal
care in the working area of the glumpang baro health center, pidie district. Journal of FARMASINDO
Polytechnic Indonusa Surakarta issn
[7] Indonesian Ministry of Health. Indonesia Health Profile 2014. Jakarta : Ministry of Health RI : 2015
[8] Indonesian Ministry of Health. 2014. Guidelines for Balanced Nutrition, Directorate
General of Nutrition and MCH, Jakarta, p. 24-26
[9] Miyata, SMI and Proverawati, A., 2010. Fetal Nutrition & Pregnant Women; How to
Make the Fetal Brain Smart, Yogyakarta, Nuha Medika.
[10] Prawirohardjo, Sarwono, 2014. Midwifery, Jakarta: PT Bina Pustaka Sarwono Prawirohardjo
[11] Priyanti, S., Irawati, D., & Syalnina, 2020. Frequency and risk factors of Antenatal Care visits. Scientific
Journal of Midwifery, vol 6, No.1
[12] Rachmawati, Al, Puspitasari, RD, Cania, E, 2017. Factors Affecting Antenatal Care (ANC) Visits for
Pregnant Women. Majority,Volume 7 number 1
[13] Rukiah, AY, Yuliani, L, Maemunah, & Susilawati, L (2013). Pregnancy Midwifery Care. Jakarta: CV.
Media Info Trans.
[14] Setyorini, A., Sijabat, Sari, MA, (2021). Factors influencing the compliance of pregnant women in
conducting antenatal care (ANC) visits in health services. Journal of Nursing I CARE, Vol.2 No.1
[15] Sulistyoningsih, H., 2011. Nutrition for Maternal and Child Health, First Edition,
Yogyakarta, Graha Ilmu
[16] Usman, et al. 2018. Factors related to the use of antenatal care at the Madisingna Mario Community
Health Center. Public health study program FIKES UMPAR: Vol.1, No 1
[17] Walyani, Elisabeth Siwi. 2015. Midwifery care in pregnancy. Pustakabarupress : Yogyakarta.