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DOI: [10.31965/infokes.Vol20Iss2.895](https://doi.org/10.31965/infokes.Vol20Iss2.895)Journal homepage: <http://jurnal.poltekkeskupang.ac.id/index.php/infokes>**RESEARCH****Open Access****The Effect of Service and Satisfaction of Pregnant Women on Antenatal Visits to Midwives****Tirza Vivianri Isabela Tabelak^{1,2a*}, Firda Kalzum Kiah^{1b}, Nurlaelah Al Tadam^{1c}**¹ Department of Midwifery, Poltekkes Kemenkes Kupang, Kupang, East Nusa Tenggara, Indonesia² Center of Excellent, Poltekkes Kemenkes Kupang, Kupang, East Nusa Tenggara, Indonesia^a Email address: tirzatabelak27@gmail.com^b Email address: firdakiah26@gmail.com^c Email address: lailaaltadam01@gmail.com

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Abstract

The utilization of antenatal services for pregnant women can be determined based on the achievements of K1 (first contact) and K4 (4 times contact) during pregnancy with competent and authorized health workers. The World Health Organization asserts that the attitude and performance of health workers are an essential elements of service quality as it affects the understanding and satisfaction of women, partners, and families in seeking ANC, delivery, and postnatal services. The objective of this research is to examine the effect of antenatal care by midwives and the satisfaction of pregnant women on antenatal visits. The type of this research is analytic observational with a cross-sectional design, performed from March - June in Kupang City. The research subjects were 120 pregnant women with a gestational age of 36 weeks. Data collection employed questionnaires and MCH Handbook. The analysis conducted was univariate and bivariate by employing the Chi-square test with Alpha = 0.05. The results of the study on 120 pregnant women demonstrated that most of the pregnant women received good service (98.3%) and most of whom (60%) were satisfied with the services they experienced. Seventy-one people (59.2%) possessed complete visits. The Chi-square test results revealed relationship between service and satisfaction of pregnant women with antenatal visits ($p = 0.652$, $p = 0.324$). The majority of pregnant women had thorough consultations, received adequate antenatal care, and were pleased with the services they received. In addition to satisfaction, health services and programs must be performed in accordance with local culture and language in order to be accepted by the community, encompassing a decision-making culture that can influence pregnant women's visits to health facilities. Distance, education, profession, parity, and the husband's support can all have an impact on the mother's adherence to antenatal visits.

Keywords: Service, Satisfaction, Antenatal Visits.***Corresponding Author:**

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1. INTRODUCTION

Antenatal care (ANC) is one of the four pillars of the safe motherhood initiative, which are services obtained by pregnant women before birth, including health promotion, screening and diagnosis, and disease prevention which are conducted comprehensively and concerned on service quality (Akowuah, Agyei-Baffour & Awunyo-Vitor, 2018; WHO, 2016). ANC aims to decrease maternal and infant mortality and morbidity directly through the detection and treatment of complications in pregnancy, furthermore, indirectly through early examination and management of problems in pregnancy (WHO, 2018).

The World Health Organization (WHO) formulated guidelines for ANC visits and clinical examinations to prevent complications (Lattof et al., 2020). In Indonesia, antenatal care programs are integrated and encompassing promotive, preventive, rehabilitative, and curative components, such as controlling infectious diseases (sexually transmitted diseases/STDs, Hepatitis B, HIV/AIDS, syphilis, malaria, TB), Maternal and Child Health (MCH) services, nutrition, immunization, noncommunicable diseases, and other local and specific programs as required. Antenatal care utilization for pregnant women can be determined based on K1 (first contact) and K4 (4 times contact) with competent and authorized health workers during pregnancy (Kementerian Kesehatan Republik Indonesia, 2014; Dinas Kesehatan Kota Kupang, 2018). Pregnant women who receive services in the first trimester should continue to obtain services until the third trimester as according to research result, numerous mothers do not frequent health facilities (Iryani, 2020).

Obstacles to implementing health services for pregnant women comprise not only access, but also the quality of services administered, incorporating the availability of infrastructure in health facilities and the fulfillment of all components of health services for pregnant women (Kementerian Kesehatan Republik Indonesia, 2014). According to the World Health Organization, the attitude and performance of health workers is a crucial component of service quality since it can affect women's, partners', and families' comprehension and satisfaction with ANC, childbirth, and postnatal services (Mannava et al., 2015).

K4 coverage data for East Nusa Tenggara Province in 2018 is still low at 52.01 percent (Kementerian Kesehatan Republik Indonesia, 2019). Kupang City as the capital city of East Nusa Tenggara Province possesses an achievement of 87.60 percent in 2018 and has surpassed the K4 target in accordance with the Strategic Plan of the Kupang City Health Office, which is 85 percent. However, not all public health centers in Kupang City have acquired the target due to the 11 public health centers in Kupang City, only 54.5 percent (6 public health centers) have attained the K4 target, while 45.5 percent (5 public health centers) acquiring the target still possesses low coverage (Dinas Kesehatan Kota Kupang, 2018).

The results of another study revealed that maternal health disorders such as hypertension, resulting in the incidence of pre-eclampsia, anemia gravidarum (mild to moderate degree), heart failure, and women with chronic infectious diseases such as STIs and hepatitis were the leading causes of maternal mortality in Kupang City. There are also pregnant women who do not receive ANC as they believe that pregnancy is a normal state, even though they are pregnant with hypertension, causing severe pre-eclampsia. This issue was detected by the midwife during a home visit (Tabelak & Boimau, 2018). Moreover, there are also pregnant women who perform pregnancy checks in the final quarter, hence, early detection of complications cannot be performed (Tabelak & Yurissetiowati, 2022). The objective of this study is to examine the effect of antenatal care and the satisfaction of pregnant women on antenatal visits to the Midwife at the Public Health Center in Kupang City.

2. RESEARCH METHOD

This research is an analytic observational with a cross-sectional design, conducted from March to June 2020 at the Public Health Center in Kupang City. The research subjects were pregnant women with a gestational age age of 36 weeks, a total sample size of 120 people, the inclusion criteria being pregnant women with a gestational age of more than 36 weeks and possessing an MCH Handbook, and the exclusion criteria being pregnant women who did not live permanently and declined to be respondents. The sample method employed was sequential sampling. Data on antenatal treatment, satisfaction, and antenatal visits were obtained by employing questionnaires and Maternal and Child Health Books were used to collect data. The chi-square test with Alpha 0.05 was performed to analyze the data. This research has received ethical approval from the ethics committee of the Kupang Health Polytechnic with the code number LB.02.03/1/0032/2020.

3. RESULTS AND DISCUSSION

This study included 120 pregnant women who visited the Kupang City Health Center for health checking. Kupang city, with an area of 180.27 km², is the capital of the province of East Nusa Tenggara. It shares borders with Kupang Regency on the south, Kupang Bay on the north, Semau Strait and Kupang Regency on the west, and Kupang Regency on the east. Kupang contains six sub-districts and 51 urban villages with diverse population characteristics, as well as 11 health clinics and 42 sub-districts distributed over the 6 sub-districts.

Table 1. The Frequency Distribution.

Variable	n = 120	%
Age		
< 20 years	5	4,2
20-35 years	100	83,3
>35 years	15	12,5
Education		
High school	34	28,3
Senior high school	63	52,5
Elementary school	23	19,2
Occupation		
Household	91	75,8
Employee	29	24,2
Parity		
Primigravida	52	43,3
Multigravida	68	56,7
ANC Visits		
Complete (≥ 4)	71	59,2
Incomplete (< 4)	49	40,8
ANC Service		
Good (10T)	118	98,3
Less ($< 10T$)	2	1,7
Satisfaction		
Satisfied	72	60
Not Satisfied	48	40

Table 1 demonstrates that most of the respondents 100 people (83.3%) of reproductive age 20-35 years, possess a high school education 63 people (52.5%), do not work 91 people (75.8%), own more than 1 child, which are 68 people (56,7%), possessed a full pregnancy visit, encompassing 71 people (59.2%), received good antenatal care as many as 118 people (98.3%), and were satisfied with the antenatal services acquired at health facilities (public health center) as many as 72 people (60%).

Table 2. Analysis result of the Relationship between ANC Services and Satisfaction with Antenatal Care Visits.

Variable	ANC Visits				Total	p-value	OR
	Complete		Incomplete				
	n	%	n	%			
ANC Service							
Good	70	59,3	48	40,7	118	0,770	0,657
Less	1	50	1	50	2		(0,040-10,921)
Satisfaction							
Satisfied	40	55,6	32	44,4	72	0,325	1,459
Not Satisfied	31	64,6	17	35,4	48		(0,688-3,095)

Table 2 reveals that 59.3% of respondents who received complete antenatal care visits received good antenatal care, while 50% of women who received less antenatal care experienced incomplete visits. The value of $p = 0.770 (> 0.05)$ indicates that no relationship exists between service and antenatal visits. The Sipatana Health Center in Gorontalo City discovered that there was no correlation between the quality of antenatal care and K4 antenatal visits, but that the mother's education and knowledge, as well as family support, possessed a substantial relationship with the visits (Laminullah, 2015).

Health workers (doctors, midwives, and competent trained nurses) in integrated antenatal care services must be able to ensure that pregnancy is in normal condition, detect early diseases and problems experienced by pregnant women, and intervene according to authority so that pregnant women are prepared to undergo the delivery process normally and safely. However, because every pregnancy has a risk of complications, antenatal care must still be of high quality and administered routinely, in accordance with standards, and in an integrated manner (Kementerian Kesehatan Republik Indonesia, 2021). Antenatal services at all health centers in Kupang city have been implemented based on the 10 T standard, which are weighing weight and measuring height, measuring blood pressure, assessing nutritional status, measuring uterine fundal height, determining fetal presentation and fetal heart rate, screening and administering TT immunization, administering iron tablets, laboratory tests, case management, and interviews. Services are also corroborated by available facilities and antenatal care standards. Dimensions of service quality are more associated with the assessment of the quality of health services in accordance with the perception of each individual (Tjiptono, 2014). Therefore, the behavior of pregnant women to make visits depends on the mother herself and other factors influencing it.

The results of other studies also discovered that in addition to providing standardized antenatal care, midwives also require to enhance health education for women of childbearing age by administering communication media and technology, hence they are able to monitor the schedule of visits and the health of pregnant women continuously (Kiah, Zuhriyah & Indrawan, 2020). Pregnant women could be monitored employing tactics such as involving health workers, implementing mobile health services, and integrating mass media communication (Peahl et al., 2021).

According to the World Health Organization, the attitude and performance of health workers is a crucial component of service quality because they can influence the understanding and happiness of women, partners, and families seeking ANC, childbirth, and postnatal services (Mannava et al., 2015). It is crucial to enhance health services by health facilities to increase patient satisfaction (Handayani, Suprpto & Sari, 2019). Result of the satisfaction analysis in table 3 demonstrates that most of the respondents whose antenatal visits were complete were not satisfied, which was 64.6%, while most of the respondents whose visits were not complete were satisfied with the antenatal services as much as 44.4%. In accordance with the research result, some pregnant women are dissatisfied with the length of time it necessitates to have a prenatal check-up. Because of the COVID-19 pandemic, pregnant women who visit are limited and arranged in a queuing system for services in order to adhere to health protocols and prevent COVID-19 transmission. The value of $p = 0.325 (> 0.05)$ demonstrates that there is no relationship between antenatal visit satisfaction. Mothers who are satisfied with the services they receive are more likely to comply with their medicine, take responsibility for their pregnancy care, and have regular visits (Pricilla et al., 2016). Citra, Lubis and Nurseto, (2013) asserted that health service is identified as quality if it is able to satisfy the patient. Anikwe et al., (2020) added that satisfaction is a person's feeling after comparing the perceived performance with the expectations. Essential determinants of pregnant women's satisfaction are waiting time, privacy during examinations, and perceptions of the service providers competence (Pricilla et al., 2016).

This study revealed that most respondents were satisfied with the available facilities. However, there were still several pregnant women who were dissatisfied with the length of time they were waiting to have a pregnancy check-up. It is due to the Covid-19 pandemic, hence, pregnant women visiting were limited and a queuing system was arranged in services to keep them by health protocols in preventing the transmission of Covid-19. This situation also emerges in other parts of Indonesia, one of which is revealed by the result of the study that the Covid-19 pandemic has resulted in changes to rules in health services encompassing adaptation of procedures, contact restrictions, and improvement of technology to telemedicine which possesses on changing the behavior of pregnant women and decreasing antenatal visits (Mardikawati, et al., 2022). Time spent in antenatal clinics is a major disincentive for pregnant women and a barrier to the administration of ANC. Long waiting times and poor patient satisfaction may cause poor utilization (Abdus-salam, Adeniyi & Bello, 2021).

Pregnant women are a vulnerable population during the Covid-19 pandemic who require special attention in protecting them from the Covid-19 transmission by implementing good health protocols (Nurfitriyani and Puspitasari, 2022). It is conducted in order pregnant women feel comfortable and are not anxious about the transmission of Covid-19 (Romdiyah & Resmi, 2021). WHO has also recommended 6 in-person visits and 2 virtual visits (3rd and 4th) during the pandemic in reducing the number of times pregnant women require to travel and seek treatment at hospitals/clinics (Uwambaye et al., 2020). Guidelines for Antenatal Care Services during the pandemic were socialized to all midwives in Indonesia (Dodal, Dinengsih & Siauta, 2021).

Furthermore, health services and programs must be implemented in accordance with local culture and language. Hence, they are more easily accepted by the community, such as a decision-making culture that might effect pregnant women's antenatal visits to health facilities (Rahman, Ngadan & Arif, 2016; Djano, Laksana & Utomo, 2021). The reality in society is that there are numerous patriarchal civilizations in which men dominate all decision-making. It is encouraged by a high regard for the husband as the family's head and a lack of wealth of mother, which causes the mother powerless to oppose men's decisions (Djano, Laksana & Utomo, 2021). Several literature studies in Indonesia explained that husbands possess full autonomy in the decision to select antenatal care (Laksono, Wulandari & Matahari, 2020). Due to financial

dependency and cultural traditions, numerous patriarchal societies in Bangladesh also deny women autonomy and prevent them from seeking antenatal care services without the approval of their husbands (Ghose et al., 2017).

Therefore, the husband's support is required to assist pregnant women in checking their pregnancy. Men's participation in ANC had a positive impact on health-care utilization and early antenatal care visits (Tesfaye et al., 2017). The community should also be educated on primary health care services through participation so that they can live independently and select their own destiny (Tabelak et al., 2022).

4. CONCLUSION

The results of this study suggest that antenatal visits to midwives at public health centers in the city are indeed beneficial, while there are still a few who have not performed them completely. Antenatal services provided by midwives are of high quality, and most pregnant women are content with the existing facilities. However, they are disappointed with the long wait times for services due to limits imposed to prevent the spread of COVID-19. Statistically, antenatal care by midwives and pregnant women's satisfaction had no significant relationship with antenatal visits. As a result, it is vital to conduct study on other factors such as distance, education, occupation, parity, husband support, and culture, which can all influence the mother's adherence to antenatal visits.

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