

Focus Group with Guatemalan Traditional Midwives about Postpartum Hemorrhage

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Abstract

The purpose of this qualitative, pilot descriptive study was to explore Guatemalan traditional midwives' knowledge, practices and attitudes about nursing interventions to manage postpartum hemorrhage (PPH). One 45-minute focus group was conducted among 13 traditional midwives at a rural health clinic that had limited resources and was located in remote central eastern Guatemala. The Long Table Approach was used to develop a matrix of common themes. Traditional midwives repeatedly asserted that they had never managed PPH despite a combined 197 years of midwifery service. Midwives expressed trust in local health care providers and said they would transfer patients to hospitals in emergencies. Midwives requested help educating villagers about the importance of prenatal care and of seeking early labor support. Limitations of this study include social desirability, lack of generalizability and variability. Future interventions should consider educating villagers, including men, as well as midwives about PPH or other prenatal care and labor support.

Keywords

Guatemala, midwives, postpartum, hemorrhage, childbirth, obstetrics, focus group

Traditional midwives attend the majority of births in Guatemala (Maupin, 2008; Walsh 2006; Walsh 2003), yet evidence from Lang and Elkin's landmark article (1997) shows traditional midwives in Guatemala lack basic skills to prevent and treat postpartum hemorrhage (PPH). Most traditional midwives are indigenous and work independently outside of a formal health care system. They may or may not have formal training for their role, and typically have been recognized by their community as trusted women who have accepted a spiritual calling (Walsh, 2006; Walsh, 2003). Midwives' lack of knowledge about managing PPH is particularly troubling given that PPH is the leading cause of maternal death related to childbirth in Guatemala and accounts for 50% of maternal deaths (International Confederation of Midwives, 2009). According to the International Confederation of Midwives (2009), the Maternal Mortality Rate in Guatemala is between 156 and 270 deaths per 100,000. This figure is three times higher for Guatemalan indigenous women than for non-indigenous (Roost, Johnsdotter, Liljestrand, & Essen, 2004). Although self-proclaimed mid-

wives have been required to attend government training programs since 1955, research shows that due to cultural insensitivity, education has not changed traditional midwives' knowledge and skills for management of PPH (Goldman & Gleib, 2003).

Cultural insensitivity in government training programs is exhibited in several established procedures. First, government training programs condemn traditional midwives' practices thus isolating them from the training group (Walsh, 2006; Goldman & Gleib, 2003). Additionally, training programs are taught in Spanish with written materials, despite the fact that many traditional midwives are illiterate and speak Mayan dialects (Hinojosa, 2004; Roost, 2004). Finally, government training programs are based on a medical model as recommended by the World Health Organization (WHO, 2009), managing PPH with oxytocic medications to help the uterus contract and transferring patients to hospitals for obstetrical problems (Goldman & Gleib, 2003; Maupin, 2008). Practicing the medical model is unrealistic for many traditional midwives because the midwives live in remote areas lacking reliable and timely resources, such as oxytocic medications and transportation to hospitals (Cosminsky, 2001). Indigenous patients of traditional midwives also resist timely transfer to health care facilities because they distrust hospital providers (Berry, 2006, 2008).

In order to change Guatemalan traditional midwives' knowledge and skills about managing PPH, we must first understand: what traditional midwives already know about PPH; what practices, if any, they use to manage PPH; and their attitudes toward accepting new practices for PPH management. This study is significant due to the paucity of information related to traditional midwives' knowledge, practices, and attitudes about PPH. The purpose of conducting a focus group study with Guatemalan tradi-

tional midwives was to explore their knowledge, practices and attitudes regarding PPH to better inform future education offerings. The questions being asked focused on traditional midwives' experience with PPH, their use of oxytocin and patient transportation to hospitals. Focus group questions also explored traditional midwives' attitudes toward the medical model and knowledge about their current treatment measures for PPH.

Literature Review

Nursing educational programs in other third world countries have successfully educated traditional midwives by first understanding the native culture and customs before introducing new nursing information from outside the culture (Sibley, 2001). The American College of Nurse Midwives (ACNM) has offered a Home Based Life Saving Skills (HBLSS) curriculum for birth management in India (Fullerton et al., 2005), Ethiopia (Sibley et al., 2004; Sibley et al., 2006), and Bangladesh (Dynes et al., 2009). It is protocol that the ACNM starts each HBLSS session by first asking midwives to share their practices and needs before teaching new nursing information from outside the culture. HBLSS leaders seek to enhance local health customs rather than condemn existing practices (ACNM, 2006).

To provide culturally sensitive educational programs it is important to understand cultural and social structures that provide meaningful and satisfying cultural care expressions, patterns and practices (McFarland, 2006). Taking in information from inside the culture before imparting information from outside the culture supports Madeleine Leininger's Cultural Care Theory of Diversity and Universality (McFarland, 2006). Leininger describes how one's worldview greatly influences cultural care meanings, expressions and patterns (McFarland, 2006). One's worldview consists of multiple, cultural and so-

cial structures, such as technology, religion, politics, economy, education, language, and environment. Thus, in accordance with Leininger's theory, understanding the cultural and social structures of Guatemalan traditional midwives is essential so meaningful and satisfying teaching and learning about PPH practices can occur (Walsh, 2006).

Currently, no literature has examined what Guatemalan traditional midwives know about PPH or how traditional midwives acquire their knowledge, though it has been suggested that they acquire their information through divine inspiration (Berry, 2006; Walsh, 2006). Likewise, no literature explains what nursing interventions Guatemalan traditional midwives practice, if any, to prevent or treat PPH. However, studies have provided some understanding of traditional midwives' health care practices. Because some indigenous women distrust hospitals (Roost, 2004) it is important traditional midwives are able to prevent or provide basic treatment for PPH. Additionally, trusting the will of God (Berry, 2006; Walsh, 2006; Roost, 2004), some midwives do not intervene when obstetrical complications occur. However, they may be willing to provide non-invasive care to decrease bleeding post birth, such as putting the infant skin-to-skin and encouraging mothers to breast-feed within the first hour after birth. Finally, no literature explains what new learning formats would be acceptable to traditional midwives. Lang and Elkin's landmark article (1997) suggests oral teaching in the native language with props, games and songs to reinforce learning an effective way to impart new information.

Methods

This qualitative, pilot descriptive study used a focus group to gain understanding of Guatemalan traditional midwives' knowledge, attitudes, and practices regarding PPH. The pri-

mary investigator was a Doctor of Nursing Practice student with experience with focus groups among Hispanics. Such a focus group validates the traditional midwives' knowledge and provides an insider's view of the practices of a cultural group other than the researcher's. The focus group discussed in this article was part of a larger PPH study to test the efficacy of a culturally sensitive teaching on Guatemalan traditional midwives' knowledge and skills for managing PPH. The larger PPH study was based on one of 12 curricula from the HBLSS that aims to teach prevention, recognition and initial home management of life-threatening maternal and newborn problems. The selected curriculum focuses only on prevention of hemorrhage in the postnatal period. Antenatal prevention of using dietary modification is included in another HBLSS curriculum to be implemented with the same group of midwives at a later date. Data from this focus group can help guide future studies with the same group of midwives.

Setting

The focus group with traditional midwives took place at a Refuge International Health Clinic. Refuge International is a non-profit organization founded in 2001 by two nurses from Gilmer, Texas. Refuge International has four clinics in Guatemala and one in Kenya. One of the Guatemalan health clinics is in a rural area of central eastern Guatemala. The rural clinic sits on the shores of the Sarstun River, which forms the border between Guatemala and Belize, and empties into the Caribbean Sea. The clinic, which was established in 2002, is in a 3,000, square-foot stucco building with a thatched roof. The focus group took place in a 12-by-18 foot conference room on the second floor of the clinic. This room contains a large, round wooden table with wooden chairs arranged in a circle to allow

interaction among participants during the discussion.

The rural Refuge clinic that is open for one week four times a year is extremely remote. No roads lead to or from the clinic. Access to the nearest city with a hospital is secured via a two-hour boat ride. For the local residents the primary means of transportation is by canoe, motor boat or a pedestrian path along the river. The closest public health clinic that is open year round is an hour away and a private health clinic that is open year round is approximately three hours away, both accessible by motorboat or canoe.

Lay health promoters are found in each of the remote villages. Health promoters are self-selected individuals who attend training once a month at the public health center. There, health promoters learn about medications, suturing, and starting intravenous fluids. However, the health center does not give health promoters supplies or salary support. Instead, the position, similar to midwives, is one of honor and philanthropy (Partridge, 2007).

When health care services are scheduled at the Refuge Clinic a local resident who works for Refuge International sends a message up the surrounding mountains to notify the highland villagers of the upcoming clinic. This method of communication was used as an advertisement for recruitment to notify traditional midwives of the upcoming focus group. On the day of the focus group a motorboat went up the river to collect midwives interested in participating.

Sample

The Refuge Clinic serves six lowland towns and three highland towns. All traditional midwives from highland and lowland villages were invited to the focus group following the established Refuge method of communication. Refuge International volunteers have been

working with these midwives for the past nine years. On the morning of the focus group, nine midwives came down from three highland villages and waited along the Sarstun River for a Refugee International boat to take them to the clinic. Four midwives from two lowland towns were able to walk a short distance to the clinic.

The populations of the highlands and lowlands have different characteristics. Highland dwellers are generally indigenous Mayans and speak the native dialect of Kek Chi. They have very little access to educational opportunities and, therefore, tend to be illiterate. Living in lean-tos with dirt floors and no electricity, highland dwellers generally cook over open fires. Their diet is comprised of oranges, tomatoes, rice, beans, and tortillas made from masa, or ground-up corn. Highland villagers must walk approximately two hours down the mountain to the closest access to "transportation," a canoe or motorboat on the Sarstun River.

Lowland dwellers tend to have more education and more resources than highland dwellers. For example, some lowland dwellers live in modest homes with electricity, televisions, phones, radios, stoves, boat launches, and livestock. In addition the only school with grades one through six, soccer field and cell phone tower are in the lowlands. Nearly ten percent of lowland dwellers are Ladinos, descendants of Europeans who speak Spanish. The other 90 percent are indigenous.

Procedure

Once the midwives arrived at the rural clinic they were informed of the purpose of the focus group. Midwives were told their participation was voluntary, participation would be considered consent and discussions would be audiotaped. Signed consents were exempted through an Institutional Review Board. One focus group discussion was conducted with 13 traditional

midwives and two translators, who spoke Kek Chi and Spanish, and were also midwives. Even though 10 to 12 participants is ideal for a focus group, it was unknown how many midwives would travel the distance for the focus group. No one was turned away as this was a unique opportunity to disseminate needed, health teaching information.

The Primary Investigator (PI), who is a trained and experienced moderator, met with both translators before the focus group to explain the process. The PI is a midwife from the United States who is well-versed in Central American history, politics and culture. The PI moderated the group in Spanish; posing open-ended questions about traditional midwives' practices. Translators then translated questions into Kek Chi verbatim. Participants were invited to share stories about the questions they were asked. Translators then translated summaries of what participants said during the focus group into Spanish so the PI could follow the discussion. The PI probed further if midwives' statements were unclear or more information could be gained.

Data Collection

Discussions were audio-recorded for accuracy. In addition, the PI and a U.S. Registered Nurse, who has worked five years at a Guatemala hospital, took field notes to highlight voice inflection, group agreement to individual comments, and noted statements that held significance. Audiotapes were transcribed and translated according to Breslin's methods of translation (Yu, 2003). Audiotapes were transcribed and back-translated by a U.S. Registered Nurse who worked for 20 years with Kek Chi in an area just north of the rural clinic. This RN speaks fluent Spanish, Kek Chi and English. The PI, who is fluent in Spanish, reviewed the audiotapes from the focus group to check accuracy of

the U.S. translator's translations from Spanish to English. Issues with translations were addressed by using Breslin's method of translation.

Data Analysis

The Long Table Approach was used to analyze the English transcripts in consultation with three, senior nurse researchers to develop a matrix of categories and common themes (Kreuger & Casey, 2000). The Long Table Approach consists of reading printed transcripts in entirety, cutting apart and sorting transcripts into categories of questions (Krueger & Casey, 2000). Next, each question was summarized, and answers were compared and contrasted. A matrix of main topics was developed that included identification and coding of key words and common threads. Similar opinions were grouped to form themes. Bracketing and frequency of similar words and phrases assisted in theme identification. The conclusion of the analysis identified common themes across all questions. Theme analysis was compared to field notes taken by researchers. Emerging themes were reported with supporting quotes from participants.

Results

Thirteen midwives participated in a 45-minute discussion about midwives' knowledge, practices and attitudes regarding PPH. Four primary themes emerged from the focus group discussion. First, midwives repeatedly asserted they had never managed PPH, even when not directly asked. Second, midwives expressed trust in local health care providers and said they would transfer patients to hospitals. Third, midwives indicated transportation to hospitals was problematic. Fourth, midwives identified their most immediate need was help educating villagers about the importance of prenatal care and the importance of seeking early labor support.

Selected demographics of participants in-

clude comparisons of age, midwifery experience, formal education, and language. The mean age of midwives was 42 ± 9.504 years, range 16 to 51. Midwives had from 0 to 30 years of midwifery experience, ($M = 12.3$ years ± 9.441). Percentage of midwives who said they would not read or write was 62.5%. Average years of formal education was 1.3 ± 1.991 years. Comparing and contrasting highland to lowland midwives, most highland midwives had no formal education. Two highland midwives had three years of schooling or less. Lowland midwives all had been to school between two to six years. Spoken languages among midwives were 56.3 % Kek Chi, 12.5 % Spanish and 31.3 % Kek Chi and Spanish.

Denial of Managing PPH

PPH is the number one reason women die in childbirth, accounting for nearly 50% of maternal deaths (International Confederation of Midwives, 2009), yet during focus group discussions, midwives repeatedly asserted they had never managed PPH even when not directly asked. One midwife introduced herself by saying, "I am 45 years old. I have been a midwife 23 years. I have delivered about 40 children, and thanks be to God, I have not had any problems. All the deliveries went well, all are alive."

When asked if they had ever experienced bleeding too much after birth, only one midwife raised her hand in acknowledgement and said she herself had experienced PPH after giving birth to one of her own children. Four other midwives asserted throughout the discussion, even when they were not being asked about their PPH experiences, that they had never helped a patient with PPH. One midwife said, "I have never seen this, but I have heard that some have had this happen." Another midwife commented, "Sometimes in my community, women will have this problem, but they don't tell anyone." In fact,

the last comment from a midwife during the focus group was a final denial of experiencing PPH during a discussion about another topic. "I haven't had any problems like you are talking about." One midwife denied helping patients with PPH during the focus group, and later told the PI privately she had helped one patient with PPH.

Trust in Hospital Transfers

Midwives stated they trusted local health care providers and said they would transfer hemorrhaging mothers to local hospitals. One midwife said, "When I have had something happen to a woman who was hemorrhaging, I massaged [her uterus]. If they are still bleeding, I call the health promoter to give an IV [intravenous]. We [midwives and health promoters] help each other."

Four midwives said mothers are sometimes afraid to go to the hospital, and they lack resources to pay for hospital care. One midwife said, "They are often afraid to go to the hospital or maybe the husband doesn't have enough money." Another midwife said, "People are afraid to go to the hospital. They won't go. They [hospital providers] don't speak Spanish. They [patients] don't have money."

Midwives saw as part of their role reassuring mothers about the importance of hospital transfers in an emergency. One midwife said, "We tell them they may not have to have surgery. They may be able to deliver naturally. We tell them [health care professionals] will be able to help them at the hospital. Maybe they [mothers] have a sickness, and they [hospital providers] can give them the medicine they need."

Transportation Problems

Only one midwife said she had access to transportation. She said, "When we have a problem like [PPH] that then we send for someone to

pick them up by canoe and take them to the hospital." Other midwives said transportation to hospitals is unreliable, particularly because mothers lack money. One midwife said, "The man of the house must start saving his money so that when there is a sickness, he will have money to take her to the hospital if necessary." Another midwife added they have access to transportation, but arranging transportation is unreliable, "We have problems with transportation. We are using the boat launch near the Refuge clinic."

Help Educating Villagers

Midwives said they most needed help educating villagers about preventing PPH, particularly men. Midwives said villagers need to understand the importance of seeing a midwife at least once during their pregnancy and earlier in labor before problems develop. One midwife said, "Sometimes in my community ... [women] are [laboring] by themselves in their houses to deliver. It is better to tell the man that he should call us. If he calls, this is a way we can help her, by transferring her to the hospital."

Another midwife said, "In my community, the same happens. It is not until the hour of need that is when they call me. What was told to us in our study is that we (midwives) should be told when they [pregnant women] are five months pregnant. It is at that time the woman should be preparing herself. But if the baby is coming when they call on me to help, it is difficult. If she is already in danger, what can you do?"

Discussion

A paucity of data exists about Guatemalan traditional midwives' knowledge, attitudes and practices regarding PPH. This is particularly troubling because PPH is the number one reason Guatemalan women die in childbirth, account-

ing for 50% of maternal deaths. In general, traditional midwives who attend the majority of births in Guatemala, are unfamiliar with basic interventions to manage birth complications, such as PPH. There is evidence government training programs have failed to change traditional midwife knowledge about PPH. More information is needed from traditional midwives to inform future studies aimed at curbing Guatemala's Maternal Mortality Rate.

Themes emerging from the discussion offer a comprehensive picture of the collective experience of traditional midwives from remote areas in rural, central eastern Guatemala. Two themes that emerged during the focus group contradicted literature findings about PPH, and two themes shed new light on how researchers can best help midwives address PPH. Findings that contradict literature reports suggest social desirability may have played a factor in focus group discussions.

One theme that contradicted literature findings was midwives said they had never experienced PPH. Maupin (2009) reports that lingering fear and distrust from a twenty-six-year civil war hindered Guatemalans from participating in an integral health system the government offered. Schieber (2009) writes that registration of maternal death is a sensitive matter in Guatemala, sometimes because it involves legal action against involved parties. Traditional midwives denial of experiences with PPH that may contribute to postpartum maternal death may originate from cultural sensitivity about death.

PPH is defined as a blood loss of 500 cc (Varney, 2004). Inability to distinguish between normal bleeding after birth and hemorrhage may be another reason midwives denied experience with PPH. Even for well-educated birth attendants, midwives and physicians, it is difficult to accurately estimate blood loss. For traditional midwives, most of whom are illiterate and who

have had minimal education, estimating blood loss may be even more difficult as they have never been educated in quantifying volume.

Another theme that contrasted with literature findings was midwives appeared to trust local health promoters and hospital providers. Midwives have been taught in other training programs when confronted with delivery problems to transfer hemorrhaging patients to the hospital, but implementation of this action is unknown. Actual transportation time to the nearest hospital may include a two-hour walk down the mountain followed by river travel time via boat.

Additional consideration for hospital transfer for PPH is the expense. Boat launches near Sarstun cost 50 Quetzales, or \$6.25, for the two-hour motorboat ride to the nearest hospital. The cost of this boat trip is equal to the average wage for two days (Maupin, 2009) even though many villagers are not employed. In fact, finances are so limited that many midwives do not receive payment for their services, confirming what is in the literature (Maupin, 2008) and what was repeated by midwives in the focus group. Instead, Kek Chi natives tend to exchange goods and services through a barter system rather than from a monetary system. The midwife will accept payment, but she will never ask for compensation for her services. Midwives have been elected to their posts by their villages due to their special talents. Thus, they view their positions as a public service (Maupin, 2008).

In addition to issues about money and transportation, if a hemorrhaging mother succeeds at making the arduous journey from her village in the highlands to the nearest hospital, hospital conditions are not promising. The Guatemalan Ministry of Public Health and Social Welfare estimates that 30% of primary health establishments, such as hospitals, need reconstruction and replacement of necessary medical equipment (Medical Mission Exchange, 2002).

Two themes emerged from the focus group that will better inform future studies with traditional midwives. Namely, midwives expressed the need for help in establishing a reliable transportation system, and for help in educating villagers, particularly men, about the importance of prenatal care and early labor support.

Future Research

As Leininger's theory postulates, worldview greatly influences cultural care meanings, expressions and patterns. In the case of this study, several findings contradict literature reports, and midwives added new information not reported in the literature. Thus, results of this focus group can better inform future studies about how to work within the worldview of rural, central-eastern Guatemalan midwives to influence the cultural care pattern of managing PPH.

Measures have been initiated to help alleviate transportation costs to hospitals. Following the analysis of the results of this study, Deb Bell, cofounder of Refuge International, set up a transportation system for midwives by handing out index cards with two phone numbers to the clinic. Midwives were instructed to call the clinic to arrange a motorboat ride to the nearest hospital, and Refuge International would pay the bill.

Researchers plan to continue working with the same group of midwives on the remaining eleven curricula for Home Based Life Saving Skills (HBLSS). As a follow-up to the focus group the midwives were asked to take mental note of cases of PPH they encountered and to report back during future studies. Future studies may consider methods to education villagers, particularly men, about addressing PPH.

This last observation complements findings the American College of Nurse Midwives published about HBLSS work in other third world

countries. ACNM researchers in India found men needed to be brought into discussions about keeping women and children safe during childbirth because men are part of the power structure of communities (Fullerton, Killian & Gass, 2005). Ultimately, midwives who participated in the focus group recommended building community and continuing education programs with the midwives as well as village residents as the best interventions to improve Guatemala's MMR.

Limitations

Limitations of the sample in this study include lack of generalizability and variability. Limitations of this study are influenced by the use of one focus group in one location with participants who may reflect social desirability. Thus, findings from the convenience sample of traditional midwives who participated in the focus group cannot be generalized to all Guatemalan traditional midwives. Responses within a focus group can be influenced by dominant members of the group and by the desire to share opinions that seemed to reflect social desirability. Comments made outside of the focus group suggested future projects may be better served by individual interviews. The benefit of conducting a focus group with traditional midwives from such a remote area was a unique opportunity to gain insight into their knowledge, practices, traditions, and attitudes, and to provide direction for needed further research.

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