Creating Synergy between Village Midwives and Traditional Midwives: To Reduce the Mortality Rate of Mothers and Babies: In the Central Kluet Sub-District Health Centre in South Aceh

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Abstract. Traditional midwives have been helping assist with birthing from ages past. Traditional midwives are still trusted by villagers to assist with birthing even though official village midwives have now been appointed to every village. The reason that some mothers choose traditional midwives is that they provide assistance with birthing that is more in accordance with the traditional social customs of the people and they are already well known because they come from the village area. The purpose of this study was to get information about the reasons why the traditional midwives are still providing birthing services and to see if there are opportunities for transfer of knowledge from the village midwives who works for the health service to the traditional midwives so that they can all work together. This study was done with the Central Kluet Sub-District Health Centre or Puskesmas in South Aceh District using a combination of qualitative and quantitative methods. The results of this study showed the women who gave birth in 2016 still used the services of a traditional midwife because the belief in them had been handed down and because the administration or rather lack of it was easy. The techniques for handling the data used reduction and triangulation of the data from the start so that as the data was gathered it was processed continuously to get early results which could be verified with the later data.

1. Introduction
Two indicators of the health status of a society are the Maternal Mortality Rate and the New-born Mortality Rate[1]. High rates of Maternal and Baby Mortality in a country show that health services in that country are not good. This is because women who are pregnant and giving birth are a group which is at high risk who need maximal health services from the health workers; one type of service which must be given to women giving birth are midwifery services [2].

Low levels of assistance with giving birth by health department staff are influenced by the attitudes and behaviour of the mothers in choosing who will help them when giving birth[3]. According to Mainan in the Health Belief Model theory, there are three (3) essential factors that all interact and are connected with health information and experience that can change behaviour, viz: (a) the readiness of the individual to change behaviour in order to avoid sickness or lower health risks; (b)
there is pressure from the environment to change behaviour and (c) individual behaviour patterns that are influenced by the character of the individual[4].

Based on the results of interviews that the researchers had with health department staff from the Central Kluet Puskesmas there was a high proportion of births assisted by traditional midwives there. This was in part because the mothers did not yet believe in the abilities and experience of the health department village midwives who were still relatively young and most were not yet married. Nevertheless, the village midwives and the traditional midwives work together at present, however as there is no proper arrangement and division of responsibilities this means that the assistance with birthing is not yet maximal: The researchers noted that there were positive aspects from the traditional midwives that could be adopted by the village midwives and the reverse. Because of this the researchers were interested to do a study to look at potential synergy between the village midwives and the traditional midwives in order to improve their level of working together in providing assistance to mothers giving birth and in pre-natal and post-natal assistance.

Literature Review

Birthing is the process in which the baby, placenta and amniotic membrane out of the mother's uterus. Birthing is considered normal if the process runs at the adequate gestational age (after 37 weeks) without complications[5]. begins since the uterus contracts and causes changes in the cervix (opening and thinning) and ending with the complete birth of the placenta[6]. Birthing begins since the uterus contracts and causes changes in cervix (opening and thinning) and ending with complete birth of placenta[7].

Birthing is a natural process that will take place by itself. However, Birthing at any time threatened with complications that endanger the mother and her fetus so that it requires supervision, help and services with adequate facilities[8]. The immediate cause of maternal death is bleeding, eclampsia, infection, abortion and old partus[1]. Delay in recognizing the signs, reaching facilities and getting help at health facilities also result in maternal death. Maternal death factor are too many giving birth and too young when having the baby (less than 20 years old). Maternal age <20 years or> 35 years old have a risk of experiencing an old partus and the mother with first labor has a greater risk of having the old partus[9]

Based on the Ministry of Health of the Republic of Indonesia (1997), in the KIA program known to several types of personnel who provide maternity assistance for pregnant women. The types of personnel are Health Workers consist of Specialist Doctor of Midwifery, General Practitioner, Midwife, and Nurse[10]. Traditional Midwife consists of a trained native who is trained by a health worker and declared graduated and untrained Traditional Midwife who has never been trained by a health worker or a shaman who is being trained and has not been graduated [11].

According to the Central Bureau of Statistics (BPS) in 2005, Traditional Midwife is the practice of alternative health services performed by Traditional Midwife specifically handling maternity/birthing who have been trained in the Ministry of Health or not. Traditional Midwife is also known as parajji (West Java), or dukun beranak (DKI Jakarta) and Mablien (Aceh). The practice of health workers (nakes) is a private practice which is carried out by nurses or midwives who are not performed in hospital, puskesmas, polindes, posyandu, or clinics [10].

2. Methodology

This study was done by combining qualitative and quantitative methods[12]. The research to find out what type of assistance is sought for giving birth and whether the village midwives are working together with the traditional midwives in providing services to women giving birth. This study was done in the area of the Central Kluet Sub-District Health Service ie. Puskesmas in 2017. The population for this study were the village midwives, the traditional midwives, the villagers and the mothers who gave birth in the area of the Central Kluet Sub-District Puskesmas in 2016.
3. Results and Discussion

1. Location
The Central Kluet Sub-District Health Centre (Puskesmas) is in Central Kluet Sub-District, South Aceh District which covers an area of 284 sq. km. It is in the centre of South Aceh District with Sub-District Menggamat as it’s central town: To the north, the boundary is with the District of South-East Aceh in the forest covered Leuser Mountain Range; To the east, the boundary is with East Kluet Sub-District; To the South is North Kluet Sub-District and to the West is the Pasie Raja Sub-District[13].

The Kluet River forming the boundary between Central Kluet and North Kluet Sub-Districts is 45 km from the town of Tapak Tuan, the District Centre of South Aceh. The road from Tapak Tuan to Pasie Raja and North Kluet is a smooth, asphalt road in good condition but to get from North Kluet to Central Kluet, from the boundary of North Kluet one has to go via a very difficult road which is steep and full of muddy holes through bare mountains.

The working area of Central Kluet Puskesmas comprises all 13 villages in 1 mukim in the Sub-District with a total population of 6,854 in about 1,600 families in 2015[14].

2. The Reasons Why Mothers still choose Traditional Healers when Giving Birth
The results of interviews with the Traditional Midwives revealed that they start to check the pregnancy from the first signs of pregnancy, as well as the mothers-to-be being checked by the official village midwife from the Health Department. As well the Traditional Midwife is trusted by the villagers to organise the traditional activities at 7 months pregnant and other matters. The Traditional Midwives are ready to come to the house and to sleep there whenever called and have very flexible hours. Then there are other traditional ceremonies, that the villagers still maintain, after the baby is born which the traditional midwife also attends such as the Naik Ayun or Hanging Cradle Ceremony about 7 days after the birth and the Turun Tanah or Coming Out of the House Ceremony that is held 40 days after the birth; these ceremonies are also accompanied by a small feast that is attended by members of both families plus close friends and neighbours.

Mothers-to-be still choose to use midwives who are not from the Health Department to help with giving birth for various reasons, amongst others because these traditional mid-wives are ready to help whenever they are called upon, they are readily available and easy to contact, they are inexpensive, they can even be paid by barter, trust in them has been handed down from older mothers and also there is an intimate relationship between them, like in a family, with the mothers-to-be that need to be helped. As well the traditional mid-wives are part of the village culture which organises the traditional ceremonies concerned with pregnancies and giving birth which are still followed strongly by the villagers.

A Village Midwife from the Health Service has been posted in each village by the Kluet Tengah Puskesmas however the local conditions mean that she is not always in the village. There are many reasons why she is not always there or at the clinic including the fact that many of the villages are far from any town, the facilities in the villages are sadly lacking and as an outsider she may not be well integrated with the local villagers. By contrast the traditional midwife is always there and always available so automatically she becomes the first choice for many of the pregnant village women.

Field observations showed that the relationship between the Official Village Midwife (OVM) and the traditional midwife (TM) were not always smooth, especially since the OVM is often not at the place when she is needed for assisting with a birth, meanwhile some TMs do not feel comfortable helping the OVM will assisting mothers to give birth: as one TM said when interviewed she did not feel comfortable because her role in the birthing process was not clear. However some other TMs said that they were quite comfortable working with the OVM. The Head of the Central Kluet Puskesmas and the Co-ordinator of Midwives said that they were afraid that working together could strengthen the role of the TM who could then feel more empowered and more free to assist with births and practice her profession without the OVM. According to them it is better if the TM only assists after the mother has given birth for example in bathing the new born baby.
Factors Which Influence the Choice of Assistance with Birthing: Age & Education.
Looking at the ages of the sample of mothers, 74 (82%) were in the low risk age group (20 to 35 years old) and the rest, 16 (18%) were in the at risk age groups, (< 20 and > 35). A bit more than half the respondents, 49 (54%), only had low education (ie only Primary or Middle school) whilst the remainder 41 (46%) had high school or higher education.

Table 1. Age and Education of Women Giving Birth

| No  | Characteristic of Respondents | Number (n) | Percentages (%) |
|-----|--------------------------------|------------|-----------------|
| 1.  | Age                           |            |                 |
|     | Low Risk                      | 74         | 82              |
|     | At Risk                       | 16         | 18              |
|     | **Total**                     | **90**     | **100**         |
| 2.  | Education                     |            |                 |
|     | Higher                        | 41         | 46              |
|     | Primary & Middle only         | 49         | 54              |
|     | **Total**                     | **90**     | **100**         |

Knowledge
The results for knowledge about giving birth are shown in Table 2 which follows:

Table 2. Knowledge about Giving Birth

| No  | Knowledge     | n  | (%) |
|-----|---------------|----|-----|
| 1.  | Good          | 58 | 64  |
| 2.  | Poor          | 32 | 36  |
|     | **Total**     | 90 | 100 |

Attitude
The results for attitude to assistance with giving birth are shown in Table 3 below:

Table 3. Attitude to Assistance with Giving Birth

| No  | Attitude     | n  | (%) |
|-----|--------------|----|-----|
| 1.  | Good         | 58 | 64  |
| 2.  | Poor         | 32 | 36  |
|     | **Total**    | 90 | 100 |

Culture
Results from the study showed that 61% of the families were supportive of the health department staff, ie. the OVM, providing support during the processes of giving birth while the rest were not supportive, as shown in Table 4 below:

Table 4. Supportive Culture of Mothers for OVM Assisting with Giving Birth

| No  | Supportive Culture | n  | (%) |
|-----|--------------------|----|-----|
| 1.  | Supportive         | 55 | 61  |
| 2.  | Not Supportive     | 35 | 39  |
|     | **Total**          | 90 | 100 |
Other Supporting Factors
The results for Other Supporting Factors are set out in Table 5 below: 72% of the women reported that their family had an income in excess of the Minimum Wage of Rp1,500,000/month. Meanwhile a little more than half, 53% of the women, reported that they lived far from the Health Centre and even though they lived close to the Health Centre it did not mean that they could easily meet with their Village Midwife because the latter usually did not live in the Sub-District.

Table 5. Other Supporting Factors

| Item                     | Supporting Factors                      | (n) | (%) |
|--------------------------|----------------------------------------|-----|-----|
| a. Income                | Above the District Minimum Wage ie. >Rp1,500,000/month | 65  | 72  |
|                          | Below the District Minimum Wage ie. < Rp1,500,000/month | 25  | 28  |
|                          | Total                                   | 90  | 100 |
| b. Distance to Health Facilities | Close                                | 42  | 47  |
|                          | Far Distant                             | 48  | 53  |
|                          | Total                                   | 90  | 100 |

Needs Factor
This factor measured the needs for support of the women due to potential or actual problems with their pregnancies and the diagnosis from the health staff, ie. the OVM.

Needs Based on Pregnancy Problems
The needs of the women (survey respondents) based on pregnancy problems were as follows: 86% reported that they visited the health centre while they were pregnant to check out their health because there is a free government program (Jampersal) provided to encourage pregnant women to give birth where there are health facilities: 66% visited the health facilities to find out the condition of their (unborn) baby or so that the midwife can tell them when they can expect to give birth: 80% of the women visited the health facilities to find out about complaints that they had with their pregnancy since the OVM had greater understanding of the medical side of pregnancy than the TM while 67% of the women visited the health facilities to find out about complications that could possibly happen in their pregnancy since the female OVM, who check the condition of their pregnancies, have full medical equipment and can educate them about pregnancy problems.

The results for the needs of women based on problems during pregnancy are shown in Table 6 below:

Table 6. Needs of Women Based on Pregnancy Problems

| No  | Needs Based on Pregnancy Problems | n  | (%) |
|-----|----------------------------------|----|-----|
| 1.  | Strong                           | 64 | 71  |
| 2.  | Low                              | 26 | 29  |
|     | Total                            | 90 | 100 |

Needs for Diagnosis by Health Staff
The needs for diagnosis by Health Department staff are as follows: 90% of the mothers believe in the results from the health department staff ie. the OVM about the accuracy of the time when they first became pregnant: 70% of them believe in the results concerning the condition of the pregnancy: 75% believe in the results of the medical inspection into complaints that they have about their pregnancies: 85% believe in the results of the inspections of their pregnancies by the health staff OVM because of their competency in handling complications of pregnancy and giving birth: 72% of the mothers believe
in the inspections of their pregnancies by the health staff OVM because of the appropriate referrals that they give them if there are likely to be complications in giving birth.

### Table 7. Needs of Women Based on Diagnosis by Health Staff

| No | Needs Based on Diagnosis by Health Staff | n  | (%) |
|----|-----------------------------------------|----|-----|
| 1. | Strong                                  | 67 | 74  |
| 2. | Weak                                    | 23 | 26  |
| **Total** |                                        | **90** | **100** |

**Assistance During Giving Birth**

Results from the study showed that a big majority of the mothers (79%) used the OVM, village midwives, for assistance in giving birth rather than the TM, traditional midwives, who only saw 18 (21%) of the mothers including 6 mothers who had antenatal checkups (ANC) from the OVM but gave birth with assistance from a TM.

### Table 8. Assistance in Giving Birth According to Mothers

| No | Assistance in Giving Birth According to Mothers | n  | (%) |
|----|-----------------------------------------------|----|-----|
| 1. | Health Department Staff ie. OVM, Village Midwives | 72 | 79  |
| 2. | Not Health Department Staff ie. TM, Traditional Midwives | 18 | 21  |
| **Total** |                                        | **90** | **100** |

**Assistance in Giving Birth by OVM, Village Midwives and by TM, Traditional Midwives**

OVM have been appointed to Central Kluet Sub-District in South Aceh from the health department staff in sufficient numbers (one for each village); however because of the remote condition of the area with inadequate facilities these OVM were not always at their posts in 2016-2017. In 2016 through to 2017 the status of the OVM, village midwives, who were previously midwives with the National Health service (PTT Kemenkes), was changed so that they became public servants (CPNS) with the District Government of South Aceh. During that transition period they did not receive any salary for 7 months because the authority of the PTT was cancelled but the authority of the CPNS had not been finalised. Finally the letter of authority (SK) for the OVM midwives to become CPNS staff was issued in October 2017 (so they could get paid at last). As a result of this the OVM weren’t always standing by in the villages in 2016 – 17: at that time the mothers in the villages had to rely on the skills of the traditional midwives to assist with giving birth even though from a medical stand-point this had a higher risk for maternal, baby and infant mortality. Moreover, as the TMs were also active in the traditional ceremonies for birthing and for infants this also increased the level of trust that the mother had in them, the TM, traditional midwives.

A comparison of the similarities and differences between assistance with birthing provided by the OVM, Village Midwives and that of the TM, Traditional Midwives in Central Kluet Sub-District is set out in Table 9 below:

### Table 9. Comparison of Assistance at Birth Given by OVM and by TM

| Assistance at Birth by Village Midwife | Traditional Midwife, Assistance at Birth |
|---------------------------------------|------------------------------------------|
| Fully trained Midwife (Certified)     | Birthing techniques handed down          |
| Time: Not always available            | Time : Always ready, whenever needed     |
| Modern equipment for giving birth      | Traditional birthing equipment only      |
| Sterility principles foremost.        | Not always perfectly sterile             |
| Mother’s privacy guaranteed           | Mother’s privacy guaranteed              |
| If there is an emergency can take action straight away ( If present at birth). | If there is an emergency, prays first then goes for assistance. |
Can get assistance from health facilities if needed | Provides assistance in a village house
---|---
Uses modern medical procedures | Uses traditional procedures
Uses all modern medicines | Uses some traditional medicines
Younger Women, about 25 to 40 years old | Older women between 45-60 years old

Looking at these matters, with the main problem being how can assistance with giving birth by the OVM and by the TM reduce and minimise the mortality rate of pregnant mothers, babies and infants it seems that the birthing assistance given by the TM must be taken over by the OVM except for those matters connected with the local traditional culture of the villagers whilst improving the relationship between the two types of midwives.

Findings in the field showed that the relationship between the OVM and the TM was not always good, even though they both supported each other without giving an image of competing with or against each other in performing their duties. The government has not yet organised a program of cooperation even though cooperation runs of its own accord.

In the eyes of the investigators there are some things that can be done to transfer knowledge from the OVM to the TM.

The TM have an advantage in communicating with the villagers, especially the young mothers, due to their mature age and local residence, while the OVM posted to the villages are generally much younger, some have only just graduated from their midwifery courses. Therefore, it will be better if the OVM can train the TM in providing better hygiene & sterilisation of equipment when assisting with giving birth while also getting agreement on their respective roles, functions and duties in order to transfer the main duties to the OVM in an optimal way. However, the worry is that, in the future, the support given to the TM by the OVM will further empower the role and the prestige of the TM and hence raise the belief that they, the TM, could run the program for assistance with birthing on their own.

During interviews with the Head of the Central Klue Sub-District Health Centre (Puskesmas) she said that even though the Puskesmas had appointed one OVM to each of the 13 villages in Central Klue, at the present time the OVM were not always present in their respective villages due to many of the locations being very isolated with very limited facilities and moreover payments of their salaries had not been smooth. She said she was at a loss to know what to do about the TM in the villages; on the one hand they were much needed and valued by the local mothers while on the other hand she worries about the work of the TM not always being sterile and about their lacking access to advanced facilities if needed.

4. **Conclusion**

1. Culture from previous generations, trust and beliefs of the villagers and traditional ceremonies from long ago are reasons why traditional midwives are still trusted to assist with giving birth in the Central Klue Subdistrict in South Aceh District. In addition the traditional midwives are mature ladies who are respected and honoured in their local villages.

2. The official village midwives and the traditional midwives often worktogether in the processes of assisting with giving birth however when the official village midwife is not in the village then the traditional midwife will take charge of assisting the mother to give birth. The official village midwife may not be in the village because she has to come from outside the village, many villages are remote and hard to get to with very poor facilities and also payment of the salaries of the official village midwives has often been delayed.

3. The trust in the traditional midwife by the villagers is supported because the traditional midwife uses prayers to assist the wife to give birth and follows up with traditional massages and ceremonies for the baby after she/he is born.

4. The Central Klue area is a very isolated area and has complex problems that affect the delivery of health services.
Recommendations

1. For the South Aceh Government, in particular the Central Kluet Sub-District Puskesmas should hold a meeting and at the same time provide training for all the Village Midwives together with all the traditional midwives in Central Kluet.

2. It is hoped that the South Aceh Government will provide better facilities and support for village midwives posted to isolated villages in areas like Central Kluet; especially facilities that will support assistance with giving birth in good health and also with paying salaries on time and with speeding up claims from the BPJS (National Health Scheme).

3. It is also hoped that the village midwives and the traditional midwives can continue to work together well in the future remembering that there are some things that the traditional midwife must not do and many things that they can do especially things connected with the local culture in their villages.

Supplementary Materials

The supplementary material of this journal consists of the questionnaire used for data collection. The questionnaire consists of 2 types which are qualitative and quantitative questionnaires that are used to interview the mothers, traditional midwife, health worker personnel and community leaders. Quantitative questionnaires consist of several sections: the identity of respondents, knowledge, attitude, culture, needs and utilization of delivery assistance by the respondent. While the qualitative questionnaire was used to interview Midwives from Health Workers, Traditional midwife and Community Leaders

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