

Natural calamities and ‘the Big Migration’: Challenges to the Mongolian health system in ‘the Age of the Market’

Benedikte V. Lindskog*

Section for Medical Anthropology and Medical History, Department of Community Medicine, Institute of Health and Society, University of Oslo, Oslo, Norway

(Received 14 November 2013; accepted 11 April 2014)

Beginning with the demise of the socialist state system in 1990, Mongolia embarked on a process of neoliberal economic reform, initiating what is known among the Mongols as ‘the Age of the Market’. The socialist health system has been replaced by a series of reforms initiated and substantiated by foreign donor organisations. This paper critically examines Mongolia’s health system and discusses the extent to which this ‘system’, despite its provision of universal, accessible and essential primary health care services, is unable to accommodate the health needs of poor urban in-migrants and nomadic herders in remote provinces. With a particular focus on recurrent natural winter disasters (*dzud*) and an escalating rural to urban migration, the paper argues that the issues of access to health services and health system strengthening must be understood in relation to factors external to the health system. Ethnographic research highlights that despite a growing economy, considerable external aid and an established primary health care model, weak rural politics, environmental challenges and economic constraints create escalating health vulnerability among the poorest in Mongolia.

Keywords: Mongolia; health system; migration; natural hazards; poverty

Introduction

The year 1990 marked the end of 70 years of socialism in Mongolia and the beginning of a process of liberal economic reforms, initiating what is known among the Mongols as *zah zeelin üye*, ‘the Age of the Market’. Over the course of the past two decades, considerable changes have taken place in Mongolia, as in all other post-socialist nations. These changes have not merely transformed the political and economic landscape of Mongolia, but have also made a deep impact on the country’s demographic profile and the distribution of socio-economic capital among Mongolians. Mongolia’s transition from a centrally planned economy and socialist governance to a liberal market-driven economy and a democratic, yet ‘weak state’ (Janes, 2009, p. 659; Rossabi, 2005), has been wrought with crises and obstacles, but also some positive developments.

Mongolia’s recent health systems reforms provide an illuminating entry point to understanding the consequences of these transitions for a growing population of the vulnerable and disenfranchised poor. Within the radically reformed health system, population health and access to affordable health care are significantly linked to socio-economic disparities. These disparities result not solely from the state’s disinvestment in

*Email: b.v.lindskog@medisin.uio.no

social security and social services, or from the motions of weakly regulated privatisation that have contributed to widening the gap between rich and poor. They are also interlinked with recurrent natural calamities and lack of risk preparedness by the state, low quality and/or lack of services in the rural areas, as well as massive one-way migration to urban areas, what is known among Mongolians as ‘the Big Migration’ (*Ih Nuudel*).

Since 1990, the earlier centralised and socialist health system has come to be replaced by a system consisting of a package of ‘essential’ and ‘complementary’ health care services, the former providing free of charge primary health care, the latter covered by health insurance through the Health Insurance Fund (Bolormaa et al., 2007, p. xvi–xvii). Initiated and supported by foreign donor organisation and development banks in cooperation with the Mongolian Government, the health system in Mongolia has explicitly been shaped on basis of principles of equity and social justice (Janes, Chuluundorj, Hilliard, Rak, & Janchiv, 2006, p. 24). Yet as Craig Janes – one of the very few scholars who have studied Mongolia’s health system in-depth – has pointed out, these basic principles have not been implemented (Janes, 2004, 2009; Janes et al., 2006). The coupling of privatisation of the secondary and tertiary levels of health care and a limited essential primary health care, as well as high levels of referral from primary to secondary and tertiary levels of care, ‘produces a fragmented system of health services’ (Janes et al., 2006, p. 25).

Inspired by Janes’ criticism of neoliberal health reforms and his thorough analyses of health reform in Mongolia, this article argues for the need to focus on factors that are seemingly external to the Mongolian health system, but that contribute to producing a fragmented health system unable to accommodate the health needs of particularly vulnerable parts of the population, notably the poor in-migrants to the capital Ulaanbaatar and mobile herders in remote provinces. I focus on two factors in particular – recurrent natural winter disasters (*dzud*) and an escalating rural to urban migration – which have contributed to exacerbating lack of access to health services, especially secondary and tertiary levels of medical care. I suggest that the impact of these factors must be realistically and politically approached in the ongoing process of strengthening the health system, if Mongolia is to provide just and equitable health care delivery for all.

This article draws on five months of comparative ethnographic research on maternal health and protective practices among peri-urban, in-migrant women to the capital Ulaanbaatar, and mobile herder women in the west-central province of Arhangai in 2011 and 2013. Moreover, some events and processes described throughout stem from two years of ethnographic research in 1996 and 2003 on social and ritual organisation and management of natural calamities among mobile herders in west-central Mongolia.

The topical concerns in the discussions below are largely based on data that emanate from interviews with women, midwives and doctors at a small district hospital and province hospital in Arhangai, as well as a maternal hospital and a ‘Family Group Practice’ (FGP) clinic in Ulaanbaatar. Data from interviews with doctors of traditional Mongolian medicine, old midwives and high-level health officials furthermore inform the discussion in this article. To describe the dynamics between the various factors that impinge on the distribution of equity and fairness within the health care system in Mongolia, I draw more generally on empirical findings from 1996 to 2013, and do not analyse the particularities of maternal health within the health system as such.

By focusing on the ‘causal webs’ in which phenomena are enfolded (Dunn & Janes, 1986, p. 3; Inhorn & Janes, 2007, p. 304; Janes & Chuluundorj, 2004; Janes & Corbett, 2009), this article explores the dynamics between various fields and levels of analysis that

impinge on the distribution of equity and fairness within the system of health service delivery in Mongolia.

Mongolian political economy: past and present transitions

The drastic macro-economic reforms that took place in Mongolia in the early 1990s were characterised by ‘shock-therapy’ (Griffin, Brenner, Kusago, Ickowitz, & McKinley, 2001; Rossabi, 2005), aimed at speedily dissolving the socialist past. Given the social and economic chaos that followed in its wake, in retrospect it seems clear that ‘shock’ took precedence over ‘therapy’. The rapid transition implied a demolition, literally overnight, of the social support system and withdrawal of comprehensive state subsidies. Backed by substantial loans, aid and advice from foreign donors, especially the World Bank and IMF, Mongolia adopted fully the package of structural adjustment policies imposed by their donors. The liberal economic reforms took the shape of privatisation of earlier public assets and state run enterprises, price liberalisation, introduction of free markets and dismantling of the state farms and pastoral collectives (*negdel*) herders had been organised into. The neoliberal incentives implemented by the government in the early 1990s, and the following ‘unstable time of the market economy’ (*zah zeeliin oroo busгаа*), has not been favourable for the majority of herders in Mongolia. Among those herders I have come to know throughout fieldwork, there is a deep apprehension about the difficulties they are faced with in terms of poverty and a heightened sense of fragility due to the unusual frequency of onsets of winter calamities (*dzud*).

Part of the rapid implementation of economic ‘shock therapy’ in Mongolia in the 1990s, as in many other parts of the world, was to create a ‘weak state’ or ‘minimal government’ (Rossabi, 2005, p. 173). The idea was to introduce market mechanisms as the most effective device for allocating resources and achieving results in the public as well as private sectors. Looking back, one may question the foresight of the foreign proponents of neoliberal reform in Mongolia, and the Mongolian state’s uncritical embrace of what, in the 1990s, developed into what could be depicted as a Mongolian variant of ‘cowboy capitalism’. As Griffin et al. (2001) write: ‘Even as late as 1999, Mongolia was described as “the darling of ultra-liberals in the West” and “the star pupil of liberal development economics”’ (p. 1). The economic and social chaos that prevailed in the aftermath of the initial transitional phase is no longer as pronounced, but the severity of poverty remains a critical issue in reformed Mongolia, especially among those most disenfranchised. The effervescence of the early 1990s and the new-won freedoms of speech and religion were, for many, slowly replaced by destitution due to lack of social protection, defunct crisis relief during calamities, non-regulated markets and a growing inequity among the population (Janes et al., 2006; Rossabi, 2005).

Presently, however, Mongolia is experiencing steady economic growth due to the rapidly developing mining industry; Mongolia has some of the largest deposits of minerals in the world. While mining revenues will doubtless be important to Mongolia’s future economy, current mining practices have been subject to massive critique, centring on the poor distribution of wealth from mining, and the perceived lack of investment of new wealth in the health sector and social support system. Given the Mongolian Government’s failure to secure viable conditions for herders in rural areas and the concomitant growth in economic, social and health inequality between urban and rural areas, mining could come to exacerbate both inequality and the in-migration to urban areas (Snyder et al., 2012, p. 84).

The Mongolian health system

During the socialist era, the state managed and provided most necessities through the collectives and state subsidies; extensive inter-sectorial organisation provided for a certain flow of work tasks that enabled an efficient allocation of the workforce. For the individual herder or factory worker, this meant that in the event of chronic or acute illness, birth, or medical conditions requiring long absences, their chores and tasks would be temporarily filled by someone else and additional social support would be provided by the state for affected family members. However, the costs of running such a system were great. Without economic input from the Soviet Union, it would not have been sustainable. This became evident with the withdrawal of Soviet support after the demise of the Union of Soviet Socialist Republics (USSR).

The socialist health system

The socialist health system that prevailed until 1990 was based on the centralised and hierarchical ‘Semashko model’, which implied an emphasis on hospitalisation and curative health care. Much of the resources were thus spent on medical treatment and often long-term stays in hospitals. Yet, the health system brought significant improvement to public health (Janes et al., 2006, p. 8) and ensured accessible health care free of charge. In fact, already in 1924 when the People’s Republic of Mongolia was constituted, a specific clause of the constitution stated that all Mongolians should be provided with free health care services (Ministry of Health, Mongolia, <http://english.moh.mn>). At the end of the 1930s, Mongolia had managed to build 10 hospitals and had 108 qualified physicians serving both rural and urban populations (Bolormaa et al., 2007, p. 19).

From the 1940s, the socialist health care system expanded greatly and general health care services were provided by educated medical doctors throughout the country (Rossabi, 2005, p. 167), some trained by Soviet physicians. While most medical facilities and tertiary-level hospitals were located in the capital and other urban centres (as remains the case), medical services in rural areas were covered by secondary-level hospitals in province centres and smaller clinics in district centres, which also had maternity waiting homes and mobile medical personnel (*feldshers*) that would go by horse or car to more remote herder encampments (Rossabi, 2005, pp. 167–168). By 1963 there were 90 hospitals and 1140 doctors. By the end of 1998 there had been an 18-fold increase since 1940 in the number of medical doctors, a doubling of mid-level health care personnel, and the number of hospital beds had increased five-fold per 10,000 persons (Ministry of Health, Mongolia, <http://english.moh.mn>).

Health sector reform

The economic reforms that took place in the 1990s in Mongolia, along with the abrupt withdrawal of Soviet subsidies (30% of the GDP) contributed to a considerable deterioration of the health sector (cf. Beck, Berry, & Chojil, 2013; Janes, 2009; Rossabi, 2005). Total health expenditure of GDP in 1991 was 5.8%, decreasing to 3.8% in 1993, dropping to 2.9% in 1995 and rising to 3.8% in 1999 (Ministry of Health, Mongolia, 2002, p. 119). With the decrease in health expenditure and the ensuing withering of the health infrastructure, Mongolians were left with a health system that could not provide adequate essential health care. Herder families in rural areas were the most severely affected due to several factors: lack of doctors (many left the health service because they were not paid any salaries); shortages of medicines and equipment that fell into disrepair;

the closing down of maternity waiting homes; and an ad hoc introduction of user-fees that demanded cash that few had access to.

The shift towards liberalisation of the health sector took place gradually from 1991 with IMF and The World Bank as dominant actors in terms of recommendations and financial guarantees. Grants and loans were provided on the condition that the Mongolian state carried through drastic neoliberal macroeconomic reforms (Rossabi, 2005, p. 37). In 1999, the Asian Development Bank provided technical advice and funding to initiate a comprehensive 'Health Sector Development Program' in cooperation with the Mongolian Government. This reform involved the provision of free primary health care services through the private FGP that serves a given geographical population (sub-district) in the cities or in the province centres and are paid on a per-capita basis, adjusted by the socioeconomic status of the patients and community risk (Janes et al., 2006, p. 11). In Ulaanbaatar, several private hospitals and clinics have been established that mostly are used by people from the middle-class and temporary foreign workers. In 2011, there were 1184 private hospitals/clinics in Mongolia (WHO & Ministry of Health, Mongolia, 2012), most of them in Ulaanbaatar.

Social health insurance and residency registration

A compulsory national social health insurance system was introduced in 1994 (Bayarsaikhan, Kwon, & Ron, 2005). Four years later 95.3% of the population was covered by health insurance. This number dropped to 82.6% in 2010 due to herders and students being exempt from coverage, yet rose again to 98.6% in 2011 due to a one-time subsidy by the Human Development Fund to groups that were uninsured (Tsolmongerel et al., 2013, p. 43). Social health insurance (*Eruul Mendiin Datgal*) covers vulnerable groups fully (children under five, disabled, adolescents, pensioners and pregnant women). Before 2006 uninsured persons were not able to receive primary, secondary nor tertiary care (Bolormaa et al., 2007, p. 37). Presently, however, primary health care is available to all regardless of health insurance, while secondary- and tertiary-level hospital care and diagnostic testing requires 10% and 15% co-payment, respectively; those without health insurance pay the full cost of care, that is, apart from the vulnerable groups. Transportation also requires payment. Moreover, in most cases out-of-pocket payments are required for drugs and medical supplies, which at state hospitals are meant to be free, as well as 'gifts' and bribes to medical personnel. Among the very poor, 94% of out-of-pocket payments are spent on pharmaceuticals (Tsolmongerel et al., 2013, p. 138). In 2010 out-of-pocket payments accounted for 41.4% of Mongolia's total health expenditure (Tsolmongerel et al., 2013, p. 45). Mongolia struggles with corruption at all levels of society (Sneath, 2006a), and the health sector is no exception.

Formal registration of residency is a prerequisite for obtaining health insurance (*Eruul mendiin daatgal*). Attaining registration documents (*Irgenii shiljilt hodolgoonii burtgel*), commonly known as *shiljuuleg* is, according to my informants, hampered by barriers in bureaucracy, the cost of the 'gifts' civil servants demand to process applications, and for the poorest the actual price of registration (6000 *tugrug*). These barriers are particularly relevant to recent in-migrants to Ulaanbaatar. Some health personnel I interviewed perceived the randomness and unclear channels of information in attaining registration papers from the Civil Authorities as a hidden strategy by the government to curb in-migration. Some also believed that the city authorities are about to increase the price of registration, which, they predicted, will have dire consequences for the poorest

in-migrants' access to health care. As a doctor at one of the FGPs in the peri-urban district of Songinohairhan in Ulaanbaatar pointed out:

You know, registration and health insurance are really problematic issues. Some in-migrants from the countryside have never been covered by the health insurance, and when they go to register, the people at the office ask them to pay for the 2–3 years that have passed, sometimes even the past 5 years. It is at this level that the poor in-migrants are stuck because they do not have money, and which means that they will not have access to health care other than primary health care.

While primary health care is available for free for the in-migrants, as with the rest of the population in Mongolia, those who lack registration documents and/or health insurance have to pay in full for any referral to higher levels of care or cases of medical emergencies. This means that poor, unregistered migrants either refrain from seeking care or take up huge loans to cover the expenses. The most vulnerable poor among the in-migrants are hence the unregistered without health insurance. The coupling of compulsory health insurance and minimal package of primary health care is, as noted by Janes (2004), 'a textbook implementation of the World Bank's prescription for health reform' (p. 461). And it is precisely in the coupling of these two that the issue of health care equity becomes most problematic, because as Janes (2004) further notes, essential health care through the FGP system in Mongolia is 'little more than a referral service to higher levels of care, where equitable access is by no means guaranteed' (p. 462).

Both the World Health Organization (WHO) and the Mongolian Ministry of Health recognise the deficiencies of the public health system and are currently pursuing initiatives to strengthen the health sector. In Mongolia 'health system strengthening' is presently advocated by WHO and is also embraced by the Ministry of Health. WHO's 'Country Cooperation Strategy' is an ongoing collaboration with the Government of Mongolia over the period 2010–2015, which involves strengthening the health system to support Mongolia in achieving the UN Millennium Development Goals. One of the outlined strategies of WHO is to support emergency and disaster preparedness, including health emergency preparedness during for example extreme winter disasters (*dzud*; WHO, 2010, p. 11).

The rest of this article focuses on the dynamics between winter calamities and their effects on herders' lives, one-way migration to the city and access to health services in in-migrant slum-areas, known as *ger*-districts, in Ulaanbaatar. A winter calamity (*dzud*) is one among several factors that pose a challenge to the already precarious lives of many mobile herders of Mongolia (Marin, 2010, p. 163). Yet, the post factum effects of a *dzud* in terms of livestock mortalities have significant consequences in terms of poverty and migration, which again influence both access to and delivery of health care services for those who end up as in-migrants in Ulaanbaatar.

Before *dzud* was not a disaster

Dzud is a composite local term for a range of different hazards that occur during winter as a result of extreme weather conditions. Due to freezing temperatures in winter, ice-crusting snow on the pastures or heavy snowfalls, animals are prevented from grazing (Sternberg, 2008, p. 1298), resulting in high livestock mortality. The phenomenon *dzud* can be classified into various forms depending on its particular characteristics, duration, severity and geographical coverage (Baas, Batjargal, & Swift, 2001, p. 188): *Har dzud* ('black *dzud*') is due to lack of grass because of drought in summer and autumn, and the threat

posed by just a little bit of snow in the winter; *Tömör dzud* ('iron dzud'), or *mösön dzud* ('ice dzud'), occurs when crust of ice forms on top of the herbage at the beginning of spring due to melting of snow-cover and then a refreezing. *Tsagaan dzud* ('white dzud') is heavy snowfall, often in combination with cold temperatures; *Hüiten dzud* ('cold dzud') occurs when the temperature drops considerably, often combined with strong winds. Finally, *Havarsan dzud* ('combined dzud') is a combination of a minimum of two of the types of *dzud* mentioned above (Batima, Bat, & Tserendorj, 2007, p. 76). *Dzud* is also threatening to the herders who may freeze to death, be injured while trying to save their animals or get mortal frostbites. *Dzud* can last for weeks and can therefore hinder herder families in reaching health care services in time, as severe weather conditions exacerbate the effects of great distances and lack of transportation, and people are tied up in trying to save their animals.

The phenomenon of *dzud* and its potential devastating consequences is complex: it involves at one-level structural, institutional and socio-economic limitations and inadequacies; at another the level the potential for mobilisation of concrete actions among the herders, long-term strategies, access to assets and services, and knowledge and experience of the land, weather and pastoral techniques. Practical experience, hard work and perceptual knowledge (*medets*) of the animals' health, nutritional needs and grazing behaviour, along with detailed knowledge of the vegetation, soil and when to move to different pastures, are emphasised by the herders (Lindskog, 2011, p. 58). The herder Batjargal, aged 52, told me:

Young people with little knowledge and experience, especially those that came from the city after 1990, have had difficult times during *dzud*. People now are not giving any help for free. It will cost. This means that we no longer have anyone to help us when it is *dzud*. We only have to depend on ourselves, our fellow homeland people, and our experience and knowledge.

The feeling many herders have of an absent state has also amplified the need for herders to return to techniques and knowledge of the past in order to sustain a viable pastoral production and to avoid the consequences of *dzud*. Two books or 'herder's manuals' are in particular popular among the herders – those of the herders Namkhainyambuu (2000) and Sambuu (2010).

Given the insufficient, and, most often, ad hoc support the government (and international aid agencies) provides to herders affected by *dzud*, a great number of herders are highly vulnerable. Pregnant women and children are most at risk during an event of *dzud* (UNFPA, 2010) as are those who are young and inexperienced, those who have a weak social network, and families with few livestock and few, if any, transportation animals, such as yak-oxen or camels. Families who lack cash for co-payments for referral-level medical services (Janes, 2010, p. 67), or who have not obtained health insurance, are particularly vulnerable. Such herders face the choice of refraining from seeking medical care or becoming indebted for life, if they manage to find ways to borrow money.

Many herders take preparation for potential *dzud* very seriously through concrete measures: cutting hay for fodder; fattening their animals during the warm season; avoiding using reserve pastures meant for winter; stocking animal dung for heating; and, if possible, saving cash for buying additional fodder in the event of *dzud*. These concrete acts in the management of risk, and the knowledge embedded in coping strategies, run parallel to a more comprehensive understanding of acts and events in nature (*baigal*). Erdenebat, a herder in his late sixties, put it this way:

Our traditions and rules concerning our ‘nature’ are important – we do not cut trees except on auspicious days, we worship dear mountains, we offer tea and milk every morning to the mountains, and we offer milk, tea and other things when we do *oboo* (ritual cairns) worship. All this we do to save ourselves from *dzud*.

Today’s lack of organised state intervention and support contrasts sharply with the socialist state’s protection against *dzud*, which was channelled through the State Emergency Fodder Fund to the collectives (*negdels*; Baas et al., 2001; Batima et al., 2007; Templer, Swift, & Payne, 1993). Presently, preparation for and management of *dzud* are mainly laid upon individual herder families, as with most other aspects of their pastoral production. As Erdenebat further recalled:

Before 1990 everything was provided for us herders: hay, fodder, barns and even sometimes vegetables. It was a good time. After privatisation everyone got their own animals, everything disintegrated...now we have to rely upon ourselves, cut our own hay, and our food is what our animals provide. We do not have salaries anymore ... *dzud* is difficult. Before, *dzud* was not a disaster.

The severe consequences of *dzud* that occurred in 1993, 1999, 2002 and in 2009–2010 explicate the Mongolian state’s shortcomings in managing and responding adequately to these disasters. These events left a substantial number of families deprived of all, or significant parts, of their livestock. Many were forced to take up loans they could not repay in order to regenerate their herds or they sought a precarious life as ‘ninja’ miners panning for gold in the informal mining sector (High, 2008). Others simply gave up herding life and migrated to the city.

In-migration and health in the *ger*-district of Songinohairhan

In 2011 Songinohairhan, one of the most densely populated *ger*-districts of Ulaanbaatar where I conducted fieldwork, had an estimated population of 253,055, the majority of whom were in-migrants. In this district 78,411 people were registered as living below the poverty line (Coulombe & Altankhyuag, 2012, p. 93). Most likely the population is even higher today due to the continuing increase of in-migrants in this particular district at the western outskirts of the city where there is still available space for the in-migrants to settle down.

According to health workers I talked to in Songinohairhan during the summer of 2013, new in-migrants from the countryside arrive every day and squat at the fringes of the district or, if they are lucky, manage to put up their *gers* (tents) in fenced courtyards of relatives or friends. The prospects for in-migrants to Ulaanbaatar are not optimistic: finding employment is becoming increasingly difficult, if not impossible; access to health services and medical treatment in hospitals is hampered by a range of factors including overburdened primary health care facilities and lack of registration documents, which impedes access to the few existing social welfare programmes and to health insurance; bad isolation and lack of fuel during freezing winters; alcoholism; and lack of enough and nutritious food. Air pollution in the *ger*-districts is critically high. Around 95% of the households use their burning stoves for heat and cooking (Nansalma, 2011, p. 3). In addition to this, increasing pollution due to cars contributes to thick smog that lies as a blanket over the city during the cold winter months. All of these factors contribute to weakened health among in-migrants for whom access to health care at times might be delayed or interrupted due to lack of economic resources. Primary health care workers

I talked to reported, quite dismally, that many in-migrants leave chronic diseases and medical conditions untreated or delay seeking medical care, as treatment requires referral to secondary and tertiary levels of care, which they cannot afford. As one health worker at one of the maternity hospitals in Ulaanbaatar, explained:

Migration from the countryside to the city is becoming a huge problem for the Mongolian state. Migration has increased the workload of the hospitals and health care facilities immensely, because now people do not have just a simple medical condition, but often severe, complicated conditions. This is a problem among the in-migrant women that come to deliver here at our hospital.

This maternity hospital caters for the entire population of Songinohairhan and is budgeted for 75 beds, but in reality has 120. There are six birthing beds, all in the same room. In 2001 the hospital performed 2300 deliveries; in 2010 the number had more than doubled to 5097. A majority of the women giving birth at this hospital are in-migrants, and according to one maternal doctor at the hospital 20% of the mothers are unregistered in-migrants. The number of beds budgeted for at state maternity hospitals is based on estimates of the number of people registered in the corresponding district. However, according to health workers quite a few of the in-migrants to this *ger*-district are unregistered, due to their recent arrival, or loss or lack of previous residence documents. This creates an extra burden for health personnel that are obliged to accept every mother in labour, irrespective of them having registration documents or not.

Most of the unregistered in-migrant women in Songinohairhan do have antenatal check-ups with a doctor at their FGP clinic in the sub-district, and the doctor will refer her to the maternity hospital for delivery or in cases of medical emergencies. Yet, as one doctor at a FGP clinic told me, problems often arise in relation to referral of a birthing woman onwards to the maternity hospital. This particular doctor would often personally take a birthing mother in her car to the hospital to assure that the woman would not be sent home. There had been several occasions, however, when a woman under her care had not been admitted, resulting in the woman giving birth in the doctor's car or ending up with home delivery. The doctor described it this way:

If there is any complication I must go with the pregnant women to the maternity hospital. If I don't do this, I will be blamed by the authorities if the mother or child should die. In fact, now we have put up cameras outside our clinic, so that, when I take a woman to the hospital it will be documented that I did my best. When there is a single maternal death the blame is always put on us, the primary health care workers.

Health personnel at the maternity hospital and doctors at the private FGP that deliver primary health care services to mostly in-migrants in one of the sub-districts of the district Songinohairhan talked about burn-out; many were hoping to leave and find a job at one of the many private hospitals that keep popping up in Ulaanbaatar. They explained that lack of financing and too many patients create a working environment fraught with distress and anxiety of being blamed for fatal outcomes. A doctor from an FGP in Songinohairhan described the work burden resulting from in-migration:

I've been working as a doctor for 18 years in this sub-district. We have two doctors working here and we used to cater for 8000 people. Due to the high in-migration the past ten years, we now cater for 20,000 people, and we are still only two doctors working.

For primary health care workers like this doctor, as well as medical personnel at state maternity hospitals, lack of registration among their patients serves to create a gap between actual numbers of patients admitted and treated, the number of patients that are covered on a capitation-basis (FGP doctors), and health care budgets based on number of beds (state hospitals). The gap between health resources, both in terms of qualified personnel and funding and the acceleration of urban poor in-migrants, is too wide. This creates poor health service delivery and high levels of referral, but also sustains a lack of incentive for the doctors to care for those ‘outside the system’ (Lhamsuren et al., 2012, p. 6). ‘The Big Migration’ (*Ih Nuudel*) creates overworked health personnel in the *ger*-districts, but most importantly it creates a growing population of vulnerable poor that have become losers not only in Mongolia’s ‘age of the market’, but also within the neoliberal health reform.

‘The Big Migration’

Since I first arrived in Mongolia during a freezing December in 1996 to carry out my first fieldwork, I have been able to observe over time the drastic effect the neo-liberal macro-economic reforms have had on the organisation of the pastoral economy. Particularly evident was, and still is, the heightened uncertainty and increasing poverty nomadic herders face in their effort to sustain a viable pastoral production (Griffin, 1995; Humphrey & Sneath, 1999). The two districts (*sum*), Tsenher and Erdenebulgan, in the province of Arhangai where I conducted fieldwork, are now rated as among the poorest in the country based on numbers from 2011, with 45–55% of the population in these districts living below the poverty line (Coulombe & Altankhyuag, 2012, p. 10). These numbers are most likely related to the *dzud* that hit this particular area in 2010 and high rates of livestock mortality.

Mongolia’s mobile herders face many challenges, especially in terms of accessing adequate health care and support during critical times. Several factors particularly impede herder families’ ability to access basic health care services and life-saving medical treatment, including long distances to health services and lack of transportation; lack of money for health insurance; run-down hospitals, unqualified health personnel and lack of medical equipment; and high rates of referrals from primary to secondary/tertiary level of health care, which, in turn, are often inaccessible due to transportation and financial barriers. For herder families, chronic disease, sudden illness or injuries may deplete their limited cash-savings. When combined with recurrent winter calamities (*dzud*) and/or summer droughts (*gang*), the economic burden of health care may force them to abandon their herder life. Out-of-pocket health care expenses impoverish those households already stricken by poverty or drive them into deeper poverty (McIntyre, Thiede, Dahlgren, & Whitehead, 2006; Storeng et al., 2008). Many of these herder families migrate to Ulaanbaatar, hoping for a better life, yet most of them end up in desperate poverty.

A massive unidirectional migration has consequently been going on since 2000 (Benwell, 2013; Bruun & Narangoa, 2006; Bruun & Odgaard, 1996; Sneath, 2006b), with the number of in-migrants escalating in those years Mongolia is struck by severe *dzud*, especially the year after *dzud* has occurred. In 2000, the number of in-migrants to Ulaanbaatar was 19,994; in 2003 the number of persons was 40,760 and in the year 2004 the numbers were 68,808. Since 2004 between 28,000 and 39,000 have migrated to Ulaanbaatar annually (Chilkhaasuren & Baasankhuu, 2012). It seems likely that these are underestimates, as many of the in-migrants are not formally registered as citizens. In 2012, the population of Mongolia was nearly 2.8 million people and an estimated 27.4%

of the population was living below the national poverty line, of which 23.2% was in urban areas, and 35.5% in rural areas (The World Bank, 2014). In a country four times the size of France, almost half of the population (1,206,610 million people) lives in Ulaanbaatar (Chilkhaasuren & Baasankhuu, 2012). Almost 70% of the city's population lives in the peri-urban 'ger-districts' at the fringes of the city (Lhamsuren et al., 2012, p. 3). These areas consist of traditional Mongolian felt-tents (*ger*) or badly isolated houses. In the most peripheral areas of the *ger*-districts basic infrastructure, such as water, electricity and sanitation, is absent and the population density is now so high that it poses serious health risk to the people living there.

The underclass of very poor in-migrants forming in the peri-urban areas of Ulaanbaatar constitutes a great challenge to the Mongolian Government and also to the health system, which struggles to provide equitable access for this highly vulnerable and disenfranchised group of people (Janes et al., 2006; Lhamsuren et al., 2012; UNICEF 2003, 2010). It is among this group of people, 'the city's countryside people' (*hotin hōdōōnii hōn*), along with herders in the countryside, especially in the more remote areas of Mongolia, that affordable health care – beyond simple primary health care – is the least accessible. As the discussion throughout this article has pointed out, this is due to the interrelated impact of institutional barriers, a fragmented health system of private and public services, unclear information, the burden of co-payments, and high levels of referrals from primary to secondary and tertiary care, along with a level of poverty so extreme that basic daily needs take precedence over health care needs.

Conclusion

While WHO's strategic agenda explicitly states that health system strengthening in Mongolia must involve a focus on and response to the rapidly increasing one-way migration to urban areas, there is little to suggest that the conditions and problems that arise from this major demographic change and their effect on health equity may be solved within the next decade. Such a solution, I suggest, would require a shift in politics through an emphasis on *social* politics that include supporting the livelihoods of mobile pastoralists in rural Mongolia. It furthermore requires attention to migration and natural calamities as not merely 'conditions' but as 'problems' that must be aligned with concrete policies and strategies concerning health system strengthening in Mongolia (Hafner & Shiffman, 2013). The Ministry of Health in Mongolia has embraced WHO's Country Cooperation Strategy 2010–2015 and its emphasis on 'holistic health-systems approach' (WHO, 2010). Yet, such a 'holism' requires that local factors and global actors are aligned and moved onto the political agenda in Mongolia. Consequently, this also involves rural politics that take seriously the sustainability of pastoral production, which further involves emphasising disaster preparedness and not merely depend post factum on emergency assistance from international aid organisations when a winter calamity (*dzud*) occurs. The massive in-migration to Ulaanbaatar, and the reasons for this unidirectional migration, must be accounted for in seeking to strengthen the systemic organisation of health care in Mongolia. 'The Big Migration' not only poses a threat to the sustainability of mobile pastoralism, but also consequently to the health of both rural and in-migrant urban populations.

As I have shown, for Mongolian herders and former herder households that now live as in-migrants to the city of Ulaanbaatar, 'the Age of the Market' has not provided more options and freedom. Instead, the liberty of choice is strained and chained by lack of cash income, a strong feeling among herders I talked to of an absent state that no longer cares,

but also having to cope with harsh weather conditions. In discussions about the hardships they encounter, it is evident that herders (especially the older ones) in the province of Arhangai continue to weigh the current reality and the socialist past against each other in relation to the elements needed to sustain their livelihoods as mobile pastoralists. The socialist era is often brought to the fore in attempts to verify, evaluate and explain the present. This may reflect that, even two decades after the dissolution of the socialist state, many still cling to the idea of ‘transition’ (*shiljilt*) as an idiom of change for the better.

Throughout, I have discussed central factors that, among others, serve to compromise equity in access for the emerging group of poor herders and in-migrants to the capital. Hafner and Shiffman (2013) have noted that ‘health systems are national systems, and dynamics within countries are the most critical facets of the issue’ (p. 42). I have argued that international and global health policies and programmes as they materialise within the Mongolian national health system must be aligned not just with the technical challenges of health care delivery, but must take account of factors that are seemingly external to the system. The decline of the welfare state, along with neoliberal incentives, exacerbate socio-economic and health inequalities in Mongolia. Directing our attention to the ‘causal pathways involved in inequality-health status relationship’ (Coburn, 2000, p. 135) provides us with both a contextual and comprehensive understanding. This should lead us to consider not only the effects, but also the causes, of those factors that inflict on the Mongolian health system’s ability to provide equitable health care for all Mongolians. In Mongolia, as elsewhere, these factors are contextual, yet shaped by global dynamics and ideological and political currents within global health policy institutions’ financing and health-intervention strategies (see Hafner & Shiffman, 2013).

The on-going migration in Mongolia is part of a large dynamic – economic, political and environmental – that affects health services and health outcomes, but which is not adequately taken into account within current initiatives to strengthen the Mongolian health system. I suggest that not taking seriously ‘the social nature of illness’ (Janes et al., 2006, p. 25), as well as the contextual causes of illness within the present neo-liberal reformed health system, will serve to weaken rather than strengthen the objective of equity implicit in the present health system strengthening efforts in Mongolia.

Acknowledgements

Thanks are owed to Heidi Fjeld, Lotte Danielsen and the editors of this volume for reviewing drafts, and to the anonymous GPH reviewers for constructive and nuanced advice. I am grateful to Dr Yadamjav Chunag, Dr Altanchimeg Delegchoimbol, Dr Tömörbaatar Luvsansambuu, Dr Ganzorig Davaa-Ochir and Dr Tsetsgee Dashzeveg for facilitating my research in Mongolia.

Funding

This work was supported by the Research Council of Norway under a Personal Post Doc grant.

References

- Baas, S. E., Batjargal, E., & Swift, J. (2001). *Pastoral risk management for disaster prevention and preparedness in Central Asia with special reference to the case of Mongolia*. Proceedings of the Asia-Pacific Conference on Early Warning, Prevention, Preparedness and Management of Disasters in Food and Agriculture atFAO, Regional Office for Asia and the Pacific, Bangkok.
- Batima, P., Bat, B., & Tserendorj, T. (2007). *Evaluation of adoption measures for livestock sector in Mongolia*. (Working Paper no. 41). Washington, DC: AIACC.
- Bayarsaikhan, D., Kwon, S., & Ron, A. (2005). Development of social health insurance in Mongolia: Successes, challenges and lessons. *International Social Security Review*, 58(4), 27–44. doi:10.1111/j.1468-246X.2005.00224.x

- Beck, C., Berry, N. S., & Choijil, S. (2013). Health system reform and safe abortion: A case study of Mongolia. *Global Public Health*, 8, 174–186. doi:10.1080/17441692.2012.762687
- Benwell, A. F. (2013). Making migration meaningful: Achievements through separation in Mongolia. *Norsk Geografisk Tidsskrift* [Norwegian Journal of Geography], 67, 239–248. doi:10.1080/00291951.2013.836722
- Bolormaa, T., Natsagdorj, T., Tumurbat, B., Bujin, T., Bulganchimeg, B., Soyoltuya, B., ... Richardson, E. (2007). Mongolia: Health system review. *Health Systems in Transition*, 9(4), 1–151. Retrieved from http://www.wpro.who.int/asia_pacific_observatory/hits/series/Mongolia_Health_Systems_Review.pdf
- Bruun, O., & Narangoa, L. (Eds.). (2006). *Mongols from country to city: Floating boundaries, pastoralism and city life in the Mongol Lands*. Copenhagen: NIAS Press.
- Bruun, O., & Odgaard, O. (Eds.). (1996). *Mongolia in transition: Old patterns, new challenges*. Richmond: Curzon Press.
- Chilkhaasuren, B., & Baasankhuu, B. (2012). *Population and economic activities of Ulaanbaatar*. Ulaanbaatar: Statistics Department of Ulaanbaatar. Retrieved from <http://ubstat.mn/reports.aspx>
- Coburn, D. (2000). Income inequality, social cohesion and the health status of populations: The role of neo-liberalism. *Social Science & Medicine*, 51(1), 135–146. doi:10.1016/S0277-9536(99)00445-1
- Coulombe, H., & Altankhyuag, G. (2012). *Millennium development goals and poverty map – 2011: Region, Aimag, Soum and district level results*. Ulaanbaatar: National Statistical Office of Mongolia, UNDP, Ministry of Economic Development.
- Dunn, F. L., & Janes, C. R. (1986). Introduction: Medical anthropology and epidemiology. In C. R. Janes, S. Stall, & S. Gifford (Eds.), *Anthropology and epidemiology* (pp. 3–34). Dordrecht: Kluwer.
- Griffin, K. (1995). *Poverty and the transition to a market economy in Mongolia*. New York, NY: St. Martin's Press.
- Griffin, K., Brenner, M. D., Kusago, T., Ickowitz, A., & McKinley, T. (2001). *A strategy for poverty reduction in Mongolia*. Ulaanbaatar: United Nations Development Programme.
- Hafner, T., & Shiffman, J. (2013). The emergence of global attention to health systems strengthening. *Health Policy and Planning*, 28(1), 41–50. doi:10.1093/heapol/czs023
- High, M. M. (2008). *Dangerous fortunes: Wealth and patriarchy in the Mongolian informal gold mining economy* (Unpublished doctoral dissertation). University of Cambridge, Cambridge, MA.
- Humphrey, C., & Sneath, D. (1999). *The end of nomadism? Society, state and the environment in Inner Asia*. Durham, NC: Duke University Press.
- Inhorn, M. C., & Janes, C. R. (2007). The behavioural research agenda in global health: An advocate's legacy. *Global Public Health*, 2, 294–312. doi:10.1080/17441690601010217
- Janes, C. R. (2004). Going global in century XXI: Medical anthropology and the new primary health care. *Human Organization*, 63, 457–471. Retrieved from <http://search.proquest.com/docview/201032173?accountid=14699>
- Janes, C. R. (2009). An ethnographic evaluation of post-Alma Ata health system reforms in Mongolia: Lessons for addressing health inequalities in poor communities. In A. R. Hahn & M. C. Inhorn (Eds.), *Anthropology and public health: Bridging differences in culture and society* (pp. 652–680). Oxford: Oxford University Press.
- Janes, C. R. (2010). Spatial mobility and health in post-socialist Mongolia. *Society, Biology & Human Affairs*, 75(2), 53–74. Retrieved from http://www.biosocsoc.org/sbha/resources/75_2/SBHA_75_2_Janes.pdf
- Janes, C. R., & Chuluundorj, O. (2004). Free markets and dead mothers: The social ecology of maternal mortality in post-socialist Mongolia. *Medical Anthropology Quarterly*, 18, 230–257. doi:10.1525/maq.2004.18.2.230
- Janes, C. R., Chuluundorj, O., Hilliard, C. E., Rak, K., & Janchiv, K. (2006). Poor medicine for poor people? Assessing the impact of neoliberal reform on health care equity in a post-socialist context. *Global Public Health*, 1(1), 5–30. doi:10.1080/17441690500321418
- Janes, C. R., & Corbett, K. K. (2009). Anthropology and global health. *Annual Review of Anthropology*, 38, 167–183. doi:10.1146/annurev-anthro-091908-164314
- Lhamsuren, K., Choijiljav, T., Budbazar, E., Vanchinkhuu, S., Blanc, D. C., & Grundy, J. (2012). Taking action on the social determinants of health: Improving health access for the urban poor in Mongolia. *International Journal for Equity in Health*, 11(1), 15. doi:10.1186/1475-9276-11-15
- Lindskog, B. V. (2011). *Collectivity in the making: Homeland, belonging and ritual worship among Halh herders in central Mongolia* (Unpublished doctoral dissertation). University of Oslo, Oslo.

- Marin, A. (2010). Riders under storms: Contributions of nomadic herders' observations to analysing climate change in Mongolia. *Global Environmental Change*, 20, 162–176. doi:10.1016/j.gloenvcha.2009.10.004
- McIntyre, D., Thiede, M., Dahlgren, G., & Whitehead, M. (2006). What are the economic consequences for households of illness and of paying for health care in low – and middle income country contexts? *Social Science & Medicine*, 62, 858–865. doi:10.1016/j.socscimed.2005.07.001
- Ministry of Health, Mongolia. (2002). *Health sector of Mongolia – 80 years* (2nd ed.). Ulaanbaatar: Author.
- Namkhainyambuu, Ts. (2000). *Bounty from the Sheep: Autobiography of a Herdsman*. (M. Rossabi & M. Rossabi, Trans.). Cambridge, MA: The White Horse Press.
- Nansalma, E. (2011). Evaluation on health impact of government support for GER (traditional dwelling) district's electricity night rates in Ulaanbaatar City. *Public Health Theses*, Paper 161. Retrieved from http://digitalarchive.gsu.edu/iph_theses/161.
- Rossabi, M. (2005). *Modern Mongolia: From khans to commissars to capitalism*. Berkeley: University of California Press.
- Sambuu, J. (2010). *Herdsman to statesman: The autobiography of Jamsrangiin Sambuu of Mongolia*. (M. Rossabi, Trans.). Lanham, MD: Rowman & Littlefield.
- Sneath, D. (2006a). Transacting and enacting: Corruption, obligation and the use of monies in Mongolia. *Ethnos*, 71(1), 89–112. doi:10.1080/00141840600603228
- Sneath, D. (2006b). The rural and the urban in pastoral Mongolia. In O. Bruun & L. Narangoa (Eds.), *Mongolians from country to city: Floating boundaries, pastoralism and city life in the Mongol lands* (pp. 140–161). Copenhagen: NIAS & Curzon.
- Snyder, J., Wagler, M., Lkhagvasuren, O., Laing, L., Davison, C., & Janes, C. (2012). An equity tool for health impact assessments: Reflections from Mongolia. *Environmental Impact Assessment Review*, 34, 83–91. doi:10.1016/j.eiar.2011.08.006
- Sternberg, T. (2008). Environmental challenges in Mongolia's dryland pastoral landscape. *Journal of Arid Environments*, 72, 1294–1304. doi:10.1016/j.jaridenv.2007.12.016
- Storeng, K. T., Baggaley, R. F., Ganaba, R., Ouattara, F., Akoum, M. S., & Filippi, V. (2008). Paying the price: The cost and consequences of emergency obstetric care in Burkina Faso. *Social Science & Medicine*, 66, 545–557. doi:10.1016/j.socscimed.2007.10.001
- Templer, G., Swift, J., & Payne, P. (1993). The changing significance of risk in the Mongolian pastoral economy. *Nomadic Peoples*, 33, 105–122.
- Tsolmongerel, Ts., Evlegsuren, S.-O., Bulganchimeg, B., Ganbat, B., Oyunbileg, S., Kwoon, S., & Richardson, E. (2013). Mongolia health system review. *Health Systems in Transition*, 3(2), 1–162. Retrieved from http://www.wpro.who.int/asia_pacific_observatory/hits/series/Mongolia_Health_Systems_Review2013.pdf?ua=1
- UNFPA. (2010). *Dzud: A slow disaster that effects the reproductive health of women in Mongolia*. [News]. Retrieved from http://mongolia.unfpa.org/2010/03/03/1892/dzud_a_slow_disaster_that_affects_the_reproductive_health_of_women_in_mongolia/
- UNICEF. (2003). *The living conditions of the children in peri-urban areas of Ulaanbaatar*. (Summary Report, No. 30). Ulaanbaatar: Author. Retrieved from <http://www.unicef.org/mongolia/LIVE.pdf>
- UNICEF. (2010). *Country Office Annual Report, Mongolia*. Ulaanbaatar: Author. Retrieved from http://www.unicef.org/mongolia/Annual_Report_2010_UNICEF_Mongolia_CO.pdf
- WHO. (2010). *WHO country cooperation strategy for Mongolia 2010–2015*. Geneva: Author. Retrieved from http://www.wpro.who.int/mongolia/publications/who_ccs_for_mongolia.pdf
- WHO & Ministry of Health, Mongolia. (2012). *Health service delivery profile, Mongolia*. Geneva: Author. Retrieved from http://www.wpro.who.int/health_services/service_delivery_profile_mongolia.pdf
- The World Bank. (2014). *World development indicators: Poverty rates at national poverty lines*. Retrieved from <http://wdi.worldbank.org/table/2.7>