Medical Service Trips in Nepal: A Short-Term Remedy with Long-Term Consequences

Parnika Godkhindi

Introduction

Nepal is known for having one of the poorest health systems in the world-it struggles with high rates of infant mortality and disease outbreaks (World Health Organization 1), which are only exacerbated by poor sanitation, malnutrition, and inadequate water supply (Ministry of Health & Population 45). The country's mountainous terrain and uneven population distribution isolate the rural areas, where the nation's poorest citizens live. Achieving universal and equitable health care has therefore been very difficult (Mishra et al. 3).

Despite foreign aid and bids by the government, there is little incentive for healthcare practitioners (HCPs) to work in the country's secluded rural regions (Zimmerman et al. 65). As a result, Nepal only has 0.67 doctors, nurses, and midwives per 1000 population (Ministry of Health & Population 4), which is significantly lower than the World Health Organization's recommendation of 2.3 doctors, nurses, and midwives per 1000 population. The country's per capita healthcare expenditure remains one of the lowest in the world, at just $4.06 USD per annum as of 2014 (WHO 11). Many non-governmental organizations (NGOs) have endeavored to address the shortcomings in the Nepalese health-

care system, predominantly focusing their efforts in rural and remote areas. There are currently over 875 health-focused NGOs operating in Nepal (Karkee et al. 2). An increasing number of them are coordinating medical service trips (MSTs), in which individuals from the Global North participate in short-term health-related volunteering in the country (Citrin 12).

Whether MSTs are truly helping the Nepalese healthcare system is heavily contested, and there is limited empirical research on the impacts of MSTs on the local community. This paper will integrate theories from multiple disciplines to consider the potential benefits and consequences of short-term MSTs, as well as the unique socioeconomic determinants of health in Nepal. It will consult academic papers on development theory, in addition to interviews and lived experiences of individuals accessing healthcare in Nepal. Beyond analyzing the Nepalese health care system in isolation, this paper will also discuss the mentalities, financial motivations, political aims, and competitive factors that drive NGO development in Nepal. This qualitative overview will allow for a critical assessment of MST operations in the country, helping ascertain that MSTs in Nepal are doing more harm than good. Not only are they hindering development of the local healthcare system, they are also endangering the immediate health outcomes of their patients. Accordingly, more research is required to find structures of MSTs that will better serve Nepal's current health needs, while also contributing to its long-term developmental goals.

Brief History of Health Care in Nepal

Nepal is one of the poorest countries in the world, with great income inequality between the rich and the poor (Niraula 151). While wealthier citizens live close to urban centers, the majority of the population lives in remote and rural regions of the country, where subsistence farming is the predominant livelihood (Ministry of Agricultural Development 4). The people in these areas are of a diverse range of caste, language, and religion. For such a small country, Nepal is remarkably varied in its landscape and demographics; this often introduces complexities when trying to implement any system-wide change.

To support development, Nepal has received aid from numerous countries, namely the United States, India, and China. However, political motives have been a major priority for these donors. After the Chinese revolution in 1946, the United States provided monetary aid to Nepal and heralded an anti-communist movement; due to its high levels of poverty and physical proximity to China, Nepal was deemed to be especially vulnerable to communism (Khadka 78). Although this influence from the U.S. helped Nepal sustain its monarchy, more Nepalese people began to support communism, leading to the formation of a national communist party in 1949 (Gul 30).

By the late 1970s, Nepal needed loans to sustain its fragile economy and pay back existing debt to Western countries, especially the U.S. (Regmi 192). The World Bank provided "tied aid", recommending that Nepal cut its government spending on public services like health care (193). In 1980, the International Monetary Fund provided further funding through its structural adjustment programs, which capped public expenditures and pushed for a greater focus on more "cost-effective" and "less political" strategies of health care, such as "vertical" and "disease-focused" interventions (Citrin 38), rather than those which addressed other determinants of health, like poverty or infrastructure. Accordingly, the government began to decrease its public health spending. As a result, there are fewer state-owned health enterprises than ever before, and the private health sector has grown considerably (Adhikari et al. 69).

Lack of funding and resources for the Nepalese health system can also be partially attributed to the People's War, a civil conflict that lasted from 1996 to 2006 (Baral and Heinen 2). Much of the conflict occurred in mountainous regions of the north, so the war's damage was primarily endured by rural folk, many of

whom were displaced from their homes (WHO 1). Today, Nepal is still suffering from the crumbling infrastructure and decimated roads that resulted from use of land mines during the war (Shneiderman and Turin 145).

After the People's War, the old autocratic government was replaced by a republic within a multi-party system (Poudyal 159), but concerns of political instability remained. Bearing in mind the risk of any future insurgencies, the country shifted the focus of its health policy towards decentralization and localization of medical technologies; this way, potential political unrest could only have a limited impact on the provision of health services (3). The government began to devolve its funds to local bodies to minimize risks (12), giving community organizations and NGOs more autonomy.

Nepal's Pluralistic Health System

Due to the previously mentioned economic liberalization policies and civil conflict, Nepal's health system is highly fragmented. Public health care receives limited funding, and the private health sector primarily serves urban centers (Saito et al. 818). Both public and private health care are subdivisions of "modern" or "Western" medicine, but other forms of medicine exist as well, including folk medicine (e.g. witch doctors, faith healers) and traditional medicine (e.g. Ayurveda, Homeopathy) (Subedi, "Primary Health Care" 323). In rural parts of the country, the latter are more widely used and trusted than modern forms of medicine; studies indicate that this is because they are "socially and culturally closer to the people, whereas modern health care has been criticized for being unacceptable and unsatisfying to most of the population" (Subedi, "Modern Health Services" 412). When dealing with an illness, patients want not only a cure, but also a meaning behind the experience of the sickness itself (413). While folk and traditional medicines serve both of these functions, modern medicine addresses only the first.

People in rural areas are also distrustful of local HCPs because they believe that preferential treatment is given to those of a higher caste. In a case study at a rural health post, a respondent claimed that higher-caste, influential patients received "most of the time of the health post staff" as well as "free medicine", while the poor were simply directed to "buy from the shop" (Niraula 157). As a result, modern medicine and primary health care offered through health posts are generally seen as a "last resort", and over three-quarters of all ailments in the country are treated by the alternative systems (Subedi, "Modern Health Services" 413).

Moreover, modern medicine is less accessible than its alternatives, as the journey to health posts can be treacherous for rural folk. Nepal has "scattered rural roads networks," and the "rugged, harsh, and diverse" terrain in rural regions makes long travels dangerous (Bhandari 8). Land mines used during the People's War (Shneiderman and Turin 145), as well as the recent earthquake in 2015 left many roads irreparably damaged. Landslides are common occurrences (Petley et al. 40), and inclement weather puts travellers' safety at risk (Gentle and Maraseni 32).

Modern medicine is also the most expensive form of care, as the increased privatization of services has rendered health care and medications unaffordable for poorer individuals. They therefore rely on subsidized public institutions for the majority of their healthcare needs, but even the state-run health posts can be costly. Although universal public health care was introduced in 2007, it covers only basic health services and access to 40 essential drugs (Ministry of Health & Population 8). As a result, out-of-pocket healthcare expenses by individual households remain tremendously high, accounting for over 62.5% of the countrys health financing (WHO 46). These user fees serve as another barrier to the use of modern medicine and equitable health care access in Nepal.

The locals' dislike of modern medicine at health posts, as well as difficult standards of living in rural areas, mean that HCPs are dis-

inclined to work in rural regions of the country. Privatization is also weakening the public health system, because a "brain drain" is occurring as educated citizens of the country are repelled from public service and are drawn towards working in the more lucrative private sector (Nichter 669). Consequently, public health services lack coordination, are inadequately sourced and understaffed, and have inefficient bureaucratic structures (Mishra et al. 1).

The Role of the NGO

The shortcomings of Nepal's government-funded modern health system necessitate the operation of numerous health-oriented NGOs in the country. These NGOs vary in scope, structure, and size (Sherraden et al. 396), but are similar in aim: to better meet the medical needs of rural communities in Nepal. Increasingly, local NGOs are partnering with organizations from other countries to receive international volunteers, who then help provide care to Nepalese people. Especially popular are short-term medical service trips (MSTs), which allow foreign HCPs to travel overseas to the Global South and provide medical services for days or weeks at a time (Asgary and Junck 625). Medical professionals bring specialized skills and expensive equipment that can be very helpful to low-resource regions.

The most obvious benefits of MSTs are access to "highly-trained specialists" and "procedures not always possible within local infrastructure" (Green et al. 11). Specialized medical services can be offered in a timely manner, thereby saving citizens' lives (Citrin 14). In addition, MSTs facilitate the exchange of knowledge and skills between local and foreign health workers, and thus have the potential to improve the quality of domestic care (Dixit et al. 414).

Implications of MSTs

One critique of MSTs is that an inherent power imbalance exists when NGOs operate within a country of the Global South. International volunteering can be considered a one-way exchange of goods and services, in which the sending country is the sole provider, and the receiving country is the sole benefactor. Yet, "volunteering as 'service' tends to reinforce power differences between giver and receiver" (Lough and Oppenheim 198). This means that the host country largely has little to no control when an international NGO attempts to operate within it. As a result, the foreign NGO often has complete freedom when deciding where in the country to send its aid, and to whom to give it (Bauer 3). In Nepal, this has resulted in a clustering of volunteer positions and NGO health projects in popular tourist areas, due to their "exotic" allure and appeal (Citrin 52).

The localization of NGO projects within the same region further introduces problems. A case study in the Humla district of Nepal found that there was a complete lack of coordination between NGOs operating within the region, as they would avoid working with each other for want of more autonomy and control (Citrin 39). In consequence, health services were frequently duplicated, or they nullified each others effectiveness. This resulted in further fragmentation of health care delivery, diminishing the quality of care that was provided to individuals (40).

The supersaturation of NGOs in certain localities also perpetuates cycles of inequality in host communities, as the input of foreign capital takes pressure off the local government to invest in its health care. A case study conducted of MSTs in Ghana found that when deciding where to invest money to improve health care, the Ghanaian government first considered the number of existing NGO services already in the area, regardless of their quality (Green et al. 6). Given that Ghana and Nepal have similar health systems with medical personnel shortages in rural areas (Drislane et al. 325), similarly structured health insurance systems (Saleh 107), and influence from NGOs (48), it is not unreasonable to expect that the same phenomenon occurs in Nepal. As a result, having multiple NGO health projects operating within the same locality in Nepal only impedes health

development. Evidently, MSTs increase the host country's dependency on foreign humanitarian aid and are thereby weakening Nepal's health system (Asgary and Junck 627).

Moreover, the same case study of an NGO in the Humla district found that NGO projects tend to be "highly performative" because they are greatly publicized. There are often domestic and international film crews present, so NGO operations are frequently brought to public attention. It is not uncommon to find local politicians and prominent figures speaking at opening and closing ceremonies, idealizing what the NGO will accomplish (Citrin 45). Such displays continue unchecked because no formal systems currently exist which can evaluate the actual impact of MSTs. NGOs themselves are unmotivated to develop and conduct objective analyses of their operations-in part because this is logistically difficult, but mainly because NGOs run on funds from donors (Suchdev et al. 47). They feel pressure to prove the magnitude of their impact, and to do so positively in order to continue receiving donations. In an attempt to substantiate their work, NGOs resort to maximizing the number of patients seen, surgeries performed, and drugs administered (Bauer 8). However, donors are "unaware that these numbers mean little in the overall context of a poverty-driven health status," (9) since having access to health care does not automatically imply that an individual is 'healthy'.

The difference between 'health' and 'health care' is especially relevant in the Nepalese health system, where there is great emphasis on dispensing medication to outpatients (Citrin 57), as opposed to addressing the root causes of health problems. The current 'fee-for-service' system lacks regulation and encourages pharmacists and local HCPs to over-prescribe medications; after all, the more medicines are sold, the more money they will make. Because drugs are short-term interventions that are costlier to deliver and easier to market to patients, they are more profitable (Maru and Uprety). Therefore, medications discourage longitudinal and preventive approaches to medicine.

When MSTs administer as many drugs as possible to prove their efficacy, this only perpetuates the short-sighted, problematic obsession with drugs in Nepal. It encourages what Whyte et al. call a "medicalization of health": when medicine is used to "solve the problems that should be addressed in other ways" (5). In fact, the prospect of free medicine is the very reason that many rural patients make the long journey to NGO health camps. Citrin suggests that at rural health posts, medications are "symbolic" of more than a cure: they provide an opportunity to connect with people who care and can "confirm and legitimize sickness and bodily discomfort," thereby providing underprivileged people with hope (47). However, this weakens the local health system, as it fosters locals' glorification of Western approaches to medicine. Although modern medicine is often considered the "last resort" in Nepal's pluralist health system (Subedi 323), the allure of foreign medicine is enough to attract locals' attention. Then, the Western paradigm "competes with, rather than supports, local health strategies," (Bauer 4) as local residents place more faith in the health care provided by a foreign HCP than a local HCP. They will wait for the next arrival of free health care from an MST, rather than consulting local medical personnel for even a minimal cost.

Not only do local citizens distrust local health workers, but the 'Western savior complex' also causes many international volunteers on MSTs to underestimate their local counterparts (Roberts 1491). This misunderstanding may stem from the fact that many local health workers in Nepal are "female community health volunteers" (FCHVs) who do not have traditional medical degrees (Khanal et al. 256). Even so, FCHVs are competent and key to local health centers (Khatri et al. 1). They provide services that would elsewhere be undertaken by professional HCPs, including childbirth assistance, medication distribution, and provision of emergency contraception (Panday et al. 9). Moreover, local health care professionals do have medical degrees

and extensive training (Dixit and Marahatta 16). When these local HCPs are undermined and underestimated, both by local patients and foreign volunteers, they become disheartened. Many may choose to leave rural areas and practice in regions without NGO operations (Bauer 4), rendering certain areas further depleted of health resources and in need of more foreign volunteers.

A Short-Term Remedy

Health camps in Nepal have long been regarded as solely short-term establishments. During the People's War, Maoists raided health posts, evicted NGOs, and antagonized health projects (Singh 1499). Land mines were planted throughout the countryside, which destroyed roads and hindered the distribution of medicines, as well as access to rural health posts. Because of the constant threat, health posts increasingly adopted short-term approaches to health care provision (Citrin 40), limiting their ability to effectively provide continued care for patients. This temporary role of health posts is also presenting itself in the operations of MSTs, which range from just one week to three months in duration (Citrin 12). However, this short-term approach to health care encourages the previously mentioned obsession with medication (57), and promotes immediate solutions to complex problems. Such a mindset poses many threats to the wellbeing of patients, diminishes the quality of treatment, and hinders system development.

Studies indicate that long-term volunteer placements are more conducive to 'capacity development,' which is the improvement of a country's ability to achieve its own development objectives over time. Placements lasting several months or longer are better able to foster equitable partnerships between the sending organization and host (Schech et al. 363), as they allow for more collaboration and input from the local community. Since there are more opportunities for all stakeholders to contribute and have their say, long-term volunteering is more capable of equalizing the power imbalance inherent in international volunteerism (Sherraden et al. 401).

In contrast, short-term placements are more one-sided, less efficient, and interruptive of continual service. They encourage more paternalistic provision of care, as "when people do not expect meaningful future interactions, they easily justify taking advantage of the other party," even subconsciously (Lough and Oppenheim 204). Short-term volunteering has been shown to clearly benefit the volunteers, but impacts on the host community are less clear (Sherraden et al. 405). From reviewing the evidence, it is clear that the short-term nature of MSTs only exacerbates their associated risks, further indicting them.

The short length of MSTs makes it easy to conflate volunteering overseas with going on a brief holiday. As it is, volunteer placements in Nepal can easily be misconstrued to serve as a cheap alternative to a 'vacation'-the proximity of the Himalayas is attractive to those who want to go backpacking or seek spiritual enlightenment. Nepal is often romanticized and exotified, so it is the perfect 'destination' for people looking to "do good" while travelling (Citrin 53). Consequently, international volunteers usually underestimate the hardships of life in the country, and do not realize exactly what they are signing up for beforehand (Asgary and Junck 626). In a qualitative study of an NGO called PHASE Worldwide, international medical volunteers indicated that they felt "contextually naïve" in Nepal, despite having received "comprehensive pre-placement briefings and documents, and having had contact with previous volunteers" (Elnawawy et al. 331). Considering only a fraction of sending organizations bother to brief their volunteers at all, most international volunteers lack cultural understanding and are unprepared for the conditions in which they will be working.

This lack of cultural awareness can make it difficult for international volunteers to properly communicate with their patients. Nepal is incredibly diverse, and while the only official language is Nepali, there are 123 native languages

(Central Bureau of Statistics 164). There is considerable variation in language, even between neighbouring villages, so international volunteers rarely have a grasp of the local dialect. Although local HCPs may be present to help with translation, this is inconvenient and only slows down the health post's operations (Green et al. 11). As a result, even when a patient is clearly confused, it is not uncommon for foreign HCPs to rush them along in order to see as many patients as possible (Bauer 8). However, clear communication is very important in effective health care, as misunderstandings can lead to misdiagnosis or incorrect treatment (5). The language barrier also makes it difficult to obtain informed consent from the patient, putting patient autonomy at risk (Roberts 1492).

Furthermore, short-term MSTs are troubling because they do not demand accountability from foreign HCPs. Since the visits are brief, patients have very little opportunity to interact with the volunteers; their time together is further shortened by the volunteers' rushing to see as many patients as possible. Unless ailments can be treated entirely in one visit, short-term MSTs leave little to no opportunity for continuity of care. As a result, foreign HCPs do not follow up with the patients they have seen and are consequently not held accountable for the services they provide. This burdens the local healthcare system with providing follow-up care, should any complications arise once the volunteers are gone (Asgary and Junck 626). Therefore, MSTs can place significant stress on local health workers, rather than helping them.

The main concern regarding short-term MSTs is that they do nothing to tackle the root cause of poor health in Nepal. Poor health outcomes are merely a symptom of much more complex systemic issues-poverty, education, and culture are just a few of the many determinants of health (Chapman 19). Since MSTs are temporary and do not involve long-term initiatives to contribute to development, they are simply "band-aid" solutions. For instance, volunteers serving in the Karnali district of Nepal shared concerns that they were not making any real contributions to improving Nepalese health, saying, "I cant help but wonder if I'm treating hunger pains here," and, "How do I tell people that their chronic pain comes from a life of chronic work, which they cant stop because their livelihood depends on it?" (Citrin 56). Such examples demonstrate the impermanence of any treatments offered by foreign HCPs on MSTs. Even when they want to, volunteers are unable to involve themselves with activities that will spark long-lasting change in the area.

The "Better Than Nothing" Mentality

If there are so many drawbacks and risks associated with MSTs, why do they continue to operate so widely? Commonly, the role of MSTs is justified with the argument that any health care is "better than nothing," even if it is not of the highest quality (Bauer 5). Without a doubt, the health services provided by international volunteers have saved countless lives (Asgary and Junck 629). However, it is likely that just as many lives have also been hurt by MSTs. The "better than nothing" mentality is damaging, as it introduces double standards in the quality of care provided to patients in Nepal. This makes it easy to sidestep regulations and encourages international volunteers to make risky or unethical decisions in the name of saving as many lives as possible. Coupled with the inherent power imbalance, this can be quite dangerous for Nepalese patients, as many blindly trust foreign HCPs and do not doubt what they are told.

For instance, many sending organizations will accept any and all applicants to volunteer with them. Global health electives have become increasingly popular in universities, so medical students-and even undergraduate students-will volunteer on MSTs (Asgary and Junck 625). They are often asked to perform services for which they have absolutely no training, such as "delivering babies, suturing wounds, or pulling teeth" (McCall and Iltis 290). Common motives to volunteer abroad generally have little

to do with helping the local community; many MSTs are advertised to students as an opportunity to gain clinical experience, or as something 'unique' to add to a resume (Projects Abroach Inc.). Practicing medicine without proper training would be unthinkable in the Global North, but the "better than nothing" principle justifies it in low-resource settings. This puts patients at risk, undervaluing life when it exists in poorer settings.

Even professionally-trained foreign HCPs may not have the skills required to practice in Nepal, and volunteers may feel pressured to perform services with which they are unfamiliar. There is a big difference between practicing medicine in a wealthy region, and in a poor setting like Nepal. In remote regions of the country, there is limited access to "paper, medication... or reliable power and water" (Bauer 4), let alone advanced medical technology. Yet, Western medical practice is highly reliant on technological aid for diagnosis and treatment (Giordano et al. 31), so HCPs without the clinical skills specific to low-resource health care may find it difficult to provide services as thoroughly as they would at home.

Despite the scarcity of resources, foreign HCPs often use diagnostic tests and tools excessively, as they are generally unfamiliar with local ailments and want to "rule out" as many medical conditions as possible in the shortest amount of time (Hozo and Djulbegovic 548). Doing so wastes resources in a setting with already low supplies. Moreover, it can harbour contentious relationships between the volunteers and local HCPs, who view the former as being insensitive to the value of medical resources (Elnawawy et al. 332). While long-term international volunteers may adapt their skills to a new environment over time, volunteers on short-term MSTs do not have the opportunity to do so and are therefore more likely to be wasteful in their practice.

In addition, if volunteers are unfamiliar with the social and living conditions of rural Nepal, there can be unforeseen consequences of the treatments they administer: for example, ibuprofen given to treat stomach ulcers causes internal bleeding without adequate water or food (Bjarnason et al. 1832); prosthetic hips are life-altering for Nepalese people, who are accustomed to squatting (Dupuis 434); antibiotics can sometimes trigger unexpected allergic reactions (Llor and Cots 1349); and anti-diarrhea medications are counterproductive when taken with contaminated water (Werner 22). Moreover, medicine bottles with labels in a foreign language are risky in the Nepalese culture, which highly encourages sharing (Montgomery 97).

A foreign HCP's lack of awareness of local conditions can, in extreme cases, even lead to death. Citrin recounts the example of a Nepalese woman that died after undergoing deworming surgery, all because a foreign HCP decided that the donated blood did not have to be tested beforehand (Citrin 55). In this case, the volunteer's unfamiliarity with the region led to an unnecessary death; she failed to recognize that blood verification is essential in a country with rising rates of HIV/AIDS. In another instance, a local patient received a deadly infection after being operated on in an unsterile room (58). These fatal mistakes were catalyzed by negligence and the "better than nothing" mentality, which encouraged volunteers to make decisions with harmful repercussions.

Conclusions

As explored in this report, short-term MSTs and international volunteering hinder the development of the Nepalese health care system. They can discourage government investment in the health sector, worsen job prospects for local health workers, and fuel the "medicalization" of health care. Their short duration encourages a paternalistic relationship between the sending and host countries, ethical double standards, and subpar provision of care. The aid given can, at best, be considered a "band-aid solution" to the greater, multilayered problems that are afflicting the overall Nepalese health care system.

Normally, the drawbacks of MST operations

in Nepal could be weighed against the benefits of getting life-saving medical care to underprivileged people that desperately need it. However, the incompetence of the international volunteers, accompanied by a lack of cultural and social awareness, exposes patients to numerous unforeseen complications-some of which are fatal. Given the great difficulties that locals endure to travel to the NGO health posts, it is crucial that MSTs fulfill their promise of healing, rather than hurting, their patients.

If MSTs are not properly fulfilling their main goal of providing immediate relief to rural folk in Nepal, and are hurting long-term development, should we completely avoid them? It is undeniable that countless people in Nepal rely on foreign medical assistance for survival. Stopping MST operations would endanger these lives, and bring other ethical concerns into question. At the same time, continuing MST projects in their current state, while knowing of their potential harms to the Nepalese health system, is unacceptable.

Accordingly, future research should consider developing guidelines and "best practices" for NGOs facilitating MSTs in Nepal. To better inform changes in NGO policy, there is a need for more empirical research that qualitatively or quantitatively measures the impacts of MSTs. It is therefore vital that NGOs begin to collect data to transparently monitor their operations. In addition, long-term service trips (lasting for several months at a time) should be popularized over short-term trips to mitigate the lack of cultural awareness and accountability. Furthermore, MSTs should focus on capacity building by emphasizing knowledge transfer and professional development, as opposed to technical and clinical assistance. These recommended MST structures can more effectively serve a countrys immediate healthcare needs, while simultaneously working towards achieving its developmental goals (Schech et al. 362). There may be no "perfect recipe," but international medical volunteerism in Nepal must ultimately be reformed so that it better helps the people it aims to care for.

About the Author

My name is Parnika, and I recently completed my first year in the Arts and Science program at McMaster University. I have an interest in global health and sustainable development. This piece about medical service trips in Nepal is a response to the emerging trend of undergraduate students 'voluntouring' overseas, with the aim of strengthening their applications to medical school. I hope that this work sheds light on what is an overall complex and multi-layered topic.

Works Cited

Adhikari, Shiva Raj, et al. "Nepalese Health Policies: Some Observations from an Economic Development Perspective." *NRB Economic Review*, vol. 14, Apr. 2002, pp. 5572.

Asgary, Ramin, and Emily Junck. "New Trends of Short-Term Humanitarian Medical Volunteerism: Professional and Ethical Considerations." *Journal of Medical Ethics*, vol. 39, no. 10, Oct. 2013, pp. 62531. *CrossRef*, doi:10.1136/medethics-2011-100488.

Baral, Nabin, and Joel T. Heinen. "The Maoist People's War and Conservation in Nepal." *Politics and the Life Sciences*, vol. 24, no. 1/2, 2005, pp. 211.

Bauer, Irmgard. "More Harm than Good? The Questionable Ethics of Medical Volunteering and International Student Placements." *Tropical Diseases, Travel Medicine and Vaccines*, vol. 3, no. 1, Dec. 2017.*CrossRef*, doi:10.1186/s40794-017-0048-y.

Bhandari, Sahadev. *Overview of Rural Transportation Infrastructures in Nepal.* 2015. *ResearchGate*, doi:10.13140/RG.2.1.4457.3527.

Bjarnason, I., et al. "Side Effects of Nonsteroidal Anti-Inflammatory Drugs on the Small and Large Intestine in Humans." *Gastroenterology*, vol. 104, no. 6, June 1993, pp. 183247.

Chapman, Audrey R. "The Social Determinants of Health, Health Equity, and Human Rights." *Health and Human Rights*, vol. 12, no. 2, 2010, pp. 1730.

Citrin, David. "The Anatomy of Ephemeral Health Care: 'Health Camps' and Short-Term Medical Voluntourism in Remote Nepal." *Studies in Nepali History and Society*, vol. 15, no. 1, June 2010, pp. 2772.

Dixit, H., and SB Marahatta. "Medical Education and Training in Nepal: SWOT Analysis." *Kathmandu University Medical Journal*, vol. 6, no. 23, 2008, pp. 41220.

Drislane, Frank W., et al. "The Medical System in Ghana." *The Yale Journal of Biology and Medicine*, vol. 87, no. 3, Sept. 2014, pp. 32126.

Dudasik, Michael W., et al. *Prosthetic Hip Implantation Method and Apparatus.* US5607431 A, 4 Mar. 1997, http://www.google.com/patents/US5607431

Dupuis, Christian C. "Humanitarian Missions in the Third World: A Polite Dissent:" *Plastic and Reconstructive Surgery*, vol. 113, no. 1, Jan. 2004, pp. 43335. *CrossRef*, doi:10.1097/01.PRS.0000097680.73556.A3.

Elnawawy, O., et al. "Making Short-Term International Medical Volunteer Placements Work: A Qualitative Study." *British Journal of General Practice*, vol. 64, no. 623, June 2014, pp. e32935. *CrossRef*, doi:10.3399/bjgp14X680101.

Gentle, Popular, and Tek Narayan Maraseni. "Climate Change, Poverty and Livelihoods: Adaptation Practices by Rural Mountain Communities in Nepal." *Environmental Science & Policy*, vol. 21, no. Supplement C, Aug. 2012, pp. 2434. *ScienceDirect*, doi:10.1016/j.envsci.2012.03.007.

Giordano, James, et al. "Culture, Sustainability, and Medicine in the Twenty-First Century. Re-Grounding the Focus of Medicine Amidst the Current 'Global Systemic Shift' and the Forces of the Market: Elements for a Contemporary Social Philosophy of Medicine." *International Journal of Politics, Culture, and Society*, vol. 23, no. 1, 2010, pp. 2941.

Green, Tyler, et al. "Perceptions of Short-Term Medical Volunteer Work: A Qualitative Study in Guatemala." *Globalization and Health*, vol. 5, no. 1, 2009, p. 4. *CrossRef*, doi:10.1186/1744-8603-5-4.

Gul, Nabiha. "Question of Nepal: Political Instability and Maoist Insurgency." *Pakistan Horizon*, vol. 55, no. 3, 2002, pp. 2740.

"Health System in Nepal: Challenges and Strategic Options." World Health Organization, Nov. 2007, http://apps.who.int/iris/handle/10665/205257

Hozo, Iztok, and Benjamin Djulbegovic. "When Is Diagnostic Testing Inappropriate or Irrational? Acceptable Regret Approach." *Medical Decision Making*, vol. 28, no. 4, July 2008, pp. 54053. *CrossRef*, doi:10.1177/0272989X08315249.

"Human Resources for Health: Nepal Country Profile." Ministry of Health and Population, Government of Nepal, Aug. 2013, nhsp.org.np/wp-content/uploads/2016/08/HRH-profile-QA.pdf

Karkee, Rajendra, and Jude Comfort. NGOs, Foreign Aid, and Development in Nepal. *Frontiers in Public Health*, vol. 4, Aug. 2016. *CrossRef*, doi:10.3389/fpubh.2016.00177.

Khadka, Narayan. "U.S. Aid to Nepal in the Cold War Period: Lessons for the Future." *Pacific Affairs*, vol. 73, no. 1, 2000, pp. 7795. *JSTOR*, doi:10.2307/2672285.

Khanal, Sudhir, et al. "Community Health Workers Can Identify and Manage Possible Infections in Neonates and Young Infants: MINIA Model from Nepal." *Journal of Health, Population and Nutrition*, vol. 29, no. 3, 2011, pp. 25564.

Khatri, Resham Bahadur, et al. "Female Community Health Volunteers in Community-Based Health Programs of Nepal: Future Perspective." *Frontiers in Public Health*, vol. 5, July 2017. *PubMed Central*, doi:10.3389/fpubh.2017.00181.

Llor, Carl, and Josep Maria Cots. "The Sale of Antibiotics without Prescription in Pharmacies in Catalonia, Spain." *Clinical Infectious Diseases*, vol. 48, no. 10, 2009, pp. 134549.

Lough, Benjamin J., and Willy Oppenheim. "Revisiting Reciprocity in International Volunteering." *Progress in Development Studies*, vol. 17, no. 3, July 2017, pp. 197213. *CrossRef*, doi:10.1177/1464993417713275.

McCall, Daniel, and Ana S. Iltis. "Health Care Voluntourism: Addressing Ethical Concerns of Undergraduate Student Participation in Global Health Volunteer Work." *HEC Forum*, vol. 26, no. 4, Dec. 2014, pp. 28597. *CrossRef*, doi:10.1007/s10730-014-9243-7.

"Medical Volunteer Abroad and Internships." Projects-Abroad.ca, Projects Abroad, www.projects-abroad.ca/ volunteer-projects/medicine-and-healthcare/#description.

Mishra, Shiva Raj, et al. "National Health Insurance Policy in Nepal: Challenges for Implementation." *Global Health Action*, vol. 8, no. 1, Dec. 2015, p. 28763. *CrossRef*, doi:10.3402/gha.v8.28763.

Montgomery, Laura. "Reinventing Short-Term Medical Missions." *Journal of Latin American Theology*, vol. 2, no. 2, 2007, pp. 84103.

"Nepal Portfolio Performance Review (NPPR) 2015." Ministry of Agricultural Development, Government of Nepal, Sep. 2015, mof.gov.np/uploads/document/file/Agriculture_NPPR-2015_20150913011507.pdf.

Nichter, Mark. "Global Health: Why Cultural Perceptions, Social Representations, and Biopolitics Matter." *Human Ecology*, vol. 37, no. 5, Oct. 2009, pp. 66970. *PubMed Central*, doi:10.1007/s10745-009-9242-5.

Niraula, Bhanu B. "Use of Health Services in Hill Villages in Central Nepal." *Health Transition Review*, vol. 4, no. 2, 1994, pp. 15166.

Panday, Sarita, et al. "The Contribution of Female Community Health Volunteers (FCHVs) to Maternity Care in Nepal: A Qualitative Study." *BMC Health Services Research*, vol. 17, Sept. 2017, p. 623. *BioMed Central*, doi:10.1186/s12913-017-2567-7.

Petley, David N., et al. "Trends in Landslide Occurrence in Nepal." *Natural Hazards*, vol. 43, no. 1, Aug. 2007, pp. 2344. *CrossRef*, doi:10.1007/s11069-006-9100-3.

Poudyal, Chandra Sharma. "Neoliberalism, Privatizaton and Education in the Republic of Nepal." *Re-Imagining the Creative University for the 21st Century*, SensePublishers, Rotterdam, 2013, pp. 15970. *link.springer.com*, doi:10.1007/978-94-6209-458-1_12.

Regmi, Kapil Dev. "World Bank in Nepal's Education: Three Decades of Neoliberal Reform." *Globalisation, Societies and Education*, vol. 15, no. 2, Mar. 2017, pp. 188201. *CrossRef*, doi:10.1080/14767724.2016.116 9517.

Roberts, Maya. "Duffle Bag Medicine." *JAMA*, vol. 295, no. 13, Apr. 2006, p. 1491. *CrossRef*, doi:10.1001/jama.295.13.1491.

Saito, Eiko, et al. "Inequality and Inequity in Healthcare Utilization in Urban Nepal: A Cross-Sectional Observational Study." *Health Policy and Planning*, vol. 31, no. 7, Sept. 2016, pp. 81724. *rossRef*, doi:10.1093/heapol/czv137.

Saleh, Karima. *The Health Sector in Ghana: A Comprehensive Assessment.* The World Bank, 2012. *CrossRef*, doi:10.1596/978-0-8213-9599-8.

Schech, Susanne, et al. "New Spaces of Development Partnership: Rethinking International Volunteering." *Progress in Development Studies*, vol. 15, no. 4, Oct. 2015, pp. 35870. *CrossRef*, doi:10.1177/146499341 5592750.

Sherraden, Margaret S., et al. "Effects of International Volunteering and Service: Individual and Institutional Predictors." *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, vol. 19, no. 4, Dec. 2008, pp. 395421. *CrossRef*, doi:10.1007/s11266-008-9072-x.

Shneiderman, Sara, and Mark Turin. "Nepal and Bhutan in 2011: Cautious Optimism." *Asian Survey*, vol. 52, no. 1, 2012, pp. 13846. *JSTOR*, doi:10.1525/as.2012.52.1.138.

Singh, Ajai R. "Modern Medicine: Towards Prevention, Cure, Well-Being and Longevity." *Mens Sana Monographs*, vol. 8, no. 1, 2010, pp. 1729. *PubMed Central*, doi:10.4103/0973-1229.58817.

Subedi, Janardan. "Modern Health Services and Health Care Behavior: A Survey in Kathmandu, Nepal." *Journal of Health and Social Behavior*, vol. 30, no. 4, 1989, pp. 41220. *JSTOR*, doi:10.2307/2136989.

Subedi, Janardan. "Primary Health Care and Medical Pluralism Exemplified in Nepal: A Proposal for Maximizing Health Care Benefit." *Sociological Focus*, vol. 25, no. 4, 1992, pp. 32128.

Suchdev, Parminder, et al. "A Model for Sustainable Short-Term International Medical Trips." *Ambulatory Pediatrics*, vol. 7, no. 4, Aug. 2007, pp. 31720.

"The High Costs Of Nepal's Fee-For-Service Approach To Health Care." Health Affairs Blog, July 20, 2015, healthaffairs.org/do/10.1377/hblog20150720.049382/full/

Werner, David. *Elusive Promise: Whatever Happened to 'Health for All?'* New Internationalist. 2001.

Whyte, Susan Reynolds., et al. *Social Lives of Medicines.* Cambridge Univ. Pr., 2009.

Zimmerman, Mark, et al. "A Staff Support Programme for Rural Hospitals in Nepal." *Bulletin of the World Health Organization*, vol. 94, no. 1, Jan. 2016, pp. 6570. *CrossRef*, doi:10.2471/BLT.15.153619.