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# A qualitative study of conceptions and attitudes regarding maternal mortality among traditional birth attendants in rural Guatemala

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**Objective** To explore conceptions of obstetric emergency care among traditional birth attendants in rural Guatemala, elucidating social and cultural factors.

**Study design** Qualitative in-depth interview study.

**Setting** Rural Guatemala.

**Sample** Thirteen traditional birth attendants from 11 villages around San Miguel Ixtahuacán, Guatemala.

**Method** Interviews with semi-structured, thematic, open-ended questions. Interview topics were: traditional birth attendants' experiences and conceptions as to the causes of complications, attitudes towards hospital care and referral of obstetric complications.

**Main outcome measures** Conceptions of obstetric complications, hospital referrals and maternal mortality among traditional birth attendants.

**Results** Pregnant women rather than traditional birth attendants appear to make the decision on how to handle a complication, based on moralistically and fatalistically influenced thoughts about the nature of complications, in combination with a fear of caesarean section, maltreatment and discrimination at a hospital level. There is a discrepancy between what traditional birth attendants consider appropriate in cases of complications, and the actions they implement to handle them.

**Conclusion** Parameters in the referral system, such as logistics and socio-economic factors, are sometimes subordinated to cultural values by the target group. To have an impact on maternal mortality, bilateral culture-sensitive education should be included in maternal health programs.

## INTRODUCTION

Maternal mortality is, despite the efforts of Safe Motherhood Programs, still a common problem, with at least 500,000 annual deaths, mainly in low-income countries. Globally, education of traditional birth attendants has previously been a priority in the efforts to reduce maternal mortality. It has not been possible to confirm a positive outcome in terms of decreased mortality from these training programs, however. The value of training traditional birth attendants has therefore been under extensive debate, resulting in a shift of focus towards the promotion of skilled birth attendants.<sup>1</sup> A global goal is that skilled attendants should assist 80% of the deliveries by the year

2005.<sup>2,3</sup> However, in some regions, progress is slow and traditional birth attendants will continue to care for many pregnant women in low-income countries during years to come, while the initiation of overall skilled birth attendance is a time-consuming and resource-demanding process.

In Guatemala, 80% of all childbearing indigenous women are attended by traditional birth attendants who have little or no formal education. The Ministry of Health in Guatemala has offered training programs for traditional birth attendants since 1955, but these programs have been criticised for being academic in nature, and for being deficient in linguistic and cultural considerations.<sup>4</sup> This could be one reason why some traditional birth attendant training programs have been viewed as unsuccessful (i.e. the training has not been conducted in an appropriate manner). Guatemala has one of the highest maternal mortality rates in Latin America, with national figures reported to be between 156 and 270 deaths per 100,000 live births.<sup>5</sup> According to the Baseline Maternal Mortality study for the year 2000, this figure is three times higher for indigenous people than for nonindigenous.<sup>6</sup> The Guatemalan Congress has declared maternal health a national priority and has set a goal of an initial 15% reduction in maternal mortality rate.<sup>7</sup> The recommendations from the baseline study are to take into account the diversity of the

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problem and to incorporate ethnic, social and cultural issues in the work for improvements.

Crucial factors in maternal care are the recognition of complications and timely referral to a higher level of care. In many countries with few skilled birth attendants, this referral relies largely on traditional birth attendants. It has to our knowledge not been investigated how traditional birth attendants regard complications, neither why nor when they consider further actions as necessary nor on what grounds they base the decision about referral. Investigations about the participation of pregnant women in the decision of how to handle complications are also scarce even though there are examples of such intentions.<sup>8</sup> Focus on the attempt to increase referrals to hospitals has been directed toward logistic and socio-economic factors, even though cultural factors and ethnic background might play an equivalent role in the choice of seeking medical care.<sup>9</sup> Furthermore, attempts to improve referral systems often exclude traditional birth attendants and mainly focus on government outreach workers and different facility levels.

The aim of this study was to explore conceptions of obstetric emergency care and the referral system among traditional birth attendants in rural Guatemala, elucidating social and cultural factors that might effect referral of pregnant women to hospital care in case of complications.

## METHODS

The study was set in the region of San Miguel Ixtahuacán, whose population of approximately 35,000 inhabitants includes about 100 traditional birth attendants. The local maternal mortality ratio was reported to be 349/100,000 live births in the year 2001, with haemorrhage and retained placenta as the only reported causes.<sup>10</sup> Health facilities are scarce and 88% of all births are attended by traditional birth attendants with no or limited education, while the majority of the remaining 12% in this underprivileged district give birth without help from anyone but their family.<sup>10</sup>

This study was based on interviews with traditional birth attendants consisting of semi-structured, thematic, open-ended questions. All interviews were conducted in June and July 2002 in the traditional birth attendant's home environment in order to minimise any feelings of intimidation between the interviewer and the interviewee. Each interview lasted for approximately 1 hour. The interview topics were: the traditional birth attendants' experiences of complications related to pregnancies and birth, conceptions of pregnant women as to the causes of complications and attitudes towards hospital care. Theoretical saturation (i.e. no further information discerned<sup>11</sup>) was achieved after 10 interviews, but three additional interviews were conducted in order to validate preliminary results. Socio-cultural factors here include health beliefs and common perceptions of causality and treatment related to complications among pregnant women. Ethnic background refers

to cultural identification and social and self-perception of ethnic identity.

Informants were chosen as representative of different villages and age groups among the active traditional midwives in the area. As a result, 13 functionally illiterate traditional birth attendants from 11 villages were interviewed. The women in the sample constituted a homogeneous group with regard to ethnic and social background. They all had learned what they knew by experience or from a relative who was also a traditional birth attendant, and combined this knowledge with traditional birth attendant courses provided by the Ministry of Health or by a non-governmental organisation. The years they had spent as traditional birth attendants varied from a few years to 45 years. In many cases, the exact ages of these women were unknown, but the approximate range, as stated by the women themselves, was 30–80. The number of pregnant women attended by the traditional birth attendants was between 2 and 36 per year for each informant. Additionally, the co-ordinator of the traditional birth attendants, a former traditional birth attendant who through a NGO had attended an auxiliary nurse education and had some knowledge of modern medicine, was interviewed in an attempt to minimise cultural or verbal misunderstandings that could influence the analysis and results of the interviews. All informants spoke Spanish as their second language which was why a translator, with possible negative effects on the interview situation, was not needed.

All interviews were tape recorded and immediately transcribed by the interviewer in order to include non-conversational information in the analysis. Important topics were coded and a systematic text analysis was independently made by three researchers with medical and/or social–anthropological background. The results were then further analysed in an attempt to optimise the use of the material. Finally, the results were re-contextualised (e.g. every statement was put back in its original context to validate it).

Before an interview took place, it was clarified that the interviewer (MR) was an independent researcher with no connection to any organisation or authority; that the informant would remain anonymous; that her participation was voluntary; and that whatever she might answer would not lead to acts of reprisal. Contacts were made through a well-known local health worker who explained the purpose of the study to prospective interviewees. Problems that had been anticipated because the interviewer was both male and a foreigner, such as unwillingness to speak about sensitive topics and language problems, did not materialise.

## RESULTS

In answer to a direct question about complications, only two traditional birth attendants stated that there had been cases of maternal mortality among their patients. 'There

was one woman whose child had only one arm out. After a while the baby came out but it was dead, and later the mother died, too' (traditional birth attendant A). 'When I got there the woman had a high temperature, but there was no car available so she died with the baby inside' (traditional birth attendant E). The other traditional birth attendants claimed that no woman had died while in their care. Throughout the interviews, the traditional birth attendants described maternal mortality as a common feature in other villages and among other traditional birth attendants. 'I have never encountered that, but I have heard about it. Here in this village two died because they went to another traditional birth attendant. They were badly taken care of and the bleeding wouldn't stop' (traditional birth attendant L). 'There are traditional birth attendants who lose women because they don't have the competence' (traditional birth attendant B). 'I have heard that a lot of women die in other villages' (traditional birth attendant E).

With regard to ways of handling obstetric emergencies, the majority considered it appropriate to send a woman to a hospital under certain problematic circumstances. Some traditional birth attendants stated that hospital referral was indicated in cases of transverse fetal position, prolonged bleeding or fever. Very young women having their first baby and older women with many children were regarded by some as being at high risk of complications. One traditional birth attendant said that under no circumstances would she send a woman to the hospital, and another said that it could be done at the family's request. 'I don't like hospitals. They only operate—and problems can be cured with massage, herbs, and salt' (traditional birth attendant B). However, only a few traditional birth attendants had actually sent a woman to the hospital when the specific question was raised. The reasons given were that they had never considered it necessary, that women do not wish to go there or that it would do no good. 'The women don't want to go there. They give birth in their house and that's it. I have never taken anyone to hospital—never' (traditional birth attendant J).

Asked about the most common obstetric complications, many of the informants described such situations as obstructed labour and haemorrhage. 'If there is blood before the birth—I have seen this many times—a lot of blood. But it also happens that they get stuck crossways, sitting or with their feet first, and many here have died' (traditional birth attendant C). Problems of septicaemia and hypertension/eclampsia were not cited by any informant. Some informants could not recall any complications and only a few could tell of more than one. Obstetric complications often appear to be viewed in the context of lifestyle and attitudes towards the expected baby. 'When the baby is born in a sitting position it's because the parents have separated and live in different places' (traditional birth attendant M). 'Sometimes it's because deep in their heart they really don't want the child' (traditional birth attendant K). Some traditional birth attendants explained complications

as being a part of *susto*, which can be described as symptoms caused by partially losing your soul. Another common idea among local women, according to the traditional birth attendants, is that fate and the will of God have predestined the outcome of pregnancy and labour: 'The women think it's only God's decision' (traditional birth attendant G). 'They don't go to a doctor, and that's because of their religion. They believe in God and wait for God to help them—that is their plan' (traditional birth attendant D). 'Some haven't been lucky with God, so the baby didn't want to come out. They wanted everything but had nothing, and then this happens' (traditional birth attendant K). Hence, fatalistic thoughts were reported as common.

Whether or not to refer cases of obstetric emergency to the hospital is reportedly not decided by the traditional birth attendant. The informants stated that such a decision is made by the woman and her family, and that the traditional birth attendant has more of an advisory role. 'They treat them well in the hospital, although I don't really know because I have never been there. But women are stubborn and don't want to go there. They don't accept the hospital because they think that they will not be able to have more children if they go' (traditional birth attendant A). 'They are afraid that they will cut and operate and that they will die of that. It's better to die at home. Sometimes the family doesn't want the woman to go' (traditional birth attendant M).

In some families, it is seen as a weakness not to be able to give birth at home, and therefore, as the traditional birth attendants explained, going to the hospital is not considered an option. According to the informants, the majority of the local women have a strong aversion to going to the hospital, even in the case of a life-threatening complication. The most common reason given is fear of a caesarean section, which is often considered unnecessary and thought to have as a consequence the inability to conceive further children. 'Women are afraid to go to the hospital because sometimes they are well taken care of and sometimes not. They can't handle the operation. They say it's better to die here, and that after an operation they can't work and then their man finds another woman. If it is God's will, the woman will be saved' (traditional birth attendant B).

Many women are also said to be afraid of actually getting hurt or dying in the hospital. This fear was partly explained by the circumstance that a hospital-related death would result in not being buried in the community's land, which is considered important for contact with one's ancestors in the afterlife. 'They are afraid because they say that they kill people in the hospital. They give an injection when sick people come there and that kills you. And sometimes the nurses get bored and that kills you, too' (traditional birth attendant L). 'They are very afraid of going to a hospital because in the hospital they are badly attended. It's cold there and you get sick and die. They say that they rather just wait for the will of God' (traditional birth attendant D). A common reason for aversion to

hospital care was the apprehension of being maltreated by staff, a fear related to not being able to speak Spanish well and being poor and indigenous. 'Some women say "they don't take care of me there, the doctor doesn't talk to me"'. They are afraid because they can't speak Spanish and they think that they will not receive treatment there' (traditional birth attendant E). Such opinions about discrimination were mainly related to hospital level but one informant described its presence also at primary health care level. Parameters such as distance and cost were cited in some interviews as important in the choice of obstetric care, but even these were always described as subordinate to the abovementioned factors.

## DISCUSSION

This study indicates that the pregnant women rather than the traditional birth attendants make the decision of how to handle a complication, based on moralistically and fatalistically influenced thoughts about the nature of complications, in combination with a fear of caesarean section, maltreatment and discrimination at the hospital level. There is a discrepancy between what traditional birth attendants consider appropriate in cases of complications, and the actions they implement to handle them.

The results from a qualitative investigation can be generalised against a background population with regard to the existence of phenomena and tendencies, but to a lesser degree with regard to amounts and proportions.<sup>12</sup> Interviewing the heterogeneous group of traditional birth attendants according to age, work experience and work locality strengthens the generalisation value of observed tendencies and phenomena. The reliability of the results in this study is confirmed by a selection whereby all informants had some education in pregnancy care. This decreases the risk of over-interpretation of tendencies and phenomena that are not a part of the subject's education and medical knowledge. One can therefore assume that observed tendencies and phenomena would have been stronger if traditional birth attendants without any formal education had been interviewed. This study is based on experiences and concepts among traditional birth attendants. The result concerning traditional birth attendant's view of pregnant women's complications and referrals to health facilities thus reflect how the traditional birth attendants apprehend barriers to health care ascribed to the pregnant women. The traditional birth attendants might have several reasons to claim that the decision about referral is made by the pregnant women, for example, to escape being held responsible for adverse outcomes of pregnancies. In further studies, direct interviews with pregnant women would be favourable to conclude to what extent the results comply with the thoughts of the pregnant women.

The first obstacle to obtain a referral when a complication is recognised was in this material the women's

aversion to hospital care. According to the traditional birth attendants, the decision of how to handle a complication is mainly made by the pregnant woman and her family. The study shows that this decision is made out of moralistically and fatalistically influenced thoughts about the nature of complications (i.e. related to thoughts about appropriate lifestyle and outcomes predestined by fate and the will of God), in combination with a fear of caesarean section, miscommunication, maltreatment and discrimination at the hospital level. These conceptions create an aversion to hospital care even in case of a life-threatening complication. Similar phenomena have been highlighted in other studies.<sup>13,14</sup> It would be appropriate to implement a continuing co-operation between the formal health sector, in the form of skilled birth attendants and hospital staff, and the traditional birth attendants in order to eliminate such negative attitudes. Traditional birth attendants generally have a strong influence in their community, which make them key persons in the efforts to reduce negative attitudes between hospital staff and pregnant women. A hospital staff-training program with the goals to institute standards of care and improve relationship with traditional birth attendants was shown to increase the number of referrals.<sup>15</sup> This supports the importance of the recognition of the traditional birth attendants and their work, but also the importance of a bilateral understanding, which could be established through programs also including community-based education for traditional birth attendants and families. To overcome the obstacle of aversions to hospitals, it seems necessary to take into account the beliefs and conceptions of the pregnant women, when planning a maternal health care project.

The second obstacle for referral is the unwillingness of the traditional birth attendants to recommend hospital care. The traditional birth attendants knew about maternal deaths in the region but were unwilling to tell about their own experiences, possibly in fear that they may look as they are to blame. They seemed to have a limited theoretical knowledge about possible complications but, in principle, the majority found it important to refer such cases to hospital. However, there was a discrepancy between what traditional birth attendants considered appropriate in cases of complications and the actions they implemented to handle them. This might be explained as a result of a social and economic interest on the part of the traditional birth attendant to comply with the request of the pregnant woman and thus maintain a good reputation in the community—something crucial for her profession. A possible consequence of this phenomenon could be that a negative attitude towards modern health care is perpetuated. In order to integrate the traditional birth attendants into the obstetric health system, the traditional birth attendants should be given feedback about women sent to the hospital which, through a sense of partitioning, could provide an incentive for more adequate referrals in the future. Furthermore, the economic aspect of referrals, which means fewer

home-based deliveries resulting in lower income for traditional birth attendants, needs to be addressed to succeed with the establishment of a positive co-operation between traditional birth attendants and the formal health sector.

Recent studies of the rapid decline in maternal mortality rate in Malaysia during 1950–1970 showed how increased availability and training of skilled birth attendants in combination with increased co-operation with traditional birth attendants were significant components of a very successful program.<sup>16</sup> Looking at such examples, it seems advisable to use the social acceptance of the traditional birth attendants in the communities in Guatemala and invest effort in integrating them into the obstetric health care system.

The outcome of training traditional birth attendants has been questioned by studies showing no decline in incidence of postpartum infections and little impact on health beliefs in the traditional birth attendant's work.<sup>17,18</sup> Increased risk for dangerous procedures and delays in referral caused by the extra confidence gained through training has also been an argument against training traditional birth attendants.<sup>19</sup> A study from Guatemala has however shown that training traditional birth attendants can indeed increase the number of referrals of women with obstetric complications to hospitals,<sup>20</sup> which supports the continuation of such programs until the objective of skilled birth attendance is a reality in developing countries. Studies of the efficiency of traditional birth attendant training programs have shown reductions in maternal mortality only in areas where traditional birth attendants had skilled backup support.<sup>21</sup> Thus, the education of traditional birth attendants also demands increased connections and co-operation with obstetric facilities if not to be made in vain.

## CONCLUSION

Parameters in the referral system, such as logistics and socio-economic factors, are sometimes subordinated to cultural values by the target group. An effective system of referring women to a well-equipped obstetric facility is vital to ensure safe motherhood and the traditional birth attendants will in the foreseeable future continue to have an important role in maternal health care in countries such as Guatemala. A suitable approach in maternal health care projects would be to use the qualities of the traditional birth attendants to improve bilateral respect between the pregnant women and the hospital staff. This could be done through bilateral culture-sensitive education programs for traditional birth attendants and hospital staff in order to support the role of the traditional birth attendants, decrease discrimination and increase adequate referrals to hospitals. In combination with a community-based education for pregnant women and families, where beliefs and conceptions are taken into account, this might decrease a prevalent aversion to hospital care.

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## Contributors

Birgitta Essén had the original idea for the study and is responsible for the study design. Mattias Rööst is the guarantor: he made the interviews, the first interpretation of the data, analysed, wrote and approved the final version of the paper in discussion with Birgitta Essén, Jerker Liljestrand and Sara Johnsdotter.

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