Barriers to Emergency Obstetric Care (EOC) and Birth Practices in Rural Manikganj

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Rukhsana Gazi
Liz Goodburn
A Mushtaque R Chowdhury
Fazlul Karim

BRAC
Research and Evaluation Division

Abstract

This study aimed to explore the situation during delivery in rural homes and to identify the barriers to emergency obstetric care (EOC). Twenty six pregnant women were followed-up at home by experienced female interviewers. No notes were taken during the conversations but a detailed diary of each visit was made immediately after they returned to the base. Women themselves were often not aware of self care. A fear of sin which was attributed to the presence of unknown male doctors in the hospital acted as barrier. Women's relationship with their in-laws was found to be important. An early assessment and indication for referral by traditional birth attendants (TBAs) was important in the decision making process. TBAs were often trying to manage the complications by themselves. The hospital is a unfamiliar place for rural people. A common perception was that the hospital people pay attention only to rich and educated people. In-laws and neighbours jointly undertook the decision for hospitalization.

All members of the community need to be educated about the danger signs of obstetric emergencies. For this poster charts, audio visual aids, folk drama might be used as effective tools for the information campaign. TBA training interventions should give more emphasis to early recognition of complications and early indications for referral.

Summary

Introduction

The World Health Organization has acknowledged the priority of emergency obstetric care (EOC) as an essential component in safe motherhood approach. Worldwide the most common causes of maternal deaths are haemorrhage, infection, toxaemia, and obstructed labour. Many of these complications can not be prevented or predicted in advance, therefore all women must have access to emergency services such as blood transfusion and caesarean section. The major challenges for better EOC would be developing a system to recognise emergencies earlier, training of midwives, upgrading hospitals and health centres, and organizing means to transport women to hospitals. In Bangladesh, beside medical college hospitals, only 39% of district hospitals offered EOC facilities in which lack of logistic equipment, lack of specialists, or both were the main reason for poor management. It has been assumed that three delays that contribute to many maternal deaths are the delay in seeking care, arrival at a facility, and starting effective treatment. Poor road conditions and lack of transportation for emergency cases from peripheral to referral hospital may make the difference between life and death. Lack of basic equipment, over crowding and a scarcity of trained personnel in the facilities are problems at the institutional level. However, in Bangladesh a man generally makes the decision for a woman to go to a facility. Financial problems and the reputation of the facility may affect his decision. There is a lack of adequate information on the problems and delays in seeking treatment at the home level. We have little information on social and cultural barriers to seeking medical care in obstetric emergencies. This study was designed to explore the situation during delivery at rural homes and to identify the barriers to EOC.

Methodology

The study was conducted in three unions (Baliakhora, Betila and Jagir) of Manikganj district. Twenty six pregnant women in three research unions were included in the study,of whom twelve developed obstetric complications. Women were followed-up twice

a week at home. Data were collected through informal discussions during each visit. Six experienced female interviewers collected the data. Good rapport was built up with the women at the initial phase of data collection which was considered to be very important due to the sensitive nature of the research. No notes were taken during the conversations but the interviewers made a detailed diary of each visit immediately after they returned to the base. One informant was selected from each household who informed the local BRAC office about the occurrence of birth. Within 48 hours after delivery the mothers were visited by the interviewers collecting information on situation during delivery.

Results

The study found that often women themselves were not aware of self care. A fear of sin which was attributed to the presence of unknown male doctors in the hospital acted as barrier. In a joint family, the women's relationship with their in-laws seems to be very important for her emergency health care. It is revealed that early assessment of the indication for referral by traditional birth attendants (TBAs)[1] is the most important component in the decision making process. Although, in few cases the TBAs instructed to shift the complicated cases relatively early, there are many other examples where the TBAs were found to be trying to manage the emergency cases by themselves rather than referring the cases to the hospital.

The hospital is a unfamiliar place for the rural people. There is a common perception that the hospital people pay attention only to rich and educated people. As one mother also had the same perception, she was rather surprised that the hospital people did not mistreat a poor woman like her while she had to go to a hospital. Reputation of the hospital is another important factor. Fear about hospital delivery is for instrumental examination and operational procedures. Another mother blamed the hospital people for the death of her baby. This type of misinterpretation may act as a de-motivating factor for others in the community where she lives.

[1] Hereafter referred to as TBAs.

Economic problem has been identified as another major barrier to institutional care. In the absence of a very serious condition women are not to be taken to the hospital. When all efforts made by a TBA, a *Fakir*[2] or a village doctor fail, and the patient's condition takes a critical turn, only then will the family members think about hospitalization. In-laws and neighbours jointly take decisions regarding hospitalization. Therefore, the woman's relationship with her in-laws is very important in the decision making process. Physical distance of the facility and transport problem were taken into consideration by the family prior to the final decision to transfer the patient to a hospital. Finally, an unfamiliar setting at the health facility, the possibility of being treated by a male doctor, and absence of family and friends might be acting to delay institutional care in emergencies.

Conclusion

All members of the community need to be educated about the danger signs of obstetric emergencies. Posters charts, audio visual aids, folk drama might be used as effective tools for the information campaign. TBA training interventions should give more emphasis to early recognition of complications and early indications for referral rather than attempting management at home.

[2] A traditional healer.

INTRODUCTION

The World Health Organization has acknowledged the priority of emergency obstetric care (EOC) as an essential component in the safe motherhood approach. [3] Worldwide the most common causes of maternal deaths are haemorrhage, infection, toxaemia, and obstructed labour (2). Since many of these complications can not be prevented or predicted in advance, all women must have access to emergency services such as blood transfusion and caesarean section. The major challenges for better EOC in developing countries would be upgrading hospitals and health centres, developing a system to recognize emergencies early and organizing transport to send women to hospitals (3).

In Bangladesh, an operational research was conducted at eight medical college hospitals, 57 district hospitals, 55 maternal/child welfare centres, 61 thana health complexes, and 50 family welfare centres to gather information on the status of emergency obstetric care (EOC)[4] services and to evaluate their performance (4). The study reported that besides medical college hospitals, only 39% of district hospitals offered EOC facilities in which a lack of logistic equipment or lack of specialists or both was the main reason for poor management. It has been estimated that in Bangladesh, the number of facilities providing EOC services needs to be increased to six fold (4).

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[3] EOC includes obstetric first aid which contains specific interventions blood transfusion, intravenous antibiotics, cesarean section, the management of abortion complications, and vacuum or forceps delivery.

[4] Hereafter referred to as EOC.

Three delays that contribute to many maternal deaths are the delay in seeking care, the delay in arrival at a facility, and the delay in starting effective treatment. Poor road conditions, lack of transportation to send emergency cases from peripheral to referral hospitals make the potential difference between life and death in most developing countries (5). Lack of basic equipment, over crowding and scarcity of trained personnel in the facilities are the known problems at institutional level.

Of various patient factors which act as the barriers to emergency obstetric care, most important might be the patient's or family's refusal to treatment or lack of awareness of the problem. In Bangladesh a man generally makes the decision for a woman to go to a facility, however, the reputation of the facility also play a role in his decision. Often fund constraints is a deterrent to seeking medical help. However, very little information is available about the problem at home level. Information on decision making process at the rural home level during obstetric emergencies are unknown to us. There is a lack of adequate information on the problems and delays in seeking treatment at home level. We have little information on social and cultural barriers to seeking medical care in obstetric emergencies. This study was designed to explore the situation during delivery at rural homes and to identify the barriers to EOC.

BACKGROUND

A collaborative community based study was undertaken by BRAC and the London School of Hygiene and Tropical Medicine (LSHTM) on maternal morbidity in rural areas of Bangladesh. The study registered 2,099 pregnant mothers over a year. In this prospective study the pregnant mothers were identified by household visits and included in the study in their first trimester of pregnancy and were monitored till the third month after child birth. This study included three components; focus group discussions, a prospective survey, and in-depth case studies. From the main survey a sub-sample of 26 women were selected to collect in-depth information on the delivery situation, barriers to seeking emergency care and birth practices.

STUDY OBJECTIVES

This study was undertaken to know the situation during home delivery and the decision making process during obstetric emergencies; to identify the home level barriers to EOC, and to obtain information on birth practices in home deliveries

METHODS AND MATERIALS

The study was conducted in three unions (Baliakhora, Betila and Jagir) of Manikganj district. This in-depth study, continued for six months (May to September 1993), included 26 pregnant women, of whom 12 developed obstetric complications. Women were followed-up twice a week at home. Data were collected through informal discussions during each visit. Six experienced female interviewers collected the data. The field workers were involved in developing guidelines to collect similar data on all the women

studied. The interviewers worked to develop a good rapport with the study women at the initial phase of data collection since the nature of the research was quite sensitive. The same interviewers were involved in the main longitudinal survey and were well known to the women. It was, therefore, easier for the interviewers to collect data on private and intimate matters. No formal questionnaire was used for data collection, rather a flexible and open guideline was followed. The data were collected through informal discussions. No notes were taken during the conversations but the interviewers made a detailed diary of each visit immediately after they returned to their base. Carbon copies of the write ups were sent to the head office at the end of each week. These transcripts were later translated into English. One person from each of the household of the pregnant woman was selected during the first visit to inform the local BRAC office about the birth. Within 48 hours after delivery the interviewers visited the mothers to collect information on the situation during delivery. Delivery history of the mothers who had obstetric emergencies are attached in the appendix.

RESULTS

FACTORS ACTING AS BARRIERS IN THE DECISION MAKING PROCESS OF ACCESSING EMERGENCY CARE

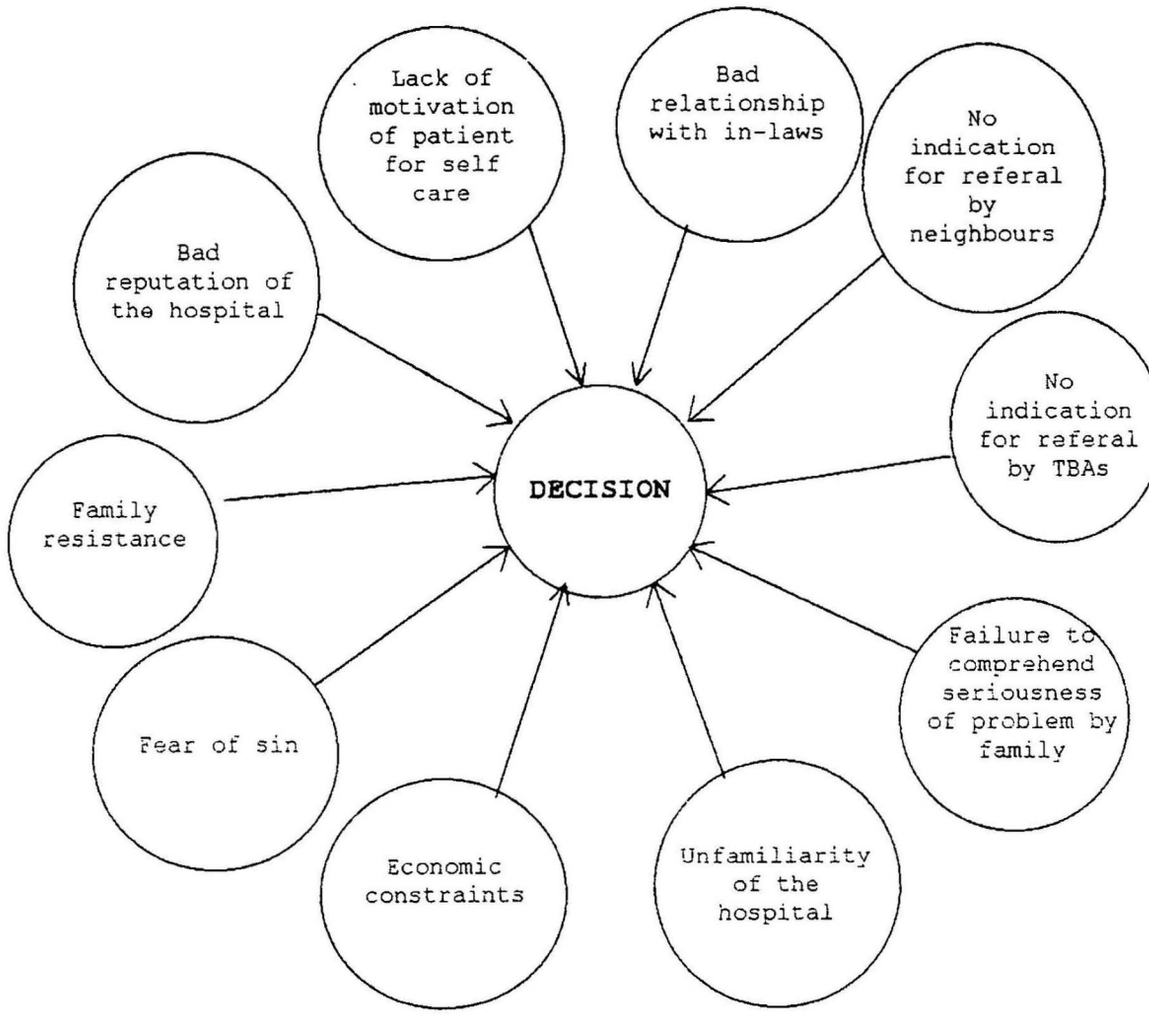

Fig 1: Barriers in decision making process of getting EOC

Lack of patient's motivation for self care

In some cases women themselves were not aware of self care. For example, Jhorna Rani had a prolonged labour. At one stage her husband wanted to take her to the hospital. However, she refused as she considered it a shame for a woman to go to hospital.

Resistance from the family

Sometimes resistance came from family members. Ambia described,

> *"During delivery I was in a serious condition as the feet of the baby came first, the dai instructed to shift me to the hospital but both my mother and my husband refused; they felt that if I were to die, it should be at home."*

Fear of sin

The main reason behind much resistance was a fear of sin which was attributed to the presence of unknown male doctors in the hospital. Misoron, who was shifted to the hospital in a critical condition, commented,

> *"It is not good for a woman go to hospital as she has to expose herself to a male person and thus loses her prestige and honour;* therefore, the pious people like *Hajis* and *Maulvis*[5] always try to treat their women at home at any cost."

However, a different view was expressed by Ayesha, she stated,

> *"In modern days people do not care much of 'pardah' system as they are getting educated".*

Bad relationship with in-laws

In a joint family, the women's relationship with their in-laws seems to be very important for their emergency health care. Ambia stated,

> *"'Women who are in bad terms with their in-laws could never be expected to be hospitalized for treatment."*

Ayesha also reported that,

> *"We saw many incidences when women were not able to go to hospital even if her condition was serious because of bad terms with in-laws."*

Delayed indication for referral by TBA

Early assessment of the indications for referral by TBAs is the most important component in the decision making process. Although, in a few cases the TBAs acted early to shift the complicated cases, there are many other examples where the TBAs were found to be trying to manage the emergency cases by themselves rather referring them to the hospital.

Unfamiliarity with the hospital

The hospital is a unfamiliar place for the rural people. There is a common perception that the hospitals only pay attention to rich and educated people. While describing such an experience, Ayesha stated that,

> *"As we are poor and from the remote part of the village, the doctors and nurses do not have the will to behave properly with us."*

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[5] Religious Muslim leaders.

A similar opinion was expressed by Kisto who said,

> *"Before we decide to go to hospital we have to find some one educated who has experienced any hospital visit, to accompany us as they have the courage to talk to the doctors."*

As Soribon also had the same perception she was rather surprised that the hospital people did not mistreat a poor women like her while she had to go to a hospital.

Bad reputation of the hospital

Reputation of the hospital is another important factor. Kisto's mother-in-law passed the comment,

> *"Those who are taken to the hospital cannot be expected to return home cured, except a few lucky ones."*

Another remark was,

> *"We hear that the doctors do not give good medicine to the poor and they sell the good medicine."*

One comment was,

> *"We hate hospitals because we heard from other people that the hospital people use machines for delivery purposes and undertake operational procedures unnecessarily."*

Jiaron had a cesarean section in hospital and delivered a stillborn baby. She blamed the hospital people for the death of her baby. She thought that the medicine they gave for treatment of her gastric pain, damaged her baby as it was decomposed at the time of

birth. This type of misinterpretation may act as a de-motivating factor for others in the community where she lives.

Economic constraints

Economic problem has been identified as a major barrier to institutional care. The expressions or experiences were;

> *"To visit a hospital is like playing with money, before we decide to go to hospital we have to think about money. We had to buy the medicine and food from outside."*

Zohura had to stay in hospital for four days as she had a retained placenta. Her family spent Tk. 11,000 for her hospital stay and transport, part of this money was borrowed and the rest came from selling lands.

BIRTH PRACTICES

Delivery and cord management

Of the 26 cases, 22 delivered their babies at home and 4 in hospitals. Among the 22 home deliveries, only six were conducted by trained TBAs and four by doctors/nurses; in three cases there were no birth attendants, and in the rest of the cases the birth attendants were untrained. In eight cases mothers lost their babies (4 stillbirths included). Knee down position was commonly practiced during delivery in all cases delivered at home. In all home deliveries oil was massaged on the lower abdomen. It was reported that both the trained and untrained TBAs applied oil in the birth canal for lubricating purpose. Hair was put often into the mothers' mouth to her vomit so that the

placenta would come out easily. Of the 26 cases, boiled blade and thread were used in 16 cases for cutting and tying umbilical cord (including 4 hospital deliveries). Sometimes, birth attendants (trained) used boiled blade and thread, but the raw surface of the cord was wiped by an old rag and spit or vermilion was applied on it. Often a new blade and thread was used but was not boiled. It was believed that boiling would not be required when these items were brand new. In few cases the cord was cut with a thin bamboo chip and tied with old thread which was unboiled. It is thought that a longer umbilical cord would be infected easily and would smell bad. In cases of partial expulsion of the placenta, the placenta was tied with a piece of thread which was fixed to the mother's thigh, otherwise it might go up to chest. One mother reported that the placenta might get dried inside the body if it did not drop within one hour. She herself faced this problem and had to take two bags of blood and two bags of saline in the hospital to make it fresh. Beside breast milk, sugar water *(misri)* and mustard oil were quite commonly used as the first food for a newborn.

Protection against evil spirits

Several measures were reported to be taken for protection of the new born from evil spirits, such as few drops of blood was collected from the umbilical cord and the baby was fed with it and the placenta was fried in a broken clay pot. The deposed part of the umbilical cord should not be buried under damp ground as it would cause common cold of the baby. Commonly that was kept by the side of the earthen stove for early healing of the naval of the baby and as a protective measure from bad forces.

Laily Begum gave birth with the help of a TBA. After delivery the baby had a bath with water from a small water hole *(doba)*. Then the TBA massaged the baby with mustard oil, put a black mark on it's forehead (tip) and then pierced the left ear lobe of the baby with a thorn and that was kept there for the baby's protection. Then she left. The baby was restless and crying for all the time. Laily's mother and mother in-law agreed that the thorn in the baby's ear was giving pain. So, they decided to replace the thorn by a loop of thread and used a non-sterilized needle to do the job. The baby still continued crying. Laily Begum asked her mother to go to a fakir for a piece of sanctified glass. Her mother took some oil and black thread and went off to the fakir. After returning from there she said that as it was afternoon, the fakir did not agree to give sanctified thread or oil. Instead he had given some sanctified dust. The dust was applied on the body of mother and the baby. Another *dai*, who also was trained, came and noticed there was smoke in the room. She advised them to put out the fire as she had learnt from her training that the seclusion room should not be smoked. She further stated that it was not necessary that the baby be given a bath right after birth, but if necessary, the bath water should be tepid. She added that Laily's baby was given a cold bath, and also because of the rain, the child had got cold, causing the continuous crying. Laily's neighbours suggested that the baby had been possessed by bad spirits while it was in the mother's womb or some one had imposed the evil eye on it.

Health care seeking for the new born baby

For sickness of the new born different indigenous treatments are often given by a *Kabiraj* or *fakir.*[6] Aley's baby had a skin rash all over the body. The interviewer asked her to take the baby to a doctor, *Aleya's mother said,*

"Doctors will not be able to cure it but only a man known to us by his special exercises, will be able to treat it. So seeking help from him is only way to get rid of it".

Finally, they consulted a *kabiraj* who gave some sanctified water to apply on the baby's body and some sanctified khud (half broken rice) for Aleya to eat. For constipation problem herbal medicines were used. Zohura's baby had an ulcer on the anus for which she used homeopathic medicine. Laily's baby was treated for oral thrush by a *fakir.* For the treatment, Laily had to give the *fakir* a complete and spotless betel leaf, a betel nut and some mustard oil. The *fakir* put the leaf and the nut in his mouth with a wick soaked in the mustard oil, set fire inside his mouth and said some verses. Three days of doing this would cure the oral thrush of the baby. For oral thrush sanctified honey and butter were also tried.

DISCUSSION

In this paper we explored the situation during delivery and examined household level barriers to institutional care during obstetric emergencies. The study was conducted in a limited area, with a small sample. As such, the results is not representative of the entire population of Bangladesh. However, such close follow-up would not have been possible in a large sample or in a wider geographical area.

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[6] Indigenous traditional healers (can be male or female).

In this study it is evident that women's health problems are not seriously considered unless it is serious. When all efforts made by a TBA, *fakir,* or a village doctor fail, and the patient's condition takes a critical turn, only then the family members think of institutional care. In-laws and neighbours play an important role in the decision of women's institutional care. The women's relationship with her in-laws is also very important in the decision making process. Often women are not aware for self-care. Physical distance of the facility and transport problem were taken into consideration by the family members prior to the final decision to transfer patient to hospitals. Finally, the unfamiliar environment at the health facility, the possibility of being treated by a male doctor, and the absence of family and friends at the health facilities might also act to delay in seeking institutional care in emergencies. Institutional delivery is not very common in rural Bangladesh. Essential obstetric services need to be decentralised.

In recent times, the concept of maternity waiting homes has been developed and instituted in developing countries (6). The objective of maternity waiting homes is to bring women with obstetric risk near hospital facilities where they could be cared for in case of emergency. Another approach to decentralizing obstetric services could be Obstetric Flying Squads, which has been successfully functioning in other developing countries(7-8).

Since it is observed that elderly in-laws and neighbours play a very important role in the decision making process of transferring women to hospitals, all members of the community need to be educated about the danger signs of obstetric emergencies.

Posters, charts, audio visual aids and folk drama might be used as effective tools for information campaign. Available literatures indicate that so far, more attention and funds were allocated for upgrading services than for informing and educating the community.

TBA training should give more emphasis on early recognition of complications and early indication for referral. Both trained and untrained TBAs were performing harmful birth practices such as putting oil inside the birth canal and cutting the umbilical cord with bamboo slits or unsterile blades. Other studies reported that such harmful birth practices by TBAs are wide spread in Bangladesh (9-10). A study done in Jordan (11) highlighted the most important reason for failure of TBA training programs was the didactic teaching mode adopted in most training courses for TBAs differed fundamentally from their customary mode of learning. The TBA training programs should be more participatory and practical. It should enforce the idea that TBAs should not insert hand or put anything inside birth canal. Safe delivery kits need to be available to the TBAs. For sickness of the neonates mothers seek help from indigenous healers, because they believe that their treatment are best for the new born.

RECOMMENDATIONS:

1. All members of the community need to be educated about the danger signs of obstetric emergencies. Posters, charts, audio visual aids, folk drama might be used as effective tools for the information campaign.

2. TBA training interventions should give more emphasis to early recognition of complications rather than delaying treatment at home.

3. TBAs should be encouraged to use safe delivery kits and to avoid harmful practices.

4. Obstetric services need to be decentralized. To achieve this, the approach of Maternity Waiting Homes can be tried.

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APPENDIX

DELIVERY HISTORY OF SOME THE WOMEN WHO HAD OBSTETRIC EMERGENCIES

Case 1:
Fulzan
Age: 20 years
Gravidity:#1
Parity: #1

Fulzan had labour pain for more than 24 hours. A dai was called in. The dai massaged oil over Fulzan's abdomen and the pain was more intensified. The dai described Fulzan's delivery in her own wards. She said "I made Fulzan stoop over on someone's shoulder and had a look into the birth canal and saw a foot coming out. I held the birth canal wide open with my both hands, but it did not help. She was kept in a knee down position by five different persons, some of them were putting pressure on Fulzan's abdomen with their knees, while some others held the birth canal wide open with hands, while I myself was applying force to pull the baby out by it's leg. After about an hour of pulling the baby was expelled up to his chest and got stuck. After further efforts I managed to pull out the baby upto the throat and it got stuck again. However, at last I pulled out the baby". For easy expulsion of placenta hair was put into Fulzan's mouth. After the placenta was expelled, the baby was laid down on a mat and various methods were applied to initiate breathing. First the umbilical cord was milked of all the blood into the baby, then the dai blew on the babies face after chanting some words, then the placenta was fried on a broken earthen pitcher. After half an hour of frying the placenta the baby had shown the sign of life. Blood was oozing out of the umbilical cord , the blood was fed to the baby by the *dai.* On wanting to know the reason for this, the *dai* replied that it was the custom and it prevented mouth sores. But the baby still had not resumed normal breathing after the cord was cut, a little sugar solution was put in the mouth, which the baby could not swallow. Fulzan's family decided to shift the new born baby to the hospital. On the way to

the hospital, the *dai* had held a large iron nail in her hand to protect the baby against evil spirit. The nurses in the hospital were on a strike. However, the baby got admission as an emergency case. But the next day Fulzan's family brought the baby back home and the baby died. Fulzan's mother said, "The hospital people did not provide any food for my grand son. No one looked after him, therefore, I requested to release the baby although the nurse did not want to do so." Then Fulzan's father said "If the baby had been left there for some time more he would have died any way." Fulzan's mother added "The babies life was short therefore nothing to do with it." Fulzan's father complained, "One matter really irritated me, the nurse sent a slip for buying a pipe for the respiration of the baby. I did so, but the nurse said it was big for the baby's nostril. I brought another one but according to nurse it was too small for the baby and sent it back." Fulzan's aunt informed the interviewer that she insisted on taking the baby to the hospital right after delivery, but the *dai* did not allow it, moreover, she had been assured that the condition of the baby was all right and it was not necessary to take him to the hospital.

Case 2
Hajera Bibi
Age:30 years
Gravidity: #4
Parity: #3

Hazera Bibi had swelling in her limbs (oedema) and she became very weak during her pregnancy. She could not walk to the toilet by herself. Her brother-in-law wanted to shift her to the hospital right from the beginning of her sickness. But, she was not willing to go to the hospital. All the relatives tried to convince her to go to the hospital. Meanwhile her whole body had swelled up, so she agreed to go to hospital. As she could not walk, she was carried to the Ghior Sadar hospital by four people on a wooden hammock to the boat. After a short ride by boat, she was taken by a rickshaw. The doctors at first refused to admit her and advised her to go to the Manikganj district hospital as her condition was serious. However, at last she got admission there. On the third day of admission, her

labour pains started. The baby did not cry right after delivery and needed artificial respiration. As the baby was not well, Hajera's relatives decided to seek the help of a *fakir* without the knowledge of the doctors. They brought a *fakir* to the hospital who practised his chanting and blowing on the baby. But, the babies condition did not improve. They brought the baby back home although the doctors opposed this. On their way back, they went to another *fakir* who applied his traditional treatment on the baby. But, the baby expired.

Case 3
Sazeda
Age: 16
Gravidity: #1
Parity:#1
Sazeda had labour pain for one day. Sazeda was given sanctified water to enhance the labour pain. The TBA put her finger inside her birth canal to see if the head was coming and she applied oil in the birth canal. In this condition a neighbouring lady and Sazeda's mother both were putting pressure on her abdomen with their knees. The TBA pulled out the baby by force. Sazeda was given warm milk to drink, but after drinking the milk she vomited and became unconscious. Everybody started pouring water on her head, but she did not regain her consciousness. Next morning when the health assistant came to work in the village she saw Sazeda and advised that she should be taken to the hospital. She had a perineal tear and excessive bleeding. But, Sazeda's family could not effort to shift her to the hospital due to lack of money. It was even not possible for them to buy medicine for her. Sazeda's mother had borrowed some money from someone and gave it to Sazeda to bring medicine. But, he brought food instead of medicine.

Case 4
Anwara
Age: 25 years
Gravidity: #1(twin)
Parity:# 2
Dead child:2

This was Anwara's first pregnancy. For the last 8 years of her marriage she had gone through many kinds of treatment to have a child. She fell down accidentally twice during her pregnancy. Since her fall at seventh month of pregnancy she began to feel pain in chest and abdomen. One TBA was called to examine her. The TBA advised that she should be taken to the hospital as she thought that the baby was in an abnormal position. However, the F.W.A suggested that Anwara first be taken to the F.W. C. The next day Anwara was taken to the F.W.C but came back without having any checkup done, as the F.W.V. was absent. The next day Anwara went to Manikganj Maternal and Child Health Centre accompanied by her sister's husband. After checking Anwara the lady doctor informed her that she might have twins. The doctor prescribed Anwara some medicine and advised her to take complete rest. After a few days she again went to the hospital for a check up as she was still feeling pain in her chest. An X-ray was done which showed that she had twins and both of them were alive. The doctor also advised her to have the delivery in the hospital. But, Anwara ignored the doctor's advise because she had heard that, in the hospitals male doctors used to conduct deliveries by surgical procedure. Anwara's labour pain started on the night they returned from the hospital and next morning she gave birth to the twins. Initially there were no problems, but the placenta did not drop right away. To deliver the placenta Anwara had to put hair and garlic in her mouth to enhance the pressure to deliver the placenta, but she did not have the strength

to push. In this stage Anwara became unconscious. She was taken to the Manikganj Sadar hospital and the placenta was then manually removed.

Case5
Aleya
Age: 21
Gravidity:# 1
Parity:#1

Aleya was well during her pregnancy. In the morning of the delivery day infrequent labour pain started. She thought the pain was due to evil wind or due to dysentery. When the pain intensified, she informed her mother. Aleya's mother called a trained TBA. The *dai* massaged Aleya's abdomen with oil and reported that delivery would take time and then she left. The *dai* came back at night and made arrangements for delivery. The *dai* had lubricated the birth passage with oil for easy expulsion of the baby and asked her to push. Aleya delivered her baby in the knee down position. The cord was severed with sterilized blade and knotted with sterilized thread. The raw surface of the umbilical cord was then wiped with a rag and spit was applied over the cut surface. The *dai* noticed that the placenta had not dropped out and the *dai* fixed the cord to the thigh. Then the baby was cleaned and placed on Aleya's lap to breast feed. On the *dai's* advice Aleya was taken to the Manikganj Hospital by rickshaw accompanied by her brother, mother and dai. The placenta was removed manually by a lady doctor in the hospital.

Case 6
Suchitra
Age: 25 years
Gravidity:#2
Parity: #1
Still birth:1
Suchitra had a previous history of giving birth to a pre-mature and stillborn baby. This time the baby was delivered at full term. The labour pain started two days earlier. On the 3rd day, a Muslim *dai* (trained) was called in. The TBA massaged mustard oil on Suchitras' abdomen and examined her by introducing a finger inside the birth canal. The labour pain was very much intensified but still there was no progress in the delivery process. Suchitra's family decided to take her to hospital. Her husband and the TBA accompanied her to the hospital and she gave birth with the help of a nurse in the hospital.

Case7
Misoron
Age:22 years
Gravidity:#1
Parity:#1

Misoron was having mild abdominal pain for five days. She fell down accidentally on her abdomen. This fall had enhanced the pain. The amniotic fluid came out and one of the baby's feet were seen in the birth canal. Three TBAs were called in to help in the delivery. As they could not deliver the baby, they advised for hospitalisation. Misoron's relatives took her to the Manikganj Sadar Hospital, but the doctors in the hospital expressed their inability to conduct such a complicated delivery and advised them to take her to Dhaka. Misoron's mother told the doctors that they were poor and could not afford to go to Dhaka. Misoron's mother said that this type of problem could be tackled at home

and told of a similar history in the neighbourhood where the baby was born safely at home. The doctors agreed to admit the patient and they were given Tk 200. Misoron was then removed to the labour room where the nurses tried to bring out the baby, but failed. Misoron was given saline and injections but it did not work, until two male doctors forcefully pulled the baby out. She reported that she did not feel shame in presence of male doctors, because her life was in danger at that moment.

Case 8
Jiaron
Age:40
Gravidity:#10
Parity:#8
Still Birth:2
Jiaron had a prolonged labour pain. She was moved to the Manikganj Hospital where an X-ray of the abdomen revealed a transverse positioning of the baby. She was then shifted by ambulance to Dhaka Medical College Hospital. The doctors there advised some medicine and observed the patient for seven days. On seventh day a caesarean section was done. The baby was still born and was macerated.

Case 9
Piara
Age: 19
Gravidity:#4
Parity:#1
Still Birth:1
Abortion 2

A mild pain had started two days prior to delivery and Piara did not inform anyone. The day of delivery, as she was grinding spices and cooking the midday meal, the pain intensified. Piara's mother-in-law called a TBA who massaged Piara's abdomen with oil and returned home. After a few hours Piara experienced a sudden foul smelling burst of

water and bloody discharge. The TBA was called again, and probed the birth passage with her finger. She reported that the position of the baby was abnormal and something soft was felt through the birth canal. Everybody was very upset on hearing that. Piara was kept in a knee down position and instructed to keep pushing hard. At that time the TBA applied mustard oil into Piara's birth canal. By a continued pushing for an hour a leg of the baby was delivered. The TBA laid Piara on her back and pulled the baby out slowly by it's leg. She confirmed that the baby was dead and decomposed. As the placenta was not expelled, Piara was kept in kneedown position with external pressure applied to the abdomen. She was given plenty of cold water to drink to enhance the expulsion of placenta which dropped after one hour.

Case 10
Ayesha
Age:43 years
Gravidity:#12
Parity:#12
Dead child:2

There was no health problems during pregnancy. Ayesha had a mild pain and a leaking membrane one day before delivery. Her husband had asked her who to bring to help her. Since her mother was not at home, she wanted to call a dai (BRAC trained TBA), the next door neighbour. The dai came but there was no further progress of delivery and the next morning her son went to bring her mother. In the meantime her neighbours planned to get a doctor to give her an injection to enhance the labour pain. Ayeshas' husband went to get the doctor, but he could not get hold of either of the two doctors he knew of and returned empty-handed. Meanwhile Ayesha's pain greatly increased and she fainted. The *dai* attempted to deliver the baby in a lying position, but it did not work. Her mother advised her to walk about, but Ayesha could not manage it. She finally delivered her baby in knee down position and the *dai* used sterilized instruments to cut the cord one

hour after birth. The baby was massaged with mustard oil and placed on mother's lap to suck colostrum.

Case 11
Zohura
Age:24 years
Gravidity:#3
Parity:# 3

Zohura could not understand that she was pregnant till the 5th month of her pregnancy because she was having menstrual bleeding 2-3 times in each month. On the 5th month she felt something moving inside her abdomen and her abdomen increased in size. She had thought that it was a tumour. She had mild abdominal pain and became very pale and weak. She went to the Manikgang Hospital where a lady doctor examined her and reported about her pregnancy. The doctor also informed her that she had an ulcer at the mouth of the uterus and was experiencing bleeding per vagina. Medicine was prescribed for her. The baby was delivered by her mother-in-law who was not trained. The delivery was difficult. At the time of delivery birth attendant found that the baby's buttock was seen at the mouth of the uterus. She then manually tried to bring the feet first. She succeeded in doing so, she pulled out the baby by the legs but the head got stuck. The dai then repeatedly pressed over the head repeatedly down on the head and the baby was born. The baby did not cried right after delivery. After sometime it cried. As the placenta was taking time to drop, hair and finger were out inside Zohura's mouth. When that did not work an injection was pushed which also failed. Therefore the cord was cut and tied to the thigh. In that condition Zohura was taken to the Manikganj hospital by a

van where she was immediately admitted. As there was no doctor at the hospital, the nurses took Zohura to the labour room and tried their best, but all in-vain. The cord had been torn by pulling hard. When the doctor returned after his lunch, he asked the nurses about the patient's condition and told that the patient needed blood which was not available in the hospital. The patient was referred to the Dhaka Medical College Hospital by ambulance. It was midnight. Zohura got admission in DMCH where blood transfusion and saline infusion were started. Two bags of blood were transfused and she was taken to the delivery room. The placenta was removed under general anaesthesia. Zohura received a total of four bags of blood in her four days stay in the hospital. Doctors advised her to stay longer, but due to lack of money she had to return home. The four day stay at the hospital plus transport had cost Zohura 11,000 taka. Part of this amount was borrowed and part came from selling lands.

Case12

Ambia
Age:25 years
Gravidity:# 3
Parity:# 2
Still Birth:1

Ambia claimed that she was affected by evil spirits in sixth month of her pregnancy, which had given rise to a lower abdominal pain. Everybody told her that her baby would be dead before birth. Therefore, to protect her a piece of sanctified jute was procured for Ambia to be worn around her waist; she also consumed sanctified water. Five or six days prior to delivery, she had dysentery accompanied by abdominal pain which she could not differentiate it from labour pain. Also she failed to realise that the baby had stopped

moving inside and her lower abdomen become rigid. When her water broke, only then she realised that labour had already begun. Ambia's mother brought a TBA found the feet of the baby protruding from the birth canal. Her husband went to call a doctor but before the doctor's arrival, the two TBAs pulled the stillborn baby out by the legs. The doctor gave her an injection and prescribed some capsules, which Ambia believed had brought her back to life.

Case 13
Asiyah
Gravidity:# 4
Parity:# 4
Asiyah's labour pain started at midnight. As there was no one at home except for her two little children, she asked her daughter to inform a women next-door. Her neighbour came and Asiyah requested that she get some sanctified water from a *fakir* which the woman brought from her home. Asiyah was sweating profusely. Her neighbour sat near the door for a while and then left. Asiyah then sent her daughter to her parents house to get her mother, who came, had one look at her and went immediately to get the TBA. But this time the head of the baby was engaged. Asiyah herself tried to pull out the baby by holding the baby's head but it got stuck at the shoulder. She kept her baby on the mat, holding onto the umbilical cord. At this moment her mother returned to find her in this condition. Asiyah asked her mother to wait outside. She tried to vomit by putting her finger in her throat and after doing so several times the placenta dropped. She rested for a while then cut the umbilical cord and took the baby in her arms. Asiyah herself cleaned all the blood and water and asked her daughter to get some water from the river. She did not have much food in her house that day, eating only a little puffed rice.