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## Which Medicine? Medicine-Taking and Changing Sherpa Lives

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# Which Medicine? Medicine-Taking and Changing Sherpa Lives

Susan Heydon

An increasing quantity of medicines, including medicines of different healing systems, have become available since the nineteen fifties to the mainly Sherpa inhabitants of the Mt. Everest region of Nepal. Considerable change and economic development has occurred in which this mountainous and remote area has become one of Nepal's principal tourist destinations and people have gained access to education, health services, and modern means of communication. Many Sherpa travel regularly in Nepal and overseas, especially for work, education, or pilgrimage, or have migrated permanently.

Focusing on oral histories, this article explores factors that have influenced people's use of different medicines over time. It provides a wider understanding of the health-seeking process for Sherpa and emphasizes the importance of individual Sherpa life experiences, as well as collective changes. Many factors influence medicines use, but

perceptions of efficacy and appropriateness continue to appear more important than 'scientific' knowledge underpinning 'modern' medicines. The source of medicines also matters. Over time people have become familiar with and generally trust Khunde Hospital, which was built in 1966 by New Zealand climber Sir Edmund Hillary. In contrast, Sherpa traveling to the capital Kathmandu have greater access to different types of medicines yet often face uncertainty about where to get medicines and issues of quality and cost. People prefer the ease of taking tablets, but some consider injections more powerful, if problematic, because of the influence of spirits. Cultural practices relating to health prevention, including taking religious medicines, remain important.

**Keywords:** history, medicine, change, Nepal, Sherpa.

## Introduction

“He had the smallpox injection before the epidemic—that was why he didn’t get it,” replied the elderly villager as I asked him about medicines he had taken during the course of his lifetime.<sup>1</sup> “It” referred to smallpox that swept through the Mt. Everest area of Nepal in late March 1963. Among the small communities of this mountainous region close to Nepal’s northern border with the Tibet Autonomous Region of China, smallpox was a greatly feared disease. For many of the area’s mainly Sherpa inhabitants, the smallpox vaccination was a person’s first encounter with allopathic medicines. Although a few people recall being vaccinated on an earlier occasion, most received their smallpox vaccination from members of the 1963 Himalayan Schoolhouse Expedition which was led by New Zealander Sir Edmund Hillary, who was planning to build schools in the area.<sup>2</sup> On encountering a developing epidemic, Hillary was able to have some vaccines flown in from the capital Kathmandu, and his group began immunizing the local population (Hillary 1964: 42). Because everyone feared the disease, a now elderly woman from another village explained, they were not scared of the vaccination. People were apprehensive, but they subjected themselves to the painful procedure, she said, because they expected it to work.<sup>3</sup> By the end of the epidemic, Hillary estimated that the expedition had vaccinated over 7,000 people in the Everest and wider region (Hillary 1964: 45).

For the Sherpa communities of the area these new medicines—in the form of vaccines—were part of a healing system that many had heard of but few had experienced. For those giving the vaccination, this was an example of a disease for which a preventive treatment was available; in other words, they held “the traditional biomedical/ technological perspective” (Cohen et al 2001: 442). For the Sherpa individuals who were being vaccinated, acceptance encompassed much more, as “numerous biological, psychological, social, economic, and cultural situations, all in constant interaction” affected people’s use of medicines (Cohen et al 2001: 442).

The purpose of this article is to explore the considerable changes in medicine-taking that have occurred over time for the Sherpa inhabitants of the Everest region. I consider a medicine to be something that treats, prevents, or alleviates symptoms, a definition that includes not only modern pharmaceuticals, but also home remedies, food, and medicines of other healing systems.<sup>4</sup> In the space of fifty years, people have moved from a situation where there were no modern pharmaceuticals to a reality in which such medicines are widely available and used, albeit within a context of a plural medical environment, as is widespread in Nepal. Medicines, because their use extends beyond formal

health services, provide a valuable lens for considering how people have dealt with sickness over time (Worboys 1997: 255). As such, my aim is first to elucidate general patterns and the medicines used and second, to highlight, as other researchers such as John Draper (1995), Barbara Gerke (2010), and Audrey Prost (2006) have noted, the ongoing individual and often pragmatic nature of people’s patterns of taking medicines. Like the Tibetans that Gerke and Prost write about, Sherpa are Buddhist, and Buddhism underpins their way of life. However, although Sherpa are ethnically Tibetan, it is important not to assume sameness. Prost cautions against making assumptions about people’s individual beliefs and practices, as did Draper about Sherpa in the Thame area (1995: 167-168).

My research method is historical. My central source is a series of interviews with forty-three people carried out during January and February 2012 in both the Everest area (known by its Sherpa name of Khumbu) and Kathmandu. As it was mid-winter, many Khumbu Sherpa were in Kathmandu on their way back from pilgrimage in India. Participants were purposefully identified through personal contact to include males and females of different ages, from different villages, and with different life experiences. Young people have grown up with the relatively ready availability of allopathic medicines, but older people have witnessed the transition from none, to mixed acceptance, and then to wider use today. As well as talking about medicines, I asked questions about people’s lives and about such topics as education, work, travel, and family to better understand the context of people’s medicine-taking strategies. English, Sherpa, or Nepali was used in interviews. Interpreters, known to both the participants and the author, were used except when the interview was in English. Some interviews were audio-recorded, while for others I took detailed notes. As I wanted to find out about different medicines used over time, my analysis was chronological and thematic. I draw on a wider array of published and unpublished sources where available, as well as my own experience of having lived in Khumbu for over two years (1996-1998). While the focus of the research was to gain lay perspectives, input from the long-serving Sherpa staff at Khunde Hospital was an integral part of the project and informs my understanding as well.

Literature about the introduction and spread of biomedicine in Asia and narratives about power and dominant discourse are extensive, but historical studies about people’s use of medicines are limited. References to medicines are scattered throughout Alex McKay’s text on the introduction of biomedicine in Tibet and the Himalayan region, and allude to their important role in the process, but his interest is the political environment in British India and

the conversion strategy of Christian missionaries (2007). Laurence Monnais writes about medicines in colonial Vietnam in the early twentieth century; she discusses the ‘dissonance’ in the discourses of seeing both rejection and acceptance and notes that “the Vietnamese made complex choices in their recourse to colonial therapies” (2009: 115). In a study of health and culture in French colonial Cambodia, Sokhieng Au also emphasises the need to consider the stabilizing forces of continuity (2011: 2).<sup>5</sup> Anthropologists have had a somewhat longer interest in medicines and bring different insights to such scholarship. For example, medical anthropologist and physician Ian Harper has suggested that the foreignness of the United Mission to Nepal hospital at Tansen, southwest of Kathmandu, gave it authority over local traditions and that this applied to both doctors and their medicines (2009). In her study of cancer in a Chinese village, Anna Lora-Wainwright highlights the importance of both structural and cultural concerns as people make decisions about healthcare and medicines (2013: 203). For example, factors such as unequal access to medicines, particularly problematic in rural areas, intersect with beliefs.

Taken together, the various literatures point to multiple factors influencing the use of medicines. For Sherpa, particularly those of the Everest region, an extensive multidisciplinary literature exists in which change and continuity have been common themes. Anthropologist James Fisher and geographer Stanley Stevens have argued that Sherpa society was never static but Fisher saw a difference between the cumulative and compounding changes in the time since Sherpa came to Khumbu in the sixteenth century and those that he saw beginning in the sixties when he first visited the area (Stevens 1996; Fisher 1997: 64). Fisher concluded, however, that while these later developments “in some ways fundamentally realigned the ecological, economic, and political pillars of Sherpa society, in other respects they have had little effect on ‘traditional’ Sherpa institutions, some of which have continued much as before” (Fisher 1997: 66).

Change and continuity, as well as power and knowledge, are important themes in the literature about health, medicines, and the ongoing plural medical environment. I have written previously that change and continuity have both been important in how Sherpa have adopted a pragmatic, selective approach in their use of modern healthcare services over time (2007, 2009) and subsequently that medicines were an integral factor in people’s use and *non-use* of these services (2011). These findings resonate with those of Gerke, who examines treatment choices among Tibetans in the Darjeeling area of India (2010). Ethnographic literature about Sherpa and medicines is, unfortunately, limited.

From a historical perspective, this is not surprising, as anthropology’s interest in medicines is more recent than many of the ethnographies of Sherpa communities. The only reference to medicines by Christoph von Fürer-Haimendorf, who first visited Khumbu in the fifties, is in the preface to his book *The Sherpas of Nepal*, when writing about the popularity of his wife’s “remedies” (1964: xvi). A few years later in her doctoral thesis, Sherry Ortner discussed different types of medicines in Sherpa culture and linked them to some of the meanings of food symbolism, seeing medicines as ‘super-food’ because they had the ability to create health from illness (Ortner Paul 1970). Aside from discussing the power of food (1978), medicines are not referred to in her later works. In a 1988 article, Vincanne Adams writes of Sherpa being “quickly attracted by the rapid efficacy of Western drugs” (1988: 507), but despite the use of the word ‘medication’ in the title of her subsequent doctoral thesis, she does not discuss *medicines* (1989). Continuing medical pluralism in the eighties was situated within a context of a changing but plural economy that mixed traditional practices (agriculture, trade, animal husbandry) and the internationalism of tourism. In a later work (1996: 109), Adams briefly mentions psychiatric medicines as evidence of people’s perceptions of the benefits of biomedical care. Also researching in the late eighties was John Draper; his research contains the most references to medicines, although his main foci were the complexities of choice and health-seeking behavior among Sherpa individuals, and particularly power and knowledge dynamics (1995). Draper died in 1994; his doctoral thesis was submitted posthumously but has been neglected by scholars.

Living in a world that was inhabited by various supernatural beings, Sherpa understood that sickness was caused by different types of spirits, by being poisoned, by pollution, or by ‘bad luck,’ and employed various strategies to deal with ill health that included prevention, self-help, and consulting a healer. Identifying the cause took precedence over symptoms (Draper 1995: 167). New ideas from outside about the causes of ill health and new ways of accessing and taking medicines, however, were part of wider changes that were beginning to affect Sherpa lives by the early sixties. The first part of the article discusses what people did or took before the new pharmaceuticals became more widely available after the opening of a small hospital in the village of Khunde. Little more than a one-room outpatient clinic with some facilities for inpatients and staffed with an overseas volunteer doctor, this hospital soon became the main provider of biomedical healthcare in the area. The second section explores a developing but mixed acceptance of the new medicines, while the final part looks at their dominance in recent years, although still within a plural medical environment and with Sherpa cultural

practices remaining an important and ongoing influence. Therefore, medicine-taking exhibits both change and continuity; in addition to collective change, the circumstances of individual Sherpa lives shaped people's actions when sick.

### "Wait and if ... not getting better"

Older people's most common comment about medicines before the hospital was built in 1966 was that there were none. It could be easy to assume, therefore, that their comments about no medicines referred only to allopathic medicines. However, as this section explores, for the Sherpa community in Khumbu, options for taking any sort of medicines when sick were limited. This discussion provides the context to considering the arrival of biomedical healthcare and medicines into the area.

Those who remembered the nineteen fifties and early nineteen sixties spoke mostly about being healthy and having few childhood illnesses. Perhaps this was unsurprising, as the elderly today are the survivors of that time period, although such views also resonate with a recent study about New Zealand (Bagge 2012). Yet people also talked about high childhood mortality, which is confirmed by a demographic study carried out in Khumbu in 1970 (Lang and Lang 1971). Over a quarter of children born alive died before becoming teenagers. Many adults also died. Another villager who was a young girl in the nineteen fifties remembers first her father becoming very ill and dying, then her mother becoming sick. She had nowhere to take her mother. All she could do was to try to give her mother some better food, such as butter and salt tea. She had no medicines. Her mother, who recovered, had a large abscess into which her daughter "poked a bone" and drained the pus.

Some people consulted different types of traditional healers. As an elderly man explained, if a person was ill, they waited, and then if things were bad and they were not getting better, they went to see a *lhawa* (spirit medium).<sup>6</sup> There were no *amchi* (Tibetan medicine practitioner) permanently in the area, although Tibetan medicines were bought while away trading.<sup>7</sup> The man continued, saying that the *lhawa* would tell a person that their problem was caused by a *pem* or *nerpa* (different types of nefarious spirits) and that to deal with the problem they needed to do a *puja* (prayer ritual).<sup>8</sup> That required people to go to a *lama* (Buddhist priest). *Lama*, however, also had various pills (*chhinlab*)<sup>9</sup> that they used, for example, for treating diseases caused by *pem* or *nerpa*. People therefore had some experience with the concept of taking an oral treatment. While most people talked about going to a *lhawa* or a *lama*, in practice families varied in their use of either or

both. One man said his father believed that "the more the *lhawa* chanted the more they would bring evil spirits into the house." For other people, cost was a factor influencing use. Although Robert Miller, in an article first published in 1965, described the economic changes being brought about by mountaineering (1997), many Khumbu Sherpa families did not have access to a cash income. The young girl with the sick mother said that she had no money to pay either *lhawa* or *lama*.

Self-medication was another option. People could use various plants and preparations, but their use and knowledge varied by families and between villages. Draper listed plants from the Thame Valley and their uses as an appendix to his thesis, but he believed that most lay people's knowledge of these was limited (1995: 262). Khumbu people talking today, including from the Thame area, remember only a few, some of which they had used and some that they had heard of. Most commonly mentioned was *hugling* (*huling*), a plant that was found at high altitude such as at Gokyo (5,000 meters/16,400 feet). Although it was traded in Tibet for salt and meat, people also collected the large root for their own use when they had a "high fever." The root was cleaned and then cooked for 10 to 15 minutes, before being drunk in a cup "like tea." A well-recognized hazard of Sherpa life was being poisoned.<sup>10</sup> One woman mentioned that a root could be taken as treatment, although she did not remember its name. Where people could gather and prepare the ingredients the cost of medicines was not a particular issue, but only a "good family," said one man, could afford to buy a small quantity of a rare ingredient such as *lartsi* (musk).<sup>11</sup>

Not everything required medicine. People who had a dry cough drank hot water, while responses to treating *chamba* (a cold) varied and might include keeping warm, drinking tea or water, or, for one boy, his father telling him to drink his own urine. No specific medicine was available for pain, but people mentioned drinking alcohol, either *chang* (beer) or the stronger *raksi* (spirit).

Most people said that they were "always happy to take orally," but not every medicine was taken or used in this way. Some medicines were applied to the skin. Moxibustion was practiced using a special burning paper, which, the man explained, was like the wick of a butter lamp. Some people in the village, he said, although not *lhawa*, had the knowledge of where to put the stick. Cuts were common, particularly at grass cutting time after the monsoon when people gathered winter food for their animals; they held the grass in one hand and then cut with the other using the sharp, curved blade of a sickle. To treat the wound, people ground juniper seeds and then put the dry powder on the cut, which they covered and tied to keep



Figure 1. Beyond Thame village. The rugged and remote environment has had a major influence on people's access to medicines.

(Susan Heydon, 2003)

out the dust. After three days the wound would be better. In the rocky terrain, knee complaints, as they are today, were common among the elderly. One remedy involved mixing the *akchua* plant with oil and then rubbing it on the knee. Another common problem was impetigo (skin infection); to relieve the itch, people applied *gemar*, the old colored butter from decorating the *torma* (ritual religious figures). The butter stopped the skin from getting dry and hurting so much.

While people usually talked about illness and medicines in terms of symptoms such as headache or pain, they also knew of the disease smallpox: *hlendum*. Some have vivid memories of the 1963 epidemic. An elderly woman, now a nun, described how when Hillary came with "medicines" she was able to have the vaccination; she thinks nobody would have survived if he had not come. A small drop of the vaccine was put on the skin and then pinched. People remember that the procedure was very painful. Then a young girl, a woman from Khumjung village, where the expedition was based, remembers the novelty of being able to play with marbles and afterwards not minding having an injection. Sweets were another inducement for children to have the vaccination. One family from a nearby village was given some pills by a village elder who said they would prevent the disease, although it is not known what these were. One of the sons also recalled a more traumatic experience from when he was very small and some "Nepali guys grabbed" him as he was playing in the village and told him he "had to have an injection."

In a book published recently to celebrate 50 years since Hillary's first school was established in Khumjung in 1961,

Ang Jangbu Sherpa describes his memories of being a young boy during the smallpox epidemic and so provides a rare written account of people's experiences. "We were not even permitted to talk about it, for fear of bringing bad luck." His mother sent him from the lower Pharak village of Jorsalle to get a vaccination from the team that had arrived in Lukla, several hours walk away.

She prepared a potato pancake as a packed lunch and gave me lengthy instructions to make sure that I wouldn't get contaminated along the way. First she wanted to make sure that I got there in time to get the life-saving inoculation. She then told me to avoid meeting people along the trail. In order to do this, I had to step off the trail and into the bush every time I saw someone coming from the opposite direction. While inside the bush, I would get busy collecting plants,.... This delayed my trip and I nearly missed the vaccination. (Sherpa 2011: 33)

He continues, explaining how at Lukla, "adults were displaying scars about the size of a coin on their upper arms to encourage the younger kids. I thought it was quite attractive. After braving the jabs myself, I was quite disappointed because of the pain and fever that followed" (Sherpa 2011: 33).

For almost everyone I talked to, preventing sickness and promoting good health were important. This took various forms such as holding *puja*, burning juniper, having prayer flags, participating in festivals, and taking *chhinlab* from a *lama*. These were just listed to me as if they did not need explanation; they were a normal part of everyday life. Gerke also writes of how Tibetans chose freely between

different systems and rituals (2010: 337-338). For Sherpa women there were additional practices. Once a woman married and had children, she had to avoid certain foods. For example, she was not to eat chilli or drink *chang* if she was breastfeeding. If the children were sick, she again had to avoid various foods and also had to be careful from whom she took her food because of the danger of *pem* and *nerpa* spirits. Widows were thought especially prone to harboring *pem*. At other times, however, a woman might have special foods, including meat or drink. Strong *chang* was believed to prevent sickness, and prayers were said during its preparation to increase the benefits. Before having a baby, women drank cooked *chang* (*sinchang*) made from roasted maize.

By the end of the fifties, a small number of people had had occasional experiences with allopathic medicines beyond vaccination (Hardie 1957: 121). One participant described how, after being bitten by a dog, a man who had returned from an expedition put some cream on the cut. Acquiring medicines via expeditions and visitors was an example of medicines being used for healthcare and being accessed from outside any formal health system. Both avenues would be important in the Everest area. Hillary's 1963 expedition provided a medical clinic, and at the end of the expedition the two recently-qualified New Zealand doctors stayed behind in the village of Khumjung in some converted rooms in the *gompa* (temple) and provided medical services and medicines for a further three months (Hillary 1964: 100-112; Gill 1969: 184-186). Also, in 1965, in an initiative to combat the region's severe iodine deficiency, students at Khumjung School were given potassium iodate tablets (Pearl 1965).

In October 1966, Hillary arrived in the village of Khunde to build a small hospital. Short-term healthcare became a long-term option and medicines became available year-round. Villagers told me that they helped with the hospital's construction and felt positive about the hospital. Hillary and his team expected that people would turn from other practices and embrace the new system (McKinnon 1968), but talking to people about the medicines they have taken indicates a very varied response both initially and over time.

### "All Mixing"

Sociologist Pieter Streefland has pointed out in his article about the spread of "modern Western medicine" in Nepal that people coming into contact with this system met "depending on time and place, totally different forms, aspects and message-bearers" (1985: 1156). It had many faces. For much of Nepal, a regular supply of allopathic medicines

remained an issue for health services, particularly in rural areas where most people lived; at Khunde Hospital, in contrast to the government health post in Namche Bazar, medicines were available and accessible. The point is important because going to Khunde Hospital became associated with getting and taking medicines, as Adams also noted (1988: 508). This section explores how over the following two decades allopathic medicines were incorporated into people's options when sick and that this occurred within a plural but changing medical environment.

A now-elderly Khunde woman was a teenager when the hospital opened at the end of December 1966. At the time, she had responsibilities to care for her younger siblings. She went to the hospital for medicine when she had pain or *chamba* (a cold). The hospital was free and the young New Zealand staff members were "friends" and gave her help. Despite this, interviewees said that whether people lived near or at some distance from the hospital, they continued to go to the *lhawa* and *lama*. Some tried the *lhawa* first and then, if that did not work, went to the hospital. Others went to the hospital first and took some medicines, but if they did not get better they then went to the *lhawa*. It was difficult for people to decide which medicine was the "strongest"—and therefore most powerful—but they considered the situation as "all mixing." They saw it in terms of options rather than confrontations between different systems. In the nineteen eighties, Draper believed that, "unlike in many other communities in Nepal, the Sherpas have not as yet come to regard medicines (Tibetan or allopathic) as the panacea to all ills, the 'magic bullets' whose simple ingestion will cure any sickness" (1995: 262). In the intervening two decades, however, people's lifestyles had also experienced considerable changes, and these too were reflected in their medicine-taking. Hillary's expeditions built several schools, enabling more children to receive an education, and tourism brought increasing economic development to the region. Kathmandu, where more commodities and services became available, was more accessible than previously, but here Sherpas had to pay for medicines.

People said that at first they used Khunde Hospital for the treatment of injuries, such as cuts and falls, and to get medicines for pain, especially headaches. These were problems for which people either knew or soon learned that the hospital could provide effective treatment. Quantities of tablets given to patients were small, and hospital staff used symbols to explain how often a medicine needed to be taken (Heydon 2011). There were no prescriptions. A person went to see the doctor, who diagnosed the problem and gave the patient medicine from the hospital's supplies. Patients expected the medicines, unlike those of

other practitioners, to work quickly. People's comments, as well as the narrow range of conditions and medicines mentioned in the hospital registers that recorded each patient's attendance, illustrate the limited and variable resort to the hospital.<sup>12</sup>

Strongly reflected in people's comments were their widespread and continued preference for oral medications and their pain and fear of injections, although they were pragmatic about accepting any sort of medicine if necessary. Sherpa dislike of injections contrasts with their growing popularity in rural Tibetan areas of Amdo and Kham in China (Schrempf 2010). In contrast to injections, tablets were easy to take. If they were large, said one woman, she broke them into pieces and took them with water to help her swallow. One man thought that "uneducated" people preferred tablets because injections were painful, but people made similar comments whether or not they had been to school. Additionally, people thought that *pem* or *nerpa* complicated the working of an injection and increased their fear of dying, since *nerpa* caused serious illness. A woman in her thirties explained that if a person is taking tablets and then finds out that *pem* or *nerpa* are involved, he or she can stop taking the tablets, whereas an injection is already in the body.

As elsewhere in Nepal, a key part of the development of health services in the Everest area were the government population health programs that mostly used injections; implementing these was not made any easier for health staff by parents telling their children that if they were naughty they would be taken to Khunde Hospital, where the doctor would give them an injection. Initially, these programs were for vaccination and to prevent problems due to the widespread iodine deficiency in the area's soil.<sup>13</sup> Almost everyone I talked to recalled having received an injection at some time, although children did not make that decision themselves. Vaccination against smallpox and tuberculosis (TB) was given annually when hospital staff travelled throughout the district, while iodized oil injections were given when needed, either at Khunde or when the doctor visited other villages. Concern about receiving injections persisted. In 1984, as a doctor was about to vaccinate a child in one village, the mother of another child told the woman that "injections kill babies."<sup>14</sup> Four years earlier, a baby had died after having an injection of penicillin.

With the opening of the hospital, an increasing range and quantity of medicines became available which people could only access through attending the hospital; there were no pharmacies, unlike in many other areas of Nepal (Dixit 2005). Some caution was felt about this availability, since many Sherpa individuals believed that if a person

took too many medicines their memory might deteriorate. It was perhaps fortunate that most medicine-taking was on a short-term basis. In the case of leprosy (*zi*), however, which was more common in the past, a person was expected to take medicines every day for years. Some patients took their medicines regularly, but, as a member of the hospital staff recalled, others did not. The most common serious disease that required long-term treatment—in the form of both tablets and injections—was TB, and again, people's adherence to treatment varied. An elderly father talked about his daughter, who was an inpatient for many months of treatment in the early years of the hospital. They lived in a village several hours' walk from the hospital, so access was not easy, but the young girl got better. He added that, as the hospital cured a lot of disease and became more popular, he personally thinks that "the hospital medicines have become stronger and more effective than the alternative ones."

Perhaps unsurprisingly, few people remembered the first time they took allopathic medicines; in talking about this question they were thinking about taking oral medications. One man from Khunde who did remember said his first experience taking allopathic medicine was in his early teens in the seventies when the family was in their summer pasture in a higher valley looking after their animals. An injury left him unable to walk. His family carried him to the hospital, where he was given some pills to take orally for a few days. He got better, but added that local healers were also consulted. These were likely to have been nearer than the hospital, but other people talked of access being a factor in their choice of healing option. A woman from Thame village said that Khunde Hospital was too far from her village and that only if someone did not get better after seeing the *lhawa* or *lama* would they then go to the hospital.

That people considered the question of which medicine was appropriate for a health problem is reflected in people frequently mentioning *amchi* (Tibetan) medicine to address gastritis (inflammation of the stomach lining but has many causes). While both men and women talked about *amchi*, more women appeared to have used *amchi* medicines. According to older people, during the nineteen fifties, as the Chinese presence intensified in Tibet, some *lama* with this medical knowledge came over the mountain passes and settled in the Everest region.<sup>15</sup> A woman from Pangboche, who moved to Khunde when she married and went to the hospital for most health issues as it was closer, returned to her home village to consult a renowned *lama amchi* for her gastritis. He gave medicines for two months, the longest she had ever taken a medicine. It was a powder and she had to take a spoonful each day. She said she never forgot

and that afterwards she was fine. Not everyone found *amchi* medicines effective. One man described how he tried it because “everyone said he should,” but when he did not get better, he went back to his usual hospital medicine.

Demand for and provision of education was a key driver in the changes that took place in the Everest area. In terms of health, children acquired knowledge at school about diseases and treatments and also learned about practices that would be beneficial throughout their life, such as hygiene and cleaning their teeth. The young overseas doctor at the hospital thought that education would bring acceptance of the new treatments, which he considered superior (McKinnon 1968). In practice, the influence of education was diverse and complex. In part, this reflected the uneven uptake of education that became increasingly available in the villages of the area (Fisher 1997; Heydon 2009). Some of the older people I talked to, however, believed they had missed out on education because of age or gender, in that boys initially were given preference; girls were expected to stay at home and help with household chores and look after siblings. By the eighties, a higher proportion of girls were starting school, although the imbalance in the higher classes remained.<sup>16</sup>

Other major drivers for change were increasing tourism and economic development that brought visitors into the area and enabled more Sherpa to travel within Nepal and sometimes overseas. Tourists carried medicines for when they were sick and used these for local people who approached them with health problems (Heydon 2009, 2011). Beginning slowly, with 20 visitors in 1964, the rate accelerated, reaching 10,343 in 1990/1991 (Heydon 2009: 322).<sup>17</sup> In 1976, the area became a national park. Although the hospital and government provided year-round services, tourism and travel increased people’s exposure to other ways of receiving healthcare and medicines. In the early nineteen nineties, Khumbu was a very different place for both tourists and Sherpa. In the 25 years after the hospital was built, use of its services had increased considerably. Outpatient attendances rose from 1,924 in 1967 to 6,066 in 1990 (Heydon 2009: 319). Clinics were built in some of the villages to bring healthcare closer to where people lived. Yet even if more people used the hospital and its medicines for a wider range of health problems, that use was still pragmatic and selective; it was still “all mixing.”

### **“Now there are many kinds of illnesses”**

This last section considers the more recent period and the increasing domination of pharmaceuticals. In the past, as the elderly man said earlier, people used old butter for impetigo, but they do not do that anymore. Now if they have any problems they go to Khunde Hospital. Laughing,

he added that today if they used “smelly butter,” people would run away. Such changes in a particular treatment were also part of a wider change. People said they used the hospital more because they believed there was more sickness. A younger man from another village explained how in the past there were few diseases “but now there are many kinds of illness like cancer.” Most people, he continued, choose to go to the hospital and take hospital treatments, a decision that is reinforced when they see somebody helped by the hospital. Although still believing in “shamans”—(the English word he used), “most of the people are now taking medicines.”

Central in this change has been the influence of the increasing level of education in Sherpa society (Fisher 1997: 157-158). Also, today more children are staying at school for longer, and many Sherpa families in Khumbu send their children, often from a very young age, to be educated in Kathmandu in English with a view to improving their employment opportunities.<sup>18</sup> In Kathmandu children not only learn about health as part of the Nepali school curriculum, but if sick at school, they also experience being ill in a different environment. Parents of children at school in Kathmandu related that minor health problems tend to be dealt with by the school and the parents receive a bill for costs such as medicines. Some schools have a doctor visit on a regular basis, but if a more serious health problem arises, the child or teenager is taken to a hospital.

Many Sherpa travel, but that travel has increased in frequency, geographically and for different reasons.<sup>19</sup> People of all ages spend increasing amounts of time away from Khumbu and have to cope with illnesses in different places. In 2008, the government of Nepal introduced a program of free basic healthcare, which included a small number of essential medicines that would also be free for patients. Access to these medicines and healthcare has improved, but sustainability remains a challenge in many rural and remote areas.<sup>20</sup> Sherpa working on expeditions in other parts of the country continue to rely for the most part on the expedition medical arrangements, but one man in his thirties, who now lives most of the year in Kathmandu, talked about how he prepared for his time away and coped with the problem of coughing, which can get serious at high altitude. He carries cough and cold preparations with him to use if drinking hot water is insufficient. These he buys from a pharmacy.

Although medicines in Khumbu are now available from different sources, most people obtain their medicines at Khunde Hospital, a system that they are used to. In Kathmandu they have to find alternatives. Most people said that if their own health problems were minor they went to a pharmacy, and otherwise a hospital. If their children

were sick, they took them to a hospital. Many expressed caution about pharmacies, such as being sold too many medicines and having to pay too much; this contrasts with Gerke's study, where pharmacies are seen as a popular and cheaper option than other forms of private healthcare (2010: 341). Past experiences were also a factor in people's decision-making about where to seek healthcare; talking among family remained important for the transmission of information. One man whose family member in the past had received the wrong medicine from a pharmacy refused to use a pharmacy, while another man whose child did not get better at the hospital but recovered after going to the *lhawa* said he would still use a *lhawa* if there was no other alternative. Unlike Khumbu, people told me, there were several *lhawa* and *jhankri* (shaman) near the areas in Kathmandu where Sherpa tend to live.

Most people talked about taking medicines for short-term health problems, with the most common form of longer-term pill-taking being the iron pills most women took during pregnancy. This is changing. While TB is much less common today in the Everest area, more chronic health problems such as diabetes and hypertension are appearing in the community for which long-term medicine-taking is increasingly advised.<sup>21</sup> Lifestyle is one contributing factor; running a lodge for tourists is a more sedentary occupation than working in the fields growing potatoes. Another reason is that people, particularly those better off financially, are getting tested and being diagnosed with conditions that formerly may have passed unnoticed.<sup>22</sup> Neither explains, however, the high prevalence of gastric cancer among Khumbu Sherpa which is causing community concern (Sherpa et al. 2012). Lack of access to medicines for chronic health problems is a major issue in a low-income country such as Nepal (Mendis et al. 2007), but in Khumbu medicines are available at low cost if received through the hospital.<sup>23</sup> Maintaining one's supply of medicines, therefore, becomes a concern for people when they travel, especially as they may be away for weeks or months. People try to stock up before they leave, although the hospital is discouraging this, as it drains their supplies and people can get medicines in Kathmandu easily, although people may have to pay more for them.<sup>24</sup> Conversely, people returning to Khumbu need to make sure they can get the same medicines they may have bought or been prescribed elsewhere. One woman, who is now on four medicines for multiple health problems, recounts that she has worked out a system whereby her son sends her medicines from Kathmandu, but her illnesses are monitored either at Khunde Hospital or in Kathmandu and she takes the relevant documentation to each.

Travel also provided an opportunity to continue accessing other medical options and also ones that were not available in Khumbu. One man in his mid-thirties had used neither *lhawa* nor *amchi*, but the medicines he had received from Khunde Hospital had not cured his "pain." Later when he was in Kathmandu, he went to an *ayurvedic* practitioner who gave him four kinds of pills. These, he said, did not help. He now thinks he should have taken them for longer, but he got "fed up" taking them. Some also had a "very bad" smell. A few years ago he tried a Chinese acupuncture therapist. This helped, and so when the pain reoccurred he went back to acupuncture. He also found a book by an American doctor advocating exercise, which also helped. He says he looks around for the "best" solution, but has not used television, radio, or the internet for information. He has also had gastric pain and mentioned by name that when he gets this he takes omeprazole. This was unusual, as few people talked about medicines by name, apart from the very common Cetamol used for pain relief.<sup>25</sup> He is currently using Chinese medicine, which he finds "smooth," "tasty," and easier to take than either of those obtained from Khunde Hospital or *ayurvedic* medicines. It is more expensive, he says, but he is taking it as he finds it is preventing his pain and he is feeling better. One box costs 400 rupees (approximately USD 5) and lasts four days.

Despite the increased use of allopathic medicines, continuity in plural medical practices is also evident and demonstrates the complexity of generalizing about the influence of education on shifting therapeutic practices and medicine consumption. Khunde Hospital staff say that they will tell people what they think is the problem and that a person will feel better if they take the hospital's medicine, but that people can also do whatever else they want because "if say don't, they won't listen." A man now in his thirties frequently had boils (*karsu*) during his childhood. He described how his family would put butter on the fire and then use hot coals from the fire to take away whatever had caused the boil—although not applied directly on the boil. If he did not get better, he was taken to the hospital, where the boil was incised to remove the pus and he was then given tablets, which he understood were antibiotics. The man had completed school and after Year 10 obtained his School Leaving Certificate. A few years ago he began expedition work and on one of these the boils reoccurred. He went to the *lhawa*, who said that while he was on the mountain he had eaten something and "got *nerpa*." The man carried out various rituals, but his boils did not improve, so he went to Khunde Hospital, where they were drained and he was given tablets. He then returned to Everest, where he succeeded in reaching the summit. As

the boils had not reoccurred he had not had to make the decision again.

Lastly, as has been evident throughout the more than fifty years discussed in this article and despite the many changes that have occurred, ideas and practices about preventing sickness exhibit a strong sense of continuity with the past. While a few people talked about the importance of good food or hygiene, which was taught in schools and spoken about on radio and television, prevention for almost everyone focused on Tibetan Buddhist ritual practice. A young man commented that at the festivals of Mani Rimdu and Dumje he would get a blessing from the *lama* who would also give out *seril*, preventive pills made of *tsampa* (ground roasted barley), butter, and sugar. A woman who had just returned from a pilgrimage in India said that a lot of people had come back with these and other types of *chhinlab*. People more commonly expressed the view that these medicines were better at preventing ill health and that if a person was sick they were less effective than other options.

## Conclusion

In her conclusion, Gerke argued for “more nuanced scholarship focused on localised pluralism” (2010: 369). While she was referring to “heterogeneous groups such as Tibetans, who live in multi-ethnic modern Indian urban environments,” this present article provides a historical exploration of the localized pluralism for Sherpa and medicines. It also provides a foundation for future study. Medicine-taking among the Sherpa community has changed considerably since the nineteen fifties. The introduction of allopathic medicines into the Mt. Everest area brought new products and a new system of healing, with their use increasing over time. Khunde Hospital became the main provider of both the services and the medicines, although never the only source. People were pragmatic about taking whatever medicine they had to take, but expressed a clear preference for oral medications. Some people thought that injections were more powerful, but injections engendered fear of a painful procedure and, for people who believed in *pem* and *nerpa*, a fear of complications and a worse prognosis. Most people’s experiences with medicines were for short-term courses of therapy or preventive programs for immunization, iodine deficiency, and later contraception. “Which medicine?” was a relevant question as people determined the appropriate action to address what they believed was the cause of their illness or problem. In practice, people added the new medicines to the range of options they could use and, as Gerke (2010) found, moved easily between them. Throughout, Sherpa practices to

promote good health and prevent illness have remained important among all age groups and for both men and women.

Over the period since the nineteen fifties, Sherpa lives had also changed considerably. The arrival of education and tourism brought new opportunities for many people and economic development in the area. Increasing travel out of the area exposed Sherpa to other healthcare situations when ill. Changing lifestyles have had an influence on the pattern of disease and ill health as they have elsewhere, with chronic disease becoming more prevalent. Individual medicine-taking, however, was—and remains—influenced by the circumstances of individual lives. Education, travel, employment, economic status, beliefs and practices, family and social relationships, access to services, and medicines all influenced a person’s behavior when ill, but people responded in different ways. Looking at Sherpa medicine-taking practices over time enables us to examine their responses; it also reinforces the need in healthcare planning to think about people not only collectively, but also as individuals making their own decisions.

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## Endnotes

1. For reasons of confidentiality, participants are described only briefly and not identified further. This project received approval from the University of Otago Human Ethics Committee and the Nepal Health Research Council. In a small community it is easy to identify people, and in the past some people have been upset when they appeared in a book. Technically the vaccination procedure was not an injection.
2. The 1963 American Mount Everest Expedition also gave some vaccinations. An important example of someone who had already received a smallpox vaccination was the young *rinpoche* (precious one) at Tengboche monastery who as a child in the early nineteen forties was taken to Kathmandu (Zangbu 2000: 58).
3. There is extensive literature surrounding the topic of efficacy and perceptions of efficacy, as there is also about health seeking behavior and explanatory models of illness, but the focus of the present research is to talk to people about medicines. Similarly, many other topics are touched on in this article, but for practical reasons are not covered further.
4. See Whyte et al. (2002: 5-6).
5. A focus on modernization can obscure such factors (Nandy and Visvanathan 2011).
6. Since Sherpa is mostly oral, words are spelt to relate to spoken Sherpa (Sherpa 2008).
7. Heydon (2009: 112-113).
8. For contemporary studies regarding ritual see Millard (2005), and for the difference between theory and practice see Samuel (2001).
9. I would like to thank Dr. Lhakpa Norbu Sherpa for his suggestion to use this spelling and translation as “blessed pills.” Email communication, 14 October 2014.
10. Geoff Childs also refers to the influence and fear of being poisoned in *Tibetan Diary* (2004: 23-24).
11. See also Craig (2012: 206).
12. These exist from 1967 and are stored at Khunde Hospital.
13. Later (nineteen nineties), injections for family planning purposes were introduced and became the preferred option, instead of IUCDs (Intrauterine Contraceptive Device; known as ‘the coil,’ it was inserted vaginally) or the oral contraceptive pill.
14. Kunde Hospital Annual Report 1 September 1983-31 August 1984.
15. Khumbu is situated on a long distance trade route between Lhasa and northern India.
16. In 1986 over half (54 percent) of enrollments for Grade 1 at Khumjung School were girls, but at secondary level this dropped to 5 percent for Grade 10. See: Fisher (1997: 79).
17. The year operated from July to June.
18. Today English medium teaching is also available in Khumbu and Pharak.
19. New Zealand has a small Sherpa community in the Mt. Cook area.
20. Currently research is limited, although evaluation reports indicate widening access and improved availability of medicines at health posts.
21. Kunde Hospital Annual Report 2008/2009.
22. Conversations with Dr. Kami Temba Sherpa, the medical officer in charge of Khunde Hospital.
23. The cost of medicines obtained through other institutions that have opened in recent years in the Everest area varies.
24. Conversations with Mingma Temba Sherpa, manager, Khunde Hospital.

25. Although people talked about medication for pain, its use appeared to be low. Personal communication, Dr. John Heydon, Khunde Hospital volunteer doctor 1996-1998, 16 February 2014.

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## References

Adams, Vincanne. 1988. "Modes of Production and Medicine: An Examination of the Theory in Light of Sherpa Medical Traditionalism." *Social Science & Medicine* 27 (5): 505-513.

———. "Healing Buddhas and Mountain Guides: The Production of Self within Society through Medication." PhD thesis, University of California, Berkeley with San Francisco State University, 1989.

———. 1996. *Tigers of the Snow and Other Virtual Sherpas: An Ethnography of Himalayan Encounters*. Princeton, New Jersey: Princeton University Press.

Au, Sokhieng. 2011. *Mixed Medicines: Health and Culture in French Colonial Cambodia*. Chicago and London: University of Chicago Press.

Bagge, Michael. "Medicines in the Context of Older People's Lives." PhD thesis, University of Otago, 2012.

Berridge, Virginia. 2009. "Introduction to History in Health." In *Principles of Social Research*, edited by Judith Greene and John Browne, 145-155. Maidenhead: Open University Press.

Childs, Geoff. 2004. *Tibetan Diary: From Birth to Death and Beyond in a Himalayan Valley of Nepal*. Berkeley: University of California Press.

Cohen, David, Michael McCubbin, Johanne Collin, and Guilhème Pérodeau. 2001. "Medications as Social Phenomena." *Health* 5 (4): 441-469. <<http://hea.sagepub.com/content/5/4/441>> (accessed on 10 July 2013).

Craig, Sienna R. 2012. *Healing Elements: Efficacy and Social Ecologies of Tibetan Medicine*. Berkeley, Los Angeles, and London: University of California Press.

Dixit, Hemang. 2005. *Nepal's Quest for Health*. Kathmandu: Educational Publishing House.

Draper, John. "Beyond Medicine: Sickness, Healing, and Order in Sherpa Society." PhD thesis, University of Sydney, 1995.

Fisher, James F. 1997. *Sherpas: Reflections on Change in Himalayan Nepal*. Delhi: Oxford University Press.

von Fürer-Haimendorf, Christoph. 1964. *The Sherpas of Nepal: Buddhist Highlanders*. London: John Murray.

Gerke, Barbara. 2010. "Tibetan Treatment Choices in the Context of Medical Pluralism in the Darjeeling Hills." In *Studies of Medical Pluralism in Tibetan History and Society: Proceedings from the XIth International Association of Tibetan Studies Meetings*, edited by Sienna Craig, Mingji Cuomo, Frances Garrett, and Mona Schrempf, 337-376. Halle: International Institute for Tibetan and Buddhist Studies, Contributions to Research on Central Asia Series.

Gill, Michael. 1969. *Mountain Midsummer: Climbing in Four Continents*. London: Hodder and Stoughton.

Hardie, Norman. 1957. *In Highest Nepal: Our Life Among the Sherpas*. London: George Allen & Unwin.

Harper, Ian. 2009. "Mediating Therapeutic Uncertainty: A Mission Hospital in Nepal." In *From Western Medicine to Global Medicine: The Hospital Beyond the West*, edited by Mark Harrison, Margaret Jones, and Helen Sweet, 303-329. New Delhi: Orient BlackSwan.

Heydon, Susan. 2007. "Sherpa Beliefs and Western Medicine: Providing Health Care at Khunde Hospital, Nepal." In *Soundings in Tibetan Medicine: Historical and Anthropological Perspectives. Proceedings of the Tenth Seminar of the International Association for Tibetan Studies, Oxford*, edited by Mona Schrempf, 65-87. Boston and Leiden: Brill.

———. 2009. *Modern Medicine and International Aid: Khunde Hospital, Nepal 1966-1998*. New Delhi: Orient BlackSwan.

———. 2011. "Medicines, Travellers and the Introduction and Spread of 'Modern' Medicine in the Mt. Everest Region of Nepal." *Medical History* 55: 503-521.

Hillary, Sir Edmund. 1964. *Schoolhouse in the Clouds*. London: Hodder and Stoughton.

Lang, S.D.R. and Ann Lang. 1971. "The Kunde Hospital and a Demographic Survey of the Upper Khumbu, Nepal." *New Zealand Medical Journal* 74 (470): 1-8.

Lora-Wainwright, Anna. 2013. *Fighting for Breath: Living Morally and Dying of Cancer in a Chinese Village*. Honolulu: University of Hawai'i Press.

McKinnon, J.R. 1968. "Health Problems of Khumbu in Nepal: The Work at the Kunde Hospital." *New Zealand Medical Journal* 67 (140): 140-143.

McKay, Alex. 2007. *Their Footprints Remain: Biomedical Beginnings across the Indo-Tibetan Frontier*. Amsterdam: University of Amsterdam Press.

- Mendis, Shanti, Keiko Fukino, Alexandra Cameron, Richard Laing, Anthonion Felipe Jr., Oussama Katib, Jerzy Leowski, and Margaret Ewen. 2007. "The Availability and Affordability of Selected Essential Medicines for Chronic Diseases in Six Low- and Middle-Income Countries." *Bulletin of the World Health Organization* 85 (4): 279-288.
- Millard, Colin. 2005. "Man and Glud: Standard Tibetan Medicine and Ritual Medicine in a Bon Medical School and Clinic in Nepal." *Tibet Journal* 30 and 31 (4 and 1): 5-32.
- Miller, Robert. (1965) 1997. "High Altitude Mountaineering, Cash Economy, and the Sherpa." Reprint, *Himalayan Research Bulletin* 17 (2): 17-22.
- Monnais, Laurence. 2008. "Rejected or Elected? Processes of Therapeutic Selection and Colonial Medicines in French Vietnam, 1905-1939." In *Biomedicine as a Contested Site: Some Revelations in Imperial Contexts*, edited by Poonam Bala, 115-133. Lanham: Lexington Books.
- Nandy, Ashis and Shiv Visvanathan. 2011. "Modern Medicine and its Non-Modern Critics: A Study in Discourse." In *Dominating Knowledge: Development, Culture, and Resistance*, edited by Frédérique Apffel Marglin and Stephen A. Marglin, 1-39. Oxford: Oxford Scholarship Online.
- Ortner (Paul), Sherry B. "Food for Thought: A Key Symbol in Sherpa Culture." PhD thesis, University of Chicago, 1970.
- . 1978. *Sherpas through their Rituals*. Cambridge: Cambridge University Press.
- Pearl, Max. 1965. "Kiwi in the Khumbu." *New Zealand Medical Journal* 64: 584-588.
- Prost, Audrey. 2006. "Causation as Strategy: Interpreting Humours among Tibetan Refugees." *Anthropology & Medicine* 13 (2): 119-130.
- Samuel, Geoffrey. 2001. "Tibetan Medicine in Contemporary India: Theory and Practice." In *Healing Powers and Modernity: Traditional Medicine, Shamanism, and Science in Asian Societies*, edited by Linda H. Connor and Geoffrey Samuel, 247-267. Westport, Connecticut: Bergin & Garvey.
- Schrempf, Mona. 2010. "Between Mantra and Syringe: Healing and Health-Seeking Behaviour in Contemporary Amdo." In *Medicine between Science and Religion: Explorations on Tibetan Grounds*, edited by Vincanne Adams, Mona Schrempf, and Sienna R. Craig, 157-183. New York and Oxford: Berghahn Books.
- Sherpa, Lhakpa Norbu. 2008. *Through a Sherpa Window: Illustrated Guide to Traditional Sherpa Culture*. Kathmandu: Vajra Publications.
- , ed. 2011. *Khumjung Secondary School: Celebrating 50 Years of Education (1961-2011)*. Lalitpur: Golden Jubilee Celebration Committee.
- Sherpa, Tshering W., Kami T. Sherpa, Garry Nixon, John Heydon, Emma Heydon, and Susan Dovey. 2012. "The Prevalence of *Helicobacter pylori* Infection in Sherpa Residents of the Upper Khumbu, an Isolated Community in Eastern Nepal." *New Zealand Medical Journal* 125 (1365): 30-37.
- Stevens, Stanley. 1996. *Claiming the High Ground: Sherpas, Subsistence and Environmental Change in the Highest Himalaya*. Delhi: Motilal Banarsidass.
- Streefland, Pieter. 1985. "The Frontier of Modern Western Medicine in Nepal." *Social Science & Medicine* 20 (11): 1151-1159.
- Worboys, Michael. 1997. "The Spread of Western Medicine." In *Western Medicine*, edited by Irvine Loudon, 249-263. Oxford: Oxford University Press.
- Whyte, Susan Reynolds, Sjaak van der Geest and Anita Hardon. 2002. *Social Lives of Medicines*. Cambridge: Cambridge University Press.
- Zangbu, Ngawang Tenzin. 2000. *Stories and Customs of the Sherpas*, edited by Frances Klatzel. Kathmandu: Mera Publications.