CHAPTER 1
INTRODUCTION AND RESEARCH CONTEXT

1.1 Introduction

In this thesis, I am concerned with the ways in which Dalit people with diabetes interpret and respond to their illness in the context of caste-based discrimination in Nepal. Social inequality is perpetually problematic for Dalits and they face daily socio-economic disadvantages as a result of generations of caste-based exclusion. In order to analyze this relationship between structural inequality and diabetes, I utilize an overarching critical medical anthropological approach as it "allows insight into the nature of relations between micro- and macro-levels of explanation, most notably between health culture and political economy, on the one hand, and between political economy and individual experience on the other" (Singer, 1986:128). As such, I present diabetes illness narratives from the Dalit community in order to explore their "sufferer experience" in the context of health inequalities and medical pluralism.

Diabetes mellitus, often simply referred to, as "diabetes", is a group of metabolic diseases in which a person has high blood sugar, either because the body does not produce enough insulin or because cells do not respond to the insulin that is produced. There are three main types of diabetes - type one and two diabetes and gestational diabetes. Other forms of diabetes include congenital diabetes, cystic fibrosis-related diabetes, steroid diabetes, and several forms of monogenic diabetes (ADAM Medial Encyclopedia, 2012). While undertaking this research I did not limit my discussion to biomedical explanations of diabetes mellitus and all types of diabetes mellitus will hereafter be referred to as "diabetes."

My research into the relationship between caste discrimination and diabetes from a medical anthropological approach comes from two personal reflections. The first is the death of my father in the mid 1970s. Due to the lack of healthcare services available, my father died in a remote area of central Nepal from a problem related to

his kidneys; my family and I do not know anymore than that. This situation has motivated my life's work into the provision of healthcare services to marginalized communities in Nepal. While my father was not a Dalit man, this experience has inspired me to question why certain communities cannot get the medical help they need. The second personal reflection is the result of meeting a low-caste Dalit man in 2008 outside a hospital in Nepal who died soon after due to diabetes complications. As part of my work in public healthcare in rural Nepal I was visiting the Lamjung District Community Hospital (LDCH) and I overheard a Dalit man talking about not being able to afford medical treatment for his diabetes. What struck me was not the fact that a man was suffering from diabetes, or even that he could not afford medical treatment; both are common in contemporary Nepal, but I was shocked to hear that a man from the Dalit caste had diabetes. I had always considered diabetes to be a disease that affected wealthy, urbanizing populations because of changes in diet and lifestyle, but here was a rural man from one of the historically poorest and most marginalized groups in Nepal talking about his diabetes. This experience led me to undertake socio-anthropological research into how the interrelationship between social inequality and diabetes is understood and experienced for Dalit people with diabetes in Nepal.

1.2 Thesis Organization

I have divided my thesis into seven chapters. In Chapter One I will provide a brief overview of the country of Nepal and its healthcare system including a section on general socio-cultural beliefs about illness. I then move to set the scene for the rest of the thesis by introducing how cast exclusion and resultant social inequality manifests in Dalit communities in Nepal and by characterizing how this discrimination results in health inequalities.

Chapter Two illustrates the research purpose and methodology I use in this study. I describe the way in which respondents were selected and the interview process. I provide an outline of respondent socio-demographic characteristics. Then I explain how the data from the interviews were coded and analyzed. In the next section I also present the ethical considerations and potential limitations of the study.

Chapter Three presents the theoretical concepts that are woven through the body of the thesis; each concept is applied to the finding in chapters four, five, and six. A literature review is integrated throughout this chapter and with the presentation of findings in each of the discussion sections. In this chapter a conceptual framework is also presented.

Chapter Four is broken down into two main sections. Section one presents respondents perceptions of the changing face of caste-based discrimination in Nepal and how this discrimination is played out in social inequality in their daily lives and in particular relation to health inequalities and diabetes. In the second section I discuss thesis findings in relation to the development and perpetuation of health inequalities based on Bourdieu's concept of capital interaction and *habitus*.

Chapter Five is divided into two sections. In the first section I present respondents' understandings of diabetes and the medical treatments they employ. The second is a discussion piece made up of an analysis of respondent's narratives utilizing the theoretical concept of medical pluralism.

Chapter Six presents two sections. The first section details respondents' descriptions of diabetes in relation to stress caused by social inequality and social marginalization. Secondly, I argue that through linking the concept of "sufferer experience" to stress created by suffering from caste-based discrimination and diabetes, respondents use their diabetes as an "idiom of distress."

Chapter Seven concludes my thesis and given that the predominant theoretical lens of the research is from a critical medical anthropological approach I explore how this theory can be actively applied.

1.3 Research Context

1.3.1 Country Introduction: Nepal

Nepal is a land-locked country sandwiched between the emerging economic giants of China to the north and India to the east, west, and south. Unlike other landlocked countries around the world, Nepal does not share its borders with multiple

countries, just these two. Historically Nepal has been greatly influenced by socio-political events of India because of shared religious traditions and a long, porous border that accommodates trade and travel where the Himalayan ranges along the north make transport through China more trying. Although given the recent influx in Chinese trade and infrastructure projects in Nepal this dynamic is changing and China is said to be "the goose with the golden eggs…flexing its muscles in line with its economic might" (Magnier, 2011).

Today Nepal is often described as an impoverished nation struggling after the end of a 10-year insurgency to establish good governance and provide basic amenities to its citizens, such as food security, health, and education (USAID Asia, 2012). With an average per capita gross domestic product (GDP) of US $260, Nepal is the poorest country in South Asia and ranks as the twelfth poorest country in the world (World Bank, 2006). As a developing country Nepal is heavily aid-dependent and has been increasingly receiving foreign assistance since the late 1950s (Bhattarai, 2007). Currently there are numerous bi-lateral and multi-lateral international agencies present in the country that are invested in the development of Nepal. Historically the focus has been on health and education, but with the recent conflict there is now also an emphasis on peace and reconciliation. According to Dr Madan Kumar Dahal of the Nepal Economic Association, foreign aid plays a major role in the country's economy and is estimated at six percent of the nation's total GDP and despite decades of aid, economically Nepal still ranks on the lower rung in the international scene (Dahal, 2008).

In 2010, according to the United States Central Intelligence Agency (CIA) estimates, only seven percent of the Nepali labor force is engaged in industry, 18 percent in services, and an overwhelming 75 percent in agriculture (CIA, 2010). Although a vast majority of the population is invested in the agriculture sector a mere 16 percent of the total land is actually arable, hence, the 75 percent of the labor force engaged in agriculture contributes a mere 33 percent of the GDP (CIA, 2010). Thus, it is not surprising that almost a third of the country struggles to survive below the poverty line (World Bank, 2012). In recent decades, most plausibly due to the Maoist-led insurgency and enduring poverty, young men and women have opted to work

overseas, mostly as unskilled workers (Shrestha, 2011). In fact World Bank economists in the recent *Migration and Development Brief* claim that Nepal is now one of the top 10 countries in the world receiving remittances as a share of GDP, at number six worldwide, 20 percent of Nepal's GDP is comprised of remittances (Mohapatra et al., 2011).

Nepal is a South Asian country with a population of 2.66 million (NPC-Census, 2011). Nepal is 147,181 sq. km. (54,633 sq. mi.) in total and boasts eight of the 10 highest peaks in the world, including the highest mountain, Mount Everest (Encyclopedia Britannica, 2012). Despite its small landmass, Nepal is composed of the *tarai* [flat plain] region in the south, a hilly region along the center, and steep rugged mountains in the north. While the geographic terrain is split into roughly equal parts horizontally, the Government of Nepal has also divided the country into administrative sectors including five development regions, 14 zones, and 75 districts (See Figure 1).

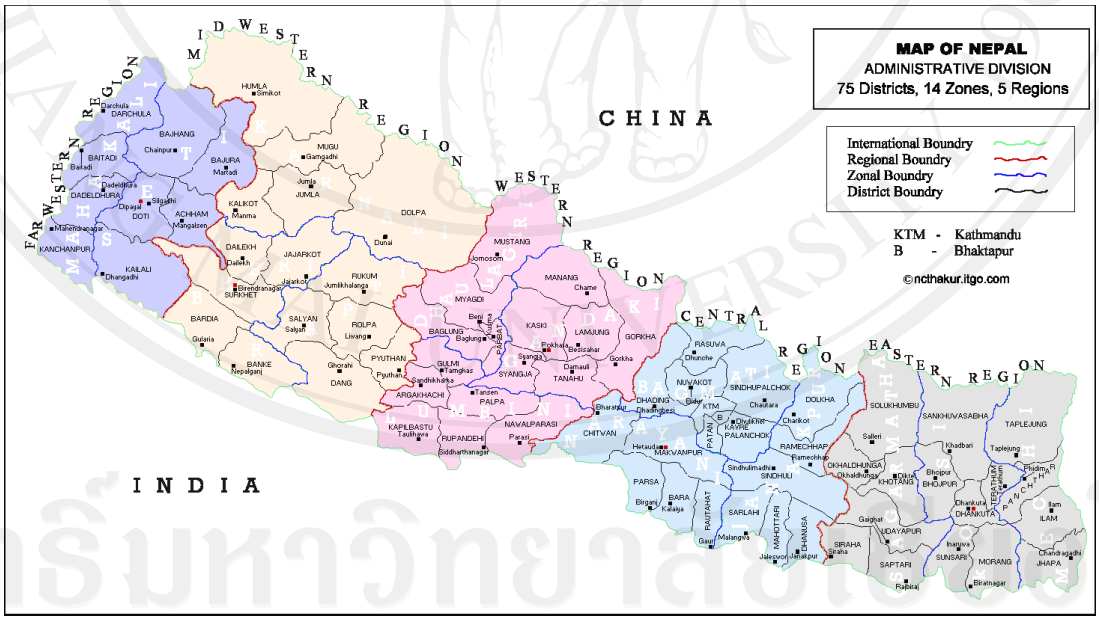

Figure 1: Map Showing Administrative Boundaries of Nepal
Source: (Ncthakur, 2012)

While Nepal plays only a small role in international geopolitics, it has been established as a sovereign state for centuries. Modern Nepal was unified under Prithivi Naryan Shah in 1768 (Kafle, 2012). In 1951 a cabinet system of government was established and further political reforms established a multiparty democracy and in 1990 Nepal became a constitutional monarchy (CIA, 2010). Unsatisfied with the slow process of change, however, Maoist extremists launched a nationwide insurgency against the state in 1996 (Tiwari, 2001). The 10-year conflict took the lives of approximately 13,000 people (Dahal, 2008) and left approximately 100,000–150,000 people internally displaced (UNESCO, 2011). The conflict concluded with the People's Movement demonstration of April 2006 when Parliament voted unanimously to curtail the then King Gyanendra's political powers and only then were the Maoist rebels willing to negotiate (Nepal Human Rights News, 2006). In November later that year, peace negotiations between the leading seven political parties and the Maoists culminated with the signing of the Comprehensive Peace Agreement (CPA) (United Nations, 2006). Furthermore, it promulgated an Interim Constitution in 2007 and prepared for the election of a Constitutional Assembly (CA) (BBC News, 2012).

In April 2008 the freshly elected CA declared the former Kingdom of Nepal as the Federal Democratic Republic of Nepal and in its first meeting the following month monarchy was abolished (BBC News, 2012). Since these two sweeping movements the CA struggled to fulfill its chief objective of drafting the new constitution. To the dismay of the Nepali people, the two-year mandate of the Interim Constitution was extended multiple times and the constitution remains unwritten (United States Institute of Peace, 2012). The primary obstacles to completing the draft of the constitution are two very contentious issues; firstly, the integration of former Maoist combatants into the National army and secondly, the proposed modal for federal states (Adhikary, 2011). As of May 2012 the constitution was still not drafted and the CA was disbanded.

Until 2006 Nepal was commonly known as the "only Hindu Kingdom in the world"; however, after the democracy movement and the fall of the monarchy, Parliament amended the constitution making Nepal a secular state (Asia News, 2006).

Nepal remains a predominantly Hindu society where according to the 2001 Census approximately 80.6 percent of the population is Hindu, 10.7 percent is Buddhist, 4.4 percent is Muslim, 3.6 percent is Kirat (an indigenous religion with Hindu influences), 0.5 percent is Christian, and 0.4 percent belong to other groups (Center for Constitutional Dialogue, 2009 and CIA, 2012). In Nepal the philosophies of the two predominant religions practiced - Hinduism and Buddhism - interact and even intermingle in some instances. Bisht (2008) outlines the fact that Hindus worship at Buddhist temples and Buddhists worship at Hindu temples is a principle reason that the two dominant religious groups in Nepal have never engaged in any overt religious conflicts. Because of such dual faith practices, the differences between Hindus and Buddhists have been very slight in general and academic in nature (Bisht, 2008). Religion shapes culture and this is the case in Nepal (Tylor, 1871). As such, Hinduism has greatly influenced the thinking and values of many Nepalis. Hinduism has seeped so deeply into Nepali society that even today many facets of culture are heavily influenced by Hindu philosophy; one of the most prominent socio-cultural influences is the hierarchical caste system (Human Rights Watch, 2001). According to this system, people are categorized based on ethnicity and organized from the most so-called “pure” of castes to the supposed lowest and least pure of castes (Jana Utthan Pratisthan, 2001). As one is born into a caste, it is difficult to break away from and negotiate the life chances it offers. The social caste system in Nepal will be discussed at greater length in section 1.1.5 in the subsection entitled The Social-Caste Hierarchy in Nepal.

Nepal is a developing country in an interesting period in world history. While globalization ensures that communication, information, trade, and the likes, can be furthered with more ease; there still exists a deep chasm between the capital Kathmandu and the remaining rural areas of Nepal (Khare and Slany, 2011). Much of the focus, including fiscal assistance is limited to urban development and “the rural-urban gap has widened over the years” (Singh et al., 2005). Political instability, a largely illiterate population, difficult terrain, the social-caste system, cultural limitations placed on women, and other forms of marginalization have greatly hindered the peace and progress of the country (UNESCO, 2011; Goyal et al., 2005).

Development is a priority of the people; however they have grown increasingly disillusioned with the government stalemates, resignations, and the plethora of political parties (BBC News, 2011). As such, many youth choose to migrate from Nepal to India and Western countries to pursue higher education while those unable to study attempt to travel to South-East Asia, India, and the Middle East as migrant workers (Admas, 2011). A study by the World Bank in 2009 shows that almost half of Nepali households have at least one member working abroad or a returnee, and a majority of Nepali migrant workers are aged between 20 and 44 – the most productive workforce group (Adams, 2011).

Should the country be able to address and make significant progress in the most alarming areas of concern, there could be multiple positive effects. This is especially the case for health and education. Only a little over half the population is literate and the status of healthcare in Nepal does not fare better (UNICEF, 2012). Nepal is at a critical political junction in its history, but without affordable and quality education and healthcare made available to all, further development is not possible.

1.3.2 Brief Overview of Healthcare in Nepal

In this section, I briefly outline the health care system as it is in Nepal. This section starts with a summary of the administrative structure of the public healthcare system in Nepal including primary policy initiatives and major stakeholders. I then move on to briefly discuss some of the major barriers to accessing biomedicine in Nepal and highlight how public healthcare infrastructure has predominantly developed in the biomedical tradition as has private healthcare services. Then this section moves on to illustrate the availability of traditional healthcare services in Nepal with a particular focus on ayurveda [traditional herbal medicine native to India] and indigenous folk healing. The theoretical concept applied to the practice of multiple medical traditions in Nepal and respondents' access to these will be expanded in the concept outline, findings, and discussion sections 3.1.3, 5.1 and 5.2 on Medical Pluralism; here I am interested in briefly outlining some of the various medical treatments available in Nepal.

Nepal's Healthcare System, Policy and Stakeholders

The Interim Constitution of Nepal states that, "every citizen shall have the right to get basic health services free of cost from the State" (Pandey, 2010:1). Since the development of the Interim Constitution in 2007, Nepal has made some progress in the field of healthcare. As an underdeveloped nation struggling to maintain political stability following a brutal 10-year insurgency, it is expected that Nepal has much more to accomplish. Challenges are plenty, but healthcare is such an important aspect of development that the inadequacy of healthcare in Nepal is of great concern.

As a development-oriented country, Nepal has had little option but to prioritize the healthcare sector and there have been a wide variety of policies, strategies, plans, and goals set by the various stakeholders. The goal of the 1991 National Health Policy was to provide primary healthcare to rural Nepal (Pandey, 2010), an absolute necessity as more than 80 percent of Nepal's population lives in rural areas (UNFPA, 2012). The main objective of the Second Long-Term Health Plan 1997-2017 is to improve the health status of marginalized populations in Nepal: women, children, rural people, and other impoverished and disenfranchised groups in society (Pandey, 2010). In policy terms, the importance of affordable quality healthcare in Nepal has already been prioritized for over 20 years.

The main actors in the healthcare system in Nepal include the Government of Nepal (GoN), International Non-Governmental Organizations (INGOs) that are bi-lateral and multi-lateral, Non-Government Organizations (NGOs), community health bodies, as well as academic institutions interested in studying and shaping the Nepali healthcare system. As an aid-dependent nation, it is no surprise that a large portion of the finance for healthcare is provided by foreign donors. According to Koehlmoos (2010), as a percentage of total spending on healthcare, foreign donor expenditure makes up an overwhelming 62 percent. Some of the primary foreign donors in the field of healthcare are listed as follows: the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), United Nations Development Program (UNDP), United Nations Population Fund (UNFPA), World Bank, German Society for International Cooperation (GIZ), United Kingdom Department for International Development (DFID), United States Agency for International Development (USAID), Japan International Cooperation Agency (JICA), and the Swiss Development Cooperation (SDC).

Comparatively, the Government of Nepal makes up 23.5 percent of the total expenditure on healthcare (Koehlmoos, 2010).

The Ministry of Health and Population (MoHP) reports that "as a share of the national budget health spending increased from 5.87 percent in 2004-5 to 7.16 in 2007-8. Health spending continued to grow rapidly to 2009-10, but the share declined in the two subsequent years to 6.33 and 6.24, reflecting rapid growth in the total budget rather than any lack of commitment to healthcare" (MoHP, 2010:4). WHO (2007b) points out that, while on paper there is an increase in healthcare spending on behalf of the government, this increase is not reflected in healthcare standards and service provision. WHO (2007b:14) reports, "administrative, central and district program-wise expenditures have not changed significantly, which also applies to output-wise expenditure." Koehlmoos (2010) notes that there is a large gap between the amount of funds committed to healthcare in Nepal, and the amount of funds which are absorbed and actually end up providing healthcare services.

To understand healthcare in Nepal, it is important to first understand the country's decentralized healthcare system, which oversees and manages multiple healthcare programs and service delivery at the national, regional, zonal, district, and village development committee (VDC) levels (See Figure 2).

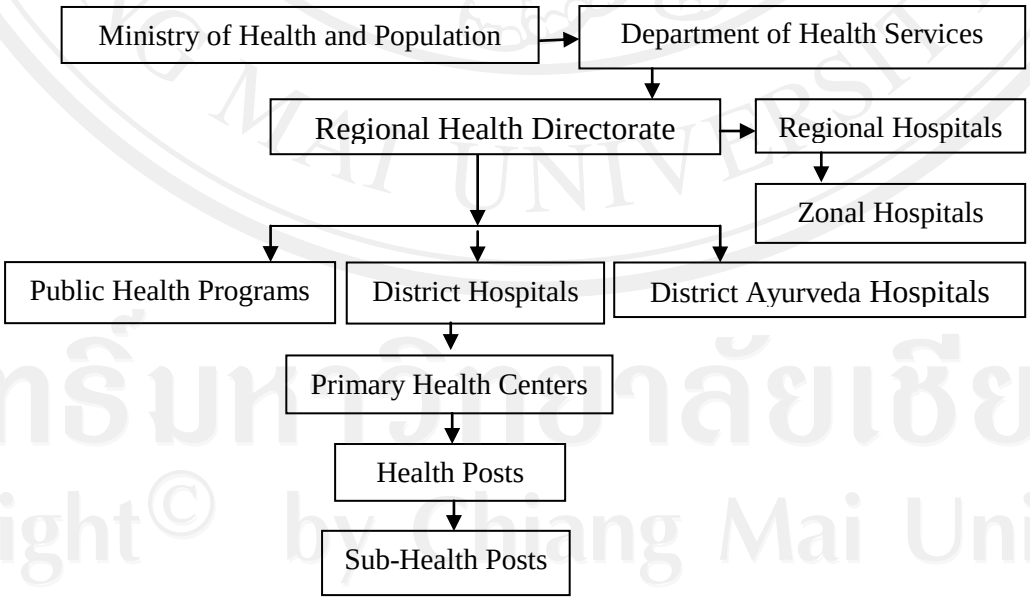

Figure 2: Overview of Healthcare System in Nepal

Source: (World Health Organization, 2007a)

When the former CA discussed the policy and planning aspect of healthcare in Nepal there was hope the modality of federal Nepal would be decentralization (Pandey, 2010). With the emphasis of delivering care to the vast majority of the population who reside in rural Nepal, working via local governmental agencies is the natural direction to take. There are currently 3,913 VDCs spread across Nepal, which are the last acting arm of the central government (Ministry of Local Development, 2012) and hence the most pivotal in determining the healthcare facilities provided by the state. As expected the MoHP is the unifying body of all governmental healthcare facilities and the MoHP works in close connection with the Director General of Health Services, a unit within the MoHP (WHO, 2007a). Five separate Regional Directorates - one in each of the five development regions - functions under the Director General of Health Services (WHO, 2007a).

Out of five development regions in Nepal there are two Regional Hospitals, also out of 14 zones there are 11 Zonal Hospitals and 62 District Hospitals out of 75 districts (WHO, 2007a). There are also government Ayurveda Hospitals - a national level hospital in Kathmandu and one in each district. There are 193 Primary Health Care Centers and principally a doctor is deputed but this post is almost always vacant, 701 Health Posts and 3129 Sub-Health Posts dispersed across the country (WHO, 2007a) that are administered by community medical assistants. Koehlmoos (2010) sums up the system as, "a good plan for decentralization and community control but lack of infrastructure, financial resources, equipment, supplies, trained staff, electricity, transportation, and water supplies as well as insurgent activity continue to hinder the development, expansion, and implementation of basic health services." As has been outlined, public health infrastructure in Nepal in based on the biomedical construct of healthcare provision.

Biomedicine

As already discussed, public health infrastructure and services in Nepal are dominated by the biomedical or Western medical traditions. In this study biomedicine refers to a healthcare system, as it has developed in the West: a system which treats

symptoms and diseases with drugs or surgery, administered by qualified and authorized medical practitioners such as medical doctors and other healthcare professionals in an official healthcare setting, like a hospital or healthcare center (Gartoulla, 1992).

Fabrega and Manning (1979) illustrate that this impetus essentially implies that the public healthcare system responds to individual and group health problems with an emphasis on patterns of health behavior; thus it is essentially developed according to population demographics. In Nepal public healthcare policy and the development of public healthcare infrastructure are primarily developed pursuant to the biomedical tradition. Both public and private healthcare institutions providing biomedical services have been developed in Nepal.

The private biomedical healthcare industry in Nepal is essentially commercial in orientation and therefore profit is an important consideration in the delivery of healthcare at these institutions. Many healthcare institutions, pharmaceutical companies, and medical equipment industries are privately owned in Nepal. Similarly, the goal of many medical practitioners is to earn money and work privately. The consequence of such privatization is that the best services and facilities are available in the places where most people live and the most wealth is concentrated (Subedi, 2001). Thus, the poor and remote population is unable to access private medical treatment of this type. In some circumstances public healthcare is provided by the state at no or nominal cost; however, there are some shared accessibility issues based on a variety of factors that both the public and private biomedical healthcare infrastructure share in Nepal.

There are many socio-economic and geographic barriers to accessing both public and private biomedical healthcare services in Nepal. The first trend is that the cost of medical treatment in Nepali hospitals varies considerably, and as Nepal does not have obligatory health insurance patients and their families have to pay for medical services upfront at both public and private healthcare institutions (Haubermann, 2006). It is common throughout Nepal that “relatives of a patient even have to buy suture material for wounds, cannula, syringes, and sodium chloride solution from a drug store affiliated to the hospital after the physician has made a list

of the required materials and drugs. Even before a patient meets the physician he has to pay for the consultation at the hospital counter" (Haubermann, 2006:520). Most public hospitals and those managed by local or foreign NGOs have social funds to cover treatment costs for poor patients in part or whole, however, this is not always available and at times requires filling out complicated forms in order to substantiate the claim (Haubermann, 2006). Van Doorslaer and colleagues (2006) report that in Nepal over 60 percent of healthcare costs are paid out-of-pocket by patients and out-of-pocket healthcare payment systems like Nepal's exacerbate poverty levels. A majority of healthcare cost being met out-of-pocket is a problem for a country that is one of the poorest in the world and means that many Nepali who require medical treatment are not in a position to fund required treatments.

Secondly, there is a lack of biomedical healthcare professionals and infrastructure available in rural Nepal, which is concerning as over half of the population live in rural areas (UNFPA, 2012). The locations of hospitals and research institutions both public and private are centralized in urban centers, meaning that even if at the public hospital the services are provided without or at nominal cost, it is still time consuming and expensive for rural people outside of urban districts to access this type of healthcare (Subedi, 2001). Also, pharmaceuticals used are generally manufactured in the urban centers or in other countries making them expensive to import and distribute. Thus, the further people live from the urban centers the more difficult it becomes to access quality and sufficient quantities of medical supplies, facilities, and services (Streefland, 1985).

The Nepal Medical Association reports that around 70 percent of Nepal's doctors are stationed in urban centers and as such, there is a large disparity between urban and rural doctor-patient ratio (Maharjan, 2010). Kathmandu has a ratio of one doctor per 800 people where in rural areas the ratio is one doctor per 3000 people (Maharjan, 2010). This disparity is compounded by the fact that in many areas, the only doctor in the hospital is a general practitioner (GP), with specialists being confined to urban centers (Butterworth, 2008). GPs are trained to provide medical, surgical, obstetric, and managerial services (Butterworth, 2008). Rural areas of Nepal greatly lack healthcare personnel and resources (Koehlmoos, 2010). The ability to train

and retain a skilled healthcare workforce would go a long way to strengthening Nepal's already fragile healthcare system particularly in rural areas (Huntington et al., 2011).

There are 10 medical schools in Nepal, both private and public, and these schools train around 500 doctors annually (Koehlmoos, 2010). In a country where doctor-patient ratios are so low - particularly in rural areas - the 500 being trained would be expected to dramatically influence this ratio and healthcare system at large. Significant portions of these 500 doctors emigrate from Nepal after obtaining their degree or residency as they consider the profession more lucrative in the West and some have large student loans to repay coupled with family responsibilities (Lakhey et al., 2009). Lakhey and colleagues (2009) report that almost half of the medical students in their survey plan to migrate to a developed country after graduation. Huntington and others (2011) outline the factors that seem to be pushing students towards emigration including poor remuneration, poor working conditions including access to water, electricity, supplies, equipment and drugs, limited academic training and opportunities, and political instability.

Rural Nepal is in desperate need of doctors, however, of the doctors that choose or have no option but to practice in Nepal, a negligible number work outside the capital (Shankar, 2010). Neupane and Gulis (2010) state that the government health system in Nepal does not have placements for doctors below the Primary Health Care Center level and it is the health facilities below the Primary Health Care Center level that are located in and serve rural areas. Koehlmoos (2010) states that remoteness, difficult terrain, lack of updated equipment, and the opportunity to study and train in new technologies and techniques, and living away from the comforts of urban life discourages doctors from committing to long-term rural placements. Shankar (2010) argues that high tuition fees from private medical schools and low government wages in rural areas prevents recent graduates from taking up rural positions. Haubermann (2006:550) states "physicians repeatedly told me that jobs in rural areas are seen as a dead end for a medical career."

While doctors are concentrated primarily in the Kathmandu valley, those who venture beyond the capital prefer to work in areas where there is hospital infrastructure to facilitate their skills (Butterworth et al., 2008). Butterworth and colleagues (2008:204) report the discouraging factors for GPs trained in surgical

techniques wanting to practice in rural Nepal include “the lack of operating room facilities, equipment and blood transfusion services, or even basic essential drugs.” Several districts have ambulance services, emergency rooms, and in-patient facilities, however, elsewhere in rural Nepal there is little availability of these services and in fact there is no guarantee of available water and electricity (Devkota, 2011).

Doctors and nurses do not comprise the majority of health manpower in rural Nepal; this is made up of community healthcare workers such as Maternal Child Health Workers (MCHW), Village Health Workers (VHW), and Auxiliary Nurse Midwives (ANM) (Neupane and Gulis, 2010). Additionally, the scope of their training is limited -most receive training through institutes and seminars organized by the government, INGOs or NGOs, and other short courses. These trainings are practical but unfortunately, they are not equipped to handle serious illnesses and medical emergencies (Koehlmoos, 2010). This is especially the case for Health Posts and Sub-Health Posts. With regards to Health Posts, Savada (1991) claims in her experience, the majority of them were barely functional because of such problems as inadequate funding, lack of trained staff, absenteeism, and chronic shortages of equipment and medicine.

These barriers may be some of the reasons why people in Nepal also utilize alternative traditional healthcare methods like folk healing. It goes without saying that a wide variety of factors, such as income, social status, caste, age, religion, education, advice from family and friends, and personal experience with illness, among others, contribute to the type of treatment people seek for their illness. This will be further discussed in the pluralistic medical traditions findings and discussion section (Chapter 5); here I am interested in briefly outlining some of the various medical treatments available in Nepal.

Traditional Medicine

In Nepal, traditional healthcare still plays a role in health seeking behavior in both the public and private spheres. According to a WHO (2002) report, two-thirds of the world’s population (concentrated mainly in developing countries) relies on

traditional therapies. In Nepal the most influential traditional healthcare methods can be seen as ayurveda and traditional folk healing.

Ayurveda

Ayurveda has a long and popular tradition in Nepal. Ayurveda is based on the *tridoshas* [three *doshas*] theory of disease. The three *doshas* are *vata* [wind], *pitta* [gall], and *kapha* [mucus] (Kartikeyan, 2007). A disturbance in the equilibrium of these *doshas* is theorized to cause disease. Herbal treatment is the primary healing method used in ayurvedic treatments (Park, 2009). Traditional healers that provide herbal treatments are - *baidhaya* and *kabiraj* [ayurvedic physicians] (Shrestha, 2006). *Baidhaya* and *kabiraj* use tinctures; metal preparations and herbs to treat illness (Gartoulla, 1992).

Like biomedical healthcare in Nepal, ayurvedic treatment infrastructure is government authorized and ayurvedic practitioners are also required to attain licenses. There are ayurvedic institutions in Nepal, including hospitals and educational institutions (Marasini, 2003). Unlike biomedical healthcare in Nepal, however, ayurvedic treatment and other traditional medical services are readily accessible to large portions of the population including rural areas and it is for this and other reasons which will be discussed that traditional medicine is still utilized in Nepal.

Ayurvedic medical practitioners have been known to reach those on the periphery commonly in villages or rural areas. Ayurvedic and other forms of traditional medical services are more readily available in the local context and as a result, people are more likely to avail themselves of these services. This raises the question of which other traditional medical services, other than ayuerveda, are utilized.

Herbal Treatment (Home Remedies)

In Nepal, it is very common for people to treat illness with readily available local herbs, plants, fruits, and vegetables. Traditionally this stems from local

knowledge acquired through conversation with family, friends, and people in the local community and at times people may access a local herbal treatment provider known as *jadi-butiwala*. The most predominantly used home remedies to treat illness are locally available herbs known as *jadi-buti* and certain foods that are believed to make the body hot or cold (discussed more in the section 1.3.3 that describes bodily imbalance). *Jadi-buti* are available for people to collect themselves in the forest or can be purchased for nominal fees from the *jadi-butiwala*, this can be seen to influence people's health seeking choices in terms of availability and cost.

Traditional Folk Healing

Indigenous popular folk healing practices like local *jyotishi* [astrologers] and *dhami/jhankris* [shaman/traditional healer] have been commonly used for generations in Nepal. Indigenous popular folk medicine is derived from a large body of commonly held assumptions about magical, supernatural, and planetary causes of illness that is discussed at greater length in the section 1.1.3 on General Beliefs about Illness in Nepal. Here I will briefly outline the practitioners of popular folk healing in Nepal.

Jyotishi: Astrologer

People in Nepal also regularly consult *jyotishi* based on a belief in the planetary influence over their lives (Haubermann, 2006). It is commonly believed that illness stems from a misalignment of certain planetary signs known as *graha dasa* [astrological imbalance]. *Jyotishi* are commonly relied on in both urban and rural areas, even amidst highly educated people. *Jyotishi* often specialize in particular techniques and the particular specialist consulted depends on the nature of the illness itself (Haubermann, 2006).

Illness due to *graha dasa* is known as *khadko* [illness due to astrological imbalance] and must be repaired by a shaman or *Brahmin* priest [Hindu priest] through *khadko kattne* [Hindu spiritual ritual for healing illness due to astrological imbalance]. *Khadko kattne* involves cutting of the lines of fate and is performed in

case of negative planet influence and sometimes accompanied by animal sacrifice (Haubermann, 2006). *Brahmin* priests are also often asked for a diagnosis based on planetary issues. Haubermann (2006:550) states, "they calculate the influence of planets on a patient. The Hindu priests then perform the *puja* [worship] required for recovery, and therefore are in close contact with the astrologers."

Dhami/Jhankris: Shaman/Traditional Healer

When illness occurs or an epidemic threatens a community, people go to see the spirit mediums *dhami/jhankris* for advice and healing. *Dhami/jhankris* use trance and non-trance divination techniques such as *nadi chhamne* [pulse diagnosis], *ankat herne* [rice diagnosis], *mala ganne* [garland diagnosis], and other methods to diagnose illness. A *dhami/jhankri's* healing procedure may last a few minutes and in some cases comprise extended all-night rituals that may have to be repeated or continued over several days (Haubermann, 2006). Treatment can involve spoken mantras, herbs or certain diet prescription, and amulets to be worn around the neck that contain either a powerful object (animal claw, medicinal herb etc.) or a protective mantra written on paper. Such traditional healing practices are everywhere in Nepal, readily available, affordable, and accessible. The costs of consulting a shaman generally lower compared with biomedicine (Haubermann, 2006) and small healing procedures are sometimes free. Haubermann (2006:551) states, "in many cases a patient pays a shaman according to his own judgment or financial possibilities, the gift being either money or natural produce. For larger and more extensive ceremonies the shaman describes to the patient or his family exactly what is required, e.g. a sacrificial animal, *chyang* [rice wine], rice, and so on. In some ceremonies all attendees are guests of the patient's family, which may be expensive depending on the length of the ceremony and the number of participants."

In this study I explore which of these medical services including biomedical and traditional medicine (or other remedies) people from the Dalit community with diabetes utilize, in what combinations, and for what purpose according to the theoretical concept of Medical Pluralism outlined in section 3.1.3.

1.3.3 Cultural Beliefs about Illness in Nepal

There are many influences on diabetes illness narratives and which will be discussed in greater length throughout the progression of my study. It is evident there are some general social, religious, and cultural narratives that influence beliefs about illness in Nepal. The broad influences listed are the concept of *karma*, supernatural and astrological influences, and the idea that bodily imbalance affects illness.

The Influence of Karma

In Nepal, the concept of *karma* can be seen as social and religious, stemming from both Hindu and Buddhist belief systems. *Karma* is commonly understood to mean that the total effect of a person's actions and conduct during the successive phases of a person's existence are determining factors affecting an individual's destiny (Das, 2012). Thus, whatever happens in one's life including illness is because of the *karma* from a previous life. According to *karma*, performing positive actions result in a good condition in one's experience, whereas a negative actions result in a bad effect (Das, 2012). That is, the effects of *karma* are viewed as actively shaping past, present, and future experiences. Thus, in terms of *karma*, illness is traditionally viewed as negative *karmako phal* [results from deeds of a previous life] (Reinhard, 2011).

Supernatural Influences

Within the Nepali cultural tradition, *bokshi* [witch] is the name given to a woman and less frequently a man, who practices magic for a variety of purposes. Haubermann (2006) states that the most frequent reasons quoted for harm befalling individuals on behalf of a *bokshi* are envy, some grudge, *bokshi* rage, or a previous argument.

A *bokshi* is believed to be able to induce certain *devi*/*devada* [gods/ goddesses] or other supernatural powers such as *bhoot pret* [evil spirits] and *masaans* [ghosts] to harm a victim by creating illness, or sending dangerous animals (like snakes or tigers) to kill a person. *Bokshis* are also believed to harm or cause illness

through the *ankha lagne* [evil eye] (Haubermann, 2006). Gartoulla (1998) describes that it is believed *bokshis* may harm people by producing a voodoo doll, pronouncing spells, or by actively mixing bewitched substances into a victim's food, and it is believed that *bokshi* come to people at night to drink their blood so the victim get weaker and weaker.

Kuladeva are ancestor spirits that are believed to influence health. It is believed that if *kuladeva* are not sufficiently respected, or if rituals for deceased family members are not performed or not performed with sufficient care, an angry *kuladeva* may make a family member ill (Haubermann, 2006).

Another socio-cultural construction in Nepal based on supernatural influences is the loss of soul phenomenon. This is believed to be an experience that causes an individual to lose their soul and it can happen in a variety of ways. For example, an involuntary jolt may cause loss of the soul since it is believed that the soul leaves the body during sleep and therefore may not have enough time to return to the body (Haubermann, 2006). Similarly, trauma or physical attacks may also cause the soul to be lost. It is also commonly believed that being near cemeteries or *ghats* [cremation grounds] may cause the soul to become lost (Haubermann, 2006). Signs that indicate the loss of the soul phenomenon include an absent look and physical weakness in adults and watery diarrhea, glassy eyes, restless sleep and continuous weeping in children (Haubermann, 2006). To recover the soul, it is believed that a ceremony needs to be preformed by a *dhami*/*jhankri* (Gartoulla, 1998), similar ceremonies are also preformed by a *dhami/jhankri* for other supernatural causes of illness.

Also, in Nepal it is commonly believed that acute or chronic health problems are indications of supernatural causes. If diseases take a sudden turn for the worse or lead to a loss of mental abilities, people assume supernatural causes - an angry *devi/devada* or a neglected *kuladeva* (Haubermann, 2006).

Astrological Influences

As already discussed in the section 1.3.2 on Traditional Medicine in Nepal *graha dasa* or an unfavorable constellation of planets is also believed to cause illness. This socio-cultural concept is strongly influenced by Hinduism which sees the constellation of planets at an individual's birth or at certain times in their lives as a

cause of illness or misfortune in general (Haubermann, 2006). As already stated, illness due to *graha dasa* is known as *khadko* and must be repaired by a shaman or *Brahmin* priest through *khadko kattne* rituals.

Bodily Illness (Imbalance)

In Nepal in socio-cultural terms, *jiuko betha,* which literally translate into bodily illness is brought about when the body is imbalanced by a person's environment, behavior, or lifestyle choices. While *jiuko betha* has some slight socio-cultural differences it can essentially be seen on par with a biomedical approach and is traditionally treated with biomedicine. It is understood as the consequence of unhealthy eating habits, changes in climate, sexual behavior, or lack of physical exercise. For the prevention and cure of these health problems people take medication and change their diet and other behaviors (Subedi, 2001).

Jiuko betha is also sometimes diagnosed and treated with traditional medicine. As already discussed in the section 1.3.2, according to ayurvedic philosophy a balance of the three *doshas* is said to play a vital role in good bodily health, where an imbalance between them results in disease (Kartikeyan, 2007). Behavior and lifestyle choices resulting in an imbalance of *gharmi* [hot] and *shardi* [cold] bodily temperature is also culturally understood to be the cause of illness (Stapleton, 1989). Bodily imbalance is sometimes diagnosed by utilizing the principles of traditional Chinese medicine and ayurveda including physical symptoms of illness, time of day and seasons, climate influences, character traits, and individual constitution (Haubermann, 2006).

In this section I outlined in general terms, beliefs about illness in Nepal, in order to set the scene for greater exploration of diabetes illness narratives, which are presented later in the study.

1.3.4 Diabetes in Nepal

It is acknowledged that diabetes is a global health threat. In 2006 the United Nations General Assembly passed Resolution 61/225 recognizing "diabetes as a chronic, debilitating and costly disease associated with major complications that pose

severe risks for families, countries and the entire world" (International Diabetes Federation, 2007:1). Illustrating the global indiscriminate reach of diabetes the International Diabetes Federation (IDF) (2007:1) observes "for the first time, a non-infectious disease has been seen as posing as serious a global health threat as infectious epidemics such as HIV/AIDS." The diabetes crisis is not isolated to wealthy countries; diabetes is becoming increasingly common in poor and developing countries across the globe. The UN Secretary General, Ban Ki-Moon, states: "Cancer, diabetes, and heart disease are no longer the diseases of the wealthy. Today they hamper the people and the economics of the poorest populations even more than infectious diseases" (Diabetes Leadership Forum, 2010:i). Jean-Claude Mbanya, President of IDF states that, "soon, four out of every five people with diabetes will live in developing countries" (Diabetes Leadership Forum, 2010:i). WHO (2011) reports that more than 80 percent of diabetes deaths occur in low and middle-income countries.

It is no surprise that diabetes is increasingly becoming a primary health threat in Nepal. Reliable statistics on the prevalence of diabetes in Nepal or within specific populations are difficult to ascertain as there is a general lack of reporting on the instances of diabetes and diabetes is commonly said to go undiagnosed (Chhetri and Chapman, 2009; Nepal Diabetes Society, 2012). The World Diabetes Foundation (2011) reports that in Nepal "due to other national health priorities little attention is given to diabetes. Qualified diabetes care is difficult to access due to a lack of trained manpower, poverty, the terrain and lack of transport. As a result late diagnosis is frequent, leading to a large number of diabetes complications." This lack of diabetes reporting and diagnosis combined with a scarcity of research on diabetes in Nepal makes it difficult to illustrate the specific magnitude of the diabetes problem. Additionally the limited health statistics available indicate that diabetes is a growing and important public health issue in Nepal. Dulal and Karki (2009) report the percentage of diabetes patients has increased in Nepal from 19.4 percent in 2002 to 25.9 percent in 2009.

While diabetes is a nationwide problem in Nepal, I chose to focus my research specifically on the Dalit community and the relationship between caste-based

discrimination and diabetes since this community suffers disproportionately from low health outcomes, this will be discussed at greater length below. Before mapping out the broader justifications for the study; the focus group to which this research applies will now be outlined, namely; the Dalit community in Nepal.

1.3.5 Caste- Based Discrimination and Social Inequality in Nepal

Social inequality and structural disadvantage associated with caste-based discrimination characterize and influence the experience of diabetes for Dalit people. In this section I explore how caste discrimination manifests in Nepal. First, I provide a brief outline the characteristics of the social-caste system and then illustrate how caste segregation and ensuing social inequality and structural disadvantages broadly manifest in Dalit communities. Lastly, I briefly discuss the mobilization of Dalit rights awareness and advocacy. This discussion forms the foundation for the next section 1.3.6, when I expand the discussion on social exclusion based on caste to develop links with health inequalities experienced by the Dalit community, with a particular focus on a justification for pursuing further research on the diabetes problem.

The Social- Caste Hierarchy in Nepal

Over 5000 years old, the caste system is said to be the oldest surviving social hierarchy in the world (Nikam and Nikam, 2011). Most closely associated with India, Hinduism, and Southern Asia, the caste system organizes people into caste categories or *varnas* based on ritual purity (Human Rights Watch, 2001). Unlike other practices of racial and ethnic exclusion, there are almost no physical characteristics that distinguish caste; however, one's surname can depict caste status (Goyal et al., 2005). The hallmark of the caste system is "untouchability," meaning that Dalits are segregated from non-Dalit based on a belief that Dalits are "polluted." Segregation includes Dalits being denied entry to public places and Dalits being prohibited from touching members of other castes as well as their possessions (Jana Utthan Pratisthan,

2001). Over generations, however, the pervasive impact of "untouchability" and social exclusion has moved far beyond physical segregation to the point that the caste system can be characterized as inherently economic and social in its consequences and the exclusion of lower-caste communities extends to the economic and social realms of wages, jobs, education, and land ownership (Human Rights Watch, 2001).

Four main social hierarchies characterize the social-caste system in Nepal: the highest caste *Brahmin* (priests and teachers), higher *Chhetri* (rulers and soldiers), high *Vaishya* (merchants and traders) and the lowest *Sudra*, recognized in Nepali society as the 'untouchable caste' and known generically as Dalit (Jodhka, 2010). Caste is determined by one's birth into a particular social group and it is not possible to change one's caste or move between caste categories (Human Rights Watch, 2001). Goyal and others (2005:6) state, "these caste divisions prevail in housing, employment, marriage, and general social interaction" and "are preserved and reinforced through the practice and threat of social ostracism or physical violence."

While the caste-based discrimination in Nepal was legally abolished in 1963 and the Interim Constitution of 2007 makes discrimination based on caste a punishable offense, the social caste system continues in contemporary Nepali society (International Dalit Solidarity Network, 2008; Bhattachan et al., 2009). Barr and others (2007:1) report, "despite certain measures, the issues surrounding Dalits are still embedded deep in the social structure and the psychology of both institutions and individuals." Within this context, I will next discuss how entrenched caste-based discrimination results in social inequality and structural disadvantage for the Dalit community in Nepal.

Caste-Based Discrimination, Social-Inequality and Structural Disadvantages

In Nepal, social inequality, structural disadvantages, and discrimination based on caste are interlinked. The term social inequality describes societies in which specific groups do not hold equal social status (Bouillier, 1977), and may be based on caste, ethnicity, gender, or other characteristics (Bista, 1989). Caste-based discrimination as a form of social inequality includes institutionalized legal and socio-cultural systems

of discrimination. The social caste hierarchy in Nepal prevents Dalit from fully participating in many social, political, and economic arenas and their access to social, educational, and employment opportunities, furthermore public resources are limited. Caste-based discrimination is socially, religiously, and culturally structural, codified into Nepali society's institutions, customs, and social conventions. Hierarchical social systems like this create dominant and secondary social groups leading to the development of structural disadvantages (Arora, 1998), discrimination, and marginalization.

Rasali (2007) observes that the Dalit community makes up approximately 15 percent of the country's population, yet they are the most marginalized group in Nepal. Forty-seven percent of the Dalits live below the national poverty line compared to 31 percent of the overall population in Nepal (Barr et al., 2007). Dalits represent 80 percent of the 'ultra poor' in Nepal, dramatically increasing their vulnerability to bonded labor, slavery, trafficking, and other forms of exploitation (Goyal et al., 2005). The International Dalit Solidarity Network (IDSN) (2011) reports Dalits are predominantly landless and much poorer than the dominant caste population, their life expectancy is lower than the national average and so is their literacy rate. A study by the UNDP found that Dalit experience personal insults, structural barriers, and hostile social environments (TEAM Consult, 1999) and subsequently reported the Dalit community "feel that they are uniquely disadvantaged; many of the hardships they suffer and the status they occupy in Nepali society are greater than that of other communities, and are indeed specific to them" (UNDP, 2008:1). In an Indian Institute of Dalit Studies (IIDS) report, Bhattachan and colleagues (2009) similarly maintain that discrimination based on caste in Nepal is practiced widely in many spheres.

The practice of caste-based occupations contributes greatly to the economic marginalization of the Dalit community. Caste-based occupations are the traditional and generationally transmitted source of livelihood for both Dalit men and women; with sub-castes occupying prescribed caste-based professions. Goyal and colleagues (2005:3) state, "the practice of untouchability relegates Dalits into work considered to be "ritually impure," such as manual scavenging or leather work. Because these

professions require the handling of dead animals or human waste, often with one's bare hands, they further exacerbate restrictions on Dalits' ability to enter public spaces." For example, the *Sarki* sub-caste group is known as leather workers and shoemakers, which includes scavenging dead animals for leather. Traditionally a *Sarki* family would be allocated to a *bali ghar pratha* [patron household] to which the family would provide their caste-based occupational services. As remuneration, they are paid mostly in kind, approximately 10 *pathi* [25 kg] of un-husked rice and one *khangre* [15 kg] of corn or grain annually, and sometimes a nominal amount of cash. In addition, they also received a share of food and clothes for festivals, marriages, or during other rituals (Bhattachan et al., 2009). The *Kami* sub-caste makes and repairs home appliances and agricultural equipment, and the *Damai* sub-caste is tailors and musicians; both these sub-groups receive similar remuneration to *Sarki* if they work for a patron household. The practice of caste-based professions occurs in the modern commercial sector as well; here the remuneration is lower than the average market wage for the same kind of job. In 2005 the International Labor Organization reported that in the commercial sphere Dalits received an average of 96 NRS (US $1.09) for a day's work; by contrast, the mean market wage rate for similar leveled work in the general population was around 105 NRS (US $1.19) (Goyal et al., 2005). Similar to caste-based professions Dalits also work in daily waged employment, which is casual, labor intensive, and low-pay.

Generations of caste discrimination denied Dalits the opportunity to own and use their own land. While much agricultural labor is performed by Dalits, only a minimal amount can claim ownership of land (Goyal et al., 2005). Dalits own a minuscule one percent of Nepal's arable land and only three percent of Dalits own more than a hectare of land (Human Rights Watch, 2001). Thus, inhabitants of squatter colonies and landless bonded laborers are predominantly Dalit (Goyal et al., 2005). Human Rights Watch (2001) reports that Dalits are charged much higher interest rates on loans from landlords than are their "upper-caste" counterparts and that this discrimination is deliberately implemented to perpetuate a system of debt bondage and free farmhands for cultivation of "upper-caste" land. The few Dalits that do own land are often isolated into one section of the community. Goyal and others

(2005) report that this segregation of Dalit land puts Dalits at a major disadvantage in terms of a lack of adequate facilities and resources. It is common for erosion, arsenic poisoning, soil quality depletion, and deforestation to disproportionately impact segregated Dalit communities. Also, most Dalit families live without toilets and or indoor plumbing and as a result, human waste pollutes Dalit land to an extent not experienced by non-Dalits (TEAM Consult, 1999).

Caste-based discrimination and consequent social inequality continues to be a reality for the Dalit community in Nepal and this gives rise to questions regarding a community response.

Dalit Rights Awareness Initiatives and Mobilization

Dalits have been struggling for social equality for their community since the late 1990s, when politically unaligned NGOs were established to confront discrimination based on caste and pursue social equality for Dalit people (Geiser, 2005; Tvedt, 2002). Over time these NGOs have mobilized members and leaders of the Dalit community to develop solidarity within their communities to collectively create a movement against caste-based discrimination and social inequality. In conjunction with this, neo-liberalism, modernity, globalization, urbanization, and mass-communication have paved a way for Dalits in Nepal to advocate for social equality and greater human rights standards (Tvedt, 2002). A number of NGOs have been established in Nepal in order to pursue equality for Dalits with the development of programs that focus on Dalits in decision making processes and on ensuring access to natural, physical, and economic resources, as well as specific services and facilities (Dalit NGO Federation, 2009).

Another contributing factor to the expansion of awareness within the Dalit community is the Dalit rights rhetoric employed by members of the Maoist movement that occurred nationwide in Nepal, between 1996-2006. The initial vision of the Maoist insurgency centered on moving away from the historical Hindu kingdom towards a secular republic, and part of this aim was a commitment to the principle of caste equality (Geiser, 2005; Goyal et al., 2005). Thus one of the precepts of the

Maoist political language was to end caste discrimination and empower Dalits and other discriminated groups across Nepal, particularly in rural and remote areas in order to gain their support (Geiser, 2005; Goyal et al., 2005). The Maoists gained considerable popular support amongst the Dalit community "…as their campaign included public humiliation and punishment schemes against those who practiced caste discrimination" reportedly "upper-caste" community members were punished by Maoists when they prevented Dalits from entering temples, selling their wares, collecting water from public wells, or participated in other forms of caste-based humiliation and abuse (Goyal et al., 2005:3).

While the Maoist movement did not deliver the end to social exclusion as they promised (Geiser, 2005; Goyal et al., 2005) initial changes are said to be occurring in terms of discrimination based on caste; the voices and grievances of the Dalit community are starting to be heard within the wider community and by local governments and administrative offices (Tvedt, 2002). It is argued that Dalit people are experiencing some changes in terms of overt physical segregation or the practices of 'untouchability' within their local social spheres, however, discrimination based on caste continues to affect the lives of Dalits in Nepal in terms of imbedded and perpetuating social inequality and structural disadvantage, there is still a lot of work to be done (Geiser, 2005). The United Nations Committee on the Elimination of Racial Discrimination (CERD) (2004:26) reports concern over continued "…segregated residential areas for Dalits, social exclusion of inter-caste couples, restriction to certain types of employment, and denial of access to public spaces, places of worship and public sources of food and water, as well as at allegations that public funds were used for the construction of separate water taps for Dalits."

The creation of NGOs based on pursuing greater social equality and participation for Dalit people through the development of campaigns and programs is an important first step in eliminating social exclusion in Nepal, however, the endemic nature of caste discrimination is such that it demands a broader sociological investigation in particular problem areas and a pursuant social policy response. Nowhere is this more evident than the impact that social exclusion based on caste has on health inequalities. It is this investigation of the social, cultural, and economic

interconnections between caste-based discrimination and health inequalities in terms of diabetes that forms one of the focus points of my study and which I will now briefly outline in the next section.

1.3.6 Caste- Based Discrimination and Health Inequalities in Nepal

It is known that the Dalits experience greater health risks compared to other social groups by virtue of systematic caste discrimination and social inequality (BP Koirala Institute of Health Sciences, (BPKIHS) 2008; World Bank and UK Department for International Development, 2006). This study raises questions about the relationship between health inequalities in terms of diabetes and Dalits in Nepal. In order to draw links between diabetes and caste discrimination it is firstly important to demonstrate the causal relationship between caste discrimination and health inequalities in general. Firstly, this section will begin with an illustration of the disproportionally low health status occupied by people of the Dalit group in Nepal. Secondly, this section will briefly outline some of the influences of caste discrimination on health inequalities. Finally, this section will draw on various international studies that report links between social inequality, related marginalization, and a greater vulnerability to developing diabetes in order to illustrate correlations with the Dalit population in Nepal and justify further research on this relationship.

Disproportionally Low Health Status of Dalits in Nepal

Health inequalities are defined as differences in which disadvantaged social groups such as the poor, low-caste minorities, and other marginalized groups have persistently experienced social disadvantage and as a result experienced poorer healthcare or greater health risks compared to other social groups (Braveman, 2006). A 2006 World Bank and UK DFID report on caste exclusion in Nepal concludes that health status amongst Dalits in Nepal is the lowest compared to the whole population, or any other group, as is their life expectancy. Using 2001 Census data the World

Bank and DFID (2006) report that the under-five mortality was 171 per 1,000 live births in the Dalit population compared to the national average of 105, and life expectancy was 51 years amongst Dalits compared to the national average of 59 years. A study by the BPKIHS (2008) in Nepal indicates that Dalits have poorer health indicators compared to the general population for a variety of health outcomes and are at higher risk of death from health complications. Dalits have disproportionately low health status and life expectancy; this raises questions about the relationship between health inequality and caste discrimination and the causes of this disparity in health status.

Influences of Caste Discrimination on Health

Contributing factors to the health inequality faced by members of the Dalit community in Nepal are interrelated, complex, and based on a variety of economic, social, cultural, and political influences. Caste discrimination impacts the health of Dalits in several distinct ways such as direct influences on health status including lack of access to water and nutritious food, less access to health care, and lower quality of health services.

As was discussed in the previous section, caste exclusion in Nepal prevents Dalits from participating in society on a variety of levels; this social, political, educational and economic discrimination undeniably contributes to the health inequality evident among this group. It is known that the Dalits occupy lower health status compared to other social groups (BPKIHS, 2008; World Bank and UK DFID, 2006). Premdas and Andolana-Karnataka (2007) state, "caste discrimination is a major contributing factor to subject millions of people to poverty, unemployment, lack of proper housing and sanitation, greater exposure to unhygienic environment, inadequate nutrition, and low quality education. These are all determinants of health status."

The Dalit community commonly experiences water scarcity. Although a lack of access to water affects many parts of Nepal, Dalits suffer disproportionally because they are denied access to communal water sources for fear that they will "pollute" the

water supply (Goyal et al., 2005). As such Dalit women and girls are forced to walk for hours to access water from natural springs (Jana Utthan Pratisthan, 2001). Dalits in Nepal are disproportionally malnourished as compared to the rest of the population. This is a direct result of being denied access to water and land and so they are unable to produce "sufficient or nutritious food" (Goyal et al, 2005). Similarly, Premdas and Andolana-Karnataka (2007) report that caste-based professions and daily wage employment means that "Dalits are forced to do hard labor for their bare subsistence. They are seasonally employed in agricultural fields with overwork and with no work for most part of the year and… as such Dalits have less access to nutritious food." The health of the Dalits community is also said to be compromised by their relegation into caste-based professions that involve handling human excrement and animal flesh, resulting in greater exposure to disease-causing agents (Goyal et al., 2005:16). Similarly, more often than not, Dalits are forced to "live in the most unhygienic, water logging, low lying areas of the village" without access to functioning toilets (Premdas and Andolana-Karnataka, 2007:109).

A major contributing factor to the low health status occupied by Dalits is less access to heath care. World Bank (2011) reports that Dalits have lower utilization of health services. This is based on a combination of poverty resulting in a limited capacity to afford medical care and segregation of Dalits on behalf of medical professionals. As already discussed in section 1.3.2 healthcare services in both the public and private sphere are predominantly paid for out-of-pocket by the patient or their family. A study on health disparities in Nepal undertaken by Rasali on behalf of the Canada Forum for Nepal concludes that continued marginalization experienced by Dalits in Nepal negatively affects their socio-economic standing and consequently their ability to afford medical services (Rasali, 2007). BPKIHS (2008) report that utilization of health services by marginalized groups such as Dalits are low because of low-income status and as such health inequality is evident amongst these groups. Dahal and Mishra (1993) argue that the health status of Dalits is negatively affected by caste discrimination in terms of limited access to public health services, deprivation of economic opportunities and exclusion from healthcare spheres. Premdas and Andolana-Karnataka (2007) report that discrimination practiced by

health professionals restricts Dalits' access to health services, that is, caste-based discrimination directly impedes equal access to health services by way of exclusion. Untouchability practiced by medical staff denies healthcare to Dalits and limits their capacity to access healthcare facilities and health personnel. Premdas and Andolana-Karnataka (2007:110) observe, "The general bias in the minds of health personnel and the atmosphere of the health system both contribute to the low quality of health care that is offered to Dalits."

Low quality of healthcare available to Dalits is another factor. As already discussed in section 1.3.2, the public health system in Nepal is suffering from lack of funds, medicines, doctors and essential medical infrastructure, and as a poverty stricken population that cannot afford medical treatment Dalits have no option but to endure the low quality of healthcare offered at lower costs in the public sphere.

It is a combination of these factors that this study seeks to investigate in order to gain a greater understanding of the influence that discrimination based on caste has on health inequalities for Dalits in Nepal in terms of diabetes. Having outlined the health inequalities faced by the Dalit community in general, it is now important to look more specifically at what the relationship between caste discrimination and health inequalities might mean in terms of diabetes.

Health Inequalities, Dalits and Diabetes

As already outlined in section 1.4 there is no disaggregated data available in Nepal on the predominance of diabetes within the Dalit group and there has not been any targeted research done in regards to risks of developing diabetes and the influences of caste discrimination on diabetes. For these reasons, I will draw on various international studies that illustrate links between social inequality, related marginalization, and a greater vulnerability to developing diabetes in order to draw a justification for exploring Dalit experiences with social exclusion and diabetes in Nepal.

Rock (2003:131) states "diabetes incidence is rising worldwide, but it is raising especially rapidly in…disadvantaged populations." A study undertaken in

Ghana observed that social discrimination, subsequent poverty, coupled with other structural disadvantages put people in a high-risk group in terms of developing diabetes (Patterson, 1981). Diabetes United Kingdom (DUK) (2004) report that there is a higher prevalence of diabetes among people from discriminated backgrounds and that low socio-economic status makes people more likely to develop diabetes at any age. In a global study Pickett and others (2005) find that diabetes and mortality rates were positively correlated with low income. In the Australian context Glover and others (2004) find socio-economic inequality a primary contribution to a higher risk of developing diabetes, as socio-economic status decreased the prevalence of the illness condition increased.

It is acknowledged that these studies were undertaken in various international contexts, however, social discrimination, subsequent low socio-economic status coupled with structural disadvantage can be seen as a common thread in all the studies in terms of a vulnerability to developing diabetes and these criteria apply to the Dalit group in Nepal. Of course these broad links do not serve as a conclusive argument that caste discrimination and diabetes have a relationship, however, these studies provide the impetus to look more closely at caste discrimination and its influence on diabetes for the Dalit community in Nepal.