



A report of a midwifery model for training traditional midwives in Guatemala

Jennifer Foster, CNM, MPH, PhD^{a,*}, Angela Anderson, CNM, MSN^b,
Jennifer Houston, CNM, MS^b, Maya Doe-Simkins, BA, MPH^b

^a*School of Nursing, The University of Massachusetts, Arnold House 314, Amherst, MA 01003, USA*

^b*Midwives for Midwives and Women's Health international, 4^a. Avenida Norte #32, Antigua, Guatemala*

Received 3 March 2003; revised 24 June 2003; 17 November 2003; accepted 8 January 2004

KEYWORDS

Traditional midwives;
Guatemala;
TBA training;
Maternal-baby;
Mortality

Summary

Objective: to describe the specific characteristics of one model of training traditional birth attendants (TBAs) in Guatemala.

Design: participant observation, unstructured and semi-structured interviews undertaken between 1997 and 2003 to gather the data to report on the characteristics of this training programme as it is evolving in the field.

Setting: the birth centre site of Ixmucane in Antigua, Guatemala, as well as community sites in the Departments of Saquetepequez, Chimaltenango, and Quetzaltenango in the western highlands of Guatemala.

Participants: traditional midwives, certified nurse-midwives and certified professional midwives, as well as many allied health professionals and volunteers.

Intervention: training philosophy, participant selection, curriculum content, intensity, and planned follow-up are the key components of the training programme described.

Measurement and findings: 93 TBAs have received training through the development of a 150 hrs contact course for self-selected TBAs in the Midwives for Midwives Program. Formal evaluation of this training is underway but results are not yet available.

Key conclusions and implications for practice: the value of incorporating midwifery philosophy and praxis in TBA training has received scant attention in the TBA literature. This report suggests that TBA training programme characteristics are important considerations in any evaluation of training efficacy of TBAs to improve maternal–child health.

© 2004 Elsevier Ltd. All rights reserved.

Introduction

Maternal and infant mortality rates in many parts of the developing world continue to be alarmingly

high. When implementing programmes to improve maternal–baby outcomes, international public health experts must contend with limited resources and multiple priorities. An early effort in the 1970s to reduce maternal–baby mortality led by the World Health Organization (WHO) called for the integration of traditional birth attendants (TBAs) into public health-care systems. Many countries

*Corresponding author. Tel.: +1-413-545-1243; fax: +1-413-577-2550.

E-mail address: jwfoster@nursing.umass.edu (J. Foster).

developed training programmes for TBAs, and WHO has documented the potential of the TBA in improving health (Mangay-Maglacas and Simmons, 1986; WHO, 1992).

More recently, in the 1990s, resources have been refocused to improve the quality of training and equipment for personnel at referral hospitals, and to increase professional, skilled attendance at birth (Starrs, 1998). Further, the concentration of biomedical health services in major urban areas, along with the persistence of maternal and infant mortality in these areas, has shifted emphasis in resource allocation by international funding agencies and national ministries of health away from training TBAs. As public health resources are limited, the need for more knowledge about TBA training and the effect on maternal–baby outcomes has become critical.

A review of the literature presents conflicting evidence. Gloyd et al. (2001) reported that an outcome evaluation of TBA training in Mozambique did not provide compelling evidence of a reduction of delivery complications. In contrast, a study from Angola by Schaider et al. (1999) indicates a decrease in maternal mortality among women attended by trained TBAs in comparison with historical data. Bailey et al. (2002) used a quasi-experimental design to assess the effect that a training intervention for TBAs in Guatemala had on the detection of complications, referral and utilisation of services. The results of this study showed a positive effect of training on the rate, detection and referral of postpartum complications only, with a negative effect on referral rates or utilisation with antepartum or intrapartum complications. A recent meta-analysis of the effectiveness of training of TBAs has been revealing (Sibley, personal communication; Sibley and Sipe, 2002). The authors report their findings with caution because of individual study limitations, but nonetheless conclude that in the aggregate the literature on TBA training indicate significant, moderate to large improvements in TBAs' knowledge, attitudes, behaviour and advice. They also found a small but significant decrease in perinatal mortality overall and a significant drop in neonatal mortality due to birth asphyxia.

While there is a focus in the public health literature upon the outcomes of TBA training, there is little known about the philosophy, approach and acceptance of such training by the TBAs being trained. Even less is known about whether TBAs initiate the request for training or public health experts mandate the training. There is also a need for more knowledge about the characteristics and curriculum of TBA training programmes in order to

better assess their effectiveness. Such knowledge could provide comparative data about what programme characteristics produce better outcomes. Key programme characteristics would include training philosophy and methodology, the curriculum content, the training intensity, and the provision of follow-up support and continuing education of trained TBAs.

In this paper we describe these four characteristics in relation to a training programme for TBAs in Guatemala, known as Midwives for Midwives (MFM). The challenges of evaluating the effectiveness of this training are also discussed. While policy makers and public health professionals are understandably in search of the scientific evidence that midwifery training is a 'best buy,' we cannot, nor would we claim to, conclude that training traditional midwives (TMs) is a 'best buy.' Rather, we highlight the work of MFM as *an example* of the training characteristics of TBA training, an account which we believe is prerequisite to any scientific evaluation of the comparative value of training or other interventions to reduce maternal and infant mortality. The literature has shown that the characteristics of training programmes are neither homogeneous nor widely disseminated. Therefore, our purpose is to illuminate why the characteristics of training is central in the discourse about training TBAs.

The staff of MFM refer to TBAs as TMs. Traditional midwife is a term that respectfully recognises the work of these practitioners as midwifery work. The term also acknowledges the self-identify of these practitioners, while differentiating their training from a midwife who has undergone higher levels of education (such as a nurse-midwife or certified midwife). Hereafter in this paper, TBAs will be addressed as TMs. The purpose of highlighting the work of MFM with TMs is to engage with the ongoing international discourse about the efficacy of their training.

Maternal–child health in Guatemala

Guatemala is a country of almost 12 million people rich in geographic, biological, and cultural diversity. Guatemala has a large indigenous Mayan population divided into 21 separate language groups and concentrated primarily in the western highlands. The Ladino population, who are a mixture of peoples of Spanish and indigenous ancestry, make up 39–49% of the population and dominate the political and economic system (Fisher and Brown, 1996). Maternal and infant

health for indigenous Guatemalans, particularly those concentrated in the rural areas, is dramatically poorer than those of urban Ladino populations. Of the total population, 75% live in poverty, but among the indigenous population, those living in poverty total 93% (PAHO, 1999) a reflection of the widespread social inequality suffered by indigenous Guatemalans.

National maternal mortality statistics range from 248/100,000 reported by the Ministry of Public Health and Social Assistance (Hurtado and Saenz de Tejada, 2001) to 190/100,000 reported by the Pan American Health Organization (PAHO, 1999). Maternal mortality among indigenous Mayan women in certain rural areas, however, may be as high as 446/100,000 (Hurtado and Saenz de Tejada, 2001). The causes of maternal mortality in Guatemala, according to PAHO, are postpartum hemorrhage, puerperal sepsis, eclampsia, and abortion (PAHO, 1999). Infant mortality is listed at 49/1000 live births (PAHO, 1999).

The National Health System in Guatemala is made up of two large sectors, the public Ministry of Health (MOH), and IGSS, the Guatemalan social security institute. The MOH administers public health services and programmes, serving the most impoverished. The MOH absorbs approximately 40% of health-care expenditures. IGSS serves workers and their families in the formal labour sector and serves 22% of the population (PAHO, 1999). Additionally there is an extensive, loosely organised network of private clinics, hospitals, pharmacies and laboratories serving 10% of the population regularly, although most Guatemalan citizens will use private services at some time in their lives. Private providers do not have co-ordinating or regulatory links between them. As a result there is no supervision, evaluation, or control of service delivery by private providers. Continuity of care is difficult to achieve, and women go to different locations to see different providers. All the public health sectors are overloaded and understaffed, so people often wait for hours or days to be seen (Houston, 2001).

In the rural areas, TMs attend 53% of the births, whereas in urban areas, they attend 31% (PAHO, 1999). According to staff at the MOH (personal communication), there are some departments where TMs attend 75% of the births. There are approximately 20 TMs for every 10,000 Guatemalans; 70% of these TMs have received some formal training (Acevedo and Hurtado, 1997; Goldman and Glej, 2000). The MOH currently requires enrollment in an ongoing education programme for the TM to be able to obtain birth certificates for the women they attend. This programme consists of a 6 h

meeting each month where TMs are instructed how to identify risk factors, good hygiene and transfer complicated cases. The programme does not provide learning materials, equipment, continuing education, or any professional organising skills (Cerezano, personal communication). There is currently no standardised mechanism to evaluate how TMs function. TMs in Guatemala play a crucial role in the care of mothers and babies, nevertheless, because they attend approximately one half of the births in the country. Appropriate ongoing training and support, therefore, is extremely important.

Midwives for midwives and Ixmucane

The data for this descriptive report have been collected in the form of observations, notes, journal entries, informal interviews, and tape recorded semi-structured interviews of TMs, collected by both the professional staff of the MFM and members of its Advisory Board. The physical centre for MFM is Ixmucane, a privately owned and operated women's health and birth centre in Antigua Guatemala that opened in 1997. The intent of the founders of Ixmucane was to establish a birth site to model professional midwifery outside North America or Europe. Ixmucane was named after the Mayan Goddess of creation from the Mayan creation myth the PopulVul. Located in a comfortable old house in Antigua Guatemala, Ixmucane has become a place where women of many cultural backgrounds and socio-economic levels have felt welcome to come for care. Ixmucane is a full scope midwifery clinic and birth centre. It is also a centre for learning. Students, midwives and volunteers from many nations come to apprentice at Ixmucane and participate in the project. Classes with various health and wellness themes are taught at the centre. There is a lending library available for clients, facilities for viewing educational videos and a meeting place for midwives and other groups.

Early community outreach established a link between the professional midwives of Ixmucane and the TMs of the department of Saquetepquez. One of the founders, a Certified Nurse Midwife (CNM) from the United States began to attend the mandatory monthly meetings for the TMs held at the local health centre. As each of the TMs reported their births to the public health nurse, the midwife from Ixmucane noticed that many of the TMs wanted to talk in detail about their experiences but were not

given the opportunity at these meetings. The TMs were invited to come to Ixmucane to share their stories and attend a non-hierarchical support group not associated with the MOH. Eighteen Sacatepequez midwives arrived the following day. This group of TMs and Ixmucane staff went on to co-develop and pilot the curriculum for the first training in 1999. This co-operative effort led to the formation of MFM.

MFM, now the mother organisation that encompasses both Ixmucane clinic and the training programme, is a United States non-profit agency and a Guatemalan non-governmental organisation (NGO). The training programme that became the work of MFM thus began out of an identified need by the TMs who came to Ixmucane to have some ongoing professional training and support. The self-perception of midwives as a community health promoter and change agent is an important component the MFM trainings. MFM recognises that midwives must feel empowered to proactively intervene on behalf of the women and families under their care.

At the time of this writing, 93 TMs have undergone training through MFM. The first group of 18 Sacatepequez TMs completed their training in November of 2000. MFM was subsequently approached by a Guatemalan NGO, PAVA (Proyecto de Ayuda de los Vecinos del Altiplano; loosely translated as the Helping Project of the Neighbors of the Highlands). PAVA contracted with MFM to train 28 TMs from the Department of Chimaltenango; this training was completed in November 2002. The most recent training, completed in October 2003, consisted of two groups of 25 TMs each from the Department of Quetzaltenango. These groups sent representatives to MFM to negotiate for training. The TMs who have completed training attend between one to seven births each month, with an overall average of three births per month. Currently over 400 TMs from all over Guatemala have requested training from MFM and are awaiting funding.

Training philosophy and methodology

The MFM training programme is grounded in midwifery philosophy. Midwifery philosophy in this context includes the recognition and facilitation of natural processes, use of intervention only when appropriate and necessary, advocacy and education of women and their families, promotion of health care, disease prevention, and the reduction of maternal and infant mortality. The underlying framework of the midwifery model is the understanding and value of connection; the

understanding of relatedness of the body and mind, mother and baby, midwife and woman, and woman and her social context. This model is rooted in the concept of personal knowledge and power as it relates to women's capacity to birth and shares information horizontally. This framework draws relationship and relevance between the individual woman's customs, beliefs, preferences, and values about birth and her body. Midwives seek to empower the women they serve with information and respect her personal right to make decisions regarding her own health, birth and body.

MFM recognises the TM as a respected and influential figure in the community. The TM is an educator, an agent of change and technology transfer, and can facilitate the mobilisation of community resources to ensure better outcomes for mothers, babies, and their families. The TM is also uniquely situated to be a bridge between the community and emergency services. The TM thus has the ability to affect and improve the well-being of the community as a whole.

Motivated by the interest of the local TMs and in order to understand the knowledge, behaviours, and beliefs of these TMs, data were gathered by conducting semi-structured interviews with fourteen of the TMs from the Sacatepequez Department in 1999. These interviews were intended to provide background information to MFM about practices that were beneficial, neutral or harmful to the safety of mother and baby from a biomedical perspective. Just as important however, these lengthy interviews enabled the TMs to speak about their practice of midwifery in the socio-cultural context in which they worked. In many ways, the narratives of these midwives were indictments of the local implementation of the health-care system in their Department. In her classic work, *Birth in Four Cultures*, Jordan (1993) called for a purposive intent for the mutual accommodation of cultural systems. Recording these narratives was thus an attempt to understand Mayan practices according to the criteria of medical obstetrics and to understand medical obstetric practices according to the criteria of the indigenous system. The approach to training this group of midwives was informed by these narratives.

In addition to the initial interviews of the TMs, notes were kept over the course of the 3 years of biweekly support meetings at Ixmucane. These notes reveal both the ordinary and extraordinary concerns of the TMs in their work. Stories of losing a mother to a postpartum haemorrhage, the shame they felt facing members of her family in the street, and wishing they could have done something more to save her life were not uncommon. Almost

everyone had a story of disrespectful treatment when transferring women to hospitals; they were yelled at or ridiculed in front of clients and families and not allowed to accompany their client into the hospital. These accounts mark the barriers they face in their ongoing struggle to achieve access to what they need to practice safely as well as some level of respect and legitimacy for what they do.

The MFM training programme began out of an expressed desire by the TMs who came to Ixmucane to receive ongoing professional training and support. This quest for knowledge from the TMs was fostered by a relationship of collegiality with the professional midwives, a relationship characterised by respect for each others' work—a unique aspect of this training. The training was informed by the principles of adult learning and built from the knowledge base of the TMs.

Curriculum content and training intensity

MFM reviewed many sources of curriculums available to train TMs. The curriculum selected was the Hesperian Foundation's, *A Book for Midwives* (Klein, 1995). Components from the WHO IMPAC (Integrated Management of Pregnancy and Childbirth) manual (WHO, 2000) and from TM training curriculum from ASESCA (Asociacion de Servicios Comunitarios de Salud, or the Association of Community Health Services), a Guatemalan NGO, were also used. These were selected for relevant and thorough content coverage, and because they both address the underlying social causes and medical consequences of poverty.

The training team is currently led by a North American CNM. Content includes components of history taking; management of normal pregnancy, labour, and birth; identification and management of complications; baby resuscitation; good nutrition; breast-feeding information; family planning; reproductive tract infections; and sexually transmitted infections. In addition, TMs are taught how to accurately take and record vital signs and perform hand skills. Course content is delivered by lecture, by audiovisual aids, group participation and skill demonstration. Training by MFM consists of over 150 contact hours developed around the scheduling needs of the TMs. TMs are given weekly homework and tested on previous course content at every class. Upon completion of the programme, each TM gets a Hesperian guide, written course materials, a safe birth kit, gloves and other health monitoring equipment.

As many of the midwives speak a Mayan dialect as their first language and do not speak Spanish well,

training has been conducted with appropriate interpreters. Level of literacy is also an issue. All content and tests were given both in oral and written form. The TMs from the second and third courses completed a pre- and post-test interview consisting of identical open-ended questions conducted by an interviewer in the appropriate language (see Appendix A). Each midwife was also asked to evaluate her experience of the training programme.

Follow-up and ongoing support

The clinic Ixmucane is an integral piece of the MFM training programme. The TMs have an open invitation to bring women under their care to Ixmucane for co-operative prenatal care, obstetric and gynaecological consultations, and for transfer during labour when appropriate. Phone consultation is a 24h option. The biweekly support meetings continue, and the staff at Ixmucane are available to answer questions as well as to conduct workshops on requested topics. The opportunity to work with international professionals, other midwives, and volunteers from the areas of public health and anthropology, has reportedly provided TMs with the gratifying perspective that there is global concern for maternal-child health in Guatemala.

TMs trained through MFM's programme also receive professional support through advocacy and collaboration. ACAM (Asociacion Comadrona de Area Mam; translated as Association of Mam Speaking Midwives) is an organisation that recently achieved official non-profit status so that it may legally receive donations. Staff from MFM has worked with ACAM and other Guatemalan NGOs to promote unity among organisations of midwives and those concerned with midwives. The TMs currently serving as president and vice president of ACAM traveled to conferences in San Miguel de Allende, Mexico in June, 2002 and to Wakefield, Massachusetts, USA, in October, 2002 to attend the Annual Meeting of the Midwives' Alliance of North America (MANA).

Monitoring and evaluation: difficulties encountered

Recognising the need to comprehensively document the effectiveness of training, MFM developed a preliminary instrument to serve as a data collection tool, a reminder of appropriate client care and a form of monitoring and evaluating midwifery actions. This four-page instrument developed

from the curriculum content contains both text and pictorial symbols. MFM hoped that such documentation would also provide information to assist physicians in the event of women or babies being transferred to their care and serve to improve physician perception of the trained TMs. This intervention was ambitious because the TMs had never before kept records on their clients. Field testing indicated that it was too difficult for non-literate TMs to use. This tool still holds promise for use with TMs who have basic literacy in Spanish.

Discussion

There are three attributes of training that make the midwifery model used at MFM distinctive from other training models. First, TMs are respected sources of authoritative knowledge. Medical anthropologists have long documented the ways in which the export of western biomedical/obstetric knowledge devalues local forms of knowledge and perpetuates hierarchies among birth attendants (Davis-Floyd and Sargent, 1997). These hierarchies inform most training processes but are often not acknowledged. Documenting and sharing local knowledge within midwifery training both acknowledges TMs as a source for legitimate knowledge and serves as informal cultural exchange between midwives from different places.

Second, training in the midwifery model strives to create non-hierarchical relations between the trainer and the trainee and solidify the bonds between midwives from different national, educational, socioeconomic, and cultural circumstances in their common avocation. One of the selection criteria for trainers at MFM is that they be clinicians themselves, allowing for an interactional flow of information. This model demonstrates respect for difference, encourages critical thinking, and supports trust and intimacy. These characteristics are necessary to provide a learning environment conducive to the preparation of individuals to be independent, critically evaluative practitioners who intervene when appropriate and transfer care when necessary.

Third, the MFM model continues to provide support and ongoing training through contact with the professional midwives at the clinic Ixmucane. This continued relationship is an important step in the personal development of TMs as participants in a formal health-care system. Eventually TMs need to participate in the development and naming of their own values, goals and standards of care and regulation. MFM is attempting to build bridges between several different midwifery groups in

Guatemala to create unity between midwives and have one voice in public policy.

TMs are the essential connection in Guatemala between community members who need medical or obstetric care and the providers of such care. From MFM's standpoint, TMs are the agents of that connection, and with the information and encouragement provided by the MFM course, they are capable of identifying areas of concern and taking appropriate action. No matter how well trained and proactive the TM, links with essential obstetric services in the nearest available health facility are critical for emergencies. Currently MFM is attempting to strengthen those links and develop working relationships with the public health sector so that TMs may transfer women and/or babies with emergencies in a timely fashion without fear.

While the approach to training is distinctive, MFM still searches for the most effective way to evaluate its training programme. Data are recorded on all clients escorted by their TM who come to Ixmucane clinic in Antigua; in these cases maternal/baby outcomes are recorded. Discussions among staff are ongoing regarding how to systematically document improvements in practice beyond anecdotal reports by the TMs themselves. The instrument to measure the effectiveness of MFM training will continue to be refined, particularly to address reliability and validity. Future research needs to focus on evaluating the referral rates during maternal-baby complications with TMs trained from this model in comparison to controls not trained in this model.

In summary, the urgency to document the outcomes of training TMs has placed little focus on the characteristics of the training programmes. We have described the characteristics of one training programme and the challenges encountered in assessing and documenting the efficacy of that training. Training based on a midwifery model, using adult learning techniques with provisions for ongoing support offers an approach that has not been emphasised in other programmes from our literature review. We hope the MFM model is successful in improving maternal and baby outcomes in Guatemala, that the work of MFM inspires other professional and TMs to work together, and that the nature of training contributes another essential dimension in the discourse about training efficacy.

Acknowledgements

The authors gratefully acknowledge the enthusiastic labours of IXMUCANE volunteers Laura Andrews, Alexis Gilbert, and Maria Freytsis.

Appendix A. Midwives for midwives post-test/final exam

Pre-/post-test interview topic guide

Midwife's identity and characteristics

Review with her personal information: where she lives, how many years midwife, how many deliveries...
 What makes you a good midwife?
 What are the characteristics someone needs to be a good midwife?

Clinical assessment: prenatal care and pregnancy

What do you do when a pregnant woman comes to you for her first visit?
 Do you do anything different at prenatal visits since your training?

History taking

What personal information do you ask a woman when she comes for her first visit?
 Do you take a full medical history? What questions do you ask?
 (Probe: medical, surgical, menstrual, gyn, ob, family, soc/psych)
 What do you do with the answers?
 How do you encourage good communication between you and your women?
 Probe: communication problems—how to solve?
 Do you make plans ahead of time with the woman and her family in case she has serious complications or needs to transport to the hospital? What questions do you ask? Do you talk to anyone in the family about this?

Healthy behaviour and nutrition

What foods do you recommend for pregnant women?
 What are healthy foods that have:
 Iron
 Calcium
 Protein
 Folic acid
 What behaviours do you recommend to a woman to maintain good general health during pregnancy? (hygiene, rest, clean water, avoid contamination, wash food)

Reproductive anatomy and physiology

Do you have a good understanding of the parts of a woman's body?
 If a woman wants to know about her menstrual cycle what do you tell her?

Probe: what's a normal cycle like
 First and last day
 When is she fertile, ovulating?

Prenatal examination

How do you know when a woman is pregnant? What questions do you ask her?
 How do you assess her due date?
 When are you concerned about a woman's weight gain?
 Do you determine the position of the baby?
 What positions are there?
 What do you do if the baby is malpositioned? (Do you turn it? When is it a problem? When is it okay?)
 How do you examine the mother?
 Probe: weight, blood pressure, fetal position, uterine growth, (want to see uterine growth at each visit?)
 Lab tests: ever done and why?
 What are some common complaints during pregnancy? Which ones are normal/serious?
 What do you recommend if she complains of:
 Nausea or vomiting
 Pain with elimination
 Mood changes, nightmares, sexual feelings and fears
 Varicose veins
 Thick, white fluid (when is this abnormal?)
 Sore breasts
 Small contractions during first 3 months
 Any other complications that can occur? What have you seen? What did you do?

Labour and delivery

How do you prepare for labour?
 Tell me everything you do when you arrive at a labour
 Probe: what questions do you ask, advice do you give?
 What is important to know about the mother, about the baby?
 How do you know when labour starts?
 How do you determine if it is a real vs. false labour?
 What are natural ways you maintain a normal birth?
 Do you remember the step-by-step method of problem solving discussed in the training?
 When you have a problem in labour how do you solve it?
 How do you prepare for a delivery?
 How do you know baby is ready to be delivered?
 What are the labour positions most women use?
 What do you recommend?
 Explain what you do when deliver the placenta?

Probe: signs to deliver
 Normal vs. too much time
 Examine it? Why?
 Normal vs. too much blood
 Action if it doesn't come

Labour complications

At what point is labour considered too long?
 What are the signs of some complications during labour?
 Probe for experiences/actions...
 (Probe: prematurity, fetal distress, meconium during labour, bleeding during labour, prolonged labour, stuck baby (shoulder dystocia), breech, twins, retained placenta, too much bleeding after birth, incomplete placenta, vaginal/perineal tears, postpartum infection)
 What do you do if a complication is very serious?
 Specifics:
 PPH
 Tear
 Retained placenta
 What are the signs that a baby is healthy when it is born?
 What do you do if the baby does not cry? Isn't breathing?

Postpartum

What happens after the birth?
 How long do you stay?
 What info do you give the mother? Give the family?
 How often do you make visits? Do you do exams?
 Explain.

Breast feeding/lactation

Do most women nurse?
 What are the advantages of breast feeding?
 What advice do you give about breast feeding?
 How do you stimulate milk production?
 Any problems women have nursing? How do you help?
 How long do you recommend they nurse?
 What are the signs of a breast infection?

STIs and family planning

What is your experience with women with STIs?
 Probe: what are the most common STIs that you see?
 How do you treat STIs?
 Do you provide family planning for the women?
 What methods do you teach?
 Modern vs. traditional methods?

Community empowerment

What are some of the reasons women die in childbirth/pregnancy? Do you know how many women die out of every 1000 births?
 What are some of the resources available in your community? How do you use them? Any resources that you don't use? Why not? (probe for positive/negative. Experiences)
 Transfer or referrals: since you've completed the training, what types of things have your referred women for? Was the care/attention received helpful?
 How do you think care from hospitals could be improved?

MFM training

- How has the training made you a better midwife?
 - What did you learn from the training?
 - What did you: like/ not like using/not using?
 - What things are you doing that you didn't do before the training?
 - Before the MFM training, did you participate in training held by Centro de Salud? (If yes): How was this training different from that you received at Ixmucane?
 - Did you attend all the classes?
- Do you come to the follow-up meetings (why? what do you learn there? Do you think they are important)
 Do you think it is important to have meetings with other comadronas apart from the MOH meetings?

Basic concepts

Now I'd like to talk about some of the things you learned in the training...
 Do you remember the difference between traditional and modern methods?
 How do you recognise if a method is beneficial, harmful or without effect?
 Can you tell me about a beneficial modern method? (harmful)
 A beneficial traditional method? (harmful)

General satisfaction

What do you have to say overall about the training you received at Ixmucane?
 Any changes you would make?
 What was the most important thing you learned?
 What do you want to learn more about? Any suggestions for topics at future training.

References

- Acevedo, D., Hurtado, E., 1997. Midwives and formal providers in prenatal, delivery and post-partum care in four communities in rural Guatemala: complementarity or conflict? In: Pebley, A., Rosero-Bixby, L. (Eds.), *Demographic Diversity and Change in the Central American Isthmus*. Rand, Washington, DC.
- Bailey, P., Szaszdi, J., Glover, L., 2002. Obstetric complications: does training traditional birth attendants make a difference? *Pan American Journal of Public Health* 11, 15–23.
- Davis-Floyd, R., Sargent, C. (Eds.), 1997. *Childbirth and Authoritative Knowledge: Cross-Cultural Perspectives*. University of California Press, Berkeley.
- Fisher, E., Brown, R.M., 1996. *Maya Cultural Activism in Guatemala*. University of Texas Press, Austin.
- Gloyd, S., Floriano, F., Seunda, M., et al., 2001. Impact of a traditional birth attendant training in Mozambique: a controlled study. *Journal of Midwifery and Women's Health* 46, 210–216.
- Goldman, N., Gleib, D., 2000. *Evaluation of Midwifery Care: A Case Study of Rural Guatemala*. Carolina Population Center, University of North Carolina, Chapel Hill, NC.
- Houston, J., 2001. *Final report: midwives for midwives*. Berhorst Partners for Development, Antigua, Guatemala.
- Hurtado, E., Saenz de Tejada, E., 2001. In: Huber, B., Sanstrom, A. (Eds.), *Relations Between Government Health Workers and Traditional Midwives in Guatemala*. University of Texas Press, Austin.
- Jordan, B., 1993. *Birth in Four Cultures: A Cross-Cultural Investigation of Childbirth in Yucatan, Holland, Sweden, and the United States*. Waveland Press, Prospect Heights, IL.
- Klein, S., 1995. *A Book for Midwives*. The Hesperian Foundation, Berkeley.
- Mangay-Maglacas, A., Simmons, J., 1986. *The potential of the traditional birth attendant*. WHO Offset Publication No. 95.
- Pan American Health Organization, 1999. *Country chapter summary from Health in the Americas for Guatemala*. <http://www.paho.org/English/SHA>. Last accessed October 23, 2003.
- Schaider, J., Ngonyani, S., Tomlin, S., et al., 1999. International maternal mortality reduction: outcome of traditional birth attendant education and intervention in Angola. *Journal of Medical Systems* 23 (2), 99–105.
- Sibley, L.M., Sipe, T., 2002. *Traditional birth attendant training effectiveness: a meta-analysis*. Technical Report given to Agency for International Development, September 2002.
- Starrs, A., 1998. *The safe motherhood action agenda: priorities for the next decade*. Report of the Safe Motherhood Technical Consultation 18–23 October 1997, Colombo Sri Lanka, Family Care International and the Interagency Group for Safe Motherhood, New York.
- World Health Organization, 1992. *Traditional Birth Attendants: A Joint WHO/UNICEF/UNFPA Statement*. World Health Organization, Geneva.
- World Health Organization, 2000. *IMPAC (Integrated Management on Pregnancy and Childbirth) Managing Complications in Pregnancy and Childbirth Handbook*. WHO, Geneva.

Available online at www.sciencedirect.com

