A qualitative study of pregnancy and maternal mortality in rural Senegal; an examination of the pregnant woman's experience



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I. Abstract

Much prior research has focused on the problem of maternal mortality in Senegal, the factors that cause it, and the numerical trends that indicate either decline or increase in maternal mortality. Few studies, however, have captured the mentality, attitudes, or beliefs of Senegalese women in rural areas, or the rationality behind their behaviors during pregnancy, which ultimately have implications for the alleged contributors to maternal mortality. I conducted the bulk of my field research in Saraya, a small town in southeastern Senegal. Through study of prenatal consultation records, participant observation in multiple settings, and interviews with healthcare practitioners and recent mothers, I managed to uncover the ways in which women endanger their pregnancies, the difficulties of seeking prenatal care, the obstacles healthcare professionals face in providing adequate prenatal care, the factors keeping women from advocating for their health, and evidence of changes that will positively affect women's health. The aim of this study was to flesh out the quantitative data that already exist on the subject with the qualitative experience of the pregnant woman in rural Senegal.

II. Introduction_

Background to the Study

The problem of maternal mortality has long loomed over Senegal and the rest of sub-Saharan Africa; according to one study, pregnant women in sub-Saharan Africa are 75 times more likely to die as a result of pregnancy or childbirth than a women in Western Europe or North America (Walraven, Telfer, Rowley et al, 2000). The Senegalese government officially recognized the seriousness of the issue in 1986 when it asked the United Nations Development Program (UNDP) for help in reducing the maternal mortality rate, which was at that time estimated at 580-760 out of 100,000 (Kimball, Cisse, Fayemi et al, 1988). However, a more recent study has shown that maternal mortality is higher in rural areas, estimated at 601 per 100 000 live births, than in urban areas, estimated at 241 per 100 000 live births (Ronsmans, Etard, Walraven et al, 2003). In response to the Senegalese government's request, the UNDP responded by creating the Safe Motherhood Initiative in 1987, the preliminary step of which was to launch a "Mission of Identification" whose purpose was to identify the factors

contributing to maternal mortality in Senegal. According to the UNDP's data, at the time most Senegalese women gave birth at home and only 20% of maternal mortality was reported. (Kimball, Cisse, Fayemi et al, 1988) This "Mission of Identification," as well as multiple other studies conducted in Senegal have called attention to a number of maternal mortality's many causes such as restricted access to obstetric care (Cham, Sundby, and Vangen 2005; Ronsmans, Etard, Walraven et al, 2003), hemorrhaging during childbirth (Kodio, Bernis, Ba et al 2002), low competency of birth attendants, lack of medication, poor medical facilities and equipment (Dumont, Gaye, Bernis et al 2006), poor nutrition and related conditions such as hypertension and anemia (Collin, Baggaley, Pittrof et al 2007) continued intense activity throughout pregnancy (Briend, 1980), and endemic diseases such as malaria and hepatitis (Etard, Kodio, and Ronsmans, 2003).

Recent statistics show that in Senegal, the poor, uneducated and rural woman still gets the short end of the stick when it comes to receiving adequate prenatal and maternal care; she is the most likely to give birth at home, the most likely to give birth without qualified assistance, and is the least likely to receive prenatal care. Data collected in 2005 show that in the region of Tambacounda, which spans vast rural areas and at the time encompassed the region where I conducted research¹, 64.5% of births happen at home (Salif and Ayad 2005, 141) and that only 27.2% of births are assisted by formally-trained birth attendants² 53.4% of births are assisted by mothers' family members, 10% by traditional birth attendants, while 8.6% of births are assisted by no one. 20.4% of pregnant women in the region of Tambacounda receive no prenatal care. The data from Tambacounda differ drastically from those of Dakar, the urban capital of Senegal, where only 6.6% of births happen at home, 92.1% of births are assisted by formally-trained birth attendants and where only 1% of pregnant women receive no prenatal care. (Salif and Ayad 2005, 134, 141 and 142)

Though many studies may have accurately identified causes of maternal mortality in Senegal and other parts of Sub-Saharan Africa, they have by no means adequately explored the mentality of the poor, uneducated and rural pregnant woman or deciphered

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¹ The Region of Kedougou, of which the District of Saraya is a part, became a region in May of 2007. The statistics I found and have included were collected in 2005, and as such I have cited those that pertain to the Region of Tambacounda, which prior to May of 2007 included what is now the Region of Kedougou.

² Formally-trained birth attendant means by a doctor, a nurse, a midwife, or a *matrone* (auxiliary midwife).

the rationality behind her actions in order to determine why these causes exist. The omission of the pregnant woman's experience in the literature on maternal mortality represents a huge blank space that needs filling. It is a given that many who conduct studies on and construct solutions to the maternal mortality problem are experts in the field and are more than able to propose and implement changes that help to lower maternal mortality rates; the Safe Motherhood initiative and falling maternal mortality rates are perfect examples of this. But because something seems to be working, does this mean that this is the most effective way of solving the problem? It is likely that the causes of maternal mortality exist for deeply rooted reasons, for reasons that may complicate and make difficult the further diminution of maternal mortality rates. We can only begin to comprehend the significance and weight of the causes of maternal mortality by connecting the pregnant woman's rationality and mentality to her actions and to the actions of others that ultimately shape the incidence of maternal mortality. It is from this understanding grounded in the experience of the poor, uneducated and rural pregnant woman that we may move forward to propose and implement effective solutions to maternal mortality.

Research Objectives

Of the many already identified contributors to maternal mortality, I chose to look at those influenced by the actions of the pregnant woman and the healthcare practitioners that care for her in rural Senegal as their decisions undoubtedly have a tremendous effect on women's health during pregnancy, childbirth and motherhood. My approach to this examination is five-fold; I aim to speak to how and why pregnant women endanger their pregnancies, the obstacles they face in seeking and receiving prenatal and maternal care, the barriers that keep healthcare practitioners from adequately caring for pregnant women, the factors that keep women from advocating for maternal health, and the evidence that positive change in underway in the area of maternal health. By looking at the experiences and personalities of the actors involved with maternal health, it is my aim to convey the qualitative reality of pregnancy in rural Senegal in order to humanize the largely quantitative and statistically based studies that currently dominate the literature on maternal mortality.

Saraya: the Site of Field Research

I conducted the bulk of my research in Saraya, a small village (population 1,400) located within the Region of Kedougou and 61km northeast from the town of Kedougou, the region's sleepy and rural-seeming capital. Saraya, both the village and equally named district, are sandwiched between the converging borders of Mali and Guinea in the southeastern corner of Senegal. In contrast to the rest of Senegal, whose population is 95% Wolof, members of many non-Wolof ethnic groups have settled in the zone; *Malinké* make up approximately 57% of the district of Saraya, *Diakhonké* approximately 29%, *Peul* approximately 8% and other ethnic groups represent approximately 6%. (Sane 2007, 10)

Lush, green vegetation covers the region during the rainy season, from mid-July to mid-October, which dries and browns from the onset of the dry season until the start of the next rainy season. I came to Saraya in mid-November after the rains had ended and during the harvest season, whose fruits were cotton to sell and mainly peanuts, corn, beans and millet for subsistence. The terrain is hilly and the mountains of Guinea are easily seen from the town of Saraya.

The region has been under rapid transformation since the discovery of its underlying gold, iron, marble and uranium. Multiple mining companies, Randgold, *Oromin*, Sored-Mines, Mineral Deposits Limited, *Axmin*, *AGEM*, *Koumba Ressources*, *Palymarbres*, *Segimarbre*, the *Nouvelle Société des Mines et des Travaux Public* (*NSMTP*) and others, (Ly, 2006) have set up shop in different parts of the region, and *Soseter*, a Senegalese public works enterprise, has begun building a new road to Bamako, Mali for the future transport of the extracted resources. The new activity bathes Saraya with red dust kicked up by the passing trucks, and has brought to the district an influx of predominantly Wolof road-workers and miners from other regions of Senegal and of *toubabs*³ affiliated with the mining companies of various nationalities. How exactly the discovery and future extraction of these natural resources from the region has already and will continue to affect the region's inhabitants is a topic of debate but has yet to be fully realized.

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³ The word *toubab* is generally used in reference to White foreigners.

My Introduction to and Presence in Saraya

Emily Dally, another SIT Senegal student and I found Saraya and its *Centre de Santé* or Health Center through Demetri Blanas, an SIT Senegal alum who has received grants to conduct research and do a couple of projects in Saraya. Demetri and his wife Carolyn Bancroft provided the seeds for a project started by the *Groupement pour la Promotion Femenine* (*GPF*), a community women's group, to construct community gardens and Carolyn has helped to start the community radio station. Both Demetri and Carolyn spend much of their time helping at the medical center and attending meetings with the medical staff and health workers in the region. Demetri put me into contact with Dr. Youssoupha Ndiaye, the *Médecin-Chef*⁴ of Saraya's *Centre de Santé*⁵, and facilitated our first meeting in Dakar in October. It was at this point that Dr. Ndiaye agreed for me to conduct research on maternal health in Saraya (see Appendix D).

Demetri Blanas and his wife Carolyn Bancroft were in Saraya for the duration of my stay and I found that my connection to them was simultaneously an invaluable gift and a complication to my research. On the positive side, Demetri and Carolyn introduced me to key informants and to the community, helped me to identify potential translators, taught me *Malinké* greetings (see Appendix A), supplied me with names I had forgotten, showed me the ropes in the medical center in Saraya and explained the hierarchy and classification of health structures in Senegal (see Appendix B). At the same time, however, I had to be careful to take their perceptions with a grain of salt and to keep from jumping to conclusions based on the ones the ones they had already reached.

Demetri and Carolyn are not the extent of the *toubab* or White presence in Saraya as the Peace Corps has also touched the town and other parts of the district. A volunteer dubbed Fanta had been stationed in Saraya but was in the process of moving to Kedougou when Emily and I arrived. During the period of my field research, we were a total of five *toubabs* and in some ways I became just an indistinguishable one of them. Due to our shared gender and common skin color, I was often mistaken for Carolyn, Fanta or Emily and as such I can only assume that from the outside, our purposes must have appeared identical. Because four of us Americans – Demetri, Carolyn, Emily and I –

⁴ Head Doctor

⁵ Health Center

spent significant parts of the day in the medical center, we often slipped into the comfort of speaking English. In hindsight, this practice must have, to some extent, alienated the non-English speakers and may have hindered building relationships with the medical staff.

Field Research Strategies and Their Limitations

I employed three over-arching methodologies to gather data in the field: study of available prenatal consultation records, participant observation in a variety of locations, and interviews.

1. Study of Prenatal Consultation Records

I chose to study the register of prenatal consultations at the Saraya Health Center, which the midwife started keeping in January 2007. I studied and recorded information on the number of prenatal consultations attended, ages of pregnant women and the number of pregnancies of each patient from those who came for their first prenatal consultation from January 1st to April 30th of 2007. I chose not to go beyond April as patients who came for their first consultation after this could in theory come for another consultation before giving birth.

Using this data has a few limitations. First, the prenatal consultation register goes back only as far as January of 2007 so I was unable to collect a lot of data. Second, there was much incomplete information – missing ages, numbers of pregnancies and other items – so the data collected does not present a completely accurate picture. Third, examining the prenatal consultation register tells me nothing about the women who do not come in for prenatal consultations at all.

2. Participant Observation

*Home Births in Baxo

Prior to the Independent Study Project period, I spent three days and two nights in the village of Baxo, a village inhabited by members of the *Diallonké* ethnic group and just across the Gambia River from Kedougou, during which time two women gave birth.

The events allowed me to witness the nature of births given at home and who typically assists homebirths.

*The Health Center, Saraya

The Health Center was my point of entry into Saraya. I spent time in the maternity ward of the center, observed prenatal consultations and saw two births. My time at the health center opened a window onto typical patient-healthcare provider relations, and the dynamics between and differing roles of the *Médecin-Chef du District*, the *Infirmiere-Chef d'Etat*, the *Sage-Femme*, the *matrones*, and the *Agents de Santé Communautaire* (ASCs). ⁶

*The Health Hut, Diakha Madina

I visited Diakha Madina, a small village 12 km from Saraya, the *Case de Santé* and its *matrone* there one morning to introduce myself, my research and to request permission to return in order to observe and interview. I came back the following day and spent the evening, the night and the following morning there, during which I observed, interviewed the *matrone*, and studied the prenatal consultation and birth records.

*Saraya, the Village

I spent time taking walking tours of the village in order to orient myself and to get a sense of village life and typical activities of its inhabitants. This allowed me to develop a sense of typical daily activities of men and women both in and out of the home and to understand the rhythm of the days.

*The Gardens

I dedicated an hour each of eight mornings and three evenings to watering, weeding, seeding and working with the women in the recently begun community gardens. Planning is underway to create a market for the women to sell the vegetables they grow in Saraya. My numerous visits allowed me to observe interactions among women over a

⁶ Head Doctor of the District, Head Nurse of the State, the Midwife, the Auxiliary Midwives, and the Community Health Workers. For further explanation, see the Glossary of Terms.

period of time and allowed me to develop personal connections with the women. By my last few watering sessions, there was a specific bucket reserved for my water carrying and I felt as if I had begun to fade into the background as another woman waterer, rather than as the foreign observer I started out as.

*The Fields

I spent one day in the fields picking cotton with Balabo Balaba, a village woman I met in the garden and a woman I believe was her mother. The walk out to the field and the work itself allowed me to experience the physicality of the journey to the field and the work performed there, and with this experience I may attempt to understand what it is like to do this work day in and day out, in the context of women's other daily activities.

*The Geography of the Region

I accompanied Youssoupha Ndiaye, the *Medécin-Chef du District* and Fatou Ndour, the *Sage-Femme* of the Saraya Health Center to visit the Health Posts at Khossanto, a village in the District of Saraya, and Oromin, the company in the process of exploration for the future exploitation of gold that was recently discovered in the region. We drove for close to two hours each way during which time I was able to get a sense of the geography of the region, the quality of the roads and the obstacles the landscape may pose to patients trying to get to the nearest health facility.

A few factors limited the breadth, scope, and accuracy of participant observation. I was by no means an invisible observer; my presence as a white foreign student may have influenced individual actions and thus the nature of the interactions I witnessed. This, in combination with my relatively short stay in Saraya make inevitable the fact that some of what I observed was likely atypical. During my stay, few women came to the Health Center for prenatal consultations and as such any generalizations made about healthcare practitioner – patient interactions are based on a relatively small number of observations.

3. Interviews

I originally intended to interview members of four groups I had identified: heathcare practitioners, traditional birth attendants, recent mothers, and family members of recent mothers or pregnant women. However time constraints and my inability to locate a traditional birth attendant in Saraya forced me to rework my interview plan. In contrast to the proposed interview populations, I was able to interview eight health care practitioners and eleven recent mothers. Each interviewee gave informed consent (see Appendix E) for the interview to take place, for my use of the information they provided, and for their name to appear in my written work if necessary. Interviewees that knew how to sign their own name did, and my translator Diaba Damba witnessed and signed in cases where interviewees did not know how to sign their own names. (For interview schedules, see Appendix C)

*Healthcare Practitioners

The healthcare practitioners interviewed represent a diverse group and a variety of experiences: those of midwives, doctors, nurses, auxiliary midwives, community health workers, those trained and working in urban settings, those trained in urban settings but working in a rural setting and those trained and working in a rural setting. Depending on the specific situation and formality of the interview, I decided whether or not to use a tape recorder; I conducted four interviews with a tape recorder and four without. The diversity of my informants allowed me to gather a variety of perceptions of prenatal care and women's health during pregnancy.

*Village Mothers

Before arriving in the field, it was my intention to really talk with recent mothers in Saraya and to capture their voices, stories and experiences of being pregnant in Senegal. Upon arrival in the field, I soon discovered that this expectation was unrealistic for multiple reasons. First, I do not speak Malinké and so had to make use of a translator; talking through another party inhibits really talking, so real conversation was out of the question. Second, I found that the women really were not used to giving opinions and that any abstract questions I asked made my informants freeze up. Third, the women in

Saraya are extremely busy; many did not have time for me to interview them and some had to cut our conversations short because of chores that remained. Fourth, I interviewed women in their homes as making appointments with women to come to a certain place at a certain time would have been complicated, and when women are outside of the home they are generally at work. Due to interview location, others were present during interviews and as such privacy and confidentiality were not an option. Fifth, due to time constraints and my relative unfamiliarity with the community and its inhabitants, I asked my translator, Diaba Damba, to identify and take me to see recent mothers. As a result of this selection process, the mothers I interviewed were women with which I had not established a previous relationship of trust, which only made extracting stories and experiences of pregnancy more difficult.

As a result of these limitations, I conducted short and relatively formulaic interviews with recent mothers. I chose not to use a tape recorder for fear of rendering my informants even more uncomfortable. I asked each woman to tell me the names of all her children, their ages, where each was born, who assisted each birth and how many prenatal consultations she did during each pregnancy. I then asked each woman to tell me everything she had done the day before and exactly what she had eaten. After this I asked if any of her activities or if her diet had been different when she was pregnant. The responses in themselves provided me with relevant information, but in addition, I was able to use the interviews as a means of observing women in their home environments and as a means of assessing their level of education by whether or not they knew how to sign their names to give informed consent and if they could speak or understand French.

Though the process of obtaining informed consent allowed me to determine my informants' education level, in hindsight I wish I had not asked these women for informed consent. I eventually realized that omitting women's names from my written work would do my research no harm and that in fact, their inclusion would be unnecessary. But beyond this, I found that using the written informed consent form (see Appendix E) introduced a level of formality that could only have unsettled my informants and made more uncomfortable our interactions.

IV. Findings and Analysis_

I present my findings and analysis in response to the five research objectives stated in the Introduction: I examine how and why pregnant women endanger their pregnancies, the obstacles they face in seeking and receiving prenatal and maternal care, the barriers that stop healthcare practitioners from adequately caring for pregnant women, the factors that keep women from advocating for maternal health, and the evidence that positive change in underway in the area of maternal health.

Part A: How and why pregnant women endanger their pregnancies on a daily basis

I found that two aspects of women's daily activities that threaten their pregnancies: the nutritional content of the foods they consume and the hard physical labor they put their bodies through. During interviews, I asked women to describe everything they had done the day before, including everything they had eaten. (See Figure 1)

Women's Daily Activities

Reported Diet

- * Buuy: millet or corn flour, water, sugar and lime
- * Sombi: rice and milk porridge
- * Plain rice
- * *Mafe*: typically rice, peanut paste, meat (when available), jimbo seasoning, salt, onion, pepper, vegetable oil
- * Niankatang: rice, peanut flour, sometimes beans
- * Cous-cous made of millet with onion sauce, meat (when available), vegetable oil, salt, tomato paste, pepper
- * Fonio: a small rice-like grain with peanut sauce, salt and okra
- * Rice and meat
- * Attaya: green tea with sugar and sometimes mint

Reported Work

- * Pumping and carrying water
- * Sweeping
- * Laundry
- * Working in the field
- * Cooking
- * Washing dishes
- * Working in the garden

Figure 1

I then if their diet had changed at all while they were pregnant, and if so, how. Of my eleven informants, two reported that they stopped eating salt in the evenings and two others said they tried to eat more fish, meat and eggs when they could afford it. I then asked if their level of physical activity differed during pregnancy. Three of the eleven women reported a change in daily activity; one informant went to school less frequently when she was tired, and the other two told me that they worked less. Many of the other

women simply laughed aloud when I asked the question, signaling its preposterous hilarity, and then articulated that they of course continued working throughout pregnancy.

In the context of their life situations, pregnant women's maintenance of the same diet and continuation of physical work until late in pregnancy is only logical. When it comes to proper nutrition, both cost and availability keep pregnant women from feeding their bodies the nutrients they need in order to protect them through pregnancy. Meat, fish and fresh vegetables are scarce and expensive in Saraya; Saraya is far from the ocean and its fish, and vegetables are essentially unavailable. The limited quantity of fresh vegetables the Health Center personnel consume come all the way from Kedougou, which is a luxury most villagers cannot afford. It is for this reason that the diet of village inhabitants is made up mostly of corn, millet, rice, peanuts and beans. Youssoupha Ndiaye, the *Médecin-Chef du District* or the Head Doctor of the District and of Saraya's Health Center, explained that as a result of their diet, which is poor in both protein and iron, many women in Saraya have anemia before becoming pregnant and that even though the Health Center gives iron supplements to pregnant women who come in for prenatal consultations, it is often too late and the supplements cannot cure the women of anemia. (Ndiaye, 2007)

On the side of physical labor, it cannot be denied that both the pregnant and non-pregnant women of Saraya work extremely hard and it is impossible to ignore the evidence of their labors. While in Saraya I would hear the pounding of millet or corn from the first light of dawn, watch the constant flow of women to and from the village wells with massive buckets full of water on their heads, see the women leave for the fields in the mornings and return in the evenings, smell the smoke rising from their cooking fires, and try not to breathe in the billowing clouds of dust agitated by their sweeping. I spent a full morning picking cotton in the fields with Balabo Balaba, the Malinké mother of my translator, with whom I could not communicate. She led me to her plot, carrying a full bucket of drinking water she had pumped from a well on the edge of the village on her head for the hour plus walk to the fields, so that she, a woman I believe was her mother, and I could hydrate ourselves during the long day of work. It was hot, the work was hard on the back and ceaselessly repetitive. The morning allowed me to feel

only a fraction of the work the typical woman in Saraya performs everyday and I must admit that my morning in the cotton field exhausted me. I repeatedly observed exactly what village mothers had reported about their continuation physical labor throughout pregnancy. I saw the two women who gave birth in Baxo, the *Diallonké* village across the Gambia River from Kedougou pounding corn into flour the day before going into labor. In Saraya, visibly pregnant women routinely pumped and carried water, pounded millet and corn and went to work in the fields despite the healthcare practitioners' claim to advise pregnant women against hard work in the late stages of pregnancy.

In an attempt to answer why women work as hard as they do and why they continue to work so hard until late in pregnancy, one must only look as far as the village men and their relative inactivity. They tend to sit together in groups for hours at a time. When leaving the health center I would pass the *Chef du Village*, the Village Chief, and his sedentary male companions at varying times of day. I observed that the group would begin the day sitting in the shade on the medical center side of the street greeting those that passed, and that at mid-day the group would follow the shade to the Post Office side, continue greeting passers-by, make and drink *attaya*⁷ and remain there through the evening. Jonas Bassene spoke to the pattern of female work and male inactivity:

This is an area that is different from other areas because here, in fact, it's the woman that does the physical work. For example, if we take the work in the fields, it's the women above all that we see going to the fields. In general the men are here, and in the morning, the women get up and they go to the fields. They leave their husbands at home... which is different for example from other zones.

When I asked if women here sometimes continue working too hard until too late in their pregnancy Bassene responded,

Yes, this happens because as I said, if the husband does not help his wife, the woman must work so that she can have something to eat. And so, even if her pregnancy is advanced, she must work in order to be able to feed herself. (Bassene, 2007)⁸

sequentially weaker as the green tea loses its potency with each addition of new water. One drinks *attaya* from a small glass after transferring the tea from one glass to another in order to create a lofty foam.

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⁷ Attaya literally means "tea;" however, making and drinking attaya is a staple of Senegalese culture. The tea itself is green tea, prepared with much sugar and often with mint in small teapots heated over hot coals or gas burner. There are always three rounds of tea drinking, the first the strongest and the next two

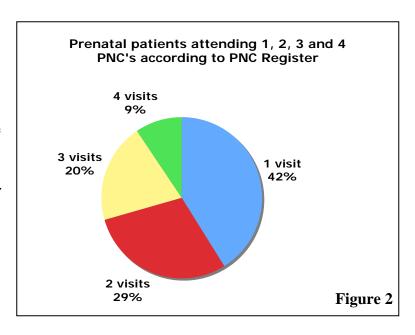
⁸ Quote translated from French: *Ici c'est un milieu qui est différent des autres milieux parce que ici en fait c'est la femme qui fait le travail physique. Donc, par exemple, si on prend les travaux champères, donc les champs, c'est les femmes qu'on voit surtout aller aux champs. En général les hommes sont là, et le matin, les femmes se lèvent et elles vont aux champs. Elles laissent leurs maries à la maison... Ce qui est différent par exemple des autres zones.*

And so it is out of necessity that village women work as much as they do; it is the woman's responsibility to feed herself and her family if they do not work as they are expected to, it is likely that no one will pick up their slack.

Part B: The pregnant woman – obstacles to seeking and receiving care

I was able to establish that pregnant women in Saraya generally do not come to the Health Center for the recommended four prenatal visits. However, I also found that more and more women give birth in the Health Center, and fewer give birth at home. In order to answer whether or not pregnant women in the district come to the health center for prenatal consultations, I examined Saraya's *Registre des Consultations Prenatales*⁹, considered healthcare practioners' perceptions of prenatal consultation (PNC) attendance, and used women's reported PNC attendance for each of their pregnancies. Interestingly, these three methodologies revealed conflicting evidence.

Examination of the PNC Register showed that of the women that do come in for consultations, most come only once and that the fewest women come in for all four visits (see Figure 2). The healthcare practitioners I interviewed had differing views on prenatal consultation attendance – some said that most women

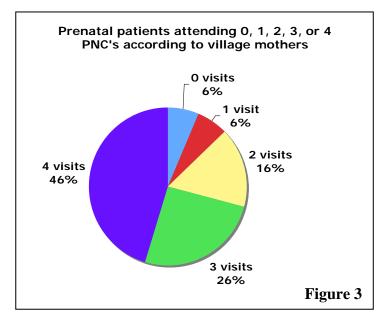


in Saraya come for prenatal consultations while others said that women hardly come at all. In contrast to what examination of the prenatal consultation register revealed, recent

Il peut y en avoir parce que comme je l'ai dit, si le marie n'aide pas la femme, donc il faut que la femme fasse un travail pour qu'elle puisse avoir quelque chose à manger. Donc même si la grossesse est à un stat avancé, il faut qu'elle travaille pour pouvoir se nourrir.

⁹ Prenatal Consultation Register (PNC Register)

mothers reported high attendance of prenatal consultations – according to their responses, women attended all four recommended prenatal consultations for 46% of pregnancies

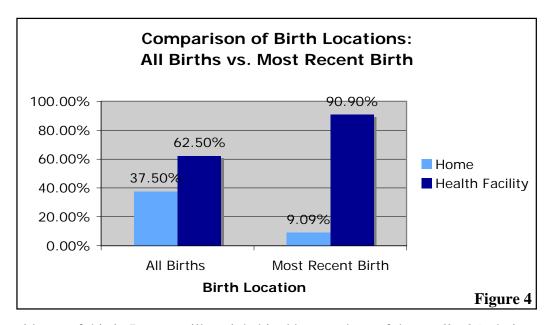


(see Figure 3).

I took the dramatic difference between the data I collected from the prenatal consultation register and the data reported by recent mothers to mean three things: first, that the data from the PNC register was somewhat inaccurate; I did find that some information was missing, which makes plausible that

some consultations went undocumented. Second, that some of the consultations recorded in the PNC Register were likely with women who live in the District of Saraya, but further from the Health Center than the women I interviewed, making their access to the Health Center more difficult. Third, the village mothers I interviewed may have remembered incorrectly or embellished the number of prenatal consultations they attended. This would not be surprising as both my focus on maternal health and my using a Community Health Worker as a translator made obvious my association with the Health Center. It follows logically that participants may have wanted to portray themselves positively by giving the "right" answers, which consequently infused my interview results with bias. And further, my recording their names and explicitly asking to use their names in the research only could have magnified this effect. However, something interesting came of my ultimately poor research decisions; I took the common exaggeration of number of PNCs attended as evidence that women in Saraya generally do know that they should do prenatal visits and that therefore women have in fact had access to some information concerning the benefits of seeking prenatal care.

Healthcare practitioners consistently told me that more and more women who live in Saraya give birth in the health center and the data reported by recent mothers in Saraya was consistent with this claim. Through my interviews with eleven women, I collected data on 32 pregnancies and births; of these, 12 births occurred at home and 20 in Saraya's Health Center or at a health facility in another location. However, of the women's most recent births, 10 occurred at the Health Center in Saraya and only one birth occurred at home (see Figure 4). Healthcare practitioners also believed that women that live in more remote villages with no health facility still tend to give birth at home. I witnessed



evidence of this in Baxo, a village inhabited by members of the *Diallonké* ethnic group village across the Gambia River from Kedougou. I spent two nights and three days in the village, during which time two women gave birth. Both baby girls were born in the village and when I asked a man in the village if women ever give birth in the clinic in Kedougou, I was told that no, women always give birth in the village and that two old grandmother's in the village always assist village births.

Though the number of women that go to the Health Center for PNCs and births seems to be growing, multiple factors still prevent many women from coming. Though the cost of prenatal consultations is relatively inexpensive in Saraya, only 300 cfa¹⁰, many women worry about the cost of consultations or simply do not have the money to spare. As we have already seen, women work incessantly and often do not have the time to come for consultations. For those who do not live in the town of Saraya itself, the

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 $^{^{10}}$ Less than 1 US dollar

distance from the Health Center, the difficulty of transport and the hilly terrain of the surrounding area make physically getting there a challenge. Education of women in rural areas is low and women often do not know the importance of coming in for prenatal consultations. Statistics collected in 2005 show that in the region of Tambacounda, only 19.3% of pregnant women are informed about risk signs during pregnancy whereas in Dakar, 38.2% of pregnant women have this information. (Ndiaye and Ayad 2005, 137)

Many of the healthcare practitioners I interviewed also spoke about "shame" in two capacities regarding prenatal consultation attendance. The "shame" young girls feel, especially if they are unmarried, if they become pregnant. According to Jonas Bassene, girls in this position sometimes make appointments for family planning in the hopes that taking birth control will abort the pregnancy. (Bassene, 2007) In other cases this occurrence typically leads girls to hide their pregnancy until they can hide it no longer at which point they come in for their first prenatal consultation late in pregnancy. My informants also talked about the shame most women felt about coming in for prenatal consultations before there was a midwife in Saraya and male nurses typically performed examinations. When we take into consideration all that women must overcome, the rationality of women's decision to stay home and away from the Health Center becomes clear.

Part C: The healthcare provider – barriers to giving adequate care

Healthcare providers, too, must confront many obstacles; I found that in order to adequately care for pregnant women in Saraya, healthcare practitioners must deal with material shortages, transcend the language barrier that separates them from most women in the area, and make the tremendous personal sacrifices that come with becoming a healthcare practitioner in a rural area far from home.

Nearly all of the healthcare practitioners I interviewed spoke of shortages that make caring for pregnant women more difficult: a lack of medicine, a lack of health facilities in many rural areas, a lack of an adequate number of healthcare practitioners in the region, and a lack of adequate equipment such as laboratories to do blood analyses and run other necessary tests. This problem is clear-cut and can only be remedied by increasing the supplies and resources that are lacking in number.

The nature of communication and patient – healthcare provider relations poses a more complex problem to effectively caring for pregnant women. Because the ethnic make-up of the District of Saraya is mostly Malinké (57%) and Peul (29%), and because the women in this area are largely uneducated, the predominantly Wolof and Frenchspeaking healthcare practitioners must care for patients with whom they share no common language. Fortunately, Agents de Santé Communautaire (ASCs) or rather, Community Health Workers serve as translators in the Health Center at Saraya. The ASCs are residents of Saraya, and thus speak the local languages as well as French and Wolof, and were selected by the Jonas Bassene, the Head Nurse of Saraya's Health Center to be trained as Community Health Workers to serve as a liason between the community and the health center, to go into the villages with the medical personnel during vaccination campaigns. ASCs often translate during consultations; Jonas Bassene, Saraya's head nurse, explained to me that even with translators the language barrier makes caring for patients difficult as one can easily miss something a woman has revealed about her pregnancy, which renders providing her with proper treatment impossible. (Bassene, 2007)

I witnessed the difficulty of communication during a morning of observing prenatal consultations conducted by Fatou Ndour, the Midwife at Saraya's Health Center. A young patient's inability to speak Wolof seemed to exasperate Fatou, who relied on Kandia Sakeliba, an *Agent de Santé Communautaire* and *Matrone*, to translate. In the way of conversation, little besides extracting the bare bones of required information occurred during the consultation. I initially jumped to the conclusion that Fatou and other healthcare providers should display more patience and understanding, but came to acknowledge that the incessant and inevitable dependence on translators would wear anyone's patience thin. The girl seemed shy; this, combined with Fatou's displayed annoyance with the language barrier may have heightened this girl's reluctance to volunteer additional information about her pregnancy that may have been important or relevant. This, of course, is all speculation, but patients' reticence in such situations seems plausible and probable when considering the number of similar patient-healthcare practitioner interactions that must occur in areas where the two parties cannot communicate and when a dramatic power and status differential exists between the

healthcare practitioners educated in urban areas and the illiterate and uneducated patients from rural areas.

After having had a taste during my stay in Saraya, it is clear that being a healthcare practitioner in rural Senegal is not easy. Many of the medical staff who work in Saraya's Health Center come from Dakar or other far away regions of Senegal, and were assigned to serve in Saraya by Senegal's Minister of Health. As such, most have left family and friends behind in order to serve in a location completely different from their home environments, with typically only a short vacation granted for *Tabaski*, a Muslim holiday that generally falls around December 20th, to return home to visit friends and family. I spent a late afternoon, evening, night and the following morning at a Case de Santé or Health Hut in Diakha Madina, a small village 12km from Saraya, in order to observe and interview Faatu Diallo, the *matrone* there. Faatu comes from Kédougou, but was stationed in "Diakha," as locals affectionately call it. She told me that very few patients come to the Health Hut; the birth records showed that there were six births in October and only two in November as of my visit on November 21st. The time I spent there was quiet, and she explained that pregnant women in Diakha Madina only come in for prenatal consultations when she asks them to. The hours passed slowly as there was little to do; my time there made me realize that life and work as a matrone in Diakha and similar locations must be often boring and quite lonely. Faatu has applied to continue her studies in Dakar so that she may someday be a midwife; if she leaves to study she will most likely not return to Diakha, rendering her stay there and long-term connection to the community all the more ephemeral.

Part D: What is Keeping Pregnant Women from Promoting Their Own Health?

I have established that pregnant women in Saraya do not get the care they deserve, neither from themselves -- in the form of nourishing themselves properly and giving their bodies the break pregnancy demands – nor from healthcare practitioners in the form of adequate, accessible and affordable prenatal and maternal care. But what then is preventing women from advocating for their own health? During my time in the field, I uncovered three contributors: I found that the lack of women's education, young pregnancies and the relatively common incidence of domestic violence in Saraya are all

keeping women from having their needs met. This is by no means a comprehensive list, but it is a start.

Though I in hindsight wished I had not undergone the formality of obtaining informed consent from the mothers I interviewed and though I regret having possibly alienated women in this way, the process of asking for their signatures revealed whether or not women knew how to sign their names, which I took as an indicator of literacy and education level. Only four of the eleven women I interviewed knew how to sign their names and only three of the eleven spoke or understood any French. Women's general lack of education, and their resulting inability to speak French or Wolof hinders the effective communication of their needs and the efficient advocating for their health.

Both the examination of the PNC Register and my interviews with recent mothers revealed the pattern of young pregnancies. 50% of prenatal patients that came for their first PNC between January 1st and April 30th of 2007 were aged 18 or under. For the village women I interviewed, I subtracted the age of their oldest child from their current age and found that on average, these women were between 16 and 17 years of age when they had their first child. These data are likely skewed as many patient ages had not been recorded in the PNC Register and as most women had to guess the ages of their children because they did not know their exact age. However, the exact numbers are not important; skewed or not, the data demonstrate that in Saraya, an overwhelming number of young girls become pregnant all the time and that most women have their first child at a very young age. The obstacles becoming pregnant at such a young age pose to women are multi-faceted. When girls are so young when they become pregnant their pregnancy is automatically elevated to an "at risk" status and as I have already mentioned, the shame young girls feel about becoming pregnant often keeps them from coming in for prenatal consultations until very late in pregnancy. In addition, infants often tie girls to the home and keep them from going to school, which further exacerbates the problem of rural women's overwhelming lack of education.

The incidence of domestic violence in Saraya and elsewhere also keeps women from advocating for their health. My knowledge of the problem in Saraya and elsewhere in Senegal is purely surface-level, but its occurrence came to my attention and greatly disturbed me. Due to my lack of focus on domestic violence during the research period,

my thoughts on its happening and its effects are relatively unformulated, but I think it important to mention nonetheless. I observed that domestic violence is openly discussed in Saraya; during my second day in the field I witnessed an unsettling conversation in the front of the health center during which a man, who is supposedly known for openly beating his wife, tried to convince both a *toubab* and a male Community Health Worker that he was justified in beating his wife because it was often necessary to do so. Another man came to his defense and argued that indeed women do need occasional beating. One present woman said quietly and seemingly more to herself than to the group that it is never right to hit a woman. I took the fact that there was disagreement on the subject as a good sign that not everyone in Saraya accepts or approves of domestic violence. However, I found the openness of the discussion and its rather light-hearted and joking nature alarming, upsetting and evidence that there is little negative consequence for the men who beat their wives.

The public acknowledgement of domestic violence seems demonstrative of the role reserved for women in Saraya as beings without voice and without argumentative power. In recalling the language barrier, the only group of people with which village women can effectively communicate apart from within their own circle of village women is village men. But if the men beat them, to whom should women turn? There is no question that abuse of women is damaging to their self-confidence, sense of self-worth and as a result damaging of their ability to advocate for themselves and for their health.

Part E: Evidence of positive change

I have presented material that may make women's situation in Saraya and elsewhere in rural Senegal seem dire and without hope. This however is neither my intention nor the truth; it became clear to me during my research period that positive change is indeed happening in the District of Saraya and that the processes underway will heighten women's financial well-being and decision-making power, improve women's nutritional health, enhance girls' education, and increase the resources needed to provide better maternal and prenatal care.

Saraya now has a *Groupement pour la Promotion Féminine (GPF)*, a community women's group, which aims to give women more administrative power and serves as a

platform for women to coordinate, organize and mobilize in order to advocate for themselves. The members of the *GPF* have started a project that has included the creation of community gardens to grow vegetables. The women work together to water, weed, seed and maintain the gardens and the women are in the process of creating a market in Saraya to sell the vegetables. The project will serve not only to provide the community and pregnant women with better nutrients, but will also bring women into the world of economic activity, which should elevate their status and give them more decision-making power.

In contrast to the way it used to be, it is now the norm for girls to go to school. Though the rate of young pregnancies is alarming and having a child at a young age often keeps girls from going to school, one of the young mothers I interviewed still goes to school. Jonas Bassene, Saraya's Head Nurse also told me the story of another girl who gave birth last year but is still going to school.

There is evidence too that health facilities in the region are becoming more numerous and better equipped. During my stay in Saraya, the Health Center had solar power installed and I attended a meeting at the Health Post at Oromin, one of the mining companies conducting explorations, in order to plan the training of eight new *matrones* who will eventually work as trained birth attendants within their own communities.

V. Conclusion

Though I aimed to expose the experiences and stories of the rural, poor and uneducated pregnant woman, I found her stories hard difficult to capture. It became clear to me that the women of Saraya are not often asked for their opinions on personal matters or expected to weigh in on important decisions. I uncovered the obstacles she faces in leading a healthy pregnancy, in seeking and receiving adequate prenatal and maternal care and the factors obstructing improvements in women's health, and in the end, I found that it is these same difficulties that muffle the pregnant woman's voice. Thankfully, evidence of positive change is emerging on many fronts; forums for women's empowerment are opening, girls' education is increasing, and women's health facilities are growing in scope and number. It is clear that women are creating space for their loudening voices, which we can only hope will grow ever louder.

VI. Ar	ppendices	

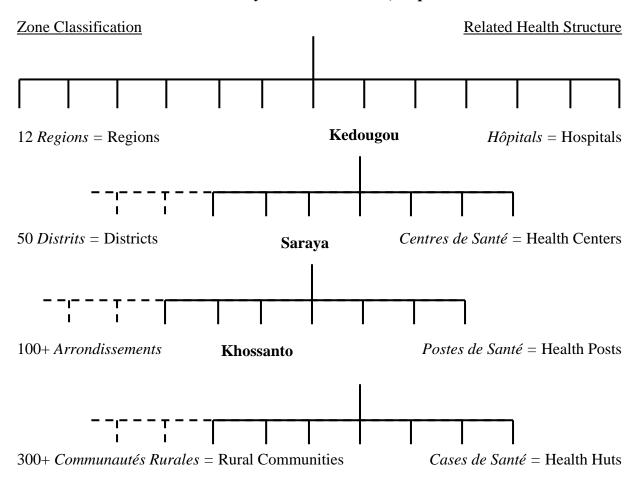
Appendix B: Malinké Vocabulary

*Marning Greatings:			
*Morning Greetings:	A. Good Morning!		
A. Isahuma! (sing.) / Allusahuma! (plur.)	A. Good Morning!		
B. Ainsi! (females) / Mbaa! (males)	B. Good Morning!		
A. Herésita?	A. How goes the morning?		
B. Heréduron.	B. Peacefully.		
A. Cotana Mansi?	A. How did pass the night?		
B. Heréduron.	B. Peacefully.		
*Afternoon Greetings:			
A. Iningtiling! (sing.) / Alluningtiling! (plur.)	A. Good Afternoon!		
B. Ainsi! (females) / Mbaa! (males)	B. Good Afternoon!		
A. Herétilinta?	A. How goes the afternoon?		
B. Heréduron.	B. Peacefully.		
A. Cotana Mantiling?	A. How have you passed the day?		
B. Heréduron.	B. Peacefully.		
*Evening Greetings:			
A. Iningwura! (sing.) / Alluningwura! (plur.)	A. Good Evening!		
B. Ainsi! (females) / Mbaa! (males)	B. Good Evening!		
*Anytime of Day:			
A. Coténanté!	A. How is your day going?		
B. Heréduron.	B. Peacefully.		
*Other Greeting Questions:			
A. Dimbaya bedi?	A. How is your family?		
B. Tananté lé. / Tanesinté lé. / Heréduron.	B. Without problem. / Peacefully.		
A. Tananté luoma?	A. How is your home?		
B. Tananté jé.	B. Without problem.		
A. Baro bedi?	A. How is your work?		
B. Tanesinté. / Heréduron.	B. Without problem. / Peacefully.		
A. Faté bedi?	A. How is your health?		
B. Tananté lé.	B. Without problem.		
A. Dindin?	A. And the children?		
B. Tanasinté jahn.	B. They are well.		
*Other Useful Words and Phrases:	_ : _ :::::::::::::::::::::::::::::::::		
Iyo. / Oh-oh.	Yes. / No.		
Y jamondima?	What is your name?		
Mmaa lon.	I don't know.		
Jé wa mine.	I am going to drink something.		
Tino mang kura.	Lunch is not ready yet.		
Mbé tahala luoma.	I am going home.		
2.20 million	z ann going nome.		

(Source: From Carolyn Bancroft's notes on greetings, November 19, 2007)

Appendix C: Health Structures Hierarchy

National Ministry of Health - Dakar, Hôpital Fann



(Source: Health Structures Hierarchy explained by Demetri Blanas, November 18, 2007)

Appendix D: Interview Schedules

*Healthcare Practitioners: Doctors / Nurses / Midwives / Auxiliary Midwives

Où est-ce que vous avez été formé ? Où est-ce que vous avez travaillé ? Comment est-ce que vous êtes venu à travailler ici ?

Dites-moi un peu sur votre travail ; qu'est-ce que vous faites exactement ?

Quel niveau de contacte est-ce que vous avez avec les femmes enceintes ? Votre travail demande quel type de rapport avec elles ?

Les statistiques montrent que moins des femmes aux milieux ruraux viennent se faire consulter et viennent à accoucher aux centres/postes/cases de santé. A votre avis, pourquoi ?

Est-ce que ça c'est un problème à Saraya ? Pourquoi ou pourquoi pas ?

Est-ce que vous employez des stratégies pour faire venir les femmes à se faire consulter et pour accoucher ? Lesquelles ? Est-ce qu'il y a d'autres stratégies que vous voudriez utiliser ?

Est-ce qu'il y a des causeries avec les femmes sur la santé de la reproduction à Saraya ? Est-ce qu'elles viennent ?

Dites-moi un peu sur les consultations prénatales. Qu'est-ce qui se passe exactement ?

Est-ce que vous les conseillez de faire ou de ne pas faire certaines choses pendant la grossesse ? Lesquelles ? comment est-ce que vous les conseillez ?

Expliquez-moi un peu sur votre communication avec les femmes ici. Est-ce que le langage vous pose de problèmes ?

Parlez-moi un peu de la nutrition des femmes enceintes au Sénégal. Quelles sont les différences entre les milieux urbains et ruraux au niveau de la nutrition ?

A Saraya, quels sont les obstacles à la bonne nutrition des femmes enceintes ?

Parlez-moi un peu sur l'activité et travail physique des femmes au Sénégal. Différence entre milieux urbains et ruraux ?

Et à Saraya ? Qu'est-ce que vous les conseillez de faire / de ne pas faire pendant la grossesse ? Est-ce qu'elles suivent les conseils ? Pourquoi ou pourquoi pas ?

Est-ce que vous trouvez que des femmes enceintes cachent leurs grossesses ? Pourquoi ou pourquoi pas ?

*Recent Mothers

Est-ce que vous avez des enfants ? Comment est-ce qu'ils s'appellent ?

Chaque enfant:

- Il / Elle a quel âge?
- Où est-ce que vous l'avez accouché(e)?
- Qui vous a aidée à accoucher ?
- Est-ce que vous avez fait des consultations prénatales ? Combien ?

Décrivez-moi tout ce que vous avez fait hier.

Est-ce que vous avez fait les mêmes activités pendant la grossesse ou est-ce que votre activité a changé pendant la grossesse ?

Est-ce que vous avez mangé les mêmes plats pendant la grossesse ou est-ce que vous changé votre alimentation pendant la grossesse ?

Appendix E: Sample letter requesting permission to conduct research

Dakar, le 18 novembre 2007

Megan Frances HARLOW School for International Training BP 16490 Dakar-Fann Sénégal

Objet : Demande d'autorisation d'observation au Centre de Santé de Saraya

Docteur Youssoupha NDIAYE, Médecin-Chef Centre de Santé de Saraya Saraya, Sénégal

Docteur Youssoupha NDIAYE,

Je soussignée, Megan Frances HARLOW, étudiante à la School for International Training (SIT), sise à la Rue 5, Point E, Dakar, sollicite auprès de vous l'autorisation d'observer et parler avec les médecins, les sages-femmes, les infirmières, et les patientes au Centre de Santé de Saraya pendant la période du 18 novembre jusqu'au 30 novembre 2007.

En effet, je mène un projet d'étude dans le cadre de ma formation académique au Sénégal. Il existe déjà des études sur la mortalité maternelle aux milieux ruraux de Sénégal, mais la plupart de ces études ne s'agitent ni de l'expérience actuelle de la femme enceinte, ni de sa mentalité ou sa rationalité qui influence les décisions qu'elle prend pendant la grossesse. À cause de cela, j'ai choisi d'étudier l'expérience de la grossesse aux milieux ruraux de Sénégal pour mieux comprendre la perspective et les actions de la femme enceinte.

C'est la raison pour laquelle je sollicite vivement votre assistance et collaboration pour une réussite de mon projet.

Pour plus d'information sur le programme de formation académique, veuillez contacter M. Souleye Diallo, Directeur Académique de SIT, téléphone 33.864.0542 (bureau) ou 77.546.1243 (portable).

Dans l'attente d'une suite favorable, je vous prie d'agréer, Docteur Youssoupha NDIAYE, l'expression de mes salutations distinguées.

	Megan Frances HARLOW	
Lu et approuvé		
Signature du Médecin-Chef:	Date :	

Appendix F: Informed Consent Form

Formulaire d'Adhésion

No	m de famille : Prénoms :
	Mère récente Age : Étnie : Lieu de naissance :
Lie	u de résidence : Lieu d'accouchement :
	Sage-femme / Médecin / Infirmière Lieu(s) de formation :
Lie	eu(s) d'emploient : S-F / M / I depuis :
	Matrone Lieu(s) de pratique : Matrone depuis :
	Parent de la mère récente Relation à elle :
	Autre titre :
Un	itulé du projet : angle différent sur la grossesse et la mortalité maternelle au Sénégal rurale; une étude la mentalité de la femme enceinte
mie	roduction au projet : Je fais de recherche sur l'expérience de la grossesse au Sénégal pour eux comprendre la mentalité, comportement, actions et décisions des femmes enceintes. J'ai choisi de parler avec vous parce que vous êtes mère et donc, vous connaissez bien la grossesse et qu'est-ce que c'est être une femme enceinte au Sénégal. Je vous ai choisi pour participer dans ma recherche parce que vous êtes sage-femme/médecin/matrone/infirmière et parce que j'imagine que vous avez eu beaucoup de contacte avec des femmes enceintes et donc que vous avez des histoires et perceptions de la grossesse et la vie de la femme enceinte au Sénégal. J'ai choisi de parler avec vous parce que vous avez un rapport personnel et familial avec une mère récente et parce que vous avez eu l'expérience de prendre soin de, ou bien interagir avec un membre de votre famille qui est enceinte. J'ai choisi de parler avec vous parce que
Do Sér enc gro de	roduction à la chercheuse : Je m'appelle Megan Harlow, ou bien Maryama Thiam au négal et je suis une étudiante à la <i>School for International Training</i> à Point E, Dakar. nnées de base : Il existe déjà des études sur la mortalité maternelle aux milieux ruraux de négal, mais la plupart de ces études ne s'agitent ni de l'expérience actuelle de la femme reinte, ni de sa mentalité ou sa rationalité qui influence les décisions qu'elle prend pendant la ssesse. À cause de cela, j'ai choisi d'étudier l'expérience de la grossesse aux milieux ruraux Sénégal pour mieux comprendre la perspective et les actions de la femme enceinte. océdures : Pendant cette interview, je vais vous poser des questions sur votre grossesse et les choses que tu te souviens d'être enceinte.

	votre travail et aussi sur vos expériences d'êt votre expérience comme parent d'une femme autre :		_
	Si vous êtes d'avis, je voudrais bien enregistre vos histoires.**	er cette interview pour mieux garder vos	réponses
pou pré liée enre	nfidentialité: Les informations de l'interview arraient être utilisées pour des études futures, s férez, je peux protéger votre identité pour que es a votre nom. Si vous décidez ça, je serai la s egistrement et je changerai votre nom dans l'o us pouvez décider à n'importe quel moment p	surtout pour ma thèse universitaire. Si vo e les infos que vous me donnerez ne soien seule personne qui aura d'accès à cet œuvre écrit et dans les présentations parle	ous nt pas ées.
	Est-ce que vous me permettez d'utiliser votre i onterez et aussi de les utiliser pour des études	-	vous me
ou	ractère Volontaire: La participation est volo ne pas participer sans aucune conséquence. De nmage.		
	ntacts et Questions: Si vous avez des question tacter ou bien vous pouvez contacter SIT.	ons ou préoccupations, vous pouvez me	
	Megan Harlow/Maryama Thiam Tel: 77.713.7654 Email: meganharlow@earthlink.net	School for International Training Rue 5, Point E, Dakar Tel: 33.864.0542 Email: sit@orange.sn	
Déc	claration d'adhésion :		
Lu	et approuvé		
	Signature du participant:	Date :	_
	Signature de la chercheuse :	Date :	_
*Eı	ntendu et approuvé		
	Signature du témoin :	Date :	-
	Signature de la chercheuse :	Date :	
Pou	ur participants qui ont moins de 18 ans : Signature du parent/gardien :	Date :	

*En quelques cas, ç'est inapproprié de demander d'adhésion écrite, par exemple quand participants sont analphabètes ou bien quand demander une signature pourrait éloigner ou faire inconfortable un participant dont la mentalité vient d'une tradition orale.

VII.	Glossary of Tern	S

Agent de Santé Communautaire (ASC) / Community Health Worker – A member of the community chosen by the *Infirmière Chef D'Etat* to go through six months of training in Kedougou. ASCs work in the health center, go into the villages on vaccination campaigns, and often serve as translators during consultations at the Health Center.

Case de Santé / Health Hut – Health facility in rural communities.

Centre de Santé / Health Center – Health facility in districts.

Chef du Village | Village Chief – acts as overseer of village affairs. For protocol and courtesy reasons, it is necessary to consult with the Village Chief before visiting a village, conducting research there, etc.

Infirmière-Chef d'Etat / **Head Nurse of State** – works as a nurse in Health Centers, does prenatal consultations as well as acts as a coordinator of projects and oversees *ASCs*.

Matrone / **Auxiliary Midwife** – a *matrone* typically goes through 6 months of training in order to become a certified birth attendant, a *matrone* may assist births and perform prenatal consultations

Médecin-Chef du District / **Head Doctor of the District –** acts as the Head Doctor in the district's Health Center, often responsible for coordination of projects.

Poste de Santé / Health Post – Health Facility in *Arrondissements*, which are sections of districts.

Sage-Femme / **Midwife** – Midwives typically have 3 years of training, perform prenatal consultations and assist births.

Toubab – term often used in Senegal to refer to a White foreigner.

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