

MIDWIVES FOR MIDWIVES IN GUATEMALA: WEAVING TRADITIONAL AND PROFESSIONAL MIDWIFERY

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I always felt welcome at IXMUCANÉ. I convinced many women who don't trust health services that IXMUCANÉ was different.... a safe haven (Guatemalan traditional midwife)

Introduction

In her seminal work, *Birth in Four Cultures*, Bridget Jordan articulated a concept of “fruitful accommodation”, where practitioners attending births apply the best of knowledge produced within the western scientific paradigm of contemporary obstetrics with the intuitive and cultural knowledge learned through the experience of birthing women through generations (Jordan [1978] 1993:136). Many midwives educated in both paradigms long to practice in such a place, an environment where both effective scientific and non-harmful indigenous practices co-exist (Sesia 1997) and where the most appropriate interventions from both paradigms are offered.

In the primary Mayan text, the Popul Vuh, Ixmucané is the grandmother of all Mayans and the entire human race. She is the feminine goddess, the midwife, the matchmaker and a protector of her people (Goetz, Morley and Recinos, 1950). Named in her honor, the Ixmucané Birth and Women's Health Center (*Ixmucané Centro de Parto y Salud de la Mujer* in Spanish), was opened

in 1997 in Antigua, Guatemala. Ixmucané was established as a free standing birth center in Guatemala, based on the midwifery model of care.

This chapter describes the history of Ixmucané Birth Center and Midwives for Midwives (MFM), a US-registered non-governmental organization (NGO) based in Antigua founded in 2000 by two professionally trained midwives. The Ixmucané birth center developed not only into a holistic, women's health and birthing center, but also became a resource center for local indigenous (Mayan) Guatemalan midwives. MFM was founded to promote and advocate for professional midwifery in Guatemala and to provide training and continuing education for the local midwives. Its board members are predominantly professional midwives and health professionals who have specialties in medicine, international public health, and anthropology.

In 2001, MFM created a counterpart organization, the Ixmucané Association (IA). IA is an NGO registered in Guatemala, and its board members are primarily Guatemalan nationals. Currently MFM is mentoring IA, anticipating over time that IA will assume most of the responsibilities and activities that MFM is currently implementing. Both organizations are focused today on refining and testing its training program for traditional midwives. MFM and IA are working in collaboration with the Ministry of Health (MOH) to develop a national training curriculum for the traditional midwives based on MFM's curriculum and training program. At the time of this writing, the most recent version of the curriculum – which features both a clinical component and preceptorship- is being field tested in Solola, a large indigenous in the western highlands.

This chapter describes this current training program by MFM, its experience to date, and its future direction. Presently, MFM conducts the most comprehensive training available to indigenous midwives in Guatemala: its goal is to improve the knowledge and skills of those who attend births in low resource communities. MFM works closely with both private and public institutions, including the MOH, to re-introduce and advance the professional midwifery model in Guatemala, to advocate for the inclusion of midwifery into the formal health system, and to provide training to the existing cadre of traditional midwives. The midwife founders desired to create an environment where contemporary professional midwifery would be informed by the experience of traditional midwives, where midwives would be encouraged to keep birth both safe and sacred, and where the cultural knowledge of these indigenous practitioners would be respected.

A point of clarification is warranted here about the nuances in the language of midwifery: the Guatemalan midwives that exist today are categorized in official WHO discourse as traditional birth attendants, or TBAs (WHO 1992). The acronym TBA is a category the professional midwives of MFM have declined to adopt, because they understand it as a term to de facto diminish the role and significance of these indigenous practitioners. Additionally, the Guatemalan practitioners self-identify as midwives (*comadronas* in Spanish). The word midwife in old English means “with woman”, referring to the way women have accompanied women through childbirth. In this chapter, we refer to the indigenous Guatemalan practitioners who attend births as traditional midwives, or

TMs, to distinguish them from the professional midwives, who have had formal education in western biomedical science and licensure in their respective countries either as certified nurse-midwives or certified professional midwives, categorized by WHO as skilled birth attendants (WHO 1998).

In her study of childbirth in South India, Cecilia Van Hollen has noted health practitioners tend to locate the cause of the problems of maternal and infant mortality among the people where poor health outcomes are most heavily concentrated—among the indigenous—who are seen as bearers of tradition and ignorance. The professional midwives of MFM, however, are philosophically positioned with women's and indigenous rights activists who view these poor outcomes as a result of discriminatory practice and inequality in the provision of health services for the poor (Van Hollen 2003). MFM's approach intentionally addresses issues such as access to health care, gender-based violence and abuse, and racial discrimination. MFM also focuses on decreasing medical barriers that limit access to quality midwifery care in the social and geopolitical context of Guatemala.

This chapter will explore this focus by detailing how the professional midwives associated with MFM demonstrate their approach in this context, their experience in training traditional midwives, and the outcome of these efforts in addressing the need for skilled birth attendants in Guatemala. Less than half of the births (41 percent) are attended by skilled birth attendants (Franco de Méndez 2003).

The Context for Midwifery Practice in Guatemala

The traditional midwives of Guatemala exist and work in a country where the maternal and infant mortality rates rank among the highest in the western hemisphere. The maternal mortality rate is estimated to be 270 (per 100,000 live births per year) and the infant mortality rate is estimated to be 39 (per 1,000 live births) (Franco de Méndez 2003). Guatemala's population today is 12.7 million, but it is expected to double by 2050. Its total fertility rate (the average number of children born to a woman during her lifetime) is 4.4, and the contraceptive prevalence rate is 34 percent, with an unmet need for family planning of 23 percent. While these statistics demonstrate a great need for health improvements among the general Guatemalan population, the situation among the indigenous Mayan population is worse.

Guatemala consists of two main cultural groups: the Ladinos, who make up slightly more than half of the population who are of Spanish and Mayan descent, and the indigenous Mayans. Among the indigenous, there are 21 languages spoken (Fisher and Brown 1996; Nelson 1999). The Ladinos dominate the country's economic and political system, and are in the aggregate wealthier and better educated. Compared to the indigenous, they are also more likely to dwell in urban areas.

Indigenous Mayan women live in precarious conditions. Their maternal mortality rate is three times the rate of Ladino counterparts (Baseline Maternal Mortality Study, Ministerio de Salud Publica y Asistencia Social 2000) and only

17 percent of their births are attended by a skilled birth attendant, compared to 41 percent among the Ladinos (Instituto Nacional de Estadística 1995).

They are more likely to be non-literate, malnourished, live in rural areas, and have poor access to health services. While 65 percent of the Guatemalan population lives in rural areas—and a higher percentage of these are indigenous— most health providers in Guatemala are concentrated in urban areas. Only 20 percent of the physicians and 40 percent of the nurses serve in rural areas (PAHO 2002). Traditional midwives are estimated to attend 30 percent of births in urban areas and between 50 percent and 75 percent of the births in rural areas, where they are often the only providers available (PAHO 1999; personal communication MOH 2004).

Over half of the maternal deaths in Guatemala are due to excessive bleeding. Others are due to infections, pregnancy-induced hypertension, and unsafe abortion. The majority of maternal deaths occur at home, where the majority of women give birth (Ministerio de Salud Pública y Asistencia Social 2003).

Ixmucané and Support to Local Midwives

The Ixmucané Birth and Women's Center ("Ixmucané") was founded by two midwives, one from Europe and the other from the United States, to demonstrate a model for midwifery in Guatemala. Soon after it opened, Ixmucané became known among the local indigenous midwives living around

Antigua as a place that they could receive support and practical information that related to their work. One of Ixmucané's founders—a certified nurse-midwife from the United States—became interested in the work of the local traditional midwives and invited them to meet at the clinic. The initial informal, somewhat sporadic gatherings evolved into a regular bi-weekly support group for the traditional midwives, where information and experiences were exchanged in a supportive, non-threatening environment. Over time, trust was built between the traditional midwives and the professional midwives, and the local midwives expressed the desire to receive training to serve the women in their communities more effectively.

Most of the Mayan midwives first associated with Ixmucané had attended births in their communities for a decade or more, and had received limited training through the Ministry of Health (MOH). Guatemala once had a midwifery school in the 1970s, but it existed for only five years and closed its doors during a tumultuous period in Guatemala's history (Miriam Portillo and Aura Amesquita, personal communication February 18, 2005). The training of traditional midwives today by the MOH today is limited to monthly educational sessions that focus on a few key topics: the importance of good hygiene and hand washing, danger signs during pregnancy, and making referrals [to local hospitals] (Carmen Cerezano, personal communication October 2002). Regular attendance at these meetings is required in order for the traditional midwives to obtain birth certificates for their clients. These monthly sessions do not provide training in

practical skills, nor are the midwives provided with educational materials and training to help them educate women in their communities.

To better understand the kind of continuing education the traditional midwives were receiving, the professional midwife from the United States started to attend the sessions along side her Guatemalan counterparts. Through her observations, she found that these monthly sessions—led by a nurse from the MOH—did little to empower the local midwives or provide them with practical knowledge that could help them in their work in their communities. The MOH nurse in charge of the session did not acknowledge the difficult and challenging environments in which the local midwives work. In general, the midwives felt chastised and even shamed as they related their stories.

Whenever we need to bring our patients to the hospital the doctors and nurses treat us badly. They tell us it is our fault when women have complications. We try and persuade the family to go to the hospital when there are problems but they don't want to go. I also don't like it when they treat us and our patients badly. I have seen them do many bad things to my patients (traditional midwife from Saquetepequez).

After observing a few of these sessions, the professional midwives at Ixmucané offered to start a support group for the local traditional midwives. The initial support group consisted of a group of 18 traditional midwives from the area surrounding Antigua, located in the Department of Sacatepequez. The meetings consisted of sharing experiences of attending births in their villages. They shared information about their practices, including the use of traditional remedies that could help women during labor and after birth. They shared stories about when women had trouble giving birth, including their attempts to help them and to navigate the Guatemalan health system on behalf of their clients. The midwives

were eager to learn more about midwifery to better serve their clients during times of their greatest need.

Out of this expressed need for education and training, the professional midwives at Ixmucané started to share information about good birthing practices they had learned. The birth center's large comfortable waiting room was transformed after clinic hours into a learning center, equipped with a library, pelvic models and videos on midwifery practice. The traditional midwives were permitted, and eventually actively encouraged, to bring their clients to Ixmucané to attend their births with the guidance and collaboration of the professional midwives.

[INSERT PHOTO OF TRADITIONAL MIDWIVES IN LIVING ROOM DURING CLASSES]

Based upon the positive experiences of the shared learning sessions and collaborative births attendances, the founder realized that a more systematic training for the traditional midwives was needed and warranted. Under the auspices of Ixmucané and later Midwives for Midwives, she initiated a formal training program, designing it in collaboration with the traditional midwives of Sacatepequez. The first cohort, whose participants were the traditional midwives associated with the support group at Ixmucané, completed its training in November 2000.

Ixmucané Clinical and Educational Services

The Ixmucané Birth and Women's Center was located in a beautiful two-story Spanish-style colonial house with a courtyard in the cobbled-stoned old section of Antigua, about a five-minute walk from the central square. The site featured a reception area, a large comfortable high-ceiling waiting room that doubled as a meeting room after clinic hours, an exam room with a nearby bathroom, a birthing room, a kitchen and a garden and courtyard. Several rooms on the upper floor housed Ixmucané/MFM staff as well as short-term volunteers and guests.

Ixmucané was the clinical site for the provision of midwifery and women's services to the community surrounding Antigua, which included Guatemala City, about one hour away by car. Staff and volunteers offered educational classes to the community on topics such as childbirth, women's health, and sexuality. Ixmucané also served as the site where local traditional midwives were encouraged to bring their clients for cooperative prenatal care, as well as obstetric and gynecology consults. Ixmucané/MFM's open door policy allowed the traditional midwives to bring their clients at any time for emergency services or a second opinion. In addition, the traditional midwives were offered support, camaraderie, and often, the replenishment of basic birthing supplies. The local midwives were always permitted to remain with their clients, and encouraged to continue to participate in the care provided for them. Every birth provided a unique teaching opportunity, where good birthing management could be observed and skills applied. Ixmucané provided an environment not only for

respectful interface and exchange of ideas, but also for hands-on education for the traditional midwives.

[INSERT PHOTO OF TM WITH CLIENT IN BREECH DELIVERY AT IXMUCANE]

Ixmucané's physical environment was conducive to keeping birth both safe and sacred. The clinic exam area was equipped to conduct prenatal, family planning and gynecological assessments. The birthing rooms were equipped with a double bed with a hand-made quilt, a wicker cradle, and a large comfortable chair. Equipment and supplies necessary for support during labor, including oxytocic medications, intravenous solutions, oxygen, and neonatal resuscitation equipment were available 24 hours per day. The courtyard and garden were enjoyed by the women during labor, and by their family and caregivers while awaiting birth. The families would often share meals with the midwifery staff in the large kitchen located off the courtyard. Typically, women who gave birth at Ixmucané stayed one or sometimes two days following birth, and family members were welcome to stay overnight in the guest bedroom adjoining the birthing room.

In addition to serving both the women of the Antigua area and the traditional midwives, the Ixmucané clinic, under the auspices of MFM, also served as a clinical rotation site for professional midwifery students from North American universities including Yale, University of Michigan, and Marquette. Graduate students from other disciplines, including public health, anthropology, and women's studies, also arrived at Ixmucané to study and volunteer their

services as interns. In 2004, MFM was able to recruit a public health professional trained in epidemiology and international health to improve MFM's capacity to monitor the progress of, and to evaluate, its training program.Practice Outcomes at Ixmucané Birth Center

The clinical services at Ixmucané were provided by professional midwives trained in North America and Europe. They worked in Guatemala under the auspices of Ixmucané Association (IA), the Guatemala NGO that was created by the founders of MFM to allow the midwives practicing at Ixmucané to do so under the legal authority of the Guatemalan government.

The birth outcomes at Ixmucané reflect the high quality of care afforded by professional midwifery and are consistent with the outcomes recommended for both mothers and babies in the Mother-Friendly Childbirth Initiative (The Coalition for Improving Maternity Services 2002). At its busiest, the center conducted approximately 30 prenatal and 25 primary or gynecological visits per week.

An audit of the Ixmucané birth records reveals that out of 261 births that were attended at Ixmucané between 1997 and 2004—including eleven vaginal breech deliveries—there were no maternal deaths. The women giving birth were between 16 and 41 years old, and about one quarter of these were clients of traditional midwives.

Ixmucané's record is rather remarkable given that the client population of Ixmucané included many indigenous women with little economic means, and a substantial proportion of clients of the traditional midwives, most of whom lived in marginalized communities outside the relative wealth and comfort of Antigua.

For the most part, the women from these villages had experienced poor access to health services throughout their lives and were more likely to be malnourished with intestinal parasites. Anemia among malnourished pregnant women – common in Guatemala -is a strong risk factor for postpartum hemorrhage.

Out of the 261 births attended at Ixmucané, there were two neonatal deaths. Both of these neonates had normal fetal heart rates that were closely monitored during labor, but had very poor Apgar scores following birth. Neither infant responded to vigorous resuscitation efforts, raising the possibility of cardiac anomaly. In both cases, autopsy was offered and encouraged, but the families declined to have it performed.

The promotion and use of both food and drink during labor and postpartum; ambulation during labor; the use of upright positions, including squatting during birth; and the use of comfort measures, such as massage and acupressure were normal practice at Ixmucané. Intravenous fluids and oxytocin for labor augmentation were used by only if warranted in the judgment of the professional midwives. The midwives on staff at Ixmucané were trained to perform vacuum assisted birth when necessary: this was required only four times in seven years.

In addition to the above measures, clients were offered the option of a water birth, using Ixmucané's large water-jet lined tub. One of the founding professional midwives was also a herbalist, so that herbal tinctures, the majority of which were made at Ixmucané, were also offered.

Although Ixmucané was equipped to manage normal births and offered basic emergency obstetrical care, it was not equipped to perform Cesarean sections, or to administer blood products. For the purpose of providing quality comprehensive services and continuity of care, the midwifery staff at Ixmucané developed the links necessary to refer to other public and private medical services in the area.

The midwives at Ixmucané established contacts and built relationships and agreements with local facilities and obstetricians. When appropriate, clients were transferred to private facilities by private car or taxi (rarely by ambulance) under the direction and care of the physician. Clients unable to afford a private car or taxi were usually accompanied and transported by the Ixmucané midwife to the local public hospital. Once a client was transferred to a public hospital, neither the traditional midwives nor the professional midwives from Ixmucané were allowed to remain with their clients, although the Ixmucané midwives would provide a report to the receiving medical team of the events leading up to the decision to transfer.

The overall transfer rate of Ixmucané for clients in labor was 10.3 percent. The primary reasons for transfer included failure to progress in labor or fetal malpresentation. Nearly every transfer resulted in a Cesarean section.

Due to Ixmucané's unique position as a transfer center for the clients of the traditional midwives, the caseload at Ixmucané included a high percentage of primigravidas (women having their first baby), women attempting a vaginal birth after Cesarean section (VBAC), and women presenting after prolonged labor and

/or rupture of amniotic fluid. Despite the disproportionate number of women with these conditions, the outcomes at Ixmucané were excellent. Overall, the Cesarean section rate of births managed by Ixmucané midwives was 9.6 percent and the VBAC rate achieved was 75 percent.

The current regulations set by the Minister of Health in Sacatepequez prohibits traditional midwives from attending home births for primigravidas and women attempting VBAC. Allowing traditional midwives to refer their clients to Ixmucané gave them a rare opportunity to see the range of variation in normal births—including first births and successful VBACs—and to participate in the continued care of their clients.

MFM's Training Program for Traditional Midwives

As of late 2004, MFM has trained 169 traditional midwives distributed in four cohorts located in four different Departments in the Guatemalan highlands (Sacatepequez, Chimaltenago, Quetzaltenango, and Huehuetenango). A fifth cohort with 70 students from the Departments of Solola and Totonicapán is scheduled to graduate in June 2005. (See Table 1 for an overview of the training cohorts, including names and location of the cohorts, dates, number of sessions, and number of trainees who started and completed the training).

MFM's training program for traditional midwives has evolved since its first offering to the traditional midwives living in the environs of Antigua in 2000. The course content, duration, and number of sessions have changed in response to feedback received through course evaluations, and based upon the experience

and recommendations of the trainers. Adjustments in the course offering are also made to match the needs and abilities of the cohorts groups.

MFM's training program draws inspiration from the teaching approaches and philosophy that was first described in David Werner's book *Where There is No Doctor* (1977) and the later *Helping Health Workers Learn* (1982), both published by the Hesperian Foundation. The Hesperian books explicitly recognize that empowerment comes through education, and that learning can be both transformational and liberating. The Spanish edition of another Hesperian publication, *A Book for Midwives*, (Klein 1995), is MFM's training course textbook. *A Book for Midwives* is one of the most complete yet simply written resources for midwives available, and it is more comprehensive than any materials provided by any other training program for traditional midwives in Guatemala.

In addition to the Hesperian books, the course also draws on other important sources, including the authoritative IMPAC (Integrated Management of Pregnancy and Childbirth) manual (WHO 2000), and materials developed by a Guatemalan organization known as ASESCA (Asociacion de Servicios Comunitarios de Salud), a non-governmental organization that has been providing education to traditional midwives for many years. In developing its curriculum, MFM reviewed other training manuals and guides developed for community health workers, health educators, and traditional birth attendants (TBAs) that have been published by various Ministries of Health in Latin America

(Guatemala, El Salvador, Nicaragua, Peru), and by other organizations, including the World Health Association, UNICEF, and other NGOs (including CARE/ Peru).

MFM's course is taught by a team consisting of professional midwives, a Guatemalan national master trainer, and a traditional midwife who is a graduate of the course. The course consists of 27 one-day sessions that are conducted once each week. The program uses adult learning methodologies and techniques, which emphasize participatory interaction, reinforcement of key messages, and practical application. Learning formats include mini lecture, discussion, role play, live model demonstration (with pregnant clients if available), hand-on skills lab for developing physical assessment techniques, and small group work involving case studies and problem solving. To accommodate non-Spanish speakers, translators are hired when necessary to assist speakers of Mayan dialects.

The main foci of MFM's training course can be roughly divided into three areas:

1. Assessment and care of the pregnant woman and newborn, covering basic reproductive anatomy and physiology; healthy behaviors and nutrition; prenatal examination; history taking; estimating gestational age and expected date of birth; initiation of breastfeeding; and postpartum evaluation of the mother and baby.
2. Technical skills including taking vital signs; measuring uterine fundal height; palpating for fetal position and presentation; auscultating fetal heart tones; sterilizing birth kit equipment, and neonatal resuscitation.

3. Critical thinking skills including management of normal labor and birth; assessment and timely identification of danger signs and potential complications; prudent and judicious use of technology; and strategies for ensuring emergency transportation and transfer.

In Guatemala, no prior training program for the traditional midwives has ever existed that is based on the midwifery model, which focuses on keeping birth normal, safe and sacred. The model features a deep respect for women and their families, the right for women to be participants in the decision making process; and providing skilled and humane care during pregnancy, childbirth, and postpartum. The model also includes respect for the body's ability to birth normally when properly nourished, hydrated and supported, such that medical intervention is imposed only when required, not as a routine. The course also trains the participants to recognize when a birth or the birth process deviates from normal, as well as how to initiate an immediate referral if danger sign(s) are observed. This ideology of limited intervention in normal cases with concomitant vigilance for deviations from normal is what Holly Powell Kennedy (this volume) has coined the art of midwifery, or “the art of doing nothing well” (Powell 2000).

MFM's program for traditional midwives emphasizes not only quality midwifery care, but also, in the Hesperian tradition, invites the midwives to reflect on the political-economic forces that impact their practice and the health of the women who live in their communities. Topics such as social inequality are discussed in the context of contemporary life in Guatemala. Reflections on social justice include implications for the work of the midwives, specifically in

advocating for better support (including education and consultation) from the MOH and more effective integration into the existing health system.

MFM's approach to women's health is rights-based, and thus MFM's training course also addresses social issues such as sexism, including violence against women (spanning domestic violence and sexual exploitation) and the consequences of a lack of education for girls.

MFM's Training Program: Lessons Learned to Date

Beginning with its first training cohort, MFM recognized the need to monitor, evaluate, document and publish its activities. The primary reason was to improve the effectiveness MFM's training program, while the secondary reason was to contribute to the national and international debate about the role and effectiveness of traditional birth attendants (TBAs) (Foster, Anderson, Houston, Doe-Simkins 2004).

At the end of the training of the first cohort of traditional midwives, participants were required to take a final exam and asked to complete a course evaluation. As the course evolved, the final exam was modified, and supplementary tools were developed to monitor the progress of the participants and evaluate the training program.

The instruments and tools currently underway to provide feedback and to evaluate the training program include the following:

- Pre-course Interview to gather demographic information, review the candidates experience in attending births, and evaluate literacy status and Spanish language comprehension;

- Pre- and Post-course Knowledge Assessment to measure change in knowledge before and after the course;
- Weekly Quiz to monitor comprehension of course content;
- Weekly Class Evaluation facilitated by the trainers to help assess relevance, usefulness, and comprehension of material covered and to also provide the trainers with an insight on what the participants liked, what they had trouble with, and what they would like to review again.
- Final Exam, which consists of a written and clinical part used to assess comprehension of course content and mastery of selected clinical skills. The final exam is organized by topic, and participants must obtain a written score of 70% or higher to pass. Clinical skills are assessed using a checklist and are scored as pass/fail.
- Weekly Reports written by the trainers to document what worked well (or not) in the training session, and what aspects that needed improvement. Based upon these notes, recommendations are made to improve the course content, alter the time spent on various topic(s), add or omit certain topics or activities.

In late 2004, MFM hired an epidemiologist specializing in monitoring and evaluation to review all of the data collected since the beginning of the training program. Although some of the data had already been cleaned, entered and analyzed in the past, the recent assessment provided MFM staff, board members and other stakeholders a comprehensive report of MFM's training program,

which included details about what aspects of the training program were successful, what areas needed improvement, and what conclusions could be drawn based upon existing data.

The epidemiologist found a range in the quality of data collected, in part due to methodology, but also due to the difficulties associated with collecting data from the traditional midwives whose education had not previously included the practice of critical thinking and taking written tests. A comparison of the training cohorts to confirm the continuing improvements in the quality of MFM's trainings has been challenging because the participants (both within and among cohorts) have differed widely in average age, literacy level and experience in attending births. In addition, there has been a trend over time to admit more and more participants who are Spanish literate.

To help determine whether the training could show a positive change in knowledge about basic midwifery concepts, a matched-pair analysis was conducted on a sub-set of questions contained in both the pre- and posttests. A statistically significant positive change in knowledge (at $\alpha=0.05$ level) was identified in approximately half of the questions analyzed. There is reason to believe that if the number of participants (sample size) had been higher, the number of questions showing statistically significant change would also have been higher.

Feedback from the traditional midwives themselves about the course suggests that they highly value the training they receive, and that they are

extremely pleased to have the opportunity to strengthen their knowledge and skills.

One of the lessons learned from analyzing MFM's data is that participants who are Spanish literate are much more likely to complete the course and graduate from the training program. They also tend to score higher on tests measuring a change in knowledge. Based upon this information, MFM made the difficult decision to limit course participation to those who are able to speak and read in Spanish, as the resources for training traditional midwives is very limited and the demand for MFM training among indigenous midwives is very high. Although the decision to make this change was difficult, the trainers feel that it is ultimately more important to train fewer midwives well than large numbers who may not succeed.

Starting with the second cohort, the required skills that needed to be demonstrated and assessed in the skills laboratory included taking blood pressures, auscultating for fetal heart tones, and neonatal resuscitation. However, it was clear to MFM that the training program must incorporate more opportunities for the trainees to learn and practice midwifery skills under the guidance of preceptors in a clinical setting. MFM's program is currently addressing this issue by adding a stronger clinical component and providing supervised in-hospital clinical rotations.

MFM is committed to improving its evaluation of its training program. The epidemiologist who wrote the recent comprehensive monitoring and evaluation

report for MFM also provided training to MFM's Antigua staff in data entry and analysis for the ongoing assessment of MFM's training program.

Future Directions for MFM's Training Program

By 2004 MFM's training program had become established in Guatemala particularly to other local NGOs, local health facilities, and the Ministry of Health. In that year, the MOH approached MFM with an interest in developing and piloting a national curricula for traditional midwives that would include a clinical component. This request by the MOH signified a major first step on the part of the Government of Guatemala in acknowledging the contribution of midwifery and the potential of including trained traditional midwives as part of the health team that routinely takes care of women giving birth in facilities. The MOH invited MFM to conduct a training in the Department of Solola, where MFM already had an existing relationship with the Medical Director of the Solola Hospital—the main public hospital in the Department.

The cohort currently being trained in Solola, scheduled to graduate in June 2005, includes 37 traditional midwives that live in the region around Lake Atitlan. In addition to attending a 27 classroom sessions, this group will participate in ten clinical sessions inside the Solola Hospital, where they will work in collaboration with hospital staff and be supervised by MFM's training team of professional midwives. The clinical component will provide a practical “hands on” clinical experience, as well as provide a unique opportunity for the traditional

midwives to receive clinical supervision from professional midwives in a hospital—the first time this has ever happened in Guatemala.

MFM is working closely with the administrative and health staff at the Solola hospital to orient the staff to MFM's training program, and to raise the awareness of the potential role of midwifery within the hospital setting. MFM's Executive Director, a midwife, and a member of MFM's Executive Board, an obstetrician-gynecologist, have worked on health teams where midwives and physicians collaborate for many years. During the orientation between MFM and the administrative and health staff of the Solola hospital, this midwife-physician team provided illustrative examples of how a health team, informed by the midwifery model, can provide the most appropriate care for women during labor and childbirth. The MFM training staff is also working closely with the nurses and doctors at Solola hospital so that they understand the role and responsibilities of the trainees and the professional midwives training them.

The future of the collaboration between MFM and the MOH and other stakeholders depends on the outcomes of this pilot training, the quality of the collaboration and relationships among the parties involved, and the availability of funding on the part of the MOH and other donors to sustain the service.

Traditional midwives are the bridge between the culture of the indigenous pregnant woman in a rural village and the formal health system in Guatemala. The admission and inclusion of the trained traditional midwives into the hospital setting in Guatemala may be a factor in improving the rate of referrals in case of complications at birth and also in the timeliness of those referrals. Non-literate

women from rural villages may be more willing to enter the health system in Guatemala if they are accompanied by a fellow villager, especially if that person is able to translate both across cultures and across the language barriers. The local midwives speak the local languages, understand Mayan culture, and are best equipped to assist their clients by remaining with them throughout their journey into the health system when they are at their most vulnerable.

The goal of both MFM and the MOH is to develop a cadre of skilled birth attendants, as defined by WHO (1998). MFM's training for traditional midwives is striving toward that goal, but needs additional resources and commitment from other partners, including the Government of Guatemala, to achieve it.

Sustainability of IXMUCANÉ and Replicability of MFM

The sustainability of the Ixmucané birth center and MFM has been influenced by MFM's mission and priorities, client volume, donor preferences, the availability of qualified staff, and the status of the midwifery profession in Guatemala.

When the original concept for the Ixmucané birth center was being developed, a plan for sustainability was built into its design: wealthier clients from the middle class seeking high quality obstetric care and women's health services would subsidize the care of clients unable to afford the full cost of services. Income generated from the center was able to cover the salary of a full time midwife and pay for the center's basic operations. As Ixmucané and MFM began to expand its mission to train indigenous midwives and to provide care for clients

who were referred by local midwives, the resources generated by the clinic were no longer sufficient to cover all operating costs. The greatest challenge in terms of resources was the difficulty of recruiting, hiring, and sustaining a professional midwife to run the clinic full time. In reality, two professional midwives were required to provide clinical services and managerial oversight to both the clinic and the training program. MFM eventually hired a professional trainer, a Guatemalan national and anthropologist, who focused on refining the training curricula.

With the broader focus on training and capacity building among groups of midwives across Guatemala, and an increasing load of clients unable to afford to pay for services, Ixmucané was never able generate sufficient income to fully staff its birthing center or have the resources required to maintain itself long term. Although Ixmucané and MFM have gained international recognition among the midwifery community and have managed to attract support from several international donors, in general grant monies for projects in Latin American are becoming increasingly scarce, as donor support is shifting more towards HIV/AIDS and to regions in Africa and Asia.

In addition, because professional midwives do not exist in Guatemala as a formally recognized occupation, it has been necessary to MFM to recruit professional midwives from North American and Europe to staff Ixmucané and its training program. The pool of highly proficient (or fluent) Spanish speaking professional, experienced midwives who are willing to relocate to Guatemala and work for a salary much lower than is available in their countries of origin is very

limited. In addition, MFM has not been able to afford a full time Director and two professional midwives to cover the clinic 24 hours a day, seven days a week. MFM has existed through the vision and generosity of key staff and board members offering their expertise and services for free or at below customary salaries, and through the efforts of volunteers. In addition, MFM has received support from various donors who are interested in supporting projects dedicated to improving maternal and child health in Central and Latin America.

After many years existing on limited resources, the leadership of MFM had to make the difficult decision to use the limited resources generated through private fundraising to focus completely on its training program and close the Ixmucané clinic. November 1, 2004 was the last day that women received clinical services at Ixmucané, although the local midwives have continued to meet bi-monthly for to study specific topics and to support each other's work.

Ixmucané provided quality clinical and educational services to the women in Antigua and the surrounding area for seven years, and successfully demonstrated the midwifery model in Guatemala. The decision by MFM to dedicate its efforts exclusively to its training program has been proposed as the most sustainable, replicable way forward to support the midwifery model in Guatemala at the current time. Both the professional midwives and traditional midwives have mourned the closing of the clinic, but training continues to draw interest from the traditional midwives, the Guatemalan MOH, and international groups that focus on midwifery, women's and children's health, and human rights.

Conclusion

Midwives for Midwives and its mother Ixmucané has served as a frontier, borderland, and crossroads for those whose avocation is midwifery. Despite vast differences in experience, cultural background, language, ethnicity, and class – the EuroAmerican professional midwives and the Guatemalan traditional midwives have come together, bound by a common commitment to the care of the women and their families.

The traditional midwives speak emphatically of their appreciation of the professional midwives and other volunteers who are a part of MFM. One indigenous midwife expressed these feelings about MFM's training:

I never had a training like this. I had other trainings but they don't teach the same things. This training taught us things we need to know like how to resuscitate babies. I always used chilies but then I learned the better way to resuscitate. I also never knew how to stop bleeding and in this training I learned that and how to start an IV. Dona Maura Videas

The flow of appreciation among the midwives, however, is bidirectional. The professional midwives have been profoundly moved by the courage and tenacity of their indigenous counterparts. Although the working conditions and sources for referral for professional midwives are greatly advantaged in developed countries in terms of material resources, the environments that in which they work are ever more complex, mechanized, medicalized and expensive. Such environments do not afford the time it takes to build the personal connections and relationships that bring deep professional satisfaction (Jonsdottir, Litchfield, & Pharris 2004).

When Ixmucané first opened, the MFM Director and volunteers recorded in-depth interviews with the indigenous midwives who worked in the region around Antigua. Their intent was to understand the nature of their midwifery practice. Many of the midwives made reference to the experience of being called to their work, a phenomenon well documented in the anthropological literature (Cosminsky 1977, 1982). Both the professional midwives and traditional midwives share a spiritual calling to the work (cf. Gaskin 1978); this calling is the foundation of their solidarity.

The popularity of MFM's training among the traditional midwives—spread by word of mouth through informal networks and the continual requests for MFM's training—demonstrates a deep desire on the part of the traditional midwives to learn, grow, and serve the women of their communities. The high demand for MFM's training reflects the respectful environment that is offered to the trainees, rarely found in Guatemala. This environment of respect that MFM strives to continuously recreate in their trainings is now recognized in international health discourse as an “enabling” environment, articulated as a pre-requisite to the successful creation of skilled birth attendants (MacLean 2003).

As MFM evolves into the next phase of its work, focused specifically upon improving training and gaining entry for traditional midwives in the formal health system, it will continue to strengthen the ties of solidarity between traditional midwives and professional midwives throughout the world. It will endeavor to respect and weave the cultural combinations of professional and indigenous knowledge, drawing on the authority of both (Lukere 2002). Despite the physical

absence of the birth center Ixmucané, MFM and the traditional midwives it trains will continue to invoke the protective power from whom it was named.

Table 1: MFM Training Cohorts

COHORT NUMBER AND NAME/LOCATION	START AND END DATES	NUMBER OF CLASSES	NUMBER OF TMS STARTED / GRADUATED	COMMENTS
(I) Ixmucañé Location: Antigua	Training completed in 11/00.		18 started 18 graduated	In-depth interviews were obtained from this initial cohort to inform the content of MFM's training course.
(II) PAVA (Proyecto de Ayuda de los Vecinos del Altiplano) Location: Chimaltenago	Pre-course interviews conducted in 9/01 Training conducted between 2/02-11/02 (not every week)	14	26 started 16 graduated	PAVA is a local NGO in Chimaltenago. The participants were highly motivated but were highly diverse in terms of Spanish language abilities and literacy.
(III) Cantel / CODECOT Location: Quetzaltenago area	Pre-course interviews conducted in 5-6/03 Training conducted between 6/03-10/03		50 started 49 graduated	Cantel is a town near Quetzaltenago, and CODECOT (Coordinadora Departamental de Comadronas de Occidente) is a collective of traditional midwives.
(IV) Quetzaltenango / Huehuetenango Location: same	Training conducted between 3/04-8/04	20	75 started (25 in each group) 62 graduated	
(V) Sololá / Totonicapán Location: same	Pre-course interviews conducted in 9-10/04 Training conducted between 11/04-5/05	27	70 started (37 in Sololá and 33 in Totonicapán) Additional clinical component for the Sololá group (10 clinical classes per participant)	

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