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Women of Leh Town, Ladakh: An Overview of Perceptions of Health, Health-Seeking Behaviors, and Access to Health Care

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Women of Leh Town, Ladakh: An Overview of Perceptions of Health, Health-Seeking Behaviors, and Access to Health Care



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India: Public Health, Policy Advocacy, and Community

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Abstract

The following study seeks to investigate access to health care services and perceptions of health care among women residing in traditional farming communities around the Ladakh region, and to analyze perspectives on health, health-seeking behavior, and access to health care. This project was prompted by the fact that health care in this region is understudied. This study also focuses on marginalized communities including local women and immigrant women. Methods used for the collection of data were qualitative interviews conducted with 24 women, as well as an amchi worker, doctors, and informal and formal conversations with people from different nongovernmental Organizations (NGOs). Interview questions consisted of open-ended questions, which concerned perceptions of health, health-seeking behaviors, and access to health care. This study seeks to contribute to literature regarding health care in Ladakh by analyzing accessibility of both health care and awareness of the best practices in order to stay healthy. A limitation of the study is the sample size is small and due to seasonal safety restraints, interviews could not be conducted with a more remote population that may have little to no access to health care. Also, note that this fieldwork project cannot be used to generalize the entire Leh district or even the specific communities studied.

Abbreviations

CHC- Community Health Center

GDP- Gross Domestic Product

LEDeG- Ladakh Ecological Development Group

MDG- Millennium Development Goals

NGO- Nongovernmental Organization

NRHM- National Rural Health Mission

PHC- Primary Health Center

SNM Hospital- Sonam Norbu Memorial Hospital

WHO- World Health Organization

Introduction

A. Ladakh Region of Study

Ladakh is a remote high desert mountain community in the Indian Himalayan region. The name Ladakh has been traced to various origins including *La-daks* meaning many passes and *Lha-daks* a land of the monks (Norberg-Hodge 1991, pg. 10). It is a land where the sand dunes meet the glaciers, and is so high that the scorching sun burns your skin, while the wind swirls all around you. Challenges are met by high altitude, extreme cold, great dryness, strong winds, low precipitation, and low humidity; the extensive landscape is barren and cluttered with steep vertical glaciated slopes, minimal forest resources, few pasture lands at high elevations, and settlements in narrow oases valleys with limited arable land and limited water for irrigation (Bhasin 2005, pg. 1).

The natural elements dictate aspects of traditional life, agricultural systems, and makes transportation difficult. The region of Ladakh covers about 45,000 square miles and is considered one of the highest regions of the world (Encyclopedia Britannica 2017). Geographically, the land is diverse containing high plains and deep valleys. Inhabitants live in villages scattered throughout a vast region from 9,000 to 15,000 feet. The region can be split up into five separate blocks including Leh District, Nubra Valley, Khalsti, Nyoma block, and Thangtse block. Ladakh is a region marked by poor conventional energy sources and has almost no

industrially exploitable resources (Bhasin 2005, pg.1). The economy is moving away from subsistence farming and now, the region is subject to commercialization, rapid urbanization, globalization, and a steady increase in the tourist industry (Dr, Landol, personal interview, November 17, 2017). Dr. Landol, a Ladakhi local and the first gynecologist in Ladakh who previously worked at Sonam Norbu Memorial Hospitals, sheds light on the current shifting situation, "Farming is almost forgotten. With the recent environmental conditions deteriorating, people forget to work in the fields. They do not know what is being done in the fields. Our children are like that now. They cannot eat money." (Dr. Landol, personal interview, November 17, 2017). The population is struggling with environmental stresses, inaccessibility, and an identity, which is stuck somewhere between traditional and contemporary.

B. Globalization & Tourism

The vast majorities of Ladakhis used to be self-supporting farmers, who lived in small settlements in the high desert valleys. The sizes of the villages were dependent on the availability of water, which comes from glacial melt. For over two thousand years *Tartar* herders have been growing peas, turnips, and potatoes in very brief growing seasons. In lower valleys, apricots and walnuts are grown, as well. Domestic animals including sheep, goats, a few donkey, small shaggy horses, and *dzo* (hybrid Asian cattle) provide meat, milk, butter, cheese, draft labor, transport, wool, and fuel. Dried dung cakes are gathered throughout the year to use as cooking fuel and heat during the winter when temperatures may fall to -40 degrees Fahrenheit. Until recently, Ladakhi's homes, clothes, and food were all

produced locally and by hand. The land was filled with cattle rears and farmers, but times have shifted.

In 1974, the Indian government opened Ladakh to tourism, which changed everything. Until that time development had been concentrated primarily in Leh, however, now that Ladakh is open to tourism the psychological impact of modernization has touched the entire region (Norberg-Hodge, 1991, pg. 92). Development in Ladakh meant developing in a Western way. Roads were built, Western medicine and Western education were introduced even in the remote reaches of Ladakh (Norberg-Hodge 1991, pg. 92). Now, farmers are pushed to become dependent on the market economy, farmers have moved away from traditional subsistence agriculture and cash cropping is the norm (Norberg-Hodge 1991, pg. 103). Other changes include increasing banks, police force, and radio. Development did not just bring tourism, but also more recently Western and Indian films and television, which provide images of luxury and power. The images are perceived by youth (really in most areas around the world) in a way in which Western culture appears to be superior compared to their own.

Not only did development bring this idea of Western superiority, but it also brought the concept of a need for money in order to survive. Tourism generated revenue and created job opportunities in sectors such as hotels, guest homes, shops (retailers and handicrafts), tourist agencies, taxi transport, restaurants, and guides. Dr. Landol echoes the issues of modernization now that people face, she explains, "People are not growing much. Now, all the youngsters have migrated to Leh and the older generation has the resources and they work and store for the winter. Ladakh

used to be subsistence. They were self-reliant, but not know. Now, money is the only thing people want. It is not really good to change” (2017). Tourism has allowed people to profit easily, which has drawn young people toward business and away from the fields.

In the last 10 years, tourism has been the largest driving force of economic growth in the district. This past year, Leh has reached the height of 30 percent annual growth in tourist arrival (Palkit 2017). Approximately 568,123 tourists visited Ladakh from 2014 to 2017 (Palkit 2017). With the rise of globalization and tourism, diets have been changing. With less farming and more imported unhealthy foods, Ladakhis are now struggling with lifestyle disease that they were not affected by previously. Helena Norberg-Hodge writes in her book *Ancient Futures* published in 1991 “In fact, obesity is so unusual that I once overheard a woman complaining to a doctor of [strange folds in the stomach,] without having any idea what they were” (pg. 37). Yet, now more than ever-younger people are eating Maggi and other imported junk foods. People are now facing health issues related to diet, including obesity. Another contributing factor is that there are seasonal limitations to regulating ones diet. In the winter, obtaining fresh vegetables and fruit is a struggle since highways and roads are generally blocked, food products come by air, but infrequently and at a high cost.

Background and Context

A. Health Care System

Health care is a basic human right of all beings. Health contributes to how individuals function in their daily life. In 1977, the 30th World Health Assembly decided the main target of governments and the World Health Organization (WHO) in the coming decades should be, “the attainment by all the citizens of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life” (WHO 1979). The World Health Organization’s 2000 global health care profile ranked India’s health care 112th out of 190 countries. Now, more than ever, the importance of health coverage for all has come to the forefront in international development. In 2000, the United Nations developed the Millennium Development Goals (MDG), and these goals plan for global development. The MDG emphasis on health in the UN declaration shows the importance of the battle against health problems worldwide. India is a diverse country full of striking juxtapositions, it is both clearly apparent and deeply disheartening the gaps of inequality between access and quality of rural and urban health care, however within this disparity, women’s health is suffering greatly in rural areas.

More recently in 2009, the government of India drafted a National Health bill proposing the legal framework to recognize the ‘right to health and the right to health care,’ addressed social determinants of health. India is a country full of striking juxtapositions; there are huge gaps of inequality between urban and rural health care as well as gendered inequity. The health system is full of complexity and

paradoxes and the health care issues extend throughout the country, including the far regions of the north. The survey brought to light major health concerns in India that remain today. Though the government showed their commitment to public health, equity in health care remains a challenge given India's institutional and implementation capabilities.

A complex network of public and private providers in India delivers health care services. The public health care system is arranged in a three-tiered system, which includes primary, secondary, and peripheral facilities. In rural areas, health care is provided through sub-centers, primary health centers (PHCs), and community health centers (CHCs). The sub-center is the first point of contact between the primary health center and the community. The facilities responsibility is to handle maternal and child health, disease control, and health counseling for a population size between 3,000 and 5,000. Within in the sub-center, there is one ANM and one male health worker, one women health worker, and one female health supervisor for six sub-centers. The next level of care is the primary health center, which is the first point of action between a village community and a medical officer. The PHC offers services for populations ranging from 20,000 to 30,000 at large. Normally, the PHC serves as a referral unit for every six sub-centers and has around four to six beds per patient. The next level of care is the community health centers managed by the state government. The CHCs must have four medical specialists supported by 21 paramedical and other staff with 30 beds, a laboratory, X-ray, and other modern technologies. The CHC provides medical aid to anywhere from 80,000 to 120,000 people. The last existing facility is the district or sub-district hospital.

The district hospital is a fully operational hospital and must be equipped with emergency obstetric care, as well as blood storage. Despite this complex system, there are severe issues in reaching many rural and marginalized communities due to inadequate planning, lack of funds, poor access, lack of staff able to run the facility, stark differences between resources, available professionals, and failure to enforce policies in public health care systems.

B. Geographical Equity: Urban-Rural Chasm

Health is now being seen as the way to development. According to the World Bank data, it is estimated that 4 percent of the total GDP is spent on health care coverage to reach over roughly 1.3 billion citizens, which denies the majority of people their basic right to health. When people are denied health care their ability to conduct themselves in society and make economic gains are significantly compromised. Their ability to go to school, achieve, participate in the community in a positive way, generate income, and their standard of living is drastically changed based upon whether the individual has access to health care or not. Many of the health inequalities result from social, economic, and political conditions, which influence both the level and distribution of health within a population. In India, 80 percent of medical costs are covered by out-of-pocket expenditures, which mean that there are huge financial barriers to access treatment (Bhaskar 2014). Approximately, 39 million Indians fall below the poverty line each year due to health-related costs (Balarajan, Selvaraj, & Subramanian 2011). The financial burden of both inpatient and outpatient care is greater for rural households

compared to urban households, which is startling since 70 percent of India's population live in rural areas (Balarajan, Selvaraj, & Subramanian 2011).

Not only are there financial barriers to health care, but also there are physical limitations. The number of hospital beds in urban areas is more than double the number of hospital beds in rural areas due to the rapid development of the private sector (CBHI 2008). Physical distance to facilities is a key determinant for access to care. Overcoming challenges like lack of roads and communication network for disadvantaged and physically isolated groups are valuable in providing health care for all.

Difficulties in providing health care for all also concern the relationship and habits of medical practitioner and patient. Sustaining adequate level of skill and quality of human resources across states, especially in poorer rural areas is another challenge. Rural practitioners serve rural areas, many are not formally trained (Balarajan, Selvaraj, & Subramanian 2011). Health-seeking behavior by the patient is also another factor that presents hurdles to overcome. Education and information made available to patients may alter compliance with health service, influence health beliefs, perceptions of health and illness, health-seeking behavior, and compliance with therapy. These barriers may be shaped by socio-cultural factors such as sex, religion, and cultural beliefs.

In response to the lack of access for those living in rural areas, the Indian government has launched the National Rural Health Mission (NRHM) whose mission is to provide equitable, quality, and affordable health care for the rural population. However, the government has had clear difficulties in designing health

interventions for rural populations partly because there are urban-biases and assumptions made about what services need to be provided to certain populations. Each community is different and has its own set of needs, which is hard when trying to solve a systematic issue for an entire country. Rural life is often ignored in the creation of government schemes. Policies that aim to improve health care in rural communities must find their way navigating through social circumstances and complexities revolving around caste, class, gender, and religion.

Another aspect of rural health is the existence of local folk health tradition (in this case Tibetan medicine and Oracles), which has been ignored by policymakers. Many women interviewed in villages surrounding Leh, where the district hospital is located reported using both allopathic, Tibetan medicine, and Oracles which shows that even in more urban environments people are connected to some aspects of traditional life. Ladakh is rich with culture, folklore, and heritage. In rural areas especially most people still rely on medicinal plants for their treatment during ill health (Rather 2015). Many government programs have been inadequate and do not reach the demands of rural communities. The government needs to implement policies that integrate traditional and global knowledge. It is crucial to weigh the importance of socio-cultural context into policy implementation.

C. Gender Equity: Women's Health Care in Rural Areas

The World Economic Forum ranked India 142 out of 144 countries in terms of gender equity in health (2017). Gender discrimination is rampant throughout systems of education, health, and opportunity. Inequalities are present throughout

the entirety of a women's life, especially in India. Due to biological differences, women live longer than men throughout all regions of the world (World Health Statistics 2014). However, India's sex ratio is in favor of boys (927 girls to 1,000 boys between the ages of 0-6 years-old in the 2011 census). India also struggles with sex selection, which is seen by the fact that there are 7,000 unborn girls who die every day due to sex discrimination (State of the World's Children 2007). Female infanticide is prevalent often due to economic reasons. Men are viewed as the main earners, men may also receive positional pensions once married, and a girl will marry out of the family, which could cost the family economic gains. Though dowry and sex-selection abortion are illegal, both practices still continue today.

After the child is born, there is still a strong son preference that persists throughout a child's life; this can create adverse quality of life issues for girls and their access to nutrition, health, education, and maternal care. Families prefer to send their boys to school and women's literacy rates are still lower compared to men's literacy rates (Census 2011). This son preference, along with high dowry costs for women, also can result in the mistreatment of daughters. Families also give the women the responsibility to take care of the house and children, yet they typically struggle with their own autonomy within their own home. Women play multiple roles, within the home, which has implications for their physical and mental health.

Not only are women burdened by domestic chores and agriculture work, globalization has lead to male and child out-migration in rural areas. Children are also then acquiring jobs outside Ladakh. Globalization has triggered shifts in culture,

language, traditions, politics, and economics, which have adverse effects on the lives of women, especially in rural areas. Women play more active roles running the household and also taking care of the fields. Rural men favor non-agriculture sectors, which leave women to take over the labor-intensive cash crop (Capila 2004). This outmigration also has changed the role of women within their community and the division of farm-work. Women are key producers and perform many tasks including selecting seeds, sowing, applying manure, threshing, and harvesting. Yet, women are accepting lower wages doing work traditionally done by men. Globalization has changed the tasks of women and also the price of health. Medicalization issues are increasingly becoming more expensive. The root of these problems lie in worldwide socio-economic differences and inequalities.

Despite women's contributions to the family, India has the nature of both a hierarchical and patriarchal society, which means that the health needs of a woman are second tier. Both economics and socio-political climates impact the health needs within a specific culture. Women are much more likely to see a doctor later when they are ill compared to men (Capila 2004). They are treated at home rather than seeing a doctor, which can have serious consequences on their health. The constitution India does not discriminate between men and women, yet due to lack of literacy and education, it is hard for women to gain social mobility and make autonomous decisions about their own health. By looking at women's health indicators, one can also see the urban and rural disparities. Women face many issues surrounding health care, which are linked to their status, but these issues start at conception in rural communities.

Women of Ladakh still face the patriarchy of India. Power dynamics still define who a woman is, her role in society, and how she should be dressed. Ladakhi women bear the loss of tradition and culture, while men escape the responsibilities that women are faced with the code of conduct that she must follow. Culturally a woman must be submissive and dressed in a conservative way. Ladakhi women look after the household, the fields, and the animals. Women are overburdened and bear the brunt of the agricultural work, which can be physically challenging. Angmo, who is from a remote village in the district discussed the life of a rural woman, “For a women life is much tougher, especially, in the mountains where you have to do most things by gathering” (personal interview, November 30, 2017). Women have to collect all the wood for heating and grass for feeding the cows on top of her daily chores of taking care of the house and working in the fields. While Ladakhi men are usually involved in serving the army and engaging in the business of tourism. Women’s work is also seen as inferior to that of a man’s.

Like most regions of India, a woman’s life is dictated by the patriarchy. Even in the cultural eating practices reflect the nature of the society. In most Muslim communities, the women serve the husband food first, then the children, and then herself. However, this cultural practice is not found in Buddhist families. When Muslim women are menstruating, they are not allowed in the Mosque to pray because their blood is seen as impure (Women 3, personal interview, November 10, 2017). This practice is not seen in the Buddhist tradition, though women in Leh are better off than most in India. Women in the city are not subject to the same type of oppression as women living in rural Ladakh and other areas in India. Angmo

exclaimed, “If you live in a modern society you will have holidays and power to decide your own life” (personal interview, November 30, 2017). While, women in more rural areas are financially dependent on their husbands and must do the daily house chores everyday without a break.

D. Traditional Medicine

Tibetan medicine is a holistic ancient medical tradition, which has stretched back over 1,000 years. According to legend, the tradition stretches back as far as the 2nd century C.E. however, it was officially codified around 7th century C.E. Tibetan medicine seeks to combine attained knowledge and Buddhist philosophy. Like Ayurveda medicine, the system has a unique way of diagnosing, describing, and treating illnesses. The health of the body is dependent upon the proper balance of the three humors (*rlung*, *mkrhis*, *pa*, and *bad kan*) (Donden, 1986, pg.34-35). Each person has a unique combination of the three humors, which will affect their make-up and personality. Another belief within the tradition is that certain factors such as emotion including ignorance, desire, hatred, poor diet, and *karma* in ones past life can affect the balance of their humors, which may lead to specific diseases (Donden, 2000, pg-60-63).

The holistic approach to disease calls for an equally holistic set of treatment to repair the humoral balance within the body, rather than treating each body part as a separate entity. Different treatments include Buddhist counseling and practice, dietary and behavioral change, therapies like acupuncture or massage, and drug regimens. However, the drugs comprise of only natural ingredients such as herbs,

minerals, and animal products. Tibetan drugs are slow acting and have little to no side effects. In addition, another pivotal part of Tibetan medicine is the patient-doctor relationship and there is little to no cost for treatment.

E. Oracles

An Oracle is a type of spiritual healer. A *Lhamo* refers to a female healer, while the male healers are known as *Lhapa*. The rituals of Oracles are most likely derived from the cultures of animistic tribes and shamans of Central Asia, Tibet, and Mongolia. Most of the Oracles are Tibetan Buddhists, which is the primary religion of the region. Oracles meet patients in their homes. Then the Oracle brings the patient to an altar in their kitchen. Generally, Oracles work with more than one patient at a time, but they talk to each of them separately about their ailments before going into a trance. Oracles then will proceed to chant, ring bells, pray, and beat drums, while they go into a trance (Angmo, personal interview, November 30, 2017). It is believed that when an Oracle goes into a trance, a spirit will enter their body. The spirits possess the Oracles during the trance and are believed to be from the pantheon of Buddhist deities.

The Oracle act in the role of exorcist, which will expel the bad spirits believed to be in the patients. In some cases, Oracles will shout or beat their own bodies until bruises appear. Traditionally, Oracles are approved by a high-ranking Tibetan Lama and once approved, the Oracles must go through a training process, which can take anywhere from three to six years and is guided by a senior Oracle. The trainees must learn the Buddhist scripture, meditation, and methods in order to become

possessed. Methods of healing include sucking the disease out of the patient (Angmo, personal interview, November 30, 2017). In this endeavor, the possessed Oracle will use a pipe or straw to suck out the substance from the patient by placing it directly on the body part that needs healing. Once the Oracle is finished, they show the substances, which tends to be small black tar-like bits to the patient. Other practices can include blood sacrifices, where an animal is killed and offered to God. (Angmo, personal interview, November 30). Regardless of religion, patients come for healing.

Results

A. Field Study Objectives

This study sought to understand perceptions of health, health-seeking behaviors, and access to health care, within an understudied region. With limited time and resources, only a small population could be examined. The author hoped to identify and analyze marginalized communities in Ladakh. The study largely also focused on social determinants including gender, location of housing, level of education, religion, number of family members, and number of children. The author hoped to hear perspectives and better understand the challenges of providing health care for all.

B. Women's Perceptions of Health

As India moves away from communicable diseases, communities are now plagued with bearing the burden of non-communicable disease also known as, lifestyle diseases. When questioned about the health needs of the areas, the village

women were well aware of the health issues in their community. The general health issues included change in diet, diabetes, eye issues, respiratory disease, hypertension, joint-issues, digestive disorders, and cancer.

Globalization and tourism have brought changes to the Ladakhi diet. In the market, now there are many general stores where one can find Maggi, Lay's Chips, Coca-Cola products, and sugary and salty snacks galore. The majority of women reported that older people in their community are significantly healthier than younger people in their community. Those who held this belief referred to all of the packaged junk food that is now available in the main market. Dr. Otzer exclaimed, "Incidence of obesity is exponentially increasing in Ladakh, lately, due to change in lifestyle and food habits." Women also reported that older people tend to eat locally grown food as well as local cuisine, which is not oily, spicy, or processed.

In conjunction with eating unhealthy foods, the younger generation is also moving away from professions like farming. All of the women interviewed from both villages acknowledged that farming is good for one's health since it provides exercise. The younger generation is less active and eating unhealthy foods. Rates of obesity and diabetes are on the rise, which are issues people in this region have never had to struggle with until now. In the winter, people's seasonal diets change as well. Due to road closings, communities have little access to fresh fruits and vegetables and most who are not vegetarian will increase the quantity of meat that they eat.

In the wintertime, families also have to use a *bukhari*, which is a stove to heat one room in their home, which they typically cook everything in and live in during

this harsh time period. *Bukhari's* consist of a wide-cylinder fire chamber at the base where dung and wood are often burned and it connects to a narrow cylinder on top that helps heat the room and also acts as a chimney. Frequently, *bukharis* emit smoke and homes are not built with proper ventilation systems. (Researcher at SNM hospital, personal interview, November 16, 2017). Due to lack of ventilation, this stove can cause breathing issues and other serious health issues. The smoke can also cause eye problems. Eye problems are also prevalent in the region due to the ecological landscape. The dusty environment and strong winds can irritate eyes, as well as the strong sunlight due to being in a high altitude zone, especially in snow-covered areas where the rays are reflective of the white snow.

Due to the high altitude and the dry climate, there are many diseases caused by the environmental factors of living in the region. The area is plagued with respiratory and breathing issues. Common respiratory disease and infections include asthma, silicosis (a lung disease that can be caused by the long-term exposure of inhaling dust), and tuberculosis. One woman from Thiksay said, "Most older people go to Jammu for the winter season. Some people have financial issues and they will not go" in regard to elderly who may struggle with breathing issues (Women 4, personal interview, November 10, 2017).

Not only does the high altitude create respiratory and breathing issues, but people are also at risk for hypertension. Pregnant women are especially at risk for hypertension. In Leh, there is a higher incidence of hypertension compared to rural areas (Norboo et al. 2015). This may be due to the urbanization and lifestyle shifts, which have resulted in obesity and therefore a high prevalence of hypertension

(Norboo et al. 2015). Social determinants such as economic conditions, traditional food culture, and harsh environment with limited resources may also affect energy intake and food diversity. The harsh climate and type of work performed (farming and manual labor) also factored into the health problems reported by the women. The majority of the women reported a high incidence of joint pain as well, which also may be due to the cold weather and farming labors.

Other major health concerns communities are struggling with include a high prevalence of digestive disorder, ulcers, gallstones, and stomach pain. For most digestive issues women sought the help of the amchi. Women also try to stay healthy by maintaining a proper diet, eating traditional foods, and providing their family with nutritional meals. Some women in order to stay healthy also reported using meditation for their mental health. Women believed in the mind-body connection meaning that thoughts, feelings, beliefs, and attitudes impact one's biological health.

Women in order to stay healthy also practiced religion. While several of the older participants looked at religious reasons for why people got sick including the belief that sickness was due to bad spirits and *karma*. However, the majority of participants believed that sickness mainly was due to the change in season and cold weather as well as old age. Many accounts from women were recorded in which their parents were struggling with a more complex illness, like cancer, but only became aware of the serious condition until it was too late (Women 15, personal interview, November 14, 2017). One woman's mother had a brain tumor and passed away (Women 15, personal interview, November 14, 2017). Her mother was

advised not to travel to New Delhi for care because the tumor was in an advanced stage when she was diagnosed. Part of Ladakhi culture is that women are strong and will wait until the pain is so unbearable that they need to seek help, which creates issues when the problem is severe (Angmo, personal interview, November 30, 2017).

C. Cultural Practices

Different regions and villages of Ladakh have different cultural practices regarding mothers returning to their home post-delivery. While shadowing Dr. Tenzin, she mentioned that women wanted to stay longer in the hospital since there are complications in living at home. Once the new mother journeys home, only relatives can eat at their home. It is believed that she will pollute any outsider who eats at the home with evil spirits. Depending on the village, outsiders cannot eat at the home for a certain duration of time (can range from anywhere between 7,15, and 30 days) since the new mother is seen as un-pure. The duration of time is also dependent upon if they have a son or a daughter. For a boy, the duration of time is shorter than if a baby girl is born. In other villages, traditional practice includes not being able to eat out of one's kitchen for a specific duration of time (in some cases one may have to eat outside the home for a week). Once the home is considered clean, friends and family can bring butter, barley wheat, and rice. Depending on the region, homes also may need to be white washed and families need to perform special prayers (Angmo, personal interview, November 30, 2017).

D. Health-Seeking Behavior

In Thiksay there is a primary health center, however, in Arling, there are no health facilities available except for The Heart Foundation, which is a charitable medical facility in which doctors can volunteer their time. The PHC in Thiksay mainly serves Nepali laborers and Bihari women in the community, who tend to be less financially stable, will often go to the PHC as a first step. However, many of the locals will pay (taxi fares are about 500 rupees one-way) to travel to the district hospital, which is 20 km away to seek treatment (Dr. Tsering, personal interview, November 25, 2017). Dr. Tsering who is a general doctor working at Thiksay's PHC explained, "If people can afford it, they prefer to go to SNM hospital because it is big and has all the modern technology and specialists" (personal interview, November 25, 2017). A systematic issue that SNM hospital is faced with is that people in villages that are in close proximity to Leh skip the step of consulting the PHCs or sub-centers, which creates overcrowding in the district hospital and long hours of waiting in the queue. (Dr. Sonam, personal interview, November 11, 2017). One reason for this is people believe they will just be sent to the district hospital anyway, so they jump ahead. The district hospital also will provide the best care since there is one ANM and one male health worker located at the sub-center and there are only two to three doctors at the PHC who will be most likely be general doctors, not specialists (Dr. Tsering, personal interview, November 25, 2017). This leaves doctors in some of the PHCs underutilized and frustrated.

Though Thiksay has a PHC, Arling does not. The only health facility in Arling that is available to women is The Heart Foundation, however, the village is only 2-3

km away from the district hospital. Women who sought care from The Heart foundation were all pregnant and looking to be treated by Dr. Landol who has a special reputation within the community. She is known to give patients time and treats them with kindness, while she explains what procedure she is performing and why. Dr. Landol articulated, “The trust between a doctor and patient is very important... I have been here since ’79, and now you can imagine I am delivering the grandchildren of my own patients” (Dr. Landol, personal interview, November 17, 2017). Dr. Landol is compassionate and believes that before anyone even becomes a doctor they must be a good person (Dr. Landol, personal interview, November 17, 2017). Most doctors in both PHCs and district hospitals do not have time to counsel patients and fully explain their diagnosis and treatment plan, which can create difficulties especially when a patient is illiterate and uneducated.

Another challenge in the health care system is that people are losing trust in the system (Dr. Sonam, personal interview, November 11, 2017). When people are sick, they are willing to travel long distances over high altitudes to see a doctor, which for seriously ill patients could put them at risk of losing their lives. This endeavor also can be quite costly for the patient if they need treatment over a long duration of time and most likely someone else needs to accompany them to help take care of them (Dr. Sonam, personal interview, November 11, 2017). The journey for some to SNM hospital can take up to a day.

There was a recent account of a pregnant woman traveling from Nubra Valley to SNM hospital who died in the taxi due to a complication (Dr. Otzer, personal communication, November 8, 2017). Nubra Valley is 150 km from Leh,

which takes four to five hours normally to reach. However, if an individual is ill, it will take five and six hours since the ambulance has to drive slowly over the bumpy roads to prevent rattling. Not only does the patient have to travel over bumpy roads, but also if they are traveling from Nubra Valley, the patient must pass over the highest motor road in the world, *Khardung La*, at 17,582 ft. Traveling across high-altitudes when sick can also be difficult. If a woman is pregnant and already hypertensive and then has to make the trip over the highest motor road in the world, the odds of surviving are not in her favor.

However, the women who were interviewed all live in close proximity to SNM Hospital, so access to health care was not an issue. Unlike the U.S., women only sought medical help when they were sick. There is no concept of annual check-ups. Apart from seeking religious leaders, *Lhamos* and *Lhampas* and traveling to a place of prayer, in this study, three patterns of health-seeking behavior were recognized. Women's behavior ranged from visiting solely an allopathic doctor, visiting only an amchi, or consulting both an allopathic doctor and amchi. Ages of the women varied from the youngest being

Age Range of Women	
25-35	8
36-45	8
46-55	2
65-75	5
+75	1

27 years old, while the oldest was 79 years old. It is also important to note, especially when looking at health-seeking behaviors, that majority of women who were interviewed were Buddhist. Tibetan medicine is steeped in Buddhist philosophy, one might expect more Buddhists to visit the amchi compared to Muslims. Out of 24 women interviewed, only 11 women sought out medical assistance from just an

allopathic doctor, while only 3 women sought help solely from the amchi (it is interesting to note that women who sought only amchi's assistance were 54, 71, and 75, all of whom were Buddhist), and 10 women sought out the aid of both the allopathic doctor and amchi. Health-seeking behavior is also being affected by globalization and urbanization with the rise of education and awareness. Younger women tended to merely visit the allopathic doctor, whereas older women tended to only visit the amchi or both health care providers (Amchi, personal interview, November 16, 2017).

Religious Breakdown	
Buddhist	18
Muslim	5
Hindu	1

Religious Breakdown	
Buddhist	18
Muslim	5
Hindu	1

All of the women who were interviewed participated in some type of praying when either they fell ill or someone in the family fell ill. Women either prayed at home in *puja* rooms or went to their respective place of prayer. When someone was seriously ill, a religious leader was also called to the home to heal the sick. On top of praying, women also reported consulting Oracles (*Lhamo* and *Lhapas*) when sick.

E. Access to Health Care

Though all women who were interviewed had access to the district hospital, there is still a lack of specialist within the hospital. Unfortunately, the hospital is not equipped to deal with serious and complex issues. For example, the gynecologist at SNM hospital was concerned about many pregnant women with hypertension, which may lead to bigger issues including a brain hemorrhage. If a pregnant woman has a brain hemorrhage, there is not a neurosurgeon in the hospital to help. This forces women and other patients to fly out of Leh, which may be difficult if it is night-time. If the patient has to wait until morning with a brain hemorrhage, they may die (Tenzin, personal observation, November 18, 2017). The lack of specialists in the district forces patients to fly out and seek treatment elsewhere, which can place a tremendous financial burden on families. SNM hospital is also not equipped with a helicopter if either a patient needs to an emergency evacuation or a patient needs an emergency rescue. However, in an emergency rescue, the army supplies the helicopter, but it can take days for the rescue to happen depending on the location and environmental factors. To land in a snowy environment, a helicopter needs special equipment and a flat surface in order to land.

In more remote areas rescues are complex especially in regions of Changthang, Nyoma block and Thangtse block, and Khalsti. Nubra Valley is equipped with a sub-district hospital, which does have an operating theater with a gynecologist, an orthopedic surgeon, general surgeon, and anesthesiologist (Doctor Tsering, personal interview, November 25, 2017). However, in other areas, patients will need to travel to SNM for serious issues. Nubra Valley is also not equipped with

as many specialists, so patients from Nubra Valley still may need to travel to SNM hospital or outside of Ladakh to receive care.

The primary health centers, medical aid centers, and sub-centers in the more remote areas of Ladakh have been reported to lack facilities, staff, and are not equipped to deal with complex issues, which makes it difficult when a patient is far from the district hospital (Angmo, personal interview, November 30, 2017). Rural remote areas also tend to have a staff that is ill trained and illiterate, which provides difficulties to prescribe the best care for patients. Other facilities lack basic features including accounts of primary health centers without doctors, especially specialists including obstetricians, lack of backup generators, and other necessary basic medical supplies. In some remote areas, there will be one doctor posted at the PHC, which makes it hard for them to practice alone without proper tools and medicine. Another issue is that doctors and specialist when posted in remote areas do not want to go because it is cold and barren. So, even when doctors do get posted, either they do not go or they do not stay for long. In the village of Lingshat, which is a four to five hour walk from the nearest road there is no doctor posted because “no one wants to be posted there. You are cut off from the rest of the world. Now if you post a doctor there, he has to go by helicopter and there is no regular service,” since the road is already closed (Doctor Tsering, personal interview, November 25, 2017). In Lingshat, there is an X-ray plant, however, no X-ray technician (Doctor Tsering, personal interview, November 25, 2017). This is an issue seen throughout India where there will be access to a certain facility or technology, but no one trained to

use the facility or technology or there will not be certain technologies or facilities, but there will be a person present that is trained in that specific area.

In areas that are off the road system, the patient must be carried down on families, friends, and neighbor's backs (Angmo, personal interview, November 30, 2017). Only one person, usually, can carry the patient at a time since the journey down the hills is too steep for makeshift stretchers (Angmo, personal interview, November 30, 2017). Once the patient is carried down, they usually arrive at a main town with a primary health center, medical aid center, or sub-center. However, in serious cases then the patient must take an ambulance to Leh. These journeys are tough on the patient and communities, especially in the harsh winters months. Imagine individuals walking down a mountain with a person on their back unable to see where to place their feet because of the snow on steep rock.

Living off the road system prevents serious issues to access to basic health care. For some villages of the road system, there are health camps provided, however, the health camps only happen from June to November for about four to five months of the year and can only reach a certain piece of the population. Even then, the roads to some areas are not well made and can provide a challenge for the health camps to maneuver, especially in snow. Health camps are also a quick fix and do not provide a systematic change to the lack of doctors and facilities in remote rural areas.

It is also especially difficult to provide nomadic people in this region with basic access to health care since they move from fixed pasture to pasture every three months. In Changthang, most of the people in the region are nomadic. Dr.

Tsering explains, “That is where access is really, really bad. If a woman is about to deliver and has labor pain, first she will sit in her tent and wait for the baby to come out. She will do it all on her own. If she is not delivering and the pain continues, then maybe after two or three days they think of moving down. They naturally have to come on horseback to the sub-center in the main village. From the main village, the ANM will inform the doctor of the obstructed labor. The ambulance will be sent, but it can take two, three, or four days and by that time sometimes the mother dies” (Personal interview, Thiksay PHC. November 25, 2017.). Part of the issue to access to health care in these regions is that communities are spread far apart, which makes it difficult to provide adequate health coverage for all. Dr. Landol declared, “For a doctor, for a teacher, for anybody, you should be grounded now. For medical staff it is more important, like me, we have gone through many difficulties and been able to fight back, but the children cannot. There is no this, there is no facility, how can we do, these are the problems with young doctors now” (personal interview, November 17, 2017). Doctors need to be inspired and trained to be innovative with the resources that they do have.

Methods

A. Framework of Study

This study undertook 32 qualitative interviews that were semi-structured with village women around Ladakh (mainly focused in the villages of Arling and Thiksay), an amchi worker, doctors from the district hospital and primary health center, local NGO workers, and other locals. Furthermore, observations were taken at the PHC and district hospital, as well as within the villages. A home-stay was conducted in Thiksay to further understand the culture and way of life in such harsh conditions.

Qualitative interviews and observations were the primary methods of this study. Qualitative studies can provide an author with information about human behavior, emotion, and captures personality characteristics, which cannot be done using quantitative studies. Qualitative studies also provide information about a participant's needs, desires, and other information that may be essential for positive change in one's life. One drawback, however, is that the author is dependent on the interviewees and interpretation and responses are not measured nor are responses statistically represented.

This qualitative field study was done with the help of Ladakh Ecological Development Group (LEDeG), which is a nongovernmental organization based in Leh who works to serve marginalized people living in structurally disadvantaged areas of Ladakh. LEDeG strives to address environmental and cultural issues within the region. The organization raises awareness about the impacts of development on

the agriculture and culture. Dr. Otzer, the field study advisor, who is the director of LEDeG, an ENT at Mahabodhi Karuna Charitable Hospital, and businessman from Nubra Valley greatly, supported this project. With his help and connections, a diverse group of people within Leh's community was able to participate in this field study. Interviews were conducted with LEDeG local staff member, and The Tata Trust (which is another local NGO working on a myriad of different issues within the community). He also helped organize interviews with women from Thiksay, Arling, as well as at SNM Hospital in the High-Risk Antenatal Ward and at The Heart Foundation. Both informal and formal interviews were also conducted with an amchi worker, doctors from SNM Hospital, doctors from Thiksay's PHC, and doctors from The Heart Foundation.

B. Data Collection

All interviews with the villagers were translated by Zangmo, who is originally from Nubra Valley, but has since settled in Leh. She has a master's in English and is applying for her Ph.D. in English. The meetings conducted with doctors and some of the locals were in English, which Zangmo was not present for. All interviews were conducted in public places or if conducted in homes other people were present, which may have contributed to the responses of the interviewees. Another factor of meeting with some of the women is sometimes they were busy doing household chores or looking after the children, which also may have had an impact on the responses elicited (maybe they were distracted while answering some of the questions).

Before each interview, the author was introduced as an American student who was conducting a fieldwork study with the guidance of LEDeG. It then was explained that the information would not be published and the interview could be stopped at any point. The interviewee was also alerted that if there was a question they were not comfortable answering then he or she did not have to. A brief description of the field study project was also given and the importance of the interviewee's perceptions of the health care system and the health issues in their community was also explained.

C. Data Analysis

All of the interviews were systematically analyzed in order to draw results. The information was split into three categories including women's perceptions of health and health concerns of the communities, health-seeking behavior, and access to health care. While processing the results, patterns and similarities within responses were sought after and grouped together. In tandem with heavily relying on primary sources, secondary sources were also incorporated into the study in order to provide more evidence for the field study.

D. Ethics Issues

SIT staff and a Local Review Board in New Delhi, India reviewed this study. Participation was voluntary and spoken consent was given by all of the participants who were interviewed. Names of local villagers, doctors, and other residents who participated in this field study all have been changed or unused to maintain

confidentiality. This paper acknowledges that everybody has a bias, but the author hoped to maintain objective throughout the project

Conclusion

A. Summary of Results

The objective of this study was to learn about women's perceptions of health, their health-seeking behavior, and their access to health care in a more remote part of the country. This study finds that most of the health issues that the community is struggling with is due to the harsh environment and the onset of globalization. Communities in Ladakh are faced with cultural changes regarding their education, diet, housing, professions, and social structures, which are all social determinants of one's health. Though there is an educational push in town, women seemed to mainly believe sickness was due to cold weather and old age, which is true, in part, but many women could not give reasons for getting sick. This could be due to either lack of awareness, a question too complex as posed, or there was a misunderstanding with what was being asked.

With the push for education in town, there is an increase of awareness as well. In Ladakh, women living in Leh are able to have much more freedom and autonomy compared to women living in more rural areas of the district. Different parts of the district seemed to have different cultural practices relating to post-delivery. Practices seemed to differ between women who lived in town compared to women who lived in villages. Women in town seemed less likely to perform any cultural practice relating to post-delivery regarding not being able to cook and or

guests not being able to eat food from their home post-delivery, compared with women living in more rural areas. Women living near Leh also seemed to go straight to the district hospital rather than utilizing PHCs and sub-centers, which places a huge burden on the district hospital and creates a deficit with provided services. Not only are women from nearby villages bypassing the government peripheral services, but women from further out villages are losing trust in the system and want to seek out better care at the district hospital. This creates an influx of patients at the district hospital. This has led to its own set of problems as these patients stress an already fragile system and doctors do not have time to properly consult patients. This systematic issue also leaves some doctors in the PHCs idle.

Majority of women who were interviewed either sought treatment just from the allopathic doctor or saw both an allopathic doctor and an amchi. Very few women, all of whom were older only sought the treatment of amchi. This may be due to modernization and the push for western medicine. However, medicine isn't the be all and end all way to heal in the region. Ladakh has a spiritual aura with countless monasteries and mosques. Faith is a big part of culture and plays into the lives of Ladakhis everyday life. When women fell ill, the majority reported offering prayer in some fashion and/or visiting Oracles in order to heal. The tie between religion and healing runs strongly through communities. Women in Leh town all had access to health care since they are close in proximity to the district hospital, though they still reported that they prayed. The religious tie to medicine may even be stronger in rural areas since there is less access to modern medicine. Access to health care is not reaching the entire population of the district. Limitations to

providing health care for all include distance, road systems, migration patterns, lack of facilities, lack of trained professionals, lack of supplies, and the difficulty of managing both so many levels of health care facilities in quantity and quality. There needs to be systemic change in order to provide health care for all.

This experience has shed light on the complexities of providing health care for all. There is no simple fix, though creating a shift in doctor's roles may help solve some of the issues of overflow in the district hospital. If doctors in all levels of medical facilities could take the time to explain to the patient their issues and course of treatment plan that may solve some of the systematic issues. It is understandable why doctors cannot take their time with patients, since they have so many to tend. Changing the doctor-patient relationship would instill more confidence and compliance within the patient. However, in order for this to happen, there is a need for more doctors and more specialists. Another fix also could relate to prevention. There could be more education on nutrition and healthy living in schools. Discussions on the risk of lifestyle diseases need to be taught at an early age in order for behavioral changes to occur. This also could spark community-wide discussions in families about healthy living. Again, there are a multitude of issues within the health care system and these problems cannot be fixed quickly. Drastic and innovative systematic changes are going to have to be made in order to repair the state of the health care system. In order to provide treatment for all people, policies must integrate local traditional knowledge and global knowledge since both hold significant value in communities across the district.

B. Recommendations for Further Study

Since the study was based in close proximity to Leh, it would have been interesting to collect data from more remote areas including Nubra Valley, Changthang, Khalsti, Nyoma block and Thangse block, in hopes of hearing more firsthand accounts from people who are living in the villages rather than simply relying mainly on doctors to color living situations and access to health care. In a future study, it would be interesting to examine marginalized communities, including nomadic people or people living off the road systems and evaluate their access to care. Since most roads are closed in the winter, communities struggle with receiving health care and emergency cases are dependent upon airlifts (which can be costly and take a long time for approval). Also, nomadic communities and those living off the road system rely on black magic and Oracles. It would be fascinating to delve deep into perceptions regarding these treatments.

Another interesting possible area of study could focus on mental health. Recently, there have been three reported students who have committed suicide in and around Leh. Suicide rates are on the rise, and many suicides go unreported at the hospital and at the police station. Most families in India are ashamed of struggling with mental health issues and the stigma associated with the disorders. Ladakh would be an interesting place to study mental health because the communities are both small and tight-knit. Leh district has also been excluded from government funds devoted to mental health awareness and is severely lacking in resources. When people face mental health issues, families tend to seek the help of religious and spiritual leaders in the community. It would be a huge challenge to

study this, but also interesting to gain more insight into mental health and how it is (or is not treated).

B. Limitations

This project sought to analyze a complex topic in a short period of time. With little to no knowledge of the local language of Ladakhi, limitations to the study included language barriers. Much of the study was conducted with the help of a translator, Zangmo, who translated interview questions from English to Ladakhi and back to English. Though her translation skills were impeccable, there is a possibility that certain details were both missed or misunderstood during the conversation process. Another limitation of the study is that there can be barriers for a foreigner who is coming into villages to discuss such a sensitive topic. The presence of a Western student in a rural area may have affected the responses elicited by the interviewees. Having an Indian person or a local community member conducting the interview instead may have closed both the translation and cultural gap. The author also came into this project knowingly with their own notions from their own culture, which affected their perspective and how they viewed a women's role in Ladakhi society as well as the quality of care the patients were receiving. Though the author did their best to try and stay neutral, nobody can ever achieve pure neutrality. Another limitation was that most of the women interviewed were uneducated and some of the questions may have been complex, difficult to answer, or misinterpreted. In addition, with more time and resources, it would have been beneficial to visit more remote communities for this field study project. That being

said, the study also aimed to only work with a few communities in a vast region, thus generalizations about access to health care in the region cannot be made.

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