MATERNAL AND CHILD HEALTH CARE

IN GARGON:

Findings from Surveys, Focus Groups, and Clinical Data

May 2005

This study was conducted under the auspices of the Tibetan Video Archive Project, a project of the non-profit Perception, as a supportive effort for the Gargon Health Care Project. As of October 2005, the new name of this Project is: **Gar Tibet Health Project**

by

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This study does not attempt to represent the views of any other team members of the Gargon Health Care Project, of the Garchen Institute, of the Tibetan Video Archive Project, or of the non-profit Perception.
Any mistakes are solely the responsibility of the author.

TABLE OF CONTENTS

Acknowledgements .... - 1 -
How the Gargon Health Care Project Began: Stage One .... - 2 -
Background on the Tibetan Nomads of Kham .... - 3 -
Background on Maternal and Child Health among Tibetan Nomads .... - 4 -
Gargon Health Care Project May 2005: Stage Two .... - 5 -
Purpose of Study .... - 6 -
Study Methodology .... - 7 -
Summary of Patient Information from Intake Forms .... - 7 -
Focus Group Results in Gargon and Taju villages .... - 9 -
Perceived Health Care Needs .... - 9 -
Difficulties in Accessing Health Care .... - 9 -
General Reasons for Health Problems .... - 10 -
Environmental Health .... - 10 -
General Health Problems .... - 12 -
Women's Health Problems .... - 12 -
Children's Health Problems .... - 13 -
Preferred Place to Give Birth .... - 13 -
Synopsis of Survey Results in Gargon and Taju villages .... - 15 -
Conclusions and Recommendations .... - 20 -
List of Conclusions .... - 20 -
Recommendations .... - 20 -
Health Care .... - 20 -
Public Health .... - 21 -
Electricity and Power Source .... - 22 -
Appendix 1 Maternal and Child Health Survey Study Results in Gargon .... - 23 -
Appendix 2 Maternal and Child Health Study Results in Taju .... - 34 -
Appendix 3 Patient Intake Form Results in Gargon and Taju .... - 43 -

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How the Gargon Health Care Project Began: Stage One

In August 2004, Donna Caplan, N.D., visited the Gargon area of Eastern Tibet, a remote region in Nangchen County where Garchen Rinpoche's monastery is located. Her goal was to assess the health care needs of both birthing mothers and the general population. Her intention to offer help was sparked by a conversation in December 2003 when Rinpoche told her of his great concern about the high numbers of women and babies dying during childbirth and the need for midwifery care and training. Upon her arrival, Dr. Caplan found that there were no midwives in Gargon. During her stay, it became apparent that the topic of birth was taboo and that even mothers and daughters were not discussing childbirth. To address this situation, Dr. Caplan taught a two-week midwifery course at Rinpoche's special request.

His Eminence Garchen Rinpoche also asked that Dr. Caplan and her associate, acupuncturist Erin Hollaway, provide health care clinics and treatments. They found significant health care needs, many chronic and some critical. People, especially women and children were constantly exposed to smoke from heating and cooking. Winter is very cold; homes are not insulated and are heated by burning yak dung or wood. Many had respiratory illnesses. Also, many muscular-skeletal problems, such as arthralgia, were very common, along with painful gastrointestinal problems, gallbladder disease, hypertension and malnutrition.

Older women were often bent over from years of carrying heavy jugs of water on their backs.

Medical care was limited to a local village doctor, who practiced some Tibetan medicine and some allopathic medicine, and appeared to have a very basic supply of medicines that he occasionally bought in town. Another older Tibetan medicine doctor is basically retired and sees few patients. The people, however, had few resources and were unable to buy medicines or pay for health care, even in urgent and emergency situations. The nearest health clinic was in Nangchen County Town, which was about a 4-5 hour drive by 4-wheel drive vehicle when the road was passable. Most people did not have vehicles and, hence, were unable to reach town even when the road was drivable. The closest hospital/MCH clinic for emergency or critical care with surgical capabilities was in Yushu. Yushu was an additional 5 hour drive from Nangchen County Town and, thus, a 9 hour drive from Gargon.

While in Gargon, Dr. Caplan and Rinpoche discussed the magnitude and urgency of the health care needs and he strongly emphasized that he would like more doctors and midwives to visit as soon as possible and to bring necessary medicines. To fulfill his request, Dr. Caplan organized a team of health care providers to return to the village and monastery of Gargon and to visit a nearby village called Taju in May 2005. This report is from information obtained in both villages.

Background on the Tibetan Nomads of Kham

Kham is the Tibetan name for the south-eastern third of the Tibetan plateau, which forms the geographical boundaries of Greater Tibet. The Tibetan nomads of Kham are referred to as “Khampas” and today live in the eastern portion of the Tibetan Autonomous Region, the southeastern part of Qinghai province, the western part of Sichuan province and the northwestern part of Yunnan province.

Both Gargon and Taju, the villages where the study took place, are located in the southeastern corner of Kham in China’s Qinghai province. These villages are about a 9 hour drive from the town of Yushu (*Jyekundo* in Tibetan), which lies on the periphery of modern Khampa territories and which has always been an important trading town. The Tibetan nomads of Kham have a distinct dialect and dress. Yaks are their primary herd animals and are taken to higher mountain pastures in the summer where the Khampas live in tents. *Dzo*, a cross-breed of cow and yak, are also herded by Khampas, but few are seen in the higher areas where Gargon and Taju are located. In winter, when the people live in their villages, the yaks are brought lower closer and closer to the villages. Sheep are also herded by the Khampas, but there are fewer of them in the higher mountainous area of Gargon and Taju. Technically, then, the Khampas of this

area are semi-nomadic, residing in their villages in the winter months and following their herds in the summer months.

The Khampas also supplement their herding by selling excess butter and cheese to townspeople and by picking caterpillar fungus (*cordyceps sinensis*) in late spring and early summer to provide cash income. They are renowned equestrians and still ride horses to herd yaks and move camp, but motorcycles, the newest status symbol, are also now ridden by men who can afford them and are increasingly replacing horses for herding and transport. Although women may ride behind a man on the back of a motorcycle, they are rarely seen driving them. In the past, Khampas were known to be ferocious warriors and, occasionally, bandits. They have always been fiercely independent politically.

Background on Maternal and Child Health among Tibetan Nomads

According to a recent *Chicago Tribune* article, the United Nations Children's Fund has determined in preliminary research that 1 in 6 to 10 newborns of Tibetan nomads are likely to die if medical care is not available. For mothers, the odds of dying in childbirth are as high as 1 in 33 births, making childbearing more dangerous than being a U.S. soldier in Iraq. And according to the World Health Organization, 1 in 10 pregnant women in the Kham area dies in childbirth. To put this in perspective, in developed countries the odds of dying in childbirth or pregnancy are 1 in 2,800.

A study conducted in 2001 by Drs. Chin, Dye, and Lee, titled *Women's Narrative Life Histories: Implications for Maternal and Child Health in Himalayan Buddhist Villages* (University of Rochester, Division of Public Health) states that women's roles in Tibetan nomadic society are difficult. They are burdened with heavy work loads and most women would like their daughters, not just their sons, to have a better education so they can lead more comfortable lives. This study also points out the importance of the mother-daughter bond in Tibetan society. Death of a mother leads to a daughter having a much harder life and to her children having a harder life.

A 2003 report from The Bridge Fund that conducted focus groups with forty Tibetan women around maternal and child health care issues found that 95% of the women delivered at home without the help of skilled birth attendants. One hundred percent of the women who delivered at home cut the umbilical themselves and in all cases this was done with a non-sterile instrument. No women received prenatal care. When asked: "Why they did not call for assistance," women explained that "teep," which is the "pollution" of the delivery, could have a negative impact on the birth attendants and cause ill health to them.

A preliminary community needs assessment was also conducted in 2004 by Dr. Becky Loy and Dr. Nancy Chin at the Ayang Monastery and Rimaa Village, both

located in the same prefecture as Gargon. The monastery and village are similar to the Gargon area. Community members stated that immediate causes of maternal death were: hemorrhaging, infection, obstructed labor, retained placenta and hypertension/eclampsia. The research team determined that intermediate causes of these problems may include: poor maternal nutrition (suspected vitamin A and D, calcium, iodine and/or iron deficiencies); heavy maternal physical work loads; unclean delivery environments and unclean instruments to cut the babies' umbilical cords; indoor air pollution (smoke from cooking fires and tobacco); the stress of high altitude adaptation to hypoxia, UV irradiation and cold; lack of village doctors, medicines, or village clinics; lack of knowledge of prenatal care and disease prevention and health promotion; poor access to advanced health services due to scattered population and inadequate roads; and inability to pay for hospital/MCH clinic care. Underlying factors that needed to be further explored according to this study were: potentially changing gender roles; the influence of the survival of grandmothers, aunts and sisters upon primary and maternal and child health care; the new male migration in and out of the community due to more efficient motorcycle transportation; changes at the state-level in the government's ability to provide rural health care; and climatic changes that had resulted in more severe and dangerous winters which, in turn, had deteriorated mountain grasslands and affected the fragile, local yak-herding economy.

Gargon Health Care Project May 2005: Stage Two

Prior to going to the villages in the Gargon area, a meeting was held in Nangchen County Town with the Vice Director of the County for the Family Planning Unit on May 16, 2006. He informed us that there were 800 people, excluding monks and nuns, in the 3 villages of Gargon, Taju, and Ta Nee. However, according to the Chief of Gargon village, there are 700 people in Gargon and 400 in Taju, making a total of 1100 people. He could well have been including the monks in Gargon Monastery and the nuns in Gargon Nunnery. Jamgon, Garchen Rinpoche's brother, also said that there are 700 people in Gargon. The Vice Director of the County for the Family Planning Unit estimated that there were approximately 15 births per year in these 3 villages. He also said that there was a hospital and a maternal and child health clinic. Family planning is free. Any other treatments or consultations cost the individual who goes to any hospital or MCH clinic. According to personnel at the maternal and child health clinic, every effort is made to help patients who don't have enough money to pay, but, generally, patients must at least pay for their medicines.

The Gargon Health Care Project (now called the Gar Tibet Health Project) team consisted of 10 people, a mix of nurses, doctors, midwives, acupuncturists, holistic healers, a Tibetan doctor from the Qinghai capital of Xining (Dr. Namlakha), a medical anthropologist, and a filmmaker. We were in the Gargon area from May 16 to May 30. Getting to and from Gargon was a long, arduous

trip and took about 3 days each way from Xining. In addition, a maternal and child health care doctor (Dr. Tashi) from Nangchen County Town came to Gargon for 4 days to work with the team and to make plans for regular return visits. The team worked in Gargon and in Taju. We were based in Gargon where Garchen Rinpoche's monastery is located and stayed in the Lower Monastery, which is located at 14,400 feet. Taju is located approximately 15 miles from Gargon and we were told that it is located at around 16,000 feet. It takes a little over an hour over a bad road in a truck to reach. In Taju team members slept on the floor of the school room.

We also had hoped to go to Ta Nee, the most distant village, but could not make it there, unfortunately, due to lack of time, inclement weather conditions, and the fact that Ta Nee could only be reached by horseback.

The team was assisted by 7 translators. There was substantial educating and skill building (capacity building) of the translators. Almost all of them assisted in interviewing, both with the qualitative survey instrument and in focus groups. By the end of the project, many were conducting the survey questionnaires independently. Also, they learned about Tibetan, Chinese, Western and Holistic medicine by assisting the clinicians.

In the villages of Gargon and Taju, the team conducted midwifery courses, distributed 150 birth kits to women (many of whom were pregnant), set up temporary clinics to provide primary health care for residents using Tibetan, Chinese, Western and Holistic medicine, conducted a study and needs assessment on maternal and child health for future grant-writing and fundraising, and shot a video documentary of the process for future fundraising efforts. There were an estimated 800 patient visits to the clinics in Gargon and Taju; however, it should be kept in mind that many of these visits were the same patient seeing several practitioners. In addition, some team members met with villagers and chiefs to discuss environmental pollution. Children and some adults in each village participated in garbage clean-up efforts as well. Garbage is new to Tibetan cultures in both Gargon and Taju, which have only recently begun to use Chinese products that come in containers or wrappers.

Purpose of Study

The purpose of this study was to conduct a needs assessment so as to better understand the maternal and child health care needs of Tibetans in the villages of Gargon and Taju.

The goal of the study was to gather information to be used to help fundraise so that improved health care, particularly in the area of maternal and child health, can be brought to Gargon and surrounding villages. Ultimately, it is hoped that a

clinic can be built and staffed for Gargon village and the nearby villages of Taju and Ta Nee.

Study Methodology

There were 3 primary methods used: surveys, focus groups, and patient intake forms. In addition, meetings with local chiefs (key-informants) took place as did informal meetings with other persons. Dr. Lumpkin, a medical anthropologist, oversaw the surveys and focus groups, spoke with local chiefs, spoke with government officials, and held informal conversations with local villagers as she worked. She also wrote up the data from the surveys and focus groups.

In addition, the medical health practitioners who treated patients at the temporary clinics in Gargon and Taju used patient intake forms to gather more data. The patient intake forms were devised by Victoria Hovde, RN, LAc, and by Linda Baxter, MS, CNM. The report for the patient intake forms was written by Linda Baxter and is included in the next heading of this report as "Summary of Patient Information from Intake Forms."

Surveys on maternal and child health care were conducted among women in both Gargon and Taju villages. The team did not give the survey randomly but used purposive sampling. For example, most of the women who took the midwifery training were surveyed and some women waiting for their turn in clinic were surveyed. Other women who were surveyed just happened to be passing by and agreed to participate.

Focus groups were conducted in both Gargon and Taju villages. Focus groups were conducted separately among men and women and also were divided by age groups among grandmothers, grandfathers, mothers, fathers, and teen-age girls.

Summary of Patient Information from Intake Forms

Prior to our arrival in Gargon we developed a single page "Intake Form" for use as a chart and also to document the villagers' health problems. This form was initially filled out by a team member together with a translator prior to the provider visit; however, at times the patient volume was so high that the providers (working with translators) interviewed the patient. At these times the interviews were often shortened to focus on the specific patient complaints and were not as thoroughly completed as they were at other times.

Although an estimated 800 patient visits were handled by the health care team, not all were documented through use of the intake forms. Dr. Namlakha, the Tibetan doctor, did not speak English so he did not utilize our forms, and he

made his own notes of his patient visits and treatments. There were many villagers who sought care from both Western and Tibetan providers, so duplication of individuals' intake forms would have been high. In addition, Dr. Tashi, the doctor from the MCH clinic in Nangchen County Town, saw many monks and nuns within the monastery and did not utilize a chart format. Some of her patient visits were, however, documented by one of the translators.

The total number of unduplicated client intake forms received was 275. The following data are taken from these forms however only about one third were fully completed, so this information only describes some of the people we treated at best. The information does seem to be in agreement with our clinical impressions of the health concerns and problems of these Tibetan villagers.

It was apparent to us that cultural differences between the Tibetans and the Western medical practitioners created a barrier to our understanding what our patients meant by their complaints of stomach pain or heart pain, kidney pain or waist pain; however, we attempted to discover their viewpoints and perceptions so as to reframe their concerns in a way we could understand.

The majority of clinic attendees were women and nuns (70%) living in Gargon village and its nunnery (66%). They ranged in age from 18 and under (14%) to over 60 (23%).

Among clinic attendees the most frequently seen complaints were stomach and gall bladder problems (68%), arthritis and joint pain (48%), headache (38%), vision and eye problems (16%), kidney/waist pain (12%), heart pain (11%), and respiratory problems (11%). Other categories of health problems were neurological, dermatological, gynecological, as well as dental problems, hearing problems, injuries and their sequellae, and hepatitis.

Among 39 pediatric patients, stomachache (50% of patients) and headache (50%) were most common followed by concerns about growth and development (25% of patients) and respiratory problems (23%). Other concerns included rashes, diarrhea, eye problems, knee pain, and emotional/behavioral problems.

The clinic patients were asked about their diet and eating habits and reported eating 4-5 meals per day. *Tsampa*, rice, yak meat, and butter were reported to be their main foods.

Almost all villagers had utilized both Tibetan and Chinese medicines as well as acupuncture for prior health treatments. Of 89 completed intake forms, 73% described having received either injections or intravenous treatment for illnesses, although they could not always articulate the reasons for their received treatments.

Nineteen women reported using alcohol “a little” or “sometimes,” most often barley wine or *chang* (boiled), which boils off the alcohol content. Fifteen men reported using alcohol, some “daily” or “a lot”, and 4 men reported that they had quit using alcohol recently.

No women reported ever smoking, while 10 men reported current tobacco use, using snuff, or snorting Tibetan herbs. Five men reported that they had quit smoking.

These numbers tell us that women apparently are not frequent users of tobacco and that they use alcohol regularly but in small amounts, having boiled off the alcohol content, which is consistent with survey and focus group data.

Focus Group Results in Gargon and Taju villages

A total of 8 focus groups were held: 5 in Gargon village and 3 in Taju village. The 5 focus groups in Gargon village were held among: grandfathers, grandmothers, fathers, mothers, and teen-age girls. In Taju village, the 3 focus groups were held among fathers, mothers, and teen-age girls. It should be noted that most of the residents of Taju village were herding yaks in the hills and so had to be notified that we would be there for several days. They came in from the hills for treatment at the clinic and it was from this self-selected group that we selected those who were in the focus groups.

Perceived Health Care Needs

All those interviewed wanted a clinic and wanted midwives trained in both villages. The people generally viewed their health as poor.

Difficulties in Accessing Health Care

A primary complaint was that the roads are poor. In Taju the road is impassable in the winter because of ice and in the summer because of mud. This makes it very difficult to get to Nangchen County Town hospital/MCH clinic. The road from Gargon, although better, suffers from the same problems.

Transport was rarely available from either Gargon or Taju to get people to the hospital or MCH clinic when the roads were passable. And when transport was available, many could not afford it. Nangchen County Town hospital/MCH clinic were a long way away (approximately 5 hours by vehicle) when the roads were passable and when transport was available.

In addition, most people could not afford to pay for health care should they be able to get to the hospital or MCH clinic, so they didn’t bother going even if they could get there..

Although there is a Tibetan doctor in Gargon, many cannot afford his services. Also, some villagers complained that he was often away. For those who lived in Taju, made it more difficult to visit him.

General Reasons for Health Problems

All those interviewed expressed the need for a clinic in Gargon. Those in Taju wanted their own clinic there. In addition, everyone wanted trained skilled birth attendants (or midwives) to offer pre-natal care and to assist at births. Men in several focus groups emphasized that the focus on maternal and child health care shouldn't come at the expense of the general health care of all villagers. There was some sense of their feeling left out due to the emphasis of the project on women's health care.

Women in Gargon complained that nothing positive happened in the community when Garchen Rinpoche was away, because they could not get the men to organize to work together to create much-needed communal projects. Garchen Rinpoche is often away. He returned to Gargon in 2004 after an absence of 7 years. It was he who worked with the government to have the original road built to Gargon.

Men, but not women, in both villages stressed the need for electricity to be brought to the proposed clinic so that surgical operations and x-rays could be done there. We explained that only very minor surgeries could be performed at a clinic. Among men, there was a definite perception that electricity would improve health and life in the villages. Solar power wasn't a popular alternative, because people in both villages associated solar power with the small panels they already used that can only light a lamp bulb or two. Instead they wanted hydropower.

Environmental Health

The concept of environmental health and hygiene did not exist among villagers or among most monks. Garbage was strewn everywhere around villages and outside nomads' tents. Garbage pits needed to be dug so that garbage could be disposed of properly.

There were no toilets or outhouses except in the monastery or sometimes near the schools. And it was usually more pleasant to use the great outdoors than the outhouses due to their lack of cleanliness.

There was no running water in either village. Water from both villages was gathered at a spring. The spring in Gargon was relatively large and put out quite a bit of water. The spring in Taju was not plentiful, particularly since it was the only water source for not only people but livestock. I visited the spring. It was about 2 feet deep, clear, with stones around it to keep the water from seeping

out. The villagers with me said that they wanted to dig the spring out and seal it with cement so that there would be more water. Another option, they said, would be to dig a deep well where the spring is so that they would have more water. Women said that they found collecting water to be time-consuming as they often had to make many trips.

Those interviewed reported washing their hands.

Regular bathing and clothes-washing was rare. Children and adults were dirty. Given the cold winter and summer temperatures, this is not surprising. Also, it is time-consuming and tiring to haul water from the spring and to find fuel to heat the water for bathing and washing clothes. The women's focus group in Taju said that they never wash their bodies because they become cold. When asked if they can heat water to wash, they replied that they never had a need to do that. Although the Tibetans in this area are aware that they don't bathe as much as the Chinese or foreigners, they laugh about it and don't seem bothered by it. Tibetans are extremely modest and feel uncomfortable revealing themselves, for example, to bathe naked in a river. The women in the mothers' focus group in Gargon said that they had learned about the need to be clean due to the influence of Chinese culture. In the past they said they never washed their eating utensils, hands, faces or clothes, but now they did. Washing the entire body with a sponge bath or in the river that is near Gargon, however, appears to be rare. During clinic hours a few patients advised health workers to wash our hands after we treated them.

Respiratory problems from smoke inhalation are a major problem. The stoves that are used to heat rooms work poorly and throw smoke and particulate matter in the air. After sleeping in the school room in Taju and after conducting focus groups in the school rooms in Gargon, we were all coughing from smoke. Everything, including us, reeked of it. It must be difficult for the school children and teachers to endure the smoke in the cold winter months.

A hydropower project, organized by Rinchen, is reportedly coming to Gargon to provide electricity.

There is a possibility that more mining will take place in Taju. This could have serious environmental health effects upon the people there. When visiting the water spring in Taju with a few local villagers, a Chinese man approached us. Later when he left, the Tibetans said that the Chinese had done some "test mining" last year. A translator, who was asked to find out what the Chinese were mining for, later said she was told that it was for lead, zinc and silver. According to villagers, five people had subsequently died from diarrhea. The villagers felt that the mining had disturbed the mountain gods and that this was why people had died. Obviously, there could have been some environmental impact that led to illness. The chief and some villagers met with the Chinese while we were there and told them that they could not mine in the area. The Chinese had offered to

improve the road and pay, we were told, around US$12,000 for mining rights. After being turned down by the villagers, the Chinese then left to re-discuss mining rights with officials at higher levels.

General Health Problems

Villagers reported gall bladder disease, arthritis and joint problems, and cataracts with ensuing blindness are frequent health problems affecting their community. Factors such as their high fat diet, nomadic lifestyle, and exposure to high levels of ultraviolet radiation from the altitude are contributors to these health problems.

Women's Health Problems

Lack of proper nutrition and lack of enough food to eat were cited as a problem in most focus groups. Pregnant women often fainted from lack of food. Women stated that they wanted more nutritious foods during pregnancy, such as bone soup, meat soup and barley beer (*chang*). They boil the *chang* to boil off the alcohol content before drinking it. Most of the women in Gargon ate yak butter, yak cheese, yak yoghurt, *tsampa*, rice, and bread. The women in Taju had access to yak butter, yak cheese, yak yoghurt, and yak meat, but they did not have access to vegetables, rice, and bread.

Generally, people felt that pregnant women couldn't reduce their workloads because there was too much poverty and they needed to work. Workloads, however, could be reduced if solar energy was used as an alternative to yak dung for fuel. Gathering yak dung is time consuming. This was particularly true in Taju where women also spent long hours herding yaks and other livestock. Some women believed that if they didn't work hard the baby would grow too large in their womb, and it would be difficult to give birth. The teenage girls at the focus group in Taju said that they thought that women worked too hard.

According to all persons interviewed, women often suffered from seizures during pregnancy. Seizures were differentiated from fainting due to lack of food. Fevers were also common.

A majority of those interviewed believed that bleeding during pregnancy was normal, because it was so common.

There was a general perception that woman had long and difficult labors in both villages. Labors of 2 days to a week or longer were seen as normal. In fact, labors that were shorter than 2 days were thought of as unusually short!

Breast infection after giving birth was common.

Pelvic inflammatory disease was common.

Also swollen legs during and after pregnancy was common.

In the grandmothers' focus group held in Gargon the grandmothers said that many of the women of childbearing age who used IUDs got infections and so wanted a better method of contraception. They also said that many of the younger women were too shy to go to a male doctor and so they wanted a female doctor.

According to the women's focus group in Taju, most of the women in the village had stomach problems.

Women's focus groups in Taju and in Gargon reported that women had kidney and waist pain when pregnant.

Also, both focus groups mentioned that their heavy workload was in part due to having many children to take care of.

The teen-age focus group in Gargon said that vaginal infection was common and that they connected this with a lack of feminine hygiene since they used whatever dirty cloths they could find during menstruation, including ones found on the ground.

Children's Health Problems

Babies are reported to sometimes not be able to breathe after birth.

Some babies are born too small and have trouble surviving.

Sepsis of the baby's umbilical cord was common because the instrument used to cut the umbilical cord was never sterilized. Nor was the sheep's wool cord that was used to tie the umbilical cord. This was addressed in midwifery classes.

It was reported by the Gargon Grandfathers' focus group that babies are often born with skin problems. They also reported high fevers among babies.

Focus groups reported that many babies had pus in their eyes after birth.

Diarrhea becomes common among children as soon as they are weaned and start taking regular water and food.

Meningitis, measles, and appendicitis were reported to be a problem.

Preferred Place to Give Birth

There was only one large discrepancy between the data gathered in Gargon and Taju: the villagers had different concepts about where a woman could give birth.

In Taju focus groups revealed that there was no taboo against women giving birth in their homes or tents. However, the focus groups in Gargon revealed that women must give birth outside the house. The kitchen seemed to be a particularly inappropriate place to give birth.

Villagers in both places were probed as to why there was a cultural difference between the 2 villages about where women could give birth. They replied that it was "just different traditions." The focus group made up of mothers in Gargon said that they gave birth outside on the mountain grasslands on a pile of sheep dung or in the dust. They perceived that their blood was not clean and so gave birth outside the home. If possible, they set up a tent outside or gave birth in a shelter for an animal. After giving birth they ask a monk to come as soon as possible to bless the mother and baby with holy water. The monk also sometimes would bring blessing pills. The mother and baby later would go to a lama to be blessed and to have a naming ceremony. Both mother and child are usually given blessing cords.

In Taju, because the monks are farther away, the mother and child must wait until a monk is able to come to Taju or until they can go to Gargon to be blessed. Sometimes a family member obtains holy water from the monastery to bless the mother and baby as an interim step since monks are not readily available. This method is also used by nomadic women when they give birth in their tents in the summer up in the hills.

The women at the focus group in Taju said that it must be the location of the monastery in Gargon (Taju does not have a monastery in its village) that makes it taboo for women to give birth in their homes. Over and over again, people said that women are not allowed to give birth "in the monastery." In a focus group made up of fathers held in Gargon, the men said, "Women give birth outside here…women have to give birth under a juniper tree not in a house or monastery…even in winter." Exactly where the monastery begins and ends may be open to interpretation. It seems that some villagers in Gargon perceive that women need to go far from the monastery and even from Gargon village, which surrounds the monastery, to give birth.

The women in the mothers' focus group in Taju said that only unmarried had to give birth alone outside the house. However, married women could give birth in their homes.

According to the grandmothers' focus group in Gargon, many women with children in Gargon were unmarried. We were told a story about an unwed mother in Taju by the Gargon teen-age girls' focus group. According to these girls, a young woman in Taju who didn't have a husband became pregnant. Her mother was very angry and told her, "You don't have anyone to care for you. I won't take care of you." As the story goes, the girl went up into the mountains and had her

baby there alone. “No one would even give her water. Both she and her baby died,” the girls said. They said that this happened around 3 years ago.

The teen-age girls in the focus group in Taju said that a married woman could give birth inside her own home, but that it was taboo to give birth in the kitchen. When we asked the married women in the focus group in Taju if this was true, they laughed and said that they could give birth in the kitchen.

The focus groups never completely untangled why the women in Gargon cannot give birth in their homes, whereas the women in Taju can. Changing the Gargon tradition of a mother giving birth outside would reduce some of the high maternal and child morbidity and mortality during childbirth.

Synopsis of Survey Results in Gargon and Taju villages

Twenty-four surveys were conducted with women who had had children or who were pregnant. Sixteen surveys took place in the Gargon area, and two of these included surveys taken in nearby nomadic camps. Eight surveys took place in the village of Taju (“horse racing village”), located 1½ hours from Gargon by truck. Two of the women surveyed in Taju said that they lived in Nangchen County, not in Taju itself; however, one of them split her time between Taju and Nangchen County Town. The women’s ages ranged from 24-68 years old.

The majority of the women had families who herded yaks. Some families also herded goats, sheep, cows, and horses. Five of the women who lived in Gargon were not nomadic. Most families earned cash income by gathering caterpillar fungus (*Cordyceps sinensis*).

None of the women interviewed said that their health was “very good” or “excellent.” Generally, women did not perceive themselves as being in good health. Women and their children went to a variety of different people for health care. There were two doctors in Gargon village. One, who was younger, was not overly popular with residents of either Gargon or Taju. He practiced some Tibetan medicine and some allopathic medicine, buying medicines in town. Complaints were that he was away often and that patients couldn’t afford his medicines. Another doctor, who was older and semi-retired, also practiced some Tibetan medicine in Gargon and seemed to be held in higher regard.

Women also went to family and friends for health care advice and to borrow medicines. Some went to a monk or lama for prayers, holy water, rituals, scripture, prayers, divinations, and blessing pills. People reached the Tibetan doctors and monks or lama by walking or riding horse-back or, occasionally, by hitching a ride on a motorized vehicle. There were no traditional healers, shamans, or traditional birth attendants. Occasionally, a woman or her child went to the hospital or MCH clinic in Nangchen County Town, but this was usually a

last resort since the town is 5 hours away by 4-wheel drive vehicle when the road is passable. In addition, many couldn't afford to pay hospital or MCH clinic costs since health care is not free.

Hygiene standards in Gargon, in Taju, and when people are in the pastures with their livestock are low. In the villages, there is no running water and houses do not have outhouses. Both villages have good springs that are not too far away; however, hauling water for bathing becomes burdensome, especially in the cold winter months. In the spring and summer, most people are in the mountains herding yaks and other livestock and so do not have access to the springs. People bathe infrequently due to the extreme cold and also custom. Litter is thrown on the ground and there is no concept of collecting trash to burn or bury. We, therefore, inquired about how often women washed their hands. Most women said they washed their hands before cooking and milking. They also said they washed their hands after gathering yak dung, milking, herding, and cooking.

Women had from 1-7 children. Of the 24 women surveyed, two women reported a miscarriage or still birth. And two women had had babies die in the first 28 days of life.

Not quite half of the women made efforts to prepare for a healthy pregnancy by talking to family members or friends. However, only two women spoke to the village doctors about preparing for pregnancy. Some of the issues discussed were: finding out if the woman was pregnant or not, how to tell a husband that a woman is pregnant, how long gestation takes, how long labor takes, whether labor is safe or not, how painful labor is, how to prepare a bed for labor, how to prepare clothing for the baby, how to make sure that someone will bring bone soup to be consumed during or after labor, how family members could help with workloads, who would attend the birth, and where the birth would take place.

Nineteen out of 24 women stated that they were over-worked. When asked what work they wanted to do less of, they said: herding, carrying wood, picking up yak dung for cooking fuel, water carrying, climbing mountains, taking care of their children and the household, cooking, making *tsampa*, caterpillar fungus harvesting, and farming grasses to be used as fodder.

This was relevant because over-work has been cited in other studies of Tibetan nomads as negatively affecting maternal health. We asked women if they reduced their workloads when they became pregnant. Sixteen of 24 women interviewed did the same amount of work or more work when they were pregnant. Several women explained that there is no special treatment for a woman who is pregnant.

We asked the women if they would use a midwife, or skilled birth attendant, if one were available. All but one woman said that they would. The reasons given were: wanting advice on how to prepare for childbirth, wanting the baby to

survive and be healthy, wanting someone to be able to help with the delivery, concern over the safety of the birthing process, and wanting someone to bring hot food and water during and after delivery.

Alcohol consumption is not a problem among pregnant Tibetan women. None of the women consumed *chang* (barley beer) unless they first boiled the beer, which burns off its alcohol content.

We asked the 24 women we surveyed what problems they have had in pregnancy, reading them this list: too much vomiting; too weak to do usual work; too much bleeding; swelling in hands, feet, face accompanied by fits (seizures); very bad headache; sickness with pain and fever, and abdominal pain. Seventeen of the 24 women said that they had had 4 or more of the above symptoms. Other symptoms not listed that they mentioned were: dizziness, aching legs, kidney pain, pain in abdomen when urinating, backache and dry mouth and tongue, and lack of appetite.

Another question was whether women were afraid of dying in childbirth. Nineteen of the 24 women were afraid of this possibility. We then asked if they were afraid that their baby might die during childbirth. Eighteen of the women reported that they were afraid that this might happen.

There was a high variation between Gargon and Taju in response to the question about where women gave birth. In Gargon, six of the woman gave birth outside the house on mountain grasslands, saying that it was taboo to give birth in their home. One of these women gave birth outside on a pile of sheep dung in January! However, in Taju all the women but one gave birth in their homes. The one who did not give birth under her own roof gave birth outside of her house near a gate. We later probed this discrepancy in the focus groups.

We asked the women if they would prefer to give birth somewhere else. Many women said that they would have preferred to give birth somewhere other than where they did. For a detailed break-out of this response, please see the appendices.

Only two women gave birth completely alone. However, many of the birth situations were far from perfect since those attending the birth had little midwifery knowledge. Women were generally attended by husbands, mothers, sisters, other relatives, and/or children. These attendants helped out by making bone soup, bringing water, making tea, serving butter soup, burning *tsampa*, burning incense, cutting and tying the umbilical cord, and caring for the children and household.

The umbilical cord was rarely cut with a sterile instrument or tied with a sterile wool string.

We also explored taboos around childbirth, asking women if they or their family members thought it might somehow be "unsafe" for a person to attend a woman's labor and delivery. This is clearly important in establishing whether or not midwives would be acceptable to this society. A little over half of the surveyed women said that it would be "unsafe" for a non-relative to attend a woman's delivery. One taboo cited that a non-relative attending a woman's birth could result in blindness in the woman giving birth or in the person attending the delivery. Others said that they would be embarrassed to have a non-relative attend their delivery. Also, some said that illness or bad spirits could affect the women in labor or the non-relative attending labor. This taboo could explain why this culture does not have traditional birth attendants.

We then asked if the women believed that family members subscribed to the birth taboo. All but one of the women who believed in the birth taboo themselves said that their family members held the same belief system. However, when asked if the women would like a midwife or skilled birth attendant to attend her delivery, only two women said that they would not want a midwife. And one of these women said that she would want a midwife if complications occurred. Clearly, skilled birth attendants are much desired and are not subject to the birth taboo that affects non-relatives who might attend a birth.

Special foods, medicine or traditional remedies were commonly used during and after labor. All the respondents ate meat or bone soup during or after labor. One third drank *chang* that had been boiled to remove the alcohol content. A majority burned incense and/or *tsampa* as a prayer offering. Nineteen ate butter soup. Thirteen women used Tibetan medicine. Over half took blessing pills from a monk or lama. Eighteen used chanting, either by themselves of by others, during or after the labor. Two of the women used western medicine.

Over half the woman said that they used holy water from the monastery after delivery. Blessing cords were often given to mother and child by the monks. Fewer women in Taju village than in Gargon village, where the monastery is located, tried to reach monks to perform these rituals.

Problems during labor were extremely common. Prolonged labor occurred among 18 out of 24 women surveyed. Ten women had experienced their water breaking more than 2 days before the baby was born. Seven women reported heavy bleeding. Fifteen said they had had severe nausea, vomiting or dehydration. Fourteen had had seizures or had passed out. Ten women had given birth to a baby that was weak or sick after birth, and 10 women had given birth to a baby who was too small. Seven had had the placenta stuck inside for too long. Three had had a baby that would not come out after pushing, and 3 women had given birth to a baby who had trouble breathing after birth.

We asked the women to whom they went for help with the above-named problems. Ten of the women didn't seek help from anyone. Ten women asked a

family member for help. Eight women saw one of the two Tibetan doctors in Gargon village. Six women asked a friend or neighbor for help. Five women went to a lama or monk for blessing pills, a prediction for the future, a blessing, incense burning and/or holy water. One woman had had access to a skilled birth attendant. And 4 women had given birth to at least one baby in Nangchen County Town hospital or the MCH clinic.

In addition, we asked about the problems women experienced 1-2 months after giving birth to their last child and to whom they went for help. All 24 women interviewed reported having problems. Eighteen women said that they had had severe pain in their lower abdomen. Fifteen reported fever. Eleven said they had experienced burning when they urinated. Eight reported excessive vaginal bleeding. Nine said they had a painful, red, infected area on their breast. Five experienced a foul smelling vaginal discharge. And none reported being unable to control urinating or their bowels. Interestingly, 13 women reported feelings of sadness or depression.

Nine women did not seek any help at all for their problems. Nine went to one of the Tibetan doctors in Gargon. Six discussed their problems with a family member. Four went to a monk or lama. Two went to friends or neighbors for advice. One woman went to Nangchen County Town hospital or MCH clinic. And two women self-treated with rest and sleep.

Women rested from 2-15 days before returning to work.

All the women who had breast milk gave it to their baby within 1-2 hours. There were no taboos against giving colostrum to the babies.

There was a wide variation on when women stopped breast-feeding and their babies started eating other foods. Children were weaned from 6-7 months all the way up to 5 years. Other foods were added to the babies' diets from 4 months to a year in age.

We asked women if they had known other women who had died in childbirth. Seventeen said that they had not personally known a woman who had died this way. Seven had known a woman to die in this manner. Most women became fearful for themselves and for their babies after experiencing someone's death due to childbirth. But, several women said that they were not affected by these deaths.

Our last question we asked women was if they had wanted to become pregnant: (1) sooner, (2) later, (3) at the time they had become pregnant, or (4) not then or any time in the future. Nine women wished that they had not become pregnant the last time and did not want to become pregnant ever again in the future. Interestingly, 3 of these women wished they'd never had children at all. One-quarter (or 6) of the women had wanted to become pregnant when they did. Four

wished they'd become pregnant later. One-sixth (or 4) of the women didn't really care when they became pregnant. And one woman had wanted to become pregnant earlier.

When asked if they were interested in birth control, seven were not interested. Sixteen women, or 2 out of 3, wanted access to birth control.

Conclusions and Recommendations

List of Conclusions

The needs assessment surveys and focus groups revealed that villagers, and in particular the women, wanted the following:

1) Accessible, affordable health care
2) Transportation to hospital or MCH clinic
3) Funds to pay for hospital or MCH clinic and medications
4) Improved diet, both quality and quantity
5) Knowledgeable prenatal and postpartum care
6) Availability of a skilled birth attendant
7) Warm, clean, safe location for birth according to mother's desires
8) Health supervision and education regarding infant and child care, weaning foods, and prevention and treatment of diarrhea in children
9) Home assistance after birth so women can rest longer
10) Access to contraceptive methods
11) Sanitation: toilets, bath houses, garbage management, clean water
12) Cleaner air in homes and tents i.e. improved stoves
13) Improved personal hygiene
14) Electricity/power source

Recommendations

Health Care

Funding is needed to build a clinic and pay clinic personnel, to help villagers pay for their health care costs, to train and pay skilled birth attendants, and for transportation to and from the MCH clinic and hospital in Nangchen County Town as well as any other health care needs. It's likely that such funding will have to be raised by a non-governmental organization (NGO).

Knowledgeable prenatal and postpartum care should be an essential part of what the clinic provides. Skilled birth attendants should be trained even though the villagers' nomadic lifestyle would make it difficult for patients and attendants to get together at the time of labor. The clinic also would need to organize the community to come up with a solution to provide home assistance to women

after they have given birth. The clinic staff also could provide continuity of care for patients needing transfer to the hospital and advocate for them there.

The issue of women having an appropriate place for giving birth is cultural and could be addressed by those working in the clinic and/or by community leaders. It also could be addressed before the clinic is constructed by persons going to Gargon and Taju to work on health care issues.

Women currently have access to contraception at the MCH clinic in Nangchen County Town. Many women don't go there because it's too far away and they can't afford transportation or because they are shy. They are also leery of the option available there. Funds for transport would alleviate the first impasse. A woman willing to accompany those who are shy and, perhaps, educate them a little would also be helpful. Once a health clinic is established at Gargon, it can provide several contraceptive methods as well as family planning education.

Health education should be an integral part of the clinic's activities, especially in regard to the care of children under 5 years.

Improvement in the variety, quality and quantity of food options for pregnant women, children, and all villagers should be addressed as part of health education activities by clinic staff.

Public Health

One of the most important ways to improve public health would be to address sanitation and personal hygiene problems.

In both Gargon and Taju, time was set aside for meetings about garbage and waste and also to collect garbage. Education about how to dispose of garbage is much needed and could be taught in the schools. The communities seemed enthusiastic about creating a cleaner environment at the meetings. Also Tenzin spoke to the Gargon community of the need to pick up garbage.

Outhouses (properly placed, built, and cared for) could reduce the incidence of hepatitis A, diarrhea, and other diseases related to improper waste disposal. According to a team member who had experience building outhouses at high altitudes in national parks in the U.S., there is a possibility that composting outhouses could work at this altitude and climate. When I spoke to a "green builder" in the U.S. about this, he said that he thought that regular outhouses would be as useful as composting ones and would be easier to maintain.

Obviously, a bath house located in each village would be of great help in preventing skin problems and in promoting cleanliness.

Also, the stoves that people use burn poorly, throwing smoke in the air, which creates respiratory problems. I recommend that better stoves be installed in the monastery, school rooms, homes, etc. We were told that these stoves are made in India. Perhaps higher quality stoves could be donated by a stove-maker in the U.S. or Europe. Many people burn yak dung in their stoves so this needs to be considered if stoves are donated.

Yak dung is a more environmentally sustainable fuel to burn than wood since deforestation is occurring. A cleaner alternative to burning yak dung would be some sort of electricity supplied by solar or wind power. In addition, solar cookers might be a good addition for cooking. These have been brought to other communities in Qinghai province.

Electricity and Power Source

A hydropower project, organized by Rinchen, is reportedly coming to Gargon. Villagers want electricity. It's important that the villagers be educated about clean power options and that the hydropower project not cause a loss of biodiversity or environmental damage. In addition, solar and wind power could be explored.

Appendix 1 Maternal and Child Health Survey Study Results in Gargon

I. Background Information

Sixteen surveys were conducted in the Gargon village area. One of these took place in Jongu camp and one in Gar camp, nomadic camps near Gargon. The remaining 14 took place in Gargon village. Each survey took from 1 ½ to 2 hours.

Eleven of the women surveyed were both residents of the Gargon area and were nomadic, depending upon the time of year. Five were permanent residents of Gargon Village, whose families did not herd.

The women's ages ranged from 24 to 68 years old. Eight of those surveyed were in their 30s. Five were in their 20s. Two were in their 40s. And one was 68 years old.

II. Herding

All 11 of the women who self-described themselves as both nomads and residents of Gargon (nomad-residents) had families who herded yaks. Two of these families also herded sheep and goats. Women who self-described themselves solely as Gargon residents did not have families who did any herding.

III. Cash Income

All but one (the 68 year old woman) of those surveyed said their families had some sort of way of earning cash income. Eight of the nomad-residents' families gathered caterpillar fungus (*Cordyceps sinensis*), a fungus that is used medicinally, earning between 300-4000¥ (yuan), which is approximately US$37-US$488, per year. One person's husband worked for the Chinese on road construction. One family sold yaks. All those interviewed who self-described as Gargon residents gathered caterpillar fungus for income, earning between 400-2000¥ (US$49-US$244) per year.

Caterpillar fungus harvesting is clearly the most important source of cash income for the majority of those living in the Gargon area.

IV. Self-description of Women's General Health

Only 2 women described their health as “good.” Six described their health as “fair.” Eight described their health as “poor.” None described their health as “very good” or “excellent.”

This indicates a lack of overall sense of well-being among all those surveyed.

Health care problems named were: headache, blurred vision, painful excretion, kidney disease, heart problems, heart palpitations, gastric reflux, stomach problems, gall bladder problems, wheezing, skin problems, anemia, fainting, heartburn, knee pain, back pain, neck pain, joint problems, and arthritis. One woman stated that she had a problem with being cold due to not having enough clothes.

V. Description of Children’s Health Problems

Women described their children as having the following health problems: colds, fever, diarrhea, stomachache, palsy, hernia, gall bladder disease, problems breathing, headache, hearing loss, joint problems and toothache.

One child had a heart problem and was treated at Nangchen hospital. A child was born with bowed legs. Some children were vaccinated for childhood diseases.

VI. Where do Villagers Go for Healing?

In Gargon there is a village doctor who practices some Tibetan medicine and allopathic medicine; however, he is often away and is not overly popular among villagers. In addition, he buys medicines in town and many people cannot afford the medicines and so go without them. There is another Tibetan doctor, older and semi-retired, whom people still occasionally see.

The closest hospital or MCH clinic is a 5 hour drive away, when the road is passable, in Nangchen County Town.

In addition, people have access to monks and lamas for prayers, rituals and blessing pills.

There are no traditional healers, such as herbalists or shamans, in the village. Furthermore, folk remedies made at home do not seem to be a part of the culture.

Women report going to the following for healing for themselves and their children: the younger and older Tibetan doctors in Gargon; occasionally a

friend or neighbor most generally for advice or to borrow medicine; and a monk or lama for prayers, rituals or blessing pills.

One woman listed having gone to the Yushu hospital for a tubal ligation and another woman went to the Nangchen County Town hospital or MCH clinic for her last delivery because the birth was very difficult.

Those who attended one of the Tibetan doctors in Gargon or those who went to see a lama or monk walked there or rode on horseback. If they went to the hospital or MCH clinic, they went by motorized vehicle.

VII. Frequency of Hand-washing

Hygiene is extremely poor in this area due to lack of running water, extreme cold, infrequent bathing, lack of outhouses, and litter thrown on the ground. Water for cooking must be carried from a local spring. A stream is also nearby for clothes washing. Hence, we inquired about hand-washing frequency.

Women most often washed their hands after gathering yak dung for fuel. They also said they washed their hands after: cooking, herding, milking, making bread, after getting up in the morning, and after their children urinate.

Almost all the women said that they washed their hands before cooking. A little less than half also washed their hands before milking

VIII. Information on pregnancies

One woman reported having had a miscarriage. Another woman reported having had one of her babies die in the first 28 days of life. None of the other 14 women had a miscarriage, stillbirth or death of a child in the first 28 days of the babies' lives.

Women had from 1-6 children.

IX. Preparing for a Healthy Pregnancy

Over half of those surveyed (9 out of 16 respondents) had talked to someone about preparing for a health pregnancy before getting pregnant. Women talked to their sisters, mothers, husbands and/or friends. One woman spoke to one of the Gargon village doctors trained in Tibetan medicine. Issues that the women discussed were: finding out if the woman was pregnant or not, telling a husband about the pregnancy, how long gestation takes, how long labor takes, how to prepare a bed for labor, how to prepare clothing for the

baby, how to make sure that someone will bring bone soup to be consumed during or after labor, whether labor is safe or not, and how painful labor is.

X. *Sense of Having Excessive Workloads*

Because over-work was cited in other studies as negatively affecting maternal health, we asked women if they felt they worked too hard and what work they wanted to do less of. Four women did not feel overworked and, interestingly, 3 of the 4 were not nomads. The other 12 women all stated that they were overworked.

They wanted to reduce their work loads in the following areas: herding; carrying wood, which is used for fuel; picking up yak dung, which is used as fuel; climbing mountains; taking care of their children and the household; caterpillar fungus harvesting; and farming grasses to be used as fodder.

Herding was seen as the most onerous work with 6 respondents citing that they wanted to do less of it. Two wanted to gather less wood.

XI. *Workloads during Pregnancy*

We then asked if women did the same amount of work when pregnant. Of those 12 women who stated that they were overworked, 5 did the same amount of work when pregnant, 4 did less work, and 3 did more work because of adverse family circumstance.

Those women who did the same amount of work pointed out that there was no one to take over their work load and that the work had to be done. Those who worked less said they did so because they were pregnant and felt they should reduce their work load or that they were too tired to do their regular work load.

XII. *Desire to Have Midwives*

We asked the women if they would use a midwife, or skilled birth attendant, if one were available in the village. All the surveyed women but one said that they would use a midwife if one was available. Reasons for using a midwife were: wanting the baby to survive and be healthy, concern about the safety of labor and delivery, and wanting advice on how to prepare for childbirth. Some wanted someone just to be there during labor. In addition women wanted someone to bring hot water and food during delivery and afterwards.

XIII. Alcohol Consumption

Alcohol consumption was limited to *chang* (barley beer), which is considered nutritious. Most of the women drank a bowl in the evening or less. All those who drank it boiled it before drinking, which boils off the alcohol content. Alcohol consumption during pregnancy does not appear to be a problem.

XIV. Problems that Women Have During Pregnancy

Women surveyed were asked what problems they had during pregnancy. The following list was read: too much vomiting; too weak to do usual work; too much bleeding; swelling in hands, feet, face accompanied by fits (seizures); very bad headache; sickness with pain and fever, and abdominal pain. Twelve of 16 respondents replied that they had 4 or more of the above symptoms.

Other symptoms not listed that they mentioned were: dizziness, aching legs, kidney pain, pain in abdomen when urinating, and lack of appetite.

XV. Fear of Dying in Childbirth

When the 16 women surveyed were asked how fearful they became, upon becoming pregnant, of dying in childbirth, 11 respondents said they were very worried. One respondent was worried about the baby but not herself.

XVI. Fear of Baby Dying during Childbirth

Eleven of the women surveyed were very worried that their child would die during childbirth.

XVII. Where the Mother Gave Birth to the Last Child

When asked where the mother gave birth to her child, 6 of the women replied that they gave birth outside the house on the mountain grasslands or in the yard. One had given birth on the mountain grasslands on a pile of sheep dung in January! Four said that they gave birth in the protected pen area where the livestock were kept. The women spoke of it being taboo to give birth in the house. Two women had their last babies at the Nangchen County Town hospital or MCH clinic because of complicated pregnancies. The other 4 gave birth at home or in a tent and some said that they gave birth there because it was so cold outside.

XVIII. Preferred Place to Give Birth

When asked if they would have preferred to give birth elsewhere, 4 women who had given birth outside on the grassland or in the livestock pen said that they would *not* prefer to give birth elsewhere. Two women who gave birth outside would have chosen to give birth in the house. A woman who gave birth in the livestock pen said she wanted to give birth somewhere where she could have something clean beneath her body. And a woman who gave birth in the tent said that the tent was too cold and she would have preferred to give birth in her home. One woman who gave birth at the Nangchen County Town hospital or MCH clinic wanted to give birth at home. Three women who gave birth outside would have preferred to give birth in the Nangchen County Town hospital or MCH clinic. Two who gave birth at home would have preferred to give birth in the Nangchen County Town hospital or MCH clinic. What seems clear is that many women do not get to choose where they give birth.

XIX. Persons Attending Birth

Only 2 women gave birth completely alone, one at her home and one in the mountain grasslands. One woman gave birth alone in the yard with her 3 year old son accompanying her. She reports that he sat by her crying saying that she was going to die and that he burned *tsampa* in ritual prayer offering for her. Another woman gave birth with only her 11 year old daughter there to help her. The daughter brought her hot water. Two women gave birth at the Nangchen County Town hospital or MCH clinic and also were accompanied by their husbands. The remaining 10 women gave birth with either their husband or relatives there. It was not taboo for a husband to attend a birth. Husbands and relatives helped in a variety of different ways such as by giving bone or meat soup to the woman, bringing water, making tea, and, rarely, helping her with the actual delivery and cutting the umbilical cord. Some women also said that their husbands helped by taking care of the other children, cooking and doing housework.

XX. Cutting the Umbilical Cord

Ten of the women cut the umbilical themselves. The other women had a relative cut the cord. A knife was used to cut the cord in almost all cases. Two women reported using a stone to cut the cord and one woman used a piece of wool string. Except for the 2 women who gave birth at the Nangchen County Town hospital or MCH clinic, none of the instruments used to cut the umbilical cord were sterilized by boiling or any other means.

XXI. Tying the Umbilical Cord

Aside from the 2 women who gave birth in Nangchen County Town hospital or MCH clinic, all the women's babies had their umbilical cord tied with non-sterile sheep's wool string. One of the women put yak butter on the umbilical cord knot 6-9 days after birth. Nothing was placed on the umbilical cord by any of the other women.

XXII. Birth Taboos

In an effort to find out more about birth taboos, we asked women if they thought it unsafe for another person to attend someone else's delivery. Seven respondents, approximately half, said yes. There were a variety of explanations. One woman said that it would be fine for a healthworker to attend anyone's delivery, but if a person who was *not* a relative attended someone else's delivery, the woman giving birth might experience bad luck or have an evil spirit bother him or her. Another woman said that the woman giving birth could become ill. Another woman stated that it was only safe to attend a relative's delivery and that a husband could only attend his own wife's delivery safely. Two women said that they would be embarrassed if a non-relative attended their deliveries. A woman explained that a person may get eye problems from attending a non-relative's delivery. And, similarly, a woman stated that a person who attends a non-relative's delivery risks going blind. Obviously, there is a taboo about attending a non-relative's delivery and a belief that harm can come to either the pregnant woman or to the attendee. However, we found that this did not seem to apply to a healthworker or trained midwife. This birth taboo may explain, however, why this culture does not have traditional birth attendants.

We then asked if the women's husbands and family members thought it unsafe to attend someone else's delivery to see if their views correlated with those of the surveyed women. There was only one discrepancy. One woman stated that she thought it safe to attend a non-relative's birth but that her husband thought that attending a non-relative's birth would "hurt his eyes." Respondents said that husbands should only attend their wives' deliveries and that relatives should only attend other relatives' deliveries. The reasons cited were that: (1) attending a non-relative's delivery could be "contaminating" for the person attending and causing him or her to become ill and (2) the non-relative might bring bad luck, an evil spirit, or illness to the woman having the baby.

XXIII. Desire to Have a Trained Birth Attendant at Delivery

Only one woman surveyed said that she wouldn't want a trained birth attendant to be present when she gave birth. All the other women wanted a trained birth attendant or midwife available when they gave birth.

XXIV. Special Foods, Medicine, or Traditional Remedies Used during Delivery

All the respondents ate meat or bone soup during and/or after they gave birth. Five drank *chang* beer that had been boiled, which removes the alcohol content. Thirteen out of the 14 who did not give birth in the Nangchen County Town hospital or MCH clinic burned incense and/or *tsampa* as a prayer offering. Thirteen ate "butter soup" or drank butter melted in one form or another. Ten used Tibetan medicine. Eight took "blessing pills" or "mani pills" that were given to them by a lama or monk. Twelve used chanting, either by themselves or by others to help them through and after delivery. And only one of the women surveyed used Western medicine. She had passed out during her delivery, which was very difficult. Her brothers brought her some medicine from town as well as an injection, both of which were administered at home. This was her first pregnancy.

XXV. Rituals after Birth

Ten women said that holy water is used after birth. Either the family brings it from the monastery or the monks bring it to the women after birth to be used on the baby. Blessing cords are often given to mother and child too.

XXVI. Problems during Labor and Who Was Sought for Help

Problems during labor were common. Prolonged labor was most common with 14 out of 16 respondents reporting this. Seven women surveyed said that they had experienced a pregnancy in which their water had broken more than 2 days before the baby was born. Six reported having experienced heavy bleeding during and after a pregnancy. Eleven said they had experienced seizures or passing out. And 11 women also said that they experienced severe nausea, vomiting or dehydration. Five women had had a pregnancy with the placenta stuck inside for too long. Three women had had a baby that would not come out after pushing. And 3 women reported that they had given birth to a baby who had trouble breathing after birth. Eight women had given birth to a baby who was born too small. Eight women reported that they had had a baby that was weak or sick after birth. Two women reported their babies being born dead. Under the "other" category, a woman said that her 1st child had been born with lumps on his/her head filled with blood.

We asked the women to whom they went for help with the above-named problems. Seven women who were surveyed didn't go to anyone for help. Three called on a lama or monk for blessing pills, a prediction for the future, or a blessing. Six called on the one of the Tibetan doctors in Gargon. Seven women asked a family member to help, find help, or find medicine for them. Four asked a friend or neighbor for help. None of the women had had access to a midwife or skilled birth attendant. Three women had given birth to at least one child in Nangchen County Town hospital or MCH clinic where they had received some Western medicine.

XXVII. Problems within 1-2 Months of Last Child's Birth and Who was Sought for Help

Every woman interviewed reported some problem within 1-2 months of her last pregnancy. Eleven women reported experiencing severe pain in their abdomen. Ten women said that they had feelings of sadness or depression.

Nine women said they had had a fever. Eight said they had experienced burning when they urinated. Six reported excessive vaginal bleeding. And 6 said that they had experienced a painful red infected area on their breast. Four women reported a foul smelling vaginal discharge. None reported having been unable to control urinating or their bowels.

Seven of the women who had experienced problems did not seek anyone for help with them. Six women went to one of the Tibetan doctors in Gargon for their health problems. Four discussed their problems with a family member. Two women reported going to a monk or lama for blessing pills. One woman asked her friends what she should do about her problem but, she said, they didn't know how to advise her. No one went to Nangchen County Town hospital or MCH clinic for treatment. Two women reported self-treating their problems with rest and sleep.

XXVIII. How Soon Women Returned to Work After Having a Baby

Women rested anywhere from 2-15 days after giving birth before starting work again. Ten reported resting less than a week. Six rested 1-2 weeks.

XXIX. First Food Given to Baby after Birth

All the women gave the baby breast milk after birth except for one woman who didn't have breast milk and so gave the baby yak milk. No women reported giving anything else to the baby. Seven women gave the baby breast milk within 2 hours of birth and all of them fed the baby the milk with

colostrum. Seven women fed their baby sometime in the first day. The one woman who didn't have breast milk initially was later able to feed her baby between 2-3 days after giving birth. Fortunately, there is no taboo in this culture against feeding the baby the milk with colostrum.

XXX. Age Babies Stopped Breast Feeding and Age Babies Began Eating Foods Other Than Breast Milk

One woman stopped breast-feeding at 7 months. Five women stopped breast-feeding at around one year. Another reported that her baby was still breast-feeding after a year. One stopped at 2 ½ years. Six breast-fed for 3 years. One woman breast-fed for 4-5 years. Many women reported that there is a variation child to child as to when the child chooses to stop breast-feeding. Six women said that they start giving the baby foods other than breast milk at around one year of age. The other 8 women reported giving their babies additional food at anywhere from 4-9 months.

XXXI. Effect of Other Women Who Have Died of Childbirth

We asked women if they had known other women who had died in childbirth. Fourteen of those women surveyed said that had *not* known a woman who had died in childbirth. Three of those respondents said that they had heard of women dying in childbirth but hadn't known these women personally. Reasons for death were not clear. Fever was sited in one case. Another woman who died had had a stillborn child. One woman said that knowing that another woman had died had affected her by making her serious and afraid. The other 2 women who had known of a woman dying in childbirth said they were not affected by the deaths.

XXXII. Desire to Become Pregnant and Use of Birth Control

We asked women if they had wanted to become pregnant: (1) sooner, (2) later, (3) at the time they had become pregnant, or (4) not then or any time in the future. One woman had wanted to become pregnant earlier. Two women had no feelings about pregnancy one way or another. Four wished they had become pregnant later. Four were satisfied with when they had become pregnant. And 5 wished they had not become pregnant at all with the last pregnancy and had no desire to get pregnant again. Three of these women wished that they hadn't had any children at all.

We asked the 5 women who had become pregnant and hadn't wanted to if they would be interested in birth control. Four out of the 5 said yes. Two of those said they wanted a tubal ligation.

Of the 15 respondents to the survey, only 3 said they were not interested in using birth control. (The 68 year old respondent said that the question was not applicable to her) One of the 3 not interested in using birth control said that taking birth control is not natural and is morally wrong All the remaining 12 women wanted access to birth control. Reasons cited for wanting birth control were: because it was difficult economically and emotionally to support many children, because they had had hard pregnancies and didn't want to become pregnant again, and because they did not want to have a baby every year.

Appendix 2 Maternal and Child Health Study Results in Taju

I. Background Information

Eight surveys were conducted in Taju village, which is about an hour and fifteen minutes by truck from Gargon. Taju means “horse racing village.” Each survey took from 1 ½ to 2 hours.

Six of the respondents were nomadic part of the year and resided in Taju the rest of the year. One woman lived in another village and was nomadic part of the year. And another woman lived in Nangchen County Town. She and her husband also maintained a residence in Taju.

The women’s ages ranged from 25 to 58 years old. Three of those surveyed were in their 20s. Three were in their 30s. One was in her 40s. And one was 58 years old.

II. Herding

The people of Taju are involved in herding to a large degree. All 8 of the women who were surveyed had families who herded yaks. Six of these families also herded one of more of these livestock groups: sheep, goats, cows and horses. It is worth noting that none of the respondents in Gargon cited having horses. This was born out by the fact that we were told that if we wanted to ride to Taju, we needed the horses to be brought to Gargon from there.

III. Cash Income

All but 2 of the women reported that their families gathered caterpillar fungus (*Cordyceps sinensis*), a fungus that is used medicinally, earning between 200-1000¥ (yuan), which is approximately US$24-US$122, per year. Caterpillar fungus harvesting is clearly the most important source of cash income for the majority of those living in the Taju area.

IV. Self-description of Women’s General Health

Only 2 women of the women described their health as “good.” Two described their health as “fair.” Four described their health as “poor.” None described their health as “very good” or “excellent.”

Health care problems named were: headache, blurred vision, stomachache, heart pain, chest pain, lower back pain, kidney pain, knee pain, swollen knees, gall bladder disease, body shaking often, and blood deficiency.

V. *Description of Children's Health Problems*

Women described their children as having the following health problems: headache, stomachache, stomach ulcers, kidney problems, fever, colds, cough, flu, diarrhea, gallbladder disease, and broken bones from horseback riding accidents.

VI. Where do Villagers Go for Healing?

In Gargon village, there is a village doctor who practices some Tibetan medicine and allopathic medicine. He occasionally goes to Taju to treat patients too. Gargon is an hour and 15 minutes from Taju by truck. There also is another Tibetan doctor, older and semi-retired, whom people still occasionally see.

The closest hospital or MCH clinic is about a 5 hour drive away, when the road is passable, in Nangchen County Town.

In addition, people have access to monks and lamas for prayers, rituals and blessing pills.

There are no traditional healers, such as herbalists or shamans, in the village. Furthermore, folk remedies made at home do not seem to be a part of the culture.

Women report going to the following for healing for themselves and their children: one of the Tibetan medicine doctors in Gargon; a family member for advice or help; a friend or neighbor most generally for advice or to borrow medicine; and a monk or lama for prayers, rituals, scripture, holy water, or blessing pills.

Three women had gone to the MCH clinic in Nangchen County Town, either for themselves or taking a child. One said she went there to see a skilled birth attendant.

Those who attended one of the Tibetan doctors in Gargon or those who went to see a lama or monk walked there or rode on horseback. If they went to the hospital or MCH clinic, they went by motorized vehicle.

VII. *Frequency of Hand-washing*

Hygiene is extremely poor in this area due to lack of running water, extreme cold, infrequent bathing, lack of outhouses, and litter thrown on the ground. Water for cooking must be carried from a local spring. Hence, we inquired about hand-washing frequency.

Women most often washed their hands after gathering yak dung for fuel. They also said they washed their hands after: cooking, herding, milking, and after washing their babies' dirty clothes.

Almost all the women said that they washed their hands before cooking and milking. Two women mentioned washing their hands before they make bread.

VIII. *Information on pregnancies*

One woman reported having had one of her babies die after 3 days. Another woman had either a miscarriage or still birth. The other 6 women did not report any miscarriages or still births.

One woman mentioned that she had had a child die from cold at 6 months.

Women had from 1-7 children.

IX. *Preparing for a Healthy Pregnancy*

Three out of 8 women surveyed had talked to someone about preparing for a health pregnancy before getting pregnant. Women talked to their mothers, fathers, sisters, and neighbors/friends. One woman spoke to one of the Gargon village doctors trained in Tibetan medicine. Issues that the women discussed were: how family members could help with workloads during pregnancy, who would attend the birth, and where the birth would take place.

X. *Sense of Having Excessive Workloads*

Because over-work was cited in other studies as negatively affecting maternal health, we asked women if they felt they worked too hard and what work they wanted to do less of. All the women except one felt overworked.

They wanted to reduce their work loads in the following areas: herding; milking; wood collecting, which is used for fuel; picking up yak dung, which is used for fuel; taking care of children and the household; water carrying; cooking; and making *tsampa*. As one 58 year old woman said, she would be

happy to have any part of her workload reduced, such as housework or taking care of animals, because she just wanted to be able to sit down and chant.

XI. Workloads during Pregnancy

We then asked if women did the same amount of work when pregnant or less work. All the women did the same amount of work when they were pregnant. Two women said they had no-one else to help them out. And 2 women said there is “no special treatment” for those who are pregnant.

XII. Desire to Have Midwives

We asked the women if they would use a midwife, or skilled birth attendant, if one were available. All the surveyed women said that they would use a midwife if one was available. Reasons for using a midwife were that they wanted the baby to survive and be healthy, that they were concerned about their own safety during and after delivery, and that if the labor became difficult, they wanted someone there to help them out. In addition they wanted someone to bring them hot water for the delivery and food afterwards.

XIII. Alcohol Consumption

Alcohol consumption was limited to *chang* (barley beer), which is considered nutritious. A little more than half of the women drank ½ bowl to 2 bowls once a day when it was available. Some drank this amount for only 10 days. All those who drank it boiled the *chang*, which boils off the alcohol content. Alcohol consumption during pregnancy does not appear to be a problem.

XIV. Problems that Women Have During Pregnancy

Women surveyed were asked what problems they had during pregnancy. The following list was read: too much vomiting; too weak to do usual work; too much bleeding; swelling in hands, feet, face accompanied by fits (seizures); very bad headache; sickness with pain and fever, and abdominal pain. Five of 8 respondents replied that they had 4 or more of the above symptoms.

Other symptoms not listed that they noted were: backache and dry mouth and tongue.

XV. Fear of Dying in Childbirth

When the 8 women surveyed were asked how fearful they became, upon becoming pregnant, of dying in childbirth, they all said they were very worried.

XVI. *Fear of Baby Dying during Childbirth*

All but one of the women surveyed were very worried that their child would die during childbirth.

XVII. *Where the Mother Gave Birth to the Last Child*

When asked where the mother gave birth to her child, all the women gave birth in their homes except one woman who gave birth under the roof of her house near a gate on a pile of sheep dung.

XVIII. *Preferred Place to Give Birth*

When asked if they would have preferred to give birth elsewhere, the woman who gave birth on the sheep dung said she would have preferred to have given birth in a tent in the yard. Three women who gave birth in their homes would have preferred to give birth at Nangchen County Town hospital or MCH clinic. These results were interesting because there did not appear to be any taboo about giving birth within the home, unless the woman was unmarried; whereas this taboo did exist in Gargon. We probed to find out more about this in the focus groups.

XIX. *Persons Attending Birth*

None of the women gave birth alone. People who attended births were: mothers, sisters, sister-in-laws, husbands, and one woman had a birth attendant as well. These people helped by: boiling tea, serving meat soup, serving butter soup, burning *tsampa*, burning incense, cutting and tying the umbilical cord, taking care of the other children, doing the housework, and herding the yaks.

XX. *Cutting the Umbilical Cord*

Three of the 8 respondents cut the umbilical themselves. The other women had a relative cut the cord, except for the one woman who had a birth attendant who cut the cord. A knife or scissors was used to cut the cord in all cases. Three of the 8 respondents said that the cutting instrument was sterilized. The other 5 women said it was not.

XXI. *Tying the Umbilical Cord*

Wool string was used to tie the umbilical cord on all but one baby. The woman attended by the birth attendant was not sure how the cord was tied since the birth attendant did it. However, she did remember applying alcohol to the child's belly-button later. One other woman applied a purple cream, which is a Chinese medicine used to prevent infection, to the baby's belly-button. And another woman put water infused with blessing pills on the baby's belly-button.

XXII. *Birth Taboos*

In an effort to find out more about birth taboos, we asked women if they thought it unsafe for another person to attend someone else's delivery. Five respondents, over half, said it was unsafe. There were a variety of explanations. One woman said that only relatives and family can attend a birth without any problem. If someone else attends, it could be bad for that person's eyes and he or she could go blind. Another woman said that if anyone other than a close relative attends, that person might bring an evil spirit upon the pregnant woman, causing her to lose consciousness. Another woman said that if someone other than a relative attends a delivery, the baby might be born sick or die. Yet another woman simply said that it could be bad for her health. And yet another said that if someone who was not a relative attended her labor, she might get a stomachache and it might hurt her eyes. This birth taboo may explain why this culture does not have traditional birth attendants.

We then asked if their husbands and family members thought it unsafe to attend someone else's delivery to see if their views correlated. There was only one discrepancy between the views of the respondents and the views of their husbands' and/or family members: One woman stated that she wasn't sure about her husbands and/or family members' views. Five respondents said that husbands should only attend their wives' deliveries and that relatives should only attend their other relatives' deliveries. The reasons cited were: that (1) attending a non-relative's delivery could be "contaminating" for the person attending and cause him or her to become ill, (2) the non-relative might bring bad luck, an evil spirit, or illness to the woman having the baby, and (3) the non-relative could go blind or bring blindness to the woman delivering the baby.

XXIII. *Desire to Have a Trained Birth Attendant at Delivery*

Only one woman surveyed said that she would *not* want a trained birth attendant to be present when she gave birth. However, that woman said that if a problem arose, she would want a birth attendant to come. All the other women wanted a trained birth attendant or midwife at their deliveries.

XXIV. *Special Foods, Medicine, or Traditional Remedies Used during Delivery*

All the respondents ate meat or bone soup during and/or after they gave birth. Three drank *chang* beer that had been boiled, which removes the alcohol content of the beer. Six burned incense and/or *tsampa* as a prayer offering. Six ate “butter soup” or drank butter melted in one form or another. Three used Tibetan medicine. Seven took “blessing pills” or “mani pills” that were given to them by a lama or monk. Six used chanting, either by themselves or by others to help them through and after delivery. And only one of the women surveyed used Western medicine for pain relief.

XXV. *Rituals after Birth*

Three women said that holy water is used after birth. Either the family brings it from the monastery or the monks bring it to the women after birth to be used on the baby. Blessing cords are often given to mother and child too. Interestingly, the other 5 did not try to get holy water or blessing cords after birth. There seems to be less effort to reach the monks for such rituals in Taju than in Gargon village, which may be because the monastery is located in Gargon village some distance away.

XXVI. *Problems during Labor and Who Was Sought for Help*

Problems during labor were common. Prolonged labor was most common with 4 out of 8 respondents reporting having experienced this. Three women said their water broke more than 2 days before their baby was born. Four women reported having severe nausea, vomiting or dehydration. Three women also reported having seizures and passing out. Two said the placenta had been stuck inside them. Two said the baby was born too small. And 2 said the baby was born weak or sick. One woman reported heavy bleeding.

We asked the women to whom they went for help with the above-named problems. Three women didn’t seek help from anyone. Three women talked to a family member about the problem. Two went to a lama or monk for blessing pills, incense burning and holy water. Two also went to one of the Tibetan traditional doctors. Two talked to a friend or neighbor. One woman spoke to a skilled birth attendant. And one woman went to the Nangchen County Town hospital or MCH clinic.

XXVII. *Problems within 1-2 Months of Last Child's Birth and Who was Sought for Help*

Every woman interviewed reported some problem within 1-2 months of her last pregnancy. Seven women said that they had severe pain in their lower abdomen. Six respondents said they had a fever. Three reported burning when they urinated. Three said they had a painful, red, infected area on their breast. Two reported excessive vaginal bleeding. One said she had had a foul smelling vaginal discharge. Interestingly, 3 women said that they had feelings of sadness or depression; thus, post-partum depression, which is often considered a "Western" syndrome, was found among Tibetan women. Also, some Buddhist teachers have said that depression is a concept unknown to Tibetan Buddhists. This result, however, indicates that more research should be done on post-partum depression. One woman said that she hadn't wanted to work. None reported having been unable to control urinating or their bowels.

Two of the women who had experienced problems did not seek anyone for help with them. Three women went one of the Tibetan doctors in Gargon village. Two discussed their problems with a family member. Two women reported going to a monk or lama for blessing pills, holy water and scripture. One woman went to her friends or neighbors for advice. And one woman went to the Nangchen County Town hospital or MCH clinic.

XXVIII. *How Soon Women Returned to Work After Having a Baby*

Women rested before starting work again anywhere from 2-10 days after giving birth. Six reported resting less than a week. Two rested 8-10 days.

XXIX. *First Food Given to Baby after Birth*

All the women, but one who didn't have any milk, gave their babies breast milk within 2 hours of birth. The one woman who didn't have breast milk initially was later able to feed her baby 2-3 days later. One woman first gave the baby holy water to drink before breast-feeding. Another woman said that with her older children she had not given them breast milk until between 2-3 days after delivery.

XXX. *Age Babies Stopped Breast Feeding and Age Babies Began Eating Foods Other Than Breast Milk*

One woman stopped breast-feeding at 6-7 months. Five women stopped breast-feeding at 2 years. Two women stopped breast-feeding at 3 years. Five women said that they start giving the baby foods other than breast milk at around one year of age or a little later. The other 3 women reported giving their babies additional food at anywhere from 5-8 months.

XXXI. *Effect of Other Women Who Have Died of Childbirth*

We asked women if they had known other women who had died in childbirth. Five of those women surveyed said that had known a woman who had died in childbirth. One woman's sister had died in childbirth. Another said her aunt's daughter had died in childbirth. One woman named a friend who had died in childbirth. Three of those who died hemorrhaged to death. One woman died of seizures and fever.

Of the 5 women who each had known of a woman who died during or after childbirth, all were upset and frightened. Two women said that they were sad and afraid. One was worried about having children in the future. Another said she was scared. The woman whose sister had died in childbirth explained that she was particularly frightened about having children now because she didn't want to die as her sister had.

XXXII. *Desire to Become Pregnant and Use of Birth Control*

We asked women if they had wanted to become pregnant sooner, later, at the time they had become pregnant, or not then or any time in the future. Two women had wanted to become pregnant at the time they had become pregnant. Two women had no feelings about pregnancy one way or another. Four wished they had not become pregnant at all with the last pregnancy and had no desire to get pregnant again.

Four of the women had no interest in birth control, and one of them was afraid of birth control although she didn't want any more children. One woman used Chinese medicine to prevent pregnancy. One said that she can't become pregnant anymore. Two women wanted access to birth control.

Reasons cited for wanting birth control were: because it was difficult to economically and emotionally to support too many children.

Appendix 3 Patient Intake Form Results in Gargon and Taju

Demographics

Men	30%
Women	46%
Nuns	25%

Gargon villagers	182
Taju villagers	78
Others/Unknown	25

Age range

< 13	10%
13 – 18	4%
19 – 40	42%
41 – 60	22%
61 – 80	20%
>81	3%

Numbers of pregnancies

1 – 4	26 of 40 women
5 - 10	14 of 40 women

Many had 1-2 children who were no longer living

Diet

Most frequent foods eaten: *tsampa*, rice, yak meat, butter
Next most frequent: bread, vegetables

Respondents stated that they ate small, frequent meals 4-5 times per day.

Most common complaints

Stomach pain/digestive problems	58 %
Joint pain/arthritis	48%
Headache	38%
Loss of vision/eye problems	16%
Kidney/waist pain	12%
Respiratory problems	11%
Heart pain	11%
Gall bladder	10%
Neurologic/developmental	7%
Dermatologic problems	7%
Gyn/menstrual problems	4%
Dental problems	3%
Injuries	3%
Hearing problems	3%

Hepatitis	1%

Most common pediatric complaints among 39 children seen

Stomachache	50%
Headache	50%
Developmental problems/growth	25%
Respiratory problems	23%
Other (rashes, diarrhea, eye problems, knee pain, emotional/behavioral)	40%

Prior use of medicines

Almost all villagers had utilized both Tibetan and Chinese medicines as well as acupuncture for prior health treatments. Of 89 completed intake forms, 73% described having received either injections or intravenous treatment for illnesses, though they could not always articulate the reason for the treatment.

Alcohol and Tobacco Use

19 women reported to using alcohol "a little" or "sometimes," most often barley wine or *chang* (boiled), which boils off the alcohol content
15 men reported using alcohol, some "daily" or "a lot"
4 men reported that they had quit using alcohol recently

No women reported smoking, past or present
10 men reported smoking, using snuff, or snorting Tibetan herbs and tobacco
5 men reported that they had quit smoking

These numbers tell us that women apparently are not frequent users of tobacco and that they use alcohol regularly but in small amounts, having boiled off the alcohol content, which is consistent with survey and focus group data.