

Maternity references on the maternal mortality: decision-making pattern perspective

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ABSTRACT

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Background: The Research is motivated by the high rate of maternal mortality in the city of Padang. One reason is the delay in the decision making of referral. The pattern of referral by a midwife decision making is a complicated process that starts with the process of problem identification, problem-solving alternative search, and evaluation of these alternatives.

Objective: The purpose of this study is to identify background reference maternity in cases of maternal mortality regarding decision making patterns of midwives in the city of Padang.

Methods: This study was a qualitative study using phenomenology. Data collection was done in the work area of Andalas, Kuranji, Pauh, and Nanggalo from May-August 2016. The selection of informants used snowball sampling technique. Qualitative data were collected through in – depth interviews, and secondary data were collected through document review. Analyzed using a fixed comparison method according to Glaser and Strauss.

Results: The result of the study shows that the identification of risk factors performed during antenatal care makes midwives decide to refer to hospitals. However, the referral was rejected by the hospital because there was no emergency alert to the mother. When an emergency occurs during labor, the midwife immediately refers to the patient but tends to be in an unstable patient state. So the midwife is blamed for not indicating on time. The decision patterns of midwives in referring maternal mothers to maternal mortality cases are influenced by screening of emergency risk factors, the principle of referral and post-referral impacts.

Conclusion: Limitations of authority, identification of risk factors, and post-referral impacts make the midwife utterly wrong in making a referral decision.

Latar Belakang : Penelitian ini dilatarbelakangi oleh masih tingginya angka kematian ibu di Kota Padang. Salah satu penyebabnya adalah keterlambatan pengambilan keputusan rujukan. Pola pengambilan keputusan rujukan oleh bidan merupakan proses yang kompleks yang dimulai dari proses identifikasi masalah, pencarian alternative pemecahan masalah dan evaluasi alternative tersebut. Tujuan penelitian ini adalah untuk mengidentifikasi latar belakang rujukan ibu bersalin pada kasus kematian ibu ditinjau dari pola pengambilan keputusan bidan di kota Padang.

Tujuan: Tujuan penelitian ini adalah untuk mengidentifikasi latar belakang rujukan ibu bersalin pada kasus kematian ibu ditinjau dari pola pengambilan keputusan bidan di kota Padang.

Metode: Penelitian ini menggunakan pendekatan kualitatif dengan rancangan fenomenologis. Pengumpulan data dilakukan di wilayah kerja Puskesmas Andalas, Kuranji, Pauh dan Nanggalo dari bulan Mei – Agustus 2016. Data dikumpulkan dengan teknik wawancara mendalam dan telaah dokumen yang terkait pelaksanaan rujukan ibu bersalin. Data dianalisa dengan menggunakan metode perbandingan tetap oleh Glase dan Strauss.

Hasil: Proses identifikasi faktor risiko saat pemeriksaan kehamilan membantu bidan untuk membuat keputusan rujukan kerumahsakit. Namun, rujukan tersebut ditolak pihak rumah sakit karena tidak menunjukkan situasi kegawatdaruratan pada ibu. Ketika situasi kegawatdaruratan saat persalinan terjadi, bidan secepatnya merujuk ibu ke rumah sakit dengan kondisi ibu tidak stabil. Sehingga bidan disalahkan karena tidak merujuk tepat waktu. Pola pengambilan keputusan bidan dipengaruhi oleh Penapisan faktor risiko, Prinsip rujukan, dampak setelah rujukan.

Kesimpulan: Keterbatasan wewenang, identifikasi faktor risiko, dan dampak setelah rujukan membuat bidan serba salah dalam pengambilan keputusan rujukan.

INTRODUCTION

Maternal mortality rate (Angka Kematian Ibu /AKI) in Indonesia has not been able to meet Millenium Development Goals (MDGs) 2015 even though it has decreased. This is supported by Indonesia Health and Demographic Survey (Survey Demografi dan Kesehatan Indonesia/ SDKI) from 1994 to 2007. In 2007, AKI was 228 per 100.000. However in 2012, AKI increased again, into 359 per 100.000 live birth.^{1,2}

Meanwhile, maternal deaths cases in Kota Padang in 2014 increased when compare to 2013, from 15 to 16 patients, in which death in pregnancy was 7 patients, death during labor was 4 cases (1 case in Primary Health Care-PHC Andalas, 2 cases in PHC Lubuk Kilangan and 1 case in PHC Lubuk Begalung), and postnatal death in 5 patients.³ Generally, 80 % maternal death was caused by obstetric complications, such as bleeding, infection, unsafe abortion, preeclampsia and eclampsia, as well as prolonged labor.^{1,4}

Delayed in referring mothers in labor is an indirect cause of death, which is known as three

delayed that includes delayed recognition of red flag symptoms and decision making, delayed arrival in referral facilities, and delayed treatment in referral facilities. Delayed in recognizing red flags or emergency symptoms will develop into delayed decision making. This delay can happen in midwife or patient's family member.⁵

Midwife competence (knowledge, attitude, and skill) correlates with referral accuracy in maternal emergencies. In addition to that, social support and access to health facilities also contribute to referral accuracy.⁶ Government through the Ministry of Health has established standard procedure for patient's referral, especially maternal referral done by midwife, called BAKSOKU. BAKSOKU which stands for B= Bidan/midwife should accompany patients from clinic to hospital, A= alat/tools that the patient might need, like oxygen, K= kendaraan/vehicle on stand by, (S= surat rujukan/referral letter and other related document (partograph), O= obat/ medicine that the patient might need, like intravenous fluid and uterotonic, K= keluarga/ family to accompany patients, and U= uang/ money to pay medical fee.⁷

The pattern of decision making in midwife for the referral of mother in labor is a complicated process, which go through some stages including identification of problem, search of problem solving alternatives by immediate intervention independently or collaboration with senior midwife, obstetric gynecologist, family advocation through *informed choice* and *informed consent* to evaluate whether the intervention succeed or failed. When it failed, and midwife decided to refer a patient, the decision-making process should be fast to prevent maternal death.

This study aims to identify the background of referral for mothers in labor in maternal death cases reviewed from a midwife's decision-making pattern.

METHODS

This study used qualitative methods with phenomenology approach. Qualitative data was obtained from a interview with midwives who refer mother in labor in maternal death cases.

Data was collected through snowball sampling in Puskesmas Andalas, Nanggalo, Pauh and Kuranji area from midwives who referred mother in labor in 8 maternal death cases from May-August 2016. Documentation review was done to assess midwifery care and referral process. Data were analyzed with Glaser and Strauss constant comparative method.

RESULT

This study involved eight midwives and generated three central themes about the based of referral decision making in maternal death case : (1) screening of risk factors, (2) referral principle, (3) referral impact. We will discuss in further detail each theme as follow:

Screening of Risk Factors

Understanding risk factor is a central concern that will become a starting point of decision making about whether or not patients need to be referred and where referral should be made. The emergency alert system set by Pusat Pelatihan Klinis Primer Kesehatan Reproduksi (P2KP – KR) described four caution criteria for midwives, which includes screening on patients admission, monitoring of stage I labor using partograph, stage II and III-IV.

"...If not mistaken, admitted on 13th March with ruptured amnion. When we checked, amniotic fluid negative, from the remaining amniotic fluid we found it was clear, fetal heartbeat ok, contraction infrequent. Dilation 1 cm, normal vitals. we gave her 1 bottle of rinnger lactate intravenous administration. After that, we monitor (1bdn)".

"...We got notified by the noon shift. At that time nova night shift, The diagnosis was serotinus and suspected ketuban pecah dini or premature rupture of chorion (KPD). Height was just 145 cm fundal height was 40 cm. partograph had passed alert line (8 bdn)"

Referral Principle

Referral principle is one of the referral mechanism that midwives need to pay attention to improve midwife tendance quality, especially

in intranatal care. The government through Ministry of Health has set a standard procedure for patient's referral especially maternal referral, one of which is patient's and family accompaniment on reference to the hospital with BAKSOKU principle. This referral principle was used by research subject on referral. However, one subject did not accompany patient during the referral due to patient's trauma. Thus they refused to use ambulance for a reference. Research subject then agreed on patient's term to refer patient using a taxi and not accompany a patient during referral.

"... The husband, family, and patient were willing to be referred. Husband had even signed consent. However patient refused to be referred in an ambulance, her blood pressure continued to rise. So the husband went out to call a cab..(7 bdn)"

Documentation review only found one midwife who made a copy of the document, the rest did not have it because they gave the document to *Badan Penyelenggara Jaminan Sosial (BPJS)* for claim.

"..Wah I am sorry, the partograph and documentation had been sent to claim BPJS (8Bdn)".

Signing inform consent for referral is included in referral principle. Every medical intervention that possess risk needs to be accompanied by written consent signed by patients or other people who have the right to give consent. The use of informed consent during labor is an effort to mediate ethical problem in case of obstetric emergency.

"Luckily at the time, patients and her family signed informed consent. Even for the risk of referral, the signed (1 bdn)".

"If not mistaken I have the record. Husband also signed informed consent. Because patients had visit regularly (3 bdn)".

Referral Impact

The process of maternal referral affects

midwives which is a learning process for them to improve when another emergency case happens in the future. Two study subjects got a negative impact from their referral decision because they could not be helped in the referral destination.

"After it happened, we got less patients. Patient's family told false stories. But Alhamdulillah, the patient's husband explained to the family all of the efforts we made to save his wife. But even now, I feel traumatic. So for that kind of labor, better if I am the one to help (1 bdn)".

"I was blank for a long time in the emergency room parking lot after patient was announced dead. It made me shocked.. Even three months after, I still can't believe it happened (3 bdn)".

The other impact felt by midwives who refer laboring mother and ended with maternal death is auditing done by local authorities. This maternal and perinatal audit process will clarify patient's diagnosis for the treating midwives. As told by two subjects

"I was relieved when Mr. Hariadi during the audit told me that possibly patient died due to pulmonary embolism (3 bdn)"

"However, after the audit, Mr. Teddy told me that the patient died due to amniotic fluid embolism. As long as I worked as a midwife, you can even say I am a midwife grandma, this is the first time something like this ever happens. I feel lucky somehow, but I also feel apologetic towards the patients (4 bdn)"

In addition to that, midwives decision to refer patients when their condition worsens during monitoring, also impact the midwives, in which they were negatively treated in the referral destination. In the referral destination, patients will be checked by other midwives and doctors. If no referral indications were found, midwives are often considered incompetent. If referral is a by signs, midwives are deemed competent. However, if a patient's conditions worsen and

emergent compared to referral indications, midwives are often considered negligent due to late referral. These things impact negatively on the midwives psychology and make them awry in making a referral.

This was described by subjects as follow :

".. what can we do... Before, I've referred a patient with prolonged phase I and partograph had passed alert line... I referred to secondary health facility, and when I arrived, the people there told me it didn't meet referral indication and showed me how they doubted my decision.. (2 bdn)"

"..Which gravid ? I don't remember. But it was multigravid. The patient came in labor. Palpation felt like twins. I was going to do my shift in the hospital. It was right after a big earthquake. I brought the patient to the hospital. In the hospital, the patient was treated by a resident. The next morning, because I felt responsible, I visited the patient in the ward. I talked with the treating doctor. The doctor told me that the patient was allowed to go home. Insha Allah normal delivery. I took the patient home. Patient's husband also asked to take the patient home. At home, I monitored the labor progression. However, after the first child was born, the patient had massive bleeding. I directly referred the patient. Can you imagine how the trip after a huge earthquake was? When we arrived at the hospital, because I also worked there, the patient could be treated directly. After the patient had stabilized, I discussed further with the treating doctor about the patient's condition and differential diagnosis. (4 bdn)"

DISCUSSION

Screening for emergency risk factors in this study is affected by knowledge, experience, feeling, and instinct of the midwives. To do a proper detection of a risk factor, midwives need to collect information and a patient's health condition. That action will assist diagnosis to handle existing health problem. Information is obtained from anamnesis, physical examination,

diagnosis testing with laboratory examination. Midwives need to accurately collect information regarding emergency condition to be able to make an active treatment decision.⁸

The use of partograph by midwives to monitor labor progression is also a tool to identify a problem during labor. Shimoda said that midwives admit that labor progression in patient is different from theory. Hence, partograph is useful to monitor patient's labor.⁹

The use of informed consent during labor is also a way to solve the ethical issue in an obstetric emergency, like the decision to refer a patient. Midwives only think of inform consent as legal evidence, but not skilled in applying it because they are more concerned about proper health service than health administration.¹⁰

Referral is a reciprocal handover of task and responsibility of health cases vertically or horizontally. Referral preparation that midwives need to pay attention to is BAKSOKU. This principle explained that during referral midwives have to escort patients and carry essential tools (partus set, infusion set, infusion fluid, oxygen), bring patient's family, referral letter, and a short resume, medications, referral vehicle, and money. This principle should be well-documented in referral book.⁷

In emergency cases where midwives are directly involved in life-saving treatment, assistant should be present to record all intervention and medications given sequentially, and after the treatment, midwives should check and correct the record. Our informants could not show us the record because midwives did not provide them with access to the document after signing.

Documenting essential findings and intervention during labor is a fundamental skill that midwives need to do proper care during labor and delivery. Midwives knowledge on treatment documentation is considered good however the implementation is still dissatisfactory, where 28 – 42 % data are gone because medical recording by health personnel is not very good.^{11,12}

The process of referring a patient affect

the midwives as well. This impact is a learning process for them to deal with emergency cases better in the future. Community's perception of midwives who referred a patient and ended up with deaths causes moral and material damages.

The maternal and perinatal audit is also a consequence. This audit is a part of professional obligation, so that treatment can be better and maternal death can be prevented. This audit is expected to improve midwives knowledge and change the attitude of midwives in dealing with emergencies. As done by Dinas Kesehatan Kabupaten Bantul, the maternal and perinatal audit is a form of legal protection for midwives who decided to do a maternal referral and not a chance to find fault.¹³

Referral decision by midwives is a process that arises from screening of emergency risk factors and the limited authority of midwives in handling certain types of cases. The screening process starts from admission, phase I monitoring with partograph, phase II, and phase III-IV delivery. The previous study by Ghazi Tabatabaie, Moudi, and Vedadhir (2012) in Iran stated that high-quality midwifery examination and assessment is a crucial point to recognize warning signs and referral. This intervention is highly dependant on the experience of the individuals.¹⁴

This is supported by informants' statement that said less experience would affect patient's and baby's condition. PERMENKES RI NO 1464/MENKES/PER/X/2010 and midwife's professional standard stated that when an emergency occurs during labor, midwives are allowed to give treatment independently, however, if the condition does not improve, midwives are obligated to refer patients. By paying attention to the principle of referral, midwives collaborate with doctors. There was 74% collaboration between midwives and obstetricians in the referral process in New Zealand. Seventy two percent of midwives were supported by doctors to continue treatment after referral.¹⁵

Our study limitation is in the selection of the research setting. Research location is a capital city with sufficient facilities and infrastructure

for healthcare, especially maternal and pediatric health.

CONCLUSION

Limitations of authority, identification of risk factors, and post-referral impacts make the midwife utterly wrong in making a referral decision.

Socialization about midwife's authority and competence, as well as update on newest regulation is needed. Refreshing about referral system for midwives and health personnel is essential to refresh the knowledge.

CONFLICT OF INTEREST

We declare that there is no conflict of interest.

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