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Social Network to Prevent and Handle Pregnancy and Childbirth Emergency

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Abstract: The reduction of maternal mortality remains the main focus of health development target of achievement in many parts of the world. Maternal mortality still as the highest contribution of deaths occurred in developing countries. Social network system developed within community has obstacles in achieving target of maternal mortality reduction. This study used quantitative and qualitative approach. Sampling for each respondent and informant was done using purposive sampling method. Quantitative data collection was undertaken among 90 postpartum women, and 25 qualitative informants. Quantitative result shows attitude and behaviour of women that most women choose delivery at health facility (n=87) with assistance by health professionals (n=90). Almost all respondents received ANC (n=96), mostly reported of having socialization and information on safe delivery. Result of in-depth interview among community members showed that strategy to overcome obstacles in social network is to include TBA in the social network, as well as report promptly if encounter difficulties in helping childbirth and using money saving for delivery preparation as known as "tabulin" in local language to overcome the economic problems of the family. The social network works by exploiting the potential that exists in the community agreed upon and built on initiation within the community itself and proven to be able to overcome various obstacles to prevent and handle the emergency of pregnancy and childbirth.

Keywords: Social Network, Maternal Health, Community Development

Introduction

The declining Maternal Mortality Ratio (MMR) in almost all over the world, is still the main focus of achieving the target of health development. More than 800 women per day estimately experience deaths related to pregnancy and childbirth, with developing countries as the highest contributors to the mortality rates (WHO, 2018). The MMR due to pregnancy and childbirth in developing countries reaches 150-250 of deaths per 100,000 live births. The high level of MMR in developing countries is caused by several factors, both medical and non-medical, one of the causes is the delay in accessing emergency services (life saving care) (Chou, Daelmans, Jolivet, Kinney, & Say, 2015).

Essentially, obstetric emergencies as well as other emergencies conditions are needed for every pregnant women with medical complications. Especially emergency services for risky pregnant women who need to be given treatment immediately and accurately to avoid complication case happen in childbirth. There is three condition of delays in emergency handling that often found in maternal death cases, first is decision making before delivery, second is delay in reaching the place of delivery, and third is in getting adequate treatment (Ayanian & Markel, 2016).

Several studies in Indonesia show that the delays in childbirth occur due to the difficult geographical conditions, financial implications, and the high role of TBA in the process of pregnancy and childbirth as one of the socio-cultural aspects that are still maintained today (Belton, Myers, & Ngana, 2014; Birdsall & Hill, 2011; Titaley, Hunter, Heywood, & Dibley, 2010). One of the obstacles in accelerating the declining of MMR in the regions also related to the lack of interaction of pregnant women with wider environment of family and community.

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Intervention efforts are needed, both for individuals, families and communities around pregnant women to overcome this problem in order to prevent cases of delays in handling emergency which can result in a risk of maternal death.

Planning and Prevention Complication of Childbirth Program or Program Perencanaan Persalinan dan Pencegahan Komplikasi (P4K) has been implemented by attaching stickers to the home of pregnant women. The P4K program is one of a government effort to reduce MMR, this program encourages pregnant women and their families to jointly in making decisions about who is the delivery helper, place of delivery, transportation method, labor costs and potential blood donors which are needed at any time in case of an emergency. The program aims to reduce the delay in seeking care and health services through measures to handle obstetric emergencies (Kementerian Kesehatan, 2010; Nukuhaly, Widagdo, & Nugraheni, 2012).

In addition, intervention efforts can also be carried out at the community level, by building a mechanism for social networks by maximizing the potential and increasing the capacity of each region in handling complications in pregnant women. The process of running a social network is certainly supported by the role of various actors in the network that cannot be separated from each other (Granovetter, 2018). The results of a qualitative study in Bangladesh show that a woman's decision to receive reproductive health services is influenced not only by her husband, but also by parents, especially mothers who are considered to have better experience and knowledge (Khan et al., 2014). Other researchers say that in Indonesia more than 70 percent of cases of late handling of obstetric emergencies are caused by husbands delay in decision making (Supratikto, Wirth, Achadi, Cohen, & Ronsmans, 2002).

The explanation above shows that the social network system that has been formed in certain community groups, has not been fully able to successfully reduce the maternal mortality rates. Nonetheless, a village in North Lombok District, namely Karang Bajo with a social network mechanism was able to show success in reducing maternal mortality to 0, and maintaining the Maternal Zero Rate or Angka Kematian Ibu Nol (AKINO) for almost a decade. The strong kinship and social ties of the community to the majority of the population of Karang Bajo village make this village far from the potential for the emergence of unwanted social conflicts, so that efforts to prevent maternal deaths are carried out voluntarily. This, of course should be an example for other regions in order to achieve similar success in effort to reduce maternal mortality.

This study aims to find out and analyze how social network systems and its mechanism can work well in preventing and handling pregnancy and childbirth emergency, also identifying community efforts in anticipating and overcoming potential barriers in preventing emergency case of pregnancy and childbirth. Conducted in the village of Karang Bajo, North Lombok Regency, the results of this study are expected to be the material for the formulation of policy recommendations, both at the district, provincial and national levels as an effort to reduce maternal mortality through the establishment of an effective and well-functioning social network system.

Method

This study used a cross sectional design with mixed method data collection (quantitative and qualitative). The research conducted in May – Januari 2017, while population study was all women who had given birth and community members involved in P4K activities and lived in Karang Bajo Village, North Lombok Regency. The subject of this research (samples) were mothers who had given birth in the last two years between period of January 1st 2014 – December 31th,2016 who were met during Pos Pelayanan Terpadu (POSYANDU) or Intergrated Serviced Activity and fulfilled the inclusion criteria.

The inclusion criteria for this study subjects were mothers with two years postpartum who were met at the posyandu activity and were willing to be interviewed. While the exclusion criteria for this study were mothers with two years after childbirth who were ill and mothers who came but were not willing to be interviewed. The number of research subjects was obtained by using a minimum sample calculation of 30% of the total deliveries in Karang Bajo Village, which were 214 deliveries during 2 years since 2015 and 2016. Maternal childbirth data

were obtained from the birth register in the village midwife and health center. Women with a history of childbirth in the last two years is choosen in consideration that the mother is still able to remember her last childbirth experience. Data retrieval can be carried out on 90 mothers two years after giving birth, who are willing to be interviewed during the visit of the POSYANDU.

The collection of qualitative data toward community members who involved in P4K activities (informants) consisting of village head, hamlet head, managers of village ambulance, religious leaders, community leaders, female figure, PKK cadres, head of Pusat Kesehatan Masyarakat (PUSKESMAS) or Community Health Center, midwives coordinator, village midwives, TBA, the head of the district health office, the head of the Rumah Sakit Umum Daerah (RSUD) or Regional Public Hospital, and the mother and family who had birth experience with emergency conditions. This study carried out by in-depth interviews using the guidelines for the interview that had been prepared. Sampling for each informant was conducted using a purposive sampling method for 35 people who were willing to be interviewed.

The analysis of quantitative data was carried out with the SPSS 17 program, data presented descriptively in graphical form to provide an overview both verbally and numerically by explaining the background or context of the symptoms and conveying different information with previous beliefs about emergency forces, the focus of this study the quantitative finding are about the attitude and practice of mother to access the health facility during their pregnancy and when labor (Creswell & Poth, 2017). While the results of in-depth interviews (qualitative data) are recorded in the transcript sheet and input into the matrix according to predetermined themes, such as the actors who play a role, the efforts to prevent the maternal death, and the barriers of working the social network.

Result

Overview OF Maternal Death in NTB Province

The evidence from the NTB Provincial Health Office in 2013 noted that the maternal mortality rate in NTB Province in 2012 decreased compared to 2011, from 130 to 100 maternal deaths, but in 2013 it rose again to 117 cases of maternal deaths. The highest incidence of maternal mortality at the time of childbirth is around 56%, maternal mortality in childbirth is around 23%, maternal mortality during pregnancy is around 21%. Based on age group, the incidence of maternal mortality at the age of 20-34 years was 63,04% dan age ≥35 years as much as 28,26% and age < 20 years was 8,70% (NTB Provincial Health Office, 2016). In Karang Bajo Village for the case, the average number of deliveries in health facilities handled by PUSKESMAS or Pondok Bersalin Desa (POLINDES) and those referred to the advanced health facilities, ranges from 90-100 births annually. From January to December 2015 the number of maternal deliveries reached 98 in total. Whereas in 2016 from January to December there were 116 maternal deliveries.

Karang Bajo village is one of the villages in North Lombok Regency which from 2007 to 2016 managed to achieve the target of Zero Maternal Mortality Rate or Angka Kematian Ibu Nol (AKINO) or in the other words was able to maintain achievement in maintaining maternal health for 10 years. An overview of maternal mortality statistics in Karang Bajo Village can be seen from in-depth interviews with the Village Head and the secondary data analysis held by the North Lombok Regency Population and Civil Registry Service and also data provided by village midwives can be seen in table 1 below:

Table 1. Overview of Maternal Death in Karang Bajo Village

Description of Year	Mortality Rates
Before the definitive village (before year 2006)	There are 2-3 cases of deaths per year. "Approximately 2-3 mothers die each year due to childbirth before Karang Bajo village becomes the definitive village, because the coverage area of the Bayan village is very broad and cannot identify what is the priority in the village ... We say the priority is for pregnant women to access childbirth in puskesmas or polindes it is difficult because at that time maternal health was not a priority .. " (Secretary of Karang Bajo Village, Female Figure)
Definitive village (year 2006)	There are still 1 cases of death in 2006 because of late handling. "The deaths still occurred in 2006, even though it was too late to handle even though if you think about it, there is a near health center, the cadres to help monitor, especially her husband ... he can't just impregnated his wife but when it's time to give birth, he choose his pet (cow) instead of taking his wife to the polindes or puskesmas .. "(Head of Karang Bajo Village)
1 year after definitive village (year 2007)	0 (AKINO) annual case of death "In 2007, there's no more maternal death, all residents were moved together to help ... starting from looking for pregnant women, reporting it to the cadre so that village cadres and midwives could monitor whether or not the pregnant woman was at high risk ... If they found signs of complications or emergency pregnancy and childbirth, the mother will be immediately delivered to health facilities ... maternal and child health has become the priority of the village since 2007 and up to now "(Head of Karang Bajo Village)

Source: in-depth interviews with village head and secondary data analysis with POLINDES and PUSKESMAS (2016)

Overview Of Pregnant Mother Attitudes And Behavior In Karang Bajo Village

The interviews toward 90 mothers with 2 years postpartum showed the following results, related to the place of childbirth. Figure 1 shows that 48.9% of mothers chose POLINDES/ BPM, 47.8% chose in the PUSKESMAS/ RSU, 3, 3% chose at home and no one chooses at the TBA house (figure 1).

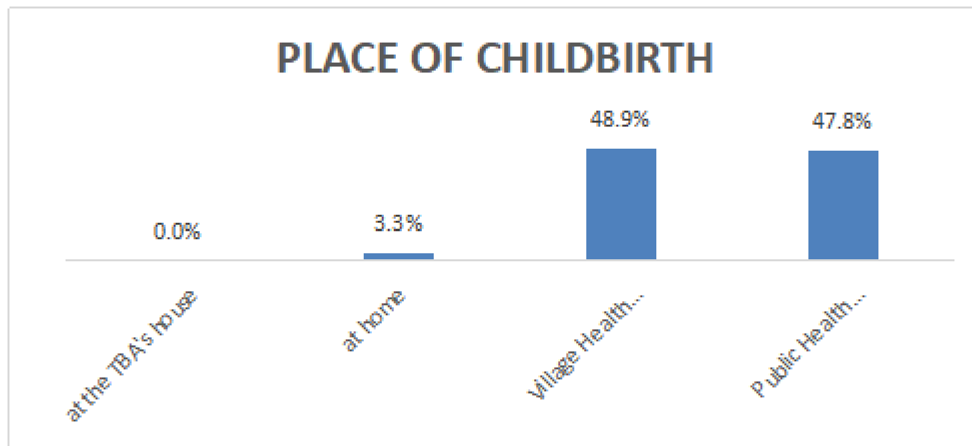

Figure 1. An overview of mothers behavior in choosing the place of childbirth in Karang Bajo Village, North Lombok Regency

Source : Primary Data Using Questionnaire, Karang Bajo Village (2016)

Figure 2 shows that all mothers choose midwives or doctors to help with their childbirth, and no one chooses a TBA. Although there were a small number of respondents who gave birth at home (figure 1), birth attendants were also provided by medical staff both doctors and village midwives.

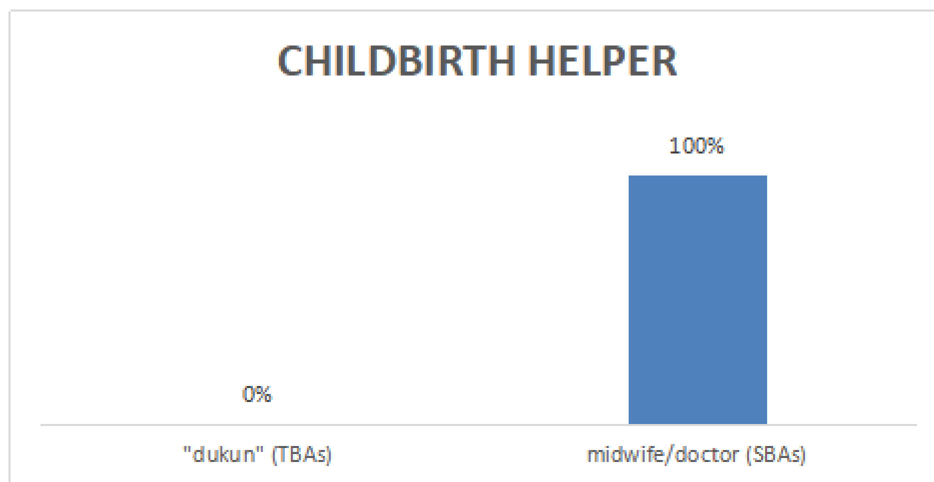

Figure 2. An overview of the mothers behavior in Karang Bajo Village, North Lombok Regency in choosing childbirth helper

Source : Primary Data Using Questionnaire, Karang Bajo Village (2016)

One of the factors that can help to prevent the emergency case of pregnancy and childbirth incident is monitoring condition of pregnant women on a regular basis, in the medical world known as Antenatal Care (ANC), which according to the Ministry of Health standards must be conducted at least 4 times during pregnancy. Recently, the WHO issued a new policy recommendation to increase routine inspection standards / ANC for pregnant women by a minimum of 8 examinations.

Based on the results of the study, 86.7% of the mothers did the routine pregnancy check up (ANC) with a minimum examination of 4 times during pregnancy and there were still 13.3% of mothers who did not carry out routine pregnancy checks (Refer to Figure 3) This result also supported by observing the mother's KIA book when making a visit to the Integrated Services Activity. Some of the reasons for the mother not checking her pregnancy are: they forgot the time schedule of ANC and they had another activity in the same time with ANC schedule.

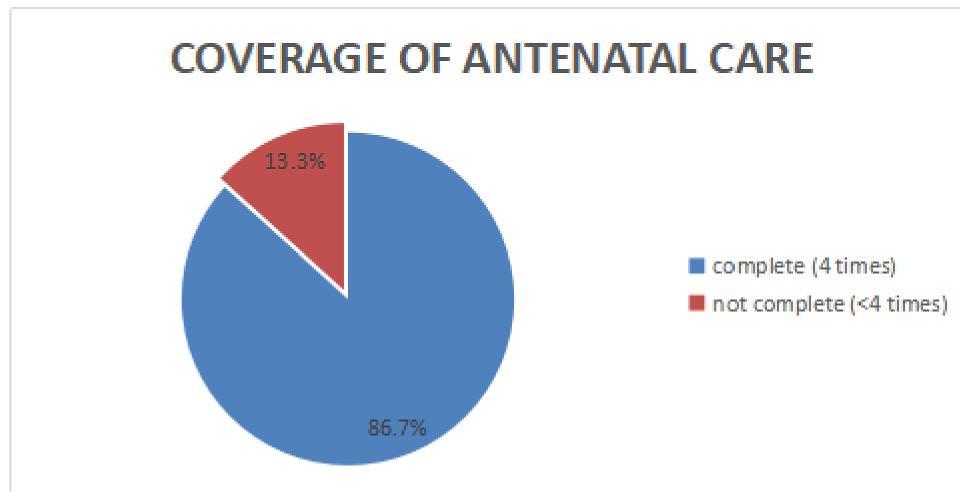

Figure 3. Overview of maternal behavior in Karang Bajo Village, North Lombok Regency in conducting checks during pregnancy (ANC at least 4 times)

Source : Primary Data Using Questionnaire, Karang Bajo Village (2016)

As much as 95.6% of pregnant women choose to have a pregnancy checked by a midwife or doctor, as many as 4.4% check their pregnancy to a TBA (figure 4). Those mothers who carried out the preganancy examination with TBA stated that they were had the social and cultural bonding with the TBAs in the village. The cultural and social bonding between them, has made the mothers were feel reluctant when they did not carry out their prenatal checks with TBA.

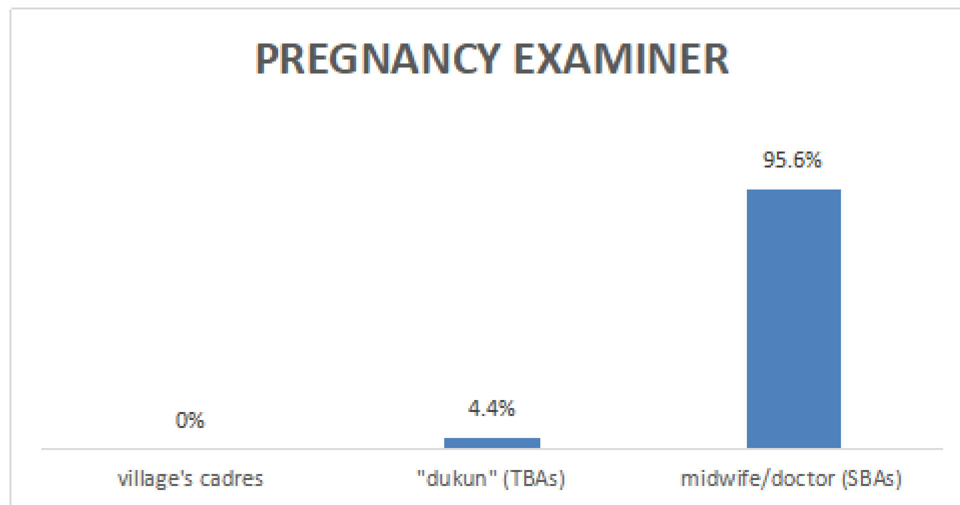

Figure 4. Overview of maternal behavior in Karang Bajo Village, North Lombok Regency in choosing a pregnancy examiner

Source : Primary Data Using Questionnaire, Karang Bajo Village (2016)

Further information that also important is to find out whether pregnant women in Karang Bajo Village receive socialization and information about safe childbirth, and from where the source of socialization and information comes from. The number of mothers who claimed to receive socialization and information about safe childbirth can be seen in Figure 5. All mothers that have been interviewed claimed to have received socialization and information about safe childbirth (100%) (figure 5).

This finding increasingly clarified by sources of information or parties that carry out safe childbirth socialization. Figure 6 shows that as much as 83% of information was obtained from midwives or doctors, 77% from village cadres, 67% from village heads and 36% of information came from TBA. Nonetheless, the interesting thing about this finding was socialization and information about safe childbirth as well. there were several respondents from the TBA in the village.

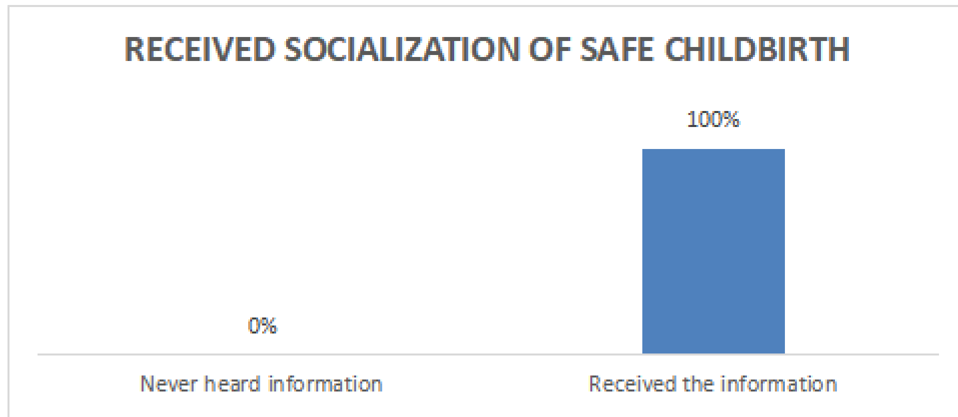

Figure 5. Overview the number of mothers in Karang Bajo Village, North Lombok Regency in obtaining socialization and information about safe delivery

Source : Primary Data Using Questionnaire, Karang Bajo Village (2016)

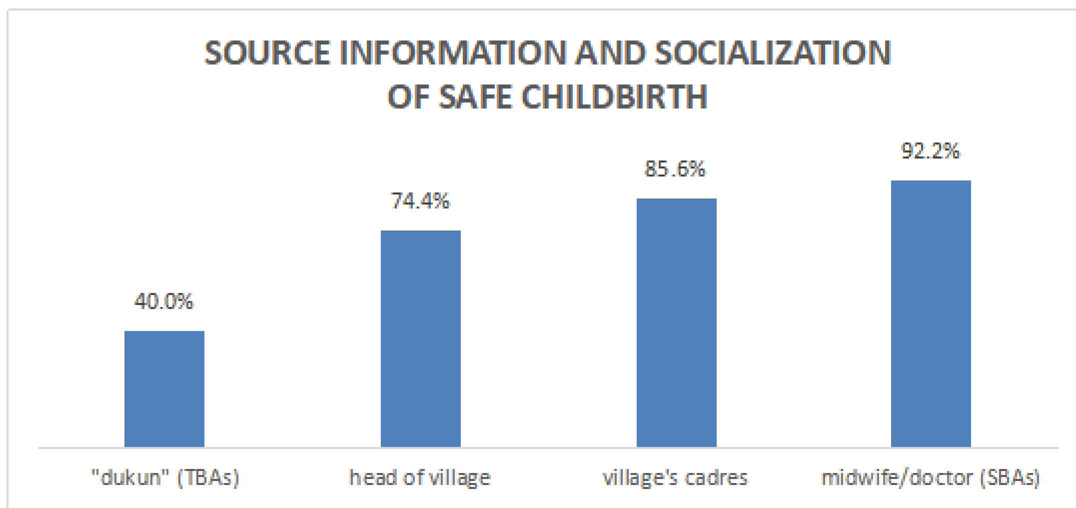

Figure 6. Sources of information for pregnant women in Karang Bajo Village, North Lombok Regency regarding safe delivery

Source : Primary Data Using Questionnaire, Karang Bajo Village (2016)

The Information about safe childbirth is better done in health care facilities or with the help of SBA (Skilled Birth Attendant) ; this information was obtained not only from one person but from many people including POSYANDU cadres, village midwives, village heads and even TBA who have now participated in socializing safe labor with the help SBA . This is in accordance with what was revealed by the mother's informant through the quotation of the in-depth interview below:

"If asked to do an examination and give birth in a midwife or health center you have often heard about it, it has been told for a long time. The midwive told us “If there are pregnant women, you must go to the Polindes, meet

me, don't go to TBA, it's not safe, you will getting risk of bleeding"..and also the cadre is never tired to remind us about this"(Informant Mrs. RS, interview was conducted at the informant's house, September 19, 2016)

"Often heard (safe maternity information) ... from midwives, village heads, and now the TBA also recommended us to go to the puskesmas bu ... (hahahahaha-informant laughs), basically if we are found pregnant, midwives must be talked about and cadres are also reminded to check the posyandu (integrated health post), and they always said we have to contact the midwife if there's anything wrong"(Informant Mrs. T, interview was conducted at the informant's house, September 23, 2016)

Public awareness in accessing health services of childbirth process is also shown in Figure 7 where 65.6% of the mothers interviewed chose not to give birth with the help of a TBA for fear of penalties established by village meetings where respondents expressed fear of fines due to the enactment of agreed upon cultur awik-awik. In addition, 34.4% of mothers stated that the reason they're not choosing the help of a TBA was because, according to them, giving birth to a TBA was not sterile, the methods and methods were unclear, until the fear of losing their lives in the childbirth process (figure 7). In addition there are also respondents who, although afraid of penalties and fines but still feel reluctant if they do not check their pregnancies even if only once to a trained TBA who still has family ties with them.

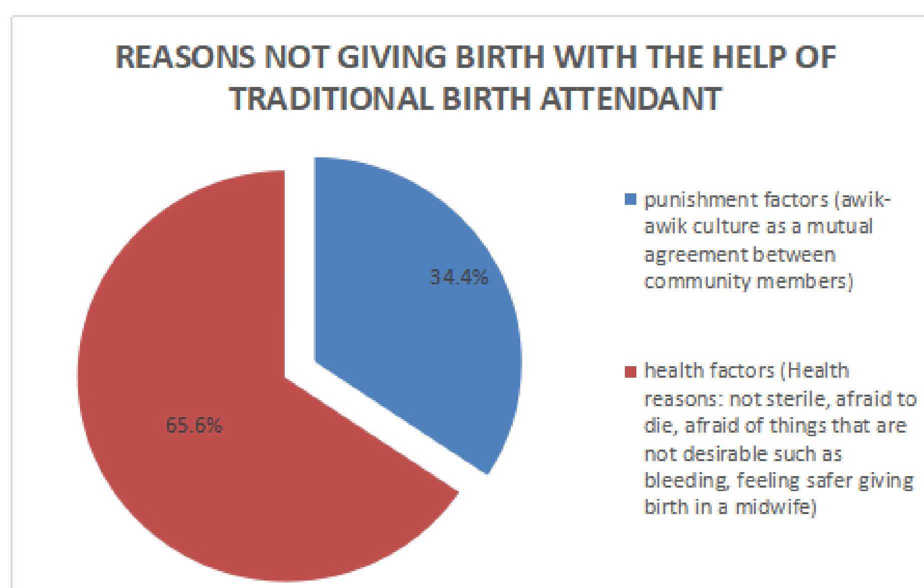

Figure 7. Reasons for pregnant women in Karang Bajo Village, North Lombok Regency not giving birth with the help of a TBA

Source : Primary Data Using Questionnaire, Karang Bajo Village (2016)

In relation to the findings of figure 7 above, the informants of the mothers interviewed in depth also shared the reasons why they were no longer seeking TBA as a helper with their childbirth. They revealed the awik-awik punishment as the main reason and also they began to realize that births with the help of TBA were at risk for maternal deaths incident because the childbirth process was not sterile as if done at the PUSKESMAS or POLINDES. This is as expressed by the mother informant with the interview quote below:

"If I give birth in a TBA, I'm afraid, personally, yeah, ma'am ... first, i afraid to pay the fine because it's definitely found here, it's okay, the neighbors will know right away, especially at the TBA, but for once in while check up to the TBA, mm I do it sometimes. ... just to let me calm down, right..hehehehe.. even if I want to give birth with TBA as helper, the TBA will also contact the village midwife ... it's too bad if I get caught in the TBA ... hehehehe " (Informant Mrs. RS, interview was conducted at the informant's house, September 19, 2016)

"I am afraid that the equipment during the childbirth process is not sterile, the scissors are boiled in midwives, but TBA uses shard wood, I am scared, something bad will happen to my child...also the mother in the village next to us is die because giving birth in TBA, that's why I'm also afraid of death. born (The informant's face looked scared and showed a worried expression)" (Informant Mrs. T, interview was conducted at the informant's house, September 23, 2016)

The description from data above illustrates the behavior patterns of mothers in Karang Bajo Village in relation to the search for childbirth assistance and information about safe childbirth. The data clearly illustrates that almost all respondents who have given birth in Karang Bajo Village now have good behavior to access safe childbirth with the help of SBA and carried out in primary health care facilities and advanced health facilities.

To achieve these adequate condition, it took a long time to create an impact on achieving target to reduced maternal mortality and to reach Angka Kematian Ibu Nol (AKINO) or zero maternal mortality rate. The emergency handling of pregnancy and childbirth in Karang Bajo Village emerge and well developed at every level in the community, from the hamlet level to the district level. It has something to do with the fact of social networks and their important role in mobilizing all elements of society to respond to complications of pregnancy and childbirth. The unique finding in this study is the efforts to rise public awareness regarding the importance of quality life for pregnant women by providing opportunities to access quality health services during pregnancy were innovations from village head to provide quality health services to mothers amid the influence of patriarchal culture in North Lombok.

Before the formation of social network in handling the emergency pregnancy and childbirth in Karang Bajo Village, pregnancy was considered as the sole responsilibity of women. The husband in general does not know about the health status of his wife during pregnancy and where the wife will give birth is the absolute decision of husband and parents. The innovation carried out by the village head to overcome this was by making Kelompok Suami Siaga or alert husband group and utilizing religious activities to socialize about the role of the husband during the wife's pregnancy. The set of alert husband group was formed no different from the time when the Karang Bajo village was established as a Desa Siaga or alert village.[a] This alert husband group was formed since 2008 and succeeded in growing the husband's awareness to accompany his wife during pregnancy checks and accompanying her during labor.

Maternal death has implications for the entire family, although few, if any, interventions have addressed the role that the husband could play in his wife's pregnancy and delivery. The Alert Husband Campaign in Indonesia was a multi-media entertainment-education intervention, implemented in 1999/2000, that targeted husbands with messages about birth preparedness. The study conducted at 2004 shown that when husbands were directly exposed to the messages from the Alert Husband campaign, new knowledge gain and birth preparedness activities occurred. However, the interaction of direct exposure to the campaign and the interpersonal communication stimulated by the campaign about Alert Husband was an even stronger predictor of knowledge gain and birth preparedness actions (Shefner-Rogers & Sood, 2004).

In addition to the positive impact of the husband involvement in social networks in the prevention and handling of emergency pregnancy and childbirth is to anticipate patriarchal cultural barriers in decision making that must

a) Alert Village is an Indonesian Health Ministry program to improve the empowerment of rural communities in managing community-based health problems. Alert Village is a village where the population has the readiness of resources, ability and willingness to prevent and overcome health, disaster, and emergency, health problems independently. (http://promkes.kemkes.go.id/desa-siaga)

prioritize pregnant women to obtain quality health services and overcome economic barriers by making savings (tabulin) with their husbands and wife. Another positive impact also, a picket groups of fathers are also made to be prepared to help deliver pregnant women safely with village ambulance, if they are going to give birth or if there are indications of emergency.

These things above were one of the factor that encourage the high coverage of pregnancy checks (antenatal-care) in accordance with the Ministry of Health standard, namely 4 times in contact with SBAs for 9 months of pregnancy and emergency maternal events that occurred in Karang Bajo Village get treatment on time, both referred to the PUSKESMAS or to Regional Public Hospital (though it tooks 3-4 hours travel from Karang Bajo Village to the Regional Public Hospital of North Lombok as the closest hospital). Furthermore, the effort of village head in the context above are also aim for overcoming maternal deaths caused by indirect causes related to socio-economic aspects, education, cultural factors, and access due to unfavorable geographical conditions. The above situation is indicated to overcome the condition of "3 Delay", namely 1) maternal mortality due to late decision making so it is too late for mother to get treatment, 2) late to the place of referral due to transportation constraint, 3) late getting treatment due to limited facility, economic factor and human resources.

A further effort by the village head as an agent of behavior change to prevent maternal death is by using communication media to massively socialize information related to reproductive health and collaborate with village women's figure, village youth figure, youth organizations, mosque youth associations in order to socialize and delay early marriage and 4 risk gestational, namely too young (gestational age for women less than 18 years), too old (gestational age for women over 35 years), too close (the distance between pregnancies is less than 2 years) and too much (parity of more than 3 children). The village head as a change actor who holds power in the village contributes greatly to maintaining social networks in the prevention and emergency response to pregnancy and childbirth in Karang Bajo Village.

An effort was made to raise the public awareness of maternal health through socialization of emergency signs in pregnancy. These efforts was informal at first, but along with the deeper and broader communication, with social network growing well at the same time, thus turning into a formal network. This is marked by the emergence of Village Head's Decision Letter on the Emergency Management of Pregnancy and Childbirth in Karang Bajo Village which aims to prevent the maternal deaths occurrence by mobilizing all communities to voluntarily cooperate and proactively assist pregnant women and be responsive to the presence of pregnant women around them. Women's health is part of women's well-being. Therefore, an analysis of factors that affect the quality life of women is an issue that deserves to be studied and discussed scientifically. One of the quality life of women is influenced by women's health conditions including how to access quality health services and choices related to their reproductive functions (Marmot M, Friel S, Bell R, Houweling TA, 2008).

Regarding a safety labor situations, WHO recommends that labor must be carried out in health care facility with the assistance of trained SBAs to achieve target for reducing maternal and neonatal deaths in all countries in the world by 2030 (United Nations, 2015). In order to achieve this target, a strategy focused on reducing the chance of emergency childbirth is needed at the times of critical maternity which can result in maternal death if it is not prevented. One of the efforts conducted by WHO is to promote the effort to prevent maternal deaths by increasing coverage of labor in health services with the help of competent SBAs professionals who provide safe and comfortable labor (Shaban, Barclay, Lock, & Homer, 2012). Trained SBAs , according to SDG's point indicators 3.2.1, are educated professionals who have competence in maternal and newborn health, generally trained, and regulated in national scale regulations and international standards (Organization, 2018).

The SBAs are competent to: 1) provide and promote evidence-based, human-rights-based, quality, socioculturally sensitive and dignified care to women and newborns; 2) facilitate physiological processes during labour and delivery to ensure a clean and positive childbirth experience; and 3) identify and manage or refer women and/or newborns with complications. In addition, as part of an integrated team of MNH professionals (including, in alphabetical order, anaesthetists, doctors [such as obstetricians and paediatricians], midwives and nurses), they perform all signal functions of emergency maternal and newborn care to optimize the health and well-being of women and newborns (United Nations Population Fund, 2014).

As stated in the 2016 WHO Standards for improving quality of maternal and newborn care in health facilities:

The quality of care for women and newborns is therefore the degree to which maternal and newborn health services (for individuals and populations) increase the likelihood of timely, appropriate care for the purpose of achieving desired outcomes that are both consistent with current professional knowledge and take into account the preferences and aspirations of individual women and their families.19

This approach covers the continuum of care from pre-pregnancy to the postnatal period and:

It takes into consideration the characteristics of quality of care and two important components of care: the quality of the provision of care and the quality of care as experienced by women, newborns and their families.19

Maternal and newborn health (MNH) care is provided by an integrated team of MNH professionals who are educated, regulated, enabled and supported according to evidence-based standards that are high enough to ensure that they are fully competent and adequately motivated (Organization, 2016; "The Lancet Series on Midwifery," 2014).

Beside the role of trained and SBAs , maternal mortality can also be prevented by socializing the danger signs of pregnancy and childbirth which can be at risk of continuing maternal deaths to increase the awareness of mothers and the community surrounding her in order to recognize the danger signs of pregnancy so that anticipation of complications that happen could be prevented to a minimum. The previous research conducted by Kaddour, et al (2008) shows that patients who die in pregnancy and childbirth (maternal death) was happen due to risk factors during pregnancy, where the family does not get information regarding the danger signs of pregnancy and childbirth, so the family does not take any preventive measures, whereas on the other hand pregnant women whose families have received information about the danger signs of pregnancy and childbirth have the opportunity to be saved from the emergency events of pregnancy and childbirth (Kaddour et al., 2008). Furthermore, after the families of pregnant women obtaining information about the risk factors experienced by later mothers in their families, these make an informal mechanism based on mutual agreement to prevent emergencies by starting with recognizing danger signs and carrying out rescue steps with the help of surrounding people.

In addition, Etzioni (2014) also found that interventions carried out at the family level could prevent the occurrence of worse health problems in the household members. Intervention efforts are carried out by providing information on risk factors, danger signs and even the possibility of death in patients and other household members if there is a delay in treatment. Media socialization plays an important role in efforts to socialize health risk factors . Health interventions need to involve the role of more resource owners (such as parents and husbands in families, hamlet heads, village heads, community leaders, village midwives, and head of PUSKESMAS).

Further studies conducted by Simon Szreter and Michael Woolcock (2004) show that in order to obtain good health output, the community needs to set the main priorities to be achieved and strive to bring together various community groups in a social network to ensure access to resources to be used in address the emergency problems of pregnancy and childbirth. Norms need to be made to ensure that all members of the community participate in helping achieve the priority goals that are determined to prevent the occurrence of maternal deaths. Social networks as part of social capital in the community can make it easier for mothers and families to access safe and quality health services.23 A systematic study review conducted by Hiroshi Murayama (2015) states that social capital (social network, social norm and belief) has a positive influence on public health output.24 With the result that, this study can strengthen the findings. At the practice level, health intervention through social network have a positive impact on public health, which is one of the important indicators is the level of maternal mortality in the community.

Planning and Prevention Complication of Childbirth Program or Program Perencanaan Persalinan dan Pencegahan Komplikasi (P4K) at the local village level has proven to have a good impact on preventing

maternal death by involving the participation of all resource-owner actors25 (power: village head, female figure; skill to assist childbirth: SBAs such as doctors and midwives; cultural experiences: TBA and traditional leaders; decision makers: parents, husband, wives themselves). When the community realizes that the quality life of pregnant women is something that must be cultivated together and made an agreement to be given the widest and maximum access, the prevention of emergency pregnancy and childbirth can succeed in prevent the occurrence of maternal death.

Closing

Women have specific health needs and this study shows that at the local level, attention to the quality life of developing mother in the community through a long process. Community-level consensus takes place with the dynamic of placing women (pregnant women) as subject of agreed social goal whose purpose is to prevent the occurrence of maternal death. An effort to prevent the occurrence of maternal death are carried out through the mechanism of social network, where social network are one of the important social capital to mobilize the community in order to achieve specified and agreed objectives in preventing maternal death through prevention and emergency response to pregnancy and childbirth.

WHO confirm an effort to prevent maternal death are a step that must be appreciated in developing countries as an effort to make maternal health a priority in accordance with SDG's point 5th with target emphasizing efforts to eliminate discrimination against women and increase gender equality by opening opportunities to the widest possible to access basic rights and opportunities to access quality reproductive and sexual health services, information and reproductive health education (point 5.6 SDG's)

The result of this study show that effort to increase the coverage of quality health services for pregnant women are carried out with various mechanisms that can be summarized in Planning and Prevention Complication of Childbirth Program, among other:

utilizing agents of change, in this case village head and village women figure to foster awareness and understanding for the community at the local level the importance of preventing maternal death including raising awareness to delay marriage and pregnancy at an early age and the proximity between pregnancy, facilitating facility existing infrastructure in the village to prevent labor complications and speed up access for pregnant women to access health services,

effort to protect pregnant women are built and carried out by utilizing social network that are built to distribute maternal health information continuously through information media in the village (through village radio, religious activities, village meeting associations, village socialization activities with PUSKESMAS, meeting of cadre mother, POSYANDU meetings) so that information regarding safe labor with massive health assistance is socialized within the Karang Bajo village community,

The social network formed involves not only men as "alert husband" association but also involving TBA - who have a close cultural interpersonal relationship with the community - to work together with village SBAs or (village midwives) and PUSKESMAS in referring pregnant women to access health care facility during childbirth.

All effort to prevent maternal death with social network in handling the emergency of pregnancy and childbirth in Karang Bajo are aimed at improving quality health promotion of mother (promoting women health care), fostering good social relation between pregnant women and the surrounding environment (promoting social relation) so that pregnant women can be easily identified and monitored for their health, including the relationship between mother and husband (alert husband) that pregnancy is not only the duty and responsibility of women, in a wider space, namely the community increases social cohesion in which all elements of society (village head hamlets, female figure, traditional figure, SBA , POSYANDU cadres, TBA, husband/men) all collaborated to prevent maternal death as an act together.

Recommendation

The finding in this study need to be implemented in other villages in Indonesia with high maternal mortality rates, to see whether the intervention with the establishment of social network in handling emergency pregnancy and childbirth such as those in Karang Bajo Village have also been shown to reduce maternal mortality in their village.

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