



The Relationship Between Age, And Occupation Of Pregnant Women With Compliance In Conducting K4 Antenatal Care (ANC) Coverage At Bpm Marmina Empat Lawang In 2023

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A B S T R A C T

Antenatal Care (ANC) is health care that is delivered to pregnant women before and during pregnancy with the aim of early detection of maternal and fetal health problems. The factors that influence ANC visits include: Age, Parity, Occupation, Education, and socioeconomics. The purpose of this study was to determine whether there is a relationship between education, age and maternal employment with Antenatal Care (ANC) visits. Analytic survey research design using a cross sectional approach. The population taken was all pregnant women who made Antenatal Care (ANC) visits at BPM Marmina Empat Lawang, totaling 517 people. Sampling using the Random Sampling method totaling 226 people. From the results of the Chi Square Test, there was a relationship between education and antenatal care visits (ANC) (p value = 0.000), and there was a relationship between age and antenatal care visits (ANC) (p value = 0.008), and there was a relationship between work and antenatal care visits (ANC) (p value = 0.013). The results of this study indicate a significant relationship between education, age and work with antenatal care visits (ANC) at the Midwife Practice BPM Marmina Empat Lawang in 2023. Conclusion to health workers, especially in the Midwife Practice Mandiri Marmina Palembang to be able to maintain and improve the quality of service to pregnant women and add counseling and counseling about the importance of Antenatal Care Visits (ANC) in pregnant women.

INTRODUCTION

K1 coverage is a description of the number of pregnant women who make their first visit to a health care facility, to get antenatal care. The K4 coverage rate is pregnant women who receive antenatal care according to the standard at least 4 times with the distribution of service delivery at least 1 time in the first quarter, 1 time in the second quarter, and 2 times in the third quarter (Indonesian Ministry of Health, 2020).

The coverage of visits to pregnant women in Indonesia in 2021 reached K1 95.25% and K4 86.85% and in 2022 increased to K1 97.86% and K4 as much as 89.33% (Ministry of Health RI, 2022). Meanwhile, in South Sumatra Province, the number of visits to pregnant women in 2020 K1 reached 98.08%, and K4 until December 2021 reached 93.86% (South Sumatra, 2021).

According to data from the Palembang City Health Office, the number of pregnant women who made K1 and K4 visits was obtained. Based on program reports from all Palembang City health centers in 2020, the number of pregnant women who made K1 visits was 99.96% and K4 visits was 98.97%. The coverage of visits by pregnant women in Palembang city for the last 5 years has continued to increase every year and exceeded the target. This reflects the high awareness of pregnant women about the importance of pregnancy check-ups (Palembang City Health Office, 2020).

According to data from the Marmina Independent Practice Midwife in Empat Lawang, the coverage of Antenatal Care (ANC) visits in 2019-2023 was 517 mothers (Profile of Marmina Independent Practice Midwife, 2023).

METHOD

Research method is a systematic way to answer the problem being studied, using scientific methods that are organized and complete. This study used an analytic survey method with a cross sectional approach where the independent variables (Education, Age and Occupation) and the dependent variable (Antenatal Care Visit (ANC)) were collected at the same time. and the dependent variable (antenatal care (ANC) visit) were collected at the same time.

RESULT

Univariate Analysis

Table 1. Frequency Distribution of Respondents Based on Antenatal Care (ANC) Visits at Midwife Independent Practice Marmina Empat Lawang Year 2023

Antenatal Care Visit (ANC)	Frequency	Percentage (%)
Yes	196	86,7
No	30	13,3
Total	226	100

Based on the table above, it can be seen that out of 226 respondents, 196 respondents (86.7%) made Antenatal Care Visits (ANC) according to the standard compared to respondents who made Antenatal Care Visits (ANC) not according to the standard as many as 30 respondents (13.3%).

Table 2. Frequency Distribution of Respondents Based on Maternal Education at Midwife Independent Practice Marmina Empat Lawang in 2023

Education	Frequency	Percentage (%)
High	177	78.3
Low	49	21.7
Total	226	100

From the table above, out of 226 respondents, 177 respondents (78.3%) had a high education, more than respondents with a low education as many as 49 respondents (21.7%).

Table 3. Frequency Distribution of Respondents Based on Maternal Age at Midwife Independent Practice Marmina Empat Lawang in 2023

Mother's age	Frequency	Percentage (%)
Productive	196	86,7
Not Productive	30	13,3
Total	226	100

From the table above of 226 respondents, respondents whose productive age level was 196 respondents (86.7%) were more than respondents whose age level was not productive as many as 30 respondents (13.3%).

Table 4. Frequency Distribution of Respondents Based on Mother's Work at Midwife Independent Practice Marmina Empat Lawang in 2023

Jobs	Frequency	Percentage (%)
Not working	190	84.1
Working	36	15.9
Total	226	100

Based on the table above, out of 226 respondents, 190 respondents (84.1%) did not work, more than respondents who worked as many as 36 respondents (15.9%).

Bivariate Analysis

Table 5. Relationship between Education and Antenatal Care (ANC) Visits at Midwife Independent Practice Marmina Empat Lawang Year 2023

Education	ANC visit				Total		P-Value
	Yes		No		n	%	
	n	%	n	%			
High	165	93.2	12	6.8	177	100	0,000 (meaningful)
Low	31	63.3	18	36.7	49	100	
Total	196	86.7	30	13.3	226	100	

Based on the table above, out of 226 maternal respondents with higher education, 177 respondents made antenatal care (ANC) visits according to the standard 165 respondents (93.2%), more than those who did not make antenatal care (ANC) visits according to the standard as many as 12 respondents (6.8%). While respondents with low education 49 respondents, who made Antenatal Care (ANC) visits according to the standard 31 respondents (63.3%) were more than those who did not make Antenatal care (ANC) visits according to the standard as many as 18 respondents (36.7%).

Table 6. Relationship between Maternal Age and Antenatal Care (ANC) Visits at Midwife Independent Practice Marmina Empat Lawang Year 2023

Age	ANC visit				Total		P-Value
	Yes		No		n	%	
	n	%	n	%			
Productive	175	89.3	21	10.7	196	100	0,008 (meaningful)
Not Productive	21	70.0	9	30.0	30	100	
Total	196	86.7	30	13.3	226	100	

Based on the table above, of the 226 respondents who had productive age 196 respondents, who made antenatal care (ANC) visits according to the standard 175 respondents (89.3%), more than those who did not make antenatal care (ANC) visits according to the standard as many as 21 respondents (10.7%). While respondents of unproductive age 30 respondents, who made Antenatal Care (ANC) visits according to the

standard 21 respondents (70.0%) were more than those who did not make Antenatal care (ANC) visits according to the standard as many as 9 respondents (30.0%).

Table 7. The Relationship Between Maternal Occupation and Antenatal Care (ANC) Visits at Mandir Marmina Practice Midwife Empat Lawang in 2023

Maternal Practices Midwife Empat Luwang in 2023							
Jobs	ANC visit				Total		P-Value
	Yes		No		n	%	
	n	%	n	%			
Not Working	170	89.5	20	10.5	196	100	0,013 (meaningful)
Working	26	72.2	10	27.8	30	100	
Total	196	86.7	30	13.3	226	100	

Based on the table above, out of 226 respondents, mothers who did not work 190 respondents, who made antenatal care (ANC) visits according to the standard 170 respondents (89.5%), more than those who did not make antenatal care (ANC) visits according to the standard as many as 20 respondents (10.5%). While 36 respondents who worked, who made Antenatal care visits (ANC) according to the standard 26 respondents (72.2%) more than those who did not make Antenatal care visits (ANC) according to the standard as many as 10 respondents (27.8%).

DISCUSSION

The results of univariate analysis obtained 226 respondents, mothers who made Antenatal Care (ANC) visits according to standards were 196 respondents (86.7%), more than respondents who did not make Antenatal Care (ANC) visits according to standards as many as 30 respondents (13.3%).

Based on this study, maternal education is divided into 2 categories, namely high (if the mother's education $\geq$ SMA) and low (if the mother's education $<$ SMA). Univariate analysis results obtained from 226 respondents, respondents with high education were 177 respondents (78.3%), more than respondents with low education as many as 49 respondents (21.7%).

This research is in line with Anggun's research (2019) at Hj. Maimunah Kertapati Independent Practice Midwife Palembang, which concluded that pregnant women who had an education level $\geq$ SMA were 29 people (65.9%) more when compared to respondents who had low education, namely 15 people (34.1%).

Based on this study, maternal age is divided into 2 categories, namely productive (if in reproductive age 20-35 years), and unproductive (if in unproductive age <20 and >35 years). the results of univariate analysis obtained from 226 respondents, respondents whose productive age were 196 respondents (86.7%), more than respondents whose unproductive age were 30 respondents (13.3%).

This research is in line with Anggun's research (2019) at Midwife Independent Practice Hj. Maimunah Kertapati Palembang, it is known that out of 44 respondents who have healthy reproduction, 25 people (56.8%) are more when compared to respondents who have unhealthy reproduction, namely 19 people (43.2%).

Based on this study, maternal employment is divided into 2 categories, namely not working (if the mother does activities but does not make money), and working (if someone does activities and makes money). Based on the results of univariate analysis obtained from 226 respondents, 190 respondents (84.1%) did not work, more than mothers who worked as many as 36 respondents (15.9%).

This research is in line with research (Anggun, 2019) at Midwife Independent Practice Hj. Marmina Empat Lawang, it is known that of the 44 respondents who did not work as many as 28 people (63.6%), more when compared to respondents who worked, namely 16 people (36.4%). Because, a study revealed that working too much can actually affect the size of the fetus at birth.

From the results of this study, the researcher assumes that work is one of the factors that influence pregnant women not to make ANC visits according to standards because a working pregnant woman tends to spend her time doing her work activities rather than having to make Antenatal Care (ANC) visits. Meanwhile, pregnant women who do not work have more time to do their daily activities and go to the health service to check their pregnancy.

CONCLUSION

Most respondents conducted standardized antenatal care (ANC) visits. Standardized ANC visits were mostly carried out by respondents who had a high level of education, were at productive age, and did not work. In addition, there is a significant relationship between education level, age, and employment status with compliance in conducting ANC visits at Marmina Independent Practice Midwife, Empat Lawang, in 2023.

REFERENCES

- Anggun. (2019a). *Factors associated with antenatal care (ANC) visits*. BPM Hj. Maimunah.
- Anggun. (2019b). *Factors associated with antenatal care (ANC) visits*. BPM Hj. Ratna Wilis.
- Andika et al. (2017). *Level of maternal knowledge about physiological changes in pregnancy in Surakarta*.
- Anwar. (2016). *Obstetric care pathology theory*. Jakarta.
- Aiy Yeyeh, R. (2019). *Midwifery care (pregnancy)*. Trans Info Medika.
- Bartini. (2016). *Midwifery care during pregnancy*. Graha Ilmu.
- BPM Yusida. (2023). *Register book*. BPM Yusida Edward.
- Eva Prianka. (2016). *Overview of primigravida mothers' knowledge of physiological changes during pregnancy at Private Practice Midwife Sri Widati Kartasura Sukoharjo*.
- Fidratul Khasanah. (2017). *Overview of antenatal care visits at the Pondok Jagung Health Center, South Tangerang City*. Nursing Science Study Program, Faculty of Medicine and Health Sciences, Syarif Hidayatullah State Islamic University.

- Galuh Candra Swandari. (2016). *The relationship between maternal knowledge and attitude with antenatal care visits in the working area of the Lambuya Health Center, Konawe Regency in 2017*. Ministry of Health of the Republic of Indonesia Kendari Health Polytechnic, D-IV Midwifery Program.
- Gunawan. (2019). *Health research methodology*. Rineka Cipta.
- Hidayat. (2016). *Midwifery research methods and data analysis techniques*. Salemba Medika.
- Indonesian Ministry of Health. (2016). *Office profile of the Ministry of Health of the Republic of Indonesia*.
- Indonesian Ministry of Health. (2017). *K1 and K4 coverage*.
- Indonesian Ministry of Health. (2019). *Profile of the health service of the Republic of Indonesia*. Ministry of Health of the Republic of Indonesia.
- Kuswanti. (2016). *Study guide for midwifery care for pregnant women*. Rineka Cipta.
- Lumempouw, G. A., et al. (2016). *Research*. Manado City.
- Madriawati. (2016). *Pregnancy care for midwifery*. Salemba Medika.
- Manuaba. (2019). *Obstetrics, gynecology, and family planning for midwife education*. Medical Book.
- Notoatmodjo. (2019). *Health research methodology* (Revised ed.). Rineka Cipta.
- Padila. (2016). *Obstetric care in physiologic pregnancy*. Salemba Medika.
- Palembang City Health Office. (2020). *Palembang City Health Office profile*.
- Pasaribu. (2019). *Practical handbook of maternal and neonatal health services*. PT Bina Pustaka Sarwono Prawirohardjo.
- Purwanto, N. (2019). *The relationship between the age of pregnant women with antenatal care (ANC) regularity: Sidomukti Village, Lamongan District*. BPS.
- Rukiyah et al. (2019). *Maternity nursing*. Nuha Medika.
- Saifuddin, A. B. (2019). *Midwifery science*. PT Bina Pustaka Sarwono Prawirohardjo.
- Sri Astuti et al. (2016). *Maternal care in pregnancy*. Salemba Medika.
- Stedmen. (2019). *Midwifery science*. PT Bina Pustaka.
- Sugiyono. (2016). *Midwifery research methods and data analysis techniques*. Salemba Medika.
- Sugiyono. (2019). *Midwifery research methods and data analysis techniques*. Salemba Medika.
- Sulistyawati, A. (2019). *Midwifery care during pregnancy*. Salemba Medika.
- South Sumatra Health Office. (2019). *South Sumatra Health Office profile*.
- Suroto. (2016). *Women's empowerment in the health sector*. Essentia Medika Foundation.