ORIGINAL ARTICLE

The Relationship between the Characteristics of the Village Midwives and the Geographical Location of the Village Maternity Post (POLINDES) with the Quality of Antenatal Care Services in Southwest Sumba Regency

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ABSTRACT

One of the provinces that have had a rise in MMR since 2019 is East Nusa Tenggara (NTT) Province. Southwest Sumba Regency saw an upsurge in maternal mortality cases in 2019, with ten cases; in 2020, there were nine cases; and as of October 2021, there were 14 MMR mothers. Having better antenatal care is one of the crucial measures to lower MMR and IMR. In order to perform their duties in accordance with the established standard operating procedures, midwives must be as prepared as feasible. One of them is raising the bar on several aspects of service quality, such as technical proficiency, service accessibility, effectiveness, efficiency, continuity, security, convenience, information, timeliness, and interpersonal relationships. This study has a cross-sectional design and is an analytical observational study. Using inclusion and exclusion criteria, a sample of 120 respondents was selected using the cluster random sampling technique. The information was gathered through the distribution of a questionnaire about midwives' knowledge of common antenatal care (ANC) examination services and the completion of a checklist to investigate the aspects of midwifery service quality and patient comfort during ANC visits. Chi-square analysis was used to examine the data. On the traits of the village midwives, the chi-square test and correlation test findings were obtained. Knowledge was the impacting factor (p-value 0.000; r = 0.599). With ANC visits, Polindes' distance from the houses of pregnant women had a p-value of 0.001 (r= 0.293). The p-value for the distance between Polindes and the residences of expectant women having quality ANC service is 0.027 (r=0.202). A p-value of 0.004 (r= 0.265) was obtained for the outcomes of the ANC visit test and the quality of ANC services. Knowledge and the geographic location of Polindes are the features of village midwives associated with the quality of ANC services in Southwest Sumba Regency.
Keywords: Characteristics, of Village Midwives Distance to Village Maternity Post (Polindes) Quality of Antenatal Care (ANC)

INTRODUCTION

To achieve the highest level of public health and make health investments in the growth of socially and economically useful human resources, health development attempts to raise everyone's awareness, willingness, and capacity to live healthfully [1]. In Indonesia, there have been 4627 maternal fatalities as compared to 4221 patients in 2019, an increase of

406 instances. Pregnancy-associated hypertensive disorders (33.1%), obstetric bleeding (27.03%), non-obstetric problems (15.7%), other obstetric complications (12.04%), infections related to maternal mortality in pregnancy (6.06%), and other causes (4.81%) were the direct causes of maternal death [1]. Maternal mortality cases increased in Southwest Sumba (NTT) Regency in 2019, from ten to nine cases in 2020, and from nine to fourteen cases as of October 2021[2].

Optimal prenatal care is one of the key initiatives to lower the Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR). To ensure the health of the mother and unborn child during pregnancy, trained healthcare professionals provide pregnant women with antenatal care (ANC) [3]. The most recent ANC service standards require routine prenatal exams at least six times [4]. The metrics can be used to evaluate the performance of midwives in providing ANC services. When providing ANC services, midwives' performance is impacted by both internal and external factors. There are internal aspects such as luggage, amount of experience, expertise, and employment status that serve as markers of a midwife's personality [5],[6]. Snehandu B. Kar claims in Notoatmodjo (2015) that access to medical facilities is a significant external issue. The quality and sustainability of healthcare services may be impacted by this, as well as the services provided and the frequency of visits by expectant women [7],[8].

In order to perform their duties in accordance with SOPs, midwives must be as prepared as possible. One of them is raising the bar on several aspects of service quality, such as technical proficiency, service accessibility, effectiveness, efficiency, continuity, safety, amenities, information, timeliness, and interpersonal interactions [9],[10].

The relationship between the characteristics of the village midwives and the location of the village maternity post (Polindes) and the quality of antenatal care services in Southwest Sumba Regency has to be studied in light of this backdrop.

RESEARCH METHOD

This study uses a cross-sectional research design and a cluster random sampling technique to conduct an analytical observational study. Who carried out this study in all community health centers in the work area of the Southwest Sumba District Health Office, NTT Province, Indonesia, between April and May of 2022. In this study, there were 120 or more pregnant women and village midwives who served as respondents or samples. Checklists and questionnaires that have undergone validity and reliability testing were the instruments used in this study. To ascertain how significant the association between variables was, data analysis used bivariate analysis with chi-square test (p-value 0.005) and correlation coefficient (r)> r table.

The Health Research Ethics Commission of the Faculty of Medicine, Universitas Brawijaya, with the Number: 80/EC/KEPK-S2/03/2022, has authorized this study.

RESULTS AND DISCUSSION

Distribution of Village Midwives' Characteristics, Distance from Patient's House to Village Maternity Post (Polindes), ANC Visits, and Quality of Antenatal Care (ANC) Services

According to table 1's age characteristics for the village midwife, the majority of respondents were under 30 years old (48.3 percent).

The majority of village midwives (52.5) have more than four years of work experience, and the majority of them have ASN status. Most village midwives also have high knowledge (97.5%) of employee status (57.5 percent). Most pregnant women reside within 5 kilometers of the Polindes, which is the distance between the patient's home and the Polindes (61.7 percent). Pregnant women are seen by ANC on average 78.3 percent of the time per trimester. Where all service dimensions are completed, it is claimed that the majority of ANC service quality is attained (93.3 percent).

Table 1: Distribution of Village Midwife Characteristics, Distance from Polindes, and Quality ofANC Services

Variable		Total	Percentage
Age (Years)	<30 years	58	48.3
	31-40 years	23	19.2
	>40 years	39	32.5
Length of employment	<3 years	34	28.3
	3-4 years	23	19.2
	>4 years	63	52.5
Knowledge Level	Good	117	97.5
	Less	3	2.5
Employee Status	State Civil Apparatus(ASN)	69	57.5
	Non-State Civil Apparatus (ASN)	51	42.5
Distance from Patient's House toPolindes	≤ 5 km	74	61.7
	>5 km	46	38.3
ANC Visits	Reached	94	78.3
	Not Reached	26	21.7
Quality of Antenatal Care Services	Reached	112	93.3
	Not Reached	8	6.7

Results of the Bivariate Analysis and the Correlation Coefficient: According to table 2, there is a significant correlation between the following variables: the level of knowledge and the quality of ANC services (p value = 0.000; r = 0.599), the distance between the polyclinic and the patient's home and ANC visits (p value = 0.001; r = 0.293), ANC visits and the quality of ANC services (p value = 0.004; r = 0.265), and the distance between the polyclinic and patients' homes (p value = 0.027; r = 0.202).

Tabel 2: Bivariate Analysis Between Research Variables Results

		Quality Of ANC Services		Total	Correlation Coefficient (r)	P-Value
		Achieved	Not Achieved			
Age	<30 Years	55	3	58		
		45.8%	2.5%	48.3%		
	31-40 Years	22	1	23		
		18.3%	0.8%	19.2%	0.082	0.545
	>40 Years	35	4	39		
		29.2%	3.3%	32.5%		
Length of employment	<3 Years	31	3	34		
		25.8%	2.5%	28.3%		
	3-4 Years	23	0	23		
		19.2%	0.0%	19.2%	0.014	0.357
	>4 Years	58	5	63		
		48.3%	4.2%	52.5%		
Knowledge Level	Good	112	5	117		
		93.3%	4.2%	97.5%	0.599	0.000
	Less	0	3	3		
		0.0%	2.5%	2.5%		
Employee Status	State Civil Apparatus (ASN)	63	6	69		
		52.5%	5.0%	57.5%	0.095	0.300
	Non-State Civi Apparatus (AS	49	2	51		
		40.8%	1.7%	42.5%		
Distance	= 5 km	72	2	74		
		60.0%	1.7%	61.7%	0.202	0.027
	>5 km	40	6	46		
		33.3%	5.0%	38.3%		
ANC Visits	Reached	91	3	94		
		75.8%	2.5%	78.3%	0.265	0.004
	Not Reached	21	5	26		
		17.5%	4.2%	21.7%		

		Antenatal Visits		Total	Correlation Coefficient (r)	P-value
		Achieved	Not Achieved			
Distance	= 5 km	65	9	74		
		54.2%	7.5%	61.7%	0.293	0.001
	>5 km	29	17	46		
		24.2%	14.2%	38.3%		

DISCUSSION

The majority of midwives are of productive age, and since their skills are supported by appropriate experience, it is believed that they can function professionally. This is supportedby the research. Age is one of the qualities of physical and psychological maturity that is directly associated to decision-making so that you will be more cautious and agile when performing work, according to the findings of Purba R.'s research, which were quoted by [11]. Because the worker is in a productive age range, productivity will rise along with worker age. However, due to fewer physical and health considerations, a worker's productivity will decline as they get older [12]. The findings of this study, however, did not indicate a connection between the standard of ANC services and the age of the midwife. In general, only the number of years of service and the quantity of experience accumulated during practice account for the disparities in each age category of midwives.

There is no assurance that someone with more experience will have more expertise thansomeone with fewer years of service. According to Guspianto's (2012) research, there is no proof that midwives with more experience are more productive in their daily work than midwives with less seniority. Therefore, the length of this employment tenure cannot ensure that the midwife's knowledge would improve. It might be because midwives with a long operational history tended to be older, between 41 and 50 years old, and generally lacked updates with the advancement of new knowledge and technology, making them less than ideal question-answerers [13].

The findings of the chi-square test between knowledge and the standard of ANC services in this study indicate a strong correlation between midwives' knowledge and the standard of ANC services. The fundamental skill that all midwives need to have in order to contribute professionally to midwifery practice, particularly to raise the standard of antenatal care services, is clinical knowledge of antenatal care. The level of the midwife's knowledge will impact how well she performs antenatal care according to established operational requirements. According to Widyani, Suparwati, and Wigati's (2016) research findings, knowledge can influence performance, and respondents who do well tend to have good knowledge [14].

In accordance with the prenatal service standards established in the Midwifery Service Standards (SPK), health workers provide antenatal care to pregnant women [15]. ANC services are crucial for tracking the fetus's growth and development as well as the mother's health during the course of the pregnancy. Pregnant women are urged to follow instructions when performing ANC checks to ensure a healthy pregnancy and delivery. Midwives provide a strategic and distinctive role in the community as a facilitator of health services, and they also have an impact on the effectiveness of the pregnant mother service (ANC) program [16],[17]. Each of the midwife's services will help execute high-quality antenatal care in accordance with standards. As a result, any endeavor to raise quality must also focus on raising each officer's performance, particularly midwives.

The quality of ANC services is not greatly influenced by the position of ASN and Non- ASN workers. Abu, Kusumawati, and Werdani (2017) conducted the same study in the Mantingan Health Center in the Ngawi Regency and came up with the same findings. This study demonstrates that the majority of respondents have an ASN work position and perform well, indicating that there is no substantial relationship between employment situation and performance. Only the incentives they receive set ASN and Non-ASN apart from one another. However, because Antenatal Care services given typically do not receive excessive incentives and are typically offered at no cost, the effect of incentives on the performance of midwives in the quality of Antenatal Care services is not substantial (free). Both ASN and non-ASN status should be able to be professional during practice to achieve ANC service targets and detect various kinds of high risks to pregnant women and fetuses as one of the health workers who play an active part in delivering various services in the ANC program [11].

The findings revealed a substantial link between travel time and ANC visits. They must undergo routine prenatal checkups under the close supervision of midwives and doctors in order to lower risks and manage any complications. Assume that access to health services becomes more challenging as they become farther away from the pregnant woman's home. In that instance, it might

make pregnant women less inclined to go to an ANC appointment. Mothers who struggle with transportation and must walk to medical facilities will be more affected by this disease since there is an increase in the energy and time needed for each visit [18].

Standard practices are followed during ANC visits, making delivery safer and reducing the possibility of unintended events occurring both during and after delivery. Pregnant women's compliance with ANC visits can be defined as their regularity in attending prenatal appointments to receive care at least six times throughout their pregnancy, which is separated into three semesters [19]. According to Green's theory, in Notoatmodjo (2012), a number of variables affect a person's behavior, including the conduct of ANC visits by pregnant women. Age, education, occupation, parity, knowledge, and attitudes are some of these risk variables. The distance from the place of living, the family's income, and the availability of information sources are enabling factors. Husband and family support as well as current health professionals are reinforcing factors [20].

The use of closed questionnaires prevents participants from exploring potential responses to the researcher's questions, which is one of the study's drawbacks. These factors should make the research process take longer so that researchers can examine the research variables in greater depth.

CONCLUSION

The characteristic of the village midwife is that knowledge is closely related to the quality of antenatal care service (p-value = 0.000; r = 0.599). Geographical location of the Village Maternity Post (Polindes) and the quality of antenatal care services were connected (p-value = 0.027; r= 0.202) and the number of antenatal care visits was correlated (p-value 0.004; r= 0.265).

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