

The effect Referral Barriers to Barriers Delay in Perinatal Mortality in Karawang

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ARTICLE INFO

Article history:

Received

Revised

Accepted

Keywords:

Barriers Referral

Referrals Delay

Perinatal Mortality

ABSTRACT

Perinatal mortality is the biggest contributor to the death of infant mortality. Most of the causes of perinatal mortality can be prevented that the factors of patients, health professionals, referral and availability of health care facilities. Obstacles in the references often found in the delay in recognizing the danger, decision-making by women because it is influenced cultural issues, difficulty gaining access to health services because of problems with the distance. Karawang regency is part of West Java Province perinatal death must be completed. The purpose of this study is the referral process constraints that caused the delay referral perinatal mortality in Karawang. The study design using the sequential explanatory mixed method. Quantitative data were taken through Perinatal Maternal Audit document was tested with Fisher Exact, whereas qualitative research conducted by Focus Group Discussion and interview. The study showed no association with late referral process bottleneck references ($p > 0.05$). The results of the qualitative research shows that the delay in the referral is more due to the limitations of the tools for referral and indirect costs (meals, round trip hospital costs) causing late picking decision.

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I. BACKGROUND

Efforts to reduce the infant mortality rate (IMR) became one of the priorities in health development refers to a general policy of national health development. Infant mortality is the largest contributor to perinatal mortality. Perinatal mortality is used as an indicator to assess the quality of antenatal and perinatal care.¹ Perinatal mortality is infant mortality (by over 22 weeks gestational age) were stillborn or infant born alive but later died in a period of seven (7) days after delivery (early neonatal deaths).² Overview of perinatal mortality in Indonesia is very complex which is influenced by socio-economic status, geographic and cultural. Perinatal deaths are more common in urban slums with less socioeconomic and health status were lower than in rural areas.³ the majority of perinatal deaths can be prevented.

Factors that could cause preventable perinatal deaths are categorized into four factors that include: health workers factors, patient factors, the availability of facilities and infrastructure of health care facilities and referral factor. Delay in reference a growing cause of maternal and perinatal mortality.⁴ Good referral is the key to reduce maternal and infant mortality.⁵ Obstacles in the references often found in the delay in recognizing the danger, decision-making by women



DOI:

W : <http://ojs.stikesstrada.ac.id/index.php/JGRPH/>

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because it is influenced cultural issues, difficulty gaining access to health services because of problems with the distance.

The difficult terrain caused obstacles in reaching referral facilities that take more than two hours because the patient lived a secluded area. References should be accompanied by good transport system to centers of reference and feedback indispensable reference.^{6,7} According to the Indonesian Demographic and Health Survey (IDHS) in 2012 perinatal mortality in Indonesia amounted to 118 268 stillbirths and early neonatal deaths, resulting in perinatal mortality rate in Indonesia was 26 deaths per 1000 live births. In West Java province perinatal mortality rate is 24 per 1000 live births.⁷

The number of perinatal deaths 2,563 cases, where the number of stillbirths was 1,055 cases, while the number of early neonatal deaths 1,508 cases.⁸ Based on preliminary studies conducted in Karawang District Health Office perinatal deaths were reported on and recorded 262 cases with a total of 133 cases of stillbirth and early neonatal death as many as 129 cases. Various attempts have been made by the government to reduce the death rate of mothers and children through various programs that have been taken by the government of Indonesia, one of them through Program *Expanding Maternal and Neonatal Survival* (EMAS) which is a program of technical assistance to the Indonesian Government US Government through the funding of the United States Agency for International Development (USAID) under the coordination of the Ministry of Health for 5 years (2012-2016). West Java is one of the provinces selected to implement the EMAS program. Through this program is expected to occur accelerating decline in maternal and newborn babies by 25% in Indonesia. One objective of EMAS program is improving the quality of the referral system.

The ineffectiveness of the referral system in Indonesia, impact on the accumulation of patients in healthcare facilities continued, resulting in the use of skilled personnel and advanced equipment is not appropriate and the declining quality of health services. Most patients who undergo emergency obstetric and neonatal cases reach health facilities / hospitals is in critical condition so that the perinatal mortality are found in hospitals / healthcare. Mom comes to healthcare when fetal movement is no longer perceived, the baby died on the way to a place of reference.^{8,9} Based on the above background, the researchers are interested in doing research Perinatal Mortality Reference Barriers in Karawang.

II. METHOD

The research design uses Explanatory Sequential Mixed Method. The first stage is done quantitatively using cross sectional approach. Collecting data using secondary data recapitulation of perinatal mortality, Perinatal document Verbal Autopsy (OVP) and the Perinatal Medical Record (RMP) to obtain the factors that cause delays referral perinatal mortality. The second stage is conducted qualitatively to strengthen the results of quantitative research. Qualitative data retrieval depth interviews to parents who experience perinatal mortality and Focus Group Discussion (FGD) to health workers. Qualitative methods are used to explore the findings of the quantitative research.

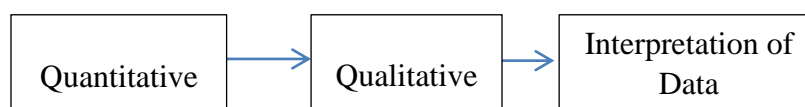


Figure 1 sequential explanatory strategy

III. RESULTS AND DISCUSSION

The results of this study present a presentation about the referral process related barriers to delay referral perinatal mortality in Karawang obtained from quantitative and qualitative data were carried out gradually. Based on the recapitulation of perinatal mortality in Karawang Health Department found the number as many as 307 cases of perinatal death. Of the total number of perinatal deaths that have AMP document in the form of OVP and RMP as many as 118 cases. The qualitative data obtained from the depth interviews with parents whose baby died, Focus Group Discussion (FGD) was conducted in two districts namely Cikampek subdistrict (PHC PONED Cikampek) and the District Pakisjaya (PHC PONED Pakisjaya) of 4 health workers. From the quantitative results showed:

Table 1. Frequency Distribution of Perinatal Mortality in Case Referral in Karawang.

Perinatal mortality	F	%
Reference	95	80.51
not Referral	23	19.49
Total	118	100

According to the table above shows that the majority of perinatal deaths that occurred in the district karawang a referral cases (80.51%)

Table 2. Frequency Distribution and Relationship Factors Perinatal Referral Barriers to Perinatal Referral Delay in Karawang.

barriers References	Delay Referral				Total		The p-value *
	Late		Not late				
	F	%	F	%	F	%	
Geographic Shelter							
Plateau	3	3.3	1	1.1	4	4.4	0.524
Lowland	72	80	14	15.6	97	95.6	
Mileage							
> 5 km	19	21.3	4	4.5	23	25.8	0,751
≤ 5 km	56	62.9	10	11.2	66	74.2	
Traveling time							
> 2 hours	0	0	0	0	0	0	-
≤ 2 hours	75	83.3	15	16.7	90	100	
Transportation							
Not available	2	2.1	0	0	2	2.1	1,000
Available	77	81.1	16	16.8	93	97.9	
Regions where Live							
Rural	33	37.1	5	5.6	38	42.7	.569
urban	41	46.1	10	11.2	51	57.3	
Financing							
Independent	62	65.3	10	10.5	72	75.8	0.205
Health insurance	17	17.9	6	6.3	23	24.2	
Administration							
There are difficulties	5	5.3	0	0	5	5.3	0.585
no difficulty	74	77.9	16	16.8	90	94.7	

*Fisher Exact Test, meaningful if the value $p \leq 0,05$

Based on Table 2 above shows that there is no relationship between the barriers referral process that includes geographic residence, mileage, travel time, transport, region of residence, financing, and administration with reference delay in Karawang ($p > 0.05$).

Based on the results of in-depth interviews and focus group discussions in getting research results is Karawang Regency is a low-lying area that has good roads, there are only a few areas difficult to reach by public transport. Various programs have also been issued one through the provision of healthy karawang for the poor and each village provided operational cars villages supported by the following statement:

"Referring also sometimes use ambulance car shih village, village operational car but it's not like ambulance but could be using for dropping the sick ..." (R2 FGD1)

"If for the hospital costs we can try, origin have an ID card here could care costs create barriers Karawang Healthy eating how, alternating behind it ..." (RP1)

Based on the quantitative and qualitative data related barriers to delay referral perinatal mortality seen from:

a. Geography

Perinatal mortality is mostly found in lowland areas for Karawang is most northern coastal area is a lowland area and just a little plateau. Of all the regions in the area karawang most of the access is good, it can be passed to public transport so that the terms of the region there is no obstacle in the referral. Only two villages in Karawang regency still secluded location is the village Tegallega and Sedari in Sub Ciampel and Cibuaya which access must pass or cross the river and ocean.

Geographically condition region Khanewal district is pretty good with good road conditions and can be passed by public transport so this result is not consistent with some of the research that states that barriers referral process is influenced by geography, infrastructure poor road causing delays in reference.⁵¹⁰

b. Mileage

Most perinatal deaths were in patients whose access to health facilities within ≤ 5 km. The number of existing health facilities in each district and every village had been there at least one midwife so in terms of distance was no obstacle for referral. The average distance from the patient's home to the health facility is in the range of 5-10 km, the longest distance is 48 km. Though remote but nice way, the transport used is available, so that in terms of distance is no obstacle in the referral.

According to the results of another study which states that the distance ≤ 5 km should be able to reduce the occurrence of perinatal mortality as seen in terms of distance was no obstacle during the referral process, even if there is no transport can be done by foot to reach the referral facility.⁵¹¹

c. Traveling time

It takes all of perinatal mortality by perinatal verbal autopsy ranges ≤ 2 hours. Good road access, transport widely available causing travel time required to be faster to reach health facilities.

The study states that the travel time within ≤ 2 hours is expected to accelerate the mother to get help at the referral facility more quickly so that mother and baby can get help with more cepat.5,10

d. Residential areas

Judging from the residence, most deaths were in urban areas Karawang. The number of hospitals and clinics in urban areas should be able to minimize the occurrence of perinatal death. Obstacles encountered in dealing with urban communities are plagued with the problem of residence. Mobilization of high urban population with many immigrants, many occupy vacant or rented housing, most of the mothers working in factories or traders in the market cause difficulties health workers to solicit pregnant women especially cases of high-risk pregnant women.

Perinatal mortality was found more common in mothers who left the territory in urban slums with low socioeconomic causes access to health services is less optimal than mothers who live in rural areas.^{6, 8}

e. transportation

In general the transportation problem was no problem in Karawang regency because in each village already provided an operational vehicle village that could be used to take care of public purposes for example dropping people who are sick, in each public health office had already provided a mobile health center and in PONED each health center has provided one ambulances. However, the constraints here are the cars in each village are only car with the usual standards, which includes no means as an ambulance (no oxygen),

The complaint also of some midwives who participated in focus group discussions that not all village operational car driver and always be alert when they will make a referral, so they are forced to use their own private cars or cars patient / family. The lack of attention or response from village officials, led to the existence of the village operational car is not running properly.

Provision village ambulance and a driver for obstetric emergency cases and their health personnel available to accompany patients for referral is needed to reduce the occurrence of perinatal death.⁶

f. Financing

Funding for health divided into two self-financing and financing by using either the health insurance of BPJS, Labor Social Security (Social Security) or the cost of health insurance in the form of Local Government Karawang to Healthy, specifically intended for poor people. Management of health insurance from Karawang local government really is not complicated, if the They have a national identity card (KTP). Although the management is easy but not all people get healthy, because they work as laborers but their identity card written work as self-employed that are not eligible for Healthy Karawang.

Funding is used in cases of perinatal mortality mostly using self-financing. Obstacles encountered financing is not just financing for hospital care but also patients think about the indirect costs such as the cost of eating while in hospital, the cost of transportation to pace back home to the hospital.

A woman is able checkups at health facilities, but when the delivery required to be done in the hospital they are constrained cost of hospital stay, cost of meal for hospitalized and the cost of transportation to health facilities.^{6, 12}

Financing of BPJS itself provides another effect to health workers, especially midwives and BPM. Village midwife / BPM does not accept patients using BPJS health insurance paid by the patient. The reason they refused because the patient immediately after birth will stop paying BPJS, so the midwife / BPM does not receive a fee for use when the patient gave birth to a new BPJS paid back to the midwife 5 months after birth. Poor understanding of people about the benefits BPJS caused mostly refer patients to the hospital for midwives / BPM reject it.

Barriers experienced by patients on healthy Karawang most health insurance is also stymied, because private hospitals were impressed reject them on the grounds the room is full or

competent medical personnel said there is no place. Of the 20 hospitals that provided approximately 15% who do not accept patients using health insurance. Because of an emergency and requires immediate action and the nearest health facility is a private health facilities cause they choose to use their own cost.

g. Administration

In terms of administration at the time of referral patients had no problems especially for referral has been aided communication “SiJARI EMAS” so that there is no difficulty experienced. Patients who have difficulty administration are patients who come alone without the help of SiJARI EMAS so still experiencing difficulties in the referral procedure to the referral health facility. Only a few health workers in private hospitals who do not understand the procedures / referral procedures so that the patient was told again to seek a referral to a health clinic that caused the handling to be blocked.

Barriers to getting help in the referral facility of the study stated that the difficulties in the management of referral procedures to be one cause of delay mothers received help in the referral facility.⁴

IV. CONCLUSION

Barriers referral process (geography, distance, travel time, transport, region of residence and the administration was not associated with a reference delay. Delay in more referrals due to limitations of the tools for referral and indirect costs (meals, round-trip hospital costs).

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