Mountains and medicines: history and medicines use in rural Nepal

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Abstract

The aim of this article is to highlight the value of an historical approach for current health research into access and use of medicines. It also suggests that historical research complements the perspectives of other social science disciplines. This study focuses on the rugged Mt Everest region of Nepal and the mainly Sherpa inhabitants from the 1960s through to the present. It draws on an in-depth historical case study of Khunde Hospital, which is the main provider of health services in the area, and an exploratory study of people’s use of medicines over time. This historical perspective deepens our understanding of both the consumer and provider of medicines in the Everest area. The research employs a variety of qualitative methods and uses a wide range of written and oral, primary and secondary, published and unpublished sources as well as participant observation and further fieldwork. Multiple separate and interconnected factors have influenced medicines use over time. The study identifies the importance of medicines in the introduction and spread of ‘modern’ medicine in the area, but like elsewhere in the Himalayan region modern health care and its medicines are used within a plural medical environment. The Mt Everest region has become a major tourist destination which has led both to considerable economic development in the area but has also influenced the supply and use of medicines. While medicines use unsurprisingly is different today, this development overall has occurred within a framework of both continuity and change that underpins Sherpa life more broadly.

Keywords: medicines, mountains, Nepal, medicines use, medicines access, history

Introduction

In the past ten years a number of articles have appeared in a range of journals that discuss the value and ways of using an historical approach in current health research, policy and practice. While an interest in history has long been present in the study of health, these articles cumulatively suggest that historians through their different interests, conceptual approaches and particular methods can provide valuable insights into today’s concerns. These perspectives complement those provided by researchers from other social science disciplines and, in terms of the patient or consumer of services, further deepen our understanding, whether at an individual or population level. For the most part, this debate about history has been conducted in and about developed countries and has focused on public health. Nevertheless an increasing interest is being shown in developing countries where these other social science disciplines, and especially anthropology, already have a major involvement in health research. In late 2004 the World Health Organization (WHO) established the Global Health Histories (GHH) project which ‘promotes the concept that learning from history is vital to help shape a healthier future for everyone, especially those most in need’.

While there is a growing historical literature about the discovery and role of medicines in tackling disease, there is little relating to current medicines issues and pharmacy practice. The aim of this paper is to bring an historical approach to considering current access and use of medicines in rural Nepal. In particular it will focus on the Mt Everest region. Although the number of pharmacists and pharmacy assistants in Nepal has increased considerably in recent years, in 2007 less than 8% of registered pharmacists and 37% pharmacy assistants worked in hospital and community pharmacies. As is to be found elsewhere in the wider region, most people in Nepal obtain their medicines through various retail outlets where often the staff has little training in medicines. Also, as noted recently in Pakistan, most pharmacies sell medicines without prescriptions. In 2007 the Nepalese government declared that many basic medicines could be obtained for free at government health institutions, but in early 2010 local media, referring to a Ministry of Health and Population source, claimed that 85% of government health institutions in Nepal were without stocks of essential medicines. While a person was able to consult a health worker for free, people had to go elsewhere and buy some or all of the medicines they required from the private sector instead of...
Mountains and medicines: history and medicines use in rural Nepal

being supplied from the government clinic or hospital. Nepal is one of the poorest countries in the world, but a 1998 study showed that funds for almost three-quarters (74%) of the country's health care came from the out-of-pocket expenditures of households.18

This paper draws on two historical studies undertaken in the Mt Everest region: a case study of the area's main provider of health services and an exploratory study into changing patterns of medicines use. The research began as history of health, but as its relevance to current practice became more striking its focus shifted towards history in health. Both studies draw on a range of primary and secondary, written and oral sources, as well as participant observation through being a volunteer at Khunde Hospital for over two years and subsequent visits. Documentary sources include hospital records, reports, correspondence and diaries, while oral history interviews were carried out with present and former hospital staff and members of the local community.

The first part of the paper examines current access and use of medicines in the Mt Everest area while the second section adopts an historical approach to understanding these patterns.

Medicines in the Mt Everest area of Nepal

The Mt Everest region is situated on Nepal's northern border with the Tibet Autonomous Region of China and is a spectacular and challenging high-altitude mountain environment. There are no roads. A national park, it is home to the Sherpas who during the first half of the twentieth century became internationally famous through their role as high-altitude support personnel on climbing expeditions. In 1953 New Zealander Edmund Hillary and Tenzing Norgay made the first successful ascent of Mt Everest. Today this region, which has a population of approximately 3500, is one of Nepal's major tourist destinations. The rise of tourism has fuelled the area's economic development and has encouraged people from other ethnic groups to move into these high valleys for employment.

Unlike most of rural Nepal the Everest region has had a permanent and functioning health infrastructure since the 1960s. Currently, while the main provider of services and medicines is Khunde Hospital, which was built by Sir Edmund Hillary in 1966 as part of his ongoing aid programme, people can also obtain medicines from various other sources. These include the hospital's village clinics, government clinics, tourists (whether or not they are health professionals), the dental clinic, various temporary or permanent aid projects and non-government organisations (NGOs), local initiatives, a licensed pharmacy and general shops. Visitors to the area also donate medicines to local health organisations. In general, people obtain most of their medicines from facilities run by health personnel with varying levels of training, but none have registered pharmacists or pharmacist assistants on their staff.

Sherpas today are familiar with accessing and using medicines. Despite the poverty of most Nepalese, many Sherpas are affluent, travel and obtain medicines while away, whether within Nepal, such as in the capital Kathmandu, or overseas on a trip sponsored by a visitor. People are aware that medicines exist for different health concerns, such as to relieve pain or help one sleep, but mostly see them in terms of what they do rather than by name. For example, they know antibiotics can be medicines that dry lesions. Communicable diseases remain important health issues in Nepal, but chronic non-communicable conditions are an increasing burden for health services. Among Sherpas, a changing and often more sedentary lifestyle has led to a growing number of people now needing to take medicines on a long-term basis. Khunde Hospital's annual report for 2008/09 notes that hypertension is common with more than sixty people under regular medication. The report also mentions an increasing prevalence of type two diabetes mellitus and gout. Currently, the hospital is able to obtain sufficient and appropriate medicines for patients with chronic conditions, and currently staff regard adherence as good.

Supplies are bought in Kathmandu, but the hospital is also happy to accept medicines donations from visitors. Internationally, the issue is of concern regarding quality, appropriateness, expiry and proper disposal. International guidelines exist, but mostly remain guidelines. Particularly useful donations for Khunde Hospital are analgesics and antibiotics, but this is not the case with all medicines received. Only some visitors ask the hospital what is needed. Good relationships with organisations operational during the trekking season may also see left over medicines coming to Khunde. Currently this happens with the IPPG (International Porter Protection Group).

In 2006/07 there were 8013 outpatient attendances at Khunde Hospital. Although many people now go to Khunde Hospital as their first choice and use its medicines, especially antibiotics and analgesics, modern medicine – as this type of health care is often referred to in Nepal – also operates in a fluid plural medical environment. Sherpas believe in a variety of gods and supernatural spirits and these beliefs inform their ideas about sickness, disease causation and the internal body. For example, a pem (a type of ‘witch’ spirit) is usually held responsible for prolonged diarrhoea and vomiting. People will take medicines from the hospital to relieve the symptoms, but the hospital is not the appropriate place for dealing with the pem that has caused the illness. Sherpas, who originally came from Tibet, are Buddhist and in the Everest area can obtain medicines from some religious lama (a senior monk) and amchi (a Tibetan medical practitioner). Recently an NGO project established medical herb gardens and began to make medicines, but while a Himalayan Trust nursery at Phurte grows some plants for Tibetan medicines, a large tourist lodge now stands on what was the Sacred Land project nursery site. Nevertheless, the hospital and community are used to each other in a relationship that is in practice a coexistence of difference. Each acknowledges and incorporates aspects of the other's beliefs and practices when dealing with a person's sickness, but remains separate. It is a relationship that has built up over time.

An alternative spelling is Kunde.
Mountains and medicines: history and medicines use in rural Nepal

Historical perspectives on access and use of medicines in the Mt Everest region

A great strength of historical research is its interest in and ability to investigate the wider context. While an examination of the current situation identifies multiple aspects to medicines use in the Everest area, historical perspectives explore these over time. This research highlights the importance of medicines in the introduction and spread of modern medicine in the area; that multiple separate and interconnected factors have influenced medicines use; and that while medicines use unsurprisingly is different today from fifty years ago, this development has occurred within a framework of both continuity as well as change that underpins Sherpa life more broadly.

Before the mid-1960s, people in the Everest region had very little access to and so little use of modern medicines. Instead, Sherpas used various rituals and a few herbal medicines. While Nepal had few biomedical services, Sherpas employed on mountaineering expeditions came into contact with their medical services. These expeditions often carried extensive supplies of medicines. A few Sherpas were also trained to assist. New Zealand climber Norman Hardie wrote about his five-month stay in 1954/55 in the village of Khumjung and provides an explicit reference to the important role of medicines in promoting the introduction and spread of modern medicine: ‘This assistant could be taught the uses of the appropriate pills for the treatment of the major fevers, dysentery and high altitude headaches. Besides assisting the party home, it would slowly diminish the deep-rooted superstitions that exist in the home villages.’ Expedition medical care, nevertheless, was a short-term option.

Although slowly expanding, government health services throughout Nepal remained limited in the 1960s and especially in rural areas where most of the population lived. In the Everest area the situation changed, particularly after the opening of the small hospital at Khunde in 1966. The government also opened a small clinic in the area’s administrative centre of Namche Bazar. Khunde Hospital, run by Hillary’s aid organisation the Himalayan Trust, soon became the main provider of both the medical services and the medicines. Nevertheless people’s use of the hospital was pragmatic and selective based on their perceptions as to the hospital being the appropriate place to go for their particular health concern. Most people had expectations that modern medicines should work in a very short space of time. If they did not, they tried other systems. The overseas volunteer medical staff had to adapt their practice to the conditions and to how people used the hospital and its medicines – for example, how to devise a dosage regimen when people did not have clocks. Initially people thought that the hospital’s medicines were no good because they were free and it was only when people travelled to Kathmandu that they found the same medicines could be expensive to buy. Then they began to increase their use of the hospital. Sherpas considered that the new medicines could treat the symptoms but were not the real cure. In the 1950s and 1960s many new medicines became available, especially antibiotics for the treatment of infectious disease, impressing both local people and the hospital staff. Overseas volunteer Lesley Evans wrote in her diary in 1968 during the walk in to Khunde: ‘We saw awful impetigo on two children in tonight’s surgery. … But gosh, how speedily infections get better. They’re so sensitive to antibiotics …’

At Khunde Hospital staff assumed they would have the necessary medicines to treat a wide range of health problems presented by the increasing number of patients. They thought of medicines mainly in terms of supply issues. Between 1967 and 2006/07 patient numbers quadrupled, from 1924 to 8013. Initially most medicines were brought in from New Zealand and many of these were donated, but gradually as more medicines became available in Nepal the hospital bought its supplies internally. Contact with government health services was very limited, except in the areas of medicines for government preventive health programmes with which the hospital became increasingly involved. These were vaccines, tuberculosis and leprosy medicines, family planning supplies and iodised oil injections. Most of these medicines came from international aid sources, but while hospital staff initially obtained some directly from the respective donor, increasingly staff found they were instructed to obtain these through the particular government programme as these developed.

As with general use of the hospital’s services, therapeutic success increased the hospital’s acceptance in the community, although not everyone is happy with modern medicines. The younger wife of an elderly man, who has forgotten the English he learned while on expeditions in the 1960s, blames his loss of ‘memories’ on all the medicines he has taken during his life. While he still takes his medicines, treatment failure could have a negative effect on people’s perceptions and use of the hospital. Over time this has affected the hospital’s efforts to develop services. In 1980 a one-year old child died in a village following an injection of penicillin. Although unrelated, this hindered the uptake of the hospital’s vaccination programme in the villages in the upper valley. Hospital staff made periodic attempts to immunise, but not till 1997 was this successful. While the issue was more complex, the effect of the belief that ‘vaccinations kill babies’ was powerful and long lasting. Medicine and mode of delivery were synonymous.

Like elsewhere in the Himalayan region, modern health services functioned within a changing but plural medical environment, with people deciding which system to use based on their perceptions of the cause of their problem. Religious and amchi medicines also circulated in the community and ritual remained important. Medicines were made by lamas from instructions in the religious books, but some medicines were more preventive and ‘not really medicine’. Small red or brown/black pills, which remain popular, were regarded as good for everything and helped a person keep healthy. Their ingredients included holy water and their preparation involved prayer. They were
Mountains and medicines: history and medicines use in rural Nepal

also given for non-specific illness and people about to die. The use of lhawa (a spirit medium/shaman) has decreased, but their declining numbers were due more to the lure of employment in the trekking industry than competition from modern medicine. Amchi medicine had a more limited influence in the area29(p.261). Sherpas used to supplement their subsistence lifestyle with trade and while away bought medicines. Trade with Tibet declined after the intensification of the Chinese presence in the 1950s, but some amchi moved permanently into the Everest region. The last aspect to be considered is the ongoing influence of recreational visitors on medicines availability and use. When few their impact was limited, but increasing numbers became integral to the economic development of the area. Tourist numbers have risen from 20 in 1964 to 28,999 in 2008/09, with totals peaking to the economic development of the area. Tourist numbers have risen from 20 in 1964 to 28,999 in 2008/09, with totals peaking in the spring and autumn trekking seasons19(p.221,22. Most visitors experience some form of sickness, ranging from the relatively minor inconvenience of the common cold to conditions resulting in death. When sick, tourists self-treat, are treated by their group or another visitor, or seek help from a health facility. At Khunde Hospital, visitors consume medicines from the hospital’s supply but pay for their cost.

Visitors have influenced medicines use in a number of ways that may also conflict with one another. Individually and as groups, they have provided much of the region’s health infrastructure through a desire to help and have also been an important source of medicines donations. These supplemented the hospital’s supplies and therefore helped to contain costs and to increase the quantity and variety of medicines available at the hospital. On the other hand, despite the presence of health facilities, climbing expeditions and trekkers have continued to give out medicines and provide treatment to local people. In the 1970s and early 1980s Khunde Hospital staff were particularly concerned about fragmentation of care for people with chronic conditions such as tuberculosis which was common at the time and had a longer treatment time than today19(p.209). Such medical help was carried out in good faith on both sides, but while a focus on the provision of basic health services may be appropriate policy for the area, it is also not surprising that local people wanted what they thought to be a better option. They did not consider receiving treatment from various sources to be a problem. They knew visitors carried medicines for their own use and over the years this has created some issues for staff at Khunde Hospital such as the use of antibiotics in cases of diarrhoea, which is very common among both local people and visitors. While the use of oral fluids for rehydration is recommended in cases of uncomplicated diarrhoea, visitors often have potent antibiotics, which can considerably speed up recovery from an unpleasant condition. Not surprisingly local people wanted similar treatment19.

Conclusion

This historical research has highlighted the central role that medicines have had in the introduction and spread of modern health care in the Mt Everest region of Nepal and has identified the wide range of complex, separate and interconnected issues and how these have changed over time. When Western medicine encountered Sherpa beliefs and practices the response was neither a one-way diffusion of Western medical practice, nor a collision between the spirit-suffused system of the Sherpas and scientific biomedicine. People used the hospital and its medicines for some things but not others, based on their perception as to whether the hospital was the effective and appropriate option to take.

Nevertheless, as with the health services more broadly, multiple factors have influenced access and use of medicines. Increasing availability and use, together with changing patterns, has occurred within a framework of both continuity and change that underpinned Sherpa life more broadly and which we need to better understand if we want to know more about what people do when they incorporate dealing with sickness into their and their family’s daily life. An understanding of these complexities over time is important for developing strategies to improve medicines policies and practices, whether, as in the Everest area, other health professionals (such as a doctor, nurse or medical assistant at Khunde Hospital) are involved rather than pharmacists or pharmacy assistants. It is also important for efforts to contain costs, an issue that is of concern not just to Khunde Hospital or Nepalese government health services. The increasing burden of chronic, non-communicable illness and the need in many cases for long-term medication is an issue facing all countries.

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Mountains and medicines: history and medicines use in rural Nepal

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