Covid-19 Prevention at the Grassroots Level:

Experiences, Perspectives, and Responses in Rural Kham, Eastern Tibet, China

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ABSTRACT: The sudden outbreak of the novel coronavirus disease (Covid-19) caused an unprecedented catastrophe worldwide. Different communities adopted a wide range of preventive measures to halt transmission of the disease. This article examines how rural Tibetan communities in China's eastern Tibet (Kham) have addressed this pandemic, including their popular discourses and practices concerning the ethics, etiology, and prevention of Covid-19. Through analysing the experiences, views, and responses of local Tibetans to Covid-19, this article reveals their underlying beliefs and values, and highlights the integration of their religious and medical practices. Analysis of ethnographic data shows that local Tibetans in Kham have not only relied on religious rituals and traditional Tibetan medicinal practices but have also adopted various modern public health measures to ensure effective prevention of the virus. Therefore, this study demonstrates not only a syncretic practice of religion and medicine in the landscape of Tibetan medical culture but also the practicality and adaptability of local Tibetans during crises.

KEYWORDS: Covid-19, eastern Tibet, preventive responses, religious practices, modern medical measures.

Introduction

While people were still immersed in the joy of welcoming the New Year, there was a sudden outbreak of the novel Coronavirus disease (Covid-19) in December 2019 in the Chinese city of Wuhan, which subsequently brought unprecedented catastrophe to the world (Li et al. 2020). With a sharp increase in infection and mortality rates in Wuhan, the central government of China enforced strict quarantine regulations on Wuhan on 23 January 2020 to limit the virus's transmission. However, Covid-19 had already spread extensively across the whole country due to intense migration before the Spring Festival (Xu et al. 2020: 324).

I was part of that massive flux, returning from Chengdu to Dartsendo (Kangding in Chinese) in the Kandze Tibetan Autonomous Prefecture of Kham to spend the Spring Festival with my family. Days after news reached Kandze Prefecture of the outbreak of Covid-19 and the lockdown in Wuhan, although many local Tibetans lacked a thorough understanding of the virus, I sensed their uneasiness. Soon afterwards, the first confirmed case was reported in the Tibetan Autonomous Region (TAR) on 24 January 2020, and from then on, cases began to be identified in other Tibetan regions as well.[1]

While locals debated whether these confirmed patients were Tibetans or non-natives after learning that the person diagnosed in TAR was a tourist from Wuhan, Kandze Prefecture reported a substantial number of domestic cases, particularly in its far eastern Dawu County (Daofu in Chinese, the neighbouring county to Dartsendo, where I was at the time).[2] These cases resulted in the quarantining of the entire prefecture, and Dawu County became the epicentre of Covid-19 for all Tibetan regions. The prefectural government and health bureaus, as well as Tibetan physicians across the region, established official protocols and published advice for

1. "西藏唯一新冠肺炎患者治癒出院" (*Xizang weiyi xinguan feiyan huanzhe zhiyu chuyuan*, Tibet's only novel coronavirus patient was cured and left the hospital), *Tibet.news.cn* (西藏頻道), 13 February 2020, www.tibet.news.cn/2020-02/13/c_138781219.htm (accessed on 28 December 2020).
2. As of 17 February, a total of 62 cases had been documented, 57 of which were in Dawu County. Sonam Lhundrop, "The 'Wounded Weanling': An Introduction to Daofu, the Epicenter of the Coronavirus Epidemic in the Tibetan Regions of China," *The Contemporary China Centre Blog of University of Westminster*, 6 March 2020, www.blog.westminster.ac.uk/contemporarychina/the-wounded-weanling-an-introduction-to-daofu-the-epicenter-of-the-coronavirus-epidemic-in-the-tibetan-regions-of-china (accessed on 29 December 2020).

prevention and treatment of the disease.[3] Tibetan medical institutions such as the Institute of Medicine and Astrology of Lhasa (Lhasa Mentsikhang), Qinghai Provincial Tibetan Medical Hospital, and various private clinics sent health workers. They donated a significant number of protective substances to target Tibetan communities in Dawu, simultaneously providing virus education outreach and encouraging stringent health protection measures in Tibetan communities (Tidwell 2020). Local residents also actively participated in the fight for disease response, demonstrating their creativity and adaptability in this time of crisis.

However, there has been little research on these local experiences and responses to epidemic prevention. In the Chinese scholarly community, most studies of Covid-19 have focused on the state's top-down responses to the disease (Chen 2021) and its consequences on economics (Wang and Jia 2020; Wright et al. 2020) or international political relations (McKibbin and Fernando 2020; Qi 2020). The fact is that although rural communities are particularly vulnerable to the effects of the disease, due to a lack of medical facilities, they have developed disease prevention and control measures based on their shared culture and tradition. However, the epidemic narratives and preventative strategies of rural communities have received little attention.

Therefore, this article will reveal first-hand pandemic encounters, beliefs, and reactions of Tibetan communities in Kham. It specifically asks how local ordinary Tibetans have experienced and shared their narratives and perspectives about Covid-19, what precautions they have taken to prevent the epidemic, and what they understand of contagious diseases and effective preventive measures. This article aims to emphasise the importance of grassroots community disease responses that align with local culture and religion. These locally adopted virus prevention strategies are essential in their own way and provide insights into the wider topics of indigenous medical practices that have been observed across various contexts in Asian medicine.

Several blogs and special series have been devoted to the pandemic situation and prevention in Tibetan regions.[4] For example, the journal *Tibetan Medicine in China* (*krung go'i bod kyi gso rig* ཀྲུང་གོའི་བོད་ཀྱི་གསོ་རིག) dedicated an entire issue to Covid-19. It especially presented a variety of perspectives and translated works on the virus, along with experts' recommendations on epidemic prevention, clinical diagnosis, and treatment (Dorje 2020). A special issue of *Traditional Tibetan Medicine Studies* (*bod sman slob gso dang zhib 'jug* བོད་སྨན་སློབ་གསོ་དང་ཞིབ་འཇུག) investigated clinical experiences and the efficacy of Tibetan and Chinese traditional medicine in preventing and treating the disease, particularly highlighting the potency of Tibetan remedies (Migmar 2020). Rinzin and Dundrup examined the clinical features of coronavirus cases in Dawu County. They discovered that adults (aged 17-70) were susceptible to the virus and had significant symptoms such as hypertension, diabetes, and shortness of breath (2020: 31). They argued that Tibetan medicine has contributed to a decrease in confirmed cases and relief of symptoms (ibid.).

Moreover, a hotspot series on traditional Asian medical literature and practices for anti-epidemic recipes and precautionary measures provided brief accounts of the history, contemporary practices, and politics of epidemics in general, particularly in connection with Tibetan traditional medicine (Craig, Gerke, and van der Valk 2020). However, none of these accounts emphasised the discourses and activities of ordinary Tibetans during the pandemic. Although Simula et al. (2020) analysed Tibetan pastoralists' reactions to the impacts of virus control policies, there are differences between people's direct responses to the disease and virus prevention policies such as quarantine. Barbara Gerke's study explored exiled Tibetans' responses to Covid-19 (2020), but the experiences and responses of Tibetans in Dharamsala, India, might vary from those of Tibetans in China. As I will demonstrate in the following sections, local Tibetans in Kham have varying interpretations of the virus and have used novel disease prevention strategies at different stages of the pandemic's evolution, such as direct consumption of caterpillar fungus (also called cordyceps).

The findings of this research are based on ethnographic data gathered in Kham. There are three primary reasons why Kham Tibetans are worth studying. First, being at the epicentre of Covid-19 among all the Tibetan regions, they have experienced and responded to the virus more dramatically than other Tibetan people. Second, since I was there the whole time, I witnessed and captured local Tibetans' encounters, feelings, and responses to the disease. Third, being a local of the region, I had easy access to a diverse range of interlocutors who generously shared their narratives and perspectives on the ongoing pandemic. The research was carried out between February and September 2020.[5] During the first three months, when the state enforced travel restrictions and quarantine, I conducted informal and semi-structured interviews with 40 locals from different social and economic backgrounds via WeChat and telephone.[6] From May to September, when Covid-19 constraints were largely lifted, I was able to visit five different communities and conduct qualitative interviews with 25 interlocutors.

Medical practices in contemporary Kham

Tibetan medicine is not the only medical system available to Tibetan communities. Since the 1960s, numerous state-supported Western or biomedical facilities have been operating throughout Tibet's urban and rural areas, and are well utilised by the public (Adams 2001: 544). Thus, Tibetan communities, including those in central Tibet and Amdo, have access to various medical models when seeking treatments for ailments (He et al. 2011: 926).[7] An individual's

3. Kunchok Gyaltsen, "新冠肺炎的三級預防" (*Xinguan feiyan de san ji yufang*, Tertiary prevention of Covid-19," *Qinghai daxue Zangyi xueyuan gongzhong hao* (青海大學藏醫學院公眾號), 7 February 2020, https://mp.weixin.qq.com/s/n6YPk-wdVrmz8nSqthQ5Cg (accessed on 15 October 2021); Yang Ga དཔལ་དགའ་དགའ་།, "གསོ་རིག་བདག་དབང་དང་རྟོག་བཏུས་མེད་དགག་སྐོར་གླེང་བ།" (*gso rig bdag dbang dang tog dbyibs nad dug skor gleng ba*, A discussion on the ownership of *Sowa Rigpa* and Covid-19)," *The World of Physicians* (འཆི་རྒྱད་གླེང་།), 16 February 2020, https://mp.weixin.qq.com/s/QErevUgJkO4k2IL91ofMFA (accessed on 15 October 2021).
4. Lakha Kunbzang, "Epidemic in a Tibetan City: A Reflection," *The China Story*, 13 May 2020, https://www.thechinastory.org/epidemic-in-a-tibetan-city-a-reflection (accessed on 27 December 2020); Yu Lha, "Fighting the Coronavirus in Local Languages," *Language on the Move*, 17 February 2020, https://www.languageonthemove.com/fighting-the-coronavirus-in-local-languages (accessed on 27 December 2020).
5. The identities of the targeted villages and interlocutors are intentionally left ambiguous for the purpose of making them as anonymous as possible, given the risky political implications of the debate itself.
6. WeChat has played an important role among local Tibetans as a means of learning information about Covid-19 and responses to it.
7. Amdo is one of the three traditional provinces of Tibet, the others being Ü-Tsang in the West and Kham in the East. It is currently situated in three Chinese provinces: northern and eastern Qinghai, southwest Gansu, and northern Sichuan.

decision to engage with a particular medical system is influenced by personal factors such as income, disease severity, and religious consultation (Zhang 2021: 88).

In Kham, medicine generally refers to both Tibetan medicine and biomedicine. Even though they are not directly termed medicines, religious rites and local remedies are considered by local Tibetans to have medically preventive and curative functions. This is because most Tibetans tend to interpret the causes of disease and the notions of potency from a Buddhist perspective, such as karma. Such practices have therefore remained an integral component of local medical practices. However, practitioners and physicians of modern biomedicine often dismiss ideas and activities related to religion as nonscience. This divergence in perception and attitude toward disease and healing raises questions about what constitutes "scientific" treatment.

The relationship between religion and medicine/science in Tibetan medical culture has been widely researched (Samuel 2007; Hofer 2008; Czaja 2017; Tsering 2019). For example, Frances Garrett elucidates Tibetan medicine's overlapping and fluid nature, specifically the interweaving of religion, science, and medicine (Garrett 2008: 5). Janet Gyatso reveals the intersection of early modern sensibilities and religious values in traditional Tibetan medicine and suggests important dimensions of Buddhism's role in developing Asian and global civilisation (2015). Further examples demonstrate the interplay between medical and spiritual healing practices in Tibetan medicine (Samuel 2014; McGrath 2019; Czaja 2020).

The process of distinguishing professional boundaries and establishing the "scientific" basis for Tibetan medicine is linked to interaction and engagement with biomedicine, modernity, politics, and social currents (Adams, Schrempf, and Craig 2011: 18). In particular, the communist Chinese government has made significant efforts throughout its history to eradicate religious ideologies and traditions as superstitions and barriers to modernisation (Adams 2001: 543). Such political and social conditions have made the term religion, as well as related expressions, politically unsafe and sensitive in contemporary Tibet. Tibetan medical institutions and doctors have purposefully excluded Buddhist elements from their medical curriculum and have incorporated elements of Western medical or biomedical thought and practice (Adams and Li 2008: 106). Therefore, debates over what constitutes a correct or scientific medical practice and whether a sacred practice is good or not in Tibetan medicine have long been held among Tibetan medical intellectuals. They have attempted to merge their hospitals and technologies for greater integration with biomedical peers and to properly position Buddhist beliefs and practices when negotiating the practical challenges posed by discourses and assumptions about the state's modernisation project (Ding 1997; Adams 2001; Gyatso 2015). For instance, Tibetan physicians and scholars have tried to prove the scientific status of Tibetan medicine by legitimising certain knowledge and practices according to the claims of a uniform and universal Western science or delegitimising others by either disproving or simply dismissing them as unscientific (Adams, Schrempf, and Craig 2011). However, they fail to realise that the term "science" must consider the religious context of Tibetan medicine.

Furthermore, the sacred ideas and practices of Tibetan medicine are deeply embedded in Tibetan society, shaping the ways Tibetans perceive health and illness and conduct "Buddhist medicine," even today (Gerke 2016: 196). For instance, local people often perform religious rituals and consume holy substances as an essential part of treatment for infectious diseases. Thus, debating the meanings of religion and science and their distinction is insignificant in Tibetan medical culture, as Tibetan medicine includes all health-promoting beliefs and activities, knowledge, and experiences that are well-rooted in its scientific principles and are contributed to the system by members of society (Hofer 2014: 7).

In summation, medical practice in Tibetan areas, especially Kham, draws no particular distinction between scientific and religious knowledge as categorised notions but rather signifies a combination of knowledge, intelligence, and creativity used to cure disease and balance health (Adams, Schrempf, and Craig 2011: 5). As we shall see in the following sections, local Tibetans' narratives and views on Covid-19, as well as their preventive efforts, blur the relationship and boundary between science and religion, and between modern and traditional medical practices.

Local experiences and narratives about Covid-19

The hazard of Covid-19 was understood to be real, even if local Tibetans did not experience it at the beginning of the epidemic. While Wuhan was under lockdown, many Tibetans in Kham had a common view that their localities would be immune to the virus. For example, a villager recalled:

> I first learned about the disease from my niece. She told me that a very transmissible virus was found in a Chinese city, and many people were infected. The government locked down the city and isolated patients. But I thought maybe this disease was just like SARS in 2003.[8] It spread widely to many Chinese cities, but no cases were discovered in Tibetan areas. So, I was not concerned that the virus would reach our place. (Interview with an elder, 5 October 2020)

However, when I continued to ask why Tibet would be immune to the virus, I got a variety of explanations.[9] For instance, a local man stated:

> I was told the current epidemic was caused by someone who ate bats, and the first infected case was found at a seafood market. Nowadays, many people like to eat various seafood and wild animals. I saw on TV that frogs were roasted and snakes skinned alive. This is due to a lack of religious belief, and retaliation by these creatures must cause this disease. But we Tibetans believe in karma and that all beings' lives are equally worthy. I think people should release more lives[10] to compensate for this crisis. (Interview with a middle-aged man, 16 November 2020)

8. In 2003, SARS spread quickly through many areas of China, significantly affecting countless Chinese people's daily practices and posing a substantial threat to the country. However, it never affected Tibetan areas, and only a single Tibetan contracted the illness.
9. According to Barbara Gerke's study, a different view was asserted by Tibetan exile communities in India, who regarded Tibetan settlements as high-risk areas for pandemic breakout due to Buddhist pilgrims from China (Gerke 2020: 191).
10. "Life release" refers to the practice of liberating animals from cages, water tanks, etc., as a positive act of compassion, and it occurs throughout Buddhist Asia (Tan 2017).

The belief that Covid-19 is retribution for killing is a widely held viewpoint among many Tibetans in Kham. They believe killing is a great sin, especially killing aquatic beings such as frogs and snakes, as they are regarded as one of the most emblematic classes of supernatural forces in Tibet's realm of deities and spirits (Luodan 2013). Thus, killing and defiling them has destructive effects such as plagues and natural disasters (ibid.). In Tibet, there are numerous stories regarding the negative karmic consequences of killings, including epidemics. Thus, many locals perceived Covid-19 as a warning to reestablish a more virtuous way of life that values wildlife.

With the increased number of coronavirus infections, local people discussed its source, which led to the more prominent topic of Tibetan belief and mortality. Some linked the virus to a concept of "'degeneration,' the shortening of human lives as predicted in Buddhist scriptures because of immoral and impure practices brought by the Chinese," such as unclean food, behaviour, and environmental influences.[11] Thus, many Tibetans believed that they would be "exempted" from the virus, since the epidemic was spread by outsiders and their impure diets and practices.

Moreover, narratives about the sacredness of their hometowns as "protection" appeared repeatedly in everyday conversations about the disease. As a local woman stated: "Our hometown's various unique protective deities and local deities would bless and protect us from the virus" (interview with a local woman, 20 February 2020).

Tibetans believe their cosmic realm is inhabited not only by human beings and animals but also by spirits, deities, ghosts, and demons (Wellens 2010: 132). Local protective deities are essential as they safeguard the territory and its people by defeating evil forces (Karmay 1994: 115). Thus, villagers often worship and pray to these deities. Viewed in this context, many Tibetans contended that the power of local deities could protect them from the current virus.

Additionally, Covid-19 has provided a context in which Tibet's remoteness and high-altitude environment, its sparse population, and local food became justifications for the virus not posing a threat to Tibet. For example, Tibet's natural conditions, such as the strong ultraviolet rays of the sun and the quality of air, can limit the virus' activity and thus decrease infection. Other examples such as the Tibetan food *tsampa* (roasted barley), yak meat, and dairy products supplement nutritional elements to strengthen Tibetans' immune system, allowing them to avoid virus infection.[12] These assumptions clearly relate to the fact that only one single infection was discovered in Tibetan areas during the SARS outbreak. Such facts not only prompted a reappraisal of "negative" perceptions about China's marginalised groups and local remedies but also validated Tibetans' faith in the power of their religion and culture and the sacredness of their homeland. Thus, Tibetans believed Tibet's unique topography and food would protect them again during the pandemic.

However, Tibetans' narratives and perceptions of Covid-19 changed significantly when coronavirus cases were discovered in Dawu County. For instance, one man recalled:

> When sick people were detected near my hometown, I was terrified. I was informed that the virus had a long incubation time, and I couldn't recall recent contacts. I was worried that I might accidentally encounter infected patients. Under such stress and anxiety, I wondered if I was infected. Would I transmit it to my family or even the entire village? Such ideas haunted me, but I was too scared to go to the hospital. Fortunately, nothing terrible occurred afterwards. (Interview with a local man, 18 July 2020)

A similar concern was also shared by a local driver when infected patients were identified in Tibetan areas:

> When sick people and those in close contact with them were taken to collective quarantine spots, I noticed local villagers' uneasiness and desire to learn more about the disease. I stopped driving my taxi and stayed home. Although I was anxious about contracting the virus, I was even more concerned about contaminating the whole community. If this happened, then I would be the sinner. (Interview with a local driver, 1 October 2020)

The driver used the term "contaminating" to describe the act of spreading the virus. This implies that he viewed the epidemic as a poisonous substance and the infected people as impure due to their exposure to the disease. Indeed, Tibetans consider epidemics to be caused by impurities through contact with contaminated animal parts, and believe that such contaminants can only be eliminated by performing religious rituals (Simioli 2019: 229). Moreover, for many Tibetans, the sense of community is more than merely a geographical sense of everyday living within a social structure; it is also a transcendence of social statuses that order a social community. Particularly in the village where the driver comes from, causing the community to suffer as a result of one's carelessness, or faults such as transmitting the virus to the entire village, are regarded as irresponsible acts (Sonam 2020: 117-50). Thus, many local Tibetans, including the driver, lived under the dual pressures of fearing both contracting and spreading the virus to the community.

In such a context, some Tibetans viewed Dawu's high infection rate as retaliation for locals' excessive mining and logging; others blamed local businesspeople and entrepreneurs for bringing the disease home.[13] Indeed, Dawu had been extensively exploited for its rich timber and mining resources during the late twentieth century (Ryavec and Winkler 2006: 43). Local Tibetans and Chinese contractors congregated in county towns and smaller villages, seeking economic benefits through the lumber industry and gold mining (ibid.). Thus, Dawu and its people have ascribed the loss of moral deeds to activities such as excessive exploitation of the environment, expansion of the market economy, and growing demand for commercial goods. Local Tibetans were advised to rectify their misdeeds and regulate their lives by the models, injunctions, and practices outlined in religious teachings on values and morals to stop the disease.

The above narratives and experiences demonstrated changing public opinions and psychological dynamics among local Tibetans

11. Alice Su and Eleanor Moseman, "A Tibetan Journey in the Time of Coronavirus," *Los Angeles Times*, 5 March 2020, https://www.latimes.com/world-nation/story/2020-03-05/a-tibetan-journey-in-the-time-of-coronavirus (accessed on 12 December 2021).
12. Interview with a local man, 17 July 2020.
13. Sonam Lhundrop, "The 'Wounded Weanling' (...)," op. cit.

in Kham at different stages of the pandemic. For example, their attitude toward Covid-19 shifted significantly from lack of concern to solicitude when they first learned about cases in Wuhan and later in Tibetan regions, particularly in Dawu. Min Xueqin's research has revealed that when disasters occur in their familiar environment, local communities desire information about the situation and their panic is heightened (Min 2003: 45-52). Similarly, local Tibetans' awareness and willingness to learn more about the disease increased after patients were identified near their home territories.

Soon after, a humorous dubbed video clip began circulating among locals via WeChat and Douyin.[14] This video comically delivered the message that no Tibetans would be immune to the virus and thus advised everyone to remain home and avoid gatherings and festivals.[15] Meanwhile, regular updates on confirmed cases and deaths, symptoms, and preventive measures for Covid-19 were reported through the state's mainstream media outlet CCTV. Tibetan physicians and clinics have provided virus-related information and recommended Tibetan medical prevention guidance through TV interviews and public lectures to the Tibetan community and even to mainland Chinese patients since the outbreak of Covid-19.[16] Other translated audiovisual resources and translations of virus-related public emergency information, health warnings and advisories,[17] and vocabularies associated with the novel coronavirus,[18] have also been made available to local people in both Tibetan and local dialects.[19]

Social media platforms such as WeChat and Douyin were essential in disseminating disease control and treatment information. Yet, these tools were also the primary sources of misleading information and conspiracies during the pandemic. For example, rumours about shortages of common supplies and suggesting fresh meat as an intermediate host for the virus were circulated among the public. Anxiety and desperation were extensively observed among local Tibetans in Kham. These feelings were accompanied by an increase in searching for information and solutions to overcoming Covid-19, particularly in areas with high infections that were placed under strict lockdown. The threat of contagion, potential death, and perceptions of safety prompted local people to take all necessary precautions to combat the disease.

Preventive responses from rural communities

The highest infection rate in Kandze Prefecture led local Tibetans to follow strict disease control policies. For example, the authorities quarantined the prefecture by prohibiting travel and closing all businesses. Identification registration and temperature checkpoints were set up every 500 meters along the streets, and each household was issued an entry-pass card that allowed them to purchase daily necessities every three days. Regular visits to public spaces were performed by an anticontamination sanitation vehicle. The van disgorged a crew of masked, white-suited hygienists who conducted inspections and disinfected shops with giant pump dispensers. Furthermore, personal precautions, such as wearing masks, constantly washing hands, sanitising homes with 75% alcohol disinfectant, limiting social interactions, and maintaining social distance were frequently propagated to local people by local authorities and visiting "experts."

Besides modern scientific health interventions and standard government pandemic responses, traditional Tibetan medicinal and religious practices were the primary preventive measures. As stated above, the cause of Covid-19 was understood within the context of Buddhist ideas of negative karma and supernatural forces. Thus, many locals believed that religious activities and substances were more effective than hygiene measures in treating an epidemic. Although monasteries were closed and communal rituals were prohibited during the pandemic, local Tibetans in Kham adopted various religious-based rituals and local remedies as virus precautions on which the success or failure of ongoing disease prevention and treatment hinged.

Recitation of religious mantras

Mantras are essential as a treatment for a wide range of incidents and diseases, and descriptions of such treatments can be found in Tibetan medical and religious texts (Slouber 2017: 57-77). In Tibetan communities, different religious mantras and rites are used to treat ailments of diverse causes and conditions. Some are employed daily to sustain health and longevity, while others are utilised in particular situations to avoid a specific disease or incident.

The Vajra Armor Mantra has been recited by many Tibetans since the beginning of the pandemic.[20] This mantra is considered to be highly effective for preventing various infectious diseases, purifying negative energies, and providing protection against sickness and bad omens (Simioli 2016: 398). Although no villagers fully understood the meaning or knew its author or origins, most of them learned it from the audio recordings of local *khenpo*[21] and monks that were circulated through WeChat. Many locals were encouraged to recite the mantra regularly to enhance the effectiveness of medicinal substances against the disease. For example, a villager stated:

14. Douyin helped collect and disseminate state news, health policies, and personal stories during the Covid-19 pandemic.
15. This video was forwarded to me by a local Tibetan. Although the dubbing author is unknown, it is a Chinese drama dubbed by a local Tibetan, conveying the highly contagious nature of Covid-19 and the suggestion of quarantine.
16. Paldrak དཔལ་བྲག་མ།, "བོད་ཡུལ་གསོ་རིག་གི་རྟོག་དཔྱོད་ནད་དུག་གསར་པའི་གློ་བའི་ཚད་རིམས་ཀྱི་བརྟག་བཅོས་དབྱད་གཞི་མ།" (*Bod lugs gso rig gi tog dbyibs nad dug gsar pa'i glo ba'i tshad rims kyi brtag bcos dbyad gzhi ma*, Tibetan medical treatment for the novel coronavirus pneumonia), *Lhoka Hospital* (སྟོད་ལྷོའི་དྲུང་ཁང་།), 12 February 2020, https://mp.weixin.qq.com/s/VJlZYaP8vldd4VirXEh7uQ (accessed on 21 December 2021).
17. "རྟོག་དཔྱོད་གློ་ཚད་གསར་པའི་བོད་སྨན་ཤེས་བྱའི་བཏུན་ཕབ།" (*Tog dbyibs glo tshad gsar pa'i bod sman shes bya'i brnyan phab*, Tibetan medicine knowledge on the novel coronavirus pneumonia), *Yuthok Forum* (ཡུ་ཐོག་གློ་ཆོས།), 6 February 2020, https://mp.weixin.qq.com/s/8Bn8xBMNX5TTnISOZ_ZXiw (accessed on 20 December 2021).
18. "關于公布'新型冠狀病毒肺炎相關術語藏文翻譯規範'的通知" (*Guanyu gongbu "xinxing guanzhuang bingdu feiyan xiangguan shuyu Zangwen fanyi guifan" de tongzhi*, Notice on the publication of the Regulations on Tibetan Translation of New Coronavirus Pneumonia Related Terms), *Qinghai sheng Zangyi yaoxue hui* (青海省藏醫藥學會), 26 February 2020, https://mp.weixin.qq.com/s/Ov55yThbnfhjHXBq8msyfA (accessed on 10 January 2021).
19. Yulha Lhawa, "Speaking the Virus: The Importance of Reaching Rural Tibetan Communities in Their Vernaculars," *Australian Himalaya Research Network*, 12 November 2020, https://aushimalaya.net/2020/11/12/speaking-the-virus-the-importance-of-reaching-rural-tibetan-communities-in-their-vernaculars-about-covid-19 (accessed on 27 December 2020).
20. The Vajra Armor Mantra is one of the most powerful healing practices in Tantric Buddhism, traditionally believed to have been introduced to Tibet by Padmasambhava (known as Guru Rinpoché). It is composed of both Sanskrit and Tibetan syllables.
21. *Khenpo* refers to senior Buddhist monks who have received a degree for higher Buddhist studies in Tibetan Buddhism.

> We must regularly chant mantras and make offerings of burning juniper twigs to ward off negative influences from demons and evil spirits. My whole family would chant the Vajra Armor Mantra together daily, as its potency in plague prevention had been approved by many high-ranking lamas. (Interview with a local man, 30 August 2020)

Mantra recitation and the use of incense may be interpreted as unscientific or superstitious in other cultural contexts. Still, the shared cultural logic of healing is important to health-seeking and healing practices in contemporary Tibetan societies (Schrempf 2011: 157-83). Epidemics, in particular, are often thought to be triggered by the action of an evil spirit (Gerke 2020: 197). Spirit, as stated by Geoffrey Samuel, can be seen as "labels for kinds of relationships with one's mind-body complex, with other people and with other aspects of one's environment. Culturally specified modes of interaction with spirits (possession and exorcism, spirit-mediumship, shamanic encounters, etc.) can thus provide ways of transforming and renegotiating these relationships. Such renegotiating may be an essential part of a healing process" (Samuel 2006: 124).

In Tibetan medical culture, disease treatment encompasses not only the physical body but also the mind, as well as social and physical environments. Following such an understanding, local Tibetans easily referred to the Covid-19 pandemic as a spirit-caused contagious disease. They believed that the need for pacifying spirits and restoring meaning to the human-spirits relationship must be carried out through religious ceremonies. Therefore, mantra recitation and ritual offerings are effective methods of preventing and treating the present virus.

Wearing Tibetan medical amulets

The amulet of nine-ingredient black pill (*nag po dgu sbyor* ནག་པོ་དགུ་སྦྱོར།, Figure 1)[22] was widely applied as a preventive method during Covid-19, though it had already become famous and popular during the SARS outbreak in 2003 (Craig and Adams 2008: 2). Tibetans believe tying this amulet around the neck and keeping it under the nostrils prevents all contagious diseases (Tidwell 2020). Thus, during the Covid-19 pandemic, numerous amulets were produced by Tibetan clinics and donated to infected Tibetan communities, including Dawu County. According to a local woman, this amulet was very difficult to obtain during the earliest stage of the pandemic. She asserted that "everyone in my village still wears it, and one should never take it off."[23] Her statement exemplifies Tibetans' appreciation for the amulet's potency.

Nonetheless, not all Tibetans agreed on the significance of the amulet in virus protection. Thupten Phuntsok, a professor emeritus of medicine, accused Tibetan physicians of benefitting from the crisis by selling amulets.[24] He even criticised amulets as being useless and meaningless during epidemics. For his assertions, many Tibetans condemned Thupten Phuntsok and described him as someone who holds wrong views about Tibetan religion and culture (*lta log pa* ལྟ་ལོག་པ།). Possibly due to the pressure of public opinion, Thupten Phuntsok later stated that one could adopt any preventive measures according to one's preferences and beliefs, including religious precautions.[25] He further urged Tibetan physicians to donate more amulets to the public. Despite the disputes over the nine-ingredient black pill amulet, many local Tibetans used it as a powerful disease prevention strategy. It provided individuals with a sense of security and served as a talisman of hope, belonging, and resilience during difficult times.

Figure 1. The nine-ingredient black pill amulet

Credit: photo taken by the author in March 2020.

Consumption of various precious pills

Tibetan precious pills are not only medicinal substances but also ritually empowered by Buddhist lamas. Thus, precious pills have been utilised as a precautionary measure during Covid-19, as Tibetans believe these pills confer protective qualities on those who consume them. There are eight different types of precious pills for various ailments, and each one is infused with different herbal and mineral ingredients (Prost 2008: 77). Due to their efficacy, these pills are often recognised as the most potent drug in Tibetan medicine (Craig and Adams 2008: 14). They are in great demand in Tibetan communities throughout China and the world (Hofer 2008: 177).

Since the Covid-19 outbreak, demand for these precious pills has

22. The instructions for making such amulets can be obtained in Tibetan classical medical texts. The amulets contain medico-ritual potencies of protective deities, mantras, and other substances and are wrapped in a cloth sachet.
23. Interview with a local woman, 7 October 2020.
24. Thubten Phuntsok and William McGrath, "Masks, Mantras, and the Black-9 Pill: Thubten Phuntsok and Tibetan Netizens on Coronavirus and Tibetan Medicine," *High Peaks Pure Earth*, 4 February 2020, https://highpeakspureearth.com/masks-mantras-and-the-black-9-pill-thubten-phuntsok-and-tibetan-netizens-on-coronavirus-and-tibetan-medicine (accessed on 12 January 2021).
25. Thubten Phuntsok ཨུ་བསྒྲན་ལྡན་ཚོགས།, "ནད་ཡམས་སྔོན་འགོག་གི་བབོད་སྐུལ།" (*Nad yams sngon 'gog gi 'bod skul*, Call for correct measures to prevent disease), *Yueguang Zangwen wangzhan* (月光藏文網站), 25 January 2020, https://mp.weixin.qq.com/s/MhHlU1qXGQhwIZuSDMY0sA (accessed on 6 May 2020).

risen dramatically, particularly for one called *mangjor* pill, which was used to treat all types of compounded and ordinary poisonings. As a local Tibetan doctor stated:

> Precious pills are the essence of Tibetan medicine; even exchanging a yak for a pill was impossible in the past. Although it is more widely available now, the current disease has increased local people's demand for these pills. In particular, the *mangjor* pill sold out in many Tibetan clinics. Some Tibetan families tried to obtain these pills from relatives and friends in India. (Interview with a local Tibetan doctor, 29 September 2020)

The most potent ingredient of the precious pills is believed to be the blessings bestowed upon them (Czaja 2015: 36). Indeed, Tibetans maintain that precious pills that have not been blessed or empowered are of lesser quality than those that have (Prost 2008: 77). To ensure the purity and efficacy of the precious pills, Buddhist lamas must perform complex ritual empowerment of the medicine, such as performing meditations and reciting mantras (Czaja 2015: 36). Due to their combination of both the sacred element (consecrated rituals) and medicinal substances, such pills are regarded as possessing the ability to prevent any contagious disease and thus represent a special kind of Tibetan medicine that is still highly sought after by Tibetans. Thus, precious pills became a vital method of preventing the Covid-19 disease for local Tibetans.

The utilisation of traditional medical herbs

The emergence of Covid-19 resulted in another increase in the domestic sale and prestige of traditional Chinese and Tibetan medicinal products (Luo et al. 2020: 243-50; Tidwell 2020). For instance, Lianhua Qingwen capsules (*lianhua qingwen jiaonang* 蓮花清瘟膠囊)[26] and Banlangen granules (*banlangen* 板藍根)[27] regained popularity due to their apparent in vitro inhibitory effects against the virus.[28] According to a local Tibetan, both Chinese and Tibetans lined up to acquire and store these two drugs, which quickly sold out across the area.[29] However, medical scholars such as Zhang Hongtao (a professor of pathology and laboratory medicine) doubted the effectiveness of these two medicines, and claimed that they would require more clinical trials.[30]

Another medical herb receiving widespread praise during Covid-19 is the so-called caterpillar fungus (Figure 2), a fungus native to the Tibetan Plateau and the Himalayas (Shrestha et al. 2010: 228). Although it has never been an important ingredient in Tibetan medicine, its popularity and demand as a medicinal herb has soared in recent decades in China owing to its supposed effectiveness in boosting immunity during the SARS outbreak in 2003 (Shrestha et al. 2013: 518-9). Due to its medical value, caterpillar fungus has become one of the most valuable medical commodities and has been widely traded worldwide in recent years. Therefore, collecting caterpillar fungus has become a significant source of cash income for rural Tibetans.[31]

During the Covid-19 pandemic, the significance of caterpillar fungus in boosting immunity was reemphasised.[32] For instance, Tang Yi, a traditional Chinese medicine doctor, stressed its efficacy in preventing the epidemic at a press conference on the prevention

Figure 2. Caterpillar fungus

Credit: photo taken by the author in October 2020.

26. "鍾南山院士在中歐抗疫交流會上透露連花清瘟治愈率達91.5%" (*Zhong Nanshan yuanshi zai Zhong Ou kangyi jiaoliu huishang toulu lianhua qingwen zhiyu lüda 91.5%*, Academician Zhong Nanshan revealed at the China-Europe anti-epidemic exchange conference that the cure rate of Lianhua Qingwen reached 91.5%), *Sohu News* (搜狐新聞), 28 March 2020, https://www.sohu.com/a/383905246_120513473 (accessed on 17 January 2021).
27. "鍾南山稱白雲山板藍根對新冠病毒有效: 網友呼'廣藥集團在收智商稅'?" (*Zhong Nanshan cheng baiyunshan banlangen dui xinguan bingdu youxiao: Wangyou hu "Guangyao jituan zaishou zhishang shui"?* Zhong Nanshan said that Baiyun brand *banlangen* is effective against the novel coronavirus: Netizens called out "Guangzhou pharmaceutical group is collecting IQ tax"?), *Sohu News* (搜狐新聞), 20 October 2020, https://www.sohu.com/a/426092658_644547 (accessed on 17 January 2021).
28. Both are Chinese herbal medicines used to treat colds and fever, and they had some preventive effects against SARS in 2003 (Fang et al. 2009: 123-8; Ye et al. 2013: 329-31).
29. Interview with a local man, 20 November 2020.
30. "鍾南山團隊新發現" (*Zhong Nanshan tuandui xin faxian*, The latest discovery of Zhong Nanshan's team), *Sohu News* (搜狐新聞), 17 October 2020, https://www.sohu.com/a/425589723_120065570 (accessed on 22 January 2021).
31. Research on the caterpillar fungus phenomenon and its impact on Himalayan communities is found in Winkler 2008: 291-305; Sulek 2011: 9-22.
32. "鍾南山: 冬蟲夏草在呼吸系統疾病中提高了研究" (*Zhong Nanshan: Dongchong xiacao zai huxi xitong jibing zhong tigao le yanjiu*, Zhong Nanshan: Cordyceps improves research in respiratory diseases), *Sohu News* (搜狐新聞), 29 March 2020, https://www.sohu.com/a/384016319_120524477 (accessed on 24 January 2021).

and control of the novel coronavirus infection.[33] Zhong Nanshan, one of China's most renowned epidemiologists, also advocated the use of caterpillar fungus during the pandemic (Simula et al. 2020: 9). Moreover, Tibetans from Qinghai donated a large quantity of caterpillar fungus to patients in Wuhan (ibid.). This information and news circulated widely in Tibetan cyberspace. Consuming caterpillar fungus has therefore become a popular way for both non-Tibetans and Tibetans to prevent the virus. As a villager described it:

> Caterpillar fungus is a rare and expensive herb. I was told it could cure even cancer, which explains its high price. Both Chinese and Tibetan doctors said that it could stop the current disease. I saw many people in my village who also eat it. I collect caterpillar fungus every year but never eat it. But to prevent the virus, my family also ate it. (Interview with a local man, 30 November 2020)

Consumption of caterpillar fungus is also noted in another villager's statement as a Covid-19 prevention practice:

> If I had known that caterpillar fungus might be used to prevent the present disease, I would have preserved more for myself rather than selling them all. But who could have expected the outbreak in the first place? Fortunately, I was able to obtain some from my relatives. I was advised that grinding them would enhance their effectiveness, so I put the powder into tea and served it to my family every morning. (Interview with a local woman, 30 August 2020)

The practice of using insects, animals, and their by-products as components of medication has a long history in Tibetan medicinal tradition (Czaja 2019: 1). However, only a few local Tibetans knew that the medical ingredients included insects, and fewer consumed them directly. As for the caterpillar fungus, most local Tibetans never had it before the Covid-19 pandemic. The main reasons are: first, it is their primary source of income and requires traveling great distances to harvest; second, locals believe that caterpillar fungus is an insect and thus eating it is sinful. However, since the Covid-19 epidemic, many local people have ingested large amounts of caterpillar fungus as a preventive strategy, believing that doctors recommended it for a reason. Facing such a highly transmissible disease, local Tibetans' fear and anxiety of contracting the virus have changed their attitudes toward caterpillar fungus. In particular, they now view caterpillar fungus as medicine and express a wish to preserve more for future use. Nevertheless, since the outbreak of Covid-19, many villages have imposed a leasing ban on caterpillar fungus harvesting to control virus transmission (Simula et al. 2020: 11). This restriction may limit some Tibetans' access to caterpillar fungus.

A syncretic practice of religion and medicine

Local Kham Tibetans' responses to Covid-19 demonstrate a syncretic practice of religion and medicine. They have used modern biomedical measures, religious practices, traditional remedies, and novel anti-epidemic recipes as effective precautionary measures. This form of intersection rekindles debate related to the interplay between religion and science and presents a novel common matrix of diverse medical practices.

First, the overlapping and fluid relationship between science versus religious, and modern versus traditional medical practices in Tibetan medicine has been well discussed by scholars such as Adams, Hofer, Gerke, and Gyatso. Still, they have primarily focused on presenting the interplay nature of Tibetan medicine and the debates over the relationship between science and religion among Tibetan medicinal professionals. Local ordinary Tibetans' medical views and practices have received little attention. Thus, this study demonstrates an interwoven practice of religion, science, and medicine among local Tibetans' perspectives on Covid-19 and their direct responses to the virus. It also argues for a fluid distinction between science and religion in rural Kham. For example, it is clear from the preceding ethnography that since the outbreak of Covid-19, local Tibetans in rural Kham have been heavily engaged in various preventive measures, including religious remedies and rituals. These religious-based activities that others deemed incompatible with science were believed to be capable of eliminating sins and driving away evil spirits, which are often indicated as the cause of the Covid-19 virus. Thus, rituals were performed as crucial and scientific methods to respond to and treat the virus.

Furthermore, Tibetan Buddhism has played a significant role in shaping the ontological worldviews from which local Tibetans in Kham get their concepts of health and healing, including how they view their bodies and diseases and how they choose to practise accordingly (Hofer 2014). For example, it is believed that an illness or epidemic is caused by a spirit and can only be cured through a range of rituals and medicinal practices (Hofer 2014: vii). These Buddhist habits of thought and practice in Tibetan medical culture provide the historical foundation for what many local Tibetans in Kham believe and do during times of crisis, such as turning to religious beliefs and activities.

Although it is difficult to gauge the efficiency of these religious practices in avoiding Covid-19, they were not simply performed as preventive measures; they also gained credibility through symbolic manipulations. Numerous local Tibetans living under lockdown have stressed the significant nature of religious activities and devotional deeds as a necessary part of disease treatment. They maintained the beneficial effects of such practices in combating the virus and generating positive coping attitudes and actions, such as a sense of security, calmness, and protection. For instance, this ethnography reveals that reciting mantra and wearing amulets reduced local Tibetans' fear during quarantine and strengthened their defence systems by helping them positively confront the obstacles and chain effects presented by the epidemic. Indeed, the findings of this study highlight the importance of cultural beliefs and religious practices in maintaining good mental health and resilience among local Tibetans during the pandemic. Therefore, it might be an overstatement to categorise religious practices as "scientific," but one can observe a pragmatic mix – an assemblage or entanglement – of religious, modern scientific, and professional Tibetan medical responses to

33. "天津舉行新型冠狀病毒感染肺炎防控工作系列新聞發布會" (*Tianjin juxing xinxing guanzhuang bingdu ganran feiyan fangkong gongzuo xilie xinwen fabuhui*, Tianjin holds a series of press conferences on the prevention and control of new coronavirus infection pneumonia), *State Council Information Office Website* (國務院新聞辦公室網站), 1 January 2020, www.scio.gov.cn/gxzt/dtzt/2020/jgkylflkxxgkqmjs/dfxwfbh_21016/tjsxwfbh/202208/t20220802_288717.html (accessed on 8 November 2023).

Covid, with often fluid boundaries between them.

Second, local Tibetans did not limit their disease prevention efforts to traditional Tibetan medical and religious practices; they also embraced new disease preventive responses and modern public health precautions such as physical distancing, facial masks, modern medication, and hand hygiene. For example, modern pharmaceuticals, blessed precious pills, and religious substances were all ingested jointly to prevent the virus. In particular, the consumption of caterpillar fungus was a new practice among local Tibetans in rural Kham during the Covid-19 pandemic. Before the pandemic, many locals saw eating caterpillar fungus as sinful, but it became a crucial antivirus measure. Thus, this study signifies local Tibetans' disease responses as a process of syncretism that has added new practices to the landscape of Tibetan medical practices and has expanded Tibetans' repertoires rather than replacing more traditional practices. Moreover, this research also underlines how ideas of what local Tibetans in Kham refer to as religion and medicine are also fluid and changing through time.

Third, ideas of an idealised Tibet as a place of natural and spiritual purity are often portrayed and promoted to China's middle class by local governments for tourist development purposes (Hillman 2009: 3). Through these lingering stereotypes, most Chinese consider Tibetans to be traditional and conservative, and loyal and devoted to their religion and culture. Meanwhile, Tibetans also reinforce the distinctiveness of their landscape, religion, and traditional culture to renew pride in their cultural heritage and sense of identity. For example, as this ethnography stated, some local Tibetans believed that Tibet would be exempt or protected from the pandemic due to the sacredness of the landscape. Others, such as medical professionals, particularly emphasised the efficacy of Tibetan traditional medicines such as protective amulets in Kham during the Covid-19 pandemic (Migmar 2020). These narratives and representations underline a "different" and "unique" image of Tibet, distinct from mainland China.

However, this study reveals that local Tibetans were more concerned with practical issues such as virus prevention and treatment than the distinction between modern medical and religious measures or scientific evidence of preventive measures when facing such a highly transmissible disease. For example, local Tibetans in rural Kham performed both religious rituals and modern medical responses to prevent Covid-19, as opposed to relying solely on or remaining faithful to their own traditional and spiritual practices. In addition, this study also represents the inconsistent thoughts and behaviour of local Tibetans throughout the pandemic. For instance, they complained about the pandemic restrictions placed on visiting monasteries and gatherings for communal ceremonies, but did not act accordingly. They stayed in isolation and carried out religious rituals at home. Some locals stated that precious pills and protective amulets were more efficient than modern preventive measures, but they still observed hygiene measures and had recourse to biomedicines. There is no necessary link between contradictory attitudes and behavioural shifts from the examples above. Therefore, the findings of this research demonstrate a syncretic application of both religious and modern medical responses among local Tibetans in rural Kham during the pandemic and highlight their adaptability and flexibility in incorporating disease prevention strategies from various medical practices. In other words, local Tibetans' virus prevention responses are the product of a complex entanglement of local and state politics, religious beliefs, ethnic identity, and various understandings of the virus, all serving as a practical means of solving existential problems.

Conclusion

Traditional remedies and religious practices were used with modern medicines and public health protocols to prevent Covid-19 in Kham. This combination might seem imperfect, but local peoples' narratives of the epidemic and their adopted precautions demonstrate otherwise. Thus, this study highlights how various ways of dealing with Covid-19 were fluidly mixed in Kham, and distinctions between science and religion or other presumed incompatibilities did not matter to the locals in the face of crisis.

Living in the epidemic epicentre among all the Tibetan regions, local Tibetans in rural Kham experienced unprecedented anxiety and tension. But at the same time, they also actively responded to the pandemic by engaging in traditional and religious practices that are closely linked with their culture and tradition. Such practices are often distinguished from the category of scientific method; this study demonstrates that they were counted as effective and reliable methods of virus prevention. It should be noted, however, that there is no direct evidence that local people considered their religious practices scientific. Additionally, this research also highlights the critical role of such activities in reducing local Tibetans' anxiety and strengthening their confidence during moments of crisis.

Moreover, due to the availability of diverse medical models in Tibet, local Tibetans adopted various preventative strategies to combat Covid-19. For instance, local people in Kham uniformly performed public health preventive responses and religious practices. For local Tibetans, traditional and religious responses to Covid-19 were not necessarily contradicted by modern medical measures, but rather intertwined with them to form a network of potency to protect the local Tibetan communities from the disease.

In summary, local Tibetans in Kham believe in the power of their own traditional medical and religious practices while also appreciating modern medicine's scientific and precise nature. More significantly, their adaptability and flexibility in adopting disease prevention strategies from various medical practices instil confidence and create a sense of security. This sense of security is crucial in combatting and mitigating negative attitudes and other pandemic impacts.

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