

**ACADEMIC PAPER**

Socioeconomic impact of COVID-19 pandemic: Evidence from rural mountain community in Pakistan

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This study examines the trend of the spread of coronavirus disease (COVID-19) pandemic in Pakistan and to explore the community perception of the socioeconomic impact of COVID-19 pandemic in a rural mountain area of Pakistan. An online survey was conducted through snowball sampling technique and total 367 people participated in the survey. The results of the study show that COVID-19 cases spiked amid ease of lockdown in the country and the spread of novel coronavirus pandemic has significant socioeconomic impact on the lives of mountain communities in Gilgit-Baltistan. Financial uncertainty, decrease in income, fear of job loss, and food insecurity are some major challenges that mountain communities face due to outbreak of coronavirus in the region. The results further show that lack of community cooperation with government agencies, lack of awareness about the severity of coronavirus, and insufficient COVID-19 testing kits are the major factors that caused the spread of coronavirus cases. This study suggests that the short-, medium-, and long-term policies are required to mitigate the consequences of this pandemic and to revitalize the mountain economy of Gilgit-Baltistan, and in this regard, this study provides baseline information for policy-makers and practitioners to devise such demanding policies.

1 | INTRODUCTION

COVID-19 first emerged in December 2019 in Wuhan city of central Hubei Province of China. A series of some more than 25 cases of pneumonia of unknown etiology was initially reported, and large numbers of those were vendors and dealers in the Huanan seafood wholesale market. Chinese authorities along with the World Health Organization (WHO) started working on it and established a new virus as the novel coronavirus (2019-nCov). On 11th January, China announced its first death of 61-year old man exposed to be working in the seafood market by COVID-19. Meanwhile, the infection spread across the world in a rapid pace (WHO, 2020a) and the accelerative pace of its outspread across the globe forced the WHO to declare it a public health emergency of global concern on January 30, 2020 (WHO, 2020b). On 11th February, WHO announced a name for the new coronavirus disease: COVID-19; subsequently on 11 of March, WHO declared COVID-19 a pandemic, as by then the virus was spread over 114 countries (WHO, 2020c).

In Pakistan, the first case of COVID-19 has been confirmed by the Ministry of Health, the government of Pakistan on February 26, 2020, in Karachi, and on the same day, another case confirmed by the Pakistan Federal Ministry of Health in Islamabad (Ali, 2020). Within 15 days, the number of total confirmed cases (COVID-19 positive) reached to 20 out of 471 suspected cases with highest in the Sindh province. Sharing economic, religious, and geographic boundaries with two early hard-hit countries, Iran and China, Pakistan was highly vulnerable to the pandemic. As the corona crisis emerged in Iran, thousands of pilgrims returned to Pakistan making it an emergency situation at borders (Waris, Atta, Asmat, & Baset, 2020). Initially, the government of Pakistan started to impose lockdown restrictions; however, fearful of the economic and financial impact and swayed by the acute hardship suffered by millions of poor families, the central government decided to ease in lockdown at the beginning of May claiming that the virus spread has been well below projections. This decision was taken to balance lives and livelihoods in the month of Ramadan. The massive crowds were in markets for the

preparation of Eid festivities despite recording its highest daily infection toll. Table 1 shows the number of cases reported during and after the month of Ramadan.

The number of cases has approximately increased five times during the month of Ramadan.¹ The comparison of the number of COVID-19 cases has quadrupled after easing in lockdown on 9th May (Table 1). If the situation continues to get worse as shown in the

trend, flattening the curve and containing a virus may become impossible without taking serious steps. A further breakdown of cases reported every 15 days since the first case appeared is shown in Table 2.

The number of confirmed cases has significantly increased over the period of 5 months, and the growth rate has remained more than a 100% in the first 3 months; however, it remained fairly low in June and July 2020.

Table 3 depicts provincially disaggregated data for the four provinces and other territories. The table shows that Sindh has the highest number of cases reported followed by Punjab province. This situation is justifiable considering the fact that these two are densely populated provinces of Pakistan. Furthermore, it can be inferred from the data that the recovery rate in Pakistan is 89% which is significantly higher considering the constraints in the health sector.

When a novel virus with pandemic potential emerges, non-pharmaceutical interventions (NPIs) actions that persons and communities can take to help slow the spread of respiratory virus infections, often, are the most readily available mitigation strategies to help slow transmission of the virus in communities, especially before a pandemic vaccine becomes widely available (Qualls, Levitt, Kanade, et al., 2017). Evidence to determine the best strategies for protecting humans during a pandemic is limited. Several studies (Glass, Glass, Beyeler, & Min, 2006; Hatchett, Mecher, & Lipsitch, 2007) suggest that early

TABLE 1 Number of cases reported after ease in Lockdown

Period, as of	Confirmed cases	Change in number of cases
April 25,2020	12,723	
April 30,2020	16,817	4,094
May 5,2020	22,550	5,733
May 10,2020	30,941	8,391
May 15,2020	38,799	7,858
May 20,2020	48,091	9,292
May 25,2020	57,705	9,614
May 30,2020	69,496	11,791
June 5,2020	93,983	24,487
June 10,2020	119,536	25,553

Source: The Ministry of National Health Services, Regulation and coordination, 2020.

Period (as of)	Confirmed cases	Increase in number of cases	% increase	Deaths
March 11, 2020	20		–	–
March 26, 2020	1,235	1,215	6,075	9
April 11, 2020	5,038	3,803	308	86
April 26, 2020	13,328	8,290	165	281
May 11, 2020	32,081	18,753	141	706
May 26, 2020	59,151	27,070	84	1,197
June 11, 2020	125,933	66,782	113	2,356
June 26,2020	198,883	72,950	58	4,035
July 11, 2020	248,856	122,923	25	5,197
July 26, 2020	274,289	25,433	10	5,842

Source: The Ministry of National Health Services, Regulation and coordination, 2020.

TABLE 2 Number of cases reported in every 15 day

TABLE 3 Provincially disaggregated data (as of July 28, 2020)

Region	Confirm cases	Active cases	Deaths	Recoveries	Recovery ratio (%)	Death ratio
AJK	2,055	462	50	1,543	75	2.43
Balochistan	11,654	1,438	136	10,080	86	1.17
Gilgit-Baltistan	2,042	334	50	1,658	81	2.45
Islamabad	14,963	2,421	165	12,377	83	1.10
KPK	33,724	4,814	1,186	27,724	82	3.52
Punjab	92,452	7,807	2,133	82,512	89	2.31
Sindh	119,398	8,237	2,172	108,989	91	1.82
Overall Pakistan	276,288	25,513	5,892	244,883	89	2.13

Source: The Ministry of National Health Services, Regulation and coordination, 2020.

implementation of multiple NPI measures, such as social distancing, school closures, and isolation of sick persons, may be effective in reducing the transmission of the virus. During a pandemic, a great deal of cooperation from the public plays an instrumental role to successfully implement community mitigation measures. This cooperation from the public largely depends on populations' precautionary behavior and risk perception. Therefore, public risk perception plays a vital role in determining mitigation strategies. Studies revealed that public opinion and input can help inform policy decisions and provide information about realistic expectations for mitigation measures before a public health emergency arises (Schoch-Spana, 2007).

Mountain community in Pakistan is not isolated from the impact of COVID-19 pandemic. Gilgit-Baltistan (GB) is a mountainous region of Pakistan, which has been significantly influenced by the coronavirus diseases. This region has already been highly vulnerable to climate change and environmental degradation, and the outbreak of COVID-19 pandemic has further exacerbated these old risks with the indication of new ones. In such a situation, the aftermaths of this pandemic are likely to be severe unless mountain-specific policies and responses for the mitigation of COVID-19 impact and the revitalization of mountain economy are developed. These policies and responses should be developed in such a way that they should take into account the short-, medium-, and long-term concerns to mitigate the negative consequences and develop socioeconomic and environmental resilience for a mountain community. This study is conducted to explore public perception about the socioeconomic impact of Covid-19 in GB and to suggest measures that can mitigate the consequences of this pandemic. This study provides helpful baseline information to local institutions to formulate the NPIs that may help to reduce the spread of COVID-19 pandemic. It also explores the major challenges that the mountain community in GB, Pakistan, is currently facing and suggests various possible intervention areas for governmental and non-governmental organizations (NGOs). Policy-makers and practitioners can get baseline information about the public perception of the Covid-19 pandemic and devise sound policies and actions for the mitigation strategies accordingly. This study is a first ever attempt to explore the community perception about the socioeconomic impact of the novel coronavirus in GB, Pakistan.

2 | METHODOLOGY

2.1 | Study area

This study has been conducted in GB which is situated in the northern part of Pakistan bordering with China through Khunjerab Pass. The region has total population of over 2 million, and it is divided into three major divisions (Gilgit, Diamar, and Baltistan) and spreads over an area of over 72,971 km². GB has an average altitude of 3,000 m, and it hosts several mountain peaks with an altitude of over 6,700 m. Annually, millions of tourists visit this region for recreational purposes and to see the mighty mountains, glaciers, lakes, and its unique landscape. Tourism, agriculture, and mining are the main sources of

livelihoods of the households, and these sectors are highly vulnerable to both natural hazards and anthropogenic activities. World Bank (2011) estimated that the GDP of GB remained PKR. 37 million (\$600 million) in 2004–2005 or its per capita income remained USD 600. GB is now in its transition phase as there is a gradual shift from subsistence farming to cash crops and fruit production. The commercial activities are also evident in the major part of the region, but such activities are more pronounced in those areas that are connected to market town through Karakoram High Way (KKH).

2.2 | Data collection

This study collected cross-sectional data using an online survey method. An online questionnaire was developed using a google doc with a consent form enclosed to it. The google doc link was sent through WhatsApp, Facebook, emails, and other social media to the contacts of the authors, and participants were requested to roll out the online questionnaire to as many people, and this way the study adopted snowball sampling technique.² In order to obtain a good number of responses in the online survey, snowball sampling has been used, and this technique has been widely used in literature (e.g., Roy et al., 2020). The online questionnaire consisted of questions related to the demography profile of the respondents and the impact of COVID-19 on their lives and proposed mitigation measures for COVID-19 outbreak and perception about different institutions working against COVID-19 pandemic in GB. Since the survey was conducted online, individuals who have better access to the internet and those who could understand English could become respondents of the study. The online survey was initiated on May 1, 2020, and closed on June 1, 2020. The collected data then were analyzed using descriptive statistical tools, and the results are reported in the form of tables and figures.

3 | DATA ANALYSIS

This study is based on primary data that have been collected through an online survey related to COVID-19 impact on socioeconomic life and mitigation measures against COVID-19 pandemic in GB, Pakistan. The respondents were those who could understand English and have access to internet service, and hence the individuals with good internet access and higher education level have higher chances to become respondents of the study. Table 4 shows the demography profile of the respondents; it is evident that total of 367 individuals participated in the online survey, and in terms of gender, 72% of the respondents are male, whereas, 28% of the total respondents are female. The majority of the respondents falls under the age group of 26–35, representing 61% of the total respondents. In terms of the education level of the respondents, it is shown in Table 4 that the majority of respondents (55%) have masters-level education followed by M.Phil (17.17%) and Bachelor-level education (17.17%). Interestingly, the study has nine respondents who have Ph.D.-level education.

Variables	Descriptions	Frequency	Percentage
Gender	Female	103	28
	Male	264	72
Age (years)	18–25	84	22.89
	26–35	224	61.04
	36–45	48	13.08
	Above 45	11	3.00
Education	FA	18	4.90
	BA/BSc	63	17.17
	Masters	202	55.04
	MS/Mphil	63	17.17
	PhD	21	5.72
Profession	Currently unemployed	29	7.90
	Employed in Govt. institution	77	20.98
	Employed in private institution	134	36.51
	Personal business	43	11.72
	Students	75	20.44
	Others	9	2.45
District of origin	Ghizer	154	41.96
	Gilgit	109	29.70
	Nagar	14	3.81
	Astore	11	3.00
	Hunza	77	20.98
	Diamer	2	0.54
Destination	Gilgit	145	39.51
	Hunza	61	16.62
	Karachi	57	15.53
	Islamabad	43	11.72
	Yasin	25	6.81
	Rawalpindi	16	4.36
	Jutial	14	3.81
	Nagar	2	0.54
	USA	1	0.27
	Quetta	2	0.54
Nepal	1	0.27	

TABLE 4 Profile of respondents

Occupations of the respondents reveal that 36.51% of respondents are employed in private sector organizations, whereas, 20.98% of them are employed in government institutions and 11.72% are engaged in business activities. Respondents were also asked to indicate their district of origin and the area where they are currently living in, and it is found that 41.96% of the respondents have District Ghizer as their origin district, whereas, 29.7% belong to District Gilgit and 20.98% of the respondents belong to District Hunza. Furthermore, 39.51% of the respondents are currently living in Gilgit city, 16.62% of them are living in Hunza valley, and 15.53% of the respondents are currently based in Karachi city of Pakistan. A small number of respondents living abroad participated in the study survey (Table 4).

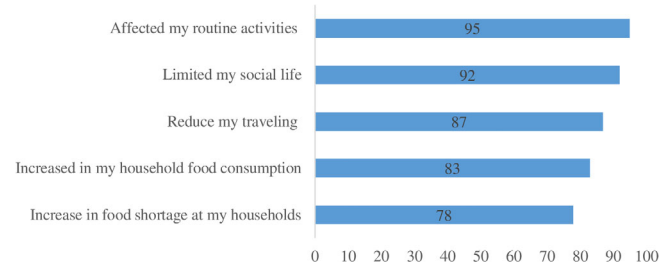


FIGURE 1 Perceived impact of COVID-19 pandemic

Respondents were asked to indicate how COVID-19 affected their life, and their results are reported in Figure 1. It is found that

95% of the respondents indicate that their routine activities have suffered due to coronavirus pandemic in the region, whereas, 92% of the total respondents reveal that COVID-19 have limited their social life, and 87% of the respondents are of the view that they have reduced their traveling already. The most alarming result indicated in Figure 1 is that 78% of the respondents reported that COVID-19 pandemic increased households' food shortage which is a serious situation that needs great attention of the policy-makers to manage this situation in a better way. Figure 2 shows the economic impact of COVID-19, and it is found that 78% of the respondents reported that they have financial uncertainty in the future, and 64% confirm that their earning/income has decreased due to COVID-19 pandemic. Six percent of the respondents have already lost their jobs, and 25% fear that they may lose their job.

Respondents were further asked to mention how do they manage their expenditure amid COVID-19, and the results show that 52.4% of the respondents manage their expenditure via their salary, and 40.2% of the respondents have used their savings. This analysis reveals that individuals take care of their future as a good number of respondents have an amount in their savings. Figure 3 further shows that only a small fraction of the respondents has met their expenditure through help from the government and NGOs.

Since the government of Pakistan has started testing patients for COVID-19 diseases and also imposed lockdown in the region, respondents were asked about the COVID-19 testing system and implementation of lockdown in their areas. Results of the study revealed that 73.2% of the respondents are not satisfied with the current COVID-19 testing system in the region, and 50% of the respondents show that lockdown is not implemented with its true spirit (Figure 4).

Since COVID-19 transmitted locally in GB, respondents were asked to indicate the factors that caused this local transmission and

results are reported in Figure 5. The results show that majority of the respondents (74.4%) blame people of the region that they did not cooperate with government and implementation agencies to take necessary mitigation measures and follow lockdown. Lack of awareness about COVID-19 severity, lack of testing kits in hospitals, and government inability to manage it at the initial level are other major reasons for the local transmission of the COVID-19.

Since GB is a mountainous region where households have limited livelihood options, the available livelihood options are vulnerable to climate change and other exogenous and indigenous shocks. In this connection, respondents were asked to indicate the most helpful support that the community may need urgently and their responses are reported in Figure 6. The results show that 53% of the respondents reveal that food support to households is highly desirable followed by ensuring sufficient medical treatment facilities in the healthcare centers and hospitals in the region. 39.6% of the respondents also indicated that direct cash support to the household may be a good help for households in this difficult time.

Since the cases of COVID-19 pandemic are increasing in Pakistan, the government of Pakistan is trying to combat this pandemic through various mitigation measures. In the survey, we asked the respondents to suggest some mitigations measures for the government of GB, Pakistan, and the responses are reported in Figure 7. The results show that the majority of the respondents (45.5%) suggest the government should extend the current state of lockdown in the region as a mitigation measure to combat the COVID-19 outbreak. Further, 24.4% are in the view that lockdown should be continued but with some relaxation and 15.3% suggested that the government should increase the COVID-19 testing facilities in the hospitals of the region. Likewise, 15.2% indicated that there should be increase in the quarantine centers and 6.3% suggested the government should

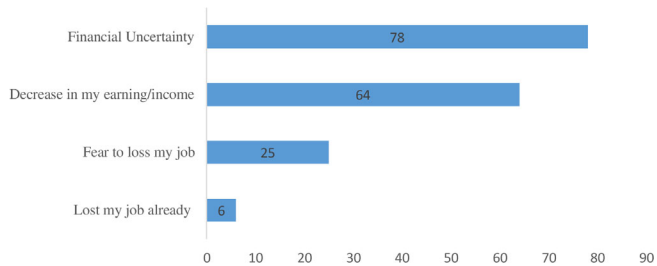


FIGURE 2 Perceived economic impact



FIGURE 4 Perception about COVID-19 mitigation measures

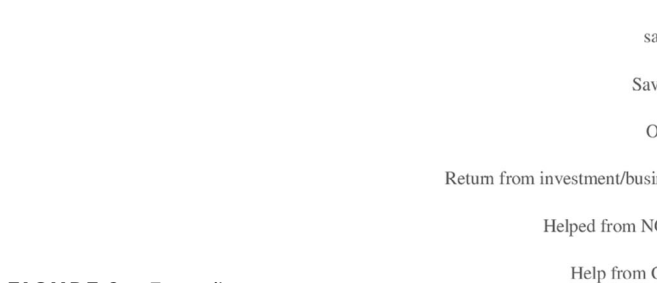
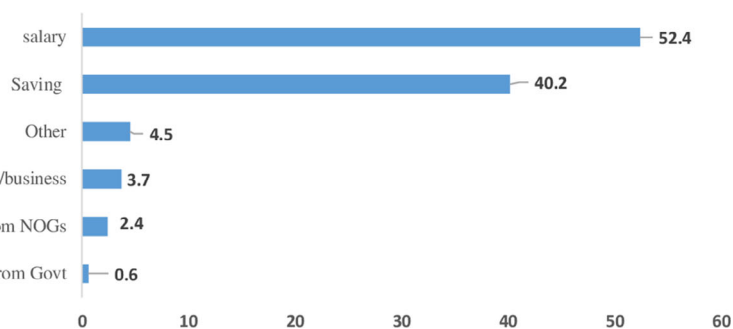


FIGURE 3 Expenditure management during COVID-19 lockdown



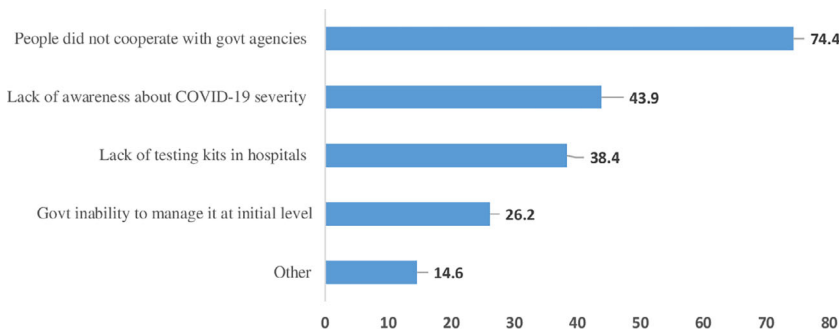


FIGURE 5 Issues with COVID-19 outbreak in the region

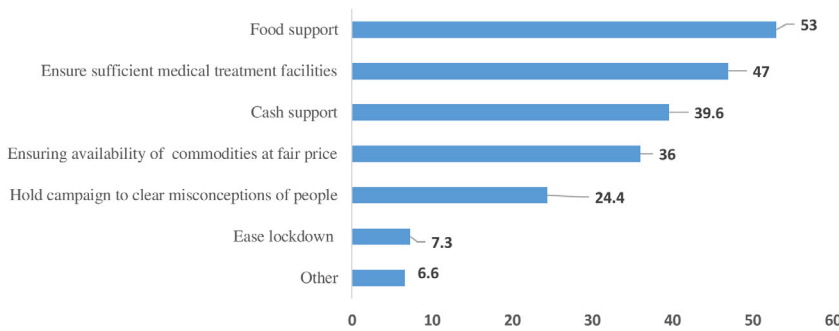


FIGURE 6 Support to local community

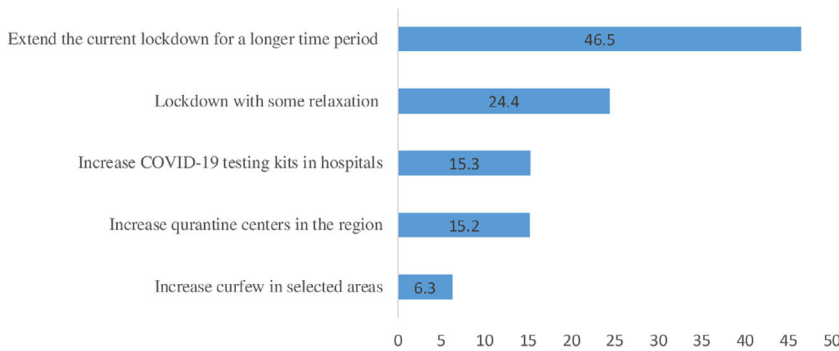


FIGURE 7 Proposed COVID-19 mitigation measures

TABLE 5 Performance rating of different institutions

	Measures taken by local government	Measures taken by NGOs	Measures taken by community members	Public cooperation with Govt. agencies
N	367	367	367	367
Mean (average)	2.14	1.72	2.03	2.02
SD	1.07	0.96	1.08	1.15
Minimum	1	1	1	1
Maximum	5	5	5	5

Note: 1 = unsatisfactory; 2 = satisfactory; 3 = Good; 4 = very good; 5 = excellent.

impose curfew in the areas where the outbreak of COVID-19 is relatively high.

In GB, various organizations are combating against COVID-19 pandemic. Respondents were asked to rate (on a scale 01, unsatisfactory, to 05, excellent) the performance of these institutions in terms of mitigating COVID-19 spread in the region. Responses of the respondents are analyzed using mean and standard deviation as

shown in Table 5. Since the scale varies from 01 (lowest rate) to 05 (highest rate), the average score approaches to higher score (maximum 05) consider better performance, and if the average score approaches one, then the performance is considered weak. Table 5 shows that respondents do not perceive any significant performance by local government, NGOs, and community members to containing the COVID-19 pandemic in the region. The mean score of public

cooperation with government agencies is 2.02 which indicates respondents are not highly satisfied with the cooperation.

4 | DISCUSSION

The threat of influenza pandemic has drastically increased during the last century with the emergence of highly contagious influenza viruses such as H5N1, H1N1, and the most recent one, COVID-19. Evidence suggests that the likelihood of pandemics has increased because of increased global travel and integration, urbanization, changes in land use, and greater exploitation of the natural environment (Jones et al., 2008; Morse, 1995). These trends seem to intensify in the case of COVID-19 which requires significant policy attention on the need to identify and limit emerging outbreaks. Despite the efforts and progress toward preparing for and mitigating the impact of pandemics, COVID-19 has challenged the global health system and has impacted millions of lives around the world.

Evidence suggests that epidemics and pandemics can have significant social consequences causing mobility restrictions, travel bans, closure of borders, and, in extreme cases, area quarantines (Espinoza, Castillo-Chavez, & Perrings, 2019). Our findings support the evidence that the current crisis has changed the way people have managed their lives by restricting mobility and social distancing. The consequences of the pandemic are not only limited to social life but also affect financial constraints at the household. The findings of the research reveal that individuals perceive the persistence of pandemic may lead to financial uncertainty and reduction in income due to longer lockdown periods. Our findings are in line with the results of Blake, Blendon, and Viswanath (2010) that reveal job insecurity as a real consideration for many working adults in the United States during the influenza outbreak. In the absence of well-implemented social safety nets and unemployment benefits, financial problems may weigh heavily on the minds workers during a pandemic, and these problems may result in comprise on compliance consideration.

The global health impact of the COVID-19 pandemic has affected workforces, transportation systems, and supply chains around the world. But this kind of emergency has threatened geographically isolated communities at another level by creating a food crisis even before the virus causes severe health problems in the community. This is mainly due to the fact that it is hard to get food supplies locally, and economic activities are disrupted as a result of lockdown. The most at-risk populations during a severe pandemic are those that are already struggling with hunger, health, and poverty. Studies provide substantive literature to support the evidence that food insecurity is significantly higher in the mountain areas of Pakistan than in the plains as a result of a range of biophysical and socioeconomic factors (Rasul & Hussain, 2015). Our findings are, similar perceived risk food insecurity is significantly high among the GB community and food support is considered as the foremost and first priority of households during the lockdown. As the mountain communities are already dealing with the epidemics of poverty, geographic isolation, and subsistence farming, the food crisis in the long term is inevitable for

communities and may result in lesser compliance with strategies of lockdown and social distancing. Besides, many households are vulnerable because of the way the pandemic has affected economic and social systems. It is crucial for policy-makers to take necessary actions to prepare for food security and ensure food supply during a severe pandemic to cope with the impacts of spreading disease.

Effective management of pandemics in the phase of no treatment or vaccination is largely dependent on the precautionary behavior of the population which, in return, is dependent on effective risk communication. Effective communication and awareness among communities stimulate realistic risk perceptions and provide correct knowledge and skills to promote and enable precautionary practices. It is essential to know how risk is perceived for preparing an effective plan, for risk communication, and may be an important predictor of the public's response. In a study conducted among the residents among the New South Wales population, Barr et al. (2008) found that respondents with higher levels of risk perception reported more willingness to comply with public health behaviors in the event of an outbreak of influenza. Similar results (Leung et al., 2003) were reported in Hong Kong, where respondents with an increased perception of risk were more likely to be engaged in risk-mitigating behaviors. However, it is observed that neither is there knowledge and awareness about the disease nor people cooperate with the government agencies inhibiting them implement lockdown in true spirits. It must be taken into consideration that such awareness is vital for effective control of newly emerging diseases because our ability to promote health-protective behavioral change depends on our knowledge and awareness. For people to voluntarily engage in precautionary actions, they need to be aware of the risk at first.

The direct health impacts of pandemics are catastrophic. It is estimated that the black death perished 30–50% European population (DeWitte, 2014), while human immunodeficiency virus (HIV)/acquired immune deficiency syndrome (AIDS) has killed more than 35 million people since 1981 (WHO, 2014). The extent and magnitude of the current pandemic are expected to have higher mortality and morbidity rate than expected. A country's expected ability to curtail pandemic spread can be expressed using a preparedness index that focuses on measuring institutional, infrastructural, and financial capacities to detect and respond to a large-scale outbreak of infectious disease (Madhav et al., 2017). Even well-prepared countries with effective public institutions and strong economies with adequate investment in the health sector are unable to cope with the current outbreak. Poorly prepared countries with inadequate resources for public health and gaps in fundamental outbreak detection and response systems have the worst effects of outbreak compared to developed countries. Our findings indicate the public health infrastructure required for identifying, tracking, managing, and treating pandemic needs improvement. Also, there needs to be adequate physical and communication infrastructure to channel information for awareness and effective risk communication. Although it is necessary to engage in precautionary behavior such as contact tracing, isolation and screening, wearing masks and hand hygiene to control new infectious diseases. These precautionary measures are partly complying with human behavior about the perceived risk of the event.

The major sources of livelihoods of the mountain community of GB are tourism and agriculture. The flow of tourists to this region has been increased exponentially over the last many years, owing to the improved law and order situation in the country and tourism-friendly policies of the current government (Ali & Yousuf, 2019), and thus, tourism became one of the main livelihood sources of the local community. However, the tourism sector has been severely hit by the outbreak of the Covid-19 pandemic, and many people have lost their jobs already. In this connection, a detailed assessment of the impact of the Covid-19 pandemic on the tourism sector is needed to provide baseline information to policy-makers to formulate sound policies for the speedy revitalization of the tourism sector. This study suggests that the immediate focus should be on jobs-creating sectors as this mountain region is highly dependent on remittances, and these remittances have drastically fallen due to return migration amid COVID-19 pandemic. It is likely to happen that these remittances will not resume to previous level, and thus, the return migrants will be looking for jobs. Therefore, policy-makers should take into account the socioeconomic impact of return migration in their policy formulation. Furthermore, this pandemic provides an opportunity for mountain regions to rebuild structure toward a green economy, to devise ecofriendly policies for tourism, agribusiness, energy, forestry, and farming (ICIMOD, 2020). Specifically, GB needs to rebuild its tourism sectors in such a way that it should be ecofriendly and supports local communities to greater extent. Mountain financial system should be designed through inclusive services that support resilient businesses in the region.

5 | LIMITATION OF THE STUDY

This study is confined to the people of GB who had access to internet connectivity, a smartphone or computer/laptop, email IDs, and the ability to understand English language, and thus, the perception of people who do not have access to the internet and are uneducated may be different from the results of this study. This study has automatically filtered out individuals with little or no formal education, thus limiting the scope of the study by not inculcating the impact on the lower income segments of the society who have no access to modern technology.

6 | CONCLUSION

The COVID-19 infection is a highly contagious disease and has affected a large population; the number of confirmed coronavirus has been increasing with the time which have severe consequences on the lives of human on earth. This disease needs to be addressed urgently, and it demands urgent actions from both governmental and NGOs. The mountain community in Pakistan is already facing severe challenges in the form of food security, limited livelihood options, and climate changes, and the outbreak of coronavirus in the region has further exacerbated these challenges. This study reveals that the mountain community needs food support, sufficient health facilities,

direct cash support, and the availability of basic commodities of life at fair prices. This study further reveals imposition of lockdown for a longer period can be an effective tool to contain the spread the COVID-19 pandemic; however, it is also evident that there is lack of community cooperation with the government agencies in containing the spread of COVID-19 pandemic, and thus, community needs to be well aware of the severity of this disease. Further, there is an urgent need to address the challenge of prioritizing live and livelihood in the mountain regions. There is a high risk of failure of lockdown if the requirement of livelihood is not addressed properly as it will be very difficult to restrain people at homes. Therefore, to ensure the true spirit of lockdown in the region, households should be given adequate access to food and other necessary items. In this regard, nongovernmental originations play an effective role, and public-private partnership is also highly desirable.

This study highlighted that mountain community in GB, Pakistan, is in dire need of immediate help in terms of direct cash transfer to needy households, food support, price stability of basic commodities of life, and ensuring sufficient healthcare in the region. Thus, governmental and NGOs need to take immediate action to address such challenges in GB. Such challenges also call for strong and resilient leadership in government, healthcare, and wider society. Policy-makers should devise short-, medium-, and long-term policies for how the mountain economy is reenergized and rebalanced after this pandemic. In this connection, a comprehensive socioeconomic development strategy for the various sectors, including tourism and business, should be developed so that the revitalization of these sectors is ensured.

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ENDNOTES

- ¹ Ramadan is the ninth month of the Islamic calendar, observed by Muslims worldwide as a month of prayer, fasting, reflection, and community.
- ² Snowball sampling is a type of non-probability sampling technique where respondents are asked to participate in the survey and identify their acquaintances so that they will also be asked to participate in the survey.

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