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The Comadrona and Response to Obstetrical Emergencies: Maternal Mortality in Highland Guatemala

A Thesis submitted in partial satisfaction of the requirements for the degree
Master of Fine Arts
in
Latin American Studies
by
Margaret Hemphill Copeland

Committee in Charge:
Professor Christena Turner, Chair
Professor Ross Frank
Professor April Linton

2011
The Thesis of Margaret Hemphill Copeland is approved and it is acceptable in quality and form for publication on microfilm and electronically:

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Dr. Christena Turner, Chair

University of California, San Diego

2011
Dedication

to

My husband Paul Cadman Copeland, whose continued support made it all possible, and to the loving encouragement from my daughters Stella Marie Copeland and Audrey Mills Copeland,

to

My mother, Stella Crawford Hemphill, always the social advocate, my heart, and my inspiration,

to

My father, John Knox Hemphill, whose Ph.D. dissertation, “Situational Facts on Leadership” (1949) and the American Sociological Association publication, “Leader Behavior of B-29 Commanders and Changes of Crew Members” (1955), motivated me to inquire into the disconnection between what people say and what they actually do,

to

My chair, Dr. Turner, and my committee, Dr. Frank and Dr. Linton,

and especially to

All the mothers, the mothers-to-be, and the children of Highland Guatemala and all of the Guatemalan “promotores de salud” trying to make the lives of their Chapines the best they can be.
Are utzijoxik wa‘e
k‘a katz‘ininoq,
k‘a kachamamoq,
katz‘inonik,
k‘a kasilanik,
k‘a kalolinik,
katolona puch upa kaj.

Esta es la relación de cómo
todo estaba en suspenso,
todo en calma,
en silencio;
todo inmóvil,
callado,
y vacía la extensión del cielo.

This is the account of how
all was in suspense,
all calm,
in silence;
all motionless,
all pulsating,
and empty was the expanse of the sky.

Popol Vuh
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The Comadrona and Response to Obstetrical Emergencies: Maternal Mortality in Highland Guatemala

By

Margaret Hemphill Copeland

Master of Arts in Latin American Studies
University of California, San Diego, 2011
Professor Christena Turner, Chair

The comadrona, the traditional birth assistant (TBA), in Guatemala still delivers almost 80% of Guatemalan babies in rural areas with large indigenous populations. She is a community leader and is well-respected for her work. However, Guatemala has a very high maternal mortality rate. In some departments as many as 230/100K women die per year. The comadrona is often blamed for these deaths. In many Central American countries the TBA has been outlawed or forced out of her practice. By analyzing the reasons that women die in childbirth in rural Guatemala I
show it is not necessarily the comadrona’s fault, but rather the lack of a community’s ability to respond in time to an obstetrical emergency. Based on 20 qualitative interviews with comadronas, medical personnel, community leaders, and medical administrators, I analyze the meaning of maternal mortality in rural Guatemala. I review the location of the comadrona in these narratives and the connection between competing health systems and maternal mortality statistics. I show one of the major causes of maternal death in rural Guatemala, postpartum hemorrhage, cannot be predicted and can be fatal in less than 2 hours. The comadrona and the small regional health posts that serve rural populations are not equipped to respond to obstetrical emergencies or to stabilize and transport the mother. Together these findings point to the need to plan for and resource community response to obstetrical emergencies, and the need for better communication between the client, her comadrona, and emergency responders.
Introduction

Almost every study on maternal mortality starts with the same preamble that cites the grim world-wide statistics. The World Health Organization for 2008 estimated there were 260 maternal deaths per 100,000 live births.¹ The fact is that maternal mortality kills women all over the world as this quote illustrates.

“Complications related to pregnancy are the number one cause of death and disability among women of reproductive age worldwide. They are responsible for more than double the loss of life as compared to STD’s, AIDS or tuberculosis. There exists no cause of mortality for men that approach the magnitude of maternal mortality and morbidity. And what makes these high levels of maternal mortality and morbidity tragically persist are the known-for-decades cost effective interventions (as defined by the World Bank that cost less than $100.00 for life saved) that are not sufficiently accessible or available in developing countries.”²

Maternal and infant mortality are used as key indicators of the quality of life. High maternal mortality rates reflect not just gender inequalities with reproductive care, but also a myriad of social inequalities, poor education, sanitation, environmental quality, and political disenfranchisement.

Reducing maternal mortality has been a major frustration for all countries in the developing world. I would argue that maternal mortality reduction cannot be done without a true understanding of the various medical systems which challenge and compete with the doxa of Western

¹ Hogan, M.C. et al., 5.
² Maine, D. et al., 1996.
biomedical systems. And yet much of state sponsored public health policy is made without really analyzing what motivates individuals to seek health care.

In Highland Guatemala sometimes known as the Altiplano the empirical birth assistant, the comadrona, (directly translated as midwife) delivers almost 80% of babies. Highland Guatemala is located in the northwestern region of the country. The geography is mountainous punctuated with volcanoes and deep river valleys. The average altitude is over six thousand feet. The Altiplano comprises some of Guatemala’s poorest and populous departments with large indigenous representation. These departments were the sites of many of the atrocities of Guatemala’s 36 year civil war that destroyed hundreds of indigenous villages and caused an exodus of Maya to neighboring states in Mexico. Guatemala has a very high maternal mortality rate (MMR) as reported for in 2009, was 153/100K. In some Highland Guatemalan departments the MMR is even higher; as many as 230/100K women die per year.

The comadrona is often blamed for these deaths. In a recent article in La Prensa, Guatemala’s largest newspaper, titled “Comadronas Reclaim their Rights”, stated,

“Las estadísticas del Ministerio de Salud culpan a las comadronas de un alto porcentaje de las muertes maternas e infantiles, acusaciones que las parteras no habían podido refutar por ser miembros de un sector sin voz; sin embargo, se han empezado a organizar y señalan que no son
responsible de las cifras de mortalidad, pero que el número sería mayor si ellas no asistieran a las parturientas." ["The statistics of the Minister of Health blame the comadronas for the high percentage of maternal and infant deaths, accusations that the birth assistants have not been able to refute for being members a voiceless sector, none the less, they have begun to organize and show that they are not responsible for the high rates of mortality, rather the number would be higher if they do not assist the parturient"]).³

Empirical birth assistants, birth assistants who use practical experience rather than scientific proof, have long been considered problematic because they do not have biomedical training and operate outside of the control of state-sanctioned biomedical systems. The Guatemalan comadrona in particular is seen as deficient and irresponsible in many ways: ignorant of anatomy, not using modern risk assessment protocols during pregnancy and delivery, inducing abortions, and using dangerous traditional medicines and therapies such massage and temescal (sauna).⁴

- The Project

Before I went to Guatemala I did some preliminary field research on "promotores de salud", health promoters, in San Diego County. This model of the lay health worker exists all over Latin America and in Spanish-speaking areas of the USA. I felt that by studying promotores de salud in Guatemala I could continue my research in a totally different context.

When I arrived in Highland Guatemala, I did find promotores de salud, however I was unable to interview them because many were on a national strike. Others were located in communities I could not visit. However I met over 200 comadronas. I was intrigued with their practice and how biomedical personnel and competing health systems interacted with these empirical birth assistants. After observing comadronas in meetings and talking with them and then learning of the alarming high maternal mortality rate in Highland Guatemala since the beginning of 2010, I wanted to find out if the comadrona was actually responsible for high maternal mortality. More interestingly I wanted to know why she was being blamed for this problem. Is she at fault?

- Methodology

Qualitative Research

Field research for this paper was conducted in two of the Highland Guatemala departments. It consists of 20 qualitative interviews of health personnel who work for an NGO that supports maternal health: Guatemalan government health personnel, community representatives, and comadronas. A constantly changing PowerPoint was used to stimulate conversation and elicit criticisms of my own perceptions illustrated in the PowerPoint. Interviews were recorded and then transcribed and initially reviewed with Atlas-TI© to find reoccurring

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5 Atlas-TI© is qualitative analysis software for textual and multi-media data.
discursive themes. Commentary was recorded simultaneously. Given relatively good Internet connections I was able to conduct email interviews with professors and doctoral students who had been in Guatemala recently and had been studying comadronas. Using information that all informants shared with me, I was able to redirect or substantiate my inquiries in subsequent interviews. Fieldwork also included observation of maternity clinics, hospitals, comadrona and nurse trainings, as well as observations of other USAID sponsored nutrition and education programs. Field research was conducted during two and a half months between June and August of 2010.

Quantitative Research

Using maternal mortality statistics provided by “Sistema de Información Gerencial en Salud” (SIGSA), a Guatemalan governmental biostatistics website, I examined the causes of maternal mortality and the place of death from five Guatemalan departments that share contiguous borders and demographics. These departments are Alta VeraPaz, Huehuetenango, Quetzaltenango, Quiché, and Totonicapán. I also looked at infant mortality statistics and a national aggregation of maternity-related morbidity statistics. Using information I obtained from interviews with biomedical experts on maternal mortality I condensed the causes of maternal mortality into four categories based upon the urgency of reacting to the particular obstetrical emergency each category
represented. Postpartum hemorrhage for example has a time window of less than two hours for emergency care. Preeclampsia-eclampsia emergencies, depending upon the individual, have a larger reactive “window”, six hours or more.

The most cited study of barriers to seeking health care for obstetrical emergencies is Thaddeus and Maine’s, “Three Phases of Delay”. The delays for the treatment of obstetrical emergencies are enumerated thus: 1.) “Delay in deciding to seek care on the part of the individual, the family or both”, 2.) “Delay in reaching an adequate health care facility”, 3.) “Delay in receiving adequate care at a facility”. Using the Thaddeus and Maine paradigm as a skeleton for my analysis I show from narratives and interviews of comadronas and health personnel how each delay affects maternal mortality in Highland Guatemala. Then by analyzing the causes of maternal mortality in Highland Guatemala with the SIGSA data I argue that the major reasons why women die in childbirth are neither predictable nor preventable before birth. I will show that blaming comadronas for high maternal mortality by using the World Health Organization campaign to eliminate the traditional birth assistant and home birth, exempts the Guatemalan State from addressing the problem of the unequal distribution of health resources for its citizens. I then show that without the resources to handle an obstetrical emergency in the

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6 Thaddeus, S., and D. Maine, 1092.
community the comadrona cannot be blamed for high maternal mortality rates.
Chapter 1 – Birth Assistants and Lay Health Workers

Reducing maternal mortality worldwide has been an objective of the World Health Association (WHO) for many years starting with Millennium Development Goals in 1996. It has been a constant struggle full of many failed initiatives and missed goals. A recent WHO news release declared that notable progress is being made in many countries, especially in Southeast Asia, but not all countries are doing so well.7 Numerous studies have been conducted to find out why some countries have managed to reduce their maternal mortality ratios (MMRs) and others have not. Some of the explanations, that include poverty and women’s empowerment issues, have also pointed to the worldwide scarcity of trained medical personnel and facilities. In addition, the World Health Association, many government public health officials, and various health-centered NGOs, have blamed the untrained birth assistant and the unsanitary environment of home birth for high maternal mortality.8 According to their perspective, the problem of the untrained birth assistants that attend clients in their homes can only be addressed by their elimination.9

- The Birth Assistant

A Birth Assistant is defined as a person that attends and assists a woman during childbirth. They can be family members, friends or a

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8 Hinojosa, S., 643.
9 Leedam, E., 251; Carlough, M. & McCall, M., 201.; Kwast, B., 117.
contracted practitioner. They can be men but most are women. Birth assistants have existed for thousands of years and perform various functions for women during pregnancy and birth. Most cultures understand the profound psychological and physical benefits derived from the support and accompaniment during labor and delivery.\textsuperscript{10}

The human body is designed so that birth can occur without interventions or assistance. In most cultures women do not birth alone, but there are some cultures in which women give birth unassisted due to personal preference or custom.\textsuperscript{11} More recently “unassisted birth” has become a fringe movement that has arisen from a rejection of biomedical obstetrical practices.\textsuperscript{12} Women’s claims to agency over their own bodies and their unborn children are highly contentious. Unassisted birth has been seen as irresponsible and even illegal.\textsuperscript{13}

Empirical birth assistant practices can run the gamut of special rituals, prayers, medicines, special locations, and positions for birth. Included are procedures that are believed to speed labor, minimize or rationalize pain and fear, and result in the delivery of a healthy baby and mother. These practices are not necessarily arcane or inflexible and can include the use of the latest biomedical information and resources.

- The Traditional Birth Assistant

\textsuperscript{10} Pascalli-Bonaro, D. & Kroeger, M., 22; Essex, H.N. & Picket, K.E., 275.
\textsuperscript{11} Bieseie, M., 474; Sarvanan, S., 96.
\textsuperscript{12} Miller, A.C., 53.; Epstein, R.H., 169-186.
\textsuperscript{13} Gehin, I. et al., S175.
What exactly is a “Traditional Birth Assistant” (TBA) and how do they differ from birth assistants in general? Many cultures have names for birth assistants, such as partera, midwife, doula, but the categorization of birth assistants as traditional birth assistants is a relatively new phenomenon.

Beginning with the Declaration of Alma-Ata in 1978 the World Health Organization promoted the right to health and primary health care. In this declaration WHO acknowledged the traditional practitioner, “Primary care: ... relies, at local and referral levels, on health workers, including physicians, ...., as well as traditional practitioners as needed, suitably trained socially and technically...”.14 In subsequent published guidelines, WHO further defined the TBA: “Strictly, the term TBA refers only to traditional, independent (of the health system), non-formally trained and community-based providers of care during pregnancy, childbirth and the postnatal period”.15 From this definition WHO developed a framework for biomedical personnel hierarchies and a place on the bottom for the “trainable” TBA. While WHO grudgingly acknowledges the TBA as a contributor to the health of pregnant women and newborns, the TBA is also seen as a liability and an impediment to reducing maternal mortality.16

The WHO has continually set goals for the reduction of maternal and child mortality. As technological advances occur the guidelines for

14 World Health Association, Declaration of Alma-Ata, Declaration 6, “Primary Care”.
16 Goldman, N. & Glei, D., 5.
“best practices” for maternal care are updated and elaborated. Various WHO expert subcommittees on maternal health periodically meet in Geneva, Switzerland. An example is a subcommittee that met in 2008 whose purpose was to provide technical guidelines on postpartum care. The committee was composed of 15 experts that were doctors, professors, government health representatives, public health officials, World Bank representatives, and UN representatives. Only one committee member was a midwife. Most were from institutions in the US, Europe and India. At that time there was no representative from Latin America.17

The naming of the tradition and attaching the word “traditional” to health practices or persons create ideologies, institutions and power relations. Defining traditions and what is “traditional” manufactures a discourse around what is thought to be traditional or not. Tradition is a very complicated word with good and bad connotations. Expanding on the theories of Foucault and control of the body as elaborated in “Discipline and Punish”, Pigg finds the concept of “tradition” problematic as it pertains to the birth assistant. It connotes practices stuck in time and therefore the TBA is stuck in time, and her practices are marginalized.18 The concept of “non-formally trained” is equally problematic because it is the lack of formal training in biomedical systems and technologies that separate the TBA from the skilled birth assistant. She is seen as a liability.

18 Pigg, S.L, 49., Foucault,M., “Discipline and Punish”.
and her knowledge of maternal health is seen as casual and dangerous. The net effect for the TBA is to relegate her to limited roles of hands-off prenatal counseling and referral. It is the referral role that positions her in the hierarchy of the biomedical apparatus, but in limited contexts effectively passing off the control of her client to the state-sanctioned health systems.

Scholars have investigated the use of “traditions” as ways of promoting social solidarity and legitimacy. As a positive the word “tradition” is used by indigenous and women’s support groups to create consensus and the promotion of a women’s choice in birth practices. A document prepared by a RELAHACUPAN, a Latin American and Caribbean network to promote humanized childbirth illustrates the use of the word tradition as it applies to birth assistants. From their perspective this definition is more encompassing than the WHO model and recognizes

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20 Ortiz Rodríguez, D.L. ed. et al. Section II, “The Traditional Midwife”, “She is an independent essential and primary care provider during pregnancy, birth and postpartum and is recognized as such by her community and jurisdiction. She offers domiciliary services. She works in isolated communities in developing countries and sometimes she practices in developed countries. She is a neighbor of the mothers she assists, and may be aboriginal in her country. Her talents vary according to the region of residence. Her gift as a midwife and her intuition help create an intimate, unique relationship with each mother and infant under her care. The use of diets, plants, various infusions, immersion baths, sweat baths, incense, enemas and massages integrate her knowledge. She understands and uses minimal intervention and special maneuvers to work with the most difficult births. She practices hygiene, promotes breastfeeding, and protects the mother with her presence, advice and prayers. The traditional midwife considers birthing a natural event, for many it is a ceremony. The traditional midwife works and collaborates in the health of the newborn baby and takes care of her/him as long as it seems necessary. She also takes care of the mothers’ health, offers education with regard to family planning and is accessible to help the women with her needs throughout her life. She gets her knowledge from traditional, and informal methods ancient to the profession. This includes: Learning through her own experience as a mother, assisting other women, from her ancestors, colleagues, healers, other health providers and by means of self-learning; dreams, examples from nature, spirits, her spirituality and God may guide her work. When her education comes from a non-governmental organization she is known as a trained traditional midwife. Occasionally she works in collaboration with other health providers. At times she may work in clinics and often she is the bridge between the health system and her community.”
the TBA’s practice as multi-faceted and community centered and most importantly working independently.

- The Skilled Birth Assistant

To replace any direct practice by traditional birth assistants the WHO global “Safe Motherhood” initiative advocates a model of the “Skilled Birth Attendant”, SBA. The SBA should have training and familiarity with medical procedures that require specific equipment or resources. The skill they should possess are the ability to: “safely conduct a normal delivery using aseptic technique; active management of the third stage of labor; provide immediate care of the newborn, including resuscitation; manage most postpartum hemorrhage through use of parenteral oxytocics and abdominal massage; manually remove the placenta; manage eclampsia through provision of parenteral antihypertensives; recognize and manage postpartum infection through use of parenteral antibiotics; perform assisted vaginal delivery through the use of a vacuum extractor; manage incomplete abortions with manual vacuum aspiration (MVA) and know how to refer women to the next level of care and stabilize them for their journey”. While many of these tasks are already performed successfully by TBAs, a vacuum aspirator needs electricity, and often there is no referral facility. Having

21 Carlough, M. & McCall, M., 201.
22 Ibid.
23 Ibid.
an army of skilled birth attendants to replace the TBAs is certainly a lofty goal that can only be achieved by countries that have the dedication and investment for this endeavor.

In an interesting reversal of a law prohibiting TBA’s from practicing in Malawi the government found out that it had neither the facilities nor sufficient biomedically-trained personnel to serve the Malawi population. President Bingu wa Mutharika lifted the ban on TBAs in October 2010, but this may be a temporary reprieve. Echoing the WHO doctrine, the TBA is still seen as a stop gap. The Executive Director of the National Organization for Nurses and Midwives in Malawi, Dorothy Ngoma stated, “We have failed to provide the service; that’s why the TBAs exist. When we have community midwives trained for at least two years, they (TBAs) will go out of business as people will see the value of being attended to by qualified medical professionals.” Ngoma’s statement does not take into account that the TBA. The TBA is often the preference of her clients who either resist biomedical interventions that are dangerous or unnecessary and run counter to their client’s beliefs or the client’s desire for treatments and drugs not available in the state-sanctioned biomedical system. The TBA may play both sides of the table by sometimes advising her clients to seek biomedical care or by hiding her own practice by refusing licensing and mandatory trainings. Contrary to the notion that traditional practices

are “stuck in time”, scholars have found TBA practices to be complex, highly skilled, and evolving.\textsuperscript{26}

- Problems with Trainability and Solutions

At the crux of the WHO argument is whether the TBA can be trained in biomedical procedures so that she can eventually become a skilled birth attendant. There have been a plethora of studies both quantitative and qualitative that continue to focus on the effectiveness of training the TBA to become a SBA. A meta-analysis of TBA training looked at 60 different training program studies and came up with the conclusion that, “TBA training is associated with moderate-to-large improvements in behaviours relating to selected intrapartum and postnatal care practices, and small but significant decreases in perinatal mortality and neonatal mortality due to birth asphyxia and pneumonia”.\textsuperscript{27} The study made no connection between the use of these practices by the TBA and reductions in maternal mortality.

In another study of training programs for Honduran TBAs the investigator came to the conclusion that the TBA was capable of learning certain practices [as evaluated by testing]. Referrals for high-risk pregnancies increased. But there was no conclusion about the effectiveness of the retained information to an actual decrease in the maternal mortality ratio (MMR). The investigator goes on to say that,

\textsuperscript{26} Davis-Floyd et al. (2001), 126; Cosminsky, S., “Modernizing Midwife”, 350.
\textsuperscript{27} Sibley, L.M. et al., 474.
“Training alone, however, is not sufficient for improving health outcomes, especially in terms of maternal mortality and morbidity. Also necessary is the integration of the trained TBAs into the local health infrastructure, the establishment of accessible centers capable of providing essential obstetrical services, and the development of transportation systems available to high-risk pregnancy patients and those with emergent complications at the time of delivery”. Recognizing the paucity of information in previous effectiveness studies that examine TBA training program characteristics, Foster introduces a profile of a TBA initiated and mentored program in Ixmucane, Guatemala. Her conclusion is that we cannot even begin to evaluate programs or link them to results without understanding what these programs mean to the participants. She also points to problems with data collection by the TBA of successful outcomes.

Training received by SBAs has also shown to be lacking. In a study of 166 SBA’s in Nicaragua, Benin, Jamaica, and Rwanda that were given a knowledge and skills test, only 50% of the respondents could handle questions on management of third stage labor, placenta delivery, uterine compression, newborn resuscitation, and newborn care. This study did not show that knowledge retention and demonstration of skills resulted in reductions in MMRs in the countries that were studied.

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28 Rodgers, K.A. et al., 8.
29 Foster, J. et al., 14.
- Are any lay health care workers effective?

There has been a trend since the mid-1990s, paralleling the decentralization and privatization of health service, to employ or use volunteer lay health workers. Their use is seen as an inexpensive way to provide non-technology-reliant health services in many countries. Rather than question the value of using lay health care workers to provide essential health care services in poor and under resourced communities lay health workers are used in great numbers.

A Cochrane meta-study examined 43 programs that used lay health workers in primary and community health care and came to no conclusion over the effectiveness of the lay health worker in programs related to maternity care.30 The study discussion pointed up the problem of defining the lay health care worker given the variety of tasks and roles they assume. Therefore it is difficult to determine their effectiveness because the tasks may not be comparable.

Yet performance and accountability are linked to WHO guidelines and World Bank loan guarantees. Determining effectiveness is also important for International Aid Organizations that fund NGOs.31 If a program isn’t “effective” – showing measurable improvements, i.e., reductions in maternal mortality or infant mortality, it isn’t likely to be renewed.

30 Lewis, S. et al., 3.
31 Najam, A., 342.
However, very few studies measure client satisfaction with home birth and a birth assistant as a proxy for “effectiveness”. The client who has her child at home with the help of her comadrona may interpret her birth experience as entirely satisfactory. Her perspective may be quite different from the biomedical personnel that attend her in the hospital. Additionally Kleinman et al. estimate that 70% of all self-identified “illnesses” and sickness [of which pregnancy and childbirth in Highland Guatemala is seen as a “sickness”] are managed outside of the purview of formal health systems. If so, how can “effectiveness” be measured outside of the context of biomedical systems?

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32 Fleischer, S., 58-72.
33 Kleinman, A., et al., 140.
Chapter 2 – Pluralistic Health Care Systems in Guatemala

- The Guatemalan State System

In the mid 1990s many Latin American countries were pushed to decentralize and to privatize many social services. Health Care became a specific target for reform by the World Bank because it became a requirement for obtaining loans. In some countries reforms had already begun. Some have argued that Latin American countries had better services before being pushed to privatize and decentralize their health systems. “Comparing the year before the reform and 2004, coverage decreased in all ten countries, and total average coverage fell from 38 percent to 26 percent of the labor force”.34 How these changes in coverage occurred and what actually happened are very particular to each country and their political-economic history of the management and the creation of a state health system.

Health systems in most countries have three principal constructions that fund them: state-managed systems, private payer systems, and non-for-profit systems.35 It is with this mix that Guatemala provides health access to their populations. It is also important to note that privatization and decentralization are processes that are often independently initiated. They do not have a historical order nor do they have similar outcomes in countries in which they are enacted. Decentralization can have many

34 Mesa-Lago, C., 184.
35 See Scheme 1 Appendix
different constructions depending upon the implementation. Kolehmainen-Aitken postulates that decentralization can have many forms which she categorizes as: de-concentrating, delegating, and devolving responsibilities and powers from one central agency to another entity, i.e. the government to another agency, local level office or municipality. Decentralization can take all of these forms in the context of the state and they can occur simultaneously.³⁶

In Guatemala the government has maintained a more direct control on the distribution of the health care budget through a “delegation” model. Individual Guatemalan departamentos and municipalities do not contract directly with NGOs. It is the Ministerio de Salud Pública y Asistencia Social (MSPAS) that interacts directly with NGO health providers to get health services into underserved rural indigenous populations. In 2002, more than 90 NGOs served the health needs of 3 million Guatemaltecos – ¼ of the population.³⁷ Guatemala has struggled to control the quality of health services and to control the fiduciary responsibilities of state governments and private not-for-profit and profit contractors.

Guatemala has taken a particular path in the decentralization and privatization of its health services. It has a social security system. It has a large and young population and a history of migration to seek work in

³⁶ Kolehmainen-Aitken, R.L., S.
other countries, principally the US. It has large areas with indigenous populations and a history of discrimination that make health care delivery difficult. These characteristics shape the consequences of decentralization and privatization especially because of the tremendous need for basic health services.

Under pressure from World Bank as a condition for loans and from agreements made in the 1996 Peace Accords Guatemala decentralized their health system. Guatemala did not decentralize by placing the administration of the health budget under the control and direction of Guatemalan departments as with done on a regional level or state level in other Latin American countries. Fiscal control and supervision was maintained on the federal level. It is a question if decentralizing and privatization of health services had any great economic import.

The total per capita expenditure on public health in Guatemala is low and has been chronically underfunded, “The budget for health is the lowest in Latin America, with the assignation of 1.17 percent of the gross national product, especially reduced in comparison to that of countries such as Costa Rica, where it 6%”.38 Guatemala receives and distributes its health care budget through two branches, social security for the formal sector and the Minister of Health for the uninsured.

The Social Security arm of the Guatemalan government is called Instituto Guatemalteco de Seguridad Social, IGSS, and was created as early in 1946. It is this system that pays for health services to those Guatemalans and Guatemalan employers that contribute to it. The contribution rate has been very low. It does divide the quality and variety of services a Guatemalan provided to non-contributors. For most Guatemalans, whether they are contributors to social security or not, the services are not affordable, “To join, each worker would have pay quota per trimester of 20 Quetzales, the employer, 40 Q and the State another 40 Q to have the right to services”. Many indigenous Guatemalans in rural areas maintain a family on 16 Q per day, but the majority of them are non-contributors to the IGSS. Minimum wage in Guatemala is 56 Q per day.

Guatemala tiers services based upon their technical complexity. Location drives their availability. Heart surgery is available in only the largest cities and at hospitals that have the where-with-all to provide the service. On the lower ranks of access, Guatemala has “puestos” (health posts), small community clinics, which treat minor ailments and give immunizations - strategically located in towns that have regional markets. Most rural Guatemalans actually live within reasonable commute distance to these puestos, but they are underutilized mostly because they

still cost too much money. These services are relatively inexpensive but they are not free. For many rural Guatemaltecos this puts even these basic services outside of their reach. Pharmaceutical access is also an issue and it is a major expense for all types of health services, public or private.

- The Influence of NGO’s – International and National

International and national NGO participation in state health systems has been studied by scholars from various points of view. International NGOs can have different agendas and auditing necessities as well as time frames that cause their commitments to be project-based and unpredictable. Doyle and Patel argue that NGO presence can cause conflicts between state-sponsored systems or can arrest of the development of state-sponsored systems, “the channeling of funds through NGOs to support primary health care can destabilize a fragile health infrastructure and undermine local control of health programs”. Often projects are funded for specific purposes based upon grants received by the NGO in its originating country. Some projects are funded as clinical research with ethical implications. They offer limited health services in exchange for patient participation. Not all receive a specific pharmaceutical for example and often there is no aftercare. Once the study is over it is over.

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41 Annis, S., 522.
42 Hautecoeur, M. et al., 97.
It could be debated that without NGO commitments, Guatemaltecos would have even less or no access to a state sponsored health system. Guatemala has a bifurcated health system divided between contributors and non-contributors and organized in that manner. (See Scheme 1). The Sistema Integral de Atención en Salud, SIAS, relies almost exclusively on NGOs to provide health care to the “informal sector”. NGOs pick up the slack in rural areas, but NGOs by their nature have difficulty in making long term or integrated commitments to the country. Native NGOs to handle health care delivery are a component of decentralizing policies and these types of NGOs are an integral part of rural health care. In Guatemala national and International NGO’s are formally integrated into the health system, but their regulation and integration and coordination is problematic. Only recently has Guatemala established a registry of all NGOs. In Guatemala today there are more than 490 NGO’s providing maternal and infant care, nutritional support, dental clinics, and specialized surgery campaigns.

This raises many ethical and practical considerations not just for the patient population, but for power struggles between the state health system and NGO objectives and norms. NGOs vary in their mission and vision and this can cause religious and political conflicts with the Guatemalan oligarchy that has staffed all levels of government.

bureaucracies with members of Guatemalan families.\textsuperscript{46} Family ties and solidarity do not necessarily make consensus within the Guatemalan oligarchy in regard to health policies especially family planning. In Guatemala it was the Catholic Church that blocked laws and even defunded a national survey on maternal and infant health in 2003.\textsuperscript{47} When the Guatemalan Republican Front (GRF) took power, Zury Ríos, a supporter of Planned Parenthood, pushed and passed a bill for reproductive rights in the Guatemalan Congress in 2000. Zury Ríos is the daughter of Efraín Ríos Montt. Ironically it was Efraín Ríos Montt who was the architect of “Operation Cenizas” that destroyed over 600 Mayan villages in the populous departments of Huehuetenango and Quiché.

Who pays for the health system? It is totally under-funded with Guatemalans spending in 2002 less than any other country as a percentage of gross national product in Latin America.\textsuperscript{48} Guatemalans, if they can afford it, buy private care because of the poor quality of the public institutions. Funding of the contributor portion through IGSS is highly dependent upon willing contributions to the fund. Guatemala has a very large migratory community. When its citizenry are outside of the country they are not paying into IGSS. In addition the ups and downs of the world economy as seen with the recession in 2009 translate into drastically reduced remittances. A large percentage of remittances are used to pay

\textsuperscript{46} Casazús Arzú, M.N., 257.
\textsuperscript{47} Shiffman, J. & Valle, A.J.L., 70.
\textsuperscript{48} Galindo, E. & Umaña, N., 81.
for health care, mostly private health care. When remittances drop so too does any investment in health services no matter what their type.

Health care is still too centralized with the government controlling spending and “borrowing” heavily from the social security fund to finance other ventures. Corruption has been rife within the IGSS. As an important side note Guatemala has a systemic problem protecting social security contributions from fraud and mismanagement. This money has also been stolen with some impunity, as the grinning face of the incarcerated Jorge Mario Nufio showed in a recent article in La Prensa. Nufio, who was the Vice-President of the IGSS, is serving a 20 year sentence for embezzling 350 million Quetzales in 2006. The money left the country in a convoluted route through Honduras to “offshore investments” in the Caribbean.

Free market thinking and neo-liberal policies of the 1990s and the subsequent decentralization and privatization of services have led to this principal criticism of the centralized Guatemalan health system,

“The weak supervision of the Ministry of Public Health and Social Assistance and the resultant inaction favors the natural way of institutions and organization, those who are found in the health area a free market of goods and services, where the cost and the demand are the only rules. With these organizations, the MSPAS has established weak political relations and in some cases subordination as with the case of financial cooperation agencies and pharmaceutical

companies. With other organizations, the Ministry establishes relations of a commercial nature as in the case of NGOs.\(^{50}\)

The state system oscillates between blatant corruption, bureaucratic ineptitude and indifference.

Some organizations such as the Cuban brigadas (brigades) have been in Guatemala for a long time. The Cuban government sends doctors to different areas of rural Guatemala and they work with local doctors. They stay for a two year period and provide constancy that short term health clinics of foreign doctors and nurses do not.\(^{51}\) Even with the Cuban presence Guatemala has a severe shortage of doctors and nurses. Health is much more than hospitals and doctors.

In Guatemala the lack of food, sanitation, and clean water are major factors in the poor health of the entire country. Guatemala lacks a financial security cushion with many of its public resources. The latest emergency is the simultaneous eruption of Volcán Pacaya and tropical storm Ágatha at the end of May 2010. Emergency services including first aide are poor or nonexistent. It was Hurricane Stan of 2005 that brought down the hillside by the sides of Santiago Atitlán. It was an illustration of how Guatemala depends so heavily on NGO assistance. The Spanish Red Cross sent a brigade to town. Spanish NGO’s stayed on and worked with the town to build a sewage treatment facility so that Lago Atitlán would

\(^{50}\) Galindo, E. & Umaña, N., 122.

\(^{51}\) Green, J. & Baston, H.A., 8.
not be polluted. In the highland areas especially close to the sides of volcanoes where many indigenous groups make their homes and farms that are subject to landslides and the closure of roads. These are the same areas in which regular health care delivery is difficult.

- Competing Medical Systems and the Influence of Communication Technologies

There is also what is referred to as traditional or indigenous medicine. While there certainly a difference that exists between the two systems, it isn’t clear what comprises “indigenous” medicine partly because whatever Mayan system existed before the Spanish has been expanded to include European 16th century baroque concepts of “humors” and illness. Roughly, the holistic philosophy of the Mayan system of health is described as, “By itself, they [indigenous health practices] make up part of the indigenous institution, many times, associated with the practice of Mayan spirituality, since health is a integral whole that does not separate the body from the spirit nor from the material or the emotional”.

As the globalization phenomenon of the distribution and marketing of drugs penetrates even the smallest and poorest countries, the effect of consumer knowledge of the latest pharmaceuticals has changed biologic and non-biologic health systems; it has spawned something

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52 Nigh, R. et al., 472.
53 Tovar, M., 56.
new.54 The consumer can see and hear through the mass media at
time the ubiquitous advertisements for Viagra®, lap-band surgery, and
anti-depressants. There is a curious mix of patients in poor countries that
desire unaffordable life-saving first world medical technologies, such as
kidney transplant, and in the same impoverished countries there are
notable ghettos of organ donors to supply the needs of wealthy clients
who cannot obtain a kidney in their own country.55 Knowledge of side
effects, proper dosages and treatment cycles, and suitability of
medications are often distorted or unavailable, but this does not seem to
stop the demand.56 These “other systems” under the rubric of patient self-
medicalization compete directly financially and socially with biomedical
and non-biomedical systems. What is different is that today, with
knowledge acquired by the rapid and ample communication on health
care, clients can and do take control of their health treatment if they can
afford it.

Guatemala has very good cell phone coverage and all of the ads
for health remedies and shows detailing the latest medical technologies
are all over the satellite TV channels. Drugs of all types are readily
available at any pharmacy. It is common for people to buy “sueros” –
vitamin and otherwise enhanced IV packs and administer it themselves.

Even in the smallest pueblos people have technical knowledge about

54 Ferguson, A., 48; Kremer, M., 72.
56 Coffman, M. et al., 204.
some very powerful drugs. If they can afford them they have no problem buying and taking them. In a visit to a tiny pueblo of less than 200 people I overheard a conversation between the auxiliary nurse and the town representative of the education committee. They were discussing buying for a low price from the NGO clinic that supplied it a very potent anti-parasitical drug calling it by its proper Latin name in a conversation as casual as the weather. Comadronas have commented to me that sometimes their clients will ask for oxytocin to accelerate birth even though it can be a very dangerous drug used in that way. Ironically it can also be the drug that saves a mother from hemorrhage after birth.

These systems, biomedical, “indigenous”, and self-medicalization compete with each other and place the comadrona in a position of constant negotiation for the childbirth preferences and rights of her client. These systems interact to pit biomedically-trained personnel against the comadrona at the same obfuscating the failure of the Guatemalan government to protect and preserve the health of all of its citizens.
Chapter 3 – Normal Childbirth, Risk Creation, and the Three Delays

- What is normal childbirth?

Women’s bodies have been controlled by societies for thousands of years. Although human eggs can be fertilized and grown into fetuses in Petri dishes for later implant, there is still no substitute for the human uterus. For now, a woman’s body is the only place that a fetus can be brought to term. The body feminine remains a contested space for political, social, and economic control.

Scientific knowledge of childbirth creates discourse of normality, agency, what constitutes a “complicated birth”, and ethics that are framed in binary models. Recently phenomenological research on pregnancy and childbirth brought women’s experiential knowledge that challenges the reductionism and essentialism of the pregnant and birthing bodies formed by scientific knowledge.\(^{57}\) Human birth certainly has risk as does any human activity. In most cultures, pregnancy and childbirth are treated with consideration for the changing physical needs of the mother. Nonetheless the majority of childbirth discourse continues to focus predominately on medicalization of childbirth and the scientific assessment risk.\(^{58}\)

Western biomedical practices of risk prevention or avoidance associated with pregnancy and childbirth began in the mid-18\(^\text{th}\) century.

\(^{58}\) Walsh, D.J., 488.
with public campaigns to control childbirth fever infections with better hygiene.\textsuperscript{59} Today in many Western societies pregnancy risk is managed with practices that start years before a contemplated child, with harm reduction strategies for both men and women such as quitting smoking, exercising, and otherwise fortifying the reproductive organs and minimizing any chromosomal damage to the zygote. Even the definition of normal childbirth has moved beyond the binary of “natural” – “abnormal” to a complete acceptance of caesarian birth, now the “new normal”. MacKenzie Bryers theorizes that these perceptions, maternity risks in particular, become blurred because of the way these perceptions are communicated from the practitioner and mediated by the women’s experience.\textsuperscript{60}

Caesarian birth is an example of childbirth risk mediation. In the US in 2007 as many as 32\% of all births are done by caesarian.\textsuperscript{61} Once a woman has had a caesarian it is very difficult for her to advocate for a vaginal birth with a subsequent pregnancy even if there are no contraindications.\textsuperscript{62} There are questions about the number of caesarians and if this procedure is actually necessary.\textsuperscript{63} Many researchers have recognized this as a problem as caesarian birth in hospital environments is

\begin{footnotes}
\footnote{Epstein, R.H., 52.}
\footnote{MacKenzie Bryers, H. & Van Teijlingen, 490.}
\footnote{Menacker, F. et al., 1.}
\footnote{Roberts, R. L., 321.}
\footnote{Villar, J. et al., 1819–1829.}
\end{footnotes}
not without significant risk to the mother and child’s health.\textsuperscript{64} In many poorer countries studies have shown that poorer women have more caesarians. Some Latin American countries have very high rates of caesarian birth. In private hospitals in Brazil the number approaches approximately 80\% of all deliveries.\textsuperscript{65} In many cases the safety of mother and child of a caesarian is not the only or even major reason for the high number of caesarian births, but is directed by a mother’s and obstetrician’s preference for scheduling and a desire to avoid a painful and protracted labor.\textsuperscript{66}

Extensive vigilance of the pregnant condition is a biomedical practice created from the perception of risk in childbirth. Prenatal checkups, folic acid and iron supplements, tetanus vaccination, and nutritional guidance have been a part of women’s prenatal care in both Western and developing countries since the 1950s.\textsuperscript{67} For all the benefit they may have for a woman during her pregnancy and for preventing birth defects these practices don’t necessarily prevent obstetrical emergencies.\textsuperscript{68}

There has been very little investigation of the psychological role of a comfortable birth environment for allowing the natural hormonal and physical processes of birth to function as they should. Complex hormonal

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{64} Barbieri, M.A. et al., 687–684.
\item \textsuperscript{65} Santos, I.S. et al., 4.
\item \textsuperscript{66} Potter, J. et al., 38-39.
\item \textsuperscript{67} Alexander G.R. and Kotelchuck, M., 307.
\item \textsuperscript{68} Ibid. 314.
\end{itemize}
\end{footnotesize}
processes interactions occur between the fetus’s hormones and the mother’s that coordinate the birth process. Research finds correlations between a mother’s stress level and the precipitation of preterm labor.\textsuperscript{69} Dr. Michel Odent blames certain customs and traditions in different societies, whether using biomedical practices or not, for disturbing the physiological processes in the period during labor and delivery. He further theorizes that these disturbances and interventions are the reason for maternal mortality caused by postpartum hemorrhage. He acknowledges the necessity of the use of uterotonics which he sees in the short term as important life-saving drugs. However he forwards the idea that more research needs to be done on the importance of privacy and undisturbed contact between mother and child.\textsuperscript{70}

- What is normal childbirth in Highland Guatemala?

Various studies of different types, quantitative and qualitative have looked at childbirth practices in rural Guatemala. The comadrona is generally involved because she provides the care for more than 85% of all babies born in Highland Guatemala. Almost all births occur at home. Analyzing data from a 1995 survey of Guatemalan Health researchers focused on client attitudes towards biomedical prenatal care and the practices of comadronas in five different departments with mixes of ladino and indigenous populations. They found that biomedical care was

\textsuperscript{69} Ellman, L.M. et al., 8.; Glynn, L. et al., 49.
\textsuperscript{70} Odent, M., 13.
not easily available and corroborated other studies that showed that the biomedical care provided was culturally inappropriate and expensive.\textsuperscript{71} A comadrona is much more affordable than the cost of birth in the public hospital or private clinic. She is also a local constituent and available within a reasonable time frame during labor. Comadronas typically meet with their clients several times before birth. Pregnancy and childbirth is viewed as a “hot condition” that must be mitigated by maintaining a balance with specific foods and medicines and practices.\textsuperscript{72} Comadronas do massage, encourage the use of temescal (sauna), and assure that the baby is head down in the birth canal or is encouraged to get in that position. Some clients only call on the comadrona when they were in labor or unfortunately when they were experiencing difficulties. Unlike some of her biomedical counterparts a comadrona will not refuse to attend to a mother in need. Moreover in the communities where she lives the comadrona is generally available.

- What do women die of in childbirth?

Women can experience various obstetrical emergencies in childbirth. What type of outcome they experience from an obstetrical emergency is determined by where they live.\textsuperscript{73} The three major killers worldwide are: postpartum hemorrhage, preeclampsia-eclampsia, and

\textsuperscript{71} Goldman, N. & Glei, D., 686.
\textsuperscript{72} Cosminsky, S., ”Modernizing Midwife”, 52.
\textsuperscript{73} Khan, K. S., et al., 1072.
The primary killer of all women in childbirth is postpartum hemorrhage which can be caused by various factors, uterine atony (loss of uterine muscle tone), trauma to the uterus or placenta, and coagulation defects. Most importantly, postpartum hemorrhage is neither preventable nor predictable before birth and occurs in 10% of all women. Lifesaving measures include stimulating the uterus to contract by massage and the administration of uterotonic drugs such as oxytocin. Surgery and transfusion may be necessary. The second major killer is preeclampsia-eclampsia, hypertensive disorder of pregnancy, which results in convulsions. As with postpartum hemorrhage, preeclampsia-eclampsia is neither predictable nor preventable before birth. Injections of magnesium sulfate are the first aid to prevent additional seizures. Delivery is the only cure for eclampsia and this can result in a premature birth and dangerous consequences for the baby. The third major killer is sepsis also known as puerperal fever. First aid is the use of antibiotics. Each of these killers has a time window in which help must be given. Postpartum hemorrhage has the most urgent time constraint; a woman can die within 2 hours after birth.

- What do women die of in childbirth in Highland Guatemala?

Women in Highland Guatemala die principally from postpartum hemorrhage at a rate almost double for any other cause. In the

74 Ibid, 1069.
75 Cameron, M.J. & Robson, S.C., 30.
Highland Guatemalan departments I reviewed in the first three quarters of 2010 of the 119 women that died in childbirth, 58 died of hemorrhage and hemorrhage-related causes, 19 of eclampsia-preeclampsia related causes, 14 of sepsis, and 28 of all other causes.\textsuperscript{77} In contrast with a population of over 2.5 million the Department of Guatemala, which includes the Capitol, during the same time period, January 1, 2010 to September 30, 2010, did not register a single maternal death.\textsuperscript{78} Nationally for 2009 the causes of maternal mortality echo my Highland Guatemala 2010 statistics.\textsuperscript{79} Infant mortality statistics for these Highland Departments are equally high Alta Verapaz: 355, Huehuetenango: 311, Quetzaltenango: 150, Quiché, and Totonicapán: 184. The Department of Guatemala logged 34.\textsuperscript{80} The “Sistema de Información Gerencial en Salud” (SIGSA) website does not break out statistics by department for maternal morbidity, but once a woman has had an obstetrical emergency the lifetime social and physical consequences are profound.\textsuperscript{81} The SIGSA maternal morbidity statistics show a very high prevalence of urinary tract infections. Untreated urinary tract infections during pregnancy and spontaneous abortion are highly related.\textsuperscript{82}

As a caveat, one major difficulty of reviewing these statistics is the way in which the statistics are shown on the SIGSA website. I collapsed

\textsuperscript{77} See Table 1
\textsuperscript{78} “XI Censo nacional de Población y VI de Habitación”, INE. 12-06-2010.
\textsuperscript{79} “Mortalidad Materna por Causa y Departamento de Enero a Septiembre 2010”, SIGSA, 12-6-2010.
\textsuperscript{80} “Mortalidad Infantil”, SIGSA, 12-6-2010.
\textsuperscript{81} “Morbilidad Materna” SIGSA, 12-6-2010; Brown, H. et al., 76.
\textsuperscript{82} Mazor-Dray, E. et al., 127.
certain causes of death into four categories related to their symptoms and the type of obstetrical emergency they represented. Reporting of maternal mortality statistics is complicated because in many areas of Guatemala a “verbal autopsy” is performed.\textsuperscript{83} The conclusions of the examiner can be very subjective. Adding to this problem is under reporting especially with abortion.\textsuperscript{84} Induced abortion in Guatemala is illegal.

- Analysis of the Paradigm of the “Three Delays”

An often cited paradigm for why women die in childbirth is the Thaddeus and Maine concept of “The Three Delays”.\textsuperscript{85} They theorize that there are three essential factors that prevent women from getting the kind of timely emergency care to prevent death. The delays for the treatment of obstetrical emergencies as enumerated by their premise: 1.) “Delay in deciding to seek care on the part of the individual, the family or both”, 2.) “Delay in reaching an adequate health care facility”, 3.) “Delay in receiving adequate care at a facility”.

Delay #1 is complicated because it speaks to lack on the part of the individual to perceive the risk of childbirth and then to do something about it. It is loaded with inferences of the individual’s responsibility and culpability, “can’t or won’t make a decision”, and victimization of the individual by the family, community and/or “customs”. Maternal mortality

\textsuperscript{83} Cross, S. et al., 150.
\textsuperscript{84} Singh, S. & Wulf, D., 8.
\textsuperscript{85} Thaddeus, S. & Maine, D., 1092.
statistics show strong correlations between women’s educational levels, economic status, and maternal death. In many poor countries the birth assistant, who could be a family member or a community member, has been shown to discourage prenatal care. The strong influence of machista attitudes has been linked to women receiving prenatal care which could also include education about labor and postpartum emergencies. Studies of family and community attitudes have not focused on obstetrical emergencies in particular and so it is difficult to conclude that family and community would not seek help for obstetrical emergencies.

Delay #2 is a very large factor in rural areas and not just poor rural areas. Distance from emergency care with life-saving technologies and personnel who know how to operate them is a problem that is complicated by good infrastructure and communication. A meta-study reviewing research on delays in reaching adequate care has found a strong correlation between distance and maternal mortality. In the spring of 2009 Amnesty International published a study of maternal mortality in the USA and found that access as defined by how you can get to services varied substantially between urban and rural areas. Even though the US has a relatively low MMR, 13/100K, by world standards in rural areas these rates are higher. The factors that prevent women in the

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86 Hogan, M. et al., 321.
87 Enciso, G.F., 377-386.
US from seeking emergency obstetrical care are essentially the same as the factors in poorer countries.\textsuperscript{89}

In Guatemala a survey of accessibility to the “puestos de salud”, health posts, of 1800 patients showed that they were located at a reasonable walking distance of fifteen minutes or less. The puestos were strategically located in market towns. But even though a patient could get to a health post the “adequate care” portion of the Delay #2 was lacking. Health posts typically are not staffed nor do they have even the basic equipment to save a mother's life.\textsuperscript{90} In some countries the problem of physical distance has been addressed by the availability of specialized life-saving equipment. A program called “Life-Wrap©” is prototyping a urethane “suit” that can be wrapped around a hemorrhaging mother to keep her from going into shock. Once the patient is stabilized then she can be transported, but this system is only effective if there is a referral clinic within a reasonable distance that has more equipment and personnel.\textsuperscript{91}

Delay #3 can be a critical factor in maternal mortality because women that can get to large hospitals and clinics are often not treated immediately.\textsuperscript{92} They wait in overwhelmed emergency rooms. There is not always specialized staff with training to remove placenta, perform

\textsuperscript{90} Annis, S., 520.
\textsuperscript{91} Hensleigh, P., 109.
\textsuperscript{92} Hautecoeur, M. et al., 92.
caesarians, or administer medications. Sometimes there is no blood supply to replace what has been lost by the mother. Many hospitals marginalize their indigenous and poor clients. There are problems with communication due to language barriers. Women are separated from their families and support. Newborns if they are born prematurely or with other problems are separated from the mother. There are limited visiting hours and only for certain family members. The birth assistant may not be allowed to stay with her client. Medicines are prescribed but the family may not have the money to fill the prescription.

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93 Cosminsky, S., "Modernizing Midwife", 366.
Chapter 4 – The Comadrona in Highland Guatemala

In this section I will explain what is a comadrona, the Guatemalan empirical birth assistant, how she practices, and how she is regulated by biomedical systems. The scope and nature of comadrona practice is based upon many factors such as the number of births she assists, her proximity, and her familiarity and acceptance of biomedical and self-medicalization systems.

Using narratives and interviews I illustrate how comadronas familiarize themselves with biomedical and self-medicalization practices. Using narratives and interviews from biomedical personnel I show that they have very little familiarity with comadronas even though they must work with them. 94 This creates tensions between the comadrona, her clients, and the Guatemalan state and foreign biomedical systems.

Observations of the physical environment evidence the limited and broken infrastructure of highways and health facilities that exists in Highland Guatemala. These difficult conditions directly affect how well women do during their pregnancies and birth. Comadronas start with clients with debilitated physical and mental health. When an obstetrical emergency occurs there are no resources in the community that are available to stabilize and transport their patients to life-saving care.

What is a comadrona?

94 See Table 2 with a list of pseudonyms for the interviewees and narratives.
Comadrona means “midwife” in English. The comadrona is generally a woman in her late 20s to mid 30s. Most are mothers. A comadrona that has children shows to her client that she is a capable mother and has experienced childbirth. She may have learned her craft from her family, serving as an assistant at a very young age. There are generations of comadronas but there are also comadronas that have “learned it on their own”. Some say they have a “don” (gift) and have been chosen for the mission. Others have an interest in the health of mothers and children. The average comadrona has 6 to 7 clients each month. Some months are better than others and there are times of the year in which she is busier.

The average client contacts her comadrona in the 4th month of her pregnancy. Over-the-counter pregnancy tests are expensive, costing as much as they do in the USA. Pregnancy tests are supposedly available at the health posts, but I never found an evidence of this availability. Many women just wait until it is obvious. The comadrona does a health interview and makes sure the mother receives folic acid, a tetanus vaccination, and vitamins. She counsels her client to eat certain herbs and vegetables with high iron content. She massages her client and checks the position of the baby. She will travel any time day and night for hours to be with the mother. If she can’t attend, because she is busy with another client, she can contact another comadrona to assist. During labor the comadrona
supports the mother with more massage, teas and encouragement. She is required by the Ministry of Health to visit the mother within 20 days after delivery. All comadronas that I interviewed had experience with "mal presentations", difficult births, and had handled twins successfully. If their client is going into labor prematurely or has symptoms of trouble in pregnancy comadronas are encouraged to refer their client to the local hospital.

- Being a Comadrona is a Business

Being a comadrona is considered a business. She can't and doesn't practice for nothing, but she will not turn away a very poor client or a client who asks for help when she is in labor. The comadrona is paid by the client after the birth of the child. In the areas where I conducted this research the comadrona receives a cash payment. If a girl is born she gets an average of 300 Quetzales (approximately $40). If a boy is born she receives more, 500 Quetzales. When I asked why there was such a difference I got a sheepish smile and a shrug of the shoulder, "así es" (that's the way it is). It is explained as "costumbre" (custom) that the birth of a boy is worth more than a girl. The licensed comadrona also registers the birth certificate and for that she receives 50 Quetzales from the Guatemalan government.

95 Jenkins, G.L, 1899. Jenkins observed complex feelings about compensation among midwives. Payment of some kind was important but she found that midwives who saw their talent as a calling from God also believed in using their skill as charity.
Comadronas operate locally and by word-of-mouth. They get repeat business if their client becomes pregnant again. Young comadronas and men comadrones have to build up their business because they are seen as inexperienced. At one comadrona training meeting there was a “competition” to see who had been a practicing comadrona for the longest time. The winner had been working for 50 years. Very elderly comadronas “retire”. The elderly comadrona still participates in the mandatory health post comadrona meetings to keep their license current and to socialize, but walking for 2 hours on a winding mountain path to reach a client is more than she chooses to do.

During a lifetime of practice a comadrona has delivered hundreds of babies, many more than the auxiliary nurses that staff the “puestos de salud” (health posts). Auxiliary nurses do not get specialized obstetrical training. In a country of high unemployment and underemployment being a comadrona brings in a modest but dependable income. Comadronas often have other jobs such as being a “curandera” (traditional healer) or a “promotora de salud” (health promoter). Being a comadrona is a very prestigious and influential job with some comadronas serving as leaders in their pueblo or elected as presidents of various health and education committees.

- Training and Regulating the Comadrona
Very few comadronas have biomedical training beyond the obligatory and perfunctory trainings they get from the Ministry of Health. It is illegal to be a comadrona in Guatemala unless you are licensed. The licensing aspect of the program has been in place since the 1950's. Nonetheless there are comadronas that practice without the license. The importance of referral and the recognition of “warning signs” such as preeclampsia-eclampsia symptoms or bleeding before birth are the staple of the comadrona trainings. I did not observe any training that instructed comadronas in active 3rd stage labor management, known as EmONC, or the use of uterotonic drugs to control postpartum hemorrhage.

The Guatemalan government at one time provided comadronas in some areas of the country with a kit that contained gloves, a flashlight, sterile razorblades, and a sterile cloth, but this program does not exist now. From time to time various comadrona training programs, hosted by international NGOs, include the receipt of similar equipment. When I asked comadronas what they wanted I heard, “scissors, scissors, scissors” – to cut the umbilical cord. For the most part comadronas must pay for their own equipment and drugs. They have very little equipment that allow them to monitor the health of the mother or hear the baby’s heart.

96 Goldman, N. & Glei, D., 2.
97 EmONC consists of three practices, controlled cord traction, immediate cord clamping, and oxytocin use. Figueras et al., 288.
98 Marroquin, A. & Silva Rodriguez, A., 22.
beat, no stethoscopes, no thermometers, and no sphygmomanometer for blood pressure testing. More than one nurse commented that the comadronas could not read the numbers on a scale to weigh the baby and “would get confused” so the use of this equipment was abandoned.

- The Nearness and Farness from Biomedical and Self-Medicalization Systems

Proximity to biomedical and self-medicalization systems is more than physical distance for Highland Guatemalan women in their search of maternity care. Barriers are constructed on many levels through language and conflicting ideologies that effectively delay or block community response to obstetrical emergencies.

It starts with the restriction of comadrona practice within the constructs of the obligatory Minister of Health trainings. Although the training is similar between comadronas that live in very rural areas and those that live closer to hospitals and clinics there is a difference in familiarity with biomedical personnel and the availability of places for a referral. Rural comadronas are not necessarily bilingual Spanish/indigenous language and some are illiterate. During trainings the printed information provided has simple diagrams printed on a poster card with pictures of mothers and babies that illustrate emergency symptoms. However you cannot assume literacy or bilingual literacy. I was surprised when a clinic nurse passed out brochures in Spanish to a
group of women in a small aldea. The cervical cancer information was in Spanish. It became obvious that the aldea women could read it and ask questions. But I never saw any printed health information in an indigenous language. Presentations had an interpreter who was from the community, but this is frustrating to health staff because presenters cannot interact freely with their audience. Sometimes the interpreter would redirect a presentation or answer questions which might not have been on the agenda of the health staff. This also caused consternation because the presenter could not get control of the meeting.

Comadronas that live closer to larger cities have more familiarity with the resources in the community. They are still preferred by their clients partly because they are less expensive, but also because they are more available. They understand their clients and function as intermediaries if their patient must go to the hospital. Their role literally stops at the hospital door because Guatemala has an almost universal norm in the national hospitals that does not allow the comadrona to accompany their client.

- Narrative of a Comadrona Meeting in a Small Pueblo

This narrative illustrates a comadrona meeting in a small pueblo that was at least 1.5 hours from the hospital. The meeting only lasted a few hours. Most of the meeting was taken up with attendance that was complicated by waves of comadronas arriving by bus and on foot. Very
few of these comadronas spoke Spanish and so the presentation was made longer by translation.

This was my first time out of the main city and at a meeting of comadronas. It has taken about an hour and a half to get here in the SUV that I shared with a nurse from an NGO, Sandra, Jorge an auxiliary nurse, and a social worker. I’m looking at sea of comadronas all wearing their “traje” (indigenous dress) sitting and standing below the tin roof extension of the local health post. The health post looks ancient and crumbly with the hours painted on the side of the building and a smaller sign indicating a pharmacy-dispensary in the adjacent door. Some women are nursing their children and some are milling around and talking on their cell phones. More comadronas arrive in the back of pickup trucks and on foot. There must be more than 150 women.

Jorge, the auxiliary nurse, is seated at a rough wood table. He is taking attendance by calling each woman’s name and comparing it against a register of names. Each woman shuffles to the front and presents her “cédula”, the Guatemalan citizen ID, and a “folleto”, a document with her comadrona credentials and license. Each folleto is then stamped and dated showing the comadrona attended this meeting. Almost an hour and a half has passed before all are accounted for. This taking of the roll and signing the “Acta” was a process that I
observed at every comadrona meeting. To speed up the process the nurse divides the task with the nurse presenter and a member of the comadrona association who is serving as a translator. Fortunately the auxiliary nurse speaks Mam the indigenous language. Later I learn he has only been in this pueblo for a month but he grew up in the area.

The subject of today’s presentation is nutrition. The nurse presenter has a handheld oilcloth flip chart with drawings and illustrations of various nutritional foods for pregnant women. The comadrona leader translates the Spanish into Mam and the lecture proceeds slowly. Not all is being translated exactly. The translator queries the comadronas about their herb knowledge by speaking aloud in Mam the names of the plants and their particular uses. The comadronas respond with head nodding and exclaiming the name of a particular herb and its use. There is a quick review of pregnancy problem warning signs by the auxiliary nurse, but the group is large and noisy and quickly running out of time. In addition to the late start and the roll call, there has already been a substantial break for a snack of mosh (hot oatmeal drink) and bañuelos (buns). At 12:30 it is time for all to leave. Many comadronas have a trip home that includes a long walk. They need to leave soon. The nurse presenter and the group I

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99 The Acta. The “acta” – legal action – was kind of a petition. It was bound in a large book. At each comadrona meeting the “acto” was read and then it was signed by all in attendance. I asked what the petition was for as was told it was to advocate for the continuation of various programs such as the USAID nutritional supplement distribution program that I observed.
came with need to leave too. We need to get back to the main city before the dangerous fog in the Altiplano obscures the roads.

- Comadrona Meeting in Santa Cristina, a Larger Pueblo

This comadrona meeting was in a larger pueblo that was at least 2.5 hours from the main hospital. The only ambulance has been available for less than a year and it serves a community of over 30,000 people. The purpose of the meeting was similar to the comadrona meeting in the smaller pueblo.

It is absolutely freezing cold today. This will be the last time I visit this pueblo for a comadrona meeting. The location is the same, the municipal building that serves as a meeting spot for almost all town activities, and a place to rent for a fiesta. It is the second floor of a large drafty Quonset hut. Our group is late. Today I’m with one of the Clinic nurses Imelda who will make the presentation on abortion to this group of comadronas. I see familiar faces but not as many. Everyone is wrapped in layers of sweaters, shawls, and the ever present polyester fleece blankets. The president of this comadrona meeting greets us but quickly gets back to work organizing the group.

Imelda is introduced and she works with the interpreter explaining what an abortion is and what a comadrona needs to do to take care of her client. In the little comedor we stopped at for breakfast Imelda has already told me what she thinks of abortion. It is very much against her
religion. She would never support it but she would never refuse to treat a woman who needed first aid after an abortion. I ask Imelda if she sees a lot of problems with illegal abortions, “Yes there are plenty of them.” It would be interesting to know the number. I tell her one problem with the statistics on maternal mortality is the way that abortion is reported. She agrees. In front of the comadronas she tells them that there are abortions that are spontaneous and not induced. Mothers who have had abortions need to have care right away. Her tone becomes a bit more strident and definitely biased against induced abortions because “the life of the child” is the important thing.

I don’t listen to most of Imelda’s lecture. I see the two auxiliary nurses out of the corner of my eye and decide to take advantage of this opportunity to interview both of them. I get some very good interview material about the roles of the nurses and what they think of the comadronas and problems with the Guatemalan health system. I rejoin the comadrona meeting. One of the nurses is finishing up with her talk on emergency referrals. The interpreter doesn’t stop to translate into Spanish which leaves the nurse and any other Spanish speakers without any idea of what is being said. The interpreter asks for questions from the audience. The questions deal with problems that the comadrona has with the health committees who rule the aldeas and are the referral network.

Comadronas have clients outside of their own aldeas. In an emergency, if
one of those clients needs emergency care, the local health committee contact refuse to talk to them and refer their clients. More hands are raised. This is a hot topic. The nurse asks to conclude the meeting so that the “Acta” can be signed and the meeting convened. I find out later from Imelda that the auxiliary nurse annoyed the President of the comadronas. I can see why because this monthly meeting is the only opportunity that these comadronas have to share their experiences and concerns.

Raúl our driver has purchased the “refacción” (snack) for the meeting. Large jugs of atole and a giant basket of sweet buns are brought in. The comadronas grab this snack and stand in the long lines to sign the “Acta” and the attendance list. They gradually filter away and we pack up to leave.

When I get to the SUV, Imelda and Raúl are ready to go. Raúl asks me if I mind if we take two passengers with us. I go to use the public toilet next to the municipal hall and when I come back there is a man and women stuffed in the backseat with a mound of their personal belongings and the presentation materials for the Clinic. I know we are going to be cramped. I find out that the woman is complaining of stomach pains, she is 36 weeks pregnant, and has high blood pressure. Her comadrona referred her to the Clinic. As we were going that way they are going with us. They introduce themselves as Maria and Miguel. I’m guessing Maria is
in her late 20’s or early 30s. She is pregnant with their fifth child. I ask them where they are from. They come from a small aldea 1 hour “a pied” (on foot) from the pueblo. Miguel makes little marching motions with his two fingers. They’ve never been to the Clinic. I’m not sure that they’ve ever been to the hospital. Since I’ve been deep into research on maternal mortality her number of pregnancies, stomach pains and high blood pressure do not bode well.

About halfway through our cloudy rainy trip Maria asks Miguel for a plastic bag. She only speaks Q’anjob’al and he translates into Spanish. Imelda and Raúl have been asking Maria every once in a while how she feels. Miguel translates that she has stomach pains and they are high on her stomach. Imelda brusquely asks actually yelling at Maria if they are labor pains. There is a certain irony in that Maria does not understand Spanish. Miguel insists Maria does not have labor pains. Maria is sick now and we’re on the curvy section of the mesita. We are still more than an hour and a half from the Clinic. Maybe Maria is car sick. Miguel asks how long until we stop. Our plan is to have the quesadillas at the regular place. We will be there shortly maybe another 15 minutes. Maria needs to pee so we stop on the side of the road and they hop out. They hop back in. This time Maria is seated next to the door with her husband squished in the middle. This is a much better position for her. I show her how to grab the seatbelt straps on the side of the car so she’ll have more stability. She
clutches them tightly as we finish the last of the curves. We arrive at the restaurant. Maria and Miguel remain outside by the side of the restaurant. Raúl has asked them if they want a coffee or a snack but they refuse. I ask Raúl why they don’t want to come in. Is it because they have no money? Raúl says he offered to treat them but Maria doesn’t want anything because she has nausea. We eat our quesadillas, collect the couple and we’re off again. Getting very close to the last town before the descent into the valley, Maria is looking greener and she is grimacing in pain. Miguel ventures, in carefully framed words, that Maria is feeling sicker. I ask Imelda if Maria isn’t having labor pains right now. This kind of alarms Imelda and she interrogates Maria directly in Spanish, “Do you have pains? Are they regular pains?” Miguel answers, “Yes they are.” Raúl calls for an ambulance to meet us on the way because we still have over an hour before we are home. Imelda calls the Clinic to tell the doctor not to go off her shift as we are bringing a patient to her.

We see an ambulance pass us going in the opposite direction. Raúl and Imelda open their windows and start signaling to them. They see us and stop at a gas station. It just happens to be the Santa Cristina’s only ambulance. Maybe we can transfer Miguel and Maria to them or at least they can examine Maria to see what might be the problem. The pueblo’s only ambulance is returning from the main city, meaning there is no ambulance service in the pueblo right now, and the ambulance is filled
with medical supplies. There is no room for Maria. Imelda asks the ambulance for a package of gloves and has us get out of the SUV. Right then and there she examines Maria to find her in labor but just beginning to dilate. Maria will be stable enough to continue with us to the hospital so we say goodbye to the ambulance. Raúl drives as quickly as he can but there is no way to lessen the abrupt and very painful jolts that happen when we cross the all too numerous “tumulos” (speed bumps). Maria looks to be in agony. I don’t want to embarrass her or her husband. It isn’t the time to stare but I think she is crying.

Finally, finally, we are down to a suburb of the main city with even more nasty bumpy roads, but at least we’re getting very close to the hospital. Miguel asks how much longer. Fortunately it isn’t rush hour and while it takes a bit of time we come out on the main road to the Clinic via the back way by the stadium. I’m very close to my home stay. I get out in front of the house. I don’t know what happened to them. Tomorrow I’ll find out.

Miguel and Maria’s experience was totally unanticipated by me, but serves to exemplify the very serious problem of emergency obstetrical care and distance. Santa Cristina does not have a hospital or even a “Type B clinic” with personnel and life-saving equipment.

This was not a trip that Maria could do by herself for many reasons other than her physical condition. Her husband had to come to act as a
cultural interpreter. Fortunately the Clinic is sympathetic to beliefs of many of its patients. It acts as much as possible as a buffer between the community that it serves and the black box draconian environment of the national hospital next door. I see Miguel at the Clinic the next day. Maria still hasn’t had her baby but she is in labor. I ask him how many children he has and who is taking care of them. He says he has five children. This will be his sixth and a friend is babysitting the family. He tells me that he may have to leave Maria at the Clinic and return home if the baby isn’t born soon. Fortunately I learn the following day that mother and child, a little girl, are alive and well and everybody has gone home.

- Interview with a More Urbanized Comadrona

Comadronas in more urbanized areas had more contact and familiarity with biomedical systems. They don’t however get more direct access to these systems and can only refer their clients.

MC: In a meeting that I attended yesterday in a large pueblo one of the comadronas was complaining about the health committees. If a comadrona has a client outside of her aldea, in another aldea, the health committee won’t cooperate with the comadrona to get first aid or to find transportation to save the life of the mother. Have you had that experience?

Angélica: Here they treat us well, there is no problem. But in certain hospitals and with certain doctors, they treat us badly. At times we bring a
patient with eclampsia or hemorrhage and they tell us, “Why did you bring us this woman in such bad condition? Why do you wait so long to bring her?”

MC: In your opinion what would be the ideal birth? That is to say what would be best for the mother during her labor and delivery? In some countries it is considered abuse to leave a mother alone to give birth. Here in the national hospital there are fixed visiting hours. There the family cannot stay with the mother nor can the comadrona. They don’t allow the husband.

Angélica: Here the hospital doesn’t permit anybody, the comadrona nor the family, nobody during the birth.

MC: Is this the norm in other hospitals in this country?

Angélica: In all of them they don’t permit anybody. Here in Guatemala there is a lot of discrimination. Nurses have a lot of work. They are very stressed.

MC: Uh huh. Working with the public is difficult. I think with the patients they want this and that. At what time do your patients come to your to contract your services? At what point in their pregnancy? The first month?

Angélica: In the fourth or fifth month. Then the patient comes and talks about the birth.

MC: How much does it cost?

Angélica: 300 Quetzales. (About 40 dollars)
MC: What does this include?

Angélica: This includes three appointments and attending the birth and care afterwards.

MC: If you have to bring the mother to the hospital, do you receive your money for the birth?

Angélica: No we don’t get the money.

MC: Is this a barrier to get help for the mother?

Angélica: Yes, there are comadronas that don’t want to refer their patients.

MC: I heard something very sad. If a girl is born the family pays less for the birth.

Angélica: Here in the municipality if a boy is born it costs more.

MC: Why?

Angélica: In Guatemala there is a lot of machismo. It is horrible because there is a lot of abuse because of machismo. If there are no sons born they beat the women. They beat the kids. They have extra-marital relations.

MC: In the United States abortion is legal but not so easy to get in some states. The good of legalized abortion is that it is a controlled procedure. There are lots of regulations. You have to have an abortion very soon. There are emergency abortion pills that you take within three days. Do they have that here?
Angélica: No, that doesn’t exist here.

MC: If I think I’m pregnant within three days I can take a doctor’s prescription to the pharmacy to obtain the pills. It is the same hormone that is used in contraceptives.

MC: I’m thinking of little changes that could help the comadronas and the mothers that can be made in Guatemala now. Do you think if comadronas had in their kit some pregnancy tests that they could attract clients earlier in their pregnancy? I’m talking about the urine test not the blood test. It isn’t a perfect test but the idea is to attract the mother earlier to talk about her pregnancy. What do you think of that idea?

Angélica: Are we talking about equipment? It is a good idea, but here each comadrona has her own equipment, but she had to pay for it.

MC: I’ve heard that the pregnancy test is expensive here. It’s too much money for the mother.

Angélica: The comadrona’s kit lacks equipment and medicines. There is nothing in the health posts. The Clinic is a salvation for some mothers. I’d like to have more training on calculating the length of the pregnancy and attending the birth.

MC: In India they have a program that gives comadronas a premeasured dose of oxytocin to control postpartum hemorrhage. Do comadronas use oxytocin?

Angélica: Yes here there are comadronas that use oxytocin.
MC: It is an interesting drug. Early in labor it is a dangerous drug. In a specific time after the birth of child it can save the life of the mother. Other measures, the natural oxytocin hormone can be stimulated by uterine massage or letting the baby suckle. The statistics in this department for maternal mortality are really high this year. Do you know why? Why this year?

Angélica: A lot of times it has to do with the poor care and the bad health of the mother.

MC: Why?

Angélica: The health posts don’t have folic acid. The mothers don’t buy it. They don’t have strength. After birth they hemorrhage. They have a lot of children and they are old like this woman who was 37 with 10 kids and she died.

As my skill with conducting interviews increased I could bring up topics that surfaced from previous interviews. This was sort of a qualitative snow-ball technique not based on obtaining additional interviewees, but rather on obtaining additional information. I had heard that comadronas used oxytocin before delivery as is done in the US to stimulate labor. During labor the cervix slowly opens from 0 to 10 centimeters. With oxytocin this can occur within two hours as opposed to 24 hours or more. The use of oxytocin to speed up labor is a dangerous practice even under monitored circumstances that can cause damage to the uterus and a lot
of pain for the mother.\textsuperscript{100}

- Interview with a Comadrona in a Larger City in another Department

Maricela was the most “modern” comadrona that I interviewed.

She had also been practicing a long time and had seen many changes in her practice. At the end of our interview she told me that she thought that her clients were healthier and had fewer problems 25 years ago. When I asked her why, she said she felt her mothers were better nourished and under less stress.

MC: What is your first and last name please?

Maricela: My name is Maricela Cortés

MC: How many years have you been a comadrona?

Maricela: I have worked for 35 years.

MC: How many births have you attended?

Maricela: Practically all in my area.

MC: And where is your area? [she misunderstands my question]

Maricela: [she lists at least a half a dozen surrounding the main city]

MC: So approximately how many births?

Maricela: More or less 500. I attend 4, 5 or 6 a month depending on the women, depending on how the women used birth control. I will talk about of births in past times and birth today. Before pincers didn’t exist, there was no cord to tie off the umbilical cord, no scissors, only a machete to

\textsuperscript{100} Liston, W.A. et al., 607.
cut [the umbilical cord] and a candle. [comadronas often work at night].
That was before. But today we have all these technological things, gloves, 
drapes, and stethoscopes to hear the baby.

MC: You have stethoscopes?

Maricela: For myself I have that, I have all the equipment. I have pincers, 
gloves, and towels to wrap up the newborn, and special scissors. I stay for 
a period of time depending on the needs of the mother. For a primipara 
(first pregnancy) I stay longer. Depending on the strength of the mother, if 
she has birth before, it is much quicker, I stay eight hours with her after 
birth. If she has given birth before the birth canal is more open. If the 
mother has a problem I’ll take her to the hospital, but they do not allow 
comadronas in the hospital.

MC: Yes, I’ve heard that. In the hospital next to the Clinic they don’t allow 
comadronas in the hospital.

Maricela: Yes, what we want is to allow us the liberty to come into the 
hospital as comadronas. That’s what they [the mothers] need to relax and 
be supported. We are more specialized than the health personnel.

MC: In the area I was in if a comadrona has to send a client to the 
hospital she doesn’t receive her payment from the family. When I asked 
comadronas if that was a barrier they said they would always send her 
client even if they didn’t get paid. In my country it is considered an abuse 
to leave a mother alone during her labor. I’ve heard here that a woman
might have a caesarean without knowing what is happening to her and lose her capacity to have any more children. [I go on to tell her that the Cuban doctor at the Clinic was not allowed to practice in the national hospital next door and in certain countries with high MMR the comadrona cannot practice at all.]

MC: So do you have to attend trainings? How often do you go?

Maricela: We have trainings once a month.

MC: Is it a waste of time?

Maricela: Yes.

MC: Do they present the same things?

Maricela: They go from 8:00 in the morning to 1:30 but they don’t teach us what we want. They don’t know how we work. I send mothers to the hospital if the baby is breach or upside down. For the majority I go to their houses and attend to them.

MC: Are their trainings that you would like to get?

Maricela: For ourselves we would like trainings more comprehensive – like a doctor would get, for example to be able to examine the mother like a technician. What we would like is for the doctor to accompany us at the time of labor. For one thing when the birth is complicated, first, we don’t have the specialized equipment, we can’t attend to the mother, secondly, we don’t know what to do, and third, the mother can die in our hands. If I’m attending a birth and the placenta has been born, I’ll call for
the bomberos (fire department). We need an ambulance or a car to transport the mother. But in the communities there are roads like this [making a gesture to show a tiny space].

MC: Yes I’ve heard in some places they put the mother in a chair and carry her to the health post.

MC: So I’ve been thinking of other things to ask. [I then tell her about the high maternal mortality rate in the department I was in and asked her opinion as to why the rate was rising]

Maricela: There are comadronas who say they know how to use scissors and pincers, but in reality they don’t know what they are doing. Also they do injections when they shouldn’t [I assume injections of oxytocin to speed delivery]. They shouldn’t license that person to work.

MC: Yes there people that don’t know what they are doing and should never touch a mother.

MC: Have you come from a family of comadronas? How did you learn?

Maricela: I have a grandmother who is a comadrona but I also have a don [gift] for it. I also learned from my aunt. She taught me how to turn the baby and how to inspect the placenta to be sure it is whole. I never had any training [by biomedical personnel] for this. I’ve delivered my niece’s babies. She is 26, alive and well. Today it is all modern. There are comadronas who are professionals and then there are parteras who are taking classes.
Maricela then explains to me a training that she was given by a midwife who came from the USA. The training was more comprehensive and very different than what she receives from the Ministry of Health.

MC: [I then explain the visit by the US obstetrical nurses to give a comadrona training in a large city that I was in. The obstetrical nurses went to the national hospital to volunteer and were very distressed to see the conditions of the labor room. Returning to a question that I asked comadronas frequently] Do you think there is a way that mothers can see a comadrona sooner in their pregnancy? [Most clients contract a comadrona in their 4th month of pregnancy].

Maricela: I see clients in their first month. The first thing is that I get their medical history. [Maricela gives a long accounting of all the things she does with the mother on the first visit, examining her for anemia and questioning her about previous pregnancies. She also gives family planning counseling to couples and counsels giving the uterus a rest between babies]

We then have about a 15 minute conversation about the use of oxytocin to speed labor. Maricela says she only gives injections of vitamins, but that she does know of comadronas that practice illegally and give injections of oxytocin to speed labor. I then tell Maricela about the USAID program in India that provides a capsule with a needle that contains a premeasured dose of oxytocin that is given to all women after
birth as a prophylactic. I then show Maricela my Powerpoint and finally ask her, “What do comadronas want?"

Maricela: We would like our own clinic to be able to attend to our clients. It would be better because they won’t let us into the hospital. When I go with a client I change into a nurse’s uniform because they won’t even let us in the door if we are wearing traje (indigenous clothing).

MC: Like Superman?

Maricela: (Laughing) Yes. If we had a clinic we could keep it clean, we could stay with our clients, and we could feed them. [In the national hospital women in labor were not permitted to eat].

I returned to the PowerPoint and we finished our interview with a discussion of the condition of the Guatemalan-state health system.

Maricela’s final comment, “There are systematic things that the Guatemala government does not do.”

Maricela’s practice is different from comadronas that work in more rural areas principally because she and her clients and their families are closer to the national hospital in a large city. She is refers more when she encounters a problem with a woman’s labor and knows the process to bring her client to medical care. She is an example of the “modernizing midwife” that talks freely of “la tecnologia”, technology, and the desire to know more about it than is provided in the mandatory comadrona
trainings. Maricela also has a larger and extensive kit that includes a stethoscope something that was missing in Imelda’s supplies.

Interestingly Maricela comments that she would like to accompany doctors and not that doctors should accompany her. This is a very different idea from comadrona associations that see the ideal of the doctor’s intervention as a last resort but readily and willingly available. This struggle between the comadronas’s agency and their biomedical contacts has been readily observed in areas where they still practice. In countries such as Costa Rica where the comadronas has been eliminated these “turf wars” of agency go higher up the medical staffing ladder as seen in conflicts between midwives and nurses. In none of the interviews that I had with different comadronas was voiced the mother’s desire for the type of birth that she preferred. It was up to the comadronas to be her intermediary. Partly I believe this was due to definite language and social barriers, but also as part of the service the comadronas supplied.

The comadrons’s advocacy evaporated once the woman was admitted to the national hospital. Mom was on her own and not allowed to have her comadrona during labor and delivery. In effect the comadrona delivers her patient with complications to the hospital black
box, as Maricela commented, “por el caesario”, a caesarian. Just as very few doctors have ever seen the comadrona in action I doubt that Maricela had ever seen a caesarian performed on one of her clients.
Chapter 5 - Biomedical Personnel that Work with Comadronas: “They do things they are not supposed to do”

- Narrative of the Return of the “Real Doctor” – “You could get in trouble”:

Spontaneous and Induced Abortion

This comadrona meeting was very different from the meetings I observed in the small pueblos. The meeting was scheduled for 9:00 AM to allow many of the women to get there. Some were coming from as far as two hours away which included a walk to the main road and then waiting for one of the packed microbuses that went to the city and then yet another transfer to a municipal bus. It was an expensive trip because a meeting such as this could easily take most of the day and the travel expense was not reimbursed. The meeting had been cancelled the month before because the nurse presenter was sick. For the women who had come the month before, when the meeting was cancelled, it was totally a waste of time. There was no practical way of reaching them even though most had a cell phone. For this meeting the comadronas eagerly anticipated the return of the “real doctor”, Dr. Salgado, who had been away for a few months. His substitute apparently did not have the same charm.

As the comadronas trickled into meeting room of the Clinic I introduced myself and asked for their permission to record their responses to some questions that I had. This was always an awkward process
because of my language skills and the inexplicability of my presence. I was a “student” but didn’t look like one. I asked a few of the women how long they had been comadronas and where they practiced. Many had been comadronas for more than twenty years. They practiced in very small pueblos and had territories they could cover by walking within a few hours. I asked my standard question which was, “What would you want if you could get it to help your clients?” I heard a familiar refrain, equipment, “We have nothing”, “We have to buy what we have”, “No we don’t have thermometers”. “Sometimes we don’t have gloves”, “scissors, scissors, scissors!.

I asked about the trainings, “We’re they useful?” Given that they had ostensibly came to receive a training that was mandatory, I could not be sure of my response. Many admitted that the Minister of Health trainings were not useful for them. They wanted more specific training on handling obstetrical emergencies and emergencies with newborns. I asked about referrals, “Do you refer? How do you cope with an emergency?” Some said, “We call the bomberos, (fire department), or an ambulance. I asked, “Do you refer to the health post or to an NGO clinic?” The reply, “Yes, we do if the mother is having a problem with her pregnancy”. [They refer to a maternity waiting home in the main city of the department]. As a group I felt these women had more experience with the biomedical system because they lived closer to the main city in
the department and there was some ambulance service and a place to send their clients. I asked, “If you refer to the hospital and your client has her baby there, do you get paid for your services?” “No we don’t get paid. We can’t go into the hospital. Even if we could go into the hospital there is no place to stay.” I depersonalized my next question, “Does this discourage comadronas from making a referral in the case of an emergency?” A comadrona, “No. We refer especially if the mother has had a problem before [refer to the waiting home to wait out the pregnancy].”

Dr. Salgado enters the room. He is dressed in what passes for Guatemalan business dress, slacks, shirt and tie. Many of the comadronas rise to meet him and shake hands. He addresses them by name. It is obvious they know him quite well. He says, “Today I’m going to talk about something that might get you in trouble.” I thought that was sort of an odd thing for him to say as I could not parse what the trouble might be as I looked at the ancient lined face of the comadrona to my right. The doctor arranges the projector for his portable computer to do a PowerPoint. Meanwhile more comadronas arrive, and by the time things were really starting, there are more than 25 women in a very small room.

The first part of the meeting is a narrative from the doctor about his experiences a few months before in another department in the eastern part of Guatemala. He tells anecdotes about women who had more than
14 children and found themselves pregnant each year with another baby. He asked the group how a pregnant mother was treated after birth, “Did she get a vacation?” I see many nodding affirmative heads implying that somehow there was a “lying-in period” of a few weeks for mothers for a proscribed time that alleviated them from household responsibilities. Food was brought to the house and mother and baby were waited on. So this “vacation” was this hypothetical woman’s time off from family responsibilities. The discourse shifts to machismo. One comadrona comments that men don’t wait very long after a birth to demand sex from their wives and they are opposed to birth control. This talk lasted for more than an hour after which the group broke for a refreshment.

When Dr. Salgado reconvenes the meeting he was now wearing his white medical coat. The object of the presentation was the subject of abortion. After explaining the difference between spontaneous abortions that can occur with all women, the doctor gets into the subject of induced abortions. Then the group plays a “dinámica” (role play) to illustrate how difficult it was to do an abortion and “how the baby really wants to live”. With laughing and high spirits, one woman tries to remove the purse from her partner while the other woman tries to take off the cardigan of the first. Dr. Salgado shows his PowerPoint that has some very graphic pictures of mangled fetuses created by various abortion procedures. The doctor carefully enunciates and reviews, chemical-
induction, vacuum suction, and curettage. Dr. Salgado finishes by asking the comadronas to not be afraid and to be sure to refer clients with abortion emergencies to the hospital.

Abortion is illegal in Guatemala except when a woman’s life is in danger.\textsuperscript{105} When I asked comadronas in subsequent meetings if “they knew of comadronas that induced abortions”, they all knew comadronas that did this. In the same congressional decree, life is defined to begin at conception, and from that point forward the fetus was under government protection. A comadrona could certainly be in trouble for murder if it were known she induced an abortion. Perhaps if done early enough an induced abortion could be seen as a spontaneous abortion and there would be no consequence to the comadrona or her client.

There is a Guatemalan comadrona practice of treating, “detención”, delayed menses, as health practice to regularize menses and clean and tone the uterus. This practice consists of the use of herbs known for their menses-inducing properties.\textsuperscript{106} As Cosminsky and other scholars who have studied emmenogogy, the regulation of menses, is a health practice are used all over the world. The practice of emmenogogy is seen as “ambiguous” because the same practice is used to induce early term abortion.\textsuperscript{107}

\textsuperscript{105} Guatemala Penal Code 1973, Congressional Decree 17-73.
\textsuperscript{106} Cosminsky, S., [2001], “Midwives and Menstruation Regulation: A Guatemalan Case Study”, 254-273.
\textsuperscript{107} Levin, M., 167-169.
The doctor’s message was equally ambiguous. I was unable to come to any conclusion as to what the doctor really was trying to say to the comadronas. Was he warning them not induce abortions or was he asking them to always refer botched abortions to save the mother’s life?

- Interview with a Neonatal nurse and Observations of a Neonatal ICU

I conducted an interview with Mariana, a neonatal nurse that worked in the national hospital next to the Clinic. We then went on a tour of the neo-natal ICU. It was a sad experience to see premature babies struggling to survive.

MC: What kind of problems do you see with the Guatemalan health system today?

Mariana: Do you mean in my area? I don’t work only for the Clinic but I also work for the Hospital. I work for both as the administrator for the kangaroo method for premature babies.

MC: Yes tell me about that. What is it like?

Mariana: In the national hospital we use the kangaroo method with our newborns. We call the parents and have them come in to get trained. They spend up to 10 hours a day with their newborns. Both mothers and fathers keep them in close body contact which has been shown to help them thrive. Still we have a lot of babies that die.

MC: So that must be hard for you.
Mariana: Yes, no matter what we do they don’t thrive. It is really a miracle if they make it. Some are born very early. We calculate in weeks. Some are born as early as 34 weeks.

MC: And you are able to save babies at the age?

Mariana: Very few but we try. Last month we had more than 25 premature babies.

MC: That is a lot.

Mariana: The hospital has only 5 ventilators. When these babies are born they have difficulty breathing and they need to have the ventilators.

MC: What happens if you have more babies than you have ventilators?

Mariana: We pump oxygen by hand. The doctors, residents take turns 24 hours a day.

MC: That’s amazing! Aren’t there any other personnel that can help? Nurses?

Mariana: We just don’t have enough staff. The nurses are already overloaded.

MC: So what do these babies die of?

Mariana: Most of them get pneumonia. Their lungs just aren’t developed enough. But really I don’t why so many. The hospital has the statistics but I do not have access to them.

MC: So what can be done then?
Mariana: The mothers need to know the risks. We have the most problems with the babies that are born to very young mothers or mothers that have had a lot of pregnancies. They don’t get prenatal care. They come to the hospital in labor and their babies are already in stress. They go into labor early and their babies are born early.

MC: So what do you think of the comadrona in all of this? Does she help or hurt?

Mariana: I’ve given trainings to large groups of them. They are really good. They can detect problems and they bring the mothers to the hospital.

MC: I’ve read that if a mother has a post-partum hemorrhage that she has less than 2 hours to get emergency medical care. In some countries the comadrona is trained to give oxcitocin. Do you think comadronas in Guatemala could be trained to administer oxcitocin?

Mariana: Yes, I think they could. Would you like to see the kangaroo program at the hospital?

MC: Yes, thank you I would

[We then go to the hospital which is next door. Mariana opens a door on the side of the hospital fence with her keys]

We go inside the hospital. The corridors are crowded with people. I ask Mariana if the hospital has fixed visiting hours. She says, yes, one hour a day from 3 to 4 pm. The people that are in the hospital today are
circulating in front of the emergency room. We move past that to another corridor. Mariana explains to the guard that I am there as an observer. He lets us through. She takes me into a small room that has a few chairs and an examining table. A very young mother is there with her equally tiny baby. This mother-child looks to be no more than 13 or 14 years old. Mariana tells me her baby was born weighing a pound and three quarters. I’m astounded. I take a peek at this little boy who really does look like a baby doll. She tells me that the “Método Canguru” [Kangaroo Method] has only been operating for a year and a half in the hospital and the Clinic.\(^{108}\) During that time it has been very successful. Mariana goes to the neonatal ICU to ask permission for me to visit. While I’m left with the mom I ask where she is from. She is from a smaller city which is 6-7 hours from the main city of the department. Mariana returns and we go to the neonatal ICU.

We enter and I see a large room with smaller rooms ringing it. There are some nurses at a desk. Mariana introduces me. I explain my project. Mariana asks me to put on a “bata”, a surgical smock to ostensibly protect against infection. I notice that there are some rather basic looking barrels that are serving as hospital waste containers. One is mounded with used syringes. The room is warm and a bit smelly. A monitor is beeping

\(^{108}\) Charpak, N. et al., 682. Kangaroo method is method in which the mother or father, using a front backpack carrier, keep the newborn close to the chest where the baby can stay warm. The baby stays in this position with the parent 24 hours a day. It has shown to substantially reduce infant mortality and can be used in any low-tech environment.
weirdly. We go from room to room looking at the babies. One room has every baby using the ventilator. They are all very tiny and some have crepe-like dry thin skin. They all have their stocking caps and many are fully rigged up to intravenous drips and oxygen. Mariana tells me that many of them won’t make it. They get pneumonia from inhaling amniotic fluid. Their mothers sometimes have infections and they transit the infection to them. Their immature lungs get infected.

This is the only hospital with any kind of neonatal ICU care in the whole department and it is overloaded. I ask Mariana about this mound of equipment that is shoved up against one of the walls with the babies. She tells me it is broken equipment and there is no one to fix it. They asked for some help of technicians from Guatemala City, but it hasn’t arrived. Meanwhile there is not enough incubator space. I talk to two nurses in one of the baby rooms and they both admit that the hospital is understaffed and under resourced with equipment and supplies. The whole hospital shows a lot of use. When we get ready to leave Mariana opens the door of the ICU and a mound of people try to press in. She assures them that they will have an opportunity, but they have to wait until the doctors have finished their rounds. Just to the side of the ICU entrance are some chairs that are filled with people waiting to come in. I ask what Mariana what is the visiting policy with the neonatal ICU. She tells me that parents can come in for 20 minutes, but only one group at a time. Babies can’t be
taken out of the ICU until they are discharged by the doctor. Then the mothers if they wish can go to the “Canguru” room at The Clinic to continue to care for their babies until they are old enough and well enough to go home. We go back through the locked door that is the shortcut to The Clinic.

- Interview with a pediatrician working as a substitute

I interviewed a pediatrician at the Clinic who was working as a substitute for the regular pediatrician who was on sabbatical. This interview was done on the day that I had toured the neonatal intensive care unit at a national hospital. I was very curious about the lack of breast feeding that I saw in the neonatal ICU and I began my interview with that observation and some questions.

MC: There is research that says if you can do this [feeding breast milk through a nasal tube] there are many benefits, much earlier. I can see here there is no way to preserve the milk. You need the help of the mother. It isn’t easy to pump breast milk. The equipment doesn’t work for everyone.

Dr. Garcia: More than anything it has to be for convenience because the best food is breast milk. But for all the babies they make up formula for all. They have to wait for the mother. Sometimes the mother isn’t available because she can’t stay. A mother can stay for 24 hours in the hospital after a normal delivery. If she has a cesarean she can stay for 48 hours.
There are only 14 beds and there isn’t room. A mother can stay for 15 days at the Clinic for 30Q. She pays 2Q per day. More than anything it is because of access [meaning accommodation for the mothers so they can stay and breast feed their babies in the hospital]. That is to say there is no access to the hospital.

MC: Another thing I’ve noticed, why don’t the parents have access to the neonatal ICU? What are the hours? How much time can they stay?

Dr. Garcia: In this hospital, in any hospital, they have specific visiting hours. They can have parents during those hours.

MC: So the parents don’t have free access?

Dr. Garcia: If they have children that are undergoing treatment it is a lot simpler. If they are in intensive care they cannot have free access. The reason is that there are various pathologies. It is better if they stay isolated from the environment because of the contamination. The parents have to wash their hands, but there might be a problem so it is better that they [the babies] are isolated. That is in the case of intensive care. In the case of “campamiento” – regular hospitalization – the parents can stay. At times they restrict the visits because it the hospital is full.

MC: There isn’t any space.

Dr. Garcia: Yes, there isn’t any space.

MC: The reason I ask is that my sister-in-law was with her premature baby for more than 14 hours a day in intensive care at that was 40 years ago.
All the babies were together in the ICU. However it was under different conditions than the conditions here.

Dr. Garcia: I don’t have any experience with the hospital here. I did my practicum in a hospital in [a large Guatemalan city]. But there those parents who babies are in intensive care – high risk – can’t stay with their babies either. They could only see their babies at certain times, two hours a day. If the mother wants to she could breast feed her baby.

MC: Do you know anything about the comadronas? Have you met them?

Dr. Garcia: In what way?

MC: What do you think about them?

Dr. Garcia: Well then. The comadronas are always found in the rural areas. In reality they help us a lot for their usefulness. The people don’t have any rapid access in the rural areas in the moment when the mother is giving birth.

MC: Do you have an opinion about their work. Do they do good work? Do they do bad work?

Dr. Garcia: Some. Some. [meaning some aren’t so good at their work]

MC: Why?

Dr. Garcia: Because there are some that don’t know how to manage a delivery.

MC: Why?
Dr. Garcia: Because they attend a delivery and the baby arrives feet first they pull on the legs.

MC: But is that what you've heard or it is what you know from your own experiences?

Dr. Garcia: In my opinion they should only manage normal deliveries.

MC: So have you talked to any comadronas like this?

Dr. Garcia: In [another larger Guatemalan City] yes. There is more suffering than normal because they have not evaluated the situation. For example when the mother is dilated to 2 centimeters they nag them to push, the more pushing, the more suffering for the baby. They should let the mother alone to do it naturally. They have no idea what to do in the 3rd stage of labor. In the 3rd stage of labor is when the placenta is expelled. Active management is what they do in the hospital. They don’t have oxytocin.

MC: Why not?

Dr. Garcia: Why? Why I don’t know maybe it is because they are not allowed to.

MC: The reason I ask is because in many poor countries like Guatemala they administer oxytocin as a prophylactic to all women after the baby is born. I've heard that sometimes the clients want oxytocin to speed up labor which is dangerous. It doesn’t matter if it is a controlled drug or not
there are ways to get it. On the other hand it can save the life of a mother.

Dr. Garcia: They can’t manage 3rd stage labor. If the placenta isn’t expelled, and they don’t have oxicotcin, they pull on the cord. The major cause is Uterine Atony, the loss of uterine contractions and the muscle tone of the uterus to expel the placenta. There is no uterine contraction. Then there is hemorrhage, shock and then death.

MC: What is the main cause of neonatal mortality?

Dr. Garcia: Prenatal Asphyxia

MC: So that is connected with the previous problem [retained placenta, hemorrhage].

Dr. Garcia: No., no. prenatal asphyxia is caused by the lack of attention during the delivery. It is before the management of 3rd stage labor. For maternal mortality it is Uterine Atony.

MC: Another question, have you seen an increase in certain problems here? How much time have you been here [in this city]?

Dr. Garcia: Two months.

MC: Let’s talk about the other large city you were in then. Have you seen more problems?

Dr. Garcia: Yes [At this point I believe that Dr. Garcia thought I was asking about problems with the comadronas – not neonatal mortality.]

MC: Like what?
Dr. Garcia: Yes, I’ve seen more presentations of babies with breach positions.

MC: Why do you think that is happening?

Dr. Garcia: They [the comadronas] are not referring them to the hospital. In the first four months of the pregnancy they need to put them into the correct position. They can be upside down or sideways. In the last few months of pregnancy it is more difficult to move them.

MC: But really what can a comadrona do in this situation?

Dr. Garcia: Learn, touch them, move them.

MC: But a baby can move on its own and change position in the 8th month.

Dr. Garcia: Yes, but it is more difficult. The comadronas need to learn if they don’t have access to ultrasound.

MC: So is this the major problem, more frequent today, the bad position of the baby in the uterus?

Dr. Garcia: No, most babies are born normally, head down.

MC: So the problem is with the mother dying?

Dr. Garcia: No, it is because babies that are badly position can asphyxiate. They are still born. It is because of bad management of the delivery. They don’t know if the baby is suffering. They don’t have stethoscopes. They can’t hear the heartbeat so they don’t know if the babies are in distress or not.
Clearly Dr. Garcia has a poor opinion of comadrona practice. She condemned the comadronas for pressuring the mother to push before she was fully dilated, pulling on the baby’s legs to remove it, and pulling on the umbilical cord to extract the placenta. Although she said that she had talked to comadronas, it was not clear that she had ever witnessed a home birth attended by a comadrona. I don’t think she knew that many comadronas know how to palpate the uterus, find the position of the baby, and encourage the baby to flip by massaging the mother or by having the mother position herself to encourage the baby to move. As a pediatrician she is focused on neonatal outcomes that can’t be ignored without considering the health of the mother and emergencies that might occur during delivery. Dr. Salgado on the other hand had witnessed comadronas in action and had more knowledge of their practice. He was respectful of their practice, but never clearly endorsed it as preferable to a biomedical birth experience.

Dr. Garcia’s dialogue with me illustrates the ignorance of comadrona practice and the defense of biomedical management of birth. As a doctor who did her internship in a larger Guatemalan hospital she said she had contact with comadronas. In subsequent interviews, during comadrona meetings, I noted a difference between comadronas that practiced closer to urban areas. Most of these comadronas were bilingual Spanish/Mayan (the Mayan language spoken in their area). They
could communicate with biomedical staff in Spanish and they also had more frequent contact with biomedical personnel. They could also refer because their clients lived close enough to hospitals and clinics that have equipment and personnel to deal with an obstetrical emergency. My final question to Dr. Garcia and the cryptic response I received from her was indicative of the referral problem.

MC: The problem for the comadrona is that she doesn’t have basic equipment and neither do the health posts. What if you live in [a distant pueblo in the department] and it takes more than six hours to get to the hospital. What can the comadrona do?

Dr. Garcia: She can understand it.

Her reasoning is that the comadrona could somehow prepare for this exigency, but given that postpartum hemorrhage, the principal killer of women in Highland Guatemala, has a 2 hour window to save the mother’s life, a six hour evacuation time is too long. To turn the question around, does Dr. Garcia understand how the comadrona is too far from any referral?

- Interview of Indigenous Auxiliary Nurses from a Distant Municipality

These auxiliary nurses had come from two different departments to attend the nurses’ training that was done by the US obstetrical and pediatric nurses. They are wearing the traje, indigenous clothing, of the areas that they come from. Of all of the auxiliary nurses at the training
very few are wearing traje. When I heard where they had come from I wanted to be sure to interview them because they represented a voice I had not heard yet.

MC: Where are you from? From what pueblo?

Nurse F 1: From [A pueblo at least 7 hours away from training center]

MC: And where is that? In what part?

David: In the north

Rita: North

MC: How far away?

David: Uh,

MC: How many miles

David: [Asks Rita]

Rita: Seven hours away

MC: Seven hours! Is it in this department or in ?

David: In Guatemalan City

MC: In this department. Uh huh. And how many people live in your people more or less?

Rita: There live about 5000 more or less.

MC: What is your real work? Are you nurses in this area? To be a nurse in Guatemala what do you have to do? How long does it take to graduate as a nurse?

Rita: Two years.
MC: Two years. Two years of studies. And where did you study?

Beatriz: In Guatemalan City

MC: In the hospital or?

Rita: Not in the hospital. There is an institute.

MC: [*]? Did you have a teacher? Did you have any training by televideo?

Rita: We had a teacher.

MC: Did you learn about assisting a delivery?

Rita: We still haven't received this training.

MC: So this training today has been very helpful.

David: and Rita: Yes, it is very good.

MC: So you've never seen how to take care of a newborn, how to clean the mouth and all of that stuff?

Beatriz and David: No

MC: In your opinion what is the main cause of maternal mortality in your area now?

Rita: Diarrhea

MC: Diarrhea for the mother or the newborn?

Rita: For both of them.

MC: For both of them, the mother too. So why do you think that is the principal cause of death for the mothers and children?
Rita: It is the lack of consciousness, the lack of care for both of them. And rotavirus as well.

MC: Rotavirus\textsuperscript{109}. Is there a lot of that there?

Rita: Yes

MC: Interesting. So what do you do for them when they have diarrhea?

What can you do for the mother? Nothing?

David: Well nothing really. You can take them to a doctor. We really can’t do much for them. It can be a grave situation.

MC: Do you work within a Health Center or is there a health post where you live?

Rita: A health post.

MC: Are there supplies in your health post?

Rita: and David: There isn’t very much only a few types of medications. It is not complete.

MC: What kinds do you have?

Rita: The most we have is for diarrhea and aspirins for a head ache. Pills, capsules

David: Capsules. There aren’t any medicines. No injections.

MC: In the case of emergency for instance, if there is a birth with hemorrhage or an abortion, what do you do?

David: Since there isn’t an ambulance there isn’t much you can do.

\textsuperscript{109} de Oliveira, L. H et al. S62. Rotavirus is one of the principal causes of severe infant diarrhea. There is a vaccine for it.
Rita: For example if this happens in an aldea that is far away they carry them in a chair.

MC: Do you know what is the cause of maternal mortality in your area? Have you seen the statistics? Do you know how many women have died in your area now?

Rita: 10 mothers, 5 undernourished, 5 preschool age children. 3 died from malnutrition. [she gives me statistics for mothers and young children]

MC: So they died from that. Do you have a good relationship with the comadronas that are in your area?

Rita: Yes.

MC: I’ve heard from some nurses that they have problems with their comadronas.

Rita: What happens with the comadronas is that they are not trained to train the mothers.

MC: So if there is a problem with the mother is it the comadrona that brings the mother to you or is it the family or do they call you? What is the process?

Rita: The comadrona and the family [bring the mother].

David: The family.

MC: In your area do you know if the comadronas don’t encourage the mothers to go to the hospital because I’ve heard that if their clients give birth in the hospital they don’t get paid. Is that a barrier?
David: Uhh, no uhh...

MC: Or is it that the comadrona really wants the mother to live?

David: Well, depending, depending how the institution is or rather how they treat us.

- Interview with Auxiliary Nurses from a Larger Pueblo

I managed to pull two nurses away from the comadrona meeting in Santa Cristina. I didn’t ask their ages but they look to be in their mid twenties. I know Pascual has only been in Santa Cristina a few months and so like me he is learning a few things. [Teresa may have arrived in Santa Cristina before Pascual. She acts more familiar with the town.]

MC: Can you tell me how the Guatemalan health system is working today? How do you work with the comadronas?

Pascual: We have a very good relationship with them. They refer to us when we have an emergency and we take it from there.

MC: So what kind of emergencies do you get and what do you do with them?

Teresa: We stabilize the mother if she is hemorrhaging. We give her IV fluids and drugs to stop the bleeding. We get her ready for transport to the hospital.

MC: I understand that Santa Cristina has an ambulance now. Is that how you transport the moms?
Pascual: Yes. The problem is if the comadrona waits too long to refer to us. Then the mother sometimes dies.

MC: Santa Cristina is not doing too well.

Pascual: We have the highest rate of maternal mortality in the county.

MC: The department has already had 27 maternal deaths in the first quarter. It is going for a record from the projections I’ve seen by the Guatemalan government. Why is this so?

Teresa: Many of these women live in very isolated aldeas. The comadrona has to walk miles to attend to them. The mothers are uneducated, they have too many births too close together. They don’t get prenatal care so they don’t take iron and folic acid.

MC: What kind of equipment does the health center have in [smaller Highland Guatemalan city]?

Teresa: We have enough to stabilize the mother. We have antibiotics and we can examine the mother.

MC: I heard the presentation on abortion that Dr. Lopez gave. Are there a lot of abortions here?

Pascual: Yes there are unfortunately lots and lots of abortions. There are some women who have multiple abortions – natural and induced

MC: Abortion is illegal in Guatemala. Who does the abortions?

Pascual: The mothers sometimes take certain drugs they think will abort them. Sometimes they get an injection.
MC: Do the comadronas do abortions?

Teresa: Some. Not many, but some do. The comadrona is a respected and powerful person in the community. She doesn’t want trouble.

MC: I’ve read a lot of studies about maternal mortality. In some countries they do not have comadronas. They are against the law. However in Guatemala most of the rural population uses a comadrona. They are not going away. What do you think the comadronas need to do their job better?

Pascual: They need more training. Some don’t know what to do with a retained placenta. They don’t know when to call for help until it is too late. They don’t have equipment.

MC: Do you think the comadrona’s clients ask for things the comadrona doesn’t want to do for example using oxytocin to accelerate labor?

Teresa: Not many. The use of oxytocin without a prescription is illegal.

[Teresa excuses herself because she is going to do a presentation on early pregnancy care and vaccinations]

MC: What do you think Pascual would be the thing that Guatemala could do for its health system right now given the circumstances that would help it? In my opinion the Guatemalan government is to blame for a lot of the problems because it underfunds rural health.

Pascual: We need more supplies and the smaller health posts need more support. Each aldea has a health committee and they are the first
contact in an emergency generally. They don’t have the basics to deal with a pregnancy emergency let alone any kind of emergency. Let me explain to you the problem with the nurses at the health center. We work on a contract so our jobs are not stable.

MC: Do you renew your contract annually? How does that work? When do you renew?

Pascual: We renew in January. We get a call that tells us to renew and then we sign another contract. Sometimes, however, there isn’t any money for the next year so you get offered a contract in a different area.

MC: This can’t be good for developing a working relationship of trust with the comadronas.

Pascual: No it isn’t. I come from this department and like everybody I’d like to work where my family is. When you just start out you cannot work there because everybody wants to work there. So you take a job somewhere else and wait until you get a contract in the city. Since the contracts only go for a year, and you probably won’t be staying, the comadronas are always meeting someone new.

MC: I have heard that the comadronas don’t get paid if they have to refer a client to the hospital because they then don’t attend the delivery. That isn’t much incentive for them. What if the government guaranteed to pay their fee in the cases in which they refer?

Pascual: I think that would be a good idea.
MC: Given the money situation, unfortunately, they probably won’t do that anytime soon. I’ve been thinking of an idea in which the comadronas would have pregnancy tests with them. That could encourage moms to get an early confirmation of their pregnancy so the comadrona could start educating the client a bit earlier and start early pregnancy care. What do you think of that idea? I’m talking about the urine test not the expensive blood test.

Pascual: A simple pregnancy test at the health center costs 25Q [$4.00].

MC: That might be out of your budget if you husband only makes a few Quetzales per day. What if the test was free but to get it you had to either go to the health center or get it from a comadrona?

Pascual: Yes they could get that and folic acid and iron pills.

MC: I think it might be a way that the mothers could start thinking about their pregnancy and what they wanted to do. They could save some money maybe or begin building up their health.

I read a study of the use of a pre-measured amount of oxytocin that can be injected easily by anybody. It is used right after the birth of the baby within a few minutes to control post partum hemorrhage. It is supposedly cheap and doesn’t need refrigeration. Do you think comadronas could learn to use oxytocin after birth? Would it be a good idea?
Pascual: Yes it would but they also need more training. Returning to your idea about the Guatemalan government, they need to support the health system better.

Interview with Clinic Nurse about Pharmaceuticals

MC: I am interested in the pharmacy that everybody has at home

Sandra: What, a pharmacy?

MC: Yes the pharmaceuticals like oxytocin.

Sandra: Yes they have a lot, but not oxytocin which is a controlled drug. In private clinics you can buy what you want, but a pharmacy will not sell it to you.

MC: So, if I go a pharmacy today without a prescription will they sell me oxytocin?

Sandra: No they will not sell it to you but a private clinic will. You can get anything in a private clinic.

MC: How then can a comadrona get oxytocin?

Sandra: I don’t really know but some have it.

MC: I have this theory that the clients ask for drugs from the comadrona to accelerate their delivery. It is very dangerous. Another thing that gets my attention was when I was one of the small aldeas; Raúl (the driver) was talking to the people about a mobile clinic. When the mobile clinic comes they will bring drugs to sell at a discounted price so the people can buy
them. The people know all the names of the drugs like the one to kill parasites.

Sandra: Yes, Mebendazole\textsuperscript{110}.

MC: They have a lot of knowledge about the types and uses. How do these people get this information?

Sandra: They receive samples from the health centers. They know what they are.

MC: What happens if something bad happens with a comadrona and the use of oxytocin?

Sandra: They bring the mother to the hospital with an emergency the family will not denounce the comadrona. The comadrona has a lot of power in the community, the same as the mayors, and the “promotores de salud” (health promoter personnel). If the family denounces the comadrona they will have problems with the community in the future.

In a subsequent interview I asked Sandra, the Clinic nurse, what she thinks of the comadronas:

MC: I was thinking about what the Director said about maternal mortality in this department. Why is this department so bad? Just this year alone the Director said there were more deaths than the previous year. What is different about this year?

\textsuperscript{110} Mebendazole is a drug used to treat various types of parasitic worm infections.
Sandra: It is the comadronas. Many of them are not trained. They don’t come to the trainings and they don’t do things in time to save the mother’s life.

MC: Do the comadronas want to be independent? Do they not like the trainings?

Sandra: Some just keep delivering babies without any training. If they don’t come to the trainings then they aren’t recognized by the government as comadronas and what they do is illegal.

MC: What are the consequences if the mother dies?

Sandra: Well they can be prosecuted.

MC: The Director told me that in Santa Cristina there is one comadrona that had three mothers that have died on her. How can she continue to be a comadrona?

Sandra: The family doesn’t denounce her. They are afraid. They would have to go the police and there would be an investigation. They don’t want that. Most people want to have a baby at home with a comadrona. They don’t want to go to a hospital. The family won’t let them go.

MC: You’d think she wouldn’t be getting any more business. From what a few of the comadronas have told me they must have delivered hundreds of women. With a hundred births there would be at least one mother with a problem. Surely a mother would die.
Sandra: Unfortunately the comadrona is often called as the woman is giving birth. She has had no prenatal care. This happened to a comadrona that I knew. She was called at the last moment. It really isn’t her fault the woman dies. It is a lot of work to train the comadronas. We try to tell them about the signs of eclampsia, the swelling of the face and hands. Some get it, some don’t. They can’t take blood pressure or temperatures.

MC: You mean they can’t learn to do that or they don’t have the equipment or what?

Sandra: Yes it is the equipment but they can’t read. We can’t even get them to understand how to weigh the babies. We say the scale is like a clock but they don’t get understand. They just lift the baby and guess. They put their hands on the mother’s forehead or cheek to take the temperature and just say she is hot.

MC: One of my questions is how many people have a cell phone. I don’t say cell phone anymore just phone because that is the only telephone there is. Everyone has a cell phone. These ladies can dial the numbers and operate one. I can’t even operate my own. Don’t you think they could learn to take a blood pressure reading?

Sandra: Yes that’s true they all have cell phones. Most of them only have it to receive messages, but there are others that use all of the features.
MC: I was reading a study of midwives in Indonesia\textsuperscript{111} who call and report on their patients with a voice answering system and the cell phone. I’ll bet someday everybody will have a cell phone and the midwives could call in their patient’s symptoms. The other thing I read about was a study by Amnesty International on maternal mortality in the US. There is a lot of variability between states in how they report maternal mortality. Do you think that maybe the difference between last year in this department and this year is better reporting?

Sandra: Yes the reporting has improved. There are two agencies that gave statistics now that didn’t exist before. There may have been as many deaths before who knows how many. Now more are being reported.

MC: So the Director said that the comadronas do too much massage and manipulation of the baby which can cause problems for the mother.

Sandra: They try to get the baby in the right position if they think the baby is lying sideways or breech. When the baby gets to be a certain size this can be bad for the mother.

MC: From what I know babies can spin around a few days before birth. Any manipulation may not have any effect.

Sandra has some of the same bad opinions of the comadronas as does the pediatrician substitute. Her information about comadrona

\textsuperscript{111} Chib, A., 516-518.
massage and positioning the fetus is contradictory to the opinions of the pediatric substitute, Dr. Garcia. Sandra not only works for the Clinic, but she also works in the national hospital, but not always as an obstetrical nurse. She works on a contract as do many of the health personnel that is renewed yearly. Her position is stable compared to the employment of the auxiliary nurses, but she looks forward to the day that she can retire from the job. As a nurse for the Clinic she has many responsibilities that include giving presentations and trainings and preparing reports for the Clinic director. She has lived in the department all of her life, but has received training in the US and visited other Latin American countries to attend conferences. She does not speak any of the indigenous languages of the department, but she has presented the obligatory Minister of Health trainings to lots of comadronas.

- Interview and Observations of the Cuban Doctor

I met Dr. Lopez at the Clinic not soon after I started using the Clinic as a base for my research. Dr. Lopez is one of the Cuban doctors that work in the community as part of a program by the Cuban government to send health care workers to different parts of Latin America. The Cubans have been in Highland Guatemala since the early 1980s significantly before the Peace Accords.112 Dr. Lopez had been in Venezuela and explained to me the structure of these programs that sent Cuban doctors

112 Huish, R.& Kirk, J.M., 81-82.
to different areas. As she said when I interviewed her, “Why Guatemala?” her reply, “Porque hay mucha necesidad” (because there was much need). I could not argue with her. Dr. Lopez had been in Guatemala less than a month and so we shared from the very beginning the work of having to make sense of what we saw and how we interacted with it. This is a brief transcript of an interview that I had with her:

MC: What kinds of work do you do here?

Dr. Lopez: What kind of work do I do here in the “Consulta” (her doctor’s office in the Clinic)? Well then, here in the Consulta I attend to pregnant women, women, and children equally, but here at this Clinic, more than anything, I attend pregnant women.

MC: What are the major problems with these women? Do you see malnutrition as a major problem? [I had seen my share of rail thin women on my visits to rural areas].

Dr. Lopez: Problems, well, not malnutrition principally, not with the women we see here. But I see a lot of malnutrition with the children.

MC: Why malnutrition with the children?

Dr. Lopez: For the lack of care and poor resources. They work in agriculture and they leave the children in the house and they are not fed properly. The principle problem is the lack of education about sanitation in the culture and also the ignorance of sexually transmitted diseases, the prevalence of machismo, and early marriage and sexual relations.
I then explained my PowerPoint and went over some of my assumptions about comadronas and how they practice in this area. DC did not comment particularly. I got the sense that I was educating her, because at that point in my field studies, I probably had seen and met more comadronas than she had.

At the time I did my interview DC had not been out into the rural areas to do a comadrona training or help with a “jornada”, (mobile clinic). That came later. I accompanied her on one such visit, her first, to a Santa Cristina 2.5 hours away from the Clinic. She expressed concerns of what the expectation was for her talk on prenatal care to a sea of comadronas. Her presentation was made difficult by her language. The translator struggled to understand not only her highly inflected Cuban accent, but also her way of explaining things.

I think she was appalled but not from the things I was seeing. She was comparing her job at the Clinic and the women she met with her experience in Venezuela that had more resources for pregnant women. She was a highly trained physician with years of specialized training, more than six years after her internship in Cuba. Her job at the Clinic was to do physicals and help women obtain birth control information and to monitor their pregnancy. She did not work at the national hospital, but she was the one of the persons that determined if a woman was ready to go to the national hospital for her delivery which was not possible at the Clinic.
- Observations of a Comadrona Training by US Midwife Team

A US midwife team returned to the Clinic to give a 3-day training for auxiliary nurses and then a 1 day training for the comadronas. There were some issues with the attendance at both trainings. The strikes at the national hospital had made it so that the local nurses weren’t allowed to attend because they were needed in the hospital. For the comadronas although many came in groups they had to get themselves to a one-day meeting that started at 9:00 in the morning. The timing was difficult given how much time it took to get anywhere with public transportation.

It is a warm day for Guatemala’s winter which is in the Northern Hemisphere’s summer. For Guatemalans it is the time of year that makes you ill to protect against colds and pneumonia that accompany the almost daily rains. Today is a special training for comadronas that is held at the local university. A group of five energetic obstetrical and pediatric nurses are here to “help out” and give lectures to the local nurses and the comadronas. The nurses have been here before and have traveled to some of the same locations I visited. They are familiar with the food and the transportation. They’ve been staying with an evangelical group and chauffeured in a large red van by the same group. None of them speak tourist Spanish, enough to get by, but they have the support of translators.

The morning begins with ice-breakers with some calisthenics meant to be used by comadronas with their clients. Things like large inflatable
exercise balls that are good for laboring women are not readily available in small aldeas, but somehow this irony never occurs to the nurses.

The pediatric nurse gives a presentation on how to attend to a newborn. She has brought a doll and a cloth replica of a uterus and umbilical cord. The pediatric nurse finishes her demonstration of how to care for a newborn baby, how to clean the nose and mouth, and first aid if the baby isn’t breathing or is responding too slowly to stimuli. The interpreter has kept pace with the abundant information flowing from the fast-talking nurse, but balks in the translation of some of the techo-medical lexicon. After apologizing for the lack of a Spanish version, the nurse then shows a quick video of a non-breathing newborn being attended by a swarm of staff that uses an electrical suction device that has a special pressure gauge to monitor the correct amount of air for the delicate newborn lungs. I scan the audience as the comadronas watch the video intently. When would that technology ever be found in a small aldea that doesn’t have electricity?

The pediatric nurse asks for volunteers to practice what they have been shown. Nobody volunteers but after a bit of prodding by the translator two older comadronas take their places by the side of the table. I encourage one younger woman who was quick to get up to go up the table even though only two volunteers were requested. The nurse gives her the duty of holding a towel which will be placed under the
newly born baby to keep it warm and dry. I watch the deft and quiet motions of the comadrona as she explains to her colleagues how it is done. She taps the sides of the baby. She taps the feet. Her hands are in constant motion but ever so gently. Part of the emphasis of the nurse’s training has been the time element, “you’ve only got 30 seconds for this, 30 seconds for that, if this isn’t happening within a minute do this, if not call the ambulance.” I see the nurse look at her watch. Is she thinking that if this were a real baby would it be dead by now? There is something about the assuredness of the comadrona that transcends time. I wish I had been born into that loving care.

The next comadrona also takes her time with her choreographed routine that she probably has done hundreds of time in her life’s work, the first breath we take in the world. She won’t be hurried. The nurse watches her carefully by scrutinizing the order and inclusion of the newly-learned steps for newborn care. I wonder who is training who here?

Satisfied with what the pediatric nurse sees, I think she’s forgotten her watch, she asks the comadrona to show how she ties off of the umbilical cord. Carefully wrapping, tightening, and folding the cord the comadrona mimes the cut. This plastic baby is breathing on its own now. It is a soul free from the plastic placenta. The comadrona explains the massages and the bathing of the newborn and then wraps the baby
enchilada-style in a blanket. With a smile she hands the baby to the pediatric nurse. We all applaud

Revisiting the question of “who is teaching who”, I think of the Gaskin Maneuver. It is a special obstetrical maneuver used to prevent shoulder dystocia, a condition when the shoulder of the delivering baby becomes stuck behind the pubis bone of the mother. By placing the mother on all fours, the shape of the uterus is changed and the shoulder can free itself. Ina May Gaskin, who is considered the “mother of authentic midwifery”, popularized this maneuver.113 She wrote the ground breaking book, “Spiritual Midwifery” in 1976 that sold over a half a million copies. The book revived home birth and midwifery in the US. The Gaskin Maneuver is now used in birthing centers all over the world. Gaskin credits acquiring the knowledge of this procedure position from “indigenous midwives while visiting the highlands of Guatemala in 1976”.114

Chapter 6 - The Community
- Malnutrition, USAID and the Community

Guatemala regularly gets in the news because it has a chronic problem with malnutrition. The heavy late spring storms in 2010 had caused many farm areas to be flooded, beans and corn were underwater. Harvests are uneven. Some areas like San Marcos, a department close to highland Guatemala, produce non-traditional export crops. In the 1990s it was a major exporter of vegetables such as broccoli, blackberries and snow peas to North American markets. However these foods do not necessarily get into the highland Guatemala diet.\textsuperscript{115}

This is the third trip I have accompanied Cristina the social worker and Raúl the driver to distribute the USAID dried vegetable bags. It rained a lot last night and there are impressive pools of water that have filled the equally impressive pot holes of unknown depth that line the road that winds around the Clinic. The SUV is loaded with enough to distribute 4 bags each to 200 women. Cristina comments to me that she thinks that there won’t be as much of a turn out because of the rain. We are on our way to Tres Cruces. We are going to the elementary school. Cristina will give a short speech on nutrition and the women will sign the “Acta”.

I made good of my idea to find out more information on two things. What is in the dried vegetable mix? Cristina tells me it has rice and potato

\textsuperscript{115} Hamilton, S. & E. F. Fischer, 35.
and the women really do like it because, “Comen pura tortilla, pura tortilla” (They eat pure tortilla, pure tortilla). These women are so poor that tortilla is the main item in their diet. The dried vegetable protein bags make enough for 50 meals which is hard to believe. The mix relieves the monotony of the tortilla diet. I turn over a bag and read the ingredients, the first two are rice and dried potato, and then a laundry list of chemical names, and finally somewhere at the end are carrot and green bean. To me the bags smell slightly of dried onion. Cristina explains that the mix can be used for soups or mixed in with eggs. My other question is what is the “Acta”? The Acta is a petition. The women are signing this petition so they can show to the government and to the relief organizations that this food supplement is desired and they want more of it.

Today attendance thankfully has already been taken. No need to show your cédula, the Guatemalan government identification card that is being retired by the new RENAP national identity card. So the only mission after Cristina’s talk is the signing of the “Acta” with the thumbprint. Then Raúl can give out the vegetable protein bags. Cristina’s talk is brief. There is more on sanitation and hand washing and not letting little José play with the dog before or after going to the bathroom. The crowd of women is not paying much attention. She reads the “Acta”. Cristina was correct. Many women have not come as there are many more in the town and they are not here today. Cristina tells the women to form three lines in
front the truck and sets up with the petition book and her stamp pad. The arrangement she makes appears not to work out so she goes to the tail gate of the truck. The distribution goes smoothly.

I take the time to ask my cell phone question to a young woman who is watching the distribution very intently. She tells me that there are a few women that have a cell phone. I asked her approximately how many. She repeats a few women. I ask again of 10-15 of the women here today, “How many of you have cell phones?” We agree on about 20% of all the women have a cell phone that came today. I ask her if she has one. She smiles and says no. I ask her friend. She doesn’t have one either.

Meanwhile we watch a woman across from us assembling her bags into a shawl to carry away talking on her cell phone tucked under her chin.

We finish the first distribution and there are still many boxes left. Raúl tells the women to form another line because there is another for each woman to receive another 4 bags. The causes a great deal of giggling. The women scramble to form another line. I notice how compactly and yet comfortably they line up. No buddy pushes or shoves. Sometimes a new line will form to the side, but Cristina pays them no attention and eventually they drift to the end of the “real” line. The 2nd pass is done and still there are a few boxes. Enough for 1 more round – 2 bags each. One more scramble and lots of giggles and finally we’re done. Two boxes remain in the back of the truck in the cab. Raúl explains to me that we
can't take those boxes back to the “bodega” (storage) at Clinic because they won't get used and they will spoil. I don't understand because the boxes came out of the bodega this morning. If these boxes went back there, wouldn't they just go out in the next distribution probably next week? I watch as I have at the other distributions the women hoist their boxes and bags on the heads and drift away.

We drive back to the Clinic. On the way we stop at a store front that looks like all the others on the side of the road. Raúl tells me that this store front is an agricultural aid organization. It is a conglomeration of US, Mexican and Guatemalan NGOs. A uniformed army officer takes the boxes. I'm confused. I'm still not cannot understand why they can't go back into inventory at the Clinic. Raúl tells me that these boxes will be given to people that really need them and they'll get used right away. Maybe this is the answer why.

Later I learn that was the last distribution for this USAID project. Maybe the signed “Acta” will help petition of this program. The social worker Cristina was laid off and I did not see her again for the rest of my visit. She is waiting for another funding cycle to get reemployed again which might not start for another few months. The driver Raúl is equally frustrated because the Clinic cannot give him enough steady work. In the time I spent with him I came to appreciate the fact that he knew as much
about the workings of the various USAID programs as the Director of the Clinic.

Outside the Clinic when I return is a “huelga”, a work-stoppage strike, of the health promoters who work all over the department. They had not been paid for almost four months and they had no gasoline for their cars. They coordinate their strike with strikes in other departments. It is a Guatemala problem this year in all areas served by the Minister of Health. The health personnel in the national hospital next door continue to work. There is no solidarity, but then again they are not contracted employees.

- Interview with a Promotora and Health Committees

Later in the day the Director asks me if I would like to interview the President of the local community development group, Vernabella Fuertes Lopez. She tells me that Vernabella is a very hard worker and has been working for years to get a water system for her aldea in Casillas:

Vernabella enters the conference room that I’m using at the Clinic as my mobile office. She brings her 8 year old daughter. I introduce myself and ask her name and her daughter’s name. I ask Vernabella what her official title is and she tells me clearly that she is the “1st level President”. She used to be the 2nd level Vice President of the regional group of 8 aldeas of Santa Cristina. I’m guessing that this development group may have more than one president and vice president given the information
that I got from Luis and Jose and their regional health group. There are a lot of committees and groups.

Vernabella tells me that her aldea is very remote. It is a pueblo of 600 women, 725 children and 505 men. I’m impressed she knows the numbers and I’m guessing it is important that she knows this exactly. Her community suffers from a lack of water because it has no way of storing it. In the winter which is now there is plenty of water but there is no storage tank. When the weather is dry for a period of more than a month there is no water and the women of these aldeas have to walk 2.5 hours to get water. At the water source there is sufficient water, but they must wait their turn. This activity takes most of the day. When water is scarce you can’t bath your children as often as you would like. You wear dirty clothes. Unless you have a “bestia” (donkey or horse) you carry the water and you can’t carry that much. Vernabella has worked on this water project for more than seven years. At one time they had gotten some interest from another NGO but it did not pan out. The aldea lacks electricity and this is required to pump water. I asked Vernabella how not having water affects the community’s health. She tells me that the community suffers from malnutrition and children get diarrhea.

\[116\] The director tells me later in the day that a Japanese NGO came to the aldea to see what was possible. There was a water source but it was too far away and would have to be pumped uphill. There was no electricity for the pump and the pumps were delicate and break down. Vernabella has not given up and she continues to look for support for her water project.
She asks me to help her. I tell her why I am in Guatemala and that I am studying health. I tell her I can't promise what will come out of my study, but I am collecting information and experiences. I tell her my university is large and that many students are studying problems such as sanitation and water problems all over Latin America. I thank her for her time.

- Narrative from the Clinic Nurse and the Driver: The Marlin Mine and Environmental Pollution

Cristina the social worker, Raúl the driver and I went on another USAID nutritional supplement distribution. As we are almost ready to leave Cristina then turns her work over to one the school committee helpers and brings me another woman. Lidia Perez Sanchez has been to the Clinic as well. Her story is sad. Her 7 year old daughter has a large tumor on the side of her face. They first went to the Clinic. They did some tests at the national hospital and the doctors decided that the tumor was too large for an operation. If they operated the cancer might spread more rapidly. Little Vitorina is now at home, “She can only eat on one side of her mouth now”. There is no money to take Vitorina to Guatemala City where she might be able to get better medicine for her pain. Lidia knows her daughter is not going to get better. Lidia wants me to come to her house to see Vitorina. It was only five minutes away, but as I wasn’t certain where I was or what the five minutes would be so regretfully I declined.
Cristina comes back and says we could drive there after the boxes are gone. Raúl would drive us.

Finally the only boxes that are left go to school committee members and previous meeting participants. Cristina and Raúl tell the school committee to save the remaining four boxes for people who really are in need. As we are about to leave Lidia returns. She has brought Vitorina. What I see is a beautiful delicate little girl with half of a face swollen twice its size. Tears are streaming from the eye on the swollen side of her face.

We leave. The truck is much lighter. We are giving a ride to one of the school committee who needs to go to Santa Clara to leave off some papers at another government office. On the way we pick up some of the women who were at the school yard. They knock on the back window to make Raúl stop. The color of the soil turns from chalky white to the coppery red. We are close to the Marlin mine. We pass wet areas on the side of the road. There are many small springs in this area. Butterflies of all colors hover around the wetness. We leave our passenger and head down the steep grade on the bumpy gravely road which according to Raúl used to a good road before hurricane Agatha ruined it this April.

- More on the Marlin mine

Raúl and I were talking about the mine during our ride to the aldea. He asked me what chemicals are in the water. We talked about the dangers of lead and mercury in the environment. I told him I would look
into the University of Minnesota study that was done on the residents of this area and give him a report. The study found certain levels of cyanide, mercury, copper, manganese, lead, cadmium, and arsenic in the blood and urine of the participants in their study. The closer the person lived to the mine, or if they worked in the mine, the higher the levels of these chemicals were found in their bodies. The study team tested water samples around the mine area and found chemical pollution. The study was not conclusive in terms of the immediate effects of this chemical cocktail on the bodies and minds of the inhabitants.

- Government Fraud

    I went with Cristina and Raúl to do a health presentation at another small aldea to the west of the department. There were very few women because they were all at the market in another town.

    On the mesa we stop at “El Mirador” that has the quesadillas and cocoa. I ask how come the alcade blew it. Raúl and Imelda tell me that the Clinic visit has always been set up once a month in this aldea and it can be any day of the week but it is the alcade who has it on the calendar. It is he who communicates with Sandra to set things up. Imelda tells me he is a busy man. I tell her he can program his cell phone calendar to send him a reminder. “No hay excuso” (There is no excuse) – “pura flojera” (pure laziness). They agree.

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In the SUV I ask them about their opinions about the current state of the health system. Raúl and Imelda eagerly answer in unison, “Es el mal gobierno de Colom. Muy mal” (It is the bad government of Colom. Really bad). Colom is the current President of Guatemala. They begin a tag team conversation with me about the corruption of this government and where the money goes that is supposed to go to the smaller and poorer parts of Guatemala. I’ve heard and read many of these things before. We discuss the “porquería” (pork barrel projects and padding of the federal budget) and what happened to a lot of the International donations after tropical storm Agatha. “Lo pusieron en una bodega” (they put it in storage) to be used for hand outs for the next election. We discuss the major families of Guatemala that keep recycling and reinventing themselves in every government position. Raúl and Imelda emphasize how violence and corruption are affecting the country. Sandra Torres de Colom is mentioned. She is doling out money like water for her pet projects to grease the skids for an upcoming presidential election bid in 2011. Raúl tells me that Colom has to curry favor for the Mafia because it will be the Mafia that buys the vote. We talk about the death of Rosenberg the Guatemalan attorney that supposed arranged his own death to make it look like a murder and before dying put a damning video about the Colom administration on YouTube for the world to see. The brothers Valdez Paíz were implicated in the murder. They own one of
Guatemala’s largest drug companies by the same name. Imelda tells me that all of the polemic around Rosenberg is a smokescreen to cover up the Guatemalan government’s attempt to get total control of the Valdez Paíz drug company and create a monopoly on the sale of drugs to the hospitals. Raúl tells me Colom and many of the other ministers have gotten into bed with the Mafia, the Narcotraficantes (narco traffickers), and now they can’t get out of it. I’m impressed with the depth of their knowledge and their ability to follow the complicated connections in the embezzlement of the Guatemala federal budget. I doubt I could have a conversation of this depth with your average American citizen. Still for all of their knowledge there is this mystical and allegorical quality to our conversation.

I attempt to refocus my inquiry. So then what can be done about the health system? They both redirect the conversation to the violence which seems to be on every Guatemalteco’s mind. They conclude that the only way to deal with the violence is that change must come from within. They get religious. They both agree the rapture is coming soon. Raúl quotes a bit from the Bible. Children will turn against their parents. Parents will turn against their children. Roles will reverse. Then they both say they have to plant the seeds for the future so that their children and grandchildren will have a better life. So if the Rapture is right around the corner why prepare for a better life for the next generation?
Anne introduces a group of young people from Alabama to me. They are missionaries of a sort. They won’t be in Guatemala very long. They don’t speak Spanish. I ask Anne what is in the cloth case she is carrying. It looks like a guitar which it is. The bookkeeper goes to get some of the pregnant ladies from the Clinic’s comedor and then it dawns on me as to what is going to happen in this room. Some of the pregnant ladies file in as well as some moms that are still with their newborns. Some of them are accompanied by their mothers. Anne briefly introduces the theme of their meeting, “A non-denominational sing and pray session to reduce the boredom of waiting to give birth.” I never thought giving birth was boring or even waiting to give birth once you are in any kind of labor. I wonder if Anne has experienced childbirth.

Finally we are a full house. All of the missionaries and Anne are standing or sitting on the side of the room. She picks up her guitar and passes out some “simple songs” in Spanish. Not all of these ladies read Spanish, but the verses are simple enough that they get it together fairly quickly. Anne exhorts them to sing louder. I know many of them are Catholic, but some of them believe in something different. After three songs Anne pulls out her bible and starts reading some verses from Matthew. How do these women really feel? Can they leave if they want? Some of them I can tell are enjoying this, but I notice the expressions on
two women in particular and I can see that they are uncomfortable. One reason that they may be uncomfortable is that more than an hour has past with singing, readings from the Bible, and exhortations about the sincerity and all encompassing love of Jesus for them and their babies. They have been sitting the whole time. Then Anne asks the group to reflect on something they want to ask from God. This as it turns out is not an option even though Anne professes that the ladies should not feel obligated to make a prayer.

She starts at one end of the group. She tells her cohort that if they feel like it they can also make a prayer and she'll translate it into Spanish. She tells them they can “lay on hands” if they so desire. Anne goes from mother to mother touching their shoulders, asking first, but then touching their abdomens, asking them if they want to pray and for what, and then narrating a long prayer over each woman. Some have no idea what to pray for and with exhortation from Anne they give a regular answer, “ayuda con el parto” or “ayuda por el bebé”. One woman quotes some scripture and obviously wants the prayer. Anne praises her as already in the arms of Jesus.

She then goes to one the grandmothers who is weeping and recounting her difficulties of being poor and being alone. She gratefully accepts the prayer and mumbles it with Anne. Her daughter however is another story. She refuses the prayer saying that mom’s prayer and the
baby's prayer was all that she wanted. Anne insists. She refuses. Anne skips
to the next woman and then the next who says she doesn’t believe in
Jesus Christ, but Anne won’t give up on her. Finally reluctantly she gets the
prayer. The two missionary women accompanying Anne lay on hands.
Anne starts the prayer by talking about the pregnant woman’s sins and
how she was going to be reborn. I can’t really read the pregnant mom’s
expression because I know she is also feeling labor pains.

The next woman is very small and her baby was premature and is
tiny too. I’ve seen her before in the Canguru dormitory where moms stay
with their premature babies and keep them warm with their body heat. 
Now both mom and her mother-in-law are sobbing and crying. Mother-in-
law repeats over and over again, “mi pobre varoncito”, “mi pobre
varoncito” (my poor little boy, my poor little boy). Her daughter-in-law lost
her 1st born. Both are bereft but as far as I know this baby is healthy for
now and probably in the best place he could be if he should have a
problem. By now the whole room is full of teary-eyed mothers-to-be,
crying babies and grandmas. This is not a happy sing-along. It is also really
hot and claustrophobic.

Maybe I’m projecting my disdain for this kind of proselytizing, but
frankly it is depressing, not elevating. Everybody is crying, well almost
everybody. Then we have to give away the baby gifts sent from the US,
“We had a baby shower and we prayed for your unborn babies sight
unseen”, all the way from Alabama. Then we give away 8 copies of the New Testament. Anne carefully signs the name of the bible recipient in the front of each volume. This is sort of the end of it and the women who want a bible line up to get one. I encourage the mother, who didn’t want a bible, to my left to get up and walk. She’s been sitting for 2 hours and squirming from contractions. I’m certain Anne has no idea what is like to be in labor.

Finally we’re done! Praise the Lord! I open the side door of the conference room. I invite the ladies to take a walk outside and go around the building. They follow me into the fresh air. As I return by the main door of the conference the young missionaries have just left. Anne is talking to them just through the side door, “We’ve saved two people today.” She thanks me for letting them use the conference room that I use as my temporary office.

Resignation and surrender to impossible circumstances is a theme that I heard in much of my interviews and observations. Guatemala is a violent country and a country with a broken infrastructure. At a presentation about fraud and the use of road construction funds that I attended, I heard that there are projects that were funded years ago. The money is gone, but there are still potholes on a major highway that could swallow a Volkswagen bus. At a new clinic for battered women the sinks
were installed without connections to hot water. There were so many things.

Many people have lost hope in a future. For some the faith in God is a solace and reconciles the unacceptable. For others there is a palpable desperation to live in the moment. Alcoholism, gender violence, child neglect and abandonment, hunger, and poverty, all contribute to the grim national health statistics. The tragedies of the 36 year Guatemalan Civil War that devastated indigenous communities painfully reverberate. Racism is firmly entrenched in Guatemalan society despite more social awareness. One could argue it is systemic. Huehuetenango is the 2nd most populous department in Guatemala. It is almost 70% indigenous and yet it receives only 10% of the national health budget. Mixed with rapid social change, globalization, and migration the mental health effects on indigenous populations are profound. For the indigenous women that are dying in childbirth these problems are played out metaphorically and objectively in their bodies.

118 Maupin, J.N., 1458-1459.
119 Foxen, P., 67.
Chapter 7 – The Three Delays and Conclusion

- Delay #1: Not seeking help when you need it

The blame for high maternal mortality in Highland Guatemala rests on the concept of the comadrona's malpractice. It is the comadrona who causes the obstetrical emergency and then cannot manage it because of her ignorance. But in reality most obstetrical emergencies cannot be predicted or prevented. The biomedical policies of the World Health Organization concentrate on the prevention of maternal mortality before birth rather than educating and equipping the community to deal with an obstetrical emergency. WHO prescribes a role for the traditional birth assistant to notice the warning signs before labor and delivery and then immediately refer the mother for biomedical care. Unfortunately, unlike the emergency networks that exist in US and Europe, when you dial 911 to report an emergency in Highland Guatemala nobody answers the phone.

Money and time is still spent on training comadronas to recognize “warning signs” and to refer, but not much thinking has gone into educating and resourcing the community to respond locally to medical emergencies. If you break your leg and you are six hours from the hospital and the femur goes through the thigh, you have an emergency. Your emergency requires a tourniquet, stabilization for shock, and transportation to a facility that has a way of managing the blood loss. In a
sense this kind of accident is as unpredictable as are most obstetrical emergencies, but "breaking a leg" is acknowledged as an accident and something that cannot be avoided. So in the case of the broken leg, while there might be blame to the victim for being clumsy or careless, it neither serves the victim to be blamed or punished and certainly not the persons that try to save her life.

Complicating the idea of the emergency/accident is that childbirth is neither an emergency, nor an accident, nor a particularly dangerous activity. It is clearly the preference of the Highland indigenous woman to birth at home and outside of hospitals. The mother survives. The child survives. My argument is that we could lower the odds of dying from the rare obstetrical emergency by recognizing the roles that the comadrona plays in her community. She is physically and culturally available. We should support her. In the rare instances in which the mother needs to get a higher level of medical care, the comadrona should have the first-responder resources that she needs. If her client must have biomedical care away from her home, the comadrona should stay in contact with her client so that she can continue to advocate on her client's behalf.

- What the community needs to handle an obstetrical emergency

To address some of the problems inherent in the Three Delays, when geography cannot be changed or resources are not available, some programs have focused on community organizing rather to rely on non-
existent state health systems. On a broader level there have been community-initiated health promotion projects to combat Dengue fever and community-led research projects to determine the type of health response and promotion a community desires. The trends to empower community action to promote health seeking behaviors and health education also parallel political and economic responses to environmental degradation that affect community health. Unfortunately this type of organizing is not preemptive, but comes as the result of disaster such as the misery and struggle chronicled in Kim Fortun’s book about the release of methyl isocyanate gas in Bhopal, India.

Developing an emergency communication system and disaster planning in general has been the focus of more than one NGO program. Meetings of town members have been convened with the theory that the town knows its resources and its needs better than outside organizations. The use of the ubiquitous cell phone and satellite communication in some parts of the world has provided instant access to medical advice or to call for evacuation of the very ill. In Australia and in India there are programs for midwives and community health care workers to report and track their clients. Other programs have focused on low-tech and self-care emergency medical care such as the famous Hesperian Press publications

120 Tran T. Tuyen Hanh et al., Retolaza Eguren, iñigo, 17.
121 Fortun, K., “Advocacy After Bhopal: Environmentalism, Disaster, and New World Orders”.
in over 40 languages, “Where this is No Doctor”. The midwife manual in Spanish has explicit information on how to perform an emergency caesarian and how to administer injections of uterotonics and anti-convulsants to stabilize women with eclampsia. The comadrona can do these things as well as anyone else; she isn’t “stuck in time” unable or unwilling to learn.

Community empowerment cannot by itself reduce maternal mortality. If uterotonics and anti-convulsants are not available and there is no support to provide these drugs, even with the most willing community members, the comadronas, nothing can be done. Braunack-Mayer and Louise argue that there has to be a meeting point between top-down, i.e., state-sponsored health systems, and the bottom-up, community organizing. Other scholars have looked at the problems of maternal health from the desire, especially by state-sanctioned biomedical practitioners that are closest to birth assistants, to work cooperatively.

One innovative program sponsored by an NGO brought together Kaqchikel Maya comadronas with Cree Nation and First Nation midwives to share intercultural health initiatives. The “innovation” comes from not only from the bi-educational model of knowledge creation, but also from

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123 Werner, D., 1985., “Donde no Hay Doctor”
125 Braunack-Mayer,A. & Louise,J., 8.
empowerment and capacity building initiated by the participants. This model also serves to empower indigenous communities and could stand up to some of the pervasive racism in Guatemala.

- Delay #2: Definitely “too far to walk” and not only that there is a big bolder in the road

Delay in reaching an adequate health care facility is very problematic in Highland Guatemala. In the five departments I examined there are only three major highways: the Pan American CA1, which exits northwestern Guatemala at the border with Chiapas, Mexico, highway N9 that goes north from the Huehuetenango City to Las Barillas, and highways 15 and 5 that go northeasterly to connect parts of Quiché and Alta Verapaz,. Aside from the Pan American Highway the other two major roads are two lanes and wind around the sides of the mountain valleys. Off of these main roads are rock strewn graveled single lane roads. A labyrinth of foot paths connects smaller aldeas and market towns. In many departments the only hospitals are in the department capitol or in the largest cities. Although many small towns have a puesto de salud (health post) they are unstaffed most of the month and have no supplies. Auxiliary nurses have a territory and only visit some puestos twice a month.

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127 Mignone, J. et al., 152-154.
128 Annis, S., 522
All through the spring of 2010 the auxiliary nurses and promotores de salud (health promoters) that work for the Minister of Health were on strike. Their wages had not been paid since February. Many kept working for nothing, but did not have money to pay for gasoline to make their rounds. What does this mean for maternal mortality? The window for receiving first aid for postpartum hemorrhage is 2 hours or less. If you live away from a town without transportation you won’t make it. I met a couple in a large town that was on their way to the hospital that was still almost three hours away by car. I asked them if they lived in the town. The husband shook his head “no” and told me by walking his two fingers on his palm, “Ya caminamos dos horas a pie” (“We already walked two hours on foot”). His wife was vomiting and complaining of stomach pains close to her ribs (a symptom of pre-eclampsia) and she was two months before her due date. If her pre-eclampsia symptoms had turned into eclampsia and she was convulsing, she was too far from a facility that could administer magnesium sulfate. She was too far from a facility that could then induce and monitor her delivery to save her life.

- The 3rd Delay, “Inadequate Attention at the Medical Facility”:

Humanized Birth and Hospital Norms

Although the majority of women in Highland Guatemala never get to a hospital or health center if they have an obstetrical emergency those

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129 “Salubristas amenazan con ir a paro laboral” La Prensa Libre. April 7, 2010.
that do often receive inadequate attention. This has been well documented by studies in other parts of Guatemala with indigenous populations. Women and families are made to wait. There are language problems, and dismissive treatment by biomedical personnel. This is reflected in the narratives of comadronas that live closer to cities and try to serve as intermediaries when they refer.\textsuperscript{130} One comadrona told me that she “would dress up in nurse’s clothing so that her patient would be attended to”. Even if an obstetrical emergency could be handled locally, depending on its severity, the mother may still need to go to a higher level medical facility for more medical treatment. She needs to be treated humanely and adequately when she arrives.

Perhaps more importantly is a change of thinking on the national and international level about natural childbirth at home with the companion of the mother’s selection. There is a worldwide movement called, “Humanized Birth” which advocates a non-interventionist model of childbirth.\textsuperscript{131} In Guatemala it is still the norm in the national hospitals not to allow the husband, partner, family member, or the comadrona to accompany the mother at birth. More and more research is being done on prenatal psychology and the complex psycho-physical interactions that occur between mother and child. Mothers who birth in a familiar and

\textsuperscript{130} Cosmimksy, S. “Modernizing Midwife”, 370.
\textsuperscript{131} Da Costa Virgen et al., 343.
comfortable environment have better outcomes.\textsuperscript{132} I heard again and again from comadronas that their services were desired by their clients even if the mother had the option to go to the hospital.

- Looking Ahead

Guatemala offers low levels of support for public health in the areas of nutrition, sanitation and clean water. The government does not see environmental degradation as a major public health problem as witnessed in the ironic disconnection between health-promoting activities and practice. A recent issue of La Prensa showed a man spraying the inside of the municipal hospital in Quetzaltenango with an insecticide to control Dengue fever. One reader commented that it was a sad fact he was not wearing any protective clothing.\textsuperscript{133} In the short term, environmental degradation and food security compromise maternal health. In the long term, all of these things shorten lifetimes and make the population more vulnerable to infections. Environmental pollution is a major issue for a large population that works in factories or in agriculture. The effects of pollution with cancers and heart disease may not be seen for years as the population ages. All of this implies the need for a public health system that anticipates these changes as Guatemala moves away from the concentration of health services for women and children. It also implies the need for health care and nursing care for the elderly.

\textsuperscript{132} Pascali-Bonaro, D., and M. Kroeger, 25.
\textsuperscript{133} “Fumigan Hospital Regional” La Prensa Libre. Jan 17, 2011.
- The Fulfillment of the Guarantee of the Guatemalan Right to Health

When I was in Guatemala the Obama administration was struggling with an uncooperative US Congress to pass some sort of health care reform legislation. As the vote approached the initiatives to provide health insurance for everyone were converted into almost nothing leaving the US citizen with enormous health costs and lack of preventative care. In my interviews I would point out to Guatemalans that their constitution guarantees their right to health care. Guatemalans were very surprised that in the USA we did not have this guarantee. I would argue that having a constitutional guarantee is an important social statement for the Guatemalan citizen, if only in practice, as a symbolic gesture. There is currently no will or money to provide it.

- The Extinction of the Guatemalan Comadrona

Given the current structure of the Guatemalan biomedical health system and the expense of using alternative self-medicalization systems I feel the Guatemalan comadrona will go extinct. The question is when and not if. As an example of how the comadrona has been phased out there is good research about midwives in Costa Rica. Costa Rica started a more comprehensive midwife certification program in the 1950s and actively discouraged home birth. The Costa Rican midwife was put into competition with nurse practitioners who were paid by the state to offer “free” service to clients thus changing the social-economic relations
between midwife and client.\textsuperscript{134} What Costa Rican comadronas there were could not compete economically with the state-funded system.

Unlike Costa Rica, in Guatemala, there are an insufficient numbers of “skilled birth attendants”, obstetricians, and obstetrical nurses to attend to all of Guatemala’s mothers. The highly trained biomedical professional is more likely to open a private clinic or work in urban areas rather than to practice in Highland Guatemala. The system as it is constructed does not incentivize these biomedical personnel and makes even a socially-motivated practice difficult to do. There are very few indigenous biomedical personnel.\textsuperscript{135} Although the Guatemalan State has a formal recognition of “indigenous medicine”, it is not funded in proportion to departments with significant indigenous populations.\textsuperscript{136}

The comadrona works for women and families in a way that cannot be done by biomedical personnel. She is an independent “contractor” and does not work for biomedical systems although she may avail herself of their technologies. Biomedical rhetoric opposes home birth and

\textsuperscript{134} Jenkins, G.L, 1906.
\textsuperscript{135} Casteñada, A., 99.
\textsuperscript{136} Lix Socop, C.E, 9.
midwifery. The comadrona challenges this rhetoric. The biomedical defense is to marginalize her practice. She is assaulted from all sides, the Guatemalan State, International NGOs, and even her own clients who believe that biomedicine will give them a faster, safer, “more modern”, and pain free delivery. I fear she can’t hold out and yet there is nothing in the near future to replace her. Will the extinction of the Guatemalan comadrona force their clients to go without any kind of maternity care? Will the maternal mortality rate go even higher?
Scheme 1:

The Guatemalan National Health System Structure

**Public Sector**

- MSPAS
  - SIAS
    - Health Services Provider (PSS)
    - Health Services Administrator (ADMISS)
      - Health Provider Team
        - Basic Package of Services

**Private Sector**

- IGSS
  - Traditional MSPAS
    - National Hospital
      - Health Center
        - Health Posts

Self-employed, Informal Sector Workers
Unemployed Persons, Retired Workers,
Persons outside Labor Force

Formal Sector/Families of Workers

Individuals with capacity to pay

SIGSA: Sistema Integral Gerencial de Atención en Salud; MSPAS: Ministry of Public Health and Social Assistance (Ministerio de Salud Pública y Asistencia Social); IGSS Guatemalan Institute of Social Security (Instituto Guatemalteco de Seguridad Social).

Table 1: Causes of Maternal Mortality Jan 1, 2010 – Sept 30, 2010 for 5 Highland Guatemalan Departments: Alta Verapaz, Huehuetenango, Quetzaltenango, Quiché, and Totonicapán. SIGSA 2010.

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Alta Verapaz</td>
<td>19</td>
<td>3</td>
<td>2</td>
<td>8</td>
<td>776,246</td>
<td>720,741</td>
<td>93%</td>
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<tr>
<td>Huehuetenango</td>
<td>24</td>
<td>9</td>
<td>5</td>
<td>13</td>
<td>846,544</td>
<td>551,295</td>
<td>65%</td>
</tr>
<tr>
<td>Quetzaltenango</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>624716</td>
<td>338,055</td>
<td>54%</td>
</tr>
<tr>
<td>Quiché</td>
<td>9</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>655,510</td>
<td>581,996</td>
<td>89%</td>
</tr>
<tr>
<td>Totonicapán</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>339,254</td>
<td>333,481</td>
<td>98%</td>
</tr>
<tr>
<td>Total:</td>
<td>58</td>
<td>19</td>
<td>14</td>
<td>28</td>
<td>3,242,270</td>
<td>2,525,568</td>
<td>80%</td>
</tr>
</tbody>
</table>
Table 2: Pseudonym Table for Narratives and Interviews, Chapter 4

The Clinic – An NGO run clinic and shelter that offers reproductive services for women.

<table>
<thead>
<tr>
<th>Description</th>
<th>Pseudonym</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse from the NGO Clinic</td>
<td>Sandra</td>
</tr>
<tr>
<td>Nurse Comadrona Meeting Smaller Pueblo</td>
<td>Jorge</td>
</tr>
<tr>
<td>Nurse from the NGO Clinic</td>
<td>Imelda</td>
</tr>
<tr>
<td>Chauffer for NGO Clinic</td>
<td>Raúl</td>
</tr>
<tr>
<td>Indigenous woman Larger Pueblo</td>
<td>Maria</td>
</tr>
<tr>
<td>Indigenous man Larger Pueblo</td>
<td>Miguel</td>
</tr>
<tr>
<td>Comadrona from more urbanized area</td>
<td>Angélica</td>
</tr>
<tr>
<td>Comadrona from a larger city in another department</td>
<td>Maricela</td>
</tr>
<tr>
<td>Doctor at NGO Clinic</td>
<td>Dr.Salgado</td>
</tr>
<tr>
<td>Nurse Neonatal ICU</td>
<td>Mariana</td>
</tr>
<tr>
<td>Pediatrician at NGO Clinic</td>
<td>Dr.Garcia</td>
</tr>
<tr>
<td>Cuban Doctor</td>
<td>Dr.Lopez</td>
</tr>
<tr>
<td>Director</td>
<td>Director</td>
</tr>
<tr>
<td>Nurse Santa Cristina Interview</td>
<td>Pascual</td>
</tr>
<tr>
<td>Nurse Santa Cristina Interview</td>
<td>Teresa</td>
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<tr>
<td>Nurse Distant Indigenous Community</td>
<td>David</td>
</tr>
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<td>Nurse Distant Indigenous Community</td>
<td>Rita</td>
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<tr>
<td>Nurse Distant Indigenous Community</td>
<td>Beatriz</td>
</tr>
<tr>
<td>Social Worker</td>
<td>Cristina</td>
</tr>
<tr>
<td>Community leader</td>
<td>Vernabella</td>
</tr>
<tr>
<td>Missionary</td>
<td>Anne</td>
</tr>
</tbody>
</table>
Works Cited


Werner, D. 1985. Donde no hay doctor Centro de Estudios Rurales Andinos" Bartolomé de las Casas".


