

DISTANCE TO HEALTH FACILITIES WITH LOW DELIVERY ASSISTANCE BY HEALTH PERSONNEL IN THE WORKING AREA OF BIBIDA HEALTH CENTER PANIAI DISTRICT CENTRAL PAPUA

Silvie Permata Sari^{1*}, Aprima Yona Amir², Fafelia Rozyka Meysetri³, Febby Herayono⁴

¹Program Studi Pendidikan Profesi Bidan Stikes Syedza Saintika

^{2,3,4}Program Studi Profesi Kebidanan Stikes Syedza Saintika

e-mail* : silviepermatasari1989@gmail.com

ABSTRACT

Maternal and newborn complications and deaths mostly occur in the period around childbirth. This is partly because help is not provided by health workers who have midwifery competence. In 2021, 56.3% of births were assisted by health workers in Papua Province. At the Bibida Community Health Center, 32% of births were assisted by health workers. The aim of this research is to examine the relationship between the distance to health facilities and the low level of birth assistance by health workers in the Bibida Health Center working area. The type of research used is quantitative, employing a descriptive design with a cross-sectional approach. This research was conducted from October 2023 to November 2023 in the Bibida Health Center working area, Paniai Regency, Central Papua. The population in this study consisted of all postpartum mothers in the Bibida Community Health Center working area in July, August, and September. Samples were selected using a total population technique, resulting in 35 samples. Computerized univariate and bivariate data processing was conducted using the chi-square statistical test. The research findings showed that the percentage of births assisted by non-health workers was 62.9%, while the percentage of births in relation to the distance to health facilities was 54.3%. The statistical analysis results indicated a significant relationship between the distance to health facilities (p -value = 0.000) and the level of birth assistance by health workers.

Keywords : Birth attendant., and distance to health facilities

INTRODUCTION

Mothers and children are family members who need to receive priority in implementing health efforts because they are vulnerable to the conditions of the family and their surroundings in general ^{1]}. Therefore, it is important to assess the health status and performance of maternal and child health efforts. The success of maternal health programs can be assessed through the main indicator Maternal Mortality Rate (MMR). Maternal deaths in this indicator are defined as all deaths during the period of pregnancy, childbirth, and postpartum caused by pregnancy, childbirth, or postpartum complications, not due to other causes such as accidents or incident^s ^{[2][3]}. Maternal Mortality Rate (MMR) is calculated as all deaths within this scope for every 100,000 live births¹.

According to the World Health Organization (WHO), the Maternal Mortality Rate (MMR) in the world reached 287,000 women dying during and after pregnancy and childbirth in 2020. This is divided into several countries. For example, the United States reached 9,300 deaths, North Africa 179,000 deaths, and Southeast Asia 16,000 deaths. Meanwhile, the MMR in Southeast Asian countries such as the Philippines reached 170 per 100,000 live births,

Vietnam 160 per 100,000 live births, Thailand 44 per 100,000 live births, Brunei 60 per 100,000 live births, Malaysia 39 per 100,000 live births, and Indonesia 214 per 100,000 live births ^{[4][5]}.

The number of maternal deaths compiled from the Family Health Program records at the Ministry of Health in 2020 showed 4,627 deaths in Indonesia. This number represents an increase compared to 2019, which had 4,221 deaths. The majority of maternal deaths in 2020 were caused by bleeding with 1,330 cases, hypertension in pregnancy with 1,110 cases, and circulatory system disorders with 230 cases ^{[6][7]}.

A very crucial health problem such as MMR is related to various factors, such as access (geography, capacity, quality of service, and distribution of health facilities and financing systems), human resources (qualification, competency, distribution, and availability), and population (level of education, socio-cultural factors, economics, poverty, purchasing power, and population density). Government policy and political will also play a significant role in regulating and striving for affordable access to health and human resources ^{[8][9]}.

In 2020, it was reported that 4,046,521 women giving birth received birth assistance by health workers in health

service facilities according to standards out of the 4,984,432 target women giving birth, resulting in a coverage of 81.18% of births in health service facilities [6].

In 2020, births assisted by health workers in Indonesia amounted to 89.8%. Additionally, 86% of pregnant women underwent childbirth with the assistance of health workers in health service facilities. It can be noted that there is a 3.8% difference in births assisted by health workers but not conducted in health service facilities. This difference has increased compared to 2019, which was 2.2%. In 2019, the percentage of births assisted by health workers was 90.95%, and the percentage of births assisted by health workers in health facilities was 88.75% [1][10].

Indicators of births assisted by health workers in health facilities in Indonesia in 2020 did not meet the 2020 RENSTRA target, which was set at 87%. DKI Jakarta Province achieved the highest rate at 99.6%, while Maluku had the lowest rate at 31.4% and Papua at 44.6%. There are significant differences between the two provinces. Provinces with high achievements are generally located in the western region, while provinces with low achievements are mostly in the eastern region [9].

The number of maternal deaths reported in Papua in 2002 was 360. In 2012, the number of maternal deaths in Papua was 573 cases, and in 2021, the number of maternal deaths in Papua Province was 236 cases. These results cannot be used as a reference for calculating the Maternal Mortality Rate (MMR) because there are still 13 districts in Papua Province that do not report the number of maternal deaths.

Maternal and newborn complications and deaths mostly occur in the period around childbirth. This is partly because help is not provided by health workers who have midwifery competence. In 2012, the number of births assisted by health workers in Papua Province was 52.3%. In 2015, births assisted by health workers were 34.1%. In 2020, births were assisted by health workers 49.8%, and in 2021, births were assisted by health workers 56.3%.

In Papua Province, there are 5 districts with the lowest percentage of births attended by health workers. The coverage of births by health workers in 2021 in Papua Province is 56.3%, with the lowest rates in Intan Jaya district at 1.8%, Paniai at 4.0%, Lanny Jaya at 4.1%, and Nduga at 6.1%. Additionally, Paniai district ranks second with the lowest number of deliveries assisted by health workers.

In Paniai Regency, there are 31 health centers. Bibida Health Center has the lowest rate of births assisted by health workers at 32%, followed by Kebo 1 Health Center with 41%, Duma Dama Health Center with 48%, Komopa Health Center with 56%, and Dey Health Center with 57%.

Based on research conducted by Siska Dhewi (2022) on the Analysis of the Selection of Birth Attendants, the results of bivariate analysis show that there is a relationship between age (p-value = 0.012), parity (p-value = 0.030),

birth costs (p-value = 0.002), and ease of access (p-value = 0.000) with the choice of birth attendant [8].

Lawrence Green stated that a person's health behavior is influenced by three determinant factors, namely predisposing factors, enabling or supporting factors, and reinforcing factors. Predisposing factors include education, knowledge, attitudes, beliefs, traditions, social norms, and experience [4]. Enabling factors include the availability of resources, costs, health facilities, affordability of health facilities, and access to information. Meanwhile, the driving factors include support from family, husband, friends, attitudes, and behavior of health workers. Several studies were conducted to determine the factors associated with the choice of birth attendant [2][10].

Distance is an important factor for people to utilize health services. The low level of utilization of health service facilities can be influenced by the distance from where they live. People are more likely to use facilities located near their residence [11][12].

The distance to health services that are not easily accessible to the community can lead people to opt for birth assistance closer to home. Some individuals choose to have assisted births due to the remote location of their homes, far from health facilities such as poskesdes, polindes, pustu, and community health centers, prompting them to prefer giving birth at home. The absence of ambulances or sea transportation provided by UPT Bibida or the village they reside in further contributes to mothers' reluctance to give birth at a health facility.

Based on the research results of Metha Fahriani and Eriyanti Sitorus regarding the relationship between maternal attitudes and family support with the selection of birth attendants in the working area of the Nibung Community Health Center, North Musi Rawas Regency, the results obtained were that 46 people (76.7%) gave birth assisted by health workers. Additionally, 37 people (61.7%) of birth mothers' attitudes supported delivery assisted by health personnel, and 35 people (58.3%) received family support for delivery assisted by health personnel [9].

Based on an initial survey conducted by researchers through interviews in the Bibida Community Health Center working area with 10 postpartum mothers, it was found that 7 people gave birth without the help of health workers, with 2 people stating the reason was because the distance was too far. Based on this background, the author conducted this research with the aim of finding out the relationship between distance to health facilities and the low level of birth assistance by health workers in the Bibida Health Center working area, Paniai Regency, Central Papua in 2023.

MATERIALS AND METHODS

The research design uses a cross-sectional descriptive approach. The population in this study consisted of all postpartum mothers in the working area of the Bibida Health Center, Paniai Regency from July to September

2023. The inclusion criteria were willingness to be a respondent, presence during the research, and being a postpartum mother in July, August, or September. Meanwhile, the exclusion criteria were pregnant women who were not present and mothers who did not want to be respondents. The research sample included all postpartum mothers in the working area of the Bibida Health Center, Paniai Regency. Samples were taken using a total population technique of 35 samples. Researchers collected samples by participating in activities at the Community Health Center and visiting the homes of respondents who had been recorded at the Community Health Center. Computerized univariate and bivariate data processing was conducted using the chi-square statistical test at a 95% confidence level, and the data were processed using SPSS..

RESULTS

Univariate Analysis

Table 1. Frequency distribution of birth assistance by health workers in the Bibida Health Center working area, Paniai Regency, Central Papua.

Helper labor	Frequency	Percentage (%)
Non health workers	22	62,9
health workers	13	37,1
Amount	35	100

Based on Table 1, it is known that out of the 35 people who gave birth, 22 (62.9%) gave birth with non-health workers, and 13 (37.1%) mothers gave birth with health workers.

Table 2: Frequency Distribution of Delivery Assistance by Health Workers in the Bibida Health Center Working Area, Paniai Regency, Central Papua.

Distance	Frequency	Percentage (%)
Far	19	54,3
Near	16	45,7
Amount	60	100

Based on Table 2, it can be seen that out of the 35 respondents, 19 (54.3%) had long-distance relationships, while 16 (45.7%) had short-distance relationships.

Bivariate Analysis

To determine the relationship between distance to health facilities and low levels of birth assistance by health workers, a chi-square test was carried out.

Tabel 3 Hubungan jarak Jarak ke fasilitas kesehatan dengan rendahnya pertolongan persalinan oleh tenaga kesehatan di wilayah kerja puskesmas Bibida Kabupaten Paniai Papua Tengah

Distance	Maternity Selection				Total	P
	Non health workers		health workers			
	f	%	f	%		
Far	18	51,43	1	2,86	19	54,29
Near	4	11,43	12	34,28	16	45,71
Amount	22	62,86	13	37,14	35	100

Based on table 3, it shows that of the 19 respondents (54.29%) who had long distance, 18 respondents (51.43%) gave birth to non-health workers, and 1 respondent (2.86%) gave birth to health workers. Furthermore, of the 16 respondents who had close proximity, there were 4 respondents (11.43%) giving birth to non-health workers and 12 respondents (34.28%).

Based on the results of the chi-square test, it can be seen that the significance level (sig-p) is 0.000 (<0.05), indicating that distance is related to birth assistance by health workers at Bibida Health Center in 2023.

DISCUSSION

Distance is the degree of ease with which people can reach an object, service, or environment. In another sense, distance is a measure of the ease of a location to be reached from other locations via the transportation system^[11]. In this research, what is meant by affordability or accessibility is a combination of distance, travel time, level of ease, and difficulty for mothers to obtain birth assistance facilities by health workers.

Based on the results of observations by researchers in the Bibida Community Health Center area, most of the roads in Bibida District, the main access roads to sub-district cities and villages, still have rocky and unpaved surfaces. Additionally, there is one village that can only be reached by speedboat to access the health facility. Some roads are challenging for four-wheeled vehicles to navigate, but two-wheeled vehicles can still be used in Bibida District. The research results showed that 19 respondents (54.29%) had to travel long distances, 18 respondents (51.43%) gave birth without the assistance of health workers, and only 1 respondent (2.86%) gave birth with the help of health workers. This is primarily due to the long and difficult access for the public to reach health facilities.

The role of midwives that can be carried out is to collaborate with local cadres and community leaders to provide information to mothers about the existence of village midwives who already exist in each village and the Bibida Health Center program regarding pick-up and drop-off for pregnant women. This is intended to raise awareness among pregnant women who will give birth so that they no longer rely on traditional midwives. When considering the distance, transportation time can clearly influence the choice of birth attendant, including a health worker.

CONCLUSIONS AND RECOMMENDATIONS

Most respondents had a long distance to health facilities, with 19 (54.3%) respondents having a long distance and 16 (45.7%) respondents having a short distance. Based on statistical tests, the results showed a relationship between the distance to health facilities and delivery assistance by health workers at the Bibida Community Health Center with a p-value of 0.000. It is hoped that midwives can improve the quality of ANC services through the Birth Planning Program, increase home visits aimed at providing health education not only to mothers but also to husbands and other family members who are decision-makers in the family. They should also utilize the time at posyandu to approach and provide understanding to pregnant women so that their negative views regarding childbirth by health workers can change. Additionally, monitoring pregnant women, especially as they approach the month of delivery, is crucial to prevent non-Nakes births. This can be achieved by utilizing cadres from each posyandu to monitor pregnant women.

BIBLIOGRAPHY

1. N. Fitriah and Y. Saputera, "Aspek Sosiologis Keberadaan Penolong Persalinan Tradisional di Indonesia," *Innov. J. Soc. Sci. Res.*, vol. 3, no. 6, pp. 3353–3361, 2023.
2. M. BATMOMOLIN, "FAKTOR-FAKTOR YANG MEMPENGARUHI PEMILIHAN PENOLONG PERSALINAN DI WILAYAH KERJA PUSKESMAS DOBO MALUKU." STIKES BINA SEHAT PPNI MOJOKERTO, 2021.
3. S. Dhewi, "Analisis Pemilihan Penolong Persalinan," *Faletehan Heal. J.*, vol. 9, no. 01, pp. 80–88, 2022.

4. I. Y. Addo, E. Acquah, S. H. Nyarko, E. N. K. Boateng, and K. S. Dickson, "Factors associated with unskilled birth attendance among women in sub-Saharan Africa: A multivariate-geospatial analysis of demographic and health surveys," *PLoS One*, vol. 18, no. 2, p. e0280992, 2023.
5. G. A. Yemata, G. Dessibellew, A. Alle, Y. Tafere, A. W. Bayabil, and E. H. Dagnaw, "Husband participation in birth preparedness and complication readiness and its predictors among men whose wife was admitted for an obstetric referral at South Gondar zone: A multicenter cross-sectional study," *Heliyon*, vol. 9, no. 5, 2023.
6. R. Chairiyah, "Determinan Ekonomi, Budaya Dan Jarak Tempat Persalinan Di Desa Ulak Medang Muara Pawan Kalimantan Barat," *J. Nurs. Midwifery Sci.*, vol. 1, no. 1, pp. 26–33, 2022.
7. M. Fahriani and E. Sitorus, "Hubungan Sikap Ibu Bersalin Dan Dukungan Keluarga Dengan Pemilihan Penolong Persalinan Di Wilayah Kerja Puskesmas Nibung Kabupaten Musi Rawas Utara," *An-Nadaa J. Kesehat. Masy.*, vol. 6, no. 1, 2020.
8. E. M. Sari, "FAKTOR-FAKTOR YANG BERHUBUNGAN DENGAN PEMILIHAN TENAGA PENOLONG PERSALINAN DI DESA MUARA MADRAS WILAYAH KERJA PUSKESMAS MUARA MADRAS TAHUN 2020," *J. Kesehat. dan Sains Terap.*, vol. 7, no. 1, 2021.
9. [M. MARSELA, "FENOMENA PERTOLONGAN PERSALINAN NON NAKES DI WILAYAH KERJA UPT PUSKESMAS PALANGKAU," 2023.
10. A. T. Husna, S. Syahda, and Y. Yusnira, "FAKTOR-FAKTOR YANG BERHUBUNGAN DENGAN PEMILIHAN PENOLONG PERSALINAN DI DESA GEMA DAN TANJUNG BELIT WILAYAH KERJA PUSKESMAS KAMPAR KIRI HULU I KABUPATEN KAMPAR TAHUN 2019," *J. Kesehat. Tambusai*, vol. 1, no. 2, pp. 50–60, 2020.
11. B. Nkeeto, B. L. Yawe, and F. Matovu, "The Relationship Between Attendance of at Least Four Antenatal Care Visits and Facility Delivery," 2023.
12. G. D. Kibret, D. Demant, and A. Hayen, "The effect of distance to health facility on neonatal mortality in Ethiopia," *BMC Health Serv. Res.*, vol. 23, no. 1, p. 114, 2023.

