

## Chapter 5

# Effectiveness of the Healthcare Delivery Systems in Prioritizing COVID-19: Case Studies of Bhutan and Nepal

**Chu Qian\***

Weatherhead East Asian Institute, Columbia University, NYC, USA

### Abstract

While the world was caught off guard by the 2019-2020 COVID-19 pandemic, healthcare systems in Nepal, like other South Asian low-or-middle-income countries experienced drastic consequences. As the overall system came to a halt, Nepal saw crippled general healthcare delivery, poor maternal and neonatal health planning, rising mental health issues, further socioeconomic stratification and other spillovers particularly as a result of prioritizing COVID-19 over other services, whereas its neighbor Bhutan stood out as a meaningful case of contrast despite a similar national lockdown in place. This chapter explores the features of healthcare delivery and resource allocations in the two countries to explain their differential responses to the crisis, and by doing so, looks to inspire discussions of better action plans for South Asia to prepare for similar disasters in the future.

**Keywords:** comparative study, Nepal, Bhutan, COVID-19, healthcare

---

\* Chu Qian, MPH; Corresponding Author's Email: qianchu31@gmail.com.

In: *Advances in Health and Disease*. Volume 57

Editor: Lowell T. Duncan

ISBN: 979-8-88697-098-2

© 2022 Nova Science Publishers, Inc.

**COMPLIMENTARY COPY**

## Introduction

Comparative study has long been done to draw parallels and differences between countries, and is categorized into two: ‘Most Similar Systems Design’ (MSSD) and the ‘Most Different Systems Design’ (MDS)(Anckar, 2008). This study in particular, employs MSSD methodology as it facilitates the investigation of independent variables of systems to establish potential causality (San et al., 2021). Comparison of South Asian countries’ response to this pandemic has been conducted for Bhutan, Sri Lanka and Bangladesh in the past (Bhaduri, 2020), while this study focuses on the case of Bhutan and Nepal as both countries, not far from each other, form the Himalayan mountain ranges; both of them border India and China, two regional giants that served the critical sources of transmission as well as of pandemic diplomacy during the crisis. Historically, Bhutan has a shadow cast on it by India, a country that long regarded itself as Bhutan’s diplomatic guardian (Mitra & Thalitakkattil, 2018). While some studies discredited Bhutan’s foreign policy as largely “band-wagoning” with India (Joseph, 2012), other studies taken a different angle say otherwise. Recognizing India’s perception of China to be a major rival in the Himalayan region, as showcased in the constant geopolitical skirmishes and economic tug-of-war over nearby smaller nations, Bhutan has spent great effort in balancing its relation with both, and this outward projection of sovereignty and independence was particularly noteworthy in the Doklam standoff between the Chinese and Indian border soldiers in 2017 (Mitra & Thalitakkattil, 2018). Such awareness is also shared by Nepal, which has long been “playing” both sides for power checks (Joseph, 2012). That is to say, the geopolitical factor is comparable, despite a few limitations to be discussed in the final section.

Second, to expand on the topic of political determinant, Bhutan, for a century ruled by royal families, under the leadership of the fourth dragon king Jigme Singye Wangchuk officially adopted democratic rule in 2008 to become a “constitutional monarchy”, the governance of which is complemented by Buddhist spiritual and religious guidance (Meier & Chakrabarti). Nepal, on the other hand, made the transition from King Birendra’s monarchical rule to a multi-party democracy in the 1992 constitution, despite criticisms of the transition being taken advantage of by neoliberal capitalism (Shakya, 2020). As both countries conduct elections to select capable government leaders, differential nature of issues can be seen as Nepal’s governing party is a constant subject of reproach of corruption and fraud (Shakya, 2020), while Bhutan a patriarchal homogenous nation whose 13% population, Nepali-

COMPLIMENTARY COPY

speaking Lhotshampas are excluded from general elections, together with other factors that led to their mass exodus by 2007 (Evans, 2010). Nonetheless, the level of political freedom showcased in the pandemic period is comparable among the two as The Economist's Democracy Index post-COVID-19 analysis ranked Bhutan and Nepal close to each other, (81 versus 102), both as "hybrid regime" (Economist, 2021). And in the specific context of healthcare funding, both countries rely on foreign aid, although to different extent and nature. India's early investment in Bhutan meant that it was reluctant to open the gate for international aids from other countries or organizations in the 70s despite the smallpox calamity (Bhattacharya, 2013). However, Bhutan was very sharp in recognizing the ramifications as early as the 60s when Indian funds started rolling in, first for the 5-year plan and then the hydropower station, that foreign aid dependence would subject itself to political manipulations, and thus, adjusting itself to be more aware and selective in accepting future aids (Kaul, 2021a). In comparison, Nepal's health logistic was virtually nonexistent before the 90s, and beginning in 1993, foreign aids including USAIDS of America, KfW of Germany, SDC of Switzerland etc. poured in large quantities, helping the country in establishing the infrastructure as well as of supply chain & logistics upkeep significantly, and studies found that this reality ushers in considerable risks unless the government is able to take accountability of the effective financing for its healthcare functions in the long-run (Bhuvan et al., 2016). Economically, Nepal and Bhutan belong to SAARC (South Asian Association for Regional Cooperation), a league of South Asian countries established in 1985. Heavily reliant on tourism export as a component of the national GDP, both countries' economies were hit hard by the COVID-19 crisis, and more specifically, Nepal saw a sharp drop in international tourism revenue from 2.34% to 0.71% of GDP and Bhutan from 4.37% to 3.63% (Valev, 2020). As all SAARC countries experienced capacity shortage of critical care (Bhutta et al., 2020), with beds estimated to be 0.7-2.8 per 100,000 population (Phua et al., 2020), it would be interesting to explore the differential reactionary measures taken by both countries under this common constraint.

Cultural similarities between the two are noteworthy, especially in the religious context. 80% of the Bhutanese population are Buddhists, with the main language spoken being Dzongkha (Meier & Chakrabarti). As for Nepal, the Ministry of Health's 2016 Demographic Health Survey shows that 85% of the population are Hindu, followed by Tibetans (6%) and Muslims (5%) (NDHS). The animistic feature in both religions, Buddhism and Hinduism, foretells that an anthropological aspect to their pandemic response is not to be

**COMPLIMENTARY COPY**

overlooked, as exemplified by the use of mantra prayers in deciding the auspicious day of vaccine roll-out in Bhutan's case (Rocha, 2021), and the population stronghold of folk medicine-based health-seeking behavior (80%) employing Ayurveda herbs, homeopathy, Tibetan traditional medicine and so forth in Nepal's case (Khadka et al., 2021).

### **Bhutan's Case Study**

Bhutan adopts a Beveridge single-payer model (Tobgay et al., 2011). As it has long been promoting the idea of Gross National Happiness (GNH) as a holistic measure of well-being instead of the GDP, the government generally spends 7-12% of its budget on healthcare, and prohibits the profit-oriented privatization (Sithey et al., 2015). As the government single-handedly supplies the funding and service, removes all competitions and out-of-pocket cost for the general Bhutanese public, some of the notable benefits of the healthcare delivery system resulted are its high universality, equity, portability and accessibility (Qian, 2018), the effect of which was particularly exemplary during the 2019-2020 COVID-19 crisis where the state continued to pay for all the diagnostic and treatment costs. Had them been an individual burden, the pandemic would surely widen the gap of the rich and poor and render those underprivileged unable or even fearful of obtaining the care needed as shown in many other countries including Nepal.

Bhutan had its own resource limitations when it comes to combating coronavirus, especially surrounding the lack of medical professionals. At the onset of the pandemic, a sheer number of 50, or 13% of the country's entire body of 376 registered doctors were undergoing training in foreign institutes because the country has no medical school. Therefore, the government took a decisive move to recall this precious workforce back home (Dorji & Lucero-Prisno, 2020). Returnees were installed at the forefront of COVID-19 treatment, quarantine and contact tracing, as well as deliveries of other medical procedures and services, besides local doctors and more than 250 nurses. Every healthcare professional had been insured by the state against COVID-19 death to obtain the peace of mind for themselves and their families. In addition, as the number of hospitals in Bhutan took a drastic increase from 31 in 2016 to 48 in 2020 (Dorji, 2021; Qian, 2018), together with 186 basic health units and three regional referral hospitals, they reached a 95% population coverage (Dorji, 2021). This ease of access enabled the subsequent nation-wide distribution of rapid COVID-19 antigen test, to complement the

**COMPLIMENTARY COPY**

country's five major hospitals that offered RT-PCR testing in Thimphu, Monggar, Gelegphu, Phuentsholing and Dewathang. By the end of 2020, the country was known to have tested every one of its adult population twice, a feat seen in no other. As a result of this national unified effort, and the tremendous extent the government is shifting the financial burden to itself, it was reported that some citizens even offered to reimburse the state for their quarantine costs (2020) including budget hotels and PCR tests. For this the Ministry of Health published a fee table to give people the transparency should they insist to cover their own healthcare expenditure (Riley et al., 2020). This mentality of the citizens reflects a wish to take personal accountability as a goodwill to their king whom they have a lot of respect for.

Bhutan since the beginning has realized the importance of isolating people who came for general health services from fever patients to prevent cross-contamination during hospital visits, therefore it transformed 54 existing flu clinics into COVID-19 surveillance and testing locations for the susceptible, meanwhile allowing other services to run unimpeded such as mental health, other infectious diseases including HIV and tuberculosis, maternal and neonatal services and treatment of chronic conditions (Gyeltshen & Dorji, 2020). For example, contraceptives were delivered on-schedule to pre-determined places using mobile technology, and mothers of newborn also had their conditions monitored remotely using tele-communication. Such emphasis on primary healthcare delivery and essential drug supply has been sown long ago in 1998 when a health trust fund was established (Sithey et al., 2015), serving the foundation for emergency readiness during the COVID-19 pandemic as identified by the WHO (Kaul, 2021b).

Interview with an ex-tour operator in Bhutan uncovered a drukyul mentality best characterized by “chill” rather than “fear”; he was able to visit the monastery, play archery, have a drink with friends amidst the global panic (Qian & Sonam, 2022), thanks to the little haven his religious country provided, albeit a travel ban taking heavy tolls on Bhutan's tourism sector, similar to that of Nepal. The travel ban occurred as early as March, but the nation-level lockdown didn't happen until August, 2020 (2021; Samarasekera, 2021), giving citizens enough time to make preparation both mentally and logistically. While lockdown is of reactionary nature, Bhutan also actively takes on preventative measures. In January, 2021, upon the receipt of the Oxford-AstraZeneca (Covidshield) vaccine from India (Dorji & Tamang, 2021), Bhutan waited for two month until the propitious moment was determined by religious clairvoyants, and began the national vaccination roll-out on March 27, inoculating nearly 40% of the population in just two days

COMPLIMENTARY COPY

(Kaul, 2021b), and 66% in the subsequent two weeks (Rocha, 2021), greatly advancing the goal towards 70% herd immunity. While literature findings did not stop there, it is very clear from the publishing academia that the emphasis on the pandemic's adverse effect was ebbing away from general public's attention since the mass vaccination campaign started.

### **Nepal's Case Study**

Nepal adopts a national health insurance (Mishra et al., 2015), but unlike Bhutan, its health system is heavily-underfunded, therefore Nepal takes on resource allocation very differently. Nepal's National Health Insurance Program (NHIP) was made official in 2016 with a goal to advance equity and universal access for its citizens. It is a promising improvement of the earlier community-based health insurance (CBHI) scheme in place since 1970s, thus higher enrolment and less pro-rich bias was expected (Mishra et al., 2015). As the decade-long civil war come to an end in 2006, Nepal's health system experienced a process of decentralization. While key decision-making power shifts from the Ministry of Health and Population in Kathmandu to provincial governments, notwithstanding a wishful thinking to improve efficiency and resource allocation, healthcare policies at the responsibility of provincial leaders, saw mixed results, both positive and negative as occurred in other federalized healthcare societies (Rushton et al., 2021). In actual implementation, budget allocation constraint, precious healthcare resources and a strong private sectors presence meant that the delivery of care is still subject to factors such as socioeconomic differentiations, ethnicity and caste. For instance, a study found that households of higher status were 4 times more likely to enroll in the NHIP (Ghimire et al., 2019). Other studies found that medical expenditure rendered one in ten Nepali experiencing episodes of colossal financial downturn and 1.67% falling below the poverty line (Thapa et al., 2018).

A literature review found more than thirty articles on the impact of COVID-19 poor response on Nepal's healthcare delivery, and the most conspicuous of all, a systemic failure of resource allocation in Nepal, and pointed to a unanimous complaint that by prioritizing COVID-19, Nepal's healthcare delivery is allowing people to die from other diseases (Aacharya & Shah, 2020; Bhatt et al., 2020; D. R. Singh et al., 2021). As the lockdown occurred without prior warnings or in any phased manner in March, 2020, Bhatt et al. (Bhatt et al., 2020) and Singh et al. (D. R. Singh et al., 2021)

**COMPLIMENTARY COPY**

identified the poor coordination between three tiers of government, namely, federal, provincial and local as an important factor for inferior healthcare quality and accessibility. While facilities dedicated to COVID-19 were set up, few resources were allocated to none-COVID illnesses (Aacharya & Shah, 2020; D. R. Singh et al., 2021), especially for chronic conditions. And as the pandemic fear intensified, local hospitals closed down and the remaining operating on full capacity were reluctant to admit patients; when people could not get service from the public hospital, the instinct was to go to private providers, a sector comprising a whopping 78% of Nepal's total hospital share (Mishra et al., 2015). However, these patients were often faced with a more pressing financial constraint including a \$55 out-of-pocket charge for a negative COVID-19 test as the pre-requisite of admission (D. R. Singh et al., 2021), even when they exhibited no signs of infection. This fear of being denied care at the clinic doorstep for not having the test simply barred many from seeking care in the first place, if not coupled with the public mistrust of the healthcare system and the general perception that hospitals served as transmission hotspots (Karkee & Morgan, 2020; D. R. Singh et al., 2021).

In addition, due to fear and poor planning, clinics of Marie Stopes International, a major provider of family planning products and services in Nepal were shut down during the lockdown (Riley et al., 2020). Together with other factors that debilitated maternal and reproductive health, neonatal death in Nepal during the same period experienced more than 200% surge (from 13 to 40 per 1000 livebirths), and institutional stillbirth 50% (from 14 to 21 per 1000 total birth) (KC et al., 2020). Studies hailed the improved hand hygiene practice as a positive spillover effect of the pandemic, and this would in turn curb sepsis (Karkee & Morgan, 2020; KC et al., 2020). However, it seems that its effect was very limited for neonatal health. Exacerbating the situation was the closing out of transportation facilities and sanctioned freedom of movement for the sick and needy: as public transportation was discontinued and ambulance service put on hold, means to get around were restricted, deterring those seeking immediate care from getting one, including a leg fracture patient and a pregnant woman as identified in a qualitative study (D. R. Singh et al., 2021). This effect is augmented in rural areas where the accessibility was already low prior to the pandemic.

Several studies pointed to a unified concern that the paternalistic official response to the pandemic have also exacerbated the divide between the rich and poor. A Fukushima study (Neupane et al., 2021) identified daily wage workers and impoverished households engaging in informal livelihoods to be among those most severely affected, as was also discovered by Bhatt's team

COMPLIMENTARY COPY

(Bhatt et al., 2020). Singh et al. shone a spotlight onto the discrimination of marginalized groups based on wealth, political associations and caste when they tried to access services. Unlike in Bhutan where police tend to talk people into wearing a mask or returning home without applying paternalistic measures like issuing arrests (Qian & Sonam, 2022), institutional violence is a recurring issue in Nepal as identified by various studies (Aacharya & Shah, 2020; Bhatt et al., 2020; D. R. Singh et al., 2021). Other incidents of police abuse in enforcing lockdown, maltreatment of migrant returnees and gender-based violence at quarantine centers were also reported (Aacharya & Shah, 2020; Bhatt et al., 2020; Shakya, 2020; D. R. Singh et al., 2021), continuing to raise questions of an endemic power imbalance of the state and individual under a pandemic facade.

In addition to the above direct means, socioeconomic stratification also occurs in subtle forms such as the reduced access of basic necessities like food. As the production and supply chain of grocery items were disrupted (B. Adhikari et al., 2020), by collecting and analyzing various food price data for a pre-and-post-pandemic comparison, Singh et al. (S. Singh et al., 2020), found a substantial increase in prices of all five food categories: pulses/legumes (18%), vegetables & fruits (14%), roots & tubers (10%), cereals (10%) and animal proteins (2%), in all three study districts, Sindhupalchok, Bandiya and Jumla. As a consequence of this inflation and reducing affordability, both school meal food basket and typical household food basket contained less nutrition: vitamins, minerals, proteins, fats and calories. The study also quantified the percentage of nutrient reduction per rupee increase, the result of which, drastic enough to warn policy makers of the negative ramification of lockdown on vulnerable populations, particularly the female and children of poor households whose coping mechanism to inflation was to change their consumption patterns. This is the beginning of a vicious cycle because poor nutrition in utero and at a young age has long-term adverse implications on lost human capital, decreased productivity and lower income upon adulthood (Hoddinott et al., 2013), perpetually fixating the poor at the bottom of a rigid social hierarchy. To serve a comparison, Bhutan rolled out the cash transfer program from April to September, 2020, providing immediate financial relief and free commodities like rice, vegetables and meat to ensure food security for individuals and families at risk (Pelayo et al., 2022; S. Singh et al., 2020).

Nepal's healthcare workers including doctors, nurses, medical assistants, midwives, hospital wards, security, lab assistants and ambulance drivers (Gupta, Mehra, et al., 2020) on the other hand, experienced high prevalence of depression and anxiety: 38%, twice that of the general population in non-

COMPLIMENTARY COPY



pandemic years (Gupta, Sahoo, et al., 2020; Risal et al., 2016). This was due to volatile workload, uncertain pay, shortage of protective equipment and social stigma. Being seen as the at-risk individuals, some were even asked to leave their rental apartment and rendered homeless (Aacharya & Shah, 2020; Bhatt et al., 2020; Gupta, Mehra, et al., 2020). While far from being an occupation-specific problem, mental health issues were on the rise even for the general population. Suicide cases increased by 20% before and after the lockdown (R. Singh et al., 2020), and other mental health morbidities became more and more prominent as a consequence of social distancing, house entrapment, domestic violence, stigma against infected or recovered individuals and a lack of consultation services (Bhatt et al., 2020; D. R. Singh et al., 2021; R. Singh et al., 2020). By comparing suicide deaths with that of pandemic casualties it was found that the former overpowers the latter, echoing the concern that a national agenda prioritizing COVID-19 is harming the population in other unforeseen ways.

In contrast to Bhutan's adoption of the Druk Trace app which requires individuals to register every visit to a public place in a database thus greatly facilitating surveillance (Dorji & Tamang, 2021), Nepal had no established e-health system. As scientists called for more aggressive contact tracing procedures in Nepal (Bhatt et al., 2020), it is likely that the country would benefit systemically from similar mobile technologies. Yet grass-root adoptions of telemedicine during the lockdown had been attempted with success by a few specialist doctors of dermatology and blood cancer, in saving a rural girl from a life-threatening toxic epidermal necrolysis (Paudel & Chudal, 2020), as well as ensuring timely follow-up and scheduling of chemotherapy sessions for leukemia patients (Poudyal et al., 2020). Among these civilian efforts, Poudyal et al. obtained positive feedback from leukemia patients who were consulted through a free text/call app Viber, the use of which is encouraged to continue post-pandemic (Poudyal et al., 2020). This smart phone technology enables the timely exchange of critical test results between patients and doctors and during the trial none of the registered user missed his or her chemotherapy. Interesting enough to also note that the Viber text exchange also helped bypass police custody and eliminate hostile interaction as patients were traveling to get their chemo sessions, although no formal agreement was made with the law enforcement (Poudyal et al., 2020). Sanguine outcomes using telemedicine were also found in another study, as WhatsApp (similar to Viber) was used to communicate the impression of toxic epidermal necrolysis (TEN) between a female patient and her dermatologist in order to prevent life-threatening drug-induced TEN due to the use of

**COMPLIMENTARY COPY**

antiepileptic carbamazepine (Paudel & Chudal, 2020). Thanks to the prompt visual diagnosis using video calls, the culprit drug could be discontinued, and treatment initiated for the severe skin condition which, had it been left untreated, could cost the rural girl her life during the lockdown. Another focus, as Singh et al. pointed out, should be for chronic disease patients, such as those with obstructive pulmonary disease, hypertension and diabetes (D. R. Singh et al., 2021), to ensure stable communication throughout infrastructure shutdown. These interventions carried out by doctors from the Kathmandu Civil Service Hospital and Nepal Police Hospital reflected the active participation of civilian Nepalese practitioners in trying to better the healthcare delivery for patients during lockdown.

## Conclusion

The intense national focus on COVID-19 has undermined the attention deserved by other types of health burdens in Nepal. Among infectious disease burdens, Nepal's COVID-19 mortality remained low at 1.09% (3,061 deaths out of 281,564 infections) as of April 14, 2021(MOHP). In comparison, the 2009 influenza A/H1N1 pandemic had a case fatality ratio of 1.74% (B. R. Adhikari et al., 2011). Moreover, influenza data during the pandemic became skewed, if not a complete absence of flu case reporting between July and September in 2020, posing a stark contrast from previous years when incidence increased steadily in the same period (Pun, 2020). Similarly, another study warned of a large dengue outbreak as a result of the overwhelmed, fully-allocated health system and the fact that COVID-19 high impact areas overlap with dengue-endemic regions (Koirala & Tamrakar, 2020). Regarding non-communicable diseases (NCD), those with chronic conditions like cardiovascular disease or diabetes, those who suffered from physical injuries and mothers of newborns simply could not receive timely care as mentioned. According to WHO, as of 2016, NCD account for two thirds of deaths (66%) in Nepal (WHO, 2016), therefore to forgo this bulk interest areas for the low-fatality COVID-19 is considered unwise, not to mention that there are other more deadly infectious agents worth pursuing as discussed above. One might argue that the low fatality was a result of focusing national effort on coronavirus prevention and treatment, as shown in a survey which found a satisfactory rate as high as 71.4% in Nepal's general public's perception of the government's response to the crisis (Madhu et al.), whereas a more targeted study on frontline healthcare workers reported a grisly 36% satisfaction that

COMPLIMENTARY COPY

in turn, predicts health workers' unwillingness to fulfill duties during the pandemic (Upadhyaya et al., 2020). People's perception gradually improves as time goes on; as the surprise factor ebbs away and fear diminishes, the system gets better at adapting. This foretells the benefits of a phased measure of lockdown, the kind Bhutan had adopted (Samarasekera, 2021): although Bhutan's travel ban occurred as early as March, the nation-level lockdown didn't fully take place until August, 2020 (2021); even so, the lockdown enforcement in Bhutan was moderate: police would not arrest or manhandle those who violated the curfew or mask rules, and routine primary care services such as maternal health and chronic disease care would be kept uninterrupted (Dorji, 2021).

Therefore, the cause of system chaos might not be of poor healthcare quality as much as of the paternalistic fashion with which the society shuts down itself, taking everyone and every sector by surprise. In late April, 2021, another indefinite lockdown of Kathmandu Valley was proposed by the Coronavirus Control and Management Committee (CCMC), this time, with a three-day notice only (Awale, 2021). This is not to say that response shouldn't occur fast. As noted by many studies, the case of Nepal was particularly challenging because it shares a 1600km porous border with India (B. Adhikari et al., 2020; Bhatt et al., 2020; D. R. Singh et al., 2021), where cases were constantly imported with Indian visitors traveling to or migrant workers of Nepali origin returning to the country (Chalise, 2020; K. Sharma et al., 2021). It is also because of this particular geographical reason that experts believe Nepal would benefit from aggressive contact tracings (Awale, 2021). However, as was mentioned above, Nepal is a country where there is a state power lean and of whom the lockdown had the gravest impact are the poor and meek subject to maltreatment by the law authority. Therefore, it is difficult to ensure that rigorous contact tracing like the one they did in Bhutan won't cause woes in Nepal. Regarding the need for better allocation of resource or funds referred to by various studies, in hindsight of this pandemic (Aacharya & Shah, 2020; D. R. Singh et al., 2021) and as a perpetual theme of studies on Nepal's healthcare system (Mishra et al., 2015; J. Sharma et al., 2018; Thapa et al., 2018), it is due to such complexity of the healthcare structure, the interworking of different tiers of government and the many stakeholders at play that it is far from a simple task to come up with the perfect action plan for an imminent threat like COVID-19. Nevertheless, useful advice is present in many of these studies and all that the policy maker has to do was to crowdsource insights. By doing so one is surely to be impressed by some of the spontaneous development of the field, for instance of the adoption of

**COMPLIMENTARY COPY**

telemedicine in bridging the gap of the urban and the rural, rich and poor, healthy and sick.

The in-depth comparison of Nepal and Bhutan also unraveled a power wrestle between the two South Asia giants: China and India. India's first batch of vaccine export sufficed by the "Neighborhood First" narrative of advancing international goodwill and offering humanitarian aid to countries in need was to Bhutan and Maldives; one day after, another batch containing one million doses was shipped to Nepal (B. Singh et al., 2022). Seen as a strategic move to redefine its relation with Nepal, India's pandemic diplomacy would potentially alleviate some of the Chinese political influence in the region, including early on during the crisis as showcased in the donation of medical supplies such as masks, PCR testing kits, PPEs of a joint effort of the Chinese government as well as private sectors such as Alibaba Jack Ma Foundation (Nirola et al., 2021). This comparison of the two countries' response is nonetheless limited due to the following. First, Nepal's porous border with India made it more vulnerable to cross-country transmission; its population is more than 38 times that of Bhutan, rendering the latter nimble at maneuvering through crisis and adapting to shifting demands, and compared to Bhutan's rather homogenous society made up of Tantric Buddhists, Nepal's ethnic composition is diverse; people follow a number of religions and speak a range of dialects, thus making it difficult to transmit critical information and prevent the spread of fake news. And last but not least, there could be a fundamental selection bias in conducting review of this kind, as the diverse Nepali academia is robust and avid in publishing critiques of its own healthcare system, when a similar introspection could be lacking in Bhutan, potentially due to a self-censoring mentality as a result of the 1992 constitution banning criticisms of the king and the system (DOS; Zam, 2018). With this in mind, this chapter hopes to draw insights among the two, not to be critical towards any one party, but to outline the lessons learned to bring out better change in the future.

## References

- Acharya, R. P., & Shah, A. (2020). Ethical dimensions of stigma and discrimination in Nepal during COVID-19 pandemic. *Ethics, Medicine and Public Health*, 14. doi:10.1016/j.jemep.2020.100536

COMPLIMENTARY COPY

- Adhikari, B., Ozaki, A., Marahatta, S. B., Rijal, K. R., & Mishra, S. R. (2020). Earthquake rebuilding and response to COVID-19 in Nepal, a country nestled in multiple crises. *Journal of Global Health*, 10(2). doi:10.7189/jogh.10.020367
- Adhikari, B. R., Shakyaa, G., Upadhyay, B. P., KC, K. P., Shrestha, S. D., & Dhungana, G. R. (2011). Outbreak of pandemic influenza A/H1N1 2009 in Nepal. *Virology Journal*, 8(133). doi:10.1186/1743-422X-8-133
- Anckar, C. (2008). On the Applicability of the Most Similar Systems Design and the Most Different Systems Design in Comparative Research. *International Journal of Social Research Methodology*, 11(5). doi:10.1080/13645570701401552
- Awale, S. (2021, Apr 26, 2021). Kathmandu locks down again. *Nepal Times*.
- Bhaduri, S. D. (2020). Comparing COVID-19 Pandemic Responses of Three South Asian Countries-Bhutan, Sri Lanka, and Bangladesh. *The Indian Practitioner*, 73(11), 7-14. Retrieved from <http://articles.theindianpractitioner.com/index.php/tip/article/view/1079>
- Bhatt, N., Bhatt, B., Gurung, S., Dahal, S., Jaishi, A. R., Neupane, B., & Budhathoki, S. S. (2020). Perceptions and experiences of the public regarding the COVID-19 pandemic in Nepal: a qualitative study using phenomenological analysis. *BMJ Open*, 10. doi:10.1136/bmjopen-2020-043312
- Bhattacharya, S. (2013). International Health and the Limits of its Global Influence: Bhutan and the Worldwide Smallpox Eradication Programme. *Medical History*, 57(4), 461-486. doi:10.1017/mdh.2013.63
- Bhutan gov't gives people option to pay for COVID-19 quarantine. *Xinhua*. 2020, Sep 29, 2020
- Bhutta, Z. A., Basnyat, B., Saha, S., & Laxminarayan, R. (2020). Covid-19 risks and response in South Asia. *BMJ*, 368. doi:10.1136/bmj.m1190
- Bhuvan, K., Heydon, S., & Norris, P. (2016). Health programmes logistics and international aid in Nepal: an overview of processes improvements. *Journal of Pharmaceutical Health Services Research*, 2016(7), 141-144. doi:10.1111/jphs.12130
- Chalise, H. N. (2020). COVID-19 Situation and Challenges for Nepal. *Asian Pacific Journal of Public Health*, 32(5), 281-282. doi:10.1177/1010539520932709
- Dorji, T. (2021). The Gross National Happiness Framework and the Health System Response to the COVID-19 Pandemic in Bhutan. *The American Society of Tropical Medicine and Hygiene*, 104(2), 441-445. doi:10.4269/ajtmh.20-1416
- Dorji, T., & Lucero-Prisno, D. E. (2020). Recalling doctors back to Bhutan for COVID-19. *Population Medicine*, 2(24). doi:10.18332/popmed/125913
- Dorji, T., & Tamang, S. T. (2021). Bhutan's experience with COVID-19 vaccination in 2021. *BMJ Global Health*, 6(5). doi:10.1136/bmjgh-2021-005977
- DOS. *Bhutan*. US State Department. Retrieved from <https://2009-2017.state.gov/documents/organization/160057.pdf>
- Economist*. (2021). A new low for global democracy: More pandemic restrictions damaged democratic freedoms in 2021. The Economist's Democracy Index.
- Evans, R. (2010). Chapter 5: The Perils of Being a Borderland People: On the Lhotshampas of Bhutan. *Contemporary South Asia*, 18(1), 25-42. doi:10.1080/09584930903561598

COMPLIMENTARY COPY

- Ghimire, P., Sapkota, V. P., & Poudyal, A. K. (2019). Factors Associated with Enrolment of Households in Nepal's National Health Insurance Program. *International Journal of Health Policy and Management*, 8(11), 636-645. doi:10.15171/ijhpm.2019.54
- Gupta, A. K., Mehra, A., Niraula, A., Kafle, K., Deo, S. P., Singh, B., . . . Grover, S. (2020). Prevalence of anxiety and depression among the healthcare workers in Nepal during the COVID-19 pandemic. *Asian Journal of Psychiatry*, 54. doi:10.1016/j.ajp.2020.102260
- Gupta, A. K., Sahoo, S., Mehra, A., & Grover, S. (2020). Psychological impact of 'Lockdown' due to COVID-19 pandemic in Nepal: An online survey. *Asian Journal of Psychiatry*, 54. doi:10.1016/j.ajp.2020.102243
- Gyeltshen, D., & Dorji, T. (2020). Doorstep delivery of essential healthcare services during the nationwide COVID-19 lockdown in Bhutan. *Population Medicine*, 2(43). doi:10.18332/popmed/129959
- Hoddinott, J., Behrman, J., & Maluccio, J. (2013). Adult consequences of growth failure in early childhood. *American Journal of Clinical Nutrition*, 98(5), 1170-1178. doi:10.3945/ajcn.113.064584
- Joseph, C. M. (2012). China–South Asia strategic engagements: Bhutan–China Relations. *National University of Singapore Institute of South Asian Studies (ISAS) Working Paper*, 157. Retrieved from <https://www.isas.nus.edu.sg/papers/157-china-south-asia-strategic-engagements-2-bhutan-china-relations/>
- Karkee, R., & Morgan, A. (2020). Providing maternal health services during the COVID-19 pandemic in Nepal. *Lancet*, 8(10), 1243-1244. doi:10.1016/S2214-109X(20)30350-8
- Kaul, N. (2021a). Beyond India and China: Bhutan as a Small State in International Relations. *International Relations of the Asia-Pacific*, 22(2), 297-337. doi:10.1093/irap/lcab010
- Kaul, N. (2021b). Small state, big example: Covid pandemic management in Bhutan. *Critical Studies on Security*, 9(1), 58-62. doi:10.1080/21624887.2021.1904359
- KC, A., Gurung, R., Kinney, M. V., Sunny, A. K., Moinuddin, M., Basnet, O., . . . Målqvist, M. (2020). Effect of the COVID-19 pandemic response on intrapartum care, stillbirth, and neonatal mortality outcomes in Nepal: a prospective observational study. *Lancet Global Health*, 8(1273). doi:10.1016/S2214-109X(20)30345-4
- Khadka, D., Dhamala, M. K., Li, F., Aryal, P. C., Magar, P. R., Bhatta, S., . . . Shi, S. (2021). The use of medicinal plants to prevent COVID-19 in Nepal. *Journal of Ethnobiology and Ethnomedicine*, 17(26). doi:10.1186/s13002-021-00449-w
- Koirala, P., & Tamrakar, D. (2020). Threat of Dengue Outbreak in Nepal in Context of COVID-19 Pandemic. *Journal of Lumbini Medical College*, 8(1), 169-170. doi:10.22502/jlmc.v8i1.365
- Madhu, A., Chapagain, B., & Adhikari, R. P. *COVID 19, Citizen's pulse (A National Survey on COVID-19-Nepal)-Participedia*. Retrieved from <https://participedia.net/case/6543>
- Meier, B. M., & Chakrabarti, A. The Paradox of Happiness: Health and Human Rights in the Kingdom of Bhutan. *Health and Human Rights Journal*, 18(1), 193-208. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5070691/>

COMPLIMENTARY COPY

- Mishra, S. R., Khanal, P., Karki, D. K., Kallestrup, P., & Enemark, U. (2015). National health insurance policy in Nepal: challenges for implementation. *Global Health Action*, 8. doi:10.3402/gha.v8.28763
- Mitra, S. K., & Thalitakkattil, S. (2018). Bhutan and Sino-Indian Rivalry: The Price of Proximity. *Asian Survey*, 58(2), 240-260. doi:10.1525/as.2018.58.2.240
- MOHP. *COVID-19 Dashboard*. Nepal Ministry of Health and Population. Retrieved from <https://covid19.mohp.gov.np/>
- National Situational Update On COVID-19*. Ministry of Health. 2021.
- NDHS. *Nepal Demographic and Health Survey 2016. The DHS Program*. Retrieved from <https://www.dhsprogram.com/pubs/pdf/fr336/fr336.pdf>
- Neupane, P., Bhandari, D., Tsubokura, M., Shimazu, Y., Zhao, T., & Kono, K. (2021). The Nepalese health care system and challenges during COVID-19. *Journal of Global Health*, 2021(11). doi:10.7189/jogh.11.03030
- Nirola, R., Poudel, B. R., & Adhikari, R. (2021). Dissecting the COVID-19 Pandemic: through the Façades of Socio-Economic Impact: Aawaran Publications.
- Paudel, V., & Chudal, D. (2020). Carbamazepine-Induced Toxic Epidermal Necrolysis Managed by Mobile Teledermatology in COVID-19 Pandemic in Rural Nepal. *Case Reports in Dermatological Medicine*, 2020. doi:10.1155/2020/8845759
- Pelayo, M., Rocha, I., & Yoezer, J. (2022). Negotiating COVID-19 in Bhutan: Successfully Aligning Science, Politics, Culture, and Religion in a Unique Public Health Strategy. In I. Ali & R. Davis-Floyd (Eds.), *Negotiating the Pandemic: Cultural, National, and Individual Constructions of COVID-19*. New York: Routledge.
- Phua, J., Faruq, M., Kulkarni, A., & etal. (2020). Critical care bed capacity in Asian countries and regions. *Critical Care Medicine*, 48(5), 654-662. doi:10.1097/CCM.0000000000004222
- Poudyal, B. S., Gyawali, B., & Rondelli, D. (2020). Rapidly established telehealth care for blood cancer patients in Nepal during the COVID-19 pandemic using the free app Viber. *ecancer*, 14(104). doi:10.3332/ecancer.2020.ed104
- Pun, S. B. (2020). Disappearance of Influenza during the COVID-19 Pandemic: Nepal's Experience. *Journal of Nepal Health Research Council*, 18(49). doi:10.33314/jnhrc.v18i4.3252
- Qian, C. (2018). Characteristics of healthcare delivery system in Bhutan. *International Journal of Healthcare Management*, 13(1), 118-119. doi:10.1080/20479700.2018.1437330
- Qian, C., & Sonam, P. (2022). Chapter 10: COVID-19 Impact on Four Tourism Stakeholders in Bhutan. In W. D. Nelson (Ed.), *Advances in Business and Management (Vol. 19)*: Nova Science Publishers.
- Riley, T., Sully, E., Ahmed, Z., & Biddlecom, A. (2020). Estimates of the Potential Impact of the COVID-19 Pandemic on Sexual and Reproductive Health In Low-and-Middle-Income Countries. *International Perspectives on Sexual and Reproductive Health*, 46, 73-76. doi:10.1363/46e9020
- Risal, A., Manandhar, K., Linde, M., Steiner, T. J., & Holen, A. (2016). Anxiety and depression in Nepal: prevalence, comorbidity and associations. *BMC Psychiatry*, 16(102). doi:10.1186/s12888-016-0810-0

COMPLIMENTARY COPY

- Rocha, I. C. N. (2021). Employing medical anthropology approach as an additional public health strategy in promoting COVID - 19 vaccine acceptance in Bhutan. *International Journal of Health Planning Management*, 36, 1943-1946. doi:10.1002/hpm.3191
- Rushton, S., Panday, S., van Teijlingen, E., Subedi, M., Balen, J., Karki, J., & Simkhada, P. (2021). An Investigation into the Impact of Decentralization on the Health System of Nepal. *Journal of Manmohan Memorial Institute of Health Sciences*, 7(1), 3-14. doi:10.3126/jmmihs.v7i1.43146
- Samarasekera, U. (2021). Bhutan: small nation, big ideas affecting respiratory health. *Lancet*, 9(7), 67-68. doi:10.1016/S2213-2600(21)00268-X
- San, S., Bastug, M. F., & Basli, H. (2021). Crisis management in authoritarian regimes: A comparative study of COVID-19 responses in Turkey and Iran. *Global Public Health: An International Journal for Research, Policy and Practice*, 16(4). doi:10.1080/17441692.2020.1867880
- Shakya, M. (2020). The politics of border and nation in Nepal in the time of pandemic. *Dialectical Anthropology*, 44, 223-231. doi:10.1007/s10624-020-09599-x
- Sharma, J., Aryal, A., & Thapa, G. K. (2018). Envisioning a high-quality health system in Nepal: if not now, when? *The Lancet Global Health*, 6(11), 1146-1148. doi:10.1016/S2214-109X(18)30322-X
- Sharma, K., Banstola, A., & Parajuli, R. R. (2021). Assessment of COVID-19 Pandemic in Nepal: A Lockdown Scenario Analysis. *Frontiers in Public Health*, 9. doi:10.3389/fpubh.2021.599280
- Singh, B., Singh, S., Singh, B., & Chattu, V. K. (2022). India's Neighbourhood Vaccine Diplomacy During COVID-19 Pandemic: Humanitarian and Geopolitical Perspectives. *Journal of Asian and African Studies*, 1(17). doi:10.1177/00219096221079310
- Singh, D. R., Sunuwar, D. R., Shah, S. K., Karki, K., Sah, L. K., Adhikari, B., & Sah, R. K. (2021). Impact of COVID-19 on health services utilization in Province-2 of Nepal: a qualitative study among community members and stakeholders. *BMC Health Services Research*, 21(174). doi:10.1186/s12913-021-06176-y
- Singh, R., Baral, K. P., & Mahato, S. (2020). An urgent call for measures to fight against increasing suicides during COVID-19 pandemic in Nepal. *Asian Journal of Psychiatry*, 54. doi:10.1016/j.ajp.2020.102259
- Singh, S., Nourozi, S., Acharya, L., & Thapa, S. (2020). Estimating the potential effects of COVID-19 pandemic on food commodity prices and nutrition security in Nepal. *Journal of Nutritional Science*, 9(51). doi:10.1017/jns.2020.43
- Sithey, G., Thowb, A.-M., & Lia, M. (2015). Gross national happiness and health: lessons from Bhutan. *Bulletin World Health Organization*, 93(8), 514. doi:10.2471/BLT.15.160754
- Thapa, R., Bam, K., Tiwari, P., Sinha, T. K., & Dahal, S. (2018). Implementing Federalism in the Health System of Nepal: Opportunities and Challenges. *International Journal of Health Policy and Management*, 8(4), 195-198. doi:10.15171/ijhpm.2018.121
- Tobgay, T., Dorji, T., Pelzom, D., & Gibbons, R. V. (2011). Progress and delivery of health care in Bhutan, the Land of the Thunder Dragon and Gross National Happiness. *Trop Med Int Health*, 16(6), 731-736. doi:10.1111/j.1365-3156.2011.02760.x

COMPLIMENTARY COPY



- Upadhyaya, D. P., Paudel, R., Acharya, D., Khoshnood, K., Lee, K., Park, J.-H., . . . Adhikari, M. (2020). Frontline Healthcare Workers' Knowledge and Perception of COVID-19, and Willingness to Work during the Pandemic in Nepal. *Healthcare*, 8(4), 554. doi:10.3390/healthcare8040554
- Valev, N. (2020). The Global Economy: Business and economic data for 200 countries.
- WHO. (2016). Noncommunicable diseases country profile: Nepal. *WHO*. Retrieved from [https://www.who.int/nmh/countries/npl\\_en.pdf?ua=1](https://www.who.int/nmh/countries/npl_en.pdf?ua=1)
- Zam, N. (2018). When Freedom of Expression Isn't Free: Journalism, Facebook, and Censorship in Bhutan. *The Diplomat*.

COMPLIMENTARY COPY