



## **Decision Making on Family Level in Having Treatment: A Case Study of Mother and Children's Health Revolution Program in East Indonesia**



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Article history: Received 27 July 2018, Accepted: 31 December 2018, Published: 30 April 2019

### **Correspondence Author <sup>a</sup> Abstract**



#### **Keywords**

*behavior;  
decision making;  
east Indonesia;  
treatment;  
maternal health;*

The purpose of this study was to find out how decisions were made at the family level in order to seek treatment for family members, especially mothers during childbirth. The population in this study were community members who resided in Ngada, Southwest Sumba, North Central Timor and East Flores- Indonesia. The sample size was determined using a purposive technique, where each district was determined by two locations based on the distance factor (the farthest area and the nearest area) from the capital city of the district. Data were collected using in-depth interview techniques and Focused Group Discussions (FGD) to explore family-level decision-making processes regarding the use of health facilities. The results of this study indicate that decisions at the family level to use health facilities in areas far from the city center tend to still adhere to local traditions and local culture; and it should be based on relatives' advice; while the people who live close to the city center, the decision to use health facilities is generally in the hands of the mother and husband.

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## 1. Introduction

There is a relationship between individuals or a community's active involvement in health care decision-making and the problem of public health (Halabi, 2009). One popular problem in the health field, especially in Indonesia, is the problem of Maternal and Child Health (MCH) (Febriany *et al.*, 2011). The level of MCH in East Nusa Tenggara Province (NTT), by 2011, showed that the Maternal Mortality Rate (MMR) was 306/100,000 live birth, Infant Mortality Rate (IMR) was 57/1,000 live birth and Under-five Mortality Rate (UMR) 80/1,000 Toddlers (Belton *et al.*, 2014; Muhidin *et al.*, 2019). This condition indicates that the MCH rate has still not reached the national health standard, namely MMR 228/ 100,000 live birth, IMR 34/1,000 live birth, and UMR 44/1,000 Toddlers; and also an indicator that the Millennium Development Goal (MDG) 4 and 5 targets have not been achieved (NTT Provincial Health Office, 2012).

The phenomena, theoretically, have happened because of many factors (Larson *et al.*, 2008), such as decision making related to health care (Mikhail, 1994; Légaré *et al.*, 2008; Frieden, 2017). Muhidin *et al.*, (2019), state that several government programs have been implemented to reduce maternal and child mortality, one of which is very well known is the Mother and Child Health Revolution (MCHR) (*see Dopo*, 2016). MCHR itself is essentially a form of movement and concrete action of the NTT Provincial Government to help and prepare adequate health facilities and personnel so that mothers and children in NTT can be saved, especially when the mother giving birth and during the puerperium (Dopo, 2016). According to Castle *et al.*, (2017), the MCH revolution is one form of efforts to accelerate the reduction of maternal and newborn deaths in extraordinary ways through childbirth at adequate health care facilities (Riley *et al.*, 1993; Barry, 2002; Janicke & Finney, 2003).

MCH Revolution in NTT was organized in collaboration between the NTT Provincial Health Office and AIPMNH AusAid (Fisher & Myers, 2011; NTT Provincial Health Office, 2012). One form of the MCH Revolution is all mothers must give birth in adequate health facilities in order to get adequate help by trained personnel (Tunis *et al.*, 2003). It has been one of the decentralization programs of ministry of health Indonesia (Bossert *et al.*, 1991), and is important because the biggest cause of maternal death is due to bleeding from giving birth at home. This is what usually happens in eastern Indonesia (Tabelak & Boimau, 2018).

There are six important components in the MCH revolution, they are trained health workers, health equipment must comply with standards, drugs, and materials needed, buildings should be accordance with standards and functions, good service systems and adequate budgets (Kim *et al.*, 2001; Lengo, 2011). In order for the MCH Revolution work properly and effectively, at least in every village in NTT- Indonesia, there must have a second health center (PUSTU) that equipped with adequate treatment rooms and a private room for health workers (midwives/ doctors) so that they are always in PUSTU to serve patients.

The important and crucial point in the implementation of MCH Revolution is from the service provider side and from the community side (Pardosi *et al.*, 2017). Crucial points, as stated by Willa & Mading (2014), were from the community side. The community itself consists of (a) who gets pregnant and where she lives; (b) do expectant mother want to give birth in health facilities; and do her husband, family members or influential people allowing her to give birth in health facilities?; (c) are there any community's abilities to bring pregnant women to nearest health facilities? (Brownson *et al.*, 1999). The focus of this study was in point (b) which basically concerns with the willingness of the pregnant woman herself, the husband and the influential people around such family in making decision about whether or not the pregnant mother can be brought to the nearest adequate health facility (Liberatore & Nydick, 2008; Reyna, 2008). This point is closely related to the community habits and behavior that have long been adhered to or trusted by local people in NTT Province (Prakarsa, 2012).

Furthermore, previous studies have indicated that a combination of clinical- and community-based interventions has the potential to reduce maternal and infant mortality in low- and middle-income countries, included Indonesia (Church *et al.*, 2002; Farnsworth *et al.*, 2014; Hamer *et al.*, 2015; Piane, 2009). Related to the thoughts above, this study was conducted to describe decision making in health matter. Specifically, the purpose of this study was to find out how decisions are made at the family level in order to seek treatment or health assistance for mothers who are going to give birth.

## 2. Materials and Methods

The current research used the research of [De Brouwere et al., \(1998\)](#), and the program of East Indonesia Government about MCH revolution in Nusa Tenggara Timur Province as mirrors to reflect further understanding about the decision making of maternal health. [De Brouwere et al., \(1998\)](#), have conducted research about the strategies for reducing maternal mortality in developing countries. [De Brouwere et al. \(1998\)](#), state that reconditions appear to have been early awareness of the magnitude of the problem, the recognition that most maternal deaths are avoidable, and mobilization of professionals and the community.

Still, there were considerable differences in the timing and speed of reduction of maternal mortality between countries, related to the way professionalization of delivery care was determined: firstly, by the willingness of the decision-makers to take up their responsibility; secondly, by making modern obstetrical care available to the population (particularly by encouragement or dissuasion of midwifery care); and thirdly, by the extent to which professionals were held accountable for addressing maternal health in an effective way. Reduction of maternal mortality in developing countries today is hindered by limited awareness of the magnitude and manageability of the problem, and ill-informed professionalization strategies focusing on antenatal care and training of traditional birth attendants. These strategies have by and large been ineffective and diverted attention from the development of professional first-line midwifery and second-line hospital delivery care ([De Brouwere et al., 1998](#)).

[NTT Provincial Health Office \(2012\)](#), state that maternal and child health was significantly improved by actively mobilizing mothers and their families to use health facilities for births and through building a partnership with the local governments ([Muhidin et al., 2019](#); [Amen et al., 2019](#)). To help improve maternal and child health in East Indonesia, cost and physical accessibility are two commonly reported barriers that need to be considered. Regarding the accessibility of health facilities, the qualitative findings show that it is not just a matter of distance, but also the ruggedness of the terrain and communication issues such as lack of cell phone reception complicate access facility deliveries.

Cost appears to serve as a barrier to facility deliveries for many even after financial barriers to the delivery itself have been removed. Although Revolusi KIA appears to have increased facility deliveries among those with and without insurance, findings from the interviews indicate that indirect costs, such as the need of baby clothes and opportunity costs, act as significant barriers. Similar findings on the direct and indirect cost involved in maternity care have also been raised by others<sup>7</sup>.

Another major factor that impeded facility birth and which may be amenable to relatively rapid change relates to the availability, credibility, and skills of midwives. In many rural areas, midwives do not always live in the places where they have been assigned, and many are quite junior, with issues raised about their competency. Additionally, the uncertainty of women about their delivery dates, which may in part be due to lack of experience or weak skills of the midwives, considerably influenced place of delivery. Many respondents reported not being adequately prepared to go to a facility or having gone to waiting homes and returned due to incorrect dates ([Muhidin et al., 2019](#); [Mustika & Harini, 2017](#)).

This current research was conducted in eastern Indonesia. Specifically, it was conducted in Ngada, Central North Timor (TTU), Southwest Sumba, and East Flores regencies. The population of this study was community members who resided in these regencies. Data were gained from primary and secondary data. Primary data were obtained through direct interviews with health workers, both women who have used and never use health facilities in giving birth, husbands and close relatives of the mother; while secondary data were obtained through data published by the health office and related technical agencies, such as the publication of the MCH Revolution Program Guidelines. The sample size was determined using a purposive technique, wherein each district was determined two locations based on the distance (the farthest area and the nearest area) from the capital city of the district. Data were collected using in-depth interview and Focused Group Discussion (FGD) to explore the decision-making process at the family level regarding the use of health facilities, and then they were analyzed using qualitative analysis techniques. The results of the analysis were described using the descriptive qualitative method.

### 3. Results and Discussions

#### 3.1 Community Knowledge of MCH Revolution Program

In general, people in NTT Province, especially pregnant and lactating women are well acquainted with the MCH Revolution Program. The indicator is that they have sufficient information and free of charge service every time they check-up at the nearest health facilities. The following are excerpts of interviews between the researcher (P) and respondent (R):

- P. ... do pregnant women in this area know about childbirth assurance?  
 R. Indeed, almost all of them already knew, so they were very sorry if they did not use health facilities prepared by the government during childbirth. So far, almost all mothers have given birth in the nearest public health centers. Maybe there are only 2 or 3 mothers who do not use this program (community leader of Waepana).

From the excerpt of the interview above, it is known that people have known about the facility if public health. However, for mothers who give birth before the enactment of the MCH Revolution program, generally, they have not known about this program at all. This indicates that in the period before the enactment of this program, mothers usually gave birth at home or did not use adequate health facilities. Although they gave birth in the health facility, they have to consider the related cost as well as social and local cultural aspects.

- P. well, about the use of *jumpers*. Do you ever know about the service of childbirth assurance?  
 R. childbirth assurance? What? I haven't experienced it.  
 P. childbirth assurance is protection for childbirth assistance for mothers who give birth in health facilities. Have you ever heard of the program?  
 R. *No, I haven't. I have just heard it.. (laughing). Does the program have an identity card like Jamkesmas?*  
 P. Actually there is no identity card available, but if we give birth in health facilities, we automatically use that facility?  
 R. *oh ... the problem is from the first to the sixth child, I gave birth at home.*  
 P. Oh.. all of your children were born at home. So, you didn't have time going to the nearest hospital to take advantages of childbirth protection program and facilities, did you?  
 R. *Yes*

As can be seen in the above transcription, some people have not known about the insurance facility provided by the government. The community, as seen in the excerpt, has known about the public health facility, but they did not know about the aid of health funding. Likewise, with community members who may have family members who are not dealing directly with health workers, they have a lack of knowledge of this program. The statement is based on the following excerpt of the interview.

- P. According to your view, do all expectant mothers in this area know well about giving birth protection?  
 R. Frankly speaking, I myself have just heard about it. Jampersal?  
 P. Yes  
 R. I don't know  
 P. do you think that it is due to lack of destination of the program?  
 R. Definitely, yes. Indeed, I have just heard about that program.  
 P. Have you known that all expectant mother using Jampersal?  
 R. No, I haven't

Next, although the community, especially mothers, are well acquainted with health programs and facilities, some people, especially those who live far from the health facilities, generally will take their own medical actions. The medical actions conducted were by trying to seek alternative medical treatment/assistance first. In many cases, when the patients have tried traditional medical treatment and did not find a good solution from the alternative medical treatment, then they will try to seek a government health facility. The following excerpt of the interview shows how people prefer to find alternative/ traditional medical treatment than visiting health facilities provided by the government.

- P: Well, in what condition do you think expectant mother visiting health facilities?  
 R: When they found that using traditional medicine was not effective, then they decided to see doctors or health staff. (Community leader of Waepana)

It is a fact that no one will know the exact time of the birth of a child, whether it can be at night or during the day when an expectant mother chooses to give birth normally. The main problem faced by local people in isolated regions is the lack of supporting infrastructure.

- P. What do you think why they use the health facilities? And how do they get there?  
 I. Because they have realized that giving birth should be handled by medical staff, particularly midwives. At least they are assisted by midwives. I see that the awareness of the local community in using health facilities has been increasing, but there is a problem in supporting infrastructure. For example, there is an expectant mother near here, she felt that she was going to giving birth, but lack of transportation, *she and her family had to use hand tractor going to the nearest community health unit*, Lack of transportation mode does not inhibit them to seek for health at the nearest health facilities.  
 P. *But some of them are still giving birth at home?*  
 R. There are some reasons. Firstly, it was in the night time. The second is there was no there are no vehicles to be used to get to the nearest health facilities. Sometimes they asked for help from the midwife but the midwife did not come until the expectant mother gave birth.

The delay in the arrival of health workers as revealed in the interview above shows that transportation facilities in the regions are still one of the factors that inhibit access to health services.

### 3.2 Decision Making at the Family Level in Search for Treatment

The results of this study indicate that there are differences in decision making at the family level in using health facilities between areas located far from the city center and areas close to the city center. In the area which is far from the city center, there is still a tendency for people to adhere to local traditions and local culture, for example in West Sumba regency, decision-makers are in the hands of the female family if the *belis*, the obligation to pay a certain amount of money from the male family to the female's family when he is going to marry the girl, has not been paid. In this condition, any decisions including those related to medical actions, even to bring the expectant mother to health facilities. Similar conditions were found in other regencies, such as in Ngada and East Flores. Mother-in-law and biological mother have a central role in making decisions whether a pregnant woman needs to be taken to a health facility or not in order to get medical treatment.

In the TTU district, decision making is different and unique. Close relatives of the husband actually gave special consideration based on their own experiences. Information and considerations for making these decisions are generally based on local cultural factors, for example, the expectant mother must be "*naketi*", which is a kind of confession to the husband and parents or relatives of a husband who has had a disagreement with the expectant mother. In other words, there is a process of forgiving each other among family members. The action is considered to open the barrier/ widen the way for the arrival of the baby so that the mother does not suffer from a prolonged illness in giving birth

Other factors that are sometimes taken into consideration are concerns about the safety of mothers and children while they are on the way to health facilities. This has become a critically important factor because most regions in NTT have poor road infrastructure, so it is very vulnerable for the expectant mother to go through such conditions. Considering these conditions, the family generally recommends that the expectant mother should perform the '*naketi*' rather than going to health facilities through poor road conditions.

Economic factor sometimes is also considered to be one problem for family members in seeking medical treatment. This factor is closely related to the related costs that must be spent during the expectant mother is undergoing medical treatment. Process of making a decision that involving large families members and relatives opinion as well as the consideration of cultural aspects; have resulted in slowing medical action. The opposite condition occurs in areas that close to the city center, where the decision to use health facilities is generally in the hands of the expectant mother and husband because on average they have a better understanding and the importance of health facilities.

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The conditions as described above are supported by data as published by the NTT Provincial Health Office (Seran, 2007) that generally (46.1%) mothers in NTT give birth assisted by their family/relatives, while those assisted by midwives are only 36.5%, and the rest are assisted by other parties, including traditional healers. Meanwhile, almost all (77%) of mothers in NTT chose to give birth at home.

#### 4. Conclusion

It is concluded that decisions at the family level to use health facilities in areas far from the city center tend to still adhere to local traditions and local culture; and it should be based on relatives' advice; while the people who live close to the city center, the decision to use health facilities is generally in the hands of the expectant mother and her husband.

Therefore, it is recommended that the government through the health office or related technical agencies continue to conduct health education to the people who live far from the city center about the importance of health facilities, improve and provide health facilities closer to the community, and cooperate with religious leaders and community figures to provide an understanding of the importance of health facilities so that people's perceptions and beliefs about tradition are gradually reduced.

#### *Acknowledgments*

The author would like to thank the editor of IJHS for their valuable time, support and advice in completing the current study.



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