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The Muyu Women and Their Birthing Culture: How to Move Labor to Health Facilities

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***Abstract*— The research was a part of participatory action research aimed to descriptively explore the issue and to suggest the possible solution to the high risk childbirth tradition. It was conducted in Mindiptana District, Boven Digoel Regency, Papua. The data was collected using in-depth interviews to Muyu women, Muyu elderlies, the pastor who was assigned in Muyu Pastoral, midwives and health workers who work in Mindiptana health community centre (Puskesmas Mindiptana) and Transient Hospital (Rumah Sakit Bergerak). It was continued by a focus group discussions of midwives and health workers in those health facilities. The researcher have work closely with all the stake holders in the district which are the local government and the community to formulate joint solutions which are appropriate to the local culture. The result of the study is the suggested action plan consisted of capacity building on (1) infrastructure by building a safe maternity house and expanding the communication means between remote areas and health facilities, (2) social organisation by involving the community leader and pastoral for promoting safe labor in health facilities, (3) individual and family level by conducting reproductive health education.**

Keywords—maternal mortality rate, maternal health, safe labor, Muyu Tribe

I. INTRODUCTION

The maternal mortality rate during childbirth in Indonesia is still very high. Official data released by the Government stated that the maternal mortality rate (MMR) increased significantly, from 228 per 100,000 live births in 2007 to 359 per 100,000 live births in 2012. The numbers equals to 44 maternal deaths every day or about one to two mother died every hour caused by pregnancy, labor and post-labor complications. Furthermore, since the number is a national calculation, the actual number of remote region such as Boven Digoel, Papua, may be worse. In 2013, only 35.02% of pregnant women in Boven Digoel Regency had their labor assisted by health workers. The number was under 55.0% coverage of Papua Province, and far lower from 82.9% national figure [1].

The ethnographic research conducted by Laksono, et al., in the Muyu Tribe who inhabit the Mindiptana District, Boven Digoel Regency, shows that physical and cultural barriers still exist and thus, influence the low number of labor assisted by health worker [2].

The Muyu people belief the blood during menstrual period and during the labor is dirty and the air from the blood can weaken and eliminate the strength of Muyu men. Muyu man who inhales the dirty air may get shortness of breath and unable to hunt for the food. The belief has made Muyu women choose not to deliver at home. Furthermore, the act of labor inside the house – both intentionally or unintentionally – is considered as taboo and may pose a consequences of getting customary fines [2].

Furthermore, the strong beliefs of Muyu Tribe have also influenced Muyu people who work as health workers. Regardless their scientific knowledge, some of them are still practicing Muyu's rituals [3]. The native Muyu health workers will conduct both medical procedure and traditional ritual when dealing with their patients [3].

The particular belief of *iptem* – dirty blood – which resulted in Muyu women delivering their baby outside the house can be captured as an opportunity to shift their pattern of labor alone in the hut to be assisted by health worker in a health facility. The Papua Health Insurance (Jamkespa) which ensures the health care services are free of charge can also help promoting the labor at health facilities [2].

Muyu Tribe warmly welcomes health workers from any ethnic origin or background. This positive value can support the utilisation of health services provided in health care facilities. Nevertheless, the demands should be balanced by the health workers supplied by the regional government. Moreover, the

construction of infrastructure must be accelerated so that health workers placed in the village will be retained [2].

The research plans to propose a strategy to move the labor of Muyu women to the health facilities, particularly in the capacity building of local community to be aware of safe labor and to suggest a joint action to safe mother and child.

II. METHOD

A. Action Research

Action research is a research which is carried out to solve problems either directly or through a reflective process of progressive problems. The reflective process can be done by individuals, or by a team, or by a part of the target community to improve the way they solve problems. There are two types of action research which are participatory action research and practical action research. According to Denscombe the aim of this action research strategy is to solve a particular problem and to produce guidelines for best practice [4].

An action research involves active participation in a changing situation, often through 'organisations' in the target area, while simultaneously conducted the research. In the action research, researchers work with the target community to propose new programs or actions to help the target community improve a particular performance.

B. Maternal health problems at Boven Digoel

The reference for maternal health ethnographically in Boven Digoel is limited. However, there were two published books which can help illustrate the point. The first book was published in 1997 by J.W. Schoorl, an anthropologist and the regent of Muyu in the 1960s, with the title "Culture and Change of the Muyu Tribe in the Current of Irian Jaya Modernization". Schools concluded that Muyu people are quite open to changes, even though they are frequently bound by cultural beliefs and many things which happen around them are believed to be mystical [3]. The second book was written by Laksono, et al., in 2014 with the title "Muyu Woman in Exile". Laksono, et al., explained the process of seclusion of Muyu women during childbirth is still existed up to now, although some of them have had their labor assisted by health workers in the health care facilities [2].

The seclusion of Muyu women during childbirth is more due to their belief that '*Iptem'* of childbirth blood will cause bad influence. The bad air comes with the blood is believed to weaken the Muyu male's strength, which in turn will make them fail in earning a living or fulfilling their household needs [2]. Based on the book, it can be summarised the supporting and inhibiting factors to shift the pattern of childbirth Muyu women to health care facilities are as follows in Fig. 1:

TABLE I. SUPPORTING AND INHIBITING FACTORS

Supporting Factors	Inhibiting Factors
Ethno value/belief	
Accept and welcome other ethnic background	Women are responsible for all domestic matters
Women cannot give birth in the house	'*Iptem*' can weaken the '*waruk*' (the strength) of men
Customary fines if labor happens at home	Men cannot stay closer to labor
Ethno value/belief	
Pastoral is helpful and supportive	The elders and community leaders have a strong belief to the tradition and ritual
Health services cost	
The Papua Health Isurance (JamkesPa) pays for all the health services	Health workers have difficulties in claiming their bonus for mobile services
Health services	
Applied modern medical technique and procedures	Limited service in local health centre facilities
Accepting health workers from other ethnic backgrounds	The area coverage is too vast
General situation	
The main road is relatively good	No public transport is available
	No adequate road to the remote area
	Rain dependent water storage
	Electricity is only available from 6 pm to 11.59 pm
	No internet connection
	Low socio economy level

Fig. 1. Supporting and Inhibiting Factors [2]

C. Research design

This was a part of a participatory action research with a qualitative approach commenced from May to July 2018. The participatory action research itself comes in three stages done in every year started from 2018 to 2019. The data collected in this part was from in-depth interviews to Muyu women and Muyu elderlies whom the researcher found using snowball method. Other in-depth interviews were done to the pastor who is assigned in Muyu Pastoral and to midwives and health workers who work in Mindiptana health community centre (Puskesmas Mindiptana) and in Transient Hospital (Rumah Sakit Bergerak). It was continued by a focus group discussions of midwives and health workers in Puskesmas Mindiptana to formulate a joint solution and propose a strategic plan for intervening the issue of childbirth culture in Muyu Tribe.

To ensure the quality of data collection, the researcher used the logbook between the research team continued by data verification using triangulation method of (1) Triangulation of researchers; data collection is carried out by at least two different researchers, (2) Triangulation of informants; for one and the same variable, more than one informant was interviewed, (3) Triangulation of data collection methods; the same data is collected by two or three different methods which were in-depth interviews, participatory observation and focus group discussions.

III. RESULT

Maternal and child health in Mindiptana District, Boven Digoel Regency is still an important issue. According to the Boven Digoel District Health Office, the number of live births in the Mindiptana District is 26 births in a population of 4,076. It is considered higher than the national live birth rate of 17.4%. Nevertheless, the high birth rate is not yet balanced to family health and nutrition.

The percentage of childbirth coverage assisted by trained health workers is still far from expectations. According to 2017 data the percentage of birth assisted by trained health worker was 82.8%. The disparity in numbers occurs particularly in the eastern regions such as Papua Province which was marked 55.1% (Directorate of Family Health, 2017). In Boven Digoel Regency the data is recorded at the percentage of 73.1%. This coverage has increased from 69.3% in 2012. Regardless the number remains under the target, the public awareness in Boven Digoel Regency to have their labor assisted by health worker is starting to increase [5].

The Muyu, which forms the majority population in the Mindiptana district, has their local beliefs and culture about pregnancy and childbirth. During pregnancy, mother will have food restriction of red meat which is believed to give hot effect to the womb. The restriction can cause nutritional deficiencies which affects the pregnancy. Ante Natal Care (ANC) is the care provided by skilled health-care professionals to pregnant women in order to ensure the best health condition for both mother and baby during pregnancy. The recommended number of ANC visit is at least four times, one during the first trimester, another one on the second trimester and two other visits on the last semester. The number of Muyu women who do the ANC visit is low. Based on the data provided by Mindiptana local health community centre, in 2018, the number of first ANC visit (K1) was 47 cases, and out of those 47 women, only 12 of them continued to have four ANC visits during their pregnancy (Profile of Boven Digoel Health Service, 2018). The low number of ANC visit and low percentage of labor assisted by health worker among Muyu women are the result of long distance between their house and the health community centre and or clinic, Mindiptana geographical condition, expensive transportation cost and lack of support from husband and the family.

In order to reach out the pregnant women who live far from the health community centre, the midwives of Puskesmas Mindiptana regularly carry out mobile clinic to conduct ANC and Posyandu activity (children check-up for immunisation and stunting monitoring). The Mindiptana district consists of 13 villages. However, not every village can be visited for mobile clinic due to the distance and the difficult geographical location. In wet season, the flood causes the blockage of the road, hence the midwives usually cancel their visit to the particular village. During the mobile clinic, pregnant women can have ANC on the spot without having to visit Puskesmas Mindiptana. Nevertheless, since the mobile clinic is only done every three months, the ANC percentage remains low. To solve the problem, Mindiptana midwives have trained several women in each village to be Posyandu cadres. These cadres will be responsible to report to the midwives about new pregnant women as well as monitoring and reminding pregnant women to go to health facilities when it is almost time for labor.

Laksono, et al., found that traditionally Muyu women have to live in *bevak* (a small hut) during labor. They will separate themselves from their families when they are about to labor until they are "dry" (from the blood spotting after delivery). It means they need to stay in the hut for around 40 days. After this period is finished, the woman is allowed to enter the main house to regather to her family. The temporary estrange situation is also happen when a woman has menstrual period each month. They need to stay away from the family and the man of the house for the sake of family health [3].

The labor in the hut can risk the health of mother and the baby since it is done in an improper place and often without any supervision from trained health workers. Hence, the proper intervention must be found and implemented.

The secluded labor tradition has been known by the Muyu community for generations, When researchers collected the data and inquired about the practice of childbirth and the beliefs which cause it, the respondents – consisted of the Muyu women and the elderlies – considered the tradition to be natural. Their belief of taboo and customary fines regarding the dirty blood is widely accepted and applied. However, researchers also found that the Muyu people have experienced changes in socio-economic and cultural during the decades. Several aspects such as their way of life, social norms, rules, or social fines have shifted. This means many practices in everyday life have been done differently compared to the old times.

According to Selo Sumardjan, a social change can occur due to several factors, and as culture is something dynamic and not static, the change which occurs in the Muyu people is a form of the liquidity of the culture itself. Regarding to this statement, Laksono, et al., mentioned that the tradition of labor in *bevak* is predominantly carried out by the older generation of Muyu society. Meanwhile, in the younger generation, the tradition has started to stop [3].

The social change is consistent to the findings of initial data collection in this study. The researcher did not find any presence of *bevak* in the Mindiptana region, thus, what was mentioned in previous studies is no longer existed. In some of the interview, the respondent denied the existence of the alienated childbirth tradition. They admitted the tradition happened in ancient times and was done by old generation. While the current generation, especially teenagers even do not know what *bevak* is.

The same finding was also claimed by health workers which were doctors, nurses and midwives working in Mindiptana local community health centre. They revealed that in the last 3 years, they did not no find any labor done in the *bevak*. According to the health workers, the tradition has long been abandoned. The community now knows the dangers of giving birth without the aid of a health worker or outside a health facility. Thus, the community at present is more likely to give birth in Puskesmas or in Transient Hospital.

Nevertheless, shortly after the interview, the researcher got a video recorded by 2018 National Health Survey team (Riset Kesehatan Dasar/Riskesdas) who worked in the Boven Digoel Regency. The video shows the appearance of a *bevak* (small hut) made of twigs and leaves with a size of 1.5x2 meters and a height of about 2 meters. The *bevak* was built not far from the home of a resident who live only about 20 minutes away from the Puskesmas Mindiptana. A man in the video admitted that he had just finished building the hut to be used by his wife for her labor. The *bevak* was deliberately built close to his mother's house so he could monitor his wife's condition and provide her need during the seclusion, including clean water, food and clean clothes.

There are two messages obtained from the video. Firstly, the phenomenon of the labor culture is an iceberg phenomenon, the

researcher must dive deeper to be able to understand the real facts. The bevak presence will most likely be denied, by Muyu people and particularly by health workers. However, the tradition remains practiced by the tribe as a habit which they have understood and believed for generations. The Muyu's isolated birthing culture is still existed, but it is hidden inside the social and economic change in Mindiptana. Secondly, the video was actually shown the husband participation in the delivery process. Furthermore, the confession in the video also implicitly revealed the wife's willingness to temporarily separate from her family to give birth, and not to be seen as an isolation.

As a follow up to that information, the researcher returned to check the existence of *bevak* and gathered more information about it. The researcher found several women who admitted to give birth in the *bevak*. These women average age was more than 40 years old and they stated that labor in bevak outside the house is a tradition as part of their daily lives. They believed it is important to have birth outside the house to avoid bad luck (since it violated the tradition) and protecting family health (due to the hygiene problem). One of the women said she has called the midwife to help the labor, however when the midwife arrived, the labor was over. The report of the midwife however, claimed the call was intended to ask for post labor treatment and not for labor assistance. As the researcher collected a more thorough data, the economic problem remains the major reason for women not to labor in the Transient hospital or the Puskesmas Mindiptana. Although the health service cost is free, the transport cost and the cost of family who accompany them in the health facilities can be overburdened. Furthermore, the difficult transportation access also influenced their decision not to labor in the health facilities [6].

During the focus group discussion several joint solutions which are appropriate to the local culture have been formulated. This research is designed as an action research and is carried out in stages [7]. Furthermore, researchers have elaborated on issues related to maternal and child health for moving Muyu traditional labor to health facilities [8]. The problem arises due to several aspects which are 1) transportation, 2) communication, 3) information, 4) socio-economic, 5) culture. Therefore, the following are the intervention models proposed from the focus group discussion [9].

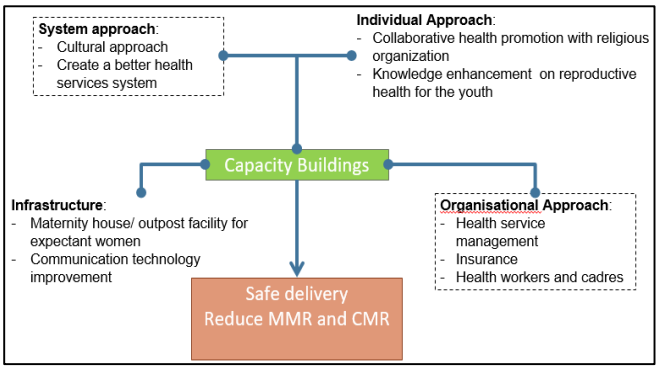

Figure 2. Intervention model to move labor to health facilities

The intervention model includes capacity building in four main aspects:

1. Organizational approach to the local government of Boven Digoel Regency to overcome barriers related to managerial and operational health services of Boven Digoel area. For example, equal management of village midwives, delivery guarantees or empowerment of cadres. It is aimed to create a partnership to increase the capacity of maternal and child health services in Boven Digoel.

2. Infrastructure approach to build a safe maternity home which can be used by women who are almost due her labor and her family who accompany her. It is advised for mother and family to stay in the house a week before and a week after the labor. The Organizational approach to the local government will ensure the building of the house next to health facilities. It is also proposed to procure communication facilities in the form of Handy Talky (HT) using radio waves. This will be more efficient to be held in the Mindiptana region given the lack of communication facilities with the telephone network. Radio networks can also reach areas far from the city centre. By expanding the communication means between remote areas and health facilities, the information of women who are about to deliver her baby will be accepted and responded faster by midwives in health facilities.

3. Individual approach to increase public knowledge about safe childbirth and health facilities in Mindiptana. Researchers will work with the church and health services to develop a health promotion instrument that can later be given to the community. The involvement of the church is considered strategic since the church and pastoral has a strategic position within community. It is hoped that the public will know more and be willing to utilize health facilities for childbirth.

4. Systems Approach. A systematic change of Organizational and managerial changes, the existence of a built safe maternity house which is suitable to the needs of the community in terms of health and culture, and the increasing knowledge of the community as the effect of health promotion will result in a sustainable change. The changes in culture related to values and practices which is beneficial to health will Muyu people health status.

IV. Conclusion

Socio-economic changes in the Muyu tribe have changed the belief that labor at home is taboo and can negatively impact the family living in it. The younger generation of Muyu is now accepting the concept of labor assisted by skilled health worker both in the house or in the health facilities. This has resulted in the rare events of giving birth in a *bevak*. Nevertheless, several events of labor in the *bevak* still happened due to economical reason, personal hygiene issues, the distance between the village and the health facilities, the road blockage, the late notification of labor to the midwives due to the bad communication means. Furthermore, the Mindiptana geographical characteristics and low economy level have contributed to the low percentage of Ante Natal Care (ANC) visit.

The effort of Mindiptana health workers to encourage mother to prepare to go to health facilities two weeks before the due date frequently failed because Muyu women and her family are concern to the cost of living while waiting for the labor. Hence, it is suggested to build a safe maternity house which can offer a solution for them who want to stay temporarily. To improve maternal and child health services should be supported by increasing resources both facilities and infrastructure and expanding communication means between farthest villages and health facilities. The Organizational approach to the local government which can ensure the infrastructure built and support the management of health workers around Mindiptana is strongly needed along with health promotion to increase public awareness of the importance of safe delivery assisted by skilled health workers in health facilities.

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