A comparison of child and adult health: Traditional vs. Western medicine and the application of Gris-Gris

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A comparison of child and adult health: Traditional vs. Western medicine and the application of Gris-Gris

by

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A thesis submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

Major: Anthropology

Program of Study Committee:
Christina Gish-Hill, Major Professor
    Ann Reed
    Jill Pruetz
    Francis Owusu

The student author, whose presentation of the scholarship herein was approved by the program of study committee, is solely responsible for the content of this thesis. The Graduate College will ensure this thesis is globally accessible and will not permit alterations after a degree is conferred.

Iowa State University
Ames, Iowa
2018

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I am extremely grateful to my advising committee, the Fongoli Savanna Chimpanzee Project (FSCP) and all its workers, as well as my family and friends who have supported me over the course of my research. I would like to thank Christina Gish-Hill for being my backbone throughout this project and helping me work through the complexities to see the desired finished project. Special thanks must also go to Jill Pruetz who hosted me at her research site in Fongoli and guided me through my initiation in Senegal. Without her introductions to the local population, my research would have been impossible. It was also my pleasure to have the advice and intellect of Ann Reed and Francis Owusu to contribute to this project.

I cannot thank Johnny Dondo Kante enough for assisting me as my interpreter during my time in Senegal. Not only was he able to speak several local languages, but also fed and took care of me during a short illness. Finally, I must especially thank my parents, Shelly and Terry Morgan, as well as my brother, Dakota Morgan, who provided support and encouragement from both overseas and at home.
Djindji, Senegal is a community that has been seeking to increase its access to Western medicine. Within the last fifteen years, the region's namesake and largest town, Kedougou, has grown significantly due to an increase in gold mining. The town's growth spurred increased access to Western medicines and is now home to two hospitals, multiple pharmacies, and multiple NGOs including the Evangelical Christian organization, World Vision, who aims to improve health standards. Despite the increased access to Western medicine in Kedougou, locals have not abandoned their indigenous practices. Religious protective amulets known as gris-gris are still commonly used to protect children’s health while traditional medicine, such as plants and herbs, are more commonly used by elderly or those who cannot obtain Western medicine. In this thesis, I argue that the emphasis which people of Djindji place on naturalistic and spiritual etiology systems enables the community to more easily adopt Western medical practices, yet their inability to fully engage with the Western health system due to lack of access to facilities and medications has yielded only marginal improvements in community health. Because of this lack of access, the community continues to rely on indigenous medicine to improve the health of their people. This research has demonstrated that continued use of gris-gris allows for parents to feel a sense of control over the uncontrollable aspects of child health, and that traditional healing remains despite increased competition with highly requested Western medicine.
CHAPTER 1. INTRODUCTION

I began the process of researching my thesis knowing that I wanted to work with an indigenous\textsuperscript{1} community increasing their utilization of Western medicine. My background was in plant pathology and I had obtained a minor in anthropology for my bachelor’s degree. When I started my master’s program in anthropology, it was with the goal of combining my interests in pathology and culture. Specifically, I was interested in the interaction between the different types of healing. I had spent time reading about medical anthropology and its role in bridging gaps in communication between locals and Western-educated doctors. My interest in medical anthropology began around the time of the Ebola outbreak in Africa, so anecdotes on the aforementioned gaps appeared constantly on my radar. These resulting health issues were often cited as the result of doctors treating patients with different cultural backgrounds. My goal was to try to observe and better comprehend the intricate ways that these interactions occurred.

I was lucky enough to be introduced to Djindji, a Muslim community who has retained indigenous identities and knowledge, while looking for a field site. Thanks to the excellent rapport Dr. Jill Pruetz had established throughout the Kedougou region while conducting her research in the Fongoli Savanna Chimpanzee Project (FSCP), the community

\footnote{1 I chose to use the term indigenous as opposed to traditional, small-scale, or global south within my thesis as it reflects the terminology used in a large quality of my literature sources such as Curtin (1971), Clifford (1983) Green (1999), Konadu (2008), Abdullahi (2011), and Conwill (2012). This term does not imply that the community is backwards or primitive, instead it indicates a community that is native, having roots in the oldest traditions and cultures of a given location. This choice is also reflective of the United Nations definition of indigenous which describes those peoples who have a unique culture and relationship to the environment and who have retained social, cultural, economic and political characteristics distinct from the those of the dominant society in which they live (https://www.un.org/development/desa/indigenouspeoples/about-us.html).}
was amenable to interacting with other researchers introduced by and affiliated with Dr. Pruetz. This allowed for my quick integration into the community.

Dr. Pruetz has worked in the region of Kedougou for sixteen years and as such, is familiar with the ins and outs of the local cultures. She also served as a valuable connection for me. As a very respected individual in the region, working under her name opened doors. It was through Dr. Pruetz that I was also able to gain the assistance of the manager of the FSCP who would be my interpreter, a Beudick named Johnny Dondo Kante, who speaks nine different languages including English, French, Bassari, Malinke, and Diakhanke.

When the community was originally mentioned to me, I knew of it only as a small village actively trying to increase their access to Western medicine through the construction of a medical hut (a medical dispensary). Conversations with local sources led me to the conclusion that the community of Djindji was very willing to host me while I interviewed them about their personal health.

Djindji was also an ideal host site as I would be one of the first cultural anthropologists to work with the village. In fact, the further back in history you go, the less information you can find on the region of Kedougou where Djindji is located. This is in part because most of the population of Senegal lies in the larger cities of Dakar and St. Louis that are close to the coast, providing better access to resources. Kedougou is not a well-known region even within Senegal. At the airport when I arrived, I spent several moments thinking I was pronouncing Kedougou wrong because customs officials had never heard of the region.

It is likely that within the near future, Kedougou will become a more recognizable region. Its population has increased substantially over the last fifteen years in tandem with the rise in gold mining. Djindji has also taken part in the gold mining industry, yet is still not
only small, but a relatively young village. The cultural group that resides in Djindji, the
Diakhanke, have a much longer history than the town, yet substantial research is still lacking
regarding their present-day lives.

My research will delve into some of the less-observed areas of the culture and health
within Djindji. Chapter one will discuss the methods of my research. In chapter two, I will
present selected literature regarding topics directly relevant to my research, as well as
background on the region and lifestyle of the Diakhanke. Chapter three will discuss why
integration of Western medicine is desired in Djindji, even when it does not seem to offer
conclusive diagnosis, along with the etiological systems I was able to observe during my
time in the community. Chapter four will present background on the two types of indigenous
medicines: traditional and gris-gris and discuss how they are used differently within the
community. Lastly, chapter five will explore the issues that people of Djindji feel are
preventing them from expanding their access to Western medicine.

Much of my thesis is dedicated to an assessment of how the community used the
three different emic categories of medicine. Djindji’s people break indigenous medicines
down into two categories. The first is gris-gris, a spiritual preventative medicine created most
often as an amulet. Anyone of any religion can wear a gris-gris amulet once it has been
created by a specialist. The second is traditional medicine, which includes only plants and
herbal remedies. Anyone in the community can create and use traditional medicine (other
than children). There are not specialists who create more advanced forms of traditional
medicine; however, the older generations are said to be more educated about the different
medicinal plants and herbs.
To make the categories less confusing, when discussing medicine specifically, I will refer to the two types together as indigenous medicines and traditional medicine only as the plants and herbs. The terms I have chosen for these medicines are based upon the translations and descriptions given to me by the local population. By using the term traditional, I by no means wish to imply that the methods are “arcane” or stuck within the past. Like Western medicine, the uses and applications of traditional medicine have changed over time, but unlike Western medicine, are rooted in indigenous knowledge of the landscape gained over generations of interaction. The third type of medicine in the community is Western medicine. It is viewed by the people of Djindji as medicines originating in Western Europe or the United States in the form of pills, liquid medication and injections. Western medicine was utilized by everyone that I interviewed within the village.

Community members in Djindji were vocal about their desire for more Western medicine; yet I still saw how prominent the marabout who created gris-gris was as a specialist and that locals still used traditional medicine for a variety of issues ranging from coughing and diarrhea to parasites and pain with urination. With this in mind, I started with the very broad question of: What can observing the interactions between the people of Djindji and the world of Western medicine tell us about the integration of villages like this one into the global world of medicine?

Digging into my broader inquiry revealed many more questions. Eventually I narrowed down my ideas into many smaller, more detailed questions which I wanted to answer. Why do individuals of Djindji put little effort into obtaining a Western diagnosis and instead focus on just obtaining drugs that may or may not work for their ailments? Why do Western drugs seem to integrate so easily into the culture and lifestyle of individuals in
Djindji as a form of medicine instead of prompting suspicion? Why is the role of traditional medicine changing so drastically within the community while gris-gris is not? Why is gris-gris used more as luck for adults and as protection against bodily harm for children? Who do the people of Djindji see as responsible for increasing their access to health services, specifically those pertaining to Western medicine? In the end, I wanted to see if these questions could help us gain a better idea of Western medicine's role in indigenous communities and specifically, how the three categories - traditional medicine, Western medicine, and gris-gris - can coexist in rural communities.

It was important to me to address ways that these three medicines were used in adults versus children. My review of existing literature on gris-gris in Muslim Africa (Simmons 1971; Madge 1998; Seybold 2002; Green 2009; Gemmeke 2009) revealed no information on the use of gris-gris as it pertains to children and the role that it has in a community where Western medicine has become more commonly used, as is the case in Djindji. Only two of the sources I found, Seybold and Madge, discussed gris-gris in depth past the idea of categorization and only Madge discusses how it may be utilized by women seeking to become pregnant.

My observations had shown that gris-gris and Western medicine were both popular for children while traditional medicine was thought too potent. Adults were far more likely to use gris-gris solely as luck. Its larger importance in protecting children’s health was due to the knowledge of and fear for the child’s weaker immune system. This holds true for the unborn child as well since the child inside the womb is not viewed as protected from the outside world and needs the same protections as other children.
People in Djindji were adamant about their desire for more Western medicine for both children and adults. This was in part due to their specific disease etiology system. My research into the categorization of how different cultures understand the cause of their illness (Foster 1976; Minkus 1980; Rasmussen 2000; Green 2009; Bakare et al. 2009; Abdullahi 2011; O’Neill 2015) suggests that the people of Djindji’s main etiologies are naturalistic and spiritualistic, which means that they view diseases as having causes based in nature as well as via spirits that exist within the natural environment. Personalistic etiology, illness caused by the actions of other people (as in witchcraft), was not mentioned in any of my interviews even when directly asked about it.

Since individuals in Djindji depend mostly on naturalistic and spiritualistic etiology, this also means that they trust in experience. People base their trust in Western medicine on results. A medication is seen as effective if they have seen it improving the health of others. Because of this, Western medicine has risen in popularity. Use of traditional medicine has correspondingly dropped and many interviewees told me that they would rather seek cures from a Western medical facility. Now, the knowledge of how to prepare traditional herbal remedies are known mostly by the older generations and used when someone cannot afford Western treatment or needs more time to get to a Western medical facility.

Interestingly the desire for Western medicines excluded the medication used for yellow fever as it was said to kill you. One villager that I asked about this told me that you must first treat the yellow fever with traditional medicine before going to the hospital.\(^2\) This was a perfect example of how the people of Djindji requested Western medicine, but only those parts of it that had been shown to be effective for them. Since people who contracted yellow fever often still died after western treatments, it was an exception.

\(^2\) (Interviewee #6. 2016. Interview with a Diakhanke woman by the author. June 3)
Lastly, I conversed with people about issues revolving around access. Since most people I talked to felt that Western medicine was so important, I was curious to see how they went about getting the medications. Some told me that they would travel to a neighboring village to get medicine from their dispensary and some said they would go to the hospital in Kedougou; however, it seemed to be almost a unanimous concern that it was difficult to get to this facility in Kedougou. Multiple people told me that they would probably stop using traditional medicine in favor of Western if it became more accessible.

Since I wanted to know about what was causing changes in usage, I decided to pursue this question. If several people in Djindji would use more Western medicine when access became available, what type of access did they need? Roads was the most common answer I was given. If anyone in the village owned a vehicle, it was a motorcycle. Johnny Kante’s was the only truck I ever saw in town. Even if someone did have a motorcycle, the roads were terrible to drive on and closed off completely due to flooding during the rainy season. The people of Djindji spoke of this poor infrastructure as the state failing them. They expressed the belief that it was the state’s responsibility to improve their access to health services by providing good roads to access Western medicine.

My time in Djindji considering the lives of its people has given me a rare look into one of the many unique West African Muslim communities who utilize both indigenous and modern Western medicines. Utilizing my research, I will present information on how their health is changing in terms of medical usage and knowledge. I utilize communications with a variety of people to show how they view the cause of illness and the importance of diagnosis or lack there-of. My analysis presents a case study of the ways in which an indigenous
African Muslim community can interact and utilize traditional medicine, gris-gris, and Western medicine.

**The Field Site in Senegal**

I got my ticket to Senegal and after several days of travel arrived in Fongoli, Dr. Pruetz's field site and the area where I would be living for the summer. I had been told that I would need bed nets and boots as well as little packs of Kleenex to use for the bathroom.

Even with all the preparation, arriving at camp to see the bamboo enclosed area of small huts was a surprise. I would be staying with Jill in Fongoli, a ‘village’ of two enclosures of huts, one of which was Dr. Pruetz's.

We would be sleeping outside on raised bamboo cots with little pieces of foam serving as mattresses since the huts were too hot in the 106-degree weather. I would often awake in the morning to find one of the neighbor’s dogs asleep by my cot, often, the little one that we had creatively dubbed ‘Puppy.’ In the years before my arrival, visitors to Fongoli had slept in the huts; however, they no longer had airflow. The openings around the roofs had recently been closed off to prevent snakes getting in. A couple of field seasons back a cobra had snuck in and, for good reason, no one wanted to repeat that.

The shower was a small area enclosed in a bamboo wall with a stump for your water bucket. The bathroom was outside of the camp enclosure, thankfully. It sat across the dirt track which served as a road, also enclosed by a thin bamboo wall. The bathroom was just a concrete slab with a hole in the middle over a deep, dug out hole, yet for a small camp in the middle of the dry

*Figure 1-1: The bamboo and foam beds at camp in Fongoli*
savanna it was elaborate. Bees seeking moisture would swarm up from its depths every afternoon when you went to relieve yourself and trips during the night required closed toed shoes and a flashlight due to the risk of puff adders; an especially dangerous venomous snake that does not flee when you approach.

My introduction to the community was easy and welcoming. This was in part due to their excitement to see my travel companions who included Jill Pruetz and Stacy Lindshield, another Iowa State University primatologist who has commonly worked in the area. A group of men from Djindji had gathered at our arrival since Dr. Lindshield wanted to talk to them about mercury poisoning. Most of the local population was unaware of the risks associated with using mercury to filter gold from dirt, especially since they did this process in buckets by hand. As it was my first exposure to the community, I was excited to see that the group was very responsive and involved. They participated in the discussion and concluded that the long-term costs of using mercury were much worse than the short-term gains. They would
work to increase the use of safety precautions such as wearing gloves and masks while using the mercury in the future.

This visit was also my first example of social interaction in the region. From the moment my companions and I departed the truck, we were shaking hands right and left. In this region of Senegal, it is expected that you shake hands and greet everyone, adult or child. While we waited for the rest of the attendees to arrive for the mercury meeting, they were enthusiastic to teach me the language, wanting me to repeat greetings several times until I got the hang of it. In terms of welcoming and open communities, it seemed I had hit the anthropological jackpot.

Even though I would later discover that my interpreter, Johnny, was not the same ethnic group as the inhabitants of Djindji, but rather Beudick, he was just as open and welcoming as the community members had been and he would host me at his home many times during my stay. Johnny lived in the larger city of Kedougou rather than Djindji but traveled the path between the two quite often. His home seemed to be an epicenter of activity anytime we were there. Often at night, children would gather around their little, solar-powered TV, which would be pulled outside onto the porch. French Disney channel seemed to be a crowd favorite among them.

Field days in the community started by Johnny picking me up from Fongoli in the morning with his little four-wheel drive truck. We would make the very bumpy trek to Djindji with the windows down, trying to catch a breeze since the air conditioning had not worked in quite some time. We would park in the middle of town by a little shop, the only one in town, where the community bought their bread, crackers, and tea supplies. The shop was a central place of the village. It was owned by a young man who had once worked for
Dr. Pruetz in the FSCP center observing chimpanzees. Occasionally they would start up the giant cement oven on the outskirts of town and make dozens of loaves of bread and sell them out of the shops little tiny front window.

Sometimes we would stay there the whole day just talking to the people and passing around crackers. Children would run happily around us or stand nearby and stare as we chatted. Other days we would go sit by the women as they cooked or sit outside someone's house and make tea while we talked. Since I was stealing Johnny from the Fongoli Savanna Chimpanzee Project, occasionally I would have to fight for Johnny’s time. I use the word fight loosely since I always seemed to lose. I had not stood a chance since my competition was a three-year-old orphan chimpanzee who Johnny would watch when his normal dad (caregiver) had the day off.

When we started the interview portion of my research my introductions were always casual. Neither Dr. Pruetz nor Johnny had introduced me to the community as ‘the person looking at their need for a dispensary.’ Arriving with this stigma on my back could have shaded the way I was viewed as a researcher and led people to think that I would be the driving force to provide them with a dispensary. Instead, I was ‘Jill’s grad student who wanted to study health.’ This title allowed me to consider a larger variety of health topics and gain a better grasp of the indigenous health system.

Our conversations were never questionnaire based. Instead, I focused on having casual discussions. I did not utilize a tape recorder but did take in depth notes during every interaction. These notes would allow me to reflect on the conversations later while the absence of the recorder during the interviews made sure that the interviewees were not uncomfortable or nervous about being quoted word for word. This allowed the conversations
to flow more comfortably. By not using a set of pre-arranged questions, I was also able to follow any train of thought that I found particularly interesting. It was the community member themselves who would bring up some of the more interesting topics such as spirit sickness and the fantahono seeds used to test for the spirits in fields. Many of those tangents would later prove to be crucial to answering my research questions.

Every interview started by me asking a series of simple demographic questions that included age, occupation, number of children and so on. Early on, I tried to dive into the ideas of health by asking them what type of needs they had in the community. I asked what type of medicines they normally took, or what medicines they wanted to have more of. I tried asking what their most recent sickness was or what their most serious illness had been. I soon discovered that would not work. My questions produced very general answers and those were almost always the same. They would tell me they wanted things to help with stomach pains or head medicine and ‘stuff’ for the children. Occasionally someone would specify that they wanted malaria medication. The issues that they suffered from were stomach aches, toothaches, and headaches. I quickly changed tack and changed my starting question to be more general, ‘What does it mean to you to be healthy.’ From this one question, the conversation about health could continue easily and casually.

After leaving Djindji, Johnny and I would often chat on the way back to Fongoli. If we were not discussing our own lives, we often talked about the people of Djindji. It was from Johnny that I got a better idea of how the community in Djindji might be viewed by their neighbors as well as small tidbits about their culture that only an outsider accepted on the inside would know, like Johnny who had been accepted over the course of many years. These conversations also helped me work through and change my inquiries for the
interviews. Even after I left Senegal, Johnny was still helping me work through some questions, especially inquiries concerning witchcraft beliefs.

I originally had not contemplated the importance that witchcraft would hold to my research. Its absence in my conversations never registered as an especially important item and it was not until I returned from Senegal that it was pointed out to me how unusual this was. I wondered how I could have missed the presence of something that was so prominent in everything I had read about indigenous African societies. Further conversations and in-depth interviews; however, continued to suggest that witchcraft was either not a prominent belief in the community or it was not being presented to me in my role as a Western student.

My goal while in Senegal was to gather as much data as I possibly could. I took opportunities where I could participate in things that had nothing to do with health solely so that I could gain different glimpses into the life of the Diakhanke in Djindji. I spent one whole afternoon trying to make the traditional Senegalese tea. I had drunk enough of it and seen the process enough times during my stay that I was curious to try my hand at it. While putting in the tons of sugar and the box of tea was easy, pouring the tea out of the pot at shoulder height into a cup on the ground was a bit more difficult.

While the ingredients and steps to make tea would not end up being very important to my thesis, it was an insight into a part of everyday life and allowed me to bond with the community as they laughed at my feeble attempts to pour the hot liquid. Every tidbit of information I gleaned in the field went into my field notes. I processed this information in the field as I received it and because I had so many notes, was able to do so again upon my return to Iowa. Several key components of my thesis would not click until I returned to home to read more and connect all the anthropological dots.
Methods

I collected the data for this project over the summer of 2016 via informal ethnographic interviews from snowball sampling of thirty-six individuals. Interviews took place in casual settings with permission from the community chief. Verbal interviews, rather than paper surveys, are the preferred research method as large portions of the population are either illiterate or do not speak the national language of French. Verbal consent to the interview process is culturally expected and appropriate in addition to being binding. The culture is mainly oral and verbal contracts are highly honored in the region.

My interpreter, Johnny, assisted with all interviews excluding two with World Vision employees who spoke English fluently. The questions for the interview often included prompts for discussion on how individuals viewed health and illness. It did not take me long to realize that most of the responses I was given focused around the health of children and pregnant women. In contrast, there were very few rules and requirements for the health and safety of adult males or nonpregnant women. I began to gear some of my questions towards this phenomenon in the hopes of shining more light on the difference. The health of children and pregnant women would eventually become a substantial arguing point about usage patterns within my thesis.

I also spent time with various medical professionals including a marabout from Djindji, the town midwife and a medical trainee who would run the coming dispensary as well as two members of World Vision, the NGO that runs programs to improve health throughout Senegal. Interviews with World Vision helped to explain how the dispensaries were set up in other small villages. I chose to do several interviews in the closest neighboring village of Petit-Oubadji in addition to Djindji since they are in a very similar geographic
location and have built a successful medical hut. Looking at these two different locations provided me with a better idea of the specific medical dilemmas that resulted from poor health care in Djindji.

The individuals from Djindji and the Bassari village of Petit-Oubadji who participated in the interviews were between the ages of nineteen and eighty-nine, with most being between the ages of twenty-two and forty-seven. In the thirty-six interviews, I spoke with twenty males and sixteen females. Twenty-six of the interviewees were from Djindji, seven from Petit-Oubadji and the last three from Kedougou. I sought out interviews with World Vision trainees in charge of the medical huts as well as the head of health programs and the education head for World Vision through Johnny Dondo Kante's connections. World Vision was often listed by locals as the main reason for their improved comprehension of Western ideals of health. It is also World Vision that provides the training for local volunteers from each community. This training will allow the volunteers to run medical huts within the villages. In Djindji, the midwife and a young gentleman of nineteen were the two volunteers who had received this training.

The rest of the participants were selected based on who was available within the villages on days that we were present. This allowed me to obtain many different perspectives and a broad grasp of the villagers’ views. Often individuals would sit in large groups and take turns speaking to me. In other cases, we would sit with men and women and talk while they worked on their daily tasks. This was the most efficient way to obtain participants since prearranging interviews is exceedingly difficult. Any scheduled interviews would have also been complicated by the communities’ work patterns, particularly that of farmers whose work in the field or in other small jobs could become necessary at unpredictable intervals in
response to the weather. Due to their very busy schedules, timeliness is not considered to be an important trait, rather tasks are accomplished when time can be made available.

For example, we once traveled to Djindji to see a wedding that was supposed to begin at eight pm. The wedding was delayed by the lack of a bride, who due to vehicle issues, did not arrive until eleven pm. The night was still spent in celebration, as the community danced while they awaited her arrival. No one cared that the bride was late. In fact, they all seemed to enjoy the extra time waiting. Nor were they perturbed at her late arrival; instead they joyously welcomed her in the dark, flashlights shining here and there so that people could see where they were walking, as she was delivered to her future husband's hut. I was told that these delays were not an uncommon occurrence.

I also saw the different view of time represented by the slowness of their greetings. Upon meeting participants, the practice of shaking hands is so important that you are to interrupt any conversation that had been going on. Traditional greetings would be exchanged. These included inquiries about families, how your village is doing, and how your work has been going. “Ca va?” “Ca va bien!” “Ca va la brousse?” Meaning ‘how are you,’ ‘I am good,’ and ‘how is the bush?’ We were asked about the bush a lot since it was the term for the forested savanna where Dr. Pruetz did all her work with the chimpanzees. We would then sit, often with a gift of mangos or tea, and I would record the responses to my questions in my field journal. At the end of the season, I transcribed my notes and analyzed the data with the intent to answer my questions.

My process was influenced by the intention of properly using concepts of comparison and what Tzvetan Todorov terms as detachment. “Comparison in its turn is not one method among others, but the only way that leads to necessary detachment from oneself, and to a true
understanding of social facts of all kinds” (1988:5). In *Knowledge in Social Anthropology: Distancing and Universality*, Todorov discusses the use of three different important points in the process of social anthropology. These steps are: first drawing near, second distancing, and second drawing near. The first stage of drawing near is the fieldwork process that involves the immersion into the society in which you are studying. It is through this integration that we can try to see as locals. We aim to see the ways in which people are part of the natural rhythm of a culture.

It is important to realize that step one is never fully accomplished. According to Todorov, to fully immerse oneself in the foreign culture would be to “abandon the anthropological enterprise” (1988:4) The combination of closeness to a culture, yet a continuous link to one’s own ways of thinking are what allow the anthropologist to notice and comprehend differences. James Clifford (1983) expresses a similar sentiment, saying that we can never fully comprehend all aspects of the culture in proper emic terms, but that we can represent their communications with us to the best of our abilities.

Within the second distancing, you return home and increase the distance, thus allowing yourself to look back on the culture again as a foreigner. He describes this stage as almost being split in two between the cultures and thus enabling communication in order to reach a type of universal meaning. “...my two halves communicate with each other, they look for common ground, translate for each other until they understand each other.” (1988: 4). In the second drawing near, Todorov emphasizes the anthropologist’s new ability to now better observe their own society. This step, at first, seemed less important for me since I did not have an intention of assessing life here in America. After my research, I took this as a challenge to find a broad final question. How exactly could my research in Senegal be useful
and what implications would it hold in terms of America’s desire to improve health across the world?

James Clifford’s (1983) *On Ethnographic Authority* was also a valuable source for me as it helped to shape my understanding of my role as an anthropologist. The question that must be answered through analysis is not just ‘how to translate findings so that they can be utilized in America,’ but ‘how to present the information and properly represent the community.’ “...while ethnographic writing cannot entirely escape the reductionist use of dichotomies and essences, it can at least struggle self-consciously to avoid portraying abstract, a-historical ‘others.’” (1983:119).

Clifford looks at different ways in which authority is created or taken away within the history of ethnography. While he gives no golden answer to the best way to perform an ethnography, he asserts that four different categories of experiential, interpretive, dialogical, and polyphonic processes are utilized within every ethnography and that the final decision lies with the author to present their choice in their writing. I strive through this text to utilize dialog and experiences from participant-observation to accurately represent the health needs that were expressed to me.
CHAPTER 2. BACKGROUND

My research covered a wide range of topics, all of which were important aspects of the research location’s culture. I first spent time considering medical anthropology since the premise of this research was based around medical needs in the community. Since religion and medicine are linked, it was also important to consider the anthropology of religion. I also utilized a large variety of sources on West Africa and Senegal in order to have a larger knowledge base on the location and its history. My research also delved into debates on the existence of witchcraft. These arguments often involved an analysis of etiology categories and their usefulness. I wished to observe and analyze these categories within my thesis, specifically, in how they pertain to behavior.

Literature Review

Medical anthropology allows us to expand upon the simple biological or technical solutions commonly applied to diseases that lack any acknowledgment of wider factors such as economic, cultural, or social input which can promote disease (Feierman and Janzen, 1992). The discipline of medical anthropology is split into two categories, the biological side that encompasses types of medicine used in different cultures and the study of disease within its biological niche of the human body and the social side where one can observe the human cultural reactions to diseases (Good 1994).

I looked to Poltorak’s (2013) discussion on assessing efficacy to help give me more insight into the reasons why locals may or may not prefer a marabout to a Western doctor and where some of the issues with diagnosis begin. He asserts that Western doctors are often blamed for failing to convince individuals that said doctor will be able to comprehend and
consequently treat their illness. Conversely, the indigenous healers are blamed by the doctor for hindering fast action in seeking Western treatment. Poltorak pulls from Allan Young’s (1977) work to define three different meanings of efficacy in indigenous medical treatment: (1) scientific evidence of ending or preventing disease; (2) empirical experiential evidence of achieving desired effects; and (3) management of sickness or the possibility of sickness. She asserts that Western trained doctors often look only at the biomedical efficacy. They fail to understand the complex ways that indigenous healers, like the marabout, interact with societies and how politics can be involved in the processes of who has access to health facilities and medicine. This represents itself through familiar links, the connections that allow individuals to ask for help and be received appropriately by the doctor or healer. Without these links, people struggle to approach Western doctors and when they do, patients do not provide doctors with enough information to accurately diagnose their issues.

Dara Seybold’s (2002) ethnography on health therapies in Senegal discusses how one woman goes about picking which types of medicines to use and the influences that push her to make those choices. Seybold divides the therapies into three different types: traditional medicine, Islamic therapies, and Western medicine. I chose to separate medicines into the same categories only referring to Islamic therapies as gris-gris. While I chose these distinct categories because the people of Djindji refer to them as distinct types of medicine, Seybold’s categorization supports my choice. She argues that the common use of indigenous therapies for infertility was said to be chosen based on what aligned with her culture and presents statistics from 1990 that state that 80% of the population relied on these therapies. While I was not able to find an official statistic, the number of people throughout my
interviews who claimed to have never used traditional medicine suggest to me that this percentage may have recently lowered.

In order to understand broad medical choices in the community, it was also essential for me to look into ideas of etiology, the way that people view their cause of illness. I pull from Edward Green’s (1999) book on indigenous contagious diseases, which expands on the concept of naturalistic etiology from George Foster (1976) who defines two categories: naturalistic and personalistic. During my research, I saw a tendency toward naturalistic which describes how illness is understood as having a natural cause rather than personalistic defined as illness caused by a person as in the case of witchcraft.

Konadu (2008) and Susan Rasmussen (2000) both point out that using naturalistic and personalistic categories may cause a broad simplification that results in a lack of understanding, especially as it pertains to such complex situations as health. Dorothy Lee (1952) was an early proponent of this idea in her discussion of religious perspectives. Lee argues that anthropologists often expect to see the supernatural in indigenous communities causing them to categorize things as supernatural when the concept may not even exist in the society being studied. Westerners sometimes impose the category of supernatural onto actions or results that indigenous people may see as natural. For example, while the anthropologist might view singing to corn as supernatural, those who do it may believe it to be as natural as singing to an infant. Further conversations from researchers such as Abdullahi (2011) have argued that the tendency to place our knowledge overtop of emic perspectives continues to represent colonial ideology that has a markedly negative impact on indigenous medicines.
Anthropologist Sarah O’Neill’s (2015) discussion on foul wind, spirits, and witchcraft also falls victim to this tendency of seeing all things supernaturally. O’Neill utilizes only the categorizes of natural and supernatural thus labeling foul wind, spirits, and witchcraft as supernatural. This common tendency aside, I still found her assessment helpful in terms of how she described the symptoms associated with spirits and foul wind. This sickness found in her research population echoed my own observations in Djindji. I would again, only argue with the placement of foul wind as personalistic. Lee and Konadu’s discussions of overlooked emic views, when coupled with conversations with the Diakhanke in Djindji, suggested to me that foul wind and spirits may have been understood more naturally or spiritually.

Lee and Konadu’s arguments reveal that that Western ideals, especially within anthropology, lead us to categorize things like sickness that can be caught by the wind as something incomprehensible and thus supernatural. These assumptions can blind anthropologists to the fact that wind sickness may be seen as a natural occurrence. This presents the local population with a natural sickness; something that is understood because it is simply part of nature and not a result of the ill intentions of human or supernatural forces. I sought to properly represent this in my discussions of etiology by using the works of Konadu (2008), Minkus (1980), and Bakare et al. (2009) who describe the additional category of spiritual etiology in which I will categorize foul wind and spirits.

Green’s work goes into detail about how issues such as foul wind should be categorized as non-personalistic illnesses. Green discusses his research with the Bambara of Mali, who have a category of wind sickness which results from inhalation of foul wind, that he categorizes as non-personalistic (1999:14). In fact, Green lies on the opposite end of the
spectrum, arguing that a variety of other illnesses previously categorized as personalistic are actually naturalistic. Even anthropologist such as Kendall (2000) who have criticized Green about his lack of discussion on the behaviors associated with his categories agree that his Indigenous Contagion Theory (ICT) is a likely an accurate representation of indigenous categories of naturalistic diseases and could even represent an emic form of the Western germ theory.

I utilize Green’s works largely because not only is he one of the loudest voices who declare the overuse of personalistic etiology, but his ICT discussion also goes more in dept through different categories of infection. In the three categories, he describes local concepts of etiology and how all the illnesses are observed emicly as naturally caused. I must also, however, take into account Kendall’s critique. As such, I have incorporated O’Neill (2015) and Foster (1976) who both include behavior in their analysis.

Green’s ICT includes three types of etiological beliefs: naturalistic infection, mystic contagion or environmental dangers. Green pulls from Murdock’s (1980) studies of illness to describe naturalistic infection as an “invasion of the victim’s body by noxious microorganisms, with particular but not exclusive reference to the germ theory of disease” (Murdock 1980:9). Many people view this in terms of something they can see, worms or little bugs, that can enter the body (Green 1999:13). The category of mystic contagion is like a type of pollution. This could be an unclean substance or essence that, when touched, makes

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3 Kendall’s criticizes Green’s work for verging off into discussions that do not always support his final argument. Green does not utilize sources such as Byron Good and Paul Farmer and instead mentions Murdock’s older and more criticized work from 1959, Africa: Its Peoples and Their Culture History (qtd. in Kendall 2000). Kendall looked at Green’s work as lacking a discussion of behavior as it results from his etiology categories (a gap which I fill by utilizing other authors) and also sees short comings in lack of information from areas Green has spent most of his time researching such as traditional healers. Kendall ends his critique by saying that Green’s work is “...a claim of efficacy built on the similarity of indigenous contagion theory to germ theory rather than on its therapeutic effect or its likely effect on policies and program. (630)” I seek to utilize a variety of other sources in my research to bridge the gaps that Kendall has seen in Green’s book but feel that his arguments on categorization of illness are still, for the most part, valid.
the person unclean or impure. Lastly, environmental dangers refer to illnesses that are seen as being carried on the wind or air (like foul wind). This category of environmental dangers is a subcategory or parallel with the category of naturalistic in that illnesses from the environment are also considered natural when assessed with Lee and Konadu’s ideas of emic categorization.

While looking through literature on witchcraft, I came across several sources that seemed to suggest that personalistic was the primary etiology system in indigenous African communities. David Owusu (1983) in his discussion of early 19th century Muslim amulet making quotes Arab polymath, Ibn Khaldun when he says, “It should be known that no intelligent person doubts the existence of sorcery, because of the influence...which sorcery exercises...” (1983:104). However, I also found several sources that had a different opinion.

Kwasi Konadu (2008) argues that personalistic etiology is over-utilized within health analysis. Several other earlier anthropologists have also made this suggestion such as Dennis Warren (1988) in his research of biomedical and indigenous African health delivery systems, Eva Gillies (1976), and G.P. Murdock (1980) in his world survey of theories of illness. Pool (1994) and Foster (1983) both sit on the opposite side declaring that witchcraft is interwoven inexorably within African cultures. My research, through literature and conversation with locals, suggests that people in Djindji may function in a way more similar to those communities described by Konadu, Warren, Gillies and Murdock.

Susan Rasmussen’s (2000) *Parallel and Divergent Landscapes: Cultural Encounters in the Ethnographic Space of Tuareg Medicine* was especially relevant to me. She states, “There is need for a new lens through which to examine the medical needs and viewpoints of local residents, one that responds to current concerns of indigenous critique and local voice
in representation, thereby giving local residents greater empowerment in ethnography and policy formulation in their own health care systems.” (2000: 244). I utilized this sentiment in two different ways. First, I assert that the etiology systems mainly utilized in Djindji are naturalistic and spiritualistic rather than personalistic. Imposing the ideas of personalistic etiology on their community when I collected no evidence towards it would be taking away the very empowerment Rasmussen encourages. Secondly, I seek to maintain empowerment of the community in my attempts at emphasizing when I refer to emic versus etic perspectives. Without this addition, information from etic perspectives can easily be misrepresented as local knowledge.

As it was my goal to properly represent the community, it was important when considering health to also look at religion since for them, much of health is spiritual and influenced by Allah. Not only are the two things intimately entwined, but early scholars such as E. E. Evans-Pritchard reinforced its usefulness. Evans-Pritchard notes that the importance of studying small scale religion cannot be overlooked. In his 1965 book *Theories of Primitive Religion*, he points to theories from Hobbes and Durkheim all the way to Darwin and Freud that have been influenced by observations of these small-scale religions (1965:1).

The study on religion and magic is vast, ranging from early studies by Frazer (1890), Malinowski (1954), Wax and Wax (1963), and Goody (1961). The discussion on the purpose of religion and magic suggests that they may be seen as keys to control aspects of life that are generally considered uncontrollable. Magic can be applied to assist with general everyday life challenges and to give individuals more power over the world around them. Since health is one of the least controllable realms of life, especially in a village where water quality and
sanitation may be sparse (Novak, 2014), health's essential role in survival and its consequent fragility have placed it in great need of magical influence.

Magic and the religious aspects of health in Djindji are strongly influenced by those who are trained to create the gris-gris amulets. Marabouts have been recorded in history as being active in villages as early as the 1600s. They also had an active presence in revolts against slave-trading within traditional aristocracy from 1673 through 1677. As a result, the continued importance of the marabout in today’s society is not so surprising. While they may no longer be seen in active revolts, their religious importance has not diminished. The marabout is often defined as an expert in esoteric knowledge which may be of use in several different societal tasks and researchers such as Sabina Perrino (2002) have described them as a type of intermediary between their followers and Allah.

Within Djindji, the marabout is seen mostly as the creator of gris-gris. I looked through several books that discussed gris-gris in a search for information on how it was used with children but was unable to discover any references to young people. Toby Green's (2009) *Meeting the Invisible Man: Secrets and Magic in West Africa* follows the author's journey to find a gris-gris that can make its owner impenetrable. Simmons (1971) book looks at different categories of gris-gris and their potential uses. Gemmeke’s (2009) work only discusses gris-gris as one of several different types of esoteric knowledge. Seybold (2002) comes the closest to referencing children with her discussion of gris-gris and its use when working to counteract infertility.

In Madge’s (1998) work on therapeutic landscapes, her research into gris-gris, termed by her as jujus, although lacking discussion of youth does supports my own argument. Madge looks at jujus as mostly a preventative magic. She states that the amulets are often
created to prevent bad luck, due to spirits and witchcraft, or may be objects used to keep luck in football games. Other uses she records may be for severe or long-term illness or psychological problems. Similar to my results, Madge also stated that she saw no decline in the use of this medicine.

Other authors have spent more time considering the types of Islamic esoteric knowledge of which gris-gris is included. Examples of categories that I did not see utilized in Djindji include the practice of istikhara - dream interpretations, khalwah - prayer sessions, and khatt ar-raml - divination sessions (Gemmeke 2009). Others categorized distinct types of gris-gris by purpose such as William Simmons (1971). Each category may also include a variety of different materials which make up the amulet such as the skin of a black cat or the horn of a goat. Of his categories only sisila, sunkutukedyow, and nambo are utilized in Djindji.

- **Baladan** is worn by men and protects from iron.
- **Balakantaran** are any amulets containing words that protect the wearer's body from harm.
- **Bamburan** is worn only by male wrestlers and wards off predators when traveling at night.
- **Boindiran** is also often worn by wrestlers and causes their opponent to fall.
- **Bouloudoun** amulets are worn to take away fear and have the secondary result of making others unable to deny a request to borrow money.
- **Daridyaran** is an amulet that causes the wearer, which can be either man or woman, to be liked by everyone.
- **Dibi dibi** becomes effective when the wearer writes down his desires onto the amulet at midnight. He can then turn invisible to steal the item from another.
- **Katume** amulets are ones containing names. Names can be listed for a variety of reasons. For example, the name could be of a person the wearer would like to go mad or someone the elders should elect him to council.
- **Mankane** protects from potential attackers. If someone attacks the wearer of this amulet, they will fall down and be unable to get back up.
- **Matyana or kabala** is an amulet most often worn by pregnant women to ease pregnancy ills. It also protects against metal, knives, and witches.
- **Nambo** causes to wearer to become important.
- *Nembah* makes others unable to call the wearer a liar as any accuser will die within five days.
- *Orto* is a death dealing amulet where one writes down the name of their victim.
- *Patyutayana* is used by men and is a stick carved with a message that is then used to clean teeth. Anything the man says afterwards will be believed and applauded.
- *Pudike* is often used by a man to make sure his woman will be faithful, but also refers to any amulet made with a goat's horn.
- *Safe kanafa* allows the wearer to become important, feared, and respected.
- *Sisila* is worn by men or women and serves to protect the body.
- *Sitikun* is used by robbers who can take whatever they want, the victim being unable to awake until they have gone.
- *Sunkutukedyow* amulets make the wearer very likable and when used by peddlers, makes everyone buy his wares.
- *Tamadan* is worn on the heads of women and often serves only as decoration.
- *Tuso* protects the owner from being accused of crimes as well as from snake bites.
- *Wolo wolo* makes everyone like the wearer and pushes away people with evil intentions.

The discussion of gris-gris throughout time is valuable and shows important insights into their purpose. Yet without the combined information gleaned through medical anthropology, magic, witchcraft, religion, and regional studies, it's importance will make little sense. Utilization of extensive literature was essential to bolster and help me clarify the importance of the data that I collected while on site in Senegal.
The Region

Senegal is located on the coastal edge of West Africa in the Sahel region, which spans from Senegal and Mauritania in the west to the east coast in Eritrea and the Sudan. The country lies in a transitional zone between the formidable Sahara Desert in the north and the region of humid savannas to the south.

![Map of Senegal and location of the focus community Djindji](image)

Most individuals in Senegal can speak the national language of French as well as their own cultural dialect, and 94% Senegalese are Muslim (Poushter 2016). Senegal may have a majority religion, but culturally it is still very diverse. Ethnic groups in the country are differentiated by their language so groups that are culturally Diakhanke speak Diakhanke. I was not able to find a statistic for the percentage of Diakhanke that reside within the region of Kedougou where the Diakhanke village, Djindji; my focus village, is located. Kedougou is both a region and a town within the same region and as such I will specify when I am referring to the region rather than the town. The ethnic group of Pular makes up 41% of the region of Kedougou's cultural population, Malinke accounts for 24%, and Wolof makes up
1.4% of Kedougou. The latter accounts for the majority of the total population of Senegal at 43.3% (Blanas, 2008). The other 33.6% of Kedougou’s population is made up of a variety of smaller ethnic groups.

One example of these smaller ethnic groups is the Bassari, neighbors to the Diakhanke of Djindji, who make up the village of Petit-Oubadji where several of my interviews took place. The Bassari are one of the few Christian groups since only 5% of Senegal is Christian. The Bassari living in Petit-Oubadji currently have a functioning dispensary. Not only is this the closest dispensary to Djindji, but it is also the type of facility that individuals in Djindji wish to have. I was able to observe Petit-Oubadji’s dispensary and speak with local community members to see how its presence had influenced their lives and health.

Senegal is also one of the poorest and most environmentally damaged places on Earth and is characterized by irregular rainfalls and land degradation. It is a country challenged by population growth, lack of environmental policies and poorly placed development priorities (Essoungou 2013). Eighty percent of the land is now degraded, and extreme weather events are expected to increase as global climate change continues. This is an alarming concept since the Sahel has already suffered over twenty years of severe drought between 1970 and 1993 (Essoungou 2013).

Since 45% of the Sahel’s Gross Domestic Product (GDP) comes from agriculture, a fragile ecosystem can be devastating. Unsurprisingly, economies have taken a hit. The semi-arid region already relies heavily on only three to four months of rainfall every year and their struggle intensifies with their dependence on external inputs of seed and fertilizer. Rounding out the issue is a lack of access to markets due to poor road systems and the threat of
continued impact on the agricultural industry as climate change worsens. I saw this for myself as farmers lamented no longer knowing when to plant. In Kedougou, the rainy season has gotten later and later, and it is not uncommon for a heavy rain to prompt planting, only for a dry spell to kill their efforts.

**Djindji**

The approximately 140 members of Djindji are Diakhanke, an Islamized group with Soninke origins (Hunter 1975). This region of Kedougou separates its ethnic groups based on their language and, as such, people in Djindji speak Diakhanke (also known as Diahanke, Diakkanke, Dyakanke, Jahanque, Jahonque, or Jaxanka). This is considered a dialect of Malinke with a lexical similarity of 75%, making the two dialects relatively traversable. While this makes the two languages similar, they are still different enough that the Diakhanke and Malinke are considered to be two distinct ethnic groups by those that make up the groups. The two groups discuss each other as having distinct cultural traits in contrast to each other. As of 2006, in Senegal, there were 422,000 people who considered their main language to be Malinke, while the number of Diakhanke speakers was estimated around 500 (the larger portion numbering 29,000 are located in Guinea) (Ethnologue: Languages of the World, Nineteenth edition).

Older texts that mention the Diakhanke label them as traders moving throughout West Africa (Curtin 1971); however, research from Hunter (1976) and Ngom (2004) argue that they were sedentary. Both texts agree that the Diakhanke focused on farming and teaching Muslim practices wherever they resided. When they settled in locations occupied by indigenous non-Islamic African communities they found purpose as Islamic educated individuals able to serve as educators or marabout. Communities who appreciated the
concepts of magic and religion adopted the amulets crafted by the Diakhanke’s Muslim medicine men in order to gain a piece of “control” over the uncontrollable aspects of their lives. By providing amulets for those traditional African villages they settled in, the Diakhanke were also able to earn a valuable income (Hunter 1976).

Cross-cultural interaction has not ceased in modern times; however, studies in 2004 showed that the market for kola nuts, a nut that is often consumed by Diakhanke cultural groups, has become closed. The sale and production of the kola now seems to have been limited to their own cultural group. This change has created a less interactive environment for the Diakhanke and caused them to be more linguistically stagnant than the northern, central, and western regions of Senegal who have, in large, transitioned to urban dialects of Wolof (Ngom 2004).

Today, most families in Djindji are supported by farming and make extra income from gold mining during the dry seasons of the year. Both mothers and fathers participate in these activities and children often stop going to school at young ages in order to help. Those who mine are constantly at risk of waterborne and infectious diseases and may end up suffering from mercury poisoning because they hand stir the mercury in water to separate the gold from the soil. About fifteen years ago, before the boom in gold mining, Kedougou, the region in which Djindji is located, was barely recognized as its own region. Now the city of Kedougou supports a population of around 75,000.

With the growing population has come greater interest from outside organizations like World Vision, the development and advocacy organization. World Vision helps start up dispensaries for communities that are interested. Villages send volunteers to medical centers where they provide a six-month training on medications and signs to watch for that indicate

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4 (Interviewee #29. 2016. Interview with World Visions head of health programs by the author. June 17)
severe health issues. If the town can construct their own building in which to house the dispensary, World Vision will then provide the initial batch of medicine for communities. Once the first batch of medicine has been sold, the trained volunteer running the dispensary will then use the money from sales to purchase the replacement medicine, thus creating a functioning dispensary within the village.

Unfortunately, this increase in population has yet to lead to improvement in the larger struggles with infrastructure. Even if a family can afford to pay for Western medicine it is often exceedingly difficult, if not impossible during the rainy season, for individuals from Djindji to make it to Kedougou. The roads are rough dirt tracks that cut through the hilly savanna. Only motorcycles are currently affordable for the small community and even these are sometimes unable to traverse the "roads".

In a similar manner, access to water can be scarce. Many times, while I was in Senegal, we had to rely heavily on filters to remove dirt from the water we had scraped up from the very bottom of the wells. At one point, the village of Djindji did have a water pump, but it has been broken for quite some time and no one knows how to fix it. In addition to the bad roads and the poor access to water, there is almost non-existent cell phone service. In the event that dispensaries suddenly need to transport someone to a larger hospital, they often do not have access to their own car and are unable to call anyone else who might help to deliver the patient.

**Medical Access/Need**

Data for Senegal shows health as being an essentially lacking area in terms of trained professionals and resources. It is listed as at high risk for infectious diseases and a total of
16.8% of children under the age of five are malnourished. In 2008, researcher Demetri Blanas interviewed a doctor who stated that the hospital in Kedougou housed only twenty-nine beds, five doctors, and forty other personnel. Consequently, it was only able to serve one seventh of the district’s population and often excluded those living in rural, isolated villages (Blanas 2008).

Individuals throughout Djindji have repeatedly told me that they would like to utilize more Western medicine in their village. This does not discount the possibility that they would still rely heavily on the two different types of indigenous medicines, traditional medicine and gris-gris, if Western medicine does increase. It is likely that indigenous medicines will also remain to resolve issues such as yellow fever that must be cured with traditional medicine.

The use of gris-gris is not likely to decrease because it serves as a protective medicine and is not something you can simply go get at the local pharmacy. Unlike gris-gris, traditional medicine serves to heal similar ailments as Western medicine thus placing the two in competition. Should Western medicine continue to increase in its level of accessibility, further research will have to be done to see if competition produces an exclusion of traditional. It is likely that indigenous medicines will remain to resolve issues such as yellow fever that must be cured with traditional medicine.

Even while people told me they would prefer to use Western medicine; this statement was qualified with the question of whether they could afford it and get to it. Due to this lack of access, both types of indigenous medicines were still in use. Lack of infrastructure has been recorded by many researchers looking at health systems in Africa such as Nyamongo (1999) in discussing malaria drug classification in Kenya, Wiseman et al (2008) who

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observed malaria treatment in the Gambia, and Madge (1998) who also researched treatments in the Gambia. Each of these anthropologists noted that lack of access prevented increased use in Western medicines and led to more use of indigenous medicines.

The use of gris-gris is different from traditional medicines in part by the fact that it requires a specialist to make. The marabout, a traditional African Muslim medicine man, uses the power of the Qur’an. By harnessing its words through prayer, he may imbue a piece of paper or water with healing, protection or good luck. This amulet is known as a gris-gris. Multiple marabouts work throughout Djindji as experts trained through apprenticeship in the healing arts to create a variety of different amulets. Gris-Gris can be sought by individuals for many different purposes such as for luck or to find true love. They can also be used to ward off migraines or stomach pains.

When Western medicine is accessible, it can currently be obtained through services offered at three different levels: the national level, the regional level, and the district level. Since the national health ministry is located in Dakar, a minimum fourteen-hour bus ride away, people in Kedougou reserve it for issues they feel cannot be resolved by local specialists and this is only if they can afford the hospital and travel. People may make this trip because the Kedougou hospital advises them to get the help of a specialists rather than a general practitioner.

The health ministry oversees the regional and district levels within the system. The regional level includes ten subdivisions called medical regions, all of which include at least one hospital. These regions are then further divided into health centers, health posts and the smallest units called health huts, which can be represented as small medical dispensaries.
Kedougou is located within the medical region of Tambacounda. As of 2008, there was one health center, sixteen health posts, and many dispensaries (Blanas 2008: 29).

World Vision works in tandem with the government to create the volunteer training and is a backbone for the dispensaries. The communities that I spoke with thought that the government in Kedougou needed to help them get more access to health resources in the larger city of Kedougou through the addition of resources such as roads but seemed to be relatively unaware of the relationship between World Vision and the government. Interviewees who discussed World Vision spoke of it as a helpful resource that had been providing occasional health training on basic topics such as the proper use and importance of bed nets.

**Religious Processes of the Diakhanke**

My observations of health and illness in Djindji often circled around to a discussion on religion. Until the arrival of Western medicine, the two main sources of healing came from the marabout and traditional medicines such as herbs. The marabout is a religious healing specialist who is Islamic trained. His role is essential in the community, in part because healing in small-scale societies is often seen as inseparable from religion (Parle 2003).

Many books are dedicated to the discussion of precolonial and colonial Senegal and its Muslim influences. The presence of Islam started as early as the eleventh century after Muslim traders and missionaries from North Africa influenced War Jabi, the Tekrur Tukulor ruler to convert (Gellar 1995). It is now the main religion for over 90% of the population (Ngom 2004: 96) and serves a prominent role in medicine. In fact, most Senegalese consider
the Qur’an to be the “authoritative and comprehensive book of medical knowledge.” (Perrino 2002: 227).

The importance of the Islamic religion is especially true in Djindji where a health issue is seen as the will of Allah. Any healing is thus also the will of Allah and individuals often wear their amulets with the hope that it will keep them in His goodwill and healthy. Marabouts’ knowledge about how to create the amulets for this protection is also gained via knowledge of Qur’anic prayers. Because of these deeply ingrained beliefs, it is important to touch on how religion functions, specifically as it interacts with health and illness.

Religion at its core has immense social and psychological power. While it is difficult to define the complex process that religion is, a working definition for the context of my paper helps present some of the fundamental ways it may shape and interact with the everyday life of people in Djindji. By laying out the key aspects of a religion, we can also better know what actions might be influenced by religion.

For the purpose of this paper, I define religion as: a system of belief in the power of the natural and/or spiritual world that creates a guideline for a social community and an explanation for natural phenomenon and events. This definition pulls from definitions created by Malinowski (1954), Durkheim’s research in the 1910’s (2012) and Geertz (1973) in its use of functionalism but expands on the importance of religion within the community.

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6 Anthropologists have tried to define religion via a variety of different approaches including analytical, functionalist, and essentialist definitions (Stein and Stein 2011). Ninian Smart’s analytical definition included the six different dimensions of religion: institutional, narrative, ritual, social, ethical, and experiential. Functionalist definitions such as Geertz explain religion as “A system of symbols which acts to establish powerful, pervasive, and long-lasting moods and motivations in men by formulating conceptions of a general order of existence and clothing these conceptions with such an aura of factuality that the moods and motivations seem uniquely realistic.” (1973). Earlier scholar such as Emile Durkheim (2012) discussed the importance of observing the simplest of religions in order to understand the underlying functions. Durkheim emphasized the eminently social aspects of religion and defined it by saying: “A religion is a unified system of beliefs and practices relative to sacred things, that is to say, things set apart and forbidden—beliefs and practices which unite into one single moral community called a Church, all those who adhere to them. (47)” Essentialist definitions were used by anthropologists such as Melford Spiro who focused on animistic aspects by defining...
The concept of guidelines is important for my argument since many of these guidelines are created to keep people healthy. Like culture in general, religion is something learned from those around you. It helps teach you the ways in which you must act to exist successfully within the social body. Being part of a religious group also requires an individual to act in cohesion with the group. This cohesion produces a society that works together to promote wellbeing in the community and wellbeing is dependent heavily on health. Lastly, I feel that it is important to involve elements of functionalism since religion often serves the purpose of answering universal questions. In the case of my research, when questions about sickness are unanswered by general knowledge, they can be addressed with the religious concept that Allah controls health.

As I have discussed before, the majority of people in Djindji are Muslim. They must, however, be categorized as distinctly West African Muslim due to the unique combination of indigenous African practices that have melded with those of traditional Islam. Like most Muslim communities, people in Djindji pray several times a day; first at five a.m., then again at two, four, six, and nine. Even when someone is sick, that person is still expected to pray. If one cannot physically go to the mosque then they will fill a bowl with dirt and lift the bowl to their head in order to symbolize bowing their head to the ground. To see the more significant differences between the community of Djindji’s West African religion and standard Islam, we will first look at the marabout.

As I have implied, the presence of the marabout is essential to the culture in Djindji. To the people of this region, the marabout is considered a type of medicine man. Sabina Perrino (2002) describes them as the person who connects followers to Allah. Multiple

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religion as an “institution consisting of culturally patterned interactions with culturally postulated superhuman beings.” (1966)
marabouts work throughout Djindji as experts trained as an expert in esoteric knowledge of different skill sets through apprenticeship, allowing them to create gris-gris with a multitude of different purposes.

The marabout is not a year-round religious enforcer. Most of them also work as farmers, Arabic educators, or even in the gold mines of Kedougou. They only create gris-gris when they are hired to do so. A marabout’s level of power will vary solely based upon which skills they are taught during their apprenticeship. Some individuals know healing rituals that others do not. In addition to this variation, marabouts gain reputation in villages through the successful application of their skills.

Marabouts may also deal with spirits. One should seek their help when suffering spirit sickness, known locally as “sentani diangaro.” This sickness is characterized by abnormal behavior such as disorientation and acting crazily. Villagers talk about it in terms of a spirit disrupting the body and causing unbalance in the soul. One villager described the symptoms as an internal feeling of fear or craziness (in which you talk like a child) that accompanies sickness. You may also know that you have contracted the sickness if you suddenly become unconscious or dizzy and fall to the ground. No matter how it is contracted, the sickness they described was spiritualistic. Its cause was natural in the environment and not brought on by a person’s ill will, thus making it spiritualistic rather than personalistic.

To heal spirit sickness, the marabout can “smoke them”. This process involves burning a chicken feather and engulfing the sick person in the smoke. Another possible cure involves the marabout speaking from the Qur’an and spitting on the sick individual while massaging their head or by more simply having them wash their bodies with water that

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7 (Interviewee #32. 2016. Interview with a Diakhanke woman by the author. July 7)
prayer paper has been soaked in. Some marabouts have the skills to help with just gris-gris, but this is a less common skill.

A marabout is an interesting combination of Islam and indigenous African religion. He works with the Qur’an and with amulets that are generally identified as magical in etic definitions. Nathaniel Murrell’s work *Afro-Caribbean Religions: An Introduction to Their Historical, Cultural, and Sacred Traditions* talks in depth about the interaction of religious cultures. This concept of “blending different religious elements into an undifferentiated religion” (Murrell 2009:71) is known as syncretism. While Murrell looks specifically into forced changes that occur during colonization, the ebb and flow of different religions within Senegal via migration across Africa still reflects the integration of practices, specifically the addition of the marabout who is an indigenous medicine man yet also an Islamic specialist.

**Defining Keys to Well-being**

Since we know that religion can often be used as a guide to community action, it is interesting to see the ways that daily actions of people in Djindji might be influenced by the Diakhanke religious background. While talking with members of the community, I was told several times that there were rules on when children and pregnant women were allowed to roam outside of the village. This regulation comes from the indigenous side of their practices and is a safety precaution against spirit sickness (*sentani diangaro*). This guideline was created to keep the spirit safe, especially those of children.

According to parents in Djindji, children should not roam past the boundaries of their home at the hottest time of the day (one to two pm) and at dusk (seven to eight pm) because they are more likely to encounter the spirits who cause spirit sickness. From my etic perspective, I saw this as a way to keep the children closer to their parents at the time of day
when it would be easiest to get heat stroke and at a time when it would be easy for them to become lost or victim of a predator. Depending on how young they are, children may also need to wear protective gris-gris to prevent a gust of wind (foul wind) blowing by and being inhaled to cause spirit sickness or dust being stirred up by a nightjar and causing a coughing sickness. This idea is prompted by their belief that all sickness can be prevented by Allah's good will, so the added amulet may offer protection from everyday risks of encountering spirits as if creating a religious barrier around the fragile child.

A pregnant woman is also expected to abide by these rules to keep her baby safe. Unlike in Western culture, where the mother is believed to be a protective barrier between the baby and the outside environment, here the unborn child is just as susceptible to danger as those out in the world. Pregnant women are also expected to never enter the Gambia River naked since spirits are heavily present. The direct contact of the water on the mother’s skin allows the spirits easier access to the mother’s body and puts the child at risk. Women stated bluntly that whatever rules the children followed, they must also follow when pregnant.

While these rules may not be viewed specifically by the Diakhanke in Djindji as religious, they are connected by the fact that the sicknesses they aim to prevent are warded off by religious protection. These traditions, engrained in the everyday life of Djindji’s community, have created a regulation that serves to protect the individuals who are most fragile. Individuals from the common farmer to those trained in Western medicine all agreed that it was the pregnant women and children who are more susceptible to illness, even while the introduction of Western medicine has made a positive impact on their fragility. Statistics from 2013 back up this local knowledge as the under-five mortality rate for children in the
region of Kedougou was estimated at 154 deaths per 1,000 live births, the highest rate in Senegal (Ndiaye et al. 2013).

The available information on Djindji as a village is limited, but by looking for literature on related studies, the knowledge base can be expanded. There are texts that pertain to the Diakhanke cultural group’s history and movement across Africa which indicate that they may have been a strong component in the spread of Islam. Multiple works about Islam and marabouts in addition to background studies on magic, witchcraft, religion, and medical anthropology allude to the complex systems of etiology that exist. When combined with data, collected over the course of my study, the implications of Djindji’s naturalistic and spiritualistic systems can be better understood for their roles within the processes of community health.
CHAPTER 3. DIAGNOSIS AND INTEGRATION

Throughout my analysis of health and illness in Djindji, I was able to take a good look at how individuals interact with disease. In response to my inquiries, people suggested a tendency towards specific types of disease etiology used in everyday life, specifically naturalistic and spiritualistic. By describing the causes that were laid out for me through multiple interviews, I may compare local diagnosis with Western diagnosis and determine certain aspects of their behavior that are linked to health. These factors in turn, support the categories of etiology in which I place their illnesses. Lastly, I will assert through my discussion of this causative system why people in Djindji expressed a desire for Western medicine even though Western diagnosis does not seem easily obtainable in the region.

Diagnosis

Anytime I heard that someone had been to the doctor recently, I would inquire about his or her diagnosis. One day we were able to gather a group of women under a meager awning of shade with the hope of discussing pregnancy.8 I talked to the women one by one and asked if they had been to the doctors when they were pregnant. Four out of five had been so I asked them why they went. “For the baby’s health,” they told me. They said that the doctors gave them the red pills to help their blood. “Do they mean prenatal vitamins?” I asked my interpreter, Johnny, who was nodding his head before I even finished the question. He told me that it was a vitamin, but that the women just thought it was for your blood because it was red. “Do they ever ask what their pills are for?” I wanted to know. Johnny conferred with the women and shook his head this time, “No.”

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8 (Interviewees #22-26. 2016. Interview with Diakhanke women by the author. June 12)
I then asked the women if they had ever lost any children. Only two said they had, but when I asked if they knew why, they both shook their heads. It struck me that none of them looked sad. It seemed to me like it was just a thing that happened, with no reason to question the doctors about its cause. I did not dig into the lack of emotional response at the time but discussed it with Dr. Pruetz since she has been involved with the community on and off for over sixteen years. She expressed that there are many reasons why people may not have presented outward sorrow; however, it was very possible that what I saw may have just been a reluctance to show emotion. She had seen that the display of sorrow is allowed in the region only on the day of death when the surviving family can be heard wailing in the village but doing so after this day is frowned on.

On a different day, Johnny and I were sitting with a 43-year old woman who had been suffering from fever and dizziness for over a year. She said she had been given some medication and was feeling better now. I asked what the doctor had said was wrong with her and was not even given a shrug. “She says she does not know,” Johnny told me. She would simply return to the doctor every ten days if the problem had not gotten better. My knee-jerk reaction was to be angry; how could the doctor not tell her what was wrong? Yet looking back at the woman, she did not look angry. I asked Johnny if it was common for people to not get a diagnosis. “Oh yes,” he replied. If the answer was not malaria, then they did not know.

There are several different ways that this problem of diagnosis was viewed by the community. The first way was directly represented to me by the people in Djindji, who said that they felt like it was a shortcoming of the doctors. A lack of education provided to the hospital staff and no money for complex tests left them unable to give a diagnosis. Instead,

9 (Interviewee #8. 2016. Interview with a Diakhanke woman by the author. June 4)
people were given generic medications and told to return ten days later to see if anything had changed. This same practice of trial and error diagnosis was noted by Collocott (1923:137) and Poltorak’s (2013) work in Tonga also observes how the indigenous community feels as if they struggle to obtain diagnosis.

My research also suggested that this issue of shortcoming could also be influenced strongly by resources. Dimitri Blanas (2008) showed that the number of doctors in the hospital totaled five and that they were only able to service one seventh of the Kedougou districts population. This number certainly has grown since Blanas’s visit and the number of support staff that I saw assisting while I was there totaled more than 30. As I was unable to pursue through the entire facility, this is my own estimate.

I experienced some of the issues revolving around diagnosis myself following several nasty fevers and dramatic blistering that appeared on my back. Johnny took a day off and delivered me to the hospital where we waited in line outside to purchase a 1000 CFA ticket (Figure 3-1). Inside the walls of the compound there were many buildings, which all had open doors and free air flow. We entered the first building to our left and were greeted by a waiting room of hard square benches (Figure 3-2) and an exuberant swarm of flies.

![Figure 3-1: A ticket to the Kedougou hospital](image1)

![Figure 3-2: The lobby of the hospital in Kedougou](image2)
There was no paper to sign letting the doctors know when I got in nor did anyone ask for my medical history. I cannot say if this was just because the system worked that way or if there was simply not enough time with the sheer number of patients. Instead, Johnny had to stand by the doctors’ offices, waiting to jump forward and declare that I should be seen next. We showed the doctor my back and I explained my symptoms: fevers, night sweats, insomnia, and an ache in my spine that made me long for a chiropractor. I inquired many times what they thought the issue was but could not pull a solid answer from the doctor. Finally, I was given some skin antibiotics and tested for malaria which came back negative. I was sent on my way with the instructions to return if it was not better by the time I had gone through all the antibiotic pills. Having seen the number of people waiting in the “lobby” I suspected that this could have been a result of lack of time for the small number of staff.

Over the next couple days, I showed my back (which you can see in Figure 3-3) to our neighbor in Fongoli, a Fongoli Savanah Chimpanzee Project (FSCP) worker from Kedougou and a friend from Djindji, none of whom needed to hear my symptoms to tell me what my problem was. The locals were sure that I had *gimbil yalkima* meaning ‘the spider walked on you.’ It clearly was not an unknown issue to the region. I was told that I would be sick for a full week with fevers and that the heat would bother me. They said that the blistering on my back would leave scars, but for the most part, I just had to wait out the actual sickness. This is exactly how my illness played out. I left Senegal with no sign of a Western diagnosis, but immediately after

*Figure 3-3: The physical symptoms of gambil yalkima (shingles)*
discussing the symptoms and showing a picture to my travel doctor in America, I was informed that I had shingles. It seemed to me as if the local diagnosis was far more helpful than the doctor in Kedougou and in fact was perhaps the local way of comprehending shingles. This was not unique to just the Diakhanke since those that diagnosed me were all from different ethnic groups.

After returning home to Iowa, I had a video chat with Johnny and another villager from Djindji to follow up on some questions that I had. Out of curiosity, I asked if he viewed *gimbil yalkima* as actually caused by a spider walking on you. Johnny listened to the man’s answer and told me that it was indeed caused by a spider, but that it was a spider urinating on you that would leave blisters along your skin. The three of us enjoyed a laugh at my involuntary “eww” before continuing with the interview. Since in America we see shingles as the adult version of the virus that causes chicken pox, I was curious to see if they knew of chicken pox. I was assured that they did have the childhood virus. In fact, Johnny had never had it as a child, but he had gotten it a couple months after my departure and had needed to travel to Dakar to get medical help, as adult chicken pox is extremely dangerous.

In discussing diagnosis with a highly Western-educated Pular (another ethnic group) individual and other international visitors from America, I was given the second opinion for why people had no diagnosis. People in Djindji simply did not ask for them. Considering this, I altered the wording of my questions to inquire specifically if my interviewees ever asked the doctor for diagnosis when they visited the hospital. In two out of three people, the answer was no. I would argue that the reason for this is multifaceted. First, experience has shown them that more often than not, the hospital will have no answer for them. A lack of trust in doctors’ capabilities throughout Kedougou seems to be a common sentiment. This

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10 (Interviewee #36. 2017. Interview with a Diakhanke man by the author. May 19)
could, again, also be because there are so many patients and not enough doctors so medical professionals discourage asking.

It is curious that Western medicine is so desired when there seems to be so many issues surrounding diagnosis. I would argue that the Diakhanke of Djindji trust enough in their own diagnosis that they do not feel a strong need to push more for the Western explanation. They have herbs that care for everything from parasites to erectile dysfunction. It stands to reason then, that they can go to the doctor and tell them they have a certain issue and ask for the proper medication. Rather than just going to the doctor for a rash on their back, they may go to the doctor and tell him or her that they are suffering from *gimbil yalkima*. It is also possible that the most common issues that that they seek help for are not things that they think need diagnosis.

When I asked what issues people normally had, they often responded headaches, stomach pain, toothaches and malaria. These problems can be resolved, at least temporarily, by common pain medicines or antibiotics. The people in Djindji seemed more interested in obtaining those Western Medicines that they had already experienced to be effective. They also were aware of which medicines they were not interested in, such as medication for yellow fever. They were adamant that the Western cure for this illness would kill you, an observation also noted by Madge (1998). The use of *Tirbo, Mohoyiro, yellow nette (Parkia biglobosa)* fruit or peanut leaves is believed to cure yellow fever, but the results were said to vary from person to person. The technique then would be to go through all of the options until one worked for you: a trial and error system.

The Diakhanke I spoke to knew of yellow fever as something that happened in combination with other illness. It was important to first take care of the yellow fever itself
with traditional medicine before going to the hospital for help with whatever the secondary illness was. Since the yellow fever vaccine has been used rather successfully throughout the area going from a mortality rate of .4 per 100,000 people in 1995 to .1 in 2013,¹¹ this view of yellow fever has become somewhat less discussed but remains in conversations mainly due to the importance it once held. In fact, the last report on yellow fever in Kedougou from the World Health Organization came in 2011.¹² It consisted of three confirmed cases in which all patients ended up fully recovered following Western treatment. Even while the three cases were resolved, yellow fever remains one of the only diseases left other than those attributed to spirit sickness that locals still mention as outside of the realm of Western medicine.

The community may also be more likely to trust the diagnosis of the marabout than the doctor. Poltorak (2013) talks about how three main components of indigenous medical treatment; the scientific evidence of ending or preventing disease, the empirical experiential evidence of achieving desired effects and the management of sickness or the possibility of sickness. Poltorak argues that rather than address the former components, Western trained professionals focus only on the biomedical efficacy.

Researcher Sabina Perrino (2002) spent time analyzing the discussions between the marabout and their patients. She established that the key to their practice is intimacy. It is this relationship of intimacy between the marabout and the patient that makes the transfer of healing power possible. “I show that the multimodal textuality in the encounter is best understood in light not only of the general position of serins [Wolof for marabout] as privileged spiritual intermediaries but also of meta discourses about healing that emphasize the need for healer/patient intimacy.” (Perrino 2002: 227). This intimacy was evident to me

¹¹ http://global-disease-burden.healthgrove.com/l/14316/Yellow-Fever-in-Senegal
throughout my interviews and through my own experiences interacting with a Djindji marabout.

**Etiology**

Further reasoning for their easy integration of Western medicine revealed itself slowly through multiple interviews. The way that the community views the cause of their illness can have a large impact on the way that they look for diagnosis because categories of etiology shape behaviors. As Susan Rasmussen points out, using only the categories of personalistic and naturalistic as crafted by anthropologists like George Foster (1976), may cause a broad simplification that results in a lack of understanding, (243) especially as it pertains to such complex situations as health. Following her lead, I am adding an additional category to the main two.

George Foster’s discussion of disease etiologies in non-Western medical systems places systems of causation into two categories. These two categories are personalistic and naturalistic. Authors such as Helaine K. Minkus (1980), Bakare (2009), and Kwasi Konadu (2008) have discussed an additional category of preternatural or spiritual etiology. Even though these are systems of causality, they can conventionally be used to discuss all other associated behaviors (Foster, 1976). As such, they provide an explanation for why people will avoid certain risky situations or look for a specific type of plant to make into tea.

I feel that it is important to note that while I make broad categorizations, they are not all encompassing. Etiology categories serve etic purposes and are not as easily qualified in emic terms. Over-use of these categories is often criticized as ‘old anthropology’ (Kendall

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13 I chose to use the term spiritual rather than preternatural as many researchers such as Bakare (2009) tend to lump preternatural into a category with supernatural. This distinction is important as my goal is to show the relationship between the spiritual causes and cures of sickness that result from spirits.
which causes anthropologists to overlook the actual ways that communities view causality (Konadu 2008). The categories of etiology that I will refer to through the rest of the thesis are loose constructs but help to interpret the systems of the Diakhanke. In practice, however, these systems and the way that they are viewed by the people of Djindji are more flexible.

Naturalistic etiology corresponds to those illnesses caused by nature or natural factors. Personalistic involves a person, intentionally or unintentionally, causing your sickness, such as when someone gives you the evil eye and causes you to become ill. Spiritualistic etiology involves illnesses that are both caused and treated by the spiritual and are generally seen as just as threatening as ordinary or bodily illness (Minkus 1980). This illness is not caused by an active person, but rather by something spiritual that defies simple explanations. In Djindji, I saw both naturalistic and spiritualistic etiologies commonly used. While these two systems seem to be predominant, this does not discount the presence of personalistic etiology as a representation of health, historically or today.

My goal is not to disprove the presence of witchcraft within Djindji. The arguments that I make within my thesis on the grounds of etiology are important in that they help to show health-seeking behaviors associated with the cause of illness. The causes of illness that I saw and were explained to me during my stay in Senegal were reflective of natural and spiritual systems which produce specific behaviors. Many anthropologists have argued that witchcraft is essential in explanations of health in rural, indigenous Africa such as Foster (1983) and anthropologist Robert Pool (1994) who goes as far as to say that “in the final instance, everything boils down to witchcraft” (1994:12). Because of these notions, it is essential to address why I do not adhere to the same ideas about etiology. The following
arguments are provided with the intention of showing why the personalistic etiology system may not be as important within Djindji.

There are several reasons why personalistic causality might not be prominent within the community. In fact, many anthropologists have argued that witchcraft has been overused to explain health and healing in indigenous communities including Dennis Warren (1988) in his research of biomedical and indigenous African health delivery systems, Eva Gillies (1976), G.P. Murdock (1980) in his world survey of theories of illness, Edward Green (1999) and Kwasi Konadu (2008) who states that there is “[a] distinction between two sites of knowledge production—field of medical anthropology and the “field” of Africa where fieldwork is conducted–on the larger canvas of global health issues. Such a distinction revealed “witchcraft” was more ubiquitous in the anthropological literature than in the “field” of Africa” (60) a sentiment that others such as Abdullahi (2011) and Conwill (2012) have shared.

Researcher Edward Green (1999), argues within his work that he has found most major diseases such as malaria, tuberculosis, schistosomiasis, cholera, amoebic dysentery, AIDS, typhoid, and acute respiratory infections like pneumonia, yellow fever, leprosy, and dengue to often be understood naturalistically and impersonally (1999). This means that when someone contracts one of the afore-mentioned issues, they do not point a finger at an angry neighbor and say that they caused them to be stung by an infected mosquito or encounter an unclean needle. My experience talking with the people in Djindji leads me to side with Warren, Gillies, Murdock, Konadu and Green in this debate.

I would also argue that it is also possible that the adoption of ecclesiastical religious beliefs may have taken the place of some witchcraft beliefs over time. Previously, I defined
religion as a system of belief in the power of the natural and/or spiritual world, which creates a guideline for a social community and an explanation for natural phenomenon and events. Conversely, witchcraft is most commonly seen as an ability to will harm unto another person via a supernatural power from within a villainous person (Stein and Stein 2011). At a basic level, these two things seem unrelated. However, if we look at Evans-Pritchard’s work with the Azande we can find a list of functions that witchcraft serves in indigenous societies. These include providing an explanation for the unexplainable, providing a guide of appropriate cultural actions for times of misfortune and providing a moral guide (1937). These needs could potentially be met with the Islamic practice.

The first function, providing an explanation for the unexplainable, can be discussed by looking again at spirit sickness. This sickness is one that can be contracted at any time in almost any setting and is often diagnosed via its symptoms of dizziness, crazy talk, and the sensation of fear when sick. It could be seen, in etic terms, as the cause behind almost all sickness that is not seen to have natural causes. Mike Poltorak (2013) also observed this tendency in his research saying that “Illnesses that are poorly explained by the hospital or that result in death without adequate explanation are frequently defined as fakamahaki. This refers to a sickness caused by spirits…” (280). At no time was this sickness ever attributed to an actual person. Instead, it helps to explain why someone is sick while someone else is not. It is also cured with assistance from the religious specialist once more pointing to its integration into religion.

Evans-Pritchard’s second function of witchcraft is that it provides a guide of appropriate cultural action for times of misfortune. The natural spirits of the forest are not just seen as the cause for illness but can also lead to other problems in the community.
During one interview, it was explained to me that spirits could also cause forest fires. He told me a story about how a spirit had caused a fire to break out in the forest near one of his previous villages. It had crept into the village, but not caused too much damage. He told me that they had not realized how close they were to an area full of spirits and the community had abandoned the destroyed area in favor of a safer location. They made sure to check for the spirits in the next location they settled in. This is done by planting fantahono seed (seen in figure 3-4) through the desired area. If the plant grows then they know that the area is safe. Not only does this protect them from spirits, but it also helps indicate areas of land that will be fertile enough for them to prosper in since spirits do not let the crops grow.

Lastly, Evans-Pritchard states that witchcraft provides a moral guide in the community. Religion serves this same purpose in for individuals in Djindji where the Qur’an is said to be the guide of behavior. Because Allah has complete power over health at the end of the day, one should constantly work to seek his good grace to be protected from contracting illness. Gris-gris helps in this instance because it allows you to wear Qur’anic prayers on you, made extra powerful with the prayers of the marabout, at every hour of the day. If you perform an act within the community that is viewed as unacceptable, it is Allah that will punish or protect you.

The Islamic religion and the use of the Qur’an as the center of ritual life has been increasing since it was first introduced into Senegal during the eleventh century (Gellar 14)

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14 (Interviewee #36. 2017. Interview with a Diakhanke man by the author. May 19)
The syncretism of the two religious cultures does not guarantee that any particular traits will push out others. However, these are potential explanations for why I did not witness personalistic etiology during my visit. It must also be noted that I spoke with people during my stay specifically about why they wanted a dispensary and that my role as ‘a Western student looking at health’ may have had an influence on their responses. I cannot discount the possibility that previous medical professionals in the area have discouraged the practice of witchcraft; however, the community was very open about other practices which may have been just as denigrated by the same individuals. I also presented questions about witchcraft to both individuals who had been around Western professionals for years and those who had very little contact, thus hoping to avoid preconceived notions of the information I wanted to obtain through my interviews.

It may also be the case that naturalistic ideologies have offered a more appealing system than personalistic for diagnosis and resolving illness. Naturalistic etiology is impersonal and systematic in that there is no physical person causing the disease. Instead, in this system, complications with your health result from natural forces. This might be as simple as being subjected to heat or wind and often involves an imbalance in the elements of the body. In the case of gimbil yalkima, the natural act of a spider urinating on my skin was seen as having caused an imbalance leading to the trail of red blistered skin. It was not suggested that someone caused the spider to choose me. The spider, as an element of nature, has its own agency.

For example, an elderly man, who was unsure of his age but thought he might be in his late 50s, was chatting with me one afternoon while we snacked on mangos.\(^\text{15}\) I was asking him about some of the different health issues that he had faced in his life. It was quite clear to

\(^{15}\) (Interviewee #13. 2016. Interview with a Bassari man by the author. June 7)
me by the milky color of one eye that he had some vision issues. I did not need to prompt him about his eyesight; however, as he brought it up with a mention of loving honey. He nonchalantly explained that he was blind in one eye because he had tried to take some honey and had been stung in the eye by a bee. With a shrug, he added that he thought the stinger was probably still in it. He understood that he had caused the problem by aggravating the bee and saw it as a natural risk of his actions.

In Djindji, individuals process the concept of germs and how they make you sick. They are not unique in using naturalistic etiology. In fact, all societies have naturalistic tendencies. All societies know that if your hand slips with a sharp object you can cut yourself. A gash does not simply open magically upon your arm. Here, witchcraft would serve the purpose of, not explaining what internally makes someone sick, but rather why one person got sick when the other did not. If two people were both stung by mosquitos and one got malaria while the other did not, the explanation for the difference could be found by showing that a witch had sent them the evil eye, whether on purpose or not. Again, this need to explain the unexplainable is met by religion.

In Djindji, when you ask why someone got sick, you are told that everything is Allah’s will. This phrase was repeated over and over again when I asked if people could will illness onto others and represents one of the ways that spiritual etiology is understood. During my follow-up interview with Johnny and a villager from Djindji I asked if you could ever get sick because someone was angry with you. I was told, “If someone is sick, they always say it is Allah. If the illness is caused by spirits, it is still Allah because no one can do anything. People can just get illness in the forest because if Allah is not okay with something, it happens.” He then went on to say that “Even if you seek healing, you may not get better if
Allah is not oaky with it. This spiritual view of health shows that the person with power to influence your health at the end of the day is Allah. Keeping His power surrounding you in the form of gris-gris amulets is one of the best ways to prevent yourself from falling victim to spiritual or natural forces.

Sarah O’Neill’s (2015) foul wind and spirits research considers the ways that malaria is diagnosed in the Senegambia for Muslim groups that are culturally similar to the Diakhanke. According to O’Neill, spirits (Jinne) can cause sickness through something called foul wind. O’Neill also makes a distinction between spirits and witchcraft as her interviewees also considered spirits to be non-human entities. According to her research:

\[ \text{Jinne} \text{ are said to be invisible to humans under ‘normal’ circumstances and do no harm although some ‘bad’ Jinne can afflict human beings, causing aggressive behaviour, ‘madness’ and mental illness, sickness or death by ‘attacking’ a person through ‘wind’ or in ‘unsafe’ places in the bush. Jinne are commonly believed to dwell in trees in the bush and attack specifically vulnerable people, e.g., pregnant women walking through their territory. However, a Jinne may attack anywhere and no place is completely safe (2015:4-5).} \]

I heard of wind causing sickness many times and adults understood it as a common cause of spirit sickness that could attack at any time of the day in the form of warm or cool air. While this type of foul wind can be contracted by children, is different from the dirty wind that many mothers say is caused by animals. Many local mothers described the dirty wind that impacted babies as being caused by a pennant-winged nightjar, a local species of bird, which would stir up dust when startled from its nest. The children would then breath the dust into their lungs. Mothers understood this as a risk to the child’s breathing and often talked about how it caused a coughing sickness, but it was never expressed as an illness caused by preternatural or supernatural forces and is different from spirit sickness.

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16 (Interviewee #37. 2017. Interview with a Diakhanke man by the author. May 19)
Wind illness represents an environmental cause of illness because it can be seen through cause and effect. When someone Breathes in unclean air, air full of dust or air that is abnormal temperatures, they are likely to get sick whether from spirit sickness or coughing sickness. Green also mentions more than one community, the Bambara of Mali and Bemba of Zambia, who have a category of wind sickness that results from inhalation of foul wind. Green establishes this type of sickness as naturalistic due to fact that the populations both view the elements that cause the illness as ones existing in the physical environment (1999:14).

Foul and dirty winds are just some of the common issues that can impact a young child in Djindji. Gris-gris amulets not only protect from contracting spirit sickness after inhaling foul winds, they also protect in an all-encompassing shielding way. Spiritual protection is similar to a forcefield that surrounds the child and makes it more resilient to the risks of spiritual and natural illness.

Here is where the categories or naturalistic and spiritualistic start to blend in Djindji. Again, I’ll use spirit sickness as the example. This sickness can strike at any time. It can come in the middle of night during a nightmare, breathing in foul wind or more commonly when you are walking through the forest. The spirit that affects you is not that of a dead ancestor or the ghost of your neighbor. It is not an entity, nor does it have an actual body, yet if you are not protected from it by gris-gris or by carrying a fantahono seed in your pocket as a backup form of protection, you could become sick. This sickness is not sent to you by another person wishing you harm, instead the spirit that affects you exists naturally.

Spirit sickness is viewed through spiritualistic etiology; however, it is also naturalistic. To show this, Dorothy Lee’s (1952) “Religious Perspectives in Anthropology”
and Konadu’s (2008) work on Akan medicine are both helpful. Lee and Konadu both argue that we often become so focused on ideas of the supernatural that we separate anything unknown into the supernatural category even when it may not be a distinction made by the community. Spirits in the forest are not seen as a supernatural force in Djindji because they are viewed as natural. Spirits are a part of the environment and as such, they are a natural cause of sickness. Spiritual and naturalistic etiology are thus, entwined.

The Importance of Experience for Determining Behavior

In Djindji, the community’s systems of etiology taboos help to explain the cause of illness, but also explain some of the behaviors of the Diakhanke that live there. One is their system of diagnosis and the other is techniques involved in preventative measures. Preventative measures for diseases focus around taboos. This means that you avoid placing yourself in certain situations or areas that could be home to spirits.

Again, the idea is presented that children and pregnant women are most in need of preventative measures. I heard one mention of men saying that it was important to be careful with women when you are young because there are some that can make you sick if you sleep with them. In addition to this warning to not sleep around, men were also advised to carry the fantahono seeds, a type of natural gris-gris substitute for protection against spirits, when hunting in the woods to protect from spirits. These two protective measures were the main restrictions on male behavior to keep them healthy. I was never told of any restrictions on non-pregnant women’s behaviors possibly because women do not hunt in the community and are generally home performing the household chores.

17 (Interviewee #34. 2016. Interview with a Diakhanke man by the author. July 11)
The one exception I found to this was a village-wide taboo. Earlier I discussed the fire that resulted when the fields next to a village were not properly checked for spirits, a process done with fantanhono seeds. The large pink seeds would be planted all over the potential farming or living area. If they grew, then the area was free of spirits. If you did not check for spirits and tried to live on land infested with spirits, then your family would suffer and none of your children would survive as a result of spirit sickness. The same test with fantanhono seeds was important for assessing farming ground. This would allow the farmer to know if the ground was fertile.

Children, however, are given restrictions on what time they are allowed to roam and are told not to venture too far into the wooded areas. One mother reiterated this importance through a story of her child becoming lost in the woods. At the time, they had been living in a different village with more forest around it. Ignoring the rules as children often do, her boy was playing in among the trees. She did not tell me how long they had searched for him or what they suspected had become of him. I asked her if she ever found out what happened to him. With little emotion, she told me that a week later the dog had returned with his head. These experiences have shaped the ways in which people establish what is allowed. Those things that are considered taboos are things that can end up killing you.

What is distinct about diagnosis within naturalistic etiology is that it operates on a basis of experience. Foster (1976) discusses how in naturalistic societies, the diagnosis comes from the patient or members of the family rather than from the curer. This knowledge results from watching others with similar issues and establishing what the similar factors might be. This is, in part, why I received a very short list of health problems from the Diakhanke in

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18 (Interviewee #31, 2016. Interview with a Diakhanke woman by the author. July 7)
19 (Interviewee #7, 2016. Interview with a Diakhanke woman by the author. June 3)
Djindji. The most common answers were head pain, stomach pain, toothaches, and malaria. In our Western etiology, we see these problems as having a variety of internal causes, but the Diakhanke see them as having the same solution leading them to all appear as similar issues. They have seen that most of the different pains can be dealt with by Western painkillers. With traditional medicine, they have three or four different solutions that one must experiment with to find the superior one for their body. These are most often herbs that are boiled and consumed as a tea.

The tendency to diagnose on experience is common in Djindji since its people do not receive diagnosis from the Western medical services and feel secure in relying on their own local diagnosis. It is likely that this behavior is also supported by the perception that Western medical professionals are undereducated. The idea of diagnosis now seems to be either desensitized or absent for the people of Djindji. It is possible that this could change if conversation were to increase between the doctors and the community.

Discussing naturalistic and spiritualistic etiology not only gives us the answer to questions about diagnosis but can also shed light on the integration of Western medicine in this indigenous community. The people in Djindji still have the knowledge to diagnose and treat illnesses with traditional medicines, yet very few interviewees said they still use them. I believe that it is due to the people of Djindji’s tradition as an experience-based, heavily naturalistic etiology that effective Western systems have been able to integrate with relative ease. Individuals seek out cures that have been effective for others. A similar case can also be seen by which marabout someone may seek. Again, the person who has greater success with healing is more sought after. There is no yellow book where you can see ratings for the
different marabout, but people are always willing to share information about which marabout worked for them.

During my time in Djindji, I spoke with a father of six who adamantly shook his head when I inquired whether he was afraid of spirit sickness. He elaborated by telling me a story. A year ago, his son had become very sick with what others said was spirit sickness. Not long after, a friend from Europe approached him with concern. According to his friend, the child had malaria. Eventually, they went to the doctor and his son became better within hours. He recalled his friend telling him that in France, they did not have spirit sickness. The deliriousness and “crazy” that the Diakhanke in Djindji saw as a symptom of spirit sickness was just what happens when one takes too long to go the doctor.

For the Senegalese father, this was a concrete example that prompted him to be a believer in the power of Western medicine to heal and is a valuable example of how experiences of success and effective medicines can influence perspectives on illness. He followed up this conversation by telling me that he no longer believed in spirit sickness. His experience of healing prompted him to see a naturalistic cause rather than a spiritual cause in his sons’ sickness. It is likely that the father still utilizes spiritual etiology for other aspects of health in his life; however, this experience demonstrates how the etiological processes have helped excel the acceptance of new types of healing.

My interviews in Djindji revealed that the community there wants access to effective Western medicines, specifically those that work as general pain killers or have shown to be effective for others. Because Western medicine often offers a quick turnaround time for healing and has repeatedly cured common illnesses such as malaria, its introduction into the community has been relatively easy. Discussions of diagnosis and the causes of illness have

20 (Interviewee #33. 2016. Interview with a Diakhanke male by the author. July 9)
also revealed that the Diakhanke in Djindji rely heavily on two dominant types of etiology, spiritual and natural. Spiritual etiology is reflected in illnesses caused by a non-person, non-malicious spirit that can be encountered most often in the forest. Naturalistic etiology can be seen in illnesses contracted through inhaling dust or not cleaning wounds. It is also present in spiritualistic etiology as the spirit that causes sickness is understood to be a natural part of the environment. While these systems may not be all encompassing and are etic categories, they provide useful explanations for different health-seeking behaviors in the community.
CHAPTER 4. THE ROLES OF TRADITIONAL MEDICINE AND GRIS-GRIS: ADULTS VS. CHILDREN

Both types of indigenous medicine, traditional medicine and gris-gris, are still being used in Djindji. The use of gris-gris by the community was represented as a preventative medicine while traditional was used for general ailments. This chapter will explain what aspects of each type of medicine are still in use, who they are used for, and what the changes (or lack of) mean about health in the community.

Usage Patterns for Medicine

Magic has often been viewed as a way to control aspects of life that are normally considered uncontrollable. Using this concept, I can assert the reasoning behind why the role of traditional medicine has changed so drastically within the community while gris-gris has not. A reiteration on Novak (2014) and Malinowski (1954) reminds us that health is viewed as both essential for survival and as a fragile realm commonly considered uncontrollable thus increasing the need for magical influence.

When I asked individuals throughout Djindji if they used traditional medicine, the answer was often “only a little” or “not at all.” A clear majority of interviewees told me that they only used traditional medicine when they could not afford Western medicine or because they would not be able to make it to the hospital. I would assert that for the people in Djindji, the use of traditional medicines has become a form of placation until Western medicine can be obtained. This was the case for all the main types of illnesses they recognized in adults: stomach pain, head pain, and tooth pain, with the exception of yellow fever. They have
experienced greater success in pain reduction with the use of things like the antibiotic amoxicillin and the pain/fever medication paracetamol than with the traditional boiled herbs.

When I spoke to the midwife in Djindji, I inquired what specific medicines she thought they needed to have access to within the village to improve health and was given the following list of items including their uses.21

- Amoxicillin (antibiotic)
- Paracetamol (pain meds) - adults take a pill while children take a liquid. *this is also used to take down a fever.*
- El fason (stomach) - also okay for pregnant women and children
- Ibuprofen (pain med)
- Iron (red pills of iron supplements for pregnant women)
- Afrairgon (for eyes - baby medicine)
- Chiffon (dysentery - safe for kids)
- Coarteme (the brand name of a malaria curative they use)
- Vermox (for stomach worms - pill for the adults and liquid for the kids)
- Vitamin C
- Bandages
- Pomade (a thick cream that is applied to wounds so bandages will not stick to them)
- Betadine and alcohol (cleaning wounds)

When people have no access to the above-mentioned medications in the village or at the hospital in Kedougou, they mentioned several local types of plants that could be used. For example, when suffering from headaches, you can wash your head with water from boiled mango leaves.22 The following is a list of some other general plants and their uses. They are listed by their local names.

- *Batiyo* leaves – leaves wrapped around your head for a headache.
- *Diabakatang Ke* leaves – boiled and drank for stomach aches and issues with eating (you cannot eat much)
- *Kankananno* leaves – leaves crushed into a powder and put in water to be drank for coughing
- *Kounkou Sita* bark – boiled with *Keno* bark for use with migraines (you can add sugar to this as it is very bitter)

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21 (Interviewee #19. 2016. Interview with a Diakhanke midwife by the author. June 9)
22 (Interviewee #12. 2016. Interview with a Diakhanke man by the author. June 7)
- *Koutoufingo* leaves – boiled and drank for general health
- *Santanno* baby leaves – placed in water and drank this when it hurts to pee
- *Se* bark – placed in water and drank for coughing
- *Sindiano* roots – placed in water and drank without boiling before the rainy season to prevent parasites
- *Tounsouma* leaves - crushed and put in water to be drank for diarrhea
- *Wolinno* grass seeds – boiled and drank every morning for problems making love (erectile dysfunction)

Generally, the consensus was that health throughout the Kedougou area has improved. Education programs run by the NGO (non-governmental organization) World Vision in partnership with the local government have changed the concept of what it takes to be healthy. While the concept of being clean has been passed down from generation to generation, World Vision has continued to push this point through a process they call “sensitizing” in which they teach people about the risks associated in certain behaviors.\(^{23}\)

Community members emphasized the importance of washing hands and keeping clean water around the house. They told me that it was important for children to wear shoes when they were walking through the forest and that bed nets helped prevent malaria. I was told that they did recognize the consequences of germs, which helped them know if illnesses should be addressed by a marabout or a Western doctor. For example, anything that was caused by parasites, like diarrhea, would clearly need to be addressed by Western doctors. For the most part, however, they speak of the concept in more simple terms: dirty equals sick and thus remaining clean would ward off ills.

**Gris-gris**

Since conversations with locals pointed to a disappearing interest in traditional medicine, I was curious why the use of gris-gris had not changed as drastically, specifically

\(^{23}\) (Interviewee #29. 2016. Interview with World Visions head of health programs by the author. June 17)
within the realm of child health. It helps to first know that to the people of Djindji, these two things are different forms of health care. Traditional medicine is a home remedy while gris-gris is obtained by a specialist.

Gris-gris in Djindji is a tool for two main purposes: luck and health protection. Marabouts that I spoke to told me about requests for magic that would help them find their soul mate, make their significant other madly in love with them, drive more people to come to their shops and spend more money, to give them luck when looking for gold, or to make them smarter in school. These are all areas of chance or for the community, things that they know the power of the Qur’an is sure to have more power over than the sheer will of man. The marabout that I interviewed was not worried about his practice. He did not feel that the addition of Western medicine would decrease the need for gris-gris. I see this as a result of its place in healing, which is preventative. Western medicine does not compete with gris-gris. In fact, the marabout felt that they would be able to work easily in cooperation with the new system. He expressed happiness that there would be somewhere else that people could go if traditional medicine or gris-gris did not help them.

The people of Djindji use two of three different types of prescriptions, Qur’anic amulets and Qur’anic waters referred to collectively in the village as gris-gris. The third type, referred to as sada, involves an offering that is recommended by the marabout in order to resolve disputes and malintent, often widely termed as witchcraft. Author William Simmons recorded the presence of sada healing among marabouts of the Badyaranke cultural group in Senegal (1971); however, I did not see this particular prescription in use during my stay.

Looking specifically at Qur’anic amulets, there are an additional twenty-two different subcategories that Simmons defines. Only four are widely used within Kedougou and

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24 (Interviewee #10. 2016. Interview with a Diakhanke marabout by the author. June 4)
Djindji: *sisila, sunkutukedyow, wolo*, and *nambo* (1971:57-59). Both *sisila* and *wolo* can be worn by men and women while the other two are seen to be worn just by men. *Sisila* appears to be the most common in that they are worn around the neck and used to protect the body from harm. This is the type of amulet that is most often seen around the necks of children in Djindji; however, Simmons does not acknowledge the use of gris-gris for the young. The last three types of amulets are used to make the wearer likable or improve their importance. *Sunkutukedyow* was the use I saw most often, as it works for peddlers to motivate people to buy their wares. I often saw these dangling from the doorways of small corner shops as you see in figure 4-1 taken in Kedougou on June 22, 2016.

The amulet in figure 4-1 is the non-pouched paper that has been prayed upon and includes a series of written verses from the Qur’an. To better protect the gris-gris from the environment, it is very common to take the paper to a tailor who specializes in protective leather gris-gris pouches. Since gris-gris production is so important to the people of Djindji, I was curious to see the process in action. I met with one of the local marabout and asked if they would make the amulets for individuals who are not Muslims.

I was told that it was acceptable for people of other religions to obtain gris-gris and, in fact, Johnny who is a Christian, had several made for his family in the past. The marabout asked me what I would like one for, suggesting one for love and saying with a sly smile that it would keep any boy smitten with me. I told him I was interested in one for general health.
He asked if I ever had any reoccurring illnesses and what my everyday life was like, saying that knowing me better would make the gris-gris more effective.

Only a few days later, I was told that the marabout had my gris-gris ready for me. He showed me the paper where the prayers were written and told me that he had prayed for my health and for me to be lucky and well-loved in life. He folded the prayer paper into a small square and tied it with string. Even while he had given me no price for the medicine I gave him some money, an amount recommended by my interpreter. While he accepted a small amount, he said that if I felt like the gris-gris worked well for me, I could later send more as thanks to him.

Before I left, the marabout reiterated that the gris-gris must be used in the way he prescribed, or it would not work. He also told me that it may take about ten days to go into effect. While my amulet was to be worn, there were other common ways to use or activate your gris-gris. Some would need to be buried or put in a river. If it was a water gris-gris, you might need to wash your head with it a certain number of times. My gris-gris, being just a simple tool for enhancing my health, was much simpler to use, all I had to do was wear it and believe that it would instill Allah’s good will for it to work. One could argue that I must not have done a good enough job at believing since only a couple weeks later I ended up with shingles.

We had to travel to the market in Kedougou to finish the process and put the paper into a protective leather pouch. Figures 4-2, 4-3, and 4-4 show the transitional stages of a sisila gris-gris made for myself and the finished product of the gris-gris in its leather pouch. This step is not required, but it is recommended if the gris-gris is to be worn since it makes the gris-gris more durable. The gris-gris tailor was experienced in all the different ways to
hang the paper and was careful to make sure that he put the yarn on so that it could be worn in the way the marabout had instructed. The finished product ended up being a lightweight leather square that I was able to wear around my neck and prompted giggles from some young men on the street who jokingly asked me if I was Muslim before walking away. Other than the young men, most people did not seem fazed about my want to obtain my own gris-gris and some even seemed excited about my clear interest in the tradition.

While the item I obtained for myself was a *sísla* style amulet, I also saw the marabout create Qur’anic waters which can be used for the same purposes as the amulets. To create this, the marabout writes the prayers from the Qur’an on a piece of wood and as with the paper, he then prays over it for several days. When finished, the marabout washes the words from the wood and the runoff is bottled to be either drank or used to wash with.

The specific purpose that gris-gris serves in terms of health is that of a preventative medicine. It is not used for individuals who are already sick because people in Djindji do not
see it as a cure. I did not often hear of adults using the amulets for healing and if I did, it was generally in response to migraines. This would not serve as the solution, but rather the key to preventing recurrent migraines in the future, thus falling under the category of sisila by preventing harm to the body. Most often the migraines are treated with Qur’anic waters rather than amulets. The water is used to wash the head, which will cleanse it of any naturalistic infection, mystic contagion or environmental dangers that have caused the issue.

The preventative aspect of the amulet works by including verses from the Qur’an that pertain to its use. The verses may not be connected within the text but are combined from different locations to work towards an end. For example, the following text was translated in Owusu’s (1983) study of protective amulets. While I was not able to obtain any translated texts of amulets in Djindji, the following is a good example of an amulet that could be worn to stabilize pregnancy, which is viewed as a state that makes you as vulnerable as a child.

’O Moses! We shall never believe in thee until we see God manifestly’, But ye were dazed with thunder and lightning even as ye looked on... He it is who shapes you in the womb as He pleases. There is no good but He, The Exalted in Might. (Surat al-Baqara (2) verse 55 and Surat al-’Imran (3) verse 6. (Emphasis mine)

In contrast to health gris-gris for adults, gris-gris on children is not a rare sight. Many families will have an amulet made that is passed down from child to child. Mothers told me that children generally need to wear their gris-gris until they are five or six years old, but that they can give them up as early as three if there is another sibling born who needs it more. These are understood to be a way to keep the child safe from all potential general ills. It was rare for them to come up with a specific problem that they protected the children from, but the few times I did get an answer, it was normally for safety from coughing sickness caused by the dust stirred up by a nightjar (see the applied gris-gris in figure 4-5 and the nightjar in figure 4-6).
The bird that mothers are concerned with is a pennant-winged nightjar, a bird with a double set of wings which stays along the ground until frightened by human presence. As described in the previous chapter, the nightjars flight blows dust and dirt into the air which is inhaled by babies who are being carried in a wrap on their mother's back. Parents in Djindji expressed consistent worry about their children becoming sick from inhaling dust.

Even with the advancements in health throughout Kedougou, gris-gris as a tool for protecting children has remained. Traditional medicines have no role in child health as herbs are considered too potent for children. Even women attempting to become pregnant may shy away from them since, unlike pharmaceuticals, there is no precise dosage, which may lead to damage rather than help (Seybold 2002). Both emic and etic perspectives view the weaker immune systems of pregnant women and children as being more susceptible to illness. It is this same concept that has led to the need for magic.

The change in traditional medicine but lastingness of gris-gris reflects the growing stability of adult health and the lingering worry over the uncontrollable aspect of child health even while the number of issues with sickness such as malaria has decreased according to parents in Djindji. Gris-Gris is most often associated with protecting from illnesses that have a spiritual cause while traditional medicines are utilized more for natural sicknesses. One parent that I spoke to in Djindji talked about how spirit sickness had to be addressed by the
gris-gris and marabout because it was not recognizable by Western trained doctors.\textsuperscript{25} This view was also recognized by Poltorak (2013) who stated that communities who still had indigenous views of health often doubted the doctors’ ability to understand their illness. The mother explained that spirit sickness was invisible and thus no medical test could show it. It is both spiritual and natural, but because it is not an illness caused by a person, intentionally or un-intentionally, it does not fall under the category of personalistic. This understanding of the illness supports the marabout’s idea that Western and indigenous medicines can work together, one treating illnesses that the other cannot.

\textsuperscript{25} (Interviewee # 31. 2016. Interview with a Diakhanke woman by the author. July 7)
CHAPTER 5. IMPEDIMENTS AND TRANSITIONS INTO THE GLOBAL WORLD OF MEDICINE

Within my research, I wanted to look deeper into the question of what the people of Djindji felt was still lacking, in terms of their access to Western medicine, and what was causing those impediments. My interviews with locals in Djindji revealed that they felt that addition of a dispensary in town would strongly increase their health via immediate access; however, they also felt that access to the better resources at the hospital in Kedougou was essential. While issues such as money are likely the biggest impediments to full access of Western medicine in Kedougou, the community emphasized their lack of proper road infrastructure as a large barrier.

The Struggle of Access

Science has quickly been improving our knowledge and skills in terms of Western health and medicine. People across the world have been able to live longer, healthier lives. Consequently, authors like Byron Good argue that it now has become the responsibility of those whose lives have been improved to share this knowledge. Good states:

We face a moral imperative to share that knowledge, to provide public health information to those whose beliefs serve the poor as a basis for healthy behavior, in particular to provide broad public health education for societies with high rates of infant mortality, infectious diseases, and other scourges prominent in populations which have undergone neither the demographic nor educational revolution (1994: 2).

My research into the health of Djindji can shed light on the continuing process of improving global health. Communities like Djindji want to have more integration of effective Western medicines in their villages. I arrived in Djindji knowing only that they had expressed the desire for a dispensary. They saw the dispensary as a way to obtain immediate
access to more effective medicines like paracetamol and malarial curatives. I was curious, however, why the dispensary in town was so important to the people of Djindji when there were already two hospitals in Kedougou and neighboring villages already had dispensaries. The problem that was expressed to me was one of a lack of access to those already established resources.

In the eyes of the people of Djindji, the lack of access to public health care is considered to be a failure of the regional government. They expectantly await the day when money will be allocated into repairing the roads and putting up telephone poles so that they can reach the medical centers and call for transportation in emergencies. In fact, this is not the first time that the state has let down the people of Africa. We can look at Adam Ashforth’s (2004) work on AIDS and witchcraft in South Africa as an especially well-articulated example of the government letting down the community during a health crisis. Ashforth discusses how the disease spread in the 1990s due to the lack of effort put forth by the white National Party government. South Africans lacked trust in the government and discussion of the epidemic was met with speculation. In fact, people felt the promotion of condom use to prevent AIDS was an act to lower the black population and allow whites to continue their domination.

Since AIDS symptoms can take years to manifest, death was not associated with the spread of fluids; instead, Ashforth noted that people in South Africa relied on the concepts of witchcraft to explain why people were dying (Ashforth 2004). In Djindji, a similar scenario has resulted from the lack of state assistance. Rather than blaming illness on witchcraft, illnesses that are not understood are blamed on spirit sickness. If people continue to have experiences similar to the gentleman who took the advice of his French friend, this may
change over time. Until then, however, spirit sickness is still a real danger. When there is no diagnosis for ailments, it falls to the community members to assess the causality of their issues. The disorientation and craziness that the Frenchman attributed to a lack of prompt medical attention have, for years, been attributed to a spirit caused sickness. It is likely that the more times people in Djindji see this sickness cured by Western medicine and explained as malaria, the less issues may be attributed to spirit sickness.

But when it comes to healing illnesses that the Diakhanke acknowledge to be caused by germs, what exactly is preventing that greater level of access to established medical centers? While the people of Djindji face many barriers, one at the front of most people’s minds is the poor condition of the roads. It is certainly not the only issue and even if roads are fixed or bridges are built, it is likely that they will still struggle with the cost of medicines or still see a lack of sufficient numbers of doctors. I chose to focus on the particular issue of roads within my research as one of the many factors since it seemed to be the most common issue that was discussed.

**Roads as an Issue of Access**

Repeatedly I asked the people of Djindji what they needed to help them obtain better their own health. I asked first if they used Western medicine. All interviewees responded yes to some extent. Several told me that they would use Western medicine if they could. When I asked what might stop them from getting it, they would often respond that they simply could not get to it. I was told that roads were the key, not just for those without a town dispensary, but also for those who resided in towns where a dispensary has already been fully established.
Even in the small village of Petit-Oubadji, which already has a Western medical dispensary, I was told about a woman losing her baby on the bumpy roads as she was rushed to the hospital in Kedougou. The volunteer running the dispensary was adamant that child health has improved in the town, but that those mothers who do not come in early enough for regular checkups are still in danger. Unfortunately, he said that this was still common in the community. Over the last year, he had five pregnant women in town. Only two of the babies ended up surviving. He placed the blame on their lack of desire to obtain prenatal checkups, but also felt that had they been able to get to the hospital in Kedougou during complications, the babies may have been saved.

The roads from Petit-Oubadji are not the only bad ones. The route going from Fongoli to Djindji was bad enough that during my stay they took a jackhammer to it in the hopes that they could level it out. Even in a four-wheel drive vehicle, the hill was almost impassible, and Johnny had to delicately maneuver through its bumps in order to get the needed traction. The jackhammer helped, but the road was still a trial. The path is also in need of bridges. The Gambia River and its tributaries swell, taking over the terrain around Kedougou and Djindji during the rainy season and causing the roads to be not only difficult, but impossible to pass.

The World Bank has produced a thorough report on the country's transportation system. The district of Tambacounda, which encompassed Kedougou until recently, has the lowest percentage of paved roads in Senegal, at 18.7% according to data collected from Agence Autonome des Travaux Routiers (AATR) (Figure 5-1). In Figure 5-2, you can see that of the 81.3% of roads that are unpaved, 1.2% are considered to be in good condition while 13.1%, 56.9%, and 28.7% are fair, poor and very poor, respectively.

Often-times individuals simply do not have access to a car. Only 1.49% of rural households own a private car, which is especially important in those location that public transportation would be unlikely to reach. The French organization Direction des Transports Terrestres (DTT), translated in English to the Department of Land Transportation, compiled statistics from 2004 to show that only 1.3% of the country’s cars reside in Tambacounda, with motor vehicles per 1,000 inhabitants totaling 4.8. The map in figure 5-3 is one that I created using ArcMaps to show the motor vehicles per 1000 throughout Senegal. Again, the bottom Southeastern section of the map is where Kedougou is located and is mapped by a red star on the map. The positioning of the roads is from data compiled by Africon with input for the year 2002 from AATR.

<table>
<thead>
<tr>
<th>Road Condition</th>
<th>% Good</th>
<th>% Fair</th>
<th>% Poor</th>
<th>% Very Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Roads</td>
<td>7.5%</td>
<td>28.6%</td>
<td>47.5%</td>
<td>24.4%</td>
</tr>
<tr>
<td>Paved</td>
<td>20.7%</td>
<td>36.4%</td>
<td>27.6%</td>
<td>15.3%</td>
</tr>
<tr>
<td>Unpaved</td>
<td>1.2%</td>
<td>13.1%</td>
<td>56.9%</td>
<td>28.7%</td>
</tr>
</tbody>
</table>

**Figure 5-1:** The proportion of paved roads in Senegal - Kedougou is included in Tambacounda. *Source: AATR*

**Figure 5-2:** Road conditions of Senegal comparing the percent that are good, fair, poor and very poor in paved and unpaved roads. *Source: AATR (following an inspection of over 90% of roads in Senegal)*
Whether or not to the road is in good condition, there is still the question of rural population having access to them. The chart in figure 5-4 was included in the World Bank paper and displays statistics from the Direction de la Prévision et de la Statistique (DPS) on the percentage of rural populations that are within five km of all-season roads. You may notice that the percentage of rural people with access to roads for the four departments is 62.5%.

**Figure 5-4: Rural accessibility to roads in Senegal.** Source: DPS
regions included are at least above 70%. What they fail to mention in this report is that all of the areas listed are geographically close to the highly-populated city of Dakar (see figure 5-5). A report of rural population access that only includes towns close to Dakar seems odd when the vast majority of the rural population resides in the southern regions.

While urbanization has increased over time, this representation of Senegal seems especially misleading for places like Kedougou when compared to statistics from the National Agency of Statistics and Demography in Senegal, which show that only 18.37% of the population lives in urban areas (see figure 5-6). The remaining 81.63% of the population remains settled in the rural areas (2012).
Even if the roads were to be drivable and an individual were to have a vehicle accessible, World Development Report (WDR) indicators from 2002 show that the cost of transportation is already high in the country of Senegal, at 139% the cost of super-unleaded fuel in other low-income countries of Africa and 129% the cost of diesel fuel.

To better comprehend the idea of roads as an impediment to health progress, I used 2015 data from Digital Globe's Human Geography Information Survey (HGIS) available through ArcGIS online. I was able to locate all the hospitals, pharmacies, and clinics in Senegal, which you can see on the map in figure 5-7. I overlaid the hospitals, clinics, and pharmacies over Senegal’s roads to better demonstrate the areas of access. I then created the following map in figure 5-8 with a buffer zone of twenty miles around every medical facility, a distance that would be very unpleasant, if not difficult or impossible, to walk for a sick or pregnant individual.

Figure 5-7: Hospitals, clinics, and pharmacies in Senegal (2015) Map created by the author
Examples like that of the dispensary volunteer in Petit-Oubadji show that having a dispensary in your town does not prevent you from needing access to more sophisticated Western medical facilities like the hospitals in Kedougou. The quality of the roads that lead to those facilities are poor at best and there are very few vehicles to traverse them. The necessary health services are not easily accessed, and most people find themselves hitchhiking or walking the long distances to reach them.

All of life revolves around access to resources. Going to the market to sell food, buying clothes, attending school and the extremely important task of obtaining medical care all rely on accessibility. The village of Djindji is no exception to this. The data shows us clearly that access is an issue and the people in Djindji brought this up in my research consistently as an issue. It may not be an easy issue to fix and the community expressed the
feeling that it is the government of Kedougou who is responsible to fix it. Unfortunately, jackhammering a road can only do so much. Without fixing these fundamental issues with structure, the rural populations of Senegal, like Djindji, are likely to continue struggling to obtain Western medical resources. The issue with roads is compounded upon by the lack of vehicles and available methods of communication. If infrastructure continues to be stagnant in the rural regions, I anticipate Djindji will continue to place emphasis on the desire to gain their own dispensary as a way to provide their families with as much access as possible.
CHAPTER 6. CONCLUSION

Life for the people in Djindji is changing rapidly as the region of Kedougou grows. Parents still face the daily struggle of getting children to wash their hands or drink only clean water, but overall the community’s health has improved and the importance of cleanliness in preventing illness has not decreased. While parents worry that their children do not always follow through on their instructions when out of sight, 2011 National Agency of Statistics and Demography, Senegal (2012) showed that over 50% of households had both soap and water in Kedougou (figure 6-1). Washing hands was the number one thing that parents mentioned teaching in order to help their children become healthier.

Several times during the course of my research I would ask men and women what it meant to be healthy. I was told that “being healthy is the most important because it allows you to do all of the important things and gives you life.” The same mother also told me that you must be clean to be healthy. She clarified that she

![Figure 6-1: The percentage of households in Kedougou that use soap and water, water only, or no cleaning supplies](image)

27 (Interviewee #31. 2016. Interview with a Diakhanke woman by the author. July 7)
stayed healthy by covering food after cooking, washing hands after using the bathroom, and using bed nets to protect from mosquitos. She encouraged her children to be healthy by teaching them the same actions. In addition, she also made sure that they wore shoes when outside and did not eat random fruits when in the forest.

Another mother talked about how she taught the children to be clean by relying on her older children to set a good example.\(^{28}\) She felt this was the best technique as the younger children were unlikely to understand the reasoning behind the acts. For the older kids, she made sure that they knew not to work without shoes and that they should only drink water from home or from sources they knew to be clean.

Even while mothers in the community work hard to teach their kids healthy habits, child health and the health of pregnant mothers continues to be an area of stress on the community. According to the National Agency of Statistics and Demography, Senegal

\[\text{Figure 6-2: 2013-2015 Neonatal, infant, and juvenile mortality rates for children in Senegal}\]

\(^{28}\) (Interviewee #32. 2016. Interview with a Diakhanke woman by the author. July 7)
continue to show infant mortality as an issue. Figure 6-2 shows that the infant mortality rate has lowered from 2013 to 2015 but remains high (2015). It is due to their increased chances of contracting diseases and illness that babies throughout Djindji still wear leather pouches filled with prayers.

Since it is Allah that determines all illness and health, the use of gris-gris allows people to ask for his good will. Specific Qur’anic verses can be chosen for pregnant women to wear that discuss his power in helping growth in the womb and protect their general health. These verses are powerful because they speak of Allah’s power. Combining different relevant verses creates a more powerful amulet but also means that a marabout must first work as an apprentice for many years to excel at this practice.

This preventative gris-gris medicine is combined with a set of rules about when children and pregnant women can wander. This excludes the times of day heat illness may occur, or when darkness increases the chance of becoming lost and prey to predators. Wearing gris-gris and following these rules can also protect from spirit sickness, a sickness of the spirit that is caused by what the locals describe as a nonentity, non-corporeal, spiritual presence.

In Djindji, most issues that people encounter with their health are understood as illnesses that can be contracted within the environment. Spiritual sickness differs slightly in that it is caused by a spirit, but this spirit also exists as part of the natural environment. The illnesses people discussed with me during my time in the community were explained through spiritualistic and naturalistic etiology, the most prominent etiology systems in the community.
Authors like Edward Green (1999), Kwasi Konadu (2008), Dennis Warren (1988), Eva Gillies (1976), and G.P Murdock (1980) have started to move away from the assumption that all indigenous African systems use personalistic etiology. My research in Djindji supports this broadening view of different etiologies in Africa. Their naturalistic and spiritualistic etiology systems have helped shape the way that people are interacting with Western medicine and have allowed adoption of new practices through experience in successful healing.

Before the introduction of Western hospitals in Kedougou, healing mostly depended on gris-gris and traditional medicine. Many people that I interviewed in Djindji said that they no longer preferred to use traditional medicine and that they often reserved it for situations when they could not afford or reach Western medicine. Traditional medicine is also now seen as knowledge kept by the older generation or utilized for unfortunate cases of yellow fever. What was once a common remedy that any mother could produce may be a knowledge lost to the newer generations.

People often told me that if they had a dispensary within Djindji, they would no longer use traditional medicine at all. The volunteer running the dispensary in Petit-Oubadji stated that the introduction of their medical hut had increased the timeliness of seeking cures. With medicine far away, parents often played a waiting game with illness. I did several interviews within Petit-Oubadji because I was curious just how helpful it was to have closer access to medicine. I sat down to talk with a father of four and asked him specifically how he felt him children were impacted. Before, he told me, you just relied on hope. You could not afford medicine and you could not get to it, so you would go to bed and just hope

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29 (Interviewee #21. 2016. Interview with a Bassari health care volunteer by the author. June 9)
30 (Interviewee #15. 2016. Interview with a Bassari man by the author. June 7)
that your child would be better in the morning. Often this resulted in the child’s illness suddenly worsening. This could happen in the middle of the night when there was no way to find access to a vehicle to rush the child to the hospital.

According the dispensary volunteer, health has improved as the wait for medicine has decreased. The father also mentioned the importance of the community in the improvement of children’s health. In his interview, he spoke about how he could potentially rely on familial ties within the village to purchase medicine in desperate situations. If you need to purchase a malaria curative for your child, you could borrow the money from a neighbor unlike if you have traveled all the way to the hospital in Kedougou. This loan can then be paid back later.

To cut down on the need to travel and improve health as the people in Petit-Oubadj have, the community in Djindji is working hard to create a structure that will house their own dispensary. However, one small structure cannot meet all the community’s health needs. Inevitably, visits to the hospital will still be necessary. They have called on the government to help them in this goal by improving the infrastructure of their roads but have seen no result. While the government of Kedougou certainly has many areas in which they would like to improve the region, the people of Djindji told me that they felt like their concerns were not being heard. Even if roads are improved and a dispensary is completed within Djindji, it is still important for those health officials entering the community to properly understand the systems of health that are currently in place. Without taking local perspectives and information into account, we risk repeating failures of the past.

For decades, America and the global North have worked to help improve the health situation in the global South. One early movement toward creating a health
reform was through the Alma Ata declaration of 1978. This declaration pushed for global adoption of primary health care after seeing it successfully implemented by China, Tanzania, Sudan and Venezuela with a resulting benefit for poor rural populations. The Alma Ata Declaration (1978) states:

Primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process.

Unfortunately, this well-intended system failed. Part of this failure has been attributed to developed countries unwillingness to let rural poor communities plan and implement their own health care programs (Hall and Taylor 2003).

Nine years later, African ministers of health sought a new path through the approval of the Bamako Initiative that would, in theory, help increase the effectiveness, efficiency, financial viability and equity of health services throughout Africa. This program would greatly benefit much of the global rural population and would be even more helpful for children of West Africa (UNICEF 1994). Again, there were issues. This initiative failed to help large numbers of individuals who fell through the cracks and would eventually result in financial incompatibility with those same rural populations.

These are just two small examples of how health initiatives have failed to have their intended results. This problem is commonly the result of not properly assessing emic views of the community that needs assistance. As anthropologists such as James Clifford and
Dorothy Lee tell us, it is essential that we represent communities to the best of one’s ability using the knowledge gained via that community. By recognizing that individuals in Djindji have an existing network of health knowledge which relies strongly on naturalistic and spiritual etiologies, we can better help them achieve their own health goals. Looking at the ways in which residents of Djindji feel they are currently struggling to obtain more medical care will lead to the eventual improvement of those very same issues. They see their current health system as uneducated and underfunded. They see dangerous roads with poor access throughout the year.

The village of Djindji is home to a community molded of Muslim and indigenous African culture whose rich history has created a unique environment and people. Perhaps it is due to the outside worlds misconceptions about how the Diakhanke of Djindji view illness that they have been hindered from reaching their goals. Regardless, the people in Djindji feel forgotten in their corner of the savannah. They wait daily for repairs on the infrastructure around them which would lead to vast improvements in their lives. Theirs is a prime example of how we must take the time to comprehend the intricacies of the Diakhankes’ everyday life, from the ways in which they currently heal to the ways their efforts to improve health are being hindered, to better the lives of rural villagers across Africa.
WORKS CITED


Green, Edward C. *Indigenous Theories of Contagious Disease*. Walnut Creek, CA: AltaMira Press, 1999.


Websites


http://www.un.org/millenniumgoals/

http://global-disease-burden.healthgrove.com/l/14316/Yellow-Fever-in-Senegal

