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Tubab in a Land Cruiser: A Study of Maternal Child Health Care in The Gambia From an American Student's Perspective

Jennifer Yates

Introduction

When I decided to enroll in the Gambia Study Tour, I had only stereotypic perceptions of what shape my experience would take. The Africa that I envisioned consisted of a hot sun beating down on land that was populated with lions, elephants, zebras – a real National Geographic photo opportunity. What I found was a hot sun, but we encountered few animals, save the roaming domesticated animals such as goats and cattle. As the "class" involves the writing of this paper, I began considering my topic before leaving the United States. I am a biology and psychology major with aspirations of attending medical school, so I decided to focus on some aspect of the Gambian health care system. Soon after my arrival in the Gambia I narrowed my research topic to a study of the health services provided to women and children, namely antenatal care and family planning. The Gambia has high rates of infant and maternal mortality, as well as one of the highest rates of population growth on the continent, making these two topics very timely. The objective of this study was to provide information and analysis that would be interesting and educational for both Gambians and non-Gambians.

To study health care, I first had to consider the economics and lifestyle of the country as a whole. The Gambia is a developing country possessing few natural resources, with the per capita income averaging $370 and the life expectancy just less than forty years (UNICEF 1995). The population is currently 1.2 million, with a growth rate of 4.1%, which means the number of inhabitants in an area that is comparable in size to Delaware will double in approximately eighteen years. Agriculture is the main occupation of the country, with 70% of the population participating in subsistence farming of grains such as millet and rice, livestock raising, and peanut cultivation. The largest urban area in the country located on the south bank at the mouth of the Gambia River on the coast is home to 40% of the population. The population is made up primarily of five ethnic groups – Mandinko (40%), Fula (19%), Wolof (15%), Jola (10%), and Creoles (1%) (Health Policy 1994-2000).

The first few weeks of the tour consisted of general acclimation, exploration, and lessons in culture and language. We established a "home base" in Bakau, near the capital city of Banjul, and participated in daily excursions that served as an introduction to Gambian life and culture. Of the seven students on the trip, three of us plan to attend medical school, which inspired the numerous trips to hospitals and health centers in the first few weeks. It was these visits that allowed us to gain a better understanding of the structure of health care in the Gambia.

The health care system is composed of three levels: the primary, secondary, and tertiary tiers. Primary health care takes place at a grassroots level and is referred to as the Village Health Services. The health care providers include a Traditional Birth Attendant (TBA) and a trained Village Health Worker (VHW). These providers live and work in the village, participating in government-sponsored training programs. They are supervised by Community Health Nurses (CHNs), who oversee a number of primary health care "circuits". The secondary level of care is the Basic Health Services, which is provided by health care centers and dispensaries. These centers are the first line of referral support for the Village Health Workers and Traditional Birth Attendants. When the VHW or TBA encounters a case that he or she is not trained or equipped to deal with, the patient is referred to the secondary health centers. In the country there are eighteen health centers and thirteen dispensaries. Seven of the eighteen health centers have a small operating theater and maternity ward. The health center serves as the base for the Maternal and Child Health (MCH) services upon which I focused my research. The third tier of medical care is the referral hospitals, of which there are two: Royal Victoria Hospital in Banjul, and Bansang Hospital in Bansang, which is farther inland. The referral hospitals deal with the cases that are too complicated for the health centers (Margaret Grant, personal communication).

Some of the recurrent problems faced by primary health care providers include difficulty in evacuating patients to the referral hospital due to the long distances and lack of vehicles, understaffing and scarce equipment at secondary and tertiary facilities, and the fact that specialist services are found only at RVH (Save the Children Federation, The Gambia Field

Office). Additionally, the country has few Gambian doctors. Less than two dozen physicians are expected to provide health care and also administer the health care system (Grant 1998). The Maternal and Child Health program is taking steps to reduce the problems that result in high infant and maternal mortality rates. Such steps involve training nurses to deal more effectively with at-risk mothers and children, using river ambulances and horse cart ambulances, strengthening a radio communication network, and promoting family planning (Manual for the MCH Services, The Gambia).

From a preliminary literature search, I learned about some of the health problems that face Gambian women. The average number of pregnancies per woman in the country is 6.5. As a result, women experience nearly continuous cycles of pregnancy and lactation. With each pregnancy, the risks of malnutrition and anemia become more of a threat to the health of both mother and child. The leading cause of maternal mortality is post-partum hemorrhage accompanied by severe anemia. In recent years, the maternal mortality rate has declined to 10.5/1000 births (UNICEF 1995) due in great part to the strengthening of the primary health care network. Related to maternal health is the health of infants. The infant mortality rate has declined from 127 deaths/1000 live births to 97 deaths/1000 live births (Health Policy 1994-2000). Other issues that women face include contraceptive options, which are often denied to them by their husbands who desire more children. Finally, one threat to women both at the time of the procedure and later in childbirth is Female Genital Mutilation (FGM), a topic covered in more detail by another student, Laurie Hatcher.

When I chose Maternal and Child Health as my topic to research, I planned to visit various facilities representing various levels of health care and thus gain a better understanding of the system as a whole. Additionally, after speaking with several people associated with the health care system, I decided that I would focus data-gathering efforts on the topic of antenatal (pre-delivery) care. I hoped to draw some conclusions concerning the time when women come in for their first antenatal visit. After determining the time frame of these visits, I planned to gain insight into the reasons behind what I had heard were often delayed visits to the clinic. From interviews I hoped to also explore other women's health issues.

Royal Victoria Hospital, Banjul

Our first introduction to modern Gambian health care took place at Royal Victory Hospital (RVH), which we toured during our first week in the Gambia. The experience was quite a shock to all of us. The exterior of the hospital reveals little: it is a two-story building that winds around and branches off into several wings. My first perception was that of the "hospital smell." American hospitals no longer smell this distinctly, but the odor of chloroform was overwhelmingly evident, even out on the surrounding streets. The smell alone made me uneasy, though I myself was not a patient.

We began our tour in the 24-bed male surgical ward. One gains access to the ward simply by walking through an open doorway. The entire building gives the impression of openness, as the windows are slatted and usually open (in response to the heat), and the floors are cement. There are no private rooms; rather, all 24 of the beds line the periphery of a relatively small room. The beds are metal frame with a mattress and occasional sheets. Family members walk through the ward freely, and the doctor and nurses have a table that serves as the ward station. There is no monitoring equipment, and charts that hang on the ends of the bed often consist of scraps of paper with scribbled diagnoses and notes. We received warm welcomes from the nurses in all of the wards, and they were comfortable sharing diagnoses of each patient with us. Most of the cases that we saw in this ward included appendicitis, ulcers, hernias, and other non-emergencies. The nurse informed us that the beds are always full, and there is usually a long waiting list to be admitted, as the patient must first be referred by the clinic.

We then visited the male medical ward, as well as the female medical and surgical wards, which had similar layouts and procedures. What struck and concerned us most took place in the male medical ward; we were ushered into a small room, and then subsequently hurried out. Once outside, the nurse conducting the tour informed us that we had just viewed the tuberculosis and HIV "isolation" room. A swinging door isolated these cases from the rest of the ward. I have since had a TB test that, surprisingly, came back negative. We were also given access to the women's ward where we saw women with the same conditions, and as we walked through I listened to the chorus of coughs only a few feet away.

After we had visited the male wards, we moved on the the Intensive Care Unit, which takes all critical patients from the other wards. The room was divided into the acute side and the stable side, each having three beds. The acute side lays claim to the only set of monitoring equipment that I saw throughout the tour. The most common cases seen here are road accidents, especially head injuries. The ward that I found most poignant was the pediatrics ward. Though relatively large, the ward gives the impression of being

overcrowded and cramped. Different rooms serve the variety of cases the hospital sees, such as burns and malnutrition. Each room was lined with beds, where it looked as if mothers slept in the beds with the patient (their child) and sometimes even other siblings. Sheets seemed scarce, and playthings or other distractions were nonexistent. Aside from the specialized sub-wards, the largest room was a flurry of activity and noise. There appeared to be little room to sit or walk amongst the beds. The crowd consisted of mothers with their children, some of whom were patients and others their siblings. The nurse informed us that many of the children's cases were malaria. She went on to explain that the numbers of malaria cases increase as the rainy season progresses. There were also cases of malnutrition; nurses fed the children and explained to the mothers how to properly provide supplemental foods to their young children. We visited other wards, labs, and the pharmacy before completing the tour. During the following four weeks we visited various other health care facilities, but none of them struck me the way RVH did, perhaps because of the sheer number of people who are either patients or family members. As we left, I noticed the number of people sitting on the ground outside the hospital, waiting either for admission or the resolution of a family member's illness.

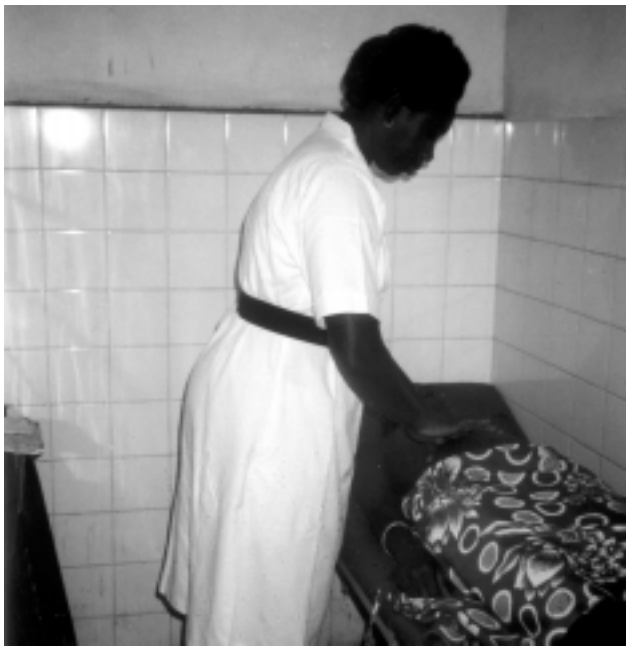
Serrekunda Health Center

Serrekunda Health Center

The second facility that we visited was a health center located in Serrekunda, which is another town in the Greater Banjul urban area, about a ten-minute cab ride from where we were staying. Serrekunda itself is beyond description; the level of activity is overwhelming. The streets – normally packed with cars – are lined with shops and stands and vendors. What room is left in the town is crowded with people walking by foot, weaving their way between the stands and cars. The health center is located off the main street, amongst the countless shouting vendors, and consists of several low buildings. Health care works as follows: hundreds of people arrive every day – mostly women and children – and sit on benches or stand in an area that leads to the screening table.

The screening nurse determines the reason for the visit and either prescribes medicine or treatment, or sends the patient on to see a doctor, which involves another long wait. The waiting area is more or less standing room only, and it is nearly impossible to weave your way from one area to another. The doctor sits at a desk in a small room, calling the patients in one at a time. The simply furnished room consists of a desk for the doctor, an exam table, a bench upon which the patient sits, and a standing screen to shield the examination table. The doctor attempts to ascertain the presenting problem in what seems like two minutes, and subsequently prescribes a drug or laboratory tests. The prescription or lab test is written on a piece of paper and the patient

This nurse works in the Family Planning Clinic of Serrekunda Health Center.

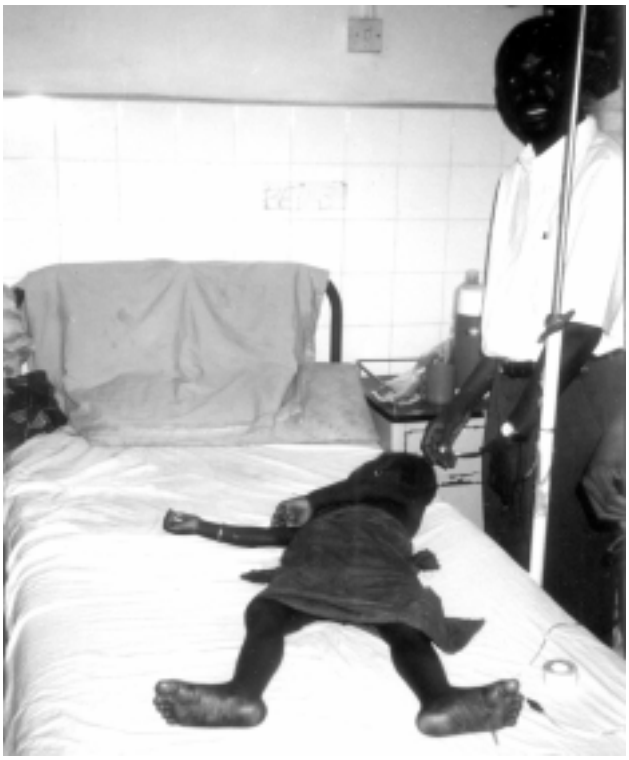


A nurse screens patients, mostly children under the age of five, who present cases ranging from malaria to sore throat.

goes either to the pharmacy or the laboratory area. The doctor rarely has time to conduct an exam.

Kristin, one of the other pre-med students on the trip, and I were able to spend about an hour in the room listening to the rapid-fire explanations of symptoms and subsequent diagnoses. The doctor on duty that particular day (the doctors rotate among the wards) was Dr. Grace, a Nigerian medical officer providing technical assistance to the Gambian health care system. As she speaks English but none of the languages native to the Gambia, there was a serious language barrier that was overcome by a Gambian male nurse who speaks several other languages. At one point he left the room for a phone call, leaving Dr. Grace unassisted; she did not miss a beat, requesting a patient remain after her diagnosis to serve as the interpreter. After only an hour with Dr.Grace, I found this experience beginning to change my view about American health care. Patients waited to see Dr.Grace outside, either sitting on a row of benches if there was room (this is not a health center with comfortable chairs and reading material as we expect here in the States), or seated on the ground in the absence of adequate seating. I do not know exactly how long they wait, but I understand that the procedure can consume an entire day. As one patient leaves, another is called in to sit on yet another bench in this room, and Dr. Grace fires questions about the presenting problem. Most of the patients seen were children, especially those under the age of five. Dr.Grace saw several cases of infants whose mothers had treated the umbilical cord with a traditional remedy, often one containing cow dung. As a result, the cord and surrounding area were becoming infected. It was not hard to see Dr. Grace's frustration as she told the mothers that the traditional remedy is not an appropriate treatment. She informed us that it was not uncommon for infants to present with similar problems. After about two minutes of questions and answers, the patients were sent on their way with the appropriate instructions.

The staff at the center includes three doctors and thirty-three nurses. Only limited procedures – such as malaria testing and urinalysis – are conducted in the lab. The maternity area of the health center has three small rooms with a couple of beds in each room for deliveries. There is no fetal monitoring equipment, and any complications are referred to RVH. The longest a woman is kept following delivery is twenty-four hours. She is often released after six hours due to the demand for the beds. Adjacent to the maternity ward is a sixteen-bed in-patient ward that serves women and children. Like the wards in RVH, all of the beds lacked bed sheets and monitoring equipment. We were told that the most frequently seen cases involve malaria, and during the rainy season there may be two or three children to each bed. The sheer number of people that visit the health center demands that patients be kept only a minimal number of hours or days.



This young malaria patient charmed everyone who passed by her bed.

This nurse performs a routine exam in the Serrekunda antenatal clinic.

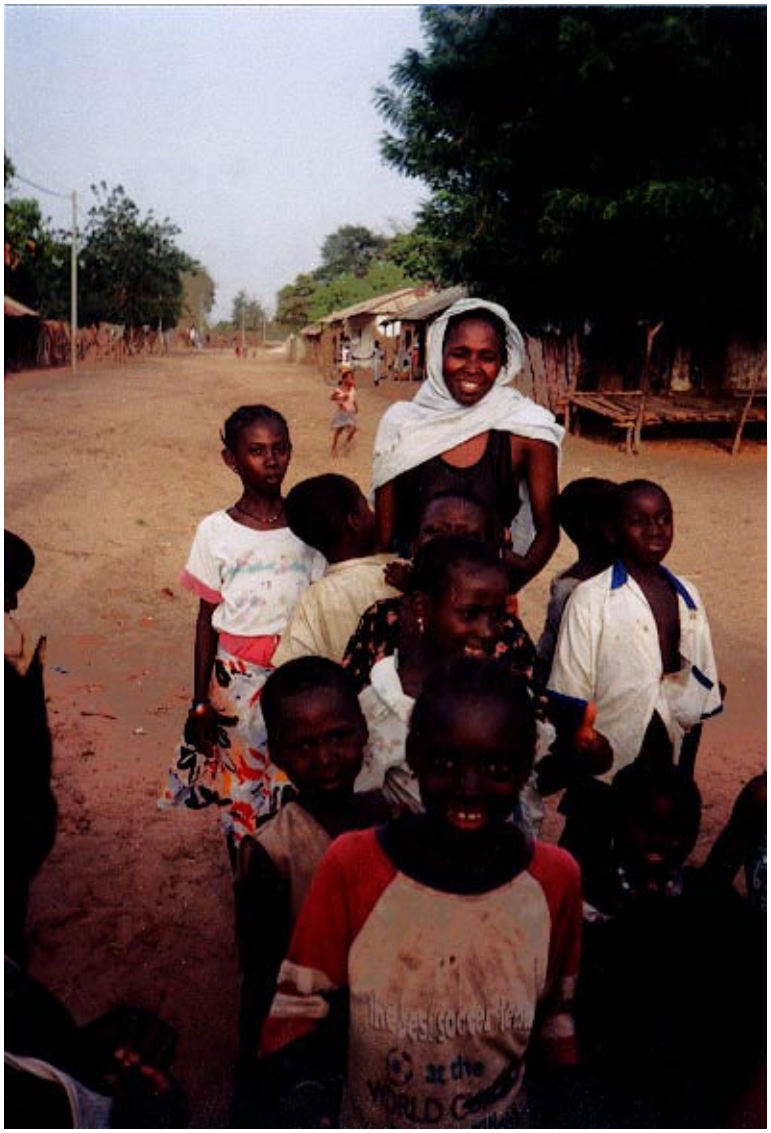
Bansang Hospital

The third week of the tour included a trip "up-country" to the communities farther east from the Greater Banjul urban area. The bus trip took approximately seven hours, and the first observation that we made was the extreme heat inland compared with the temperatures on the coast. There was no relief to be found in a breeze up-country. Bansang is home to the country's second hospital, Bansang Hospital. Touring the hospital, we noticed similar conditions and procedures as those at RVH. However, Bansang seemed somewhat less crowded and more orderly, possibly due to its location away from the urban area. Here, like in Banjul, many of the cases are malarial, especially during the rainy season. The Pediatrics unit was strikingly different from that of RVH; the ward was one large room, subdivided to separate the types of cases. There was none of the pandemonium that predominated at RVH. The ward was quiet and some of the beds remained unoccupied.

Trekking with the Maternal and Child Health team

During our stay up-country I was able to participate in a form of outreach health care that attempts to serve those who are unable to travel to the clinics or hospitals. A branch of the Maternal and Child Health team based at Bansang Hospital in the Central River Division (the area where we were staying) holds a clinic there on Mondays and Tuesdays. For the remainder of the week the team "treks," packing supplies into a Land Cruiser and traveling to remote villages to deliver health care to pregnant women and children under the age of five. Kristin and I had the opportunity to trek with them to a village called Sare Soffie, about a forty-five minute trip from the hospital. The Land Cruiser is outfitted with two benches along either side of the back of the vehicle for the passengers. The equipment consists primarily of charts, a chest containing the medications that are prescribed, and a couple of scales. The trip to the village was an adventure; the "road" consisted of a pitted dirt trail, full of bumps and occasional fleeing animals. The driver – obviously well-experienced in driving off-road – showed no hesitation – or reduction in speed – when navigating the road. We finally arrived at the village, which is the site of a primary health facility and thus has a small building designated for the storage of medical supplies and housing of the Village Health Worker.

Before describing the medical experience, the experience of arriving in such a remote village must be addressed. Having spent the first few weeks in the urban area, the trip up-country – only one day old – had been quite an eye-opening experience for us. However, trekking to a village such as this gave us new insight into the traditional and unspoiled nature of life in the rural areas of the country. The village is a collection of compounds, subdivided by grass fences and made up of a number of mud huts. The huts themselves are round and topped with a thatch roof, each with one or two small windows cut into the wall. Such a description makes them sound flimsy and in constant disrepair, but instead they appear solid and well equipped to withstand the elements. There are a number of trees and other vegetation, mostly scrub, in and around the village, with a great majority of the trees being baobab. When I was in the urban area, I was often struck by the desolate and sparsely vegetated landscape. But this area was much more verdant, and seemed more welcoming and attractive. The litter that decorated almost every square inch of Banjul was absent in this village, which was a welcome change. I am not sure exactly what made the people, especially the women, appear different from those I encountered in the Kombos, but I was first struck by their beautiful garments, which include several layers that make up the traditional blouse and skirt, as well as a head garment. The fabric is usually brightly colored, many times with rows of lace sewn on the



We visited this village up-country, where we were met by this welcoming crowd.

blouse. Later in the day, as I pushed up sleeves to take blood pressures, I noticed that most of the women wear *jujus* (protective amulets) on their upper arms. Many of them have the facial scars and tattoos that identify their ethnic affiliation. Most of the women were a couple of inches taller than me, and all appeared capable and strong while at the same time feminine and beautiful. The work they perform daily in the rural areas is strenuous and varied; the women tend the fields as well as the children and homes. It is quite amazing and inspirational to consider the knowledge and capabilities these women have and have had for hundreds of years.

When we arrived at the village health center, a long line of women already waited outside. The routine has been standardized, and women were already stationed in the areas that served their different medical needs. A weighing station was set up outside the building where a long line of women with children waited; the antenatal clinic was held inside a small room, and about thirty women lined the benches outside the "exam room." We helped to set up the equipment, but I felt to be more in the way as they seemed to have an estab-lished system for setting up as efficiently and quickly as possible. By this time it was almost ten o'clock, so the heat had not begun in earnest. At first the clinic scene seemed chaotic to me, but I began to realize that everyone knows where she should be and how the day progresses. I was introduced to the Village Health Worker (he spoke no English) and the Community Health Nurse who oversees this center. The nurse in charge, Mariama Ceesay, kindly showed me what was taking place and brought me to the antenatal portion of the clinic, as that is my primary interest. I was soon put to work taking the blood pressures and recording the weights of the pregnant women waiting to be examined. I had never before taken a blood pressure, so one nurse demonstrated how it is done; she then watched me take one, checked my accuracy, and turned me loose. I learned that it is hard to take an accurate blood pressure reading when one is inexperienced and surrounded by a couple of hundred women and children. Language was one barrier that was difficult to overcome while up-country and especially on this day when I tried to ask women to step on to the scale or push up their sleeve; most of the women speak only their local African language, so I substituted gestures for words. When I had taken all of the blood pressures and weights, I was able to observe what takes place in an antenatal examination. A woman is first asked several questions about her general health, then the nurse examines her abdomen to determine the gestational age of the baby. When the baby can be felt to extend to the naval the gestational age is twenty weeks, and every additional two fingers the baby extends beyond that point is an additional two weeks of gestation. The nurse occasionally listens to the heartbeat of the baby with an instrument that is a short tube with cups on either end. Often the expectant mothers are given vitamins or iron supplements to combat anemia. While the antenatal clinic is taking place, other nurses are providing immunizations and well-child exams

(routine exams to chart the growth and height of children). The clinic ends when all of the patients have been seen; we spent about three hours at Sare Sofie that day. The ride back to the hospital was a little more cramped, as we had picked up a few passengers in the village as well as two chickens. I still do not know to whom the chickens belonged and why they were in the vehicle.

After this first up-country trip and trekking experience, Kristin, Laurie (another student on the trip), and I decided we would like to return to Bansang (Laurie would go on to Basse) the following week as part of our research. We returned on public transportation – quite a different experience from our own private van – and stayed in a hospital guesthouse. Somehow it seemed hotter this time, and the electricity seemed scarcer. To deal with the heat, we did as the Gambians do – we napped during the hottest part of the day.

The first day I trekked to Sare N'Gai, again very remote and difficult to reach. It is easy to understand how difficult it is for those who live in these villages to reach a medical facility. Instead of assisting in the antenatal clinic, I helped in the weighing of the children. While one male nurse weighed the babies on a table scale, I used a standing scale to weigh the older children. There were maybe one hundred in line to be weighed, so it was quite a job, even for two. The women keep their own charts as well as their children's charts, presenting them when they visit the clinic. On one side of the children's charts is a graph that illustrates the optimal weight curve as a function of age. Once I took the child's weight I was to plot it on the graph; in doing this I noticed that many of the children in this village fell below the optimal standards for weight. The language barrier was again evident, but it was not nearly as serious as the fear factor of the children. Most, if not all, of the children had never before seen a white person, and their reaction to me was terror and refusal to step on the scale. Instead they screamed, cried, and lifted their legs so they could not be placed on the scale. The best I could do was try to communicate to the mother to turn the child away from me so as to not frighten him or her any more than I already had. Both the mothers and I found this fear to be an obstacle to the weighing. When there was a lull in weighing the children, I was able to get a glimpse of more health cards, and one of the pieces of information that I noticed was the number of children the mother had given birth to and the number surviving. What surprised me most was the number of children each woman had, as well as the number that did not survive. On many of the cards that I saw, the child had five or six siblings, two of which did not survive. To ward off illness and death, the infants all wear *jujus*, traditional objects that look like necklaces, bracelets, or belts that usually consist of a string with leather charms. Many of the children that I saw wore several of these.

The third time that I trekked we went to the village of Galleh Samba, where the clinic was set up in the school building. I was later told that a fire had destroyed much of the village, accounting for the relatively small numbers of patients that were seen. This time I worked in the antenatal clinic, again taking blood pressures and weights. After all of the patients had been seen, I had about forty-five minutes to spend waiting while the rest of the clinic finished seeing patients. I passed the time with Isatou, a nursing student who volunteers to trek with the MCH team while she waits to take her nursing exam that will allow her to practice as a nurse. She told me of her family situation, which I learned is common in the country. Isatou's mother had eight children, two of which did not survive childhood. The mother herself died shortly after the eighth child was born, the only reported symptom being simply a headache.

While in Bansang I collected data from the MCH return sheets, which tally the number of cases seen each month at all CRD facilities. Some of the records were incomplete, but I was impressed with the thoroughness of the records in light of the rapidly paced bustle of the clinics. Again, Mariama Ceesay was helpful in guiding me to the data and explaining its significance. The time spent up-country was a great experience, one that afforded me not only the opportunity to experience Gambian health care, but also to gain insight into the lives of the Gambians who live away from the urban areas. The day after I trekked to Galleh Samba we returned to the coast and the rest of our study group. The following week, I visited several urban MCH clinics in the Banjul area and collected the same data, tallying the numbers of cases seen, planning to compare antenatal visits in the rural versus urban areas.

I first visited the Fajikunda health center, which is a bustling, crowded center much like Serrekunda. Outside on benches maybe two hundred women and small children waited to be seen. Like the Serrekunda center, they were first screened, and then directed either to pick up a prescription or go see the doctor. When I requested the tally sheets that record the number of antenatal visits per month, I was met with a blank look and confusion. After I explained the sheets, however, I was relieved that the nurse in charge knew of them, and I was taken to a small room that housed a record cabinet. The sheets were pulled from what appeared to me as a haphazardly arranged stack of paper, and despite the apparent disorderliness the records were remarkably complete

and well kept. After a couple of hours of copying the data into my notebook, the room was converted to the area where the doctor sees patients who have since passed through the screening phase. The doctor, who never questioned my presence, was a Nigerian and, like many other Nigerian health care providers in The Gambia, was spending several years helping provide the medical services that are in such great demand here in The Gambia. As I continued to copy the data, I kept an eye on the stream of patients that came to see the doctor in this cramped room. The cases varied little from what I had seen at Serrekunda – some malaria, diarrhea, and other ailments. One child came in tied to her mother's back, but she appeared to have little muscle tone for her apparent age. The doctor noticed my interest and explained that he thought that she had muscular dystrophy. It is unfortunate in The Gambia that there are so few treatment and counseling options for the patients such as these and their families. The mother was sent away with a vague diagnosis to explain her daughter's condition. After several hours of copying tally sheets, I had the data that I was looking for, and I sought out a nurse/midwife, Ivan Coker, who had promised me an interview. Mr. Coker was incredibly helpful and informative, and I describe his interview later in the paper.

The following day I visited the Bakau health clinic in search of the same data. What I found was a place that was calm and quiet in comparison to the Serrekunda and Fajikunda health centers. There were few people waiting outside the clinic; the majority lined the walls inside the screening area and waited to be seen. I was directed to the nurse in the antenatal clinic. She was eager to impart her experiences in the medical field in the Gambia. She is a Nigerian, working for two years in the Gambia, while her several children and husband remain in Nigeria. I learned that the typical antenatal visit includes weighing, blood pressure monitoring, occasionally urinalysis, and monitoring of the fetal heart rate. She explained to me some of the problems antenatal nurses encounter, including mothers not knowing their children's ages, difficulty determining the last menstrual period and thus gestation age, and the language barrier, which is especially evident between Nigerians and Gambians. While I waited for the records, I looked through the register book. The book lists each new patient and includes information about their previous pregnancies and live births, the number of children who are alive or dead, and the form of birth control used when the woman became pregnant. What I found most surprising were the high numbers that I saw in the column that listed the number of children born to each mother who had died. In some cases I counted two surviving children and one dead child, and in others I saw four children living and four who had died. This register impressed upon me very clearly – more so than the U.N. figures – the strikingly high infant and child mortality rates in The Gambia. The death of a child here in the States is rather rare when one considers how often it occurs in The Gambia, where it is a real and painful part of life, one that is accepted as common though I am sure no less distressing. One other observation I made from this register was the young age at which women become pregnant and have children. Many women already had several pregnancies before they were twenty years old. Following a rather lengthy though informative wait, I was given the tally sheets. Once again, I was impressed with the completeness of the records.

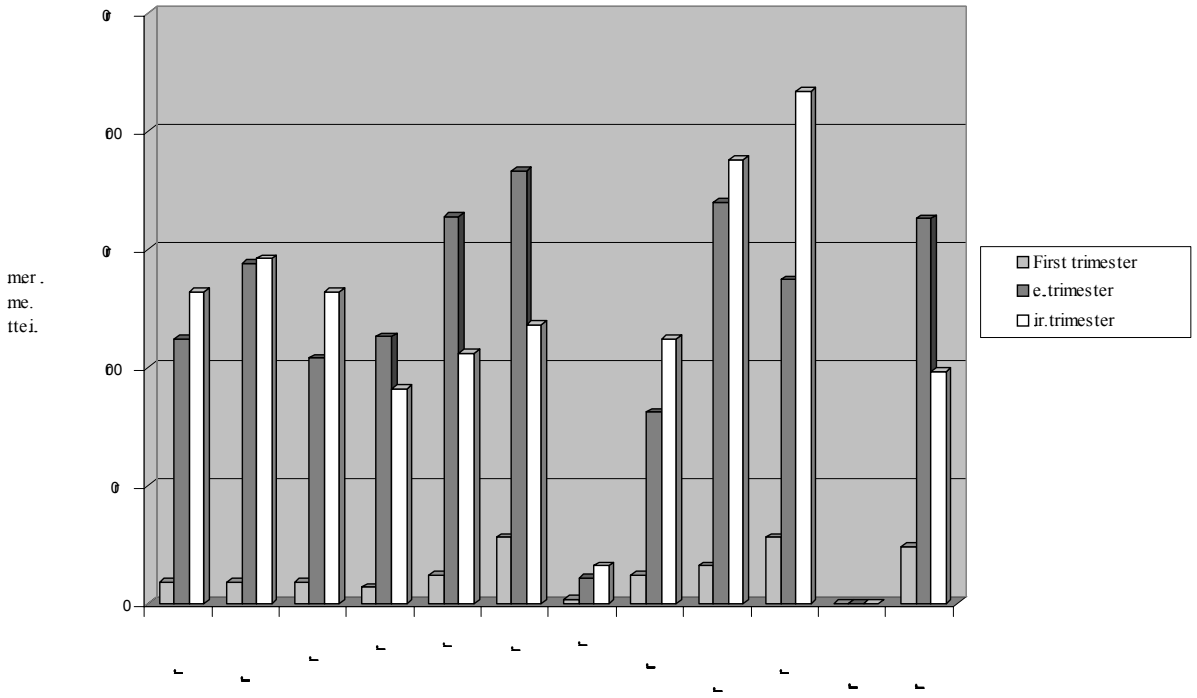
After I had gathered tally sheets from several clinics in the Banjul area, I analyzed the data by determining the percentages of first antenatal visits by trimester in rural and urban areas in 1996 and 1997. The results are displayed as graphs (Figs. 1-4) on the following pages.

From the data gathered in the urban areas, I noticed that the initial visits during the first trimester are quite rare. Most women attend their first clinic either during the second trimester or their third trimester (see Figures 1 & 3). When the data are averaged, the number of women who attend clinic for the first time is split evenly between the second and third trimester (47.8% and 47.0%, respectively). The fewest number of women attend the clinic in their first trimester (5.2%). These figures were averaged from the data I gathered that included both 1996 and 1997. There was no significant change in the percentages from one year to the next.

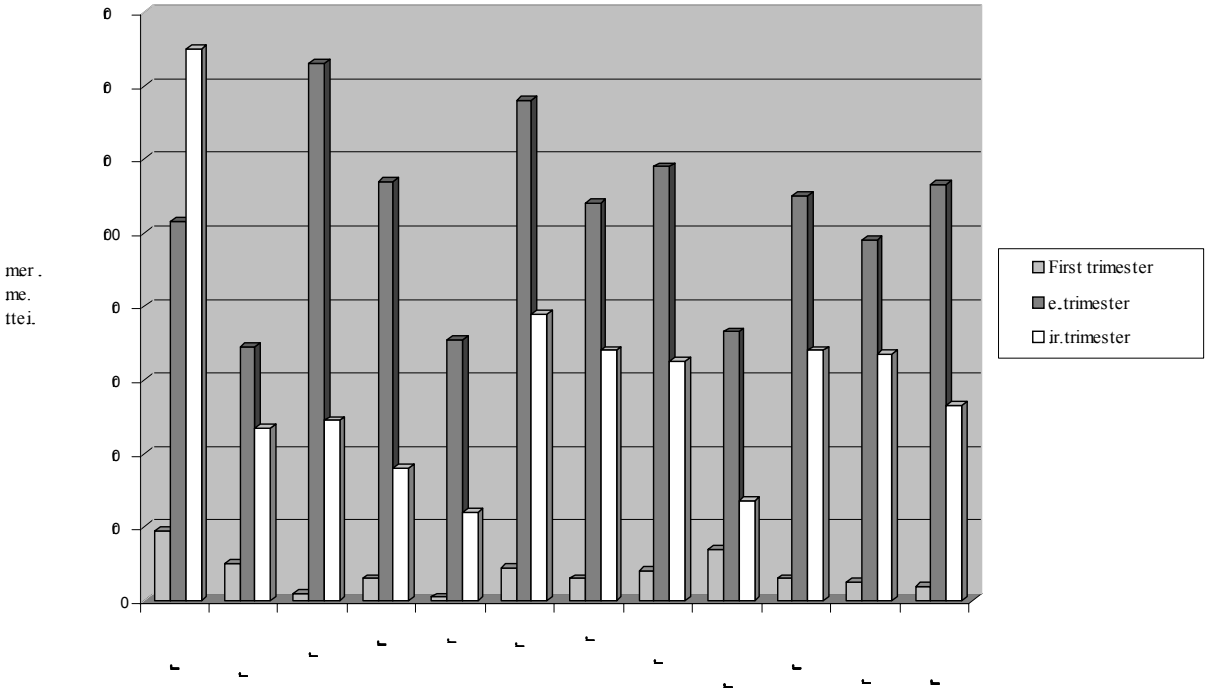
I found a different trend with the rural data, however. In all of the months in the two-year period except for one, the greater number of first visits occurred in the second trimester of pregnancy and not the third trimester (see Figures 2 & 4). When averaged, I calculated the percentage of visits in the second trimester to be 60.3%, while the percentage of visits in the third trimester was 35.0%. Again, there was no significant change from 1996 to 1997, making it safe to assume that these findings accurately represent the trend in antenatal care. The first trimester percentages differ by only 0.5%, but the second and third trimester variations are more significant. Medical care is sought earlier in the pregnancy in the rural areas included in this study.

I had chosen to collect these particular data because the MCH clinic administrators told me that it would be a beneficial study. I did gain some insight into the reasons behind the general late attendance at antenatal clinics. As I learned in three interviews

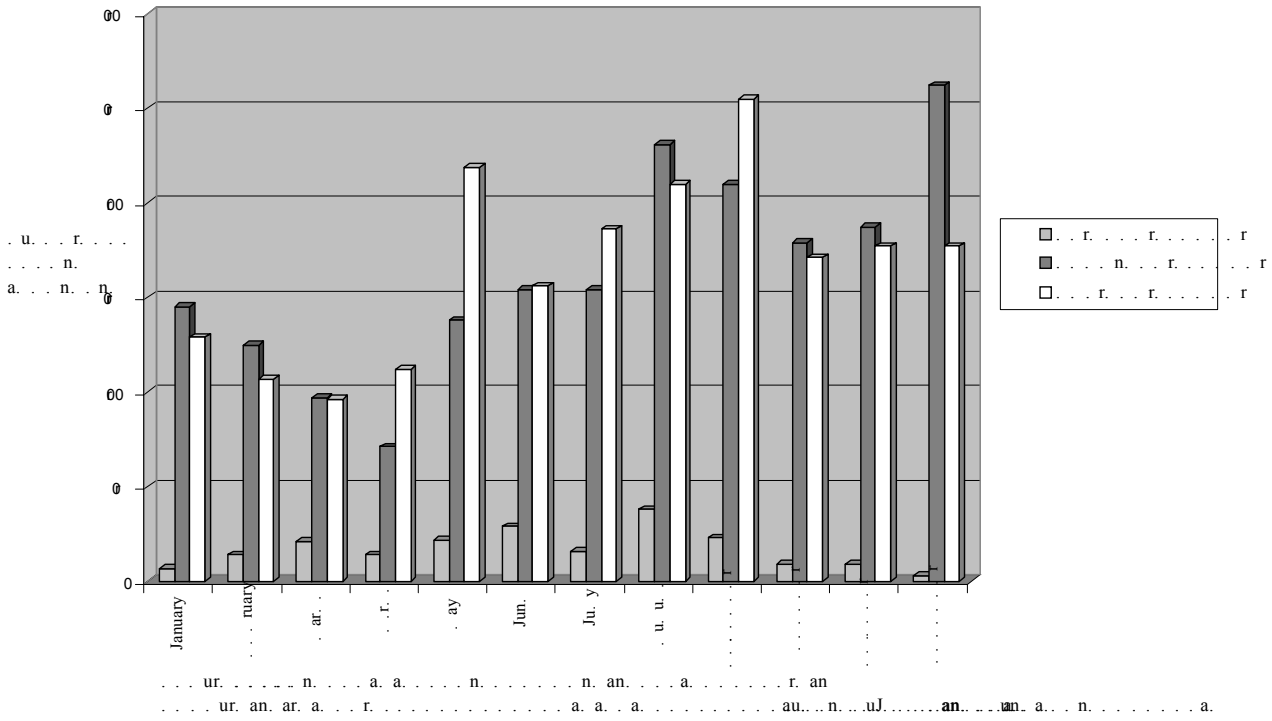
1996 ante-natal clinic attendance rates for the initial visit in urban areas



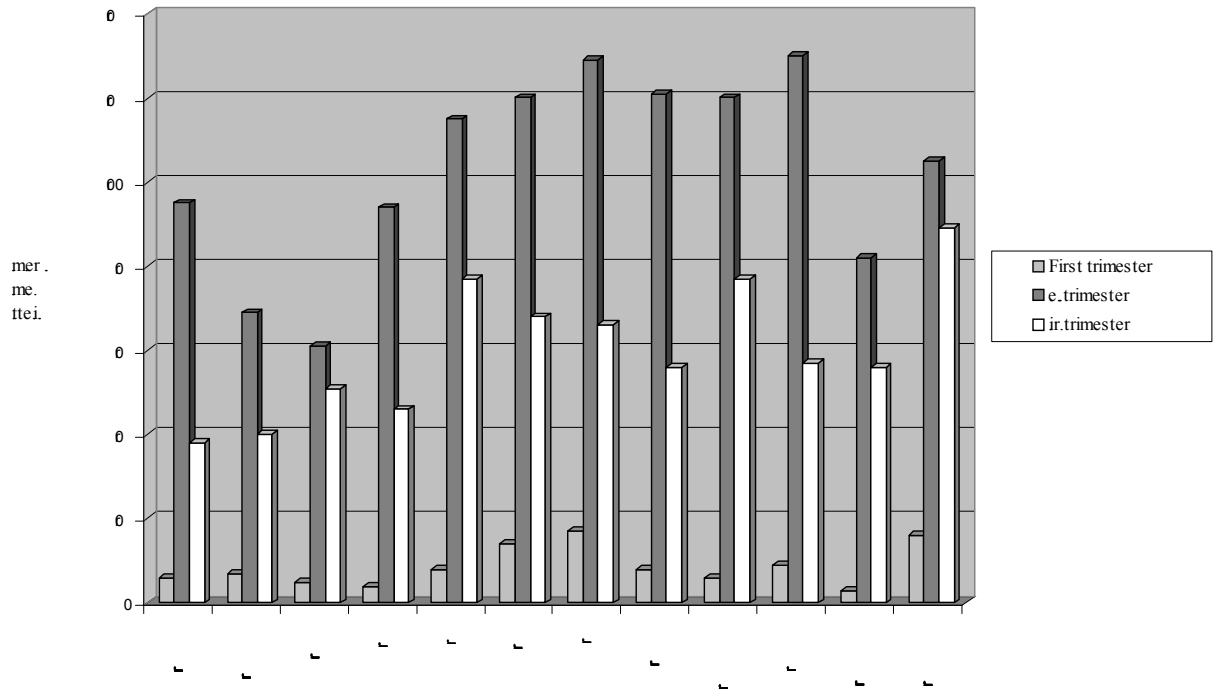
1996 ante-natal clinic attendance rates for the initial visit in the rural areas



1997 ante-natal clinic attendance rates for the initial visit in the urban areas



1997 ante-natal clinic attendance rates for the initial visit in the rural areas



that are reported later in this paper, there are often superstitions that surround the pregnancy, which dissuade the expectant mother from seeking medical care early in her pregnancy. Additionally, lack of education is a major obstacle to obtaining care: pregnant women often are unaware that they should have check-ups even before their pregnancy is visually apparent. These two factors apply to all Gambian women, so I am unsure how to interpret the drastic difference in attendance rates by trimester in the urban and rural areas. I am sure that those who are more acquainted with the fine points of health care, such as the Divisional Health Teams, will have some perspective.

The Gambian government is making a considerable effort to increase the rates of clinic attendance in the first trimester as well as the other two trimesters by strengthening the primary health care system. In doing so they hope to provide expectant mothers with valuable information as well as screen for potentially high-risk pregnancies. In order to determine some of the reasons behind the late antenatal clinic attendance, I interviewed several health care providers. Without exception they were well informed as to the functioning and problems encountered by the MCH program and other programs aimed at increasing health care provided to mothers and young children. They were able to shed light on the issue of clinic attendance as well as various other issues in maternal and child health.

Interview with Ivan Coker

Mr. Coker is the nurse in charge of the antenatal services provided at the Fajikunda health center. He explained to me that Fajikunda is a referral center for primary health care centers and dispensaries, with a catchment population (number of Gambians served by the center) of 120,000. Within this population there is no single dominant ethnic group. As a result, language is often a barrier; Mr. Coker tries to speak more than one language; he speaks Mandinka and Wolof well, and also speaks some Jola and Fula. The health center, he explained, provides quality care, and while some people have the option of seeking private care, the public health care is a great deal less expensive.

Mr. Coker described to me the labor and delivery system at the center as well as the country as a whole. Though it is hard to pin down an actual statistic, Mr. Coker estimates that 50% of women in the area deliver at home, often with the aid of a traditional birth attendant. After delivery and the traditional Muslim naming ceremony eight days later, the mother brings the newborn to the center for a first visit. The government has tried to strengthen the primary health care system, especially the services of the traditional birth attendants, who are taught to recognize potential problems in delivery, such as fetal distress and abnormal bleeding, and refer the patient to a health care center. For example, high-risk cases, such as a woman with more than six pregnancies, a breech presentation, and a labor that lasts more than twenty-four hours, should be referred to the health center. Fajikunda health center is open twenty-four hours for deliveries. There are thirty beds in the facility, including two delivery rooms, each with two beds. After delivery the patient is kept only a few hours for observation and is then sent home. Each month the center sees between 235 and 250 deliveries. I asked Mr. Coker his thoughts about the problem of high rates of maternal mortality in the country. He informed me that the rate is not as high in this region of the country, perhaps due to the accessibility of the hospital and health centers. In the urban areas, where literacy rates are higher – more people are aware of the problem and seek medical attention when there is a problem with childbirth. For high-risk cases, the mother is advised to live with relatives near the hospital until she delivers. Mr. Coker is aware of three deaths in the Mansakonko area where he previously worked. He says the goal is to make an early diagnosis and refer those patients with complications to the appropriate facility. He attributes the high rates of maternal mortality to poverty and ignorance.

Mr. Coker also spoke at length about the family planning services that the clinic offers. Many people prefer to use traditional birth control methods as opposed to modern methods. Traditional methods include wearing *juju* charms to prevent pregnancy, as well as abstaining from intercourse during certain times of the month. However, Mr. Coker said that many people do not abstain, which prompted him to say that it is "better to control desires during certain times." Many people opt for the modern methods offered at the clinic which include condoms, the IUCD, birth control pills, foaming tablets, and DepoProvera. One obstacle that women face in obtaining birth control is their husband's disapproval. Many Muslim fundamentalists see birth control as forbidden in the Koran, and as a way of "getting women loose." As a result, many women seek birth control secretly, without their husband's consent. Sterilization is becoming more popular as a birth control method. Women, Mr. Coker said, are voluntarily opting for sterilization, with three having come in that week requesting information. The government is targeting young, sexually active people for education concerning sterilization. Presently, a woman must have her husband's consent to have the

operation, but Mr. Coker said the government is reevaluating, because "women should have empowerment over their bodies." There presently are no gynecologists on staff at the clinic, so patients pursuing sterilization are referred to RVH. The most significant obstacle to sterilization is the regulation that requires women be counseled three times before consenting to the procedure. Some, Mr. Coker said, do not come in for their third visit, although the trend is toward greater rates of attendance. Mr. Coker was very informative and shed light on several of the topics of interest to me. I appreciated the hour that he spent with me from what is an obviously hectic schedule at the clinic.

Interview with Yusupha Ceesay

Mr. Ceesay is a nurse/midwife who works at the MCH administration in Banjul. I sought him out, hoping he would shed light on the trends in the data that I had gathered. He was able to give me some information on this topic, as well as a great deal of information on the issue of family planning in the Gambia.

Concerning the late attendance of women in the antenatal clinics, Mr. Ceesay explained that there are often different factors that influence the time women come to the clinic. If the patient is young, she may be hiding her pregnancy, and to appear at an antenatal clinic would confirm her pregnancy in a community in which it is impossible to remain anonymous. When women are not concerned about the repercussions of others knowing of her pregnancy, they may not be able to attend the clinic early in the pregnancy because of her heavy workload at home. Many women do not see the necessity of attending the clinic so early in their pregnancy. Mr. Ceesay credits the lack of information and education for this tendency. Finally, a woman may be unsure that she is pregnant, as there are no pregnancy test kits such as we have here in the States. The indicators that she relies upon are amennorrhea, growth of the uterus, and feeling the baby kick. I had heard that superstitious beliefs often prevent women from visiting the clinic early in pregnancy (thereby not alerting the rest of the community of her pregnancy). When I asked Mr. Ceesay about this, he said he was not aware of the superstition and did not believe it accounts for the low rates of early attendance.

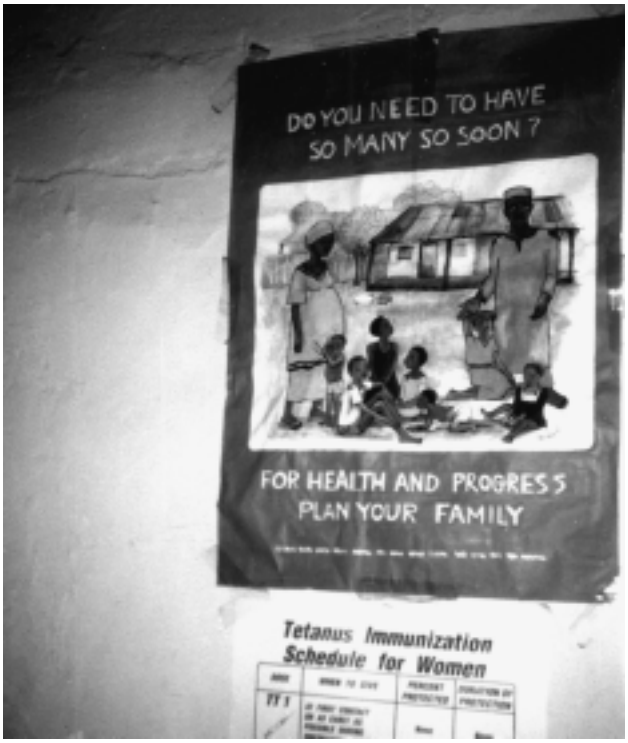
Mr. Ceesay had a great deal to say about family planning, especially as it relates to Islam. Many Muslim scholars claim that the Koran explicitly forbids family planning. Different interpretations of the Koran lead to conflicting opinions. One argument states that family planning is infanticide, while another argument uses the passage in the Koran referring to Allah providing for all as proof that family planning is in direct conflict with Islam. Mr. Ceesay indicated that these passages can be countered with others that do not conflict with family planning. For instance, the Koran states that to be human, an embryo must be 120 days or older. Mr. Ceesay states that another argument refers to the inclusion in the Koran of a reference to *coitus interruptus*, a form of family planning. Many fundamental Muslims choose to believe that Allah will provide for all the children that he sends to a couple, and thus the couple should not interfere with Allah's plan. Mr. Ceesay says that polygyny contributes to the low prevalence of family planning. Wives of the same man compete to have more children; when the husband dies, the wife with the most children receives the greatest share of the assets. Additionally, men often desire many children, which is a hardship on their wives as well as prohibitive to the advancement of family planning policies. In addition to some interpretations of the Koran serving as a barrier to family planning, another problem that faces family planning is the growing number of young, unmarried individuals who do not use contraception, or whose contraception fails. Mr. Ceesay states that this trend of increasing sexual activity in young people can be attributed to the parents not taking control of their children.

The interview with Mr. Ceesay was quite interesting. He gave me information on the late appearance of women at the antenatal clinic, which was my primary topic of interest, but he also gave me greater insight into the problems facing health care, as well as the family planning debate. He is obviously well informed as to the debate that is presented by Muslim fundamentalists, as well as the counter-argument in favor of family planning.

Interview with Marie Gomez

My final interview was with Marie Gomez, who is the Senior Clinical Assistant at the Gambia Family Planning Association (GFPA). The GFPA, which was founded in 1968, provides counseling on family planning and STDs, as well as issuing contraceptives and referring infertility and STD cases. The GFPA has offices in Banjul, Kanifing, the Lower, Upper, and Central River Divisions, and the North Bank.

Mrs. Gomez referred to the belief in witches when I questioned her as to her thoughts about the reasons behind late attendance to the antenatal clinic. She stated that many women do not want others to know of their pregnancy during the first trimester due to a superstitious belief in witches. A second reason involves knowledge – many women do not realize why



The poster above represents a national campaign to increase awareness and use of family planning methods.

it is desirable to attend the clinic as early as the first trimester. She says that women in their first pregnancy are the most likely to attend the clinic later due to lack of information. Finally, Mrs. Gomez said that many women find it boring to come to the clinic early; instead, they visit in the second trimester so that they will have to make fewer visits throughout the pregnancy.

Mrs. Gomez had a great deal to say concerning family planning. One of the most favored forms of contraception is DepoProvera, as it is easy to maintain and to hide from husbands who do not approve. Like Mr. Coker, she says that female sterilization is becoming more popular as a means of birth control. She also holds the belief that polygyny is partially to blame for the low rates of family planning. Competition among wives to have more male children leads to a high birth rate. Mrs. Gomez also gave me some perspective into the dynamics of polygamous families. If there are two wives, she says, there will often be a great deal of competition, and they generally will not live together in the same house. If there are four wives (the maximum allowed by Islamic law), the first and third wives ally themselves together against the second and fourth wives. In addition to this competition, there is often animosity amongst the children.

Mrs. Gomez also discussed the issue of Female Genital Mutilation (FGM) in relation to childbirth. She knew of one woman who was circumcised at age six by her grandmother. The circumcision involved complete excision of the clitoris, eventually prohibiting sexual intercourse. She was referred to RVH for surgery to remove scar tissue. When women are in labor, they often face delayed second stage as well as tears in childbirth. A bilateral episiotomy is often required to allow childbirth to progress. As a result of these complications, Mrs. Gomez says that FGM is being rejected more frequently.

I was able to gain a great deal of information and insight into the Gambian health care system, namely the MCH services that are provided. I am very thankful for the eagerness of health care providers to share their experiences and knowledge with me, as well as allow me to participate in the health care delivery first hand. I am especially grateful to the Bansang MCH team, who afforded me the incredible opportunity to trek to the remote villages and see an extension of the health care system that I would not otherwise have been able to see. Their willingness to let me lend a hand made my experience all the more meaningful.

As I write this paper, I have no regrets as to my choice of topics. The trip as a whole was an experience of a lifetime, and to explore the health care system in depth was profound. I never left a health center or hospital without a sense of sadness – how can you leave a place like that without feeling a compulsion to change the situation. The long waits with hundreds of other people, the cursory diagnosis of a nurse who has many more patients to see before the end of the day, and, in the more serious cases, a stay in a hospital that is overburdened and understaffed. The most striking and memorable cases that I saw were the children, who are the victims of high infant and child mortality rates. The pediatric wards at the hospitals and health centers remain the most vivid in my memory. On a more positive note, the health care providers that I met are committed to their jobs, and they have a great deal of compassion for those who seek their services. The health care system is improving, and many people living far from the health care facilities located in towns and the larger villages have access to the health services provided by mobile health teams on trek. The prognosis seems very good, though I am sure the process takes a great deal of time. I am thankful for the opportunity to learn so much and meet as many interesting people as I did, and I hope the next trip is as successful and eye-opening as this one.

Acknowledgements

I would like to thank the following people for their assistance while I carried out my research in The Gambia.

Margaret Grant, Peace Corps volunteer in Bansang. Margaret helped me to solidify my research topic during our first trip up-country. She also introduced me to the Bansang trek team and arranged for me to spend several days on trek with them.

Dr. Grace, and the rest of the staff at the Serrekunda Health Center, who took the time to explain what was going on in the health center.

Dr. Alieu Gaye, Director of Medical and Health Services, instructed his staff to help us in any way they could.

Ismaila Njie, Acting Chief Nursing Officer in Banjul. Mr. Njie opened many doors for us throughout the trip, arranging countless meetings with various health care workers as well as offering his own expertise and knowledge.

Mariama Ceesay, nurse in charge at the Bansang Maternal and Child Health clinic.

Mr. Ivan Coker, Ms. Marie Gomez, Mr. Yusupha Ceesay are all members of the Gambia's Medical and Health Department, and answered many of my questions about Maternal Child Health services.

Mr. Bala Saho, curator at the Gambia National Museum.

Works Cited

Grant, Margaret. "A brief and Incomplete Description of the Health Care System in The Gambia." Divisional Health Team, Bansang, Central River Division.

Kolars, Christine, et.al. *Analysis Report: Health Service Statistics Basic Tables 1991*. Center for Applied Research in Population and Development.

The Republic of the Gambia's Health Policy, 1994-2000: Improving Quality and Access. The Ministry of Health, Social Welfare and Women's Affairs, Banjul.

UNICEF. *The State of the World's Children*. 1995. Gambia: 1995.

St. Mary's students in front of the Serrekunda Health Center, with Dr. Grace

Jennifer Yates
St. Mary's College of Maryland
P.O. Box 842
St. Mary's City, MD 20686

I am writing to you on behalf of the Gambia Pediatrics Project, which I have organized with the goal of gathering medical supplies for a pediatrics unit in the Gambia, West Africa.

This summer I studied for five weeks in the Gambia, as a part of a St. Mary's College study abroad trip. Seven students participated, each choosing a specific research topic. As a pre-med student, I chose to study the country's Maternal and Child Health (MCH) system, which offers "base clinics" at various health care centers and hospitals, as well as "trekking" to remote sites. I had the opportunity to trek for three days with the MCH team to villages whose inhabitants would otherwise be unable to attain medical care. It was quite an experience, especially as most of the villagers had never before encountered a white person -- many of the children I tried to weigh as a part of the clinic were frightened of me.

As well as trekking with the MCH team, I visited several health centers and the two hospitals in the country. The Pediatrics Unit in Royal Victoria Hospital was most striking for me. It is remarkable what the nurses are able to do with so little at their disposal, but additional supplies would make a huge difference in the unit.

Upon returning fron the Gambia, I decided to organize an effort to gather supplies from medical providers in the Unites States. I am asking for supplies that can be spared or are to be replaced with newer equipment. Even older, outdated equipment would be of great service to Gambian health care workers, who are currently working with few supplies. I am hoping to return to the Gambia in the spring to deliver medical supplies. Any supplies, including bandages, BP machines, and thermometers, that you have available to donate would be greatly appreciated. Thank you very much.

Sincerely,

Jennifer Yates

Figure 2.5 Jennifer Yates initiated The Gambia Pediatrics Project after her return to the USA

Mural at Tendaba Camp of musician playing the balafon while others dance

Mural at Wassu market depicting scene from a jihad, or holy war