Analysis of the Utilization of Antenatal Care Services in Pregnant Women at Health Center Langsa City

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Abstract

BACKGROUND: Perinatal mortality is a problem for developing countries, including Indonesia. Maternal and infant mortality is influenced by various factors, one of which is health services. Antenatal care (ANC) services efforts to reduce maternally and infant mortality are ANC services. Therefore, it is essential to know the quality of ANC services for the welfare of the fetus in pregnant women.

AIM: The aim of this study was to determine the quality of ANC services that affect the welfare of the fetus in pregnant women

METHODS: This type of research is evaluative research with a cross-sectional design (cross-sectional design). The sample in this study amounted to 206 people in the Langsa Health Center Work Area, Langsa City. The sample was taken using the proposed random sampling formula. The statistical test used the Chi-square test.

RESULTS: The results showed that the quality of ANC affected the welfare of the fetus with a sig. 0.000. Average fetal well-being was 163 people (79%), and the quality of ANC services mainly was in average condition as many as 171 people (83%). ANC services effectively reduce the risk of maternal mortality and morbidity.

CONCLUSION: There is an influence of quality of ANC services on Fetal Welfare in Pregnant Women at the Langsa Health Center.

Introduction

Complications during pregnancy, childbirth and puerperium are the leading causes of death and disability in women of childbearing age [1]. According to a systematic analysis by the United Nations (UN) Maternal Mortality Estimates Inter-Agency Group, in 2015, approximately 830 women died every day globally due to complications during pregnancy or childbirth; approximately 99% of these deaths occur in developing countries [2], [3]. Globally, nearly 300,000 women die each year from childbirth-related complications worldwide [4]. The South Asian region accounts for about one-third of global maternal and child deaths each year [5]. The sustainable development goal sets a target to reduce the maternal mortality ratio (MMR) to less than 70 per 100,000 births by 2030 [6]. Indonesia is still experiencing serious problems related to infant mortality. The infant mortality rate (IMR) in Indonesia continues to decline every year. Based on data from the UN, IMR in Indonesia in 2019 was 21.12. This figure decreased from 2018 to around 21.86 or in 2017 of 22.62. Maternal and infant deaths are affected by health services [7]. In addition, maternal and infant mortality is an indicator of health status and a benchmark for health service performance. One of the efforts to reduce mortality and morbidity is through antenatal care

(ANC) [8]. ANC is essential for preventing maternal and fetal mortality and morbidity. Several studies show that sociodemographic and economic characteristics, knowledge, and attitudes affect ANC (FANC) [9], [10].

The WHO recommends focused ANC (FANC), which promotes the implementation of interventions to address the most common health problems affecting pregnant women and newborns [11]. Quality ANC services have an important position in reducing maternal and infant mortality. ANC goals are to monitor and maintain the well-being of the mother and fetus, detect pregnancy complications and take the necessary action, respond to maternal complaints, prepare the mother for delivery, and promote healthy maternal behavior [1].

ANC services are also designed to maximize good health outcomes; low maternal and infant mortality, low postpartum anemia, and appropriate birth weight [12]. Through ANC services, health-care providers can inform women about the signs and symptoms of danger and take immediate care to solve problems [13].

Quality ANC services have an important position in efforts to reduce maternal and infant mortality because through professional and quality ANC services, pregnant women receive education on how to keep themselves healthy, prepare for the birth of a healthy baby, and increase awareness and knowledge

about the possibility of having a healthy baby. Risk or occurrence of complications in pregnancy so that optimal health can be achieved in the face of childbirth and postpartum. Based on the results of a preliminary study that the Langsa City Health Center in the past 3 months, namely, April, May, and June 2021, pregnant women with a gestational age of more than 38 weeks were 62 people from several surrounding areas. In April, there were 26 ANC visits, 19 in May and 17 in June. From all these data, there are 49 pregnant women who have complete visits and 13 incomplete ANC visits.

Based on this, it is necessary to know the quality of ANC Services on Fetal Welfare in Pregnant Women at the Langsa Health Center.

Methods

This type of research is evaluative research with a cross-sectional design (cross-sectional design). The research was carried out from July to November 2021, using a structured questionnaire equipped with a consent form. The population in this study were all pregnant women in the Langsa Baro Health Center Work Area, Langsa City, as many as 423. The sample was reduced using the Slovin formula and obtained a sample of 206 people. Data collection is done by questionnaire. The sample was taken using the proposed random sampling formula. Data analysis used a Chi-square statistical test.

Results

In Table 1, it is known that the characteristics of respondents aged 20–15 years are 180 people (87.4%), multigravida is 118 people (57.3%), and mothers with high school education are 116 people (56.3%).

Table 1: Frequency distribution of respondents' characteristics by age, parents, and education of third trimester pregnant women

Characteristics	Frequency	%
Age		
<20 years	8	4.4
20–35 years	180	87.4
>35 years	17	8.2
Parity		
Primigravida	76	36.9
Multigravida	118	57.3
Grande multigravida	12	5.8
Education		
Senior high school	116	56.3
College	90	43.7

In Table 2 above, it is known that the welfare of the fetus is mostly in normal conditions as many as 179 people (86.9%). Most of the condition of the fetus is in a state of well-being as measured by heart rate and fetal movement. The condition of fetal well-being can be seen

Table 2: Frequency distribution of fetal welfare in third trimester pregnant women

Fetal welfare	Frequency	%
Normal	179	86.9
Abnormal	27	13.1
Total	206	100

from variations in heart rate changes and movements in the fetus. Monitoring of the welfare of the fetus is carried out so that negative impacts can be anticipated.

Table 3 above shows that the quality of ANC services is mostly in good conditions as many as 171 people (83%).

Table 3: Frequency distribution of ANC service quality in first trimester pregnant women

ANC service quality	Frequency	%
Good	171	83
Not good	35	17
Total	206	100

Table 4 above shows that pregnant women who received good quality ANC services mostly had average fetal well-being of 163 people (79%). The statistical results show that the value of sig. 0.000, it can be interpreted that the quality of ANC services affects the welfare of the fetus. From the results of medical record data at the Public Health Center, it was found that there were several problems that arose in the ANC service process, where there were pregnant women who experienced hypertension in pregnancy (HDK), pre-eclampsia (PEB), and chronic energy deficiency (KEK). According to midwives at the Public health center, many mothers did not perform a complete ANC at the public health center, because the distance from their homes to the public health center was too far, and there were mothers who were migrants or moved out of town so that the recording of ANC visits at the public health center was incomplete.

Table 4: Quality of ANC services on fetal welfare in third trimester pregnant women

ANC service quality	Fetal welfare				Total		Sig.
	Normal		Abnormal				
	Frequency	%	Frequency	%	Frequency	%	
Good	163	79	8	4	171	83	
Not good	16	7.8	19	9.2	35	17	0.000
Total	179	86.9	27	13.1	206	100	

Discussion

The results showed that the quality of ANC services affected the welfare of the fetus that showed that most of the pregnant women had average fetal well-being. This is because health workers' quality of ANC services is getting better. ANC can help pregnant women prepare for childbirth obtain information about childbirth complications and the benefits of giving birth with trained health workers. ANC carried out by trained personnel enables the detection of pregnant women who require special services. ANC is increasingly

important in developing countries due to the high risk of malaria and anemia in malnourished pregnant women and the risk of developing tetanus [14]. Data prove that maternal mortality can be reduced through promotion of the availability, access, and utilization of primary and comprehensive emergency obstetric services for pregnant women with childbirth complications [15].

If pregnant women are late for ANC visits, it will reduce their opportunities to receive timely health education advice, they may also lose the benefits of screening tests for early detection and prevention of side effects of childbirth [16]. The use of maternal health services is a practical approach to reduce the risk of maternal mortality and morbidity. Visiting antenatal and delivery clinics with the help of trained health workers can reduce morbidity and mortality through the early detection and management of complication [17]. Demographic characteristics of pregnant women (economy, education, and occupation) and the number of children affect the satisfaction of pregnant women with ANC. Several studies reported that the demographic characteristics of pregnant women affect maternal satisfaction with ANC [18].

Parity and level of education have a significant influence on childbirth. In this study, pregnant women who had two ANC visits were 24% more likely to adhere to their iron-folate supplementation when compared to those who had one ANC visit [19]. The results showed that pregnant women who received good quality ANC services mostly had the average fetal well-being of 163 people (79%) at the Langsa Public Health Center. Prenatal care is effective if the woman begins receiving care in the first trimester of pregnancy and continues to receive care throughout the pregnancy [20]. Women living in rural areas received a smaller number of ANC visits. Many previous studies have also reported lower utilization of ANC services among rural women [21]. Completeness of standards and guidelines, media for delivering information on maternal, and child health are important things to do to support the delivery of quality ANC services. In addition, it is necessary to provide security and welfare guarantees for midwives on duty, especially in Health Center and their networks.

Conclusion

There is an influence of quality of ANC services on Fetal Welfare in Pregnant Women at the Langsa Health Center.

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