Perceptions and experiences of the public regarding the COVID-19 pandemic in Nepal: a qualitative study using phenomenological analysis

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ABSTRACT

Objectives Perceptions of people regarding COVID-19 influences their health behaviour in terms of seeking public health services. This helps the government in planning appropriate public health strategies. Therefore, this study intends to explore the perceptions of people towards COVID-19 and their experiences during the pandemic in Nepal.

Design, setting and participants This qualitative study was conducted among the public in Kathmandu, Kanchanpur, Bajura and Jhapa districts of Nepal. Eight focus group discussions and 40 in-depth interviews were conducted by using a maximum variation sampling method.

Results The findings were organised into the following themes: General understanding of COVID-19, Disease prevention, Source of information and misconceptions, Expectation and challenges; and Personal and societal consequences of COVID-19, social distancing and lockdown. There was a good general understanding among respondents about COVID-19, personal preventive measures and population-level strategies. They responded that the use of masks, sanitisers, handwashing and proper lockdown would help to prevent the disease. The respondents acknowledged the vital role of media in increasing awareness. Participants also expressed concerns over the misleading news spread by some media. The lack of social interaction, isolation and loss of income were raised as pertinent issues by the participants as potentially leading to psychological consequences. Health workers and public both raised concerns over inadequate Personal Protective Equipment, under-prepared health system, unorganised public quarantine centres, and public violation of lockdown

Conclusions This study reports participants’ views on disease prevention measures such as maintaining personal hygiene, adhering to physical distancing, and using personal protective equipments. Additionally, it illuminates the confusion among public due to conflicting public health messages from different sources of information which was deemed as misleading by the participants. This research sheds light on people’s perspectives and experiences that can inform population-targeted policies in the future.

Strengths and limitations of this study

► Representation of participants from diverse backgrounds.
► A large number of participants interviewed in a short period of time abiding preventive measures and safety guidelines.
► Use of the phenomenological approach has enriched the evidence generated from the lived experiences of people.
► Children and the elderly population excluded from the study due to the possibility of increased risk of COVID-19.
► Hesitancy of participants to participate in the focus group discussions due to different stages of lockdown and disease outbreak in different parts of the country.

INTRODUCTION

The COVID-19 is a newly discovered infectious disease, first seen in December 2019 at Wuhan city of Hubei province, Central China. A rapid spread with a high transmission rate and substantial deaths have been observed worldwide affecting 216 countries, areas or territories already.12 The World Health Organization (WHO) declared the COVID-19 outbreak as a global pandemic on 11 March 2020.3 In Nepal, the first case was confirmed on 23rd of January 2020,4 in a person who had returned from Wuhan.5 It was also the first recorded case of COVID-19 in South Asia.6 The total cases in Nepal reached 188883 as of 6 November 2020, with 1070 mortalities.4

Countries around the world are implementing different measures, from local quarantines to travel restrictions, to prevent wide spread of the virus.7 Nepal is a risk zone for COVID-19 due to its weak health system and porous borders with India.8 The government of Nepal adopted various preparedness measures viz.: establishing and strengthening
the health desk at International Airport, Nepal–China and Nepal–India borders; designating COVID-19 hospitals—to prevent and control infection and provide critical care where available; procuring and stockpiling Personal Protective Equipment (PPE), laboratory items and ventilators; and allocating spaces for quarantine purposes throughout the country. Moreover, the risk communication protocol was developed, prevention and protection messages were disseminated in local languages, and case investigation and contact tracing were carried out. The surveillance systems, screening at point of entries, and community level screening and testing were also strengthened, and the Rapid Response Team was mobilised.9 On 20 March 2020, the government of Nepal enforced a complete lockdown of the country that included the suspension of international and domestic flights, restrictions on movement and mass gathering, and closures of the schools and colleges, businesses and services apart from those considered essential. People were urged to stay at home maintaining social distance.10

The unintended effects among people at all levels are many, ranging from anxiety/stress to reduced freedom on daily living, and from fear of the unknown to loss of income sources.11 It has been reported that the strict and prolonged lockdown has various effects such as effects on maternity services and rise in maternal deaths, effects on mental health and rise in suicide cases, effects on children and adolescents, rise in domestic violence, impact on routine health services like child health and immunisation, impacts on logistics and supply management, and impacts on farming.12 A study conducted in Nepal showed that 41.9% of health workers had symptoms of anxiety, 37.5% had depressive symptoms, 33.9% had symptoms of insomnia and more than half of the health workers faced stigma.13

A study in India reported that the knowledge and practice towards COVID-19 pandemic among people is good but still there was a gap in right perception.14 Similarly, in the USA and the UK, people had important misconceptions about COVID-19 whereas, in Nepal, a study reported that the overall knowledge of COVID-19 was high and the majority of people had a positive perception towards universal safety measures.15

The future trajectory of the COVID-19 pandemic largely depends on the behaviour of people.16 With increasing number of researches conducted on COVID-19, some evidence have been generated regarding the transmission of COVID-19, risk factors, preventive methods and health-seeking behaviour of people.14-17 However, there is still a dearth of relevant population-level research in the context of Nepal, that addresses people’s real experiences of living in the pandemic situation.18 Understanding the perceptions that people have about the disease, hearing about people’s experiences during this pandemic and using this evidence to inform policy could help the country design preparedness plans and preventive strategies for the future. Therefore, this study aims to explore the perceptions that people have towards COVID-19 and their experiences about the social distancing measures applied by the government during the COVID-19 pandemic in Nepal.

METHODS

Study design

The phenomenological approach of qualitative research design was used due to lack of previous studies on the topic for Nepal. The use of phenomenological approach helped explore and understand people’s own perspectives and description of the events from their lived experiences.19 This approach was also instrumental in identifying key topic areas and interview guide for data collection based on the preliminary interactions with the research participants. This study was conducted from March to June 2020.

Researcher characteristics and reflexivity

The interviewer team comprised of experts from different health fields that included two public health researchers, two medical doctors and one postgraduate resident who had the experience of conducting the qualitative research design. Before the data collection, an online video meeting was conducted for all the members of the research team on interviewing, facilitating, recording, note-taking and transcribing. The research team and the research participants were not familiar with each other, personally and professionally.

Study sites

Based on proximity to greater risk factors of an outbreak in Nepal and to include diverse population from different geographical regions of Nepal having heterogeneity of health facilities, culture, tradition, people’s behaviour and geographical access to the effective health services, Kathmandu, Kanchanpur, Bajura and Jhapa districts were selected purposively. The population profile of the districts is described in online supplemental file 1. The location of the study sites in different districts is listed in table 1. The municipalities in the district were conveniently selected and wards were selected randomly.

Study population and sampling technique

After the random selection of the wards, as per the Government of Nepal’s regulation to prohibit large gatherings of people at a place as a preventive measure for the COVID-19 outbreak, each focus group discussion (FGD) consisted of six people who were placed at a 1-metre distance from one another in open space. Additionally, face masks were provided to the participants, and alcohol-based hand sanitisers were made available to each of the focus groups to further reduce the risk of exposure.

The participants that represented diverse backgrounds in terms of gender, profession, education, geography and social status were selected using a maximum variation sampling method. We announced participant recruitment for the study through local social networks and
invited potential participants aged 18–60 years to participate in the FGD. For the FGD, a maximum of one participant was included from a house on a voluntary basis. For the in-depth interview (IDI), individuals who were at the forefront in the community such as the healthcare workers (doctors, nurses, laboratory workers) of the local hospital, security personnel (Nepal Police, Nepal Army, Armed Police Force), media personnel, school teachers, local leaders, female activists, human rights advocates, local public health experts, students, shopkeepers, drivers and daily wage labourers were selected for the participation. These people are at greater risk of transmission of COVID-19 and most of them are directly involved in the management of the situation. Data were collected in a community setting either at the household or at a place preferred by the research participants.

A further collection of data was ceased after the saturation of data. Data were considered to have reached saturation when the response from participants had started repeating or no new themes emerged.

Criteria for sample selection

Among the respondents to our call, we enrolled all people who were willing to participate in the study and provide written informed consent for the study. People who were less than 18 years or more than 60 years, pregnant, or those suffering from infectious disease or having underlying conditions were excluded from the study.

Data collection methods and technique

FGDs were conducted using a topic guide, involving a moderator responsible for guiding the discussion and a note-taker responsible for taking notes, noting down non-verbal responses and ensuring the tape-recording. A total of eight FGDs were conducted, two in each district. Each FGD lasted for 60–90 min on average. The IDI was conducted by a single researcher using the interview schedule comprising of open questions on COVID-19, and personal experiences of living during the pandemic. After obtaining informed consent, the interview was conducted at a location convenient for the respondent. A total of 40 IDIs were conducted, with each IDI lasting for 30–45 min on average.

The discussions and interviews in Kanchanpur and Bajura districts were conducted in the local (Doteli/ Pahadi) language although respondents tended to mix Doteli and Nepali languages during the interviews; whereas, in other study districts, Nepali language was used and were tape-recorded. The data were collected for a duration of 2 weeks. After completion of the data collection, the tape-recorded discussions and interviews were transcribed directly into the English language by an expert language translator.

The validation of the tool was ensured by the index of item-objective congruence and consultation with the experts. A pretesting, consisting of one FGD and four IDIs, was conducted prior to the study, and the changes required were incorporated. The trustworthiness of the data was met through triangulation of different aspects of data collection: (1) among different respondents and (2) using different methods of data collection such as IDIs and FGDs.

Data processing and analysis

The collected data from the focus groups and interviews were transcribed verbatim. A member of the research team, conversant in Doteli, Nepali and English language, cross-checked the transcripts for accuracy and language translation consistency.

Colaizzi’s phenomenological analysis method was used to analyse the transcript. The analysis included steps such as familiarisation, identifying significant statements, formulating meanings, clustering themes, developing an exhaustive description, producing the fundamental structure and seeking verification of the fundamental structure. Two researchers were involved in independently reviewing the data and formulating the themes after summarising and extracting the meaningful contents, bracketing the presuppositions of the researchers.

Patient and public involvement

Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this study.

RESULTS

A total of eight FGDs were conducted in four districts: Kathmandu Metropolitan City-7, Kathmandu; Bhimdatt Municipality-2, Kanchanpur; Budhiganga-5, Bajura and Mechinagar-11, Jhapa, comprising of 24 men and 24 women above 18 years of age. Similarly, 40 IDIs were also conducted among people from these districts. The baseline characteristics of the participants are given in Table 2.

The responses from the IDIs and FGDs were classified into five broad themes. Within each broad theme were several subthemes. The themes and subthemes are
summarised in table 3. All verbatim quotes by the respondents can be found in online supplemental file 2.

**Theme 1: general understanding of COVID-19**
Participants mentioned China as the origin of COVID-19. A few expressed the possibility of the COVID-19 being a bioweapon made by powerful countries. When asked about the cause of the disease, the participants believed it to be caused by a virus that spreads through droplets during sneezing and coughing.

...we have been listening about this for about 1 month, so I think it can be transmitted through droplets from mouth and nose during coughing and sneezing. Also touching infected area can transmit the disease. –FF2

Participants agreed that people with low immunity, children, old people and the diseased (asthma, heart disease, liver disease and kidney disease) are more at risk.

**Theme 2: prevention of disease**
Participants reported using masks, washing hands or using sanitiser, and maintaining social distance will help in preventing the disease. Similarly, participants also reported that maintaining at least 1-metre distance during the conversation with people was necessary. Some

| Variable                  | FGD participants |  | IDI participants |  |
|---------------------------|------------------|---|------------------|---|
| **Table 2** Sociodemographic characteristics of the participants | Number (%)       |  | Number (%)       |  |
| Age group                 |                  |  |                  |  |
| 18–30                     | 12 (25)          |  | 12 (30)          |  |
| 31–40                     | 18 (37.5)        |  | 14 (35)          |  |
| 41–50                     | 10 (20.83)       |  | 8 (20)           |  |
| 51–60                     | 8 (16.67)        |  | 6 (15)           |  |
| Sex                       |                  |  |                  |  |
| Female                    | 24 (50)          |  | 18 (45)          |  |
| Male                      | 24 (50)          |  | 22 (55)          |  |
| Religion                  |                  |  |                  |  |
| Hindu                     | 30 (62.5)        |  | 24 (60)          |  |
| Buddhist                  | 8 (16.67)        |  | 8 (20)           |  |
| Muslim                    | 4 (8.33)         |  | 4 (10)           |  |
| Others                    | 6 (12.5)         |  | 4 (10)           |  |
| Marital status            |                  |  |                  |  |
| Single                    | 18 (37.5)        |  | 15 (37.5)        |  |
| Married                   | 30 (62.5)        |  | 25 (62.5)        |  |
| Ethnicity                 |                  |  |                  |  |
| Brahmin                   | 14 (29.17)       |  | 12 (30)          |  |
| Chhetri                   | 12 (25)          |  | 12 (30)          |  |
| Indigenous                | 12 (25)          |  | 9 (22.5)         |  |
| Others                    | 10 (20.83)       |  | 7 (17.5)         |  |
| Highest level of education|                  |  |                  |  |
| Did not go to school      | 12 (25)          |  | 5 (12.5)         |  |
| Grade 10 or below         | 9 (18.75)        |  | 8 (20)           |  |
| Grade 12                  | 7 (14.58)        |  | 8 (20)           |  |
| Bachelor                  | 12 (25)          |  | 14 (35)          |  |
| Masters and above         | 8 (16.67)        |  | 5 (12.5)         |  |
| Respondent type           |                  |  |                  |  |
| Teachers                  | 3 (6.25)         |  | 4 (10)           |  |
| Students                  | 5 (10.41)        |  | 4 (10)           |  |
| Security personnel        | 5 (10.41)        |  | 4 (10)           |  |
| Head of household         | 5 (10.41)        |  | 4 (10)           |  |
| Leaders                   | 6 (12.5)         |  | 8 (20)           |  |
| Health workers            | 7 (14.58)        |  | 8 (20)           |  |
| Homemaker                 | 7 (14.58)        |  | 2 (5)            |  |
| Others                    | 10 (20.83)       |  | 6 (15)           |  |
| Resource setting          |                  |  |                  |  |
| Rural                     | 24 (50)          |  | 20 (50)          |  |
| Urban                     | 24 (50)          |  | 20 (50)          |  |
| Geographical location     |                  |  |                  |  |
| Himalayan region          | 12 (25)          |  | 10 (25)          |  |
| Hilly region              | 12 (25)          |  | 10 (25)          |  |
| Terai region              | 24 (50)          |  | 20 (50)          |  |

FGD, focus group discussion; IDI, in-depth interview.
said that bathing after returning from the market and changing clothes regularly could prevent transmission.

One thing I am still not sure about the mask, some say surgical masks, some say N95, and some say a mask cannot stop the infection, it’s worthless. [laughs…] But I am still using my old mask when I go out. I believe a mask can prevent its (COVID−19) transmission to a significant level. –FM5

Participants believed that the government is trying its best to prevent transmission, but the efforts are not adequate. They opined that the lockdown and border closure were some of the praiseworthy steps of the government to prevent the spread of the disease. It was suggested that enforcing strict lockdown, blocking of borders and social distancing were the most appropriate measures to limit the transmission of this disease. Lockdown would restrict people from moving and carrying the disease to different areas. However, the need for alternatives to lockdown was also suggested as it has created much havoc in the country and would heavily degrade the economy.

The participants thought that still many people especially in the village were not aware of the disease but were frightened. So, they suggested increasing awareness programmes. They also requested media to play a positive role in providing informative programmes rather than reporting only the rising cases and deaths of the people.

Theme 3: source of information and misconceptions

Participants had heard about the disease from television, radio, newspapers and social media. They were thankful to different media for reporting news from all around the world that helped them to get information about the COVID-19, its transmission, prevention, and day-to-day situation in and around the country.

Participants stated that they didn’t completely believe all the information portrayed by media; especially social media was deemed as unreliable as it contained many rumours regarding the COVID-19 cases in Nepal.

No…it’s not always true. Some of the negative news spread by media makes people anxious and terrified rather than making them aware, I am very much terrified by the scenes of dead bodies shown by the news. –FF9

Rumours and fallacies

There were varied perceptions regarding COVID-19 about its origin and its survival. Participants blamed different non-vegetarian food items to be the source of infection. They thought that consuming meat and eggs can cause this disease and suggested people to avoid raw consumption. Moreover, the pervasive notion that virus’ survival decreases in hot temperatures was agreed upon by the participants. It was also believed by them that Nepalese people are immune to the virus and would not be affected easily. In addition, they supported the idea of roles of turmeric, onion, tea and alcohol in preventing the disease.

Theme 4: expectations and challenges

Participants contended the effectiveness of interventions by the government, pointing out that tracing and testing were not being adequately performed. Health workers stated that adequate provision of PPE was not done, which should be the first priority of the government.

Health workers also admitted to harboring palpable fear due to inadequate PPE which also affected their readiness to treat patients as they felt extremely unsafe in doing so. Challenges were further augmented with a sudden shortage of masks and other PPE, and with the revelation of patient’s tendency to lie about their travel history fearing doctors may not treat them, as reported by participating health workers. This was considered to pose an increased risk of transmission.

Well, we are always ready to serve patients. But, we have not been provided with adequate protective measures. This would indeed be more dangerous as a single health worker can transmit the disease to hundreds of people at a time. –IF12

Participants made various suggestions to effectively take COVID-19 disease such as: conducting mass screening, contact tracing and testing, providing sufficient ventilators to hospitals in different parts of Nepal, and effective border seal. Furthermore, they questioned the government’s functionality, and condemned the misuse of N95 masks and PPE by some government officials and non-exposed non-frontline staff.

It’s disastrous that the healthcare workers and other frontline personnel are not getting adequate PPE to wear. They have been using the same surgical mask for many days; haven’t got any other protective equipment. But the government officials and the ministers have been using N95 mask even at home. –FM7

Demand of people

Participants indicated that public had put many expectations on political parties, health workers, and security forces, some of which were genuine concerns, but which, they argued, were not addressed by the government. However, the participating political leaders argued that most of the demands had been fulfilled but some of the ambitious demands were not important at the moment.

Furthermore, participants lamented about the problems they were facing and requested the government and the leaders to fulfill their demands to gain their daily livelihood.

…I am a patient of sugar (Diabetes Mellitus) and pressure (hypertension)...I want to go to the hospital, but I cannot go easily…the government cannot manage services for us. It is paradoxical to let people die from other diseases, to save people from the coronavirus. –FM16

Bhatt N, et al. BMJ Open 2020;10:e043312. doi:10.1136/bmjopen-2020-043312
More or less, people were aware of the COVID-19. Majority of the public were reported as dutifully observing the lockdown. However, some had been violating the lockdown rules. People had high expectations from the police to help their community by taking strict actions against those who were violating rules.

Participants had opined that people who tried to break the rules of the lockdown must be punished since they could transfer disease to others. However, some participants considered it was not completely their fault as the efforts of the government were not enough to help the general public.

I have been working as a frontline health care worker in the nearby hospital. While going to the duty station by my motorcycle, the authorities are not allowing me to go, even if I show my identity card. Instead, they beat me with sticks and abused me verbally for breaking the lockdown rules. –IM19

Moreover, participants expressed concern for the people who had started walking on foot for many days to return to their home, and requested the government to take needful actions to let those hard-hit wayfarers reach home easily, despite the lockdown.

We are worried about those people (who are walking to reach their home) … (pause) … we can’t imagine the journey they have started to walk from east to west. It would take months for them to reach their home. They are all daily wage workers and have no money to sustain. They should be supported. –FM20

Participants shared that the government had been trying but the designated quarantine facilities were insufficient and ineffective. They suggested to increase the number of quarantine facilities and convince people to stay in quarantine. They held the view that the healthcare services provided in quarantine and isolation centres were not adequate.

…government is developing quarantine homes, but they are not appropriate. The protective measures have not been applied sufficiently. –FF18

Participants also expressed concern for the people who were stuck in lockdown and quarantined at the border areas.

It is troublesome for people who are stuck at the borders. What would happen to them if they remain in tents at the border? They are thousands in number. There is a high chance of transmission of the disease in the crowded quarantine facilities. –FF21

Moreover, the security personnel were worried about their health and requested the government to provide adequate PPE and let them be tested for the disease.

Theme 5: personal and societal consequences of COVID-19, social distancing and lockdown
Social discrimination and stigma
Participants reflected on their experiences of social discrimination and stigma in their communities. The healthcare workers were expelled from their rent houses; moreover, they were denied proper food and lodging in the hotels. The COVID-19 positive cases were disrespected in the community. The people who returned from abroad were shunned by the community people and those who were sent home from quarantine centres, after testing negative for PCR tests, were not permitted to enter their homes. The community people strongly opposed the local government’s decision to make a quarantine centre in their village. The people who marched a long way to their home by foot were prohibited to walk near the streets and highways. In addition, participants reported that after a significant number of positive cases increased in a religious gathering, people started blaming religious groups for spreading the COVID-19.

The stigma was prevalent even among the local government bodies and police personnel. Trucks of vegetables and fruits were destroyed by the local administration after they came to know that those agricultural products came from the COVID-19-affected areas. Similarly, the police personnel manhandled the persons who came from abroad and were made to stay at home even if they tested negative for the PCR test.

The house owner has told me to leave the rented room as soon as possible, blaming me to be a major source of COVID-19 spread as I am a health worker. Where should I go all of a sudden? I feel regretful; I made a wrong decision by choosing this profession. –IF24

Lack of social interaction
Participants stayed at home due to social distancing and social isolation policy, except a few directly involved frontline workers such as healthcare workers and security personnel. They agreed that social interaction had decreased significantly and they were feeling socially isolated.

It’s been so long that we have been staying at home. There’s the same daily routine. We used to play carom and cards at the Chowk (junction). –FM26

However, a variation was found between the participants in rural and urban areas in terms of social interaction. The participants in urban areas said that they were strictly prohibiting any interaction with others. But people in villages or rural areas had different views. They said that they were meeting their neighbours while maintaining one metre distance, though the interaction had decreased in comparison to the pre-lockdown period.
There are only houses and buildings with a high density of people living in this area. So we are prohibiting us from going anywhere. –FF11

Economic loss
Participants had varied experiences on the economic loss due to lockdown and social isolation policy. The daily wage workers were suffering the most who lamented that they did not have enough money to sustain their livelihood. They were worried about their family members as they were the only breadwinners in the family.

…what should I say sir (to the interviewer)…this lockdown has been a catastrophe for us. I used to earn money after working daily. I worked at the people’s house. I did everything…from cleaning pots and pans to performing daily chores, and earned some money… (tears in eyes seen)…Now nobody is allowing even to walk anywhere. –IM28

Also, some participants brought up their concern of significant loss in their business due to the closure of the market. However, there were a few government officials who were not affected economically by the lockdown and social distancing, as the government had been paying them the monthly salary as usual.

Changes in lifestyle
The effect of lockdown and social distancing saw a significant variation in the lifestyles among people from the urban and rural areas. The people from the urban area were worried about their sluggish lifestyle since the start of lockdown.

We have become claustrophobic seeing the four walls of this home, daily. There is no place to go. No parks and open spaces nearby…people and media say that we should not leave our home…we have been doing even morning walk in a single room, going from one corner to another. –FF18

However, people in villages and rural areas had different experiences. They said that though they were not going anywhere they had still plenty of work to do in their fields and were busy.

This is the time for harvesting the wheat and prepare for planting the paddy. So, we are busy with it. Though we have been maintaining some distance among us, we haven’t stopped our work. –FM32

On one hand, a few participants said that lockdown had created a good environment to be together with family members, and had enabled productive use of time, on the other hand, few participants were fed up of the prolonged and extended lockdown, and were worried about the change in their lifestyle.

Psychological impact
Experiences of anxiety, fear of being infected, and stress due to lack of interaction were shared by the participants.

They harbored the fear of spread of disease to village areas of Nepal, as many may die due to inadequacy of healthcare facilities. One of the participants shared about her children’s escalating fear due to constant exposure to conversations of COVID-19 and its threat.

My son is a doctor. He is working in the COVID-19 hub hospital in the main city, where so many positive cases have been found. I fear that my son would be infected with it (COVID-19). Meanwhile, I can’t say to him to leave the job and come home. I don’t like speaking with anyone these days. Boredom and loneliness have been my friends. –FF6

The healthcare workers expressed fear of getting infected when providing treatment to COVID-19 positive and suspected cases, as they were not provided with adequate PPE. Moreover, they stated that they had not visited their families for months due to fear of transmitting the disease to the family members, which they admitted to making them feel lonely. Similar was the response from the security personnel who was fearful to work in the field away from home.

People whose family members were in foreign countries seemed to be more terrified and anxious. Moreover, people also claimed that the media played a negative role and the continuous information provided by it increased fear and anxiety among people.

DISCUSSION
This study explored the perceptions of the public towards COVID-19, and their experiences during the lockdown on lifestyle, mental health and social life. The study showed that participants possessed good knowledge about the origin, transmission, cause and prevention of COVID-19. They were aware that using masks and sanitisers, washing hands and maintaining social distance could help them prevent the disease, and they believed that awareness campaigns in rural areas were necessary. Mass media played a vital role in raising awareness among people; however, the need of checking the credibility of all information spread by social media was stressed upon by some participants. The finding of this research is in line with the study conducted in Bangladesh21 where most of the participants were aware of the COVID-19 pandemic, and their source of information was mass media. In the USA,16 most people exhibited good knowledge about the mode of transmission, causes and symptoms of the COVID-19. In this study, participants mentioned the potential risk factors of the disease, such as age and comorbidities, which were similar to the report published by the Center for Disease Control and Prevention.22 Similarly, the study conducted in Uganda23 reported that awareness and attitude played an important role in preventing the spread of COVID-19. Safe water, sanitation and hygiene are a must for defending against this virus.24 However, debates are still ongoing on the evidence of effectiveness of face masks as a prevention measure.25 One of the studies
suggests that early public interest in face masks may be an independently important factor in controlling the COVID-19 epidemic on a population scale. One illustrative region is Hong Kong, where the public interest in face masks is among the highest due to the perception of masks preventing the disease transfer. The use of surgical masks in high risk and crowded areas can provide effective protection.

Accurate information shared by media plays a role in shaping people’s perceptions towards risk of contracting COVID-19; lack of accessibility to this information can serve as a barrier which in turn, can increase the probability of the infection. Similarly, a study conducted in India reported that most people have good knowledge and right practice towards COVID-19, but gaps persist in the right perception of myths and misconceptions. It suggests providing educational programmes to rectify misconceptions about COVID-19 and improving the knowledge, perception and practices. Moreover, there was good knowledge on the situation of COVID-19 but poor perceived knowledge on preventive measures.

A study conducted in Nepal revealed that the knowledge of people about COVID-19 was high, but there was a gap in knowledge on social distancing and quarantine. There was a positive perception towards universal safety measures of COVID-19, but negative perceptions also existed such as: COVID-19 attacked only older people; and coughing into the elbow was not good practice to prevent the spread of the virus.

Participants also believed in: survival of the virus in hot temperatures, meat and egg consumption causing the disease, and the potential role of turmeric, onion, tea and alcohol in preventing it. Similar to it, a study in Afghanistan showed that 89% of the participants believed that during the outbreak, eating well-cooked and safely handled meat is safe. Similarly, a study conducted in India showed that social media played a major role in spreading awareness among the public, however, the spread of fake news was also reported, highlighting racism issues during the epidemic which created panic and negative influence on people’s mental health and psychological well-being.

Similar to this study, the lack of protective equipment and transportation were the difficulties experienced by rural residents in China during the epidemic. A study conducted in Nepal showed that a shortage of test kit and medical supplies including PPE, poor coordination among different tiers of government and poor reporting were the major challenges in containing COVID-19. The high population density in the urban areas of South Asia makes it difficult for people to maintain social distancing and proper personal hygiene. PPE is essential to reduce viral transmission and prevent the spread of the disease among the healthcare workers and patients, but shortage, inappropriate use and misuse of PPE were identified as the major problems in the UK, and shortage of PPE in high-demand areas like triage and isolation wards of India has resulted in severe problems. A study conducted in Italy revealed that only 13% of physicians reported having access to PPE every time they needed them. In Thailand, contact tracing is most effective but mass screening cannot be afforded by the government. Similarly, a study conducted in Taiwan revealed that testing only symptomatic cases can miss many asymptomatic infections and render contact tracing less effective.

Tackling the violation of lockdown rules is one of the biggest challenges for the government. A study has shown that strict mitigation measures, if implemented in a timely manner, greatly outperform lengthy quarantines and lockdowns. Social distancing is regarded as the most effective measure for mitigation of the disease; additionally, early lockdown reduces the effects of the disease. The experience of China suggested that social distancing is a deliberate effort to slow down the spread of infectious or contagious diseases. Keeping that in mind, most of the countries focused on social distancing and lockdown systems to prevent the spread of the disease. Participants from a study believed that quarantine, social distancing and the use of face masks can actually break the chain of COVID-19 spread. In Pakistan, the forced lockdown was not feasible, so it changed into a partial lockdown first and then into a smart lockdown. Therefore, lockdown is a hard choice and challenging in order to maintain essential services.

According to a study conducted in Nepal, a long and strict lockdown had negative effects on many health aspects of people and the community: many women are facing barrier in accessing maternal health services; data have shown an increase in suicide attempts; children...
and students felt stressed due to uncertainty about the future.\textsuperscript{12} Quarantine is effective to control the COVID-19,\textsuperscript{30} but its effective management is a challenge for the government. However, increase in abusive behavior highlights the negative aspects of isolation and quarantine at home.\textsuperscript{12}

The impact of the pandemic and lockdown on public is enormous: people opined that the disease and its consequences reduced social interaction, exacerbated the economic crisis, increased psychological effects (fear, anxiety and depression) and also changed the lifestyle of the people in many ways. In rural areas, however COVID-19 wasn’t reported to bring considerable changes in lifestyle. Interestingly, for some participants, lockdown had some positive impacts as well as it helped them to have quality time with their family members and helped them feel refreshed.

This study showed that COVID-19 has led to high degree of social stigma and discrimination, especially towards health workers, their family members, people coming from abroad, and people living in quarantine. According to UNICEF, COVID-19 is a new disease with many unknowns; these unknown factors have led to anxiety among the public,\textsuperscript{54} which has in turn fueled stigma and discrimination.\textsuperscript{55} Other studies also showed that healthcare workers, people released from quarantine, people returning from travel, and people with the disease and their families also faced social stigma.\textsuperscript{56} A study revealed that healthcare providers working in hospitals and laboratories are discriminated against and are facing difficulties for food and shelters, with the neighbours refusing to interact with them while showing their displeasure.\textsuperscript{54} Similar to this study, in Nepal also, health workers were expelled from their rooms and were faced with the difficulty of getting food in the hotel. This kind of discrimination makes people socially isolated, and can leave them angry and depressed.\textsuperscript{53} A qualitative study was conducted in Lorestan University of Medical Sciences, Iran to explore the perception of nurses on taking care of patients with COVID-19, which revealed that nurses experienced many challenges such as physical fatigue, stress, anxiety, feeling of insufficiency, and being enclosed in protective equipment during caretaking; all these led to a decrease in the quality of patients’ care.\textsuperscript{55}

Social distancing and social isolation during COVID-19 have affected most people in a negative way. It has reduced social interactions, changed lifestyle, led to economic loss and resulted in psychological crises. Social isolation increases loneliness which is a risk factor for various psychological conditions.\textsuperscript{56} A study conducted in the UK also showed that social distancing and isolation had negative impacts on the mental health and well-being of people. It also affects employment, economy, individual’s worthiness, and daily routines of people leading to psychological and emotional loss.\textsuperscript{57}

**Strengths and limitations**

The major strength of this study is the use of a maximum variation sample method which enabled the representation of participants from diverse backgrounds in terms of gender, profession, education, geography and social status. A large number of participants were interviewed in a short period of time abiding preventive measures and safety guidelines. Furthermore, the use of the phenomenological approach was instrumental in translating messages from people’s lived experiences during this pandemic situation in this research. This study has a wide geographical coverage of study sites covering three out of seven provinces including the capital city of Nepal. The use of qualitative methods may render the findings not generalisable, however, the evidence generated is useful to design quantitative research to understand the burden of issues and the impact of the COVID-19 on the population at large. Other limitations include the possibility of having interviews and data collection being influenced by the experiences of the research team regarding COVID-19. Due to different stages of lockdown and disease outbreak in different parts of the country, people were hesitant to participate in FGDs and somewhere they were discouraged by the authorities. To address this issue, government-set rules and regulations for the public gathering were followed, that is, maintenance of 1-metre distance, use of masks and sanitisers; and they were ensured of safety and free will to withdraw any time. Similarly, since the children and elderly population were excluded from the study due to the possibility of an increased risk of COVID-19, their views and experiences could not be understood. Moreover, this was a short-term study conducted over a period of 2 weeks. The long-term experience of the participants may provide a better understanding of people’s experiences during the pandemic.

**CONCLUSIONS**

People believed that the use of masks and sanitisers, frequent hand washing, maintaining social distance and manageable lockdown help in preventing the disease. Similarly, social distancing, isolation and economic loss during lockdown increase the risk of psychological problems, implying the need for professional counselling. High expectations from people, inadequate supply of PPE, violation of the lockdown, unprepared health system, poor management of quarantines and the rumours created by social media are challenges faced by the government during this pandemic. There is a need for improvement in the effective management of the COVID-19.

The findings from this study can contribute in planning policies and generating guidelines that can improve the physical as well as psychological health of the public, including the healthcare providers, the security personnel as well as the frontline care providers. Further research may help reduce the myths and misconceptions. Based on
the local status quo of the pandemic, local governments may be in a better place to administer and implement local social distancing policies. The three tiers of government need to work based on the principle of coordination, cooperation and coexistence to strengthen its health system. There is a need to identify ways to strengthen surveillance, contact tracing, quarantine and isolation centres management. Also, engaging with public through mass awareness campaigns and establishing strong and coordinated mitigating measures in place is a must.

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PERCEPTIONS AND EXPERIENCES OF PEOPLE REGARDING COVID-19 PANDEMIC IN NEPAL: A QUALITATIVE STUDY USING PHENOMENOLOGICAL ANALYSIS

Population profile of the study sites:

Based on the heterogeneity of health facilities, culture, tradition, people’s behavior, and geography to access effective health services, Kathmandu, Kanchanpur, Bajura, and Jhapa districts were selected purposively. These districts vary considerably in terms of their geography, socio-economic, and cultural characteristics thus enabling us to study the population from different perspectives. The municipalities in the district were conveniently selected and wards were selected randomly. Ward is the smallest administrative unit under the local government in Nepal.

Kathmandu, the capital city in the central part of Nepal, is the representation of the urban population. According to the National Population and Housing Census 2011, the total population of Kathmandu is 1,744,240 occupying 436,344 households. It has a very high population density of 4416 people per square kilometer and low illiteracy of 12 percent. It has the most sophisticated and advanced healthcare services in Nepal and has also reported the highest number of daily COVID-19 cases as well. Kathmandu bears high mobility of heterogeneous groups of people from all over the country. Therefore, this district was selected to provide an urban perspective in the study.

Kanchanpur, the westernmost terai district of Nepal, has a population density of 280 per square kilometer and illiteracy of 27 percent. 451,248 people are currently living in 82,152 households. Furthermore, being on an open border with India, it is also highly vulnerable to the spread of the COVID-19.

Bajura, belonging to rural hilly parts of Nepal, has a very low population density of 62 people per square kilometer and a very high illiteracy rate of 42 percent. The population of this district is very low with 134,912 people living in 24,908 households. It has a poor infrastructure in terms of health
services with the available health services not easily accessible. It provides us with a rural perspective in this study.

Jhapa is the easternmost port of entry into Nepal from the neighboring country India with which it shares an open border. The district has a population of 812,650 living in 184,552 households. Additionally, a high population density of 506 people per square kilometer and an illiteracy rate of 23 percent makes it quite vulnerable to disease transmission which further amplifies the need for conducting a study in the district.
### General understanding of COVID-19

- **Origin of the disease**
  - **FM1:** Well, though I don’t know much about its origin, it is said that it originated from the Wuhan province of China.

- **Cause of the disease**
  - **FF2:** We have been listening about this for about 1 month, so I think it can be transmitted through droplets from the mouth and nose during coughing and sneezing. Also touching an infected area can transmit the disease.

- **Mode of transmission**
  - **FF3:** ...but this disease has spread due to eating raw and uncooked meat.

- **Threats and risk groups**
  - **MF4:** [Sighs...] ...the news I heard yesterday, which said people above 60 years are dying in such a great number and people with other diseases of lungs, hearts, liver, and kidneys are also dying in high number.

### Prevention of disease

- **Information regarding prevention**
  - **FM5:** One thing I am still not sure about the mask, some say surgical masks, some say N95, and some say a mask cannot stop the infection, it’s worthless. [laughs...] But I am still using my old mask when I go out. I believe, a mask can prevent its (COVID-19) transmission to a significant level.

- **Eating habits**
- **Sanitation**
- **Mask and its use**
- **Personal Protective Equipment (PPE)**
**Lockdown**
- Awareness program

**FF6:** All these types of diseases have originated from meat and eggs so we should stop eating meats and eggs...

**FM1:**...it is very much helpful for a country like Nepal to prevent the spread of the disease, as compared to developed countries...the government should extend lockdown till transmission stops... we should also close our border until corona fear is out of the world...

**FM7:** Media can share true news, condition around different parts of the world, and create awareness...it is not enough... Wrong information and negative news can make people more scared and fearful...they should provide the right information and conduct informative programs.

### Source of information and misconceptions

- Role of media
- Credibility of news
- Rumors and fallacies

**FF8:** The worldwide information given by the media has helped us to know about the disease and to stay safe. It has awakened people.

**FF9:** No...it's not always true. Some of the negative news spread by media makes people anxious and terrified rather than making them aware. I am very much terrified by the scenes of dead bodies shown by the news.

**FM10:** I think this virus cannot survive in the hot temperature because this disease has affected more cold countries.
| Expectations and challenges |
|-----------------------------|
| • Inadequate PPE            |
| • Health system management  |
| • Violation of lockdown     |
| • Demand of people          |
| • FM7: Yesterday I was told about alcohol being a preventive measure... [laughs]... I think it is false. Alcohol rather decreases the immunity of the body. |
| • FM11: Oh my god, poor health workers, they are the real heroes of this time. We can’t even imagine how risky their job is...and also they are not provided with adequate PPE. |
| • IF12: Well, we are always ready to serve patients. But, we have not been provided with adequate protective measures. This would indeed be more dangerous as a single health worker can transmit the disease to hundreds of people at a time. |
| • IM13: The government should also focus on providing us with adequate PPE. No one wants to suffer individually; everyone has their family and equally love them as others do. We feel very much demotivated because of the government’s inaction in providing security to us. |
| • IM14: There is still the system of referring people to higher centers in most of the places (hospitals). This has generated some gaps between people and health workers. Also, the patients who are admitted have been expecting an isolated environment and constant care, which we have not been able to provide. |
| • FM7: It’s disastrous that the healthcare workers and other frontline personnel are not getting adequate PPE to wear. They have been using the same surgical mask for many days; |
haven’t got any other protective equipment. But the government officials and the ministers have been using the N95 mask even at home. I don’t know how this system works. This is ridiculous.

- **IM15:** We are facing different challenges due to lockdown. We have no work and markets are closed...there is a scarcity of food, and they charge us more, we have no money to pay, so how can we continue our livelihood?

- **FM16:** I am a patient of sugar (Diabetes Mellitus) and pressure (hypertension)...I want to go to the hospital, but I cannot go easily...the government cannot manage services for us. It is paradoxical to let people die from other diseases, to save people from the coronavirus.

- **IM17:** General population wants us to aware people not to violate lockdown and social distancing. Some have expected to provide security to their shops also. We are concerned for the people who are daily wage workers and want to go back to their villages. Most of them try to break the lockdown.

- **FM1:** It’s not our fault; the government should have applied the lockdown strictly. They have been allowing some people to go and some have been beaten harshly. Though many police personnel have been helping the people, there are a few who are very rude.

- **FF18:** The health workers, the media, and the government have to inform those people well. Also, some people trying to break the rule have some obligations that should be solved by the government.
• IM19: I have been working as a frontline health care worker in the nearby hospital. While going to the duty on my motorcycle, the authorities are not allowing me to go, even if I show my identity card. Instead, they beat me with sticks and abused me verbally for breaking the lockdown rules.

• FM20: We are worried about those people (people walking to reach their home)... (pause)...we can’t imagine the journey they have started to walk from east to west. It would take months for them to reach their home. They are all daily wage workers and have no money to sustain. They should be supported.

• FF21: Government should make proper arrangements and transport them to their respective homes.

• FF18: ...government is developing quarantine homes, but they are not appropriate. The protective measures have not been applied sufficiently.

• IF12: ...not sufficiently performed, health facilities are for treatment not for quarantine and isolation.

• FF21: It is troublesome for people who are stuck at the borders. What would happen to them if they remain in tents at the border? They are thousands in number. There is a high chance of transmission of the disease in the crowded quarantine facilities... (Pausing and thinking)... The government should make arrangements for them.
- **FM22**: It’s a matter of worry... a person staying across the border quarantine... his mother died here. He is not allowed to come to pay the last tribute to his mother. We should think about them.

- **IM23**: Yesterday, a few people came hiding by and crossed the border by swimming in the river. ... (pause)... around thousands who came from the neighboring country, where the number of cases of COVID-19 is increasing day by day. We had to perform our duty with great fear as we didn’t want to get the disease. We have not been provided with adequate PPE and other protective measures. We would be grateful if we are also tested with our swab for Coronavirus.

| Personal and societal consequences of COVID-19, social distancing and lockdown |
| --- |
| - Social discrimination and stigma |
| - **IF24**: The house owner has told me to leave the rented room as soon as possible, blaming me to be a major source of COVID-19 spread. Where should I go all of a sudden? I feel regretful; I made a wrong decision by choosing this profession. |
| - **IM19**: Sometimes people make us gods and sometimes they disparage us. Now the hotels are also being reluctant to provide us food and lodging. Even the hotel organization has rejected making it a quarantine center for the health workers. |
| - **FM9**: As all the transport means were shut down, we were impelled to walk on our feet to our homes. The locals prohibited us to walk even on the highways and streets. They told us not to use this path, as they felt risky to be in contact with us. |
- **FM7**: I had stayed in the quarantine for 2 weeks and was sent home after my reports came negative. But then also, nobody in my neighbor even bothered to talk with me. They (neighbors) have told their children not to visit my home or play with my children.

- **FM4**: How can we allow the government to make a quarantine center in our village school? The houses are denser here. Further, there are many other places that are far away from the residential area. Better to make them (quarantine) there. It (government) cannot keep our life at risk.

- **FM25**: I returned from abroad a few days back. I was all healthy, without any symptoms, but also, I was staying in home-quarantine. But, our neighbors came and scolded me to leave the room saying that I could be a contagion for this (COVID-19). Later they informed the local authorities. The authorities also shouted at me and took me to the police station. Then I was kept there until my PCR report came negative. I thought of coming to my own country at this stage of the crisis. But I had to bear this humiliation in my own place, by our own people.

- **FM21**: The media have been repeatedly reporting about how deadly this disease is. The mortality is increasing day by day. How can we go to the funeral of positive cases? The dead person has already gone, why should we risk our life? We fear even to touch the dead body.
| Category                  | Comments |
|---------------------------|----------|
| FF18: We have seen the administration personnel detaining the transport trucks coming to our place and destroying the fruits and vegetables thinking that they may spread Corona. |
| Lack of Social interaction| FM26: It’s been so long that we have been staying at home. There’s the same daily routine. We used to play carom and cards at the Chowk (junction). |
| FF11: There are only houses and buildings with a high density of people living in this area. So we are prohibiting us from going anywhere. |
| FM27: Hmm... The houses are less dense, there are fewer people. We can say hello and hi from our courtyard to them (neighbors). Though we less often leave our house, we sometimes go to our neighbor’s house. We gossip... (laughs)...but we maintain a one-meter distance between us. Sometimes, we also use the mask, if going a bit far from home. But, our movement has not stopped. |
| Economic Loss             | IM28: ...what should I say sir (to the interviewer)...this lockdown has been a catastrophe for us. I used to earn money after working daily. I worked at the people’s house. I did everything...from cleaning pots and pans to performing daily chores, and earned some money... (tears in eyes seen)...Now nobody is allowing even to walk anywhere. |
| IM29: I have planned to go home tomorrow on foot. I came here a few months back to work in a factory. But due to lockdown, the factory is closed. All work has been halted. |
We are not paid money now... (pause)...we have been waiting so long for the lockdown to resume. I am bankrupt now. I don’t have money even for food.

- **FF2:** I have a fancy shop in the market...It’s been more than 2-3 months since it has been closed. We did not have earnings for these months. Now, slowly, we are feeling difficulty to manage the expenditure.

- **IM30:** Though it’s difficult for us in terms of buying things from the market and few things have been expensive due to a shortage in the market. But since we are paid by the government (salary), we haven’t faced difficulty to run the livelihood.

### Changes in lifestyle

- **FF18:** We have become claustrophobic seeing the four walls of this home, daily. There is no place to go. No parks and open spaces nearby...people and media say that we should not leave our home...we have been doing even morning walk in a single room, going from one corner to another.

- **FF31:** There is no work for me to do. My office is shut down. I have no place to go. I have watched almost every movie I have on my list twice. Now I have started feeling bored and lonely. I fear to go outside.

- **FM32:** This is the time for harvesting the wheat and prepare for planting the paddy. So, we are busy with it. Though we have been maintaining some distance among us, we haven’t stopped our work.
• **FF33:** I can go anywhere I want. There are many open spaces and fields. It’s all-natural here. I have been going for the walk in the morning. Nothing has changed in my lifestyle, except going for a social gathering.

• **FF34:** It has been a long vacation for us. We have been enjoying home, and family time. We have been playing badminton in the morning, and learning household chores. Watching television is a daily schedule for me. I am also reading new books.

• **IM35:** I had exams hot at hand. I hadn’t prepared well for the exams. It’s better that I got plenty of time to prepare for the exams. Good for me...hehe (laughs).

• **FM26:** The long vacation is crazy. I now learned it’s very difficult to sit doing nothing. I used to go to the gym, but it’s closed now. It has made me lazy and sluggish. I have increased my weight too. I have started feeling bored.

• **Psychological Impact**

• **FF31:** Yes, I am very anxious and fearful to meet my neighbors and go to a nearby shop. Even if I have a conversation with anyone, I feel anxious.

• **FM36:** I feel demotivated and depressed each day. Though I have been preparing for my exams, I am unable to concentrate on myself. I spend my whole day listening to the news and worldwide updates on Coronavirus infection and deaths.
• FF6: My son is a doctor. He is working in the COVID-19 hub hospital in the main city, where so many positive cases have been found. I fear that my son would be infected with it (COVID-19). I don’t like speaking with anyone these days. Boredom and loneliness have been my friends.

• IM13: Each day, I start my day praying the god to protect us from the disease. We have not been supplied with adequate PPE. Sometimes, it’s not even possible to take every precaution. It has been a month that I have not gone home. I fear that I could transmit the disease to my family members... (Pause)...I had been preparing for the MD exams in my leisure time...but now I have completely stopped preparing. I cannot concentrate on myself.

• IM17: After a long time, I planned to go home this time but my leaves were canceled. All my happiness of meeting my family after so long gone in vain. We are at risk of exposure to people at the quarantine. I fear that I would die before I could meet my family members and my 5 years old daughter. It has been weeks that I haven’t eaten and slept properly.

• FF37: My only son...(tearful eyes)...(pause)...just one week before the lockdown began, he went abroad to give his exams for his further studies...the exams got canceled now...he could not return as lockdown had already started here (in Nepal)...He has no place to stay there and money to survive on his own...some of the kind Nepali people have sheltered him till now...there’s not a single day that I have slept well and not cried.
- FM7: For a long time we are staying at home... and the media have been constantly giving news on the rampantly increasing number of new deaths day by day...The news of people dying, developed countries not being able to control it, etc. are terrifying for us. It has increased my blood pressure. My family and I are not able to sleep properly for a week.