

Running Head: THE EXPERIENCE OF MAM CHILDBIRTH

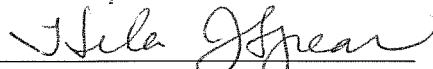
The Experiences of Childbirth:
Personal Stories of Mam Women from Comitancillo, Guatemala

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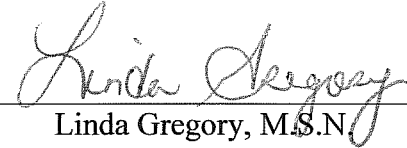
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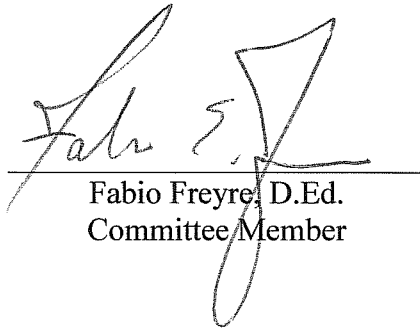
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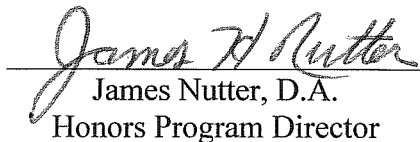
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Abstract

This phenomenological research study examines the attitudes and actions that surround the experience of childbearing among women in a Maya-Mam community of highland Guatemala. This area typifies the indigenous underprivileged population of Central America that has attracted international attention for poor maternal-child health outcomes and resistance to attempts at bio-medical interventions in obstetrics. Interviews were conducted among women with obstetrical experience wherein they described their traditional practices and attitudes towards modern medical care during childbirth. It was found that participants preferred traditional methods of care, but were willing to integrate bio-medical care into their realm of experience in the event of an emergency or, sometimes, as a matter of preference. The findings indicate that the best way to approach medical interventions among the rural, indigenous Mam would be to incorporate the assistance and beneficial practices of traditional providers rather than seeking to supplant them.

The Experience of Childbearing in the Indigenous Mam Population of Comitancillo, Guatemala

Introduction

Childbirth is an experience unlike any other in the course of the human lifespan; one that is steeped in tradition and hope as well as danger and anxiety (Maher, 2003). Although this can be observed worldwide, it becomes particularly apparent when examining an isolated culture whose traditions date back nearly to the beginning of modern history. There are many reasons to examine the continuation of cultural childbirth in such societies, not the least of which is to better understand how to provide necessary medical interventions without attempting to circumvent or dispose of a rich heritage. An understanding of the childbirth experiences of the women of isolated linguistic groups such as the Mam of central Guatemala can provide valuable insights for health care providers attempting to better serve culturally unique populations in the area of obstetrics (Begay, 2004; Izugbara & Ukwai, 2004).

Guatemalan Demographics and Health

Guatemala, as a country, is typically divided in one of two ways—urban or rural and indigenous or *ladino*. From these two divisions, it can be found that persons in the population tend to fall into one of four classes (i.e., *ladino* urban, *ladino* rural, indigenous urban or indigenous rural). Roughly half of the entire population was indigenous to Guatemala as of 2001, with 7.9% belonging to a language group of Mayan descendents known as the Mam (Central Intelligence Agency, 2006). In addition, 53% of the population is classified as rural, with significant overlap between the indigenous and rural populations (United Nations Children's Fund [UNICEF], 2006).

Both rural living and indigenous ethnicity are third world risk factors for poverty, and the indigenous rural population is particularly prone to be indigent in Guatemala, as this population

is second class both economically and socially (Beckett & Pebley, 2003). Nearly 75% of the country's population falls below the poverty line, with the lowest 40% of the population holding only 9% of the total gross domestic product (GDP) (Central Intelligence Agency [CIA], 2006; UNICEF, 2006). The poorest and most vulnerable among this population include women and, in conjunction, their dependent children (Beckett & Pebley, 2003).

Poverty adversely affects health worldwide and is of particular significance to the health status of populations in rural areas of the third world. Economic isolation poses a barrier not only to medical care access, but also general preventative necessities such as clean drinking water, adequate sanitation facilities, and indoor plumbing. It could additionally be argued that one of the most vulnerable periods in the lives of this particular aggregate occurs during the times immediately surrounding childbirth, given the increased risks, health needs and susceptibility of both the mother and the infant. The rural indigenous population has a fertility rate of 6.9 children per woman, roughly 25% above the national average, which augments the dangers to the maternal/child health status of this population (United Nations [UN], Economic Commission for Latin America and the Caribbean [ECLAC], 2004).

Mayan Culture and Health

The Guatemalan infant mortality rate, a marker of maternal/child health worldwide, was estimated to be 35.93 per 1,000 in 2005, compared to 6.5 per 1,000 in the United States (CIA, 2006). This number, along with other health status markers, is significantly higher in rural areas of the country, a fact which has caused increased concern and advancement efforts by the Guatemalan government as well as other non-governmental organizations (NGOs). Particular importance has been given to the role of traditions, language barriers, and midwives in rural indigenous communities as a means of improving health status (UN, Misión de Verificación de

las Naciones Unidas en Guatemala [MINUGUA], 2001). Health improvement undertakings have included a significant emphasis on prenatal care and maternal health, as evidenced by the pregnancy and fertility programs, midwife training classes, and nutritional supplementation for pregnant women implemented by health departments even in extremely rural areas (Centra Salud in Comitancillo, personal communication, July 21, 2005).

Literature Review

This and other factors have generated research into the rural Guatemalan culture in both the health and cultural anthropology scientific communities. It is widely acknowledged that many aspects of the rural Mayan culture affect outcomes in maternal/child health. For example, the traditional and most accessible way of preparing meals is over an open or wood stove, usually located within an enclosed room in the house. Women's constant exposure to this smoke has evidenced not only an increase in back and eye problems; but also to have an adverse affect on birth weight in infants born to mothers who regularly cook in this manner (Boy, Bruce & Delgado, 2002). The growth of these infants has shown to be additionally curtailed when they are cared for by pre-adolescent siblings, a common practice among the Guatemalan Maya (Engle, 1991).

Certain aspects of these practices are not likely to be changed quickly due to such factors as isolation and low socio-economic status of the Maya and the consequent limited accessibility of such amenities as gas, electricity and options regarding child care. In regards to maternal/child health, however, these findings present negligible risks to the health of the population at large. More immediate concerns in this area lie in the realm of basic health education and access to preventative and emergency medical care. Government and NGO programs to publicize such health information as danger signs in pregnancy have met with success in being widely

disseminated to the extremely rural areas of Guatemala, thus setting the stage for health-seeking behaviors towards the medical care available (Perreira, 2002).

Much of the research which has been conducted in the field of health interventions in the area of childbearing in Guatemala deals specifically with problems of family size and multiparity. Studies such as Bertrand et al. (1999) and Bertrand, Seiber, & Escudero, (2001) show that NGO and government programs are increasing knowledge and action in regards to such issues as birth spacing and contraception among the Mayan population.

This is not to say, however, that certain methods are not well accepted and used by the Mayan population, given the opportunity to use such modes. Despite resistance to various types of birth control including barrier methods and hormonal contraception, indigenous couples are highly receptive to natural family planning methods. Studied populations have, given the proper education, used this method with a high degree of consistency and success (Burkhart, 2000). The collective findings of research in the area of medical-obstetrical interventions in indigenous populations of Guatemala reveals that while the fundamental concept of reform in an area such as women's health may be accepted, the methods must conform to the culture before change is to be realized.

Most of the studies cited above have investigated Mayan health from the western bio-medical perspective, while Mayan attitudes on these subjects have been less examined by the medical community. Carter (2002) conducted two significant studies into social structure and its effects on obstetric health, finding that Mayan husbands are less bound by stereotypes and tend to be more involved in their wives' pregnancies and deliveries than previously believed. This involvement tended to correlate with an increase in the husband's educational status, but was still centered on such traditional components as prenatal visits, delivery by a midwife and

admonitions to avoid contact with water after birth. These findings suggest that while there is a positive correlation between health education and change in the community, this does not imply that it comes at the cost of traditional ways of life.

This is further evidenced by Glei & Goldman (2000) who examined the nature of ethnic influence on prenatal care in Guatemala. This analysis suggested that cultural influences were more significant to health seeking behaviors of the childbirth experience than was accessibility to modern medical care. Mayan women were, as a whole, more likely to primarily seek traditional care and to use bio-medical services only in conjunction with services by a cultural midwife. Although quite possibly the most potentially insightful findings regarding modern Mayan obstetrical behavior, they were the result of an analysis of a raw, nationwide database instead of personal interviews and therefore did not delve into the phenomenological experiences which resulted in the data that was collected (Glei & Goldman, 2000).

While the populations of divergent Mayan linguistic groups are roughly equal, the obstetrical health research to date has not included a component representative of the Mam Indians. This may be due to their relative social isolation, as many groups are located in the mountainous highlands of western Guatemala. It is apparent that while there is some understanding of Mayan obstetrical behavior in general, little has been investigated into one of the indigenous groups most likely to need medical interventions due to their remote location geographically. In light of this brief review of the research literature, there is a need to collect experience narrative from the Mam women in South-western Guatemala to further guide modern bio-medical obstetrical involvement in regards to their culture.

Methods

Research Design

This study evidences a phenomenological, qualitative research design. It seeks to gain insight into the way Mam mothers in the Comitancillo area are situated culturally and to promote understanding of how this guides their actions during and after delivery (Burns & Grove, 2003). This is done through interviews and observations that are examined for individual and cultural context in order to better grasp the personal views and experiences that determine how these women seek out obstetrical care.

Research Question

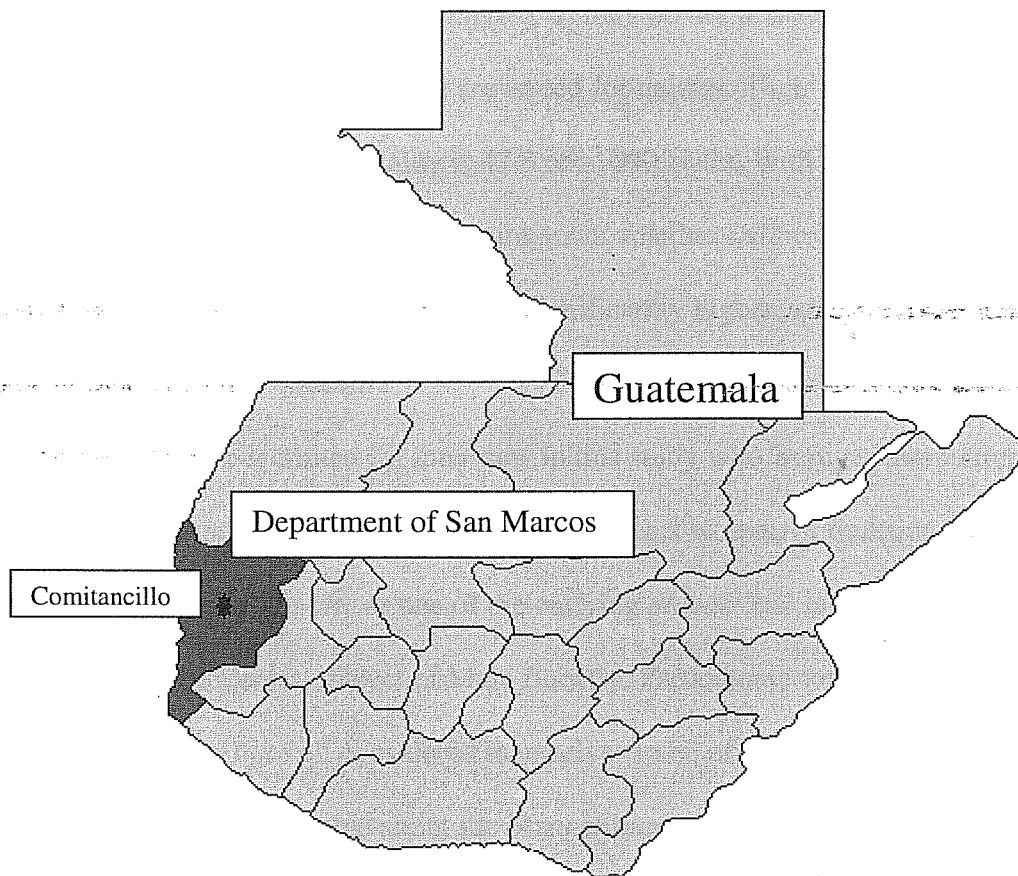
This study was guided by the following question, *What cultural and traditional influences guide the Mam women and midwives of Comitancillo, Guatemala in their experience of childbirth and how does this affect their perspectives and experiences related to childbearing and healthcare?* For the purposes of this study, *culture* includes attitudes, behaviors, beliefs, and institutions that are socially transmitted either through language or example. *Mam* refers to an indigenous group of Guatemalan nationals of Mayan descent who speak the central dialect of the Mam language, especially surrounding the municipality of Comitancillo, Guatemala.

Here the term *childbirth/ childbearing* means the experience of labor itself and the events immediately surrounding its preparation and recovery. *Experience* refers to an event which an individual has lived through as well as his or her interpretation of said event. *Healthcare* is defined as those actions which an expectant mother performs to ensure her safe passage through childbirth as well as the safe passage of her infant through that same experience. These include both traditional and bio-medical methods of care, regardless of actual outcomes in terms of maternal/ infant health.

Setting

Comitancillo is a small municipality located in the department to San Marcos, Guatemala (See figure 1). The topography of the area is mountainous, located along the Sierra Madre mountain range, in the same political department as the volcano Tajumulco, the highest point in the country at 4,211 meters above sea level (CIA, 2006).

Figure 1. The location of Comitancillo in the Department of San Marcos, Guatemala.



Located roughly two hours south of the departmental capital of San Marcos City, Comitancillo is the central municipality of several small hamlets, or *aldeas* whose residents come to the city's location for supplies, market, religious worship, or medical attention. It is representative of an almost homogenous Mam population, with 99% identified as indigenous. The term *Comitancillo*,

in this sense, is inclusive of residents of these *aldeas* within its specified 113 Km boundary. In fact, of the reported population of 54,718, only 2% actually retain their homes within the official city limits.

Within this population, 52% are represented by women of all ages; the number of women of childbearing age is unknown. There is one health department located in the city of Comitancillo, and the nearest hospital, which is government run and free to residents, is located in San Marcos City. The health department collects vital statistics for the area, although it can be inferred that their statistics are not complete, as they do not actually have direct contact with most births or deaths, and certificates are issued for neither. Their reports show that in the Comitancillo region, infant mortality is 47.8 per 1000 births, with the majority of infants dying within 28 days from birth, although it is unknown whether stillbirths and peri-natal deaths are reported in this figure. Maternal deaths are significantly higher, at 248.3 per 1000.

Sample and Sampling Procedure

Women were recruited for interview in this study who were representative of the Mam culture in Comitancillo. Inclusion criteria was such that women or traditional midwives were recruited who lived in the city or one of the outlying *aldeas*, had given birth to at least one child, and who spoke the Central dialect of Mam fluently. Participants were also included who spoke Mam only partially, but still considered themselves to be of direct Mam descent and who were involved in and knowledgeable about the Mam culture of the area. These criteria were fairly open, in that neither involvement in a marital relationship nor a recent childbirth was required, nor was the location of actual or intended delivery taken into account in recruitment efforts.

The interviewer recruited participants from personal contacts while in the area, representing mostly a convenience sample, and therefore included many city dwellers and

women who either lived in nearby *aldeas* or had traveled into the municipality for personal or business reasons. There was, however, some small snowball effect as recruitment efforts were made on behalf of the interviewer by locals who had participated and/ or were interested in the project. It was felt that the women interviewed represented their general communities and no hesitation was encountered on the part of any of the women asked to participate.

All of the women's and midwives' responses were recorded on a voice tape recorder for later translation. Permission to academically use answers was verbally recorded, along with an understanding of privacy, as literacy was considered less reliable than a verbal contract. The translations of the interviews are a combination of the interviewer's own translation with the assistance of 3 other parties who either spoke Spanish and English fluently or had received a degree in Spanish language study. One of the translations was made by a translator who, being trilingual, translated the interview directly from Mam to Spanish.

Data Collection and Analysis

Data were collected using a researcher-developed tool designed specifically for the Mam women of Comitancillo. The research questions were formulated after an informational visit was made by the interviewer to the area in question. Certain traditional ways of managing health and pain were noted, and these concepts were incorporated into the survey in order to assess their usage during the childbearing process. Fourteen standard questions (See Table 1) were asked of each woman, with an extra question asked of midwives regarding their practice. A combination of closed-ended and open-ended questions was asked and women were encouraged to elaborate

Table 1.

Research Tool: Questions Asked of Participants

Demographic questions	<p>1.) How old are you?</p> <p>2.) How many children do you have?</p> <p>3.) How many times have you been pregnant?</p> <p>4.) Do you speak Mam?</p>
Research Questions	<p>5.) Where did you give birth to your children?</p> <p>6.) Who attended your labors?</p> <p>7.) What did you use for labor pains?</p> <p>8.) Did you use the <i>chuj</i>?</p> <p>9.) When did you first start using the <i>chuj</i>, and how long did you use it?</p> <p>10.) What other things are important to use during and after childbirth?</p> <p>11.) Why do you do these things, and what would happen if you didn't do them?</p> <p>12.) Who taught you to use these things?</p> <p>13.) If someone wanted to change the way things are done, would you accept these changes? Why or why not?</p> <p>14.) If you had the opportunity to give birth in a hospital with a doctor, would you prefer to do this? Why or why not?</p>

on their answers. Additional topics were addressed as women introduced issues outside of the scope of the original set of questions, but were considered relevant to the subject.

The questions of the tool were developed with the help of a local advisor indigenous to the area. They were originally designed by the researcher then reviewed by the Mam advisor who made suggestions for additional questions and changes in wording. The questions were then translated from English into Spanish by the same person, who was fluent in all three languages. This strategy helped to identify cultural norms that should be included as well as to ensure culturally competent wording of the questions as well as lingual accuracy. The questions of the tool were, when necessary, translated from Spanish to Mam by a translator on site.

Initially, some demographic questions were asked, including age, number of children, number of pregnancies, and whether or not the participant spoke the Central Mam dialect. These questions were asked to determine the cultural and obstetrical expertise of the women as well as to provide a basis of comparison between the answers given. A set of research oriented questions followed, some requiring informational answers, others requiring narrative and explanatory responses. This format was utilized to provide a relatively simple translational database of information while still allowing an opportunity for the women to share and expand upon the fullness of their obstetrical experiences as they saw fit. It is probable that only children living past a certain age were reported as true pregnancies, as only one possible miscarriage was reported among any of the participants, and even this occurrence may have been the result of a twin birth counting as two 'pregnancies.' Since no miscarriage among 41 pregnancies in a high-risk population is a possible, but highly improbable result, answers to the question '*How many times have you been pregnant?*' were excluded from results.

The narrative data was analyzed by aid of translation and multiple evaluations of content by the researcher. The interviews were first transcribed verbatim from the tape recordings in Spanish or Mam with the help of a native speaker or academically trained translator. Responses were then read and reread for meaning and identification of thematic content. Answers from various women were compared and contrasted with each other and organized into categories for further analysis of attitudes and themes. The thematic identification was then compared with the demographic data obtained from the women for further understanding and analysis.

One traditional practice in particular deserves special attention, i.e. the use of the *chuj* as mentioned in questions 8 and 9. The *chuj* is a traditional steam bath that was common throughout the ancient Mayan world, although it is known by different names in different geographies (Hammond & Bauer, 2001). The *chuj* of Comitancillo is a small building, spacious enough for only a few people at a time to enter, usually located next to the kitchen building on a homestead. It is entered through a small door, and is only tall enough for a crouched or reclined position. A fire is built which heats several rocks before the person enters the building, at which time they shut the door after them and throw water over the rocks to create a steamed area much like the Italian *sauna*. They then take *herbos de chuj*, or ‘*chuj* herbs’ and strike their bare skin over the entire body, after which the sweat and herbal debris are wiped off.

The *chuj* is used for many reasons and in many situations- it is the principle method of bathing in homes where no running water is present, although many homes in the city have running water for cooking, drinking or other everyday tasks in addition to a *chuj* for bathing. It can be entered alone or with one or two other people, usually of the same sex, who all help each other bathe; it is also used by children with their parents. While these observations are evident

from a casual visit to the area, the specific use of the *chuj* during childbirth and in the postpartal period require further study.

Findings

Selected Demographic Characteristics of the Sample

The final sample consisted of six women who ranged from 25 to 72 years of age, with the mean age being 45.5 years. The average family size reported by women was 7 children with a range from 2 to 12. All the women spoke Mam fluently and dressed in traditional clothing with the exception of one, whose parents and husband spoke the language, and who otherwise participated in the local traditional culture. This sample was purposefully sought out in order to obtain and compare data between generations as well as between those whose lifestyles are more distanced from tradition and those who live almost exclusively in the traditional manner.

Four out of the six women spoke Spanish fluently, and these were interviewed privately, one on one with the interviewer. Two of the women spoke Mam either exclusively or with a much higher degree of fluency and comfort than they spoke Spanish, and these were interviewed with a local translator who translated from Mam to either Spanish or English during the interview. These translators were men, as there were not sufficiently bilingual women in the context of the settings of the two interviews. In one case the interview took place in the woman's home where no other women were available, whereas another interview was conducted in a rural *aldea*, where none of the women present could be said to be bilingual. Each interview lasted approximately 15 minutes, although this length of time was significantly expanded when a translator was used.

Personal Experiences as Told by Mam Women

In general, it was found that while the participants were not ignorant of the bio-medical services available to them, they preferred to utilize traditional methods of childbirth. This was done in varying degrees and for various reasons, but was always the primarily preferred means of receiving prenatal care. Western interventions were integrated into the system secondarily, either as a means of improving upon traditional home care (i.e., midwife training), or as a last resort in the case of a problem. This was found to be true in all participants with slight variations in perspective among those with varying degrees of education and age.

Overall, the women answered with a high degree of homogeneity in regards to the traditional methods used for childbirth (see Table 2). Most of the participants had given birth at home with a midwife, used the *chuj*, taken local herbs, and changed their eating habits before, during and after their labors. Additionally, most cited their mothers as their source of traditional knowledge, while some added their grandmothers as well. One woman stated that traditions were passed down by example as the parents demonstrate their way of life: “When a child is bathed, it learns to do these things so as an adult they know already.”

Theme: Holding to Traditional practices

Several traditional practices were identified by the women of Comitancillo, the first to be mentioned by all the women being the *chuj* sweat bath. The first *chuj* is done directly after birth, when the midwife enters with the mother and infant into the bathhouse, massages the mother’s belly and bathes the infant for the first time. The *chuj* is traditionally used for 20 days after delivery, twice a day (*double chuj*) for the first ten days, then only in the afternoons (*single chuj*) for the next ten days. This was cited as both a custom and a means of relieving post-partal pain.

As one woman put it, “The *chuj* relaxes me, bathes me when I’m tired after giving birth. When I get in, I’m dirty and tired, but when I come out, I’m clean and able to rest.” The *chuj* was additionally identified as a means of returning strength to the post-partal mother and a means of restoration of the normal state of the body.

Body positions during labor were also discussed as a means of dealing with the pain of childbirth. Two positions were specifically mentioned (i.e., squatting and lying down, either on the bed or on the ground). Changing positions during labor was said to be helpful, although squatting was the preferred method of delivery among respondents, who reported using an object such as the end of the bed to support themselves and to grip while in this position. This was reported as a matter of preference, as in the following case: “[While I am in labor] I prefer to squat because I never got used to lying down.”

The use of local herbs was also discussed as a means of pain relief and healing. Several herbs were mentioned, including chamomile and local herbs such as *altamisa*, *guayaba*, *hierba buena*, and *pericon*. The respondents in Comitancillo state that the herbs were either rubbed directly on the stomach (possibly in the *chuj* or during labor) or drunk in a tea, the purpose of both being for uterine pain (*dolor de la matrix*) as well as restoration of strength.

Modifications in diet were frequently discussed as another important matter to which the Mam women pay special attention. Several aspects of diet were discussed, including increased amount, increased variety, and specific types of foods to be eaten or avoided. The general concepts of increasing the amount of foods eaten as well as eating foods high in nutritional value were often reiterated. Women often said things along the lines of: “It is... important to eat double while pregnant and breastfeeding” and, “Add [to the normal diet] lots of vegetables, good food, cow’s milk, chicken.” An understanding of nourishment not only for fetal growth and

breast milk production but also for promoting healing in the post-partal period was brought out, in examples such as: “After I had the baby, it is better for me to eat everything in order to heal faster. Other women don’t eat all kinds of foods and they don’t feel good.”

In addition to an increased amount of food, a specific regimen of certain types of foods was also alluded to in the interviews. The participants discussed the importance of eating ‘hot’ foods and not touching cold water, or listed foods known to be considered ‘hot’ as foods important to them right after they had given birth. The concept of heat in relation to childbirth was explained by one of the midwives interviewed: “For one week after birth, a woman should not touch cold water. Birth is a warm state, and cold may be harmful.” Another woman stated:

I eat as if I was on a diet—all my foods were ‘hot’. Women who have given birth are not as youthful (*tierna*) as they used to be, so they have to follow this diet. My body was no longer tender; I felt weak, so I needed to eat these foods so I felt better. They must be cooked and warm.

The *chuj* is additionally perceived as a ‘warm’ remedy imparting heat to the mother. This was best expressed in the following statement:

We use them [the foods, herbs and the *chuj*] because they relax us. One or two disagree, but most women agree that it helps the uterus. I think so; when I gave birth I used the *chuj* and little by little I became normal. When others didn’t use it, they had more pain, (*for example*) headaches.

All of the women interviewed identified several examples of the above traditional practices in which they participated. One woman made the following statement in regards to her perception of the importance of these traditions. She pronounced the following rather vehemently when asked whether or not she would accept change or want to go to the hospital:

“No, no, definitely not! These things are customary, and are very important not to lose for our communities.”

Theme: Change is a Matter of Necessity

Many of the women interviewed reported awareness of the availability of obstetric biomedical care through either the local health department or the nearest hospital. One of the women had had visits by nurses from the health department as well as from the midwife during her pregnancies, and two others had been present at a hospital delivery, either their own or because they were accompanying a family member. Others gleaned their knowledge of hospital births from the experiences of other Mam women in the area.

Most of the women independently interpreted the question as to whether or not they would accept changes to mean ‘Is outside care acceptable in an emergency?’ and answered accordingly. Despite a description of an uncomplicated birth, the women qualified their statements and answered that they would prefer a hospital birth if there was a problem, otherwise they would prefer to deliver the traditional way. The ideas of safety, necessity and lack of traditional knowledge came up often as a reason to use bio-medical services, while ideas of comfort, tradition, and location were reiterated as reasons to use the traditional services of the area when giving birth.

Almost all of the respondents presented a moderately cautious opinion of biomedical interventions in obstetrical care. They stated that they would accept change [interpreted as delivering with a doctor in a hospital] if necessary for the safety of the mother. This attitude was best expressed in the following statement: “Yes, I would accept change. I don’t want to die. I would go to the hospital if I had to, but if there is no reason to, then no.”

Necessary changes in traditional practices were, however, often qualified with reservations. One woman who had been sent to the hospital for failure to progress while laboring with her first child expressed her feelings in this way: “It [delivering at the hospital] is more comfortable [safe], but it was bad, because my family couldn’t come.” Another woman who had gone with her daughter-in-law to the hospital stated that she would never want to give birth there because of the lack of control she perceived the mother as having. She stated a preference for a birthing environment where she had what she needed and didn’t have to follow the instructions of strangers.

Theme: Change is a Matter of Preference

There was more acceptance demonstrated towards less drastic changes in post-partial care, such as shots and pills for pain. These interventions were used instead of, or in addition to, traditional methods of care, although the names of these medications were not known by the respondents. Two of the women reported using these methods themselves, one in addition to traditional care, the other instead of the *chuj* because she said it gave her a headache. Other women reported that many of the traditions are optional, and that those who don’t know about them or don’t like them can use bio-medical cures instead for their pain. One woman, for example, stated:

Yes, I know about different ways to have a baby. There are women who don’t know how [to bathe in the] *chuj*, so they use these other forms. They may get a shot, or pills, or get help from a doctor.

While these women acknowledged that there were safety and supplementary benefits to be found in bio-medical interventions, all showed a preference for adhering to the traditional

methods of delivering children. One woman, who spoke the least Mam and who had delivered her first child in a hospital, stated the following expression of preference for local customs:

Some [changes] yes [I would accept], some no. I prefer tradition, unless the change is necessary. I definitely prefer to give birth at home; I liked it better because my mother was there. I was able to rest better because I didn't have to travel.

Other women reiterated that they were more comfortable at home, and that traditions were important in their decisions on how to deliver their own children.

Theme: Change Through Midwives

The two midwives who were interviewed were both very traditional in lifestyle, speech and dress. They both had had some education in midwifery, traditionally from their own mothers (who were also midwives) as well as technically from the local health department and area NGO's. The younger woman had completed high school and was an elementary school teacher in addition to her midwifery practice. While they each provided detailed descriptions of traditional practices among the Mam, they were also very vocal about their perceptions of the changes needed in obstetrical care in the area.

One of the midwives gave the following rationale for soliciting biomedical resources for obstetrical care:

It [change] is very important, because sometimes there are problems with the birth. Thanks be to God there are doctors there [at the hospital] and they are better equipped than midwives. I have more confidence in them, because sometimes the baby is in a bad position, therefore it is important to have a doctor.

Both the midwives stated that they routinely sent women who met certain specifications to the regional government-run hospital. These reasons included failure to deliver after a day and a night of labor, or continued frank bleeding for more than three days after a delivery. The perception of better equipment being necessary for more complicated deliveries was communicated as the reason for these referrals. The following statement illustrates this point: “Yes, I would accept this [delivery in a hospital], because at the hospital they have equipment for c-sections, if needed.” Equipment the midwives had obtained for delivery was also presented to the interviewer, such as hemostats, gloves and a clean basin; a gown was additionally requested for ‘cleanliness’ in exchange for the interview.

Limitations

As with all research studies, this study has some limitations. To begin with, the language barrier encountered between the interviewer and the women being interviewed limited the amount of narrative which could be explored during the course of the interviews. This limitation was in addition to those encountered in translating recorded statements. This difficulty was amplified when the woman being interviewed gave answers in Mam, which is radically different, both structurally and thematically, from both Spanish and English (Collins, 2005). The wide cultural difference between the interviewer and the participants lends itself to an inherent limitation of the possibility of misunderstanding the responses given.

Using local men as translators posed both a potential bias and a possible asset to the answers given by the interviewees, as they may not have revealed all the information that they otherwise would have because of discomfort or modesty reasons. On the other hand, the translators may have been more likely to provide an unbiased translation since they were relating an occurrence outside of their realm of experience and were not a part of the woman’s immediate

family, while still having an understanding of the cultural context. It was found, however, that the women's comments in the interview were similar to other women who were interviewed privately, and that they were not more likely to abbreviate their answers on any of the topics discussed, indicating that the potential bias in this regard was minimized.

Time was another limitation, as the study took place over the course of only two months, which did not allow for extensive development of the subject matter or for recruitment of more than a few women to participate in the study. The small number of women interviewed limits the amount of generalization possible, even within the Comitancillo area, in addition to the fact that participants were not recruited in a systematic fashion. In addition, the age and inexperience of the interviewer, who was younger than the participants and had given birth to no children, may also have been an impediment in the willingness of the Mam women to describe their childbirth, as both seniority and modesty are highly valued in their culture. Nevertheless, despite these limitations this study yields useful information that may lend itself to a fuller understanding of how biomedical interventions are perceived and integrated into the rural Mam population.

Discussion

Much of the literature in the area of obstetrical practices among indigenous groups in Guatemala shows that change is occurring that has the potential to positively impact identified areas of maternal-child morbidity and mortality. This is encouraging, but progress has shown to be slow, with the majority of the population resisting pressure to conform to modern methods of gynecological and obstetric medicine. Other studies in the field bring to light increased acceptance of medical changes if they are introduced in a manner that does not threaten the basic cultural and traditional values held by these people groups.

This concept is specifically applicable to the Mam population of Comitancillo, who have been understudied in the literature, but who represent an infant mortality rate 25% above the national rate. This is consistent with the co-relationally higher birth rate in the area, in addition to an even higher maternal mortality rate. Economically, the area is highly at risk, with staple crops being the main source of income and many of the men leaving for part of the year to seek outside jobs. The Spanish literacy rate is one of the most important factors in the ability to negotiate and obtain health care. Women who live in the outlying *aldeas*, however, are the least likely to speak or read Spanish, as education is less available to them and they are seldom present in the city unaccompanied by a spouse or children who translate for them.

In consideration of social seclusion and low educational status of the area, it is not surprising that the woman most staunchly opposed to change or hospital births was a woman in her 70s from a remote *aldea* who spoke no Spanish. This illustrates the need to moderate biomedical interventions so that they are not perceived as a threat to tradition. On the other hand, the women interviewed who were the most supportive of biomedical intercession and change in the area of obstetrical care were local midwives who had received increased education and training and who had referred many women to the hospital because of complications. It should be noted, however, that these women attended home births and personally practiced the local customs as well as assisted their clients in performing them. While they were the most enthusiastic about enlisting bio-medical help when necessary, they did not seem to advocate a complete change in local customs to the exclusion of tradition.

The most recent research related to this people group is a dissertation in linguistics by Collins (2005), which addresses the philosophy of “centeredness” in the Mam way of life. The research suggests that this philosophy causes this particular Mayan group to hold to their

traditional lifestyle while at the same time attempting to integrate non-conflicting modern innovations as they seek to improve their social, economic, and health status (Collins, 2005). This concept resonates well with the findings of this study, in that the Mam women of Comitancillo reported desiring to keep their traditions intact while seeking further bio-medical help if necessary. They are, in a sense, augmenting the traditions which sustain their way of life with the ideas and resources that enable them to continue in their particular method of survival.

The traditional practices discussed are very similar to practices described among other Mayan groups throughout Central America. The sweat bath has been described with remarkable similarity in other highland Mayan groups, who also use it for post-partal healing (Groark, 2005; Lewis, 1970). Groark (2005), in particular, provides an in-depth analysis of the philosophy of restoring heat to the exhausted mother after childbirth through sweat baths and 'hot' herbs in order to prevent complications due to increased vulnerability to the 'cold.' Although this concept was not expounded upon by the women in this study, their traditions surrounding the *chuj*, herbs and diet reflect a similar outlook on health during the peri-partal and post-partal periods. Even women who had given birth in a hospital returned to their homes and participated in the traditional methods of healing afterwards.

There are several positive health benefits that can be recognized in the practice of the *chuj* in particular. The warmth and steam of the bathhouse provides an environment which promotes vasodilatation and increased circulation and healing, much as a sitz bath does in the modern medical setting. Benefits of engaging in this practice immediately after birth include thermal benefits to both the mother and the newborn. The mother receives relief from the recognized drop in temperature and 'chills' that ensue after delivery, likewise the infant is warmed from the state of hypothermia and thermal loss that it is at risk for immediately after

birth. The fact that mother and infant partake together promotes bonding in the immediate post-partal stage. The abdominal massage that is given by the midwife in the *chuj* very likely assists in the involution of the uterus, thus decreasing the chances of hemorrhage (Olds, London, Ladewig & Davidson, 2004).

Another area that was alluded to in the interviews is that of the hot/cold aspect of humoral theory in regards to childbirth. To begin with, the herbs which were mentioned have all been identified as 'hot' herbs in other parts of highland Guatemala and are used for the treatment of 'cold' illnesses such as cramping and other stomach pains (Logan, 1973a). The 'hot' post partal diet is also in accordance to the recognized 'hot-cold' theory of illness prevalent throughout both the modern Mayan and Latin American cultures, which classifies not only illnesses, but many objects as inherently 'hot' or 'cold.' (Kunow, 2003). This system of classification has been previously identified among the Mam of Comitancillo in regards to diseases and cures, so it is not surprising that this concept also surfaces in food and herbal classification and obstetrical care (Collins, 2005).

While one of the participants clearly stated that cold might be harmful to the post-partal woman, it is evident that heat is needed to return strength to the woman after she has delivered. The local concept of balancing hot and cold shows that the woman has just lost the heat of the infant within her, and is continuing to lose heat with the blood that is lost post-partally. She is therefore in danger of becoming too cold, too quickly, and becoming ill due to this sudden overwhelming loss of heat in the uterus. Therefore, she must do everything she can to retain as much heat as possible, gradually returning back to a 'normal' state (Collins, 2005).

The fact that women reported instances in which further biomedical assistance was needed and that midwives reported specific criteria they assessed in order to refer patients out in

an emergency is a positive sign of acceptance of the perceived benefit of western medical concepts. This acceptance, however, was integrated into their already established philosophy of childbirth and health, meaning, for example, that certain western remedies were acceptable substitutes for the traditional if necessary because they were considered 'hot' as well (Logan, 1973b). Many women gave the example of receiving 'injections' as an alternative to traditional curative measures; injections have been recognized as being considered 'hot' in the area, since they are thought to go straight to the blood (Collins, 2005).

For this reason, the experience of childbirth by Mam women in Comitancillo, Guatemala can be said to be centered around the traditions and the comforts imparted by them, while modern practices are also integrated as they provide an increased measure of comfort or safety to the established way of functioning. This was shown to be especially true in the obstetrical field as even the least culturally homogenous women in the area show a preference for the traditional form of childbirth as opposed to modern innovations. A conclusion can reasonably be drawn that it is not solely a resistance to new ideas that surrounds a keeping with traditions, but also the perceived benefits to culture and personal comfort that allows them to continue throughout the modern generations.

This preference for tradition is well illustrated by the example of one woman in the area who was not interviewed in the study as she did not speak any Mam, dress in the traditional manner or embrace the traditional lifestyle, although she was of direct Mam descent. When she became pregnant with her first child, she and her husband were in the United States while he was studying at a university. The benefits of modern medical care and the potential for American citizenship for her child being extremely high in this situation, she nevertheless asked her husband to return to Guatemala so that she could have the baby in the traditional manner with

her mother. While this may be an uncommon situation, it does illustrate the deep-seated bond that permeates the thinking of the Mam women in regards to the way in which they deliver their children.

One significant finding in relation to traditional care providers is that the midwives interviewed stated that they had received training through the local health department as well as an NGO initiative that had given classes in the area. This shows a willingness to integrate biomedical concepts into traditional care, likely increasing efforts to keep a clean delivery environment and to implement measures to decrease perinatal maternal and infant mortality. This is further evident in the fact that they had established parameters when they would refer to the hospital as well as an attitude of gratefulness that emergency resources were available. These women expressed a positive attitude towards biomedical providers as augmenting their own services, a mind-set which has been described among other midwives in other Mayan groups as well (Cominsky, 2001).

Implications for Practice and Further Study

The attitudes that this study reveals of the Mam women and their midwives towards health promotion and working with the biomedical community is a positive first step in recognizing the possibilities of furthering maternal-child health in the area. The related importance of traditional care as well as the perception of need in regards to safety can guide the health care worker in attempting to integrate the modern care necessary for safety in childbirth while allowing and encouraging the continuance of non-harmful traditional practices. The already accepting attitude of certain modern interventions conveyed by the local midwives may set a precedent for increasing their involvement in the attempts that are made to improve maternal-child outcomes. This integration may be best affected by further educating the

traditional midwives of the area as well as public health campaigns aimed at all members of the community to increase awareness of danger signs in the prenatal and post-natal periods, which has been shown effective elsewhere (Perreira et al. 2002).

The integration of traditional midwifery services into that offered by the local biomedical community (i.e., the health department) would possibly have the additional benefit of expanding the resources of the midwives without compromising the traditional care they provide. This would assist in closing the safety gap between biomedical and traditional services in the area of obstetrical care, a sentiment supported by the United Nations in its report on the indigenous population of Guatemala (UN, MINUGUA, 2001). Special attention should be paid to areas of greatest adverse outcomes as the women are most likely to institute new practices where they see their need the greatest.

In conclusion, the Mam women of Comitancillo evidence both a preference for and a devotion to local traditions in childbirth while recognizing the role of bio-medical interventions in obstetrical emergencies. Their phenomenological descriptions show a respect for knowledge, both empirical and traditional, and a shift towards augmenting their traditions with techniques and information to ensure their safety. This information can be used to guide health promotion efforts as the importance of the culture and traditional practitioners is recognized in the obstetrical field. Therefore, in the estimation of the researcher, there is a continued need to conduct additional research in the area of culturally acceptable influences on obstetrical health seeking behaviors in isolated ethnic groups of Central America.

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