

# **CHAPTER-ONE**

## **INTRODUCTION**

### **1.1 Background of the Study**

Coronavirus disease 2019(COVID- 19) is defined as an illness caused by a novel coronavirus called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; formerly called 2019-CoV), which was first identified amid an outbreak of respiratory illness in Wuhan city, Hubei Province, China. It was initially reported to the World Health Organization (WHO) on December 31, 2019. On January 30, 2020, the WHO declared the COVID-19 outbreak a global health emergency. On March 11, 2020, the WHO declared COVID-19 a global pandemic, its first such designation since declaring H1N1 influenza a pandemic in 2009.

Illness caused by SARS-CoV-2 was termed COVID-19 by the WHO, the acronym derived from "coronavirus disease 2019." The name was chosen to avoid stigmatizing the virus's origins in terms of population, geography, or animal associations. On February 11, 2020, the Coronavirus Study Group of the International Committee on Taxonomy of Viruses issued a statement announcing an official designation for the novel virus: severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

### **1.2 Statement of the Problem**

COVID-19 is threatening the health and the livelihood of workers and employers globally. It is not a local but a worldwide challenge, requiring a global response. Urgent action is essential from international organizations. The time has come to see the United Nations reform in action. Enhanced cooperation and coordination are required among all actors in the multilateral system. The pandemic has led to a dramatic loss of human life worldwide and presents an unprecedented challenge to public health, food systems, and the world of work. The economic and social disruption caused by the pandemic is devastating: tens of millions of people are at risk of falling into extreme poverty, while the number of undernourished people, currently estimated at nearly 690 million, could increase by up to 132 million by the end of the year.

The pandemic has been affecting the entire food system and has laid bare its fragility. Border closures, trade restrictions, and confinement measures have been preventing

farmers from accessing markets, including for buying inputs and selling their produce, and agricultural workers from harvesting crops, thus disrupting domestic and international food supply chains and reducing access to healthy, safe, and diverse diets. The pandemic has decimated jobs and placed millions of women and men under threat, with those in low-income countries, particularly the most marginalized populations, which include small-scale farmers and indigenous peoples, being hardest hit.

### **1.3 Objectives of the Study**

Objectives of the study about impacts of COVID-19 on workers in Itahari municipality are:

- To identify the main impacts of COVID-19 on workers,
- To know the levels of COVID-19 awareness and knowledge,
- To collect and analyze the data on COVID-19 affected workers,
- To find out the obstacles and hazards of the pandemic that has been created in their lifestyle,
- To estimate the strength of association between these outcomes and sociodemographic and health characteristics of workers.

### **1.4 Significance of the Study**

The significance of the study about COVID-19 in workers are pointed below:

- It helps to find out the situation of the pandemic,
- To follow and provide awareness of COVID-19,
- Helps the worker to maintain the social hygienic habits,
- To provide ideas about the harmful effects of the pandemic,
- To inspire the individuals to follow the criteria of preventive measures of the pandemic,
- Motivates to be aware of the possible upcoming hazards of the pandemic,
- Inspire NGO, INGO to implement different programs on prevention of COVID-19.

### **1.5 Delimitation of the Study**

- The typical areas of Itahari Municipality I.e., ward no. 8 and 9 ( Gaisar and Bhurki ) have been selected for the study,
- Workers or Labours of the respective area around 100 individuals has been selected for the questionnaire process,
- The questions will be asked from the particular topic only,
- Planned to include household workers as well as child Labours (if available),
- The questions will be asked in limitation of descriptive methodology,
- The individual won't be forced to answer if they feel the questions are not comfortable,
- The conclusion will be decided according to the interview and questionnaire analysis.

### **1.6 Expected Outcome**

On the basis of the objective of the study the expected outcomes will be following:

- To improve the impacts of COVID-19 on workers,
- To develop the social hygienic habit among workers,
- Provide knowledge and make them inspired to follow the protocols of COVID-19,
- The rate of the infected will be deducted as expectation,
- Inspire them to be prepared for upcoming situations.

## **CHAPTER-TWO**

### **REVIEW OF THE LITERATURE**

#### **2.1 Review of the Theoretical Literature**

A review of the theoretical literature on adaptation to the COVID-19 pandemic is conducted to assess the current state of knowledge. Different questionnaires are searched for studies. Narrative synthesis showed that knowledge is largely based on experts' assessments of relative bereavement research and professional experience.

A theoretical perspective is applied to the information derived from the available articles. The model of the question is descriptive and illustrative.

#### **2.2 Review of the Empirical Literature**

The COVID-19 crisis triggered by the novel coronavirus (SARS-CoV-2) and the infection control measures taken has extended beyond affecting health issues to impact economic activity worldwide. In this structured literature review, the focus is specifically on how the crisis has impacted entrepreneurial activity. The review focuses on the early empirical literature that primarily relied on data collected during the first wave of the pandemic. These empirical results are synthesized in a thematic literature review. The entrepreneurship research on the COVID-19 crisis is marked by three perspectives: the uncertainty perspective, the resilience perspective, and the opportunity perspective. To obtain a complete picture of the effects of the crisis on entrepreneurship, these three perspectives should be considered in combination. We provide implications for future research, policymakers, and entrepreneurs discussing how the interplay of the reviewed perspectives provides paths toward creative reconstruction, that is, the opportunity to move beyond pre-crisis levels of innovation and entrepreneurial action.

#### **2.3 Theoretical Framework**

This paper provides some theoretical scenarios of the socioeconomic impacts caused by the COVID-19 pandemic for the workers in Itahari Municipality. To do so, after a brief literature review of previous pandemics, we use the macro and microeconomic theory, together with aggregated data, in order to provide expected implications of the COVID-19 pandemic in Itahari. At a macroeconomic level, we explain how the COVID-19 shock is causing aggregate financial plunging the region into a recession

and why such a recession is dangerously harmful to the employee's economies. For the people, the impact of this sanitary crisis is related to the change in their preferences and household members' relations due to extended quarantines.

## **2.4 Conceptual Framework**

The purpose of this study is to add insight to the integrative conceptual framework on employee performance during the COVID-19 pandemic for Itahari Municipality. The literature review indicates the effects of motivation, remote work environment, and employee performance during the Covid-19 pandemic. A positivism research approach was used and data were collected through a literature review. The findings from the literature review indicate motivation, remote work environment, and employee satisfaction have a significant effect on employee performance during the COVID-19 pandemic. Also, we addressed some potential guidance and suggestions to help future researchers study the other variables that could impact their employee performance during COVID-19.

## **2.5 Implications of the Review for the Research**

In this paper, we investigate how Labour market shocks, as a direct result of the implemented social distancing and lockdown measures during the COVID-19 pandemic, are associated with the perceived financial wellbeing of people living in Itahari Municipality. We are specifically interested in the relationship with *financial wellbeing*, rather than income alone. Financial wellbeing can range widely within income levels and is arguably a more direct measure of people's enjoyment of their income, their consumption, and their financial worries and constraints. In comparison to focusing on income, financial wellbeing gives us a holistic view of the true pressures felt by all individuals across the income and wealth distribution during the pandemic.

Financial wellbeing as a validated multi-item empirical measure is a relatively new development. Our measure is defined in terms of the extent to which individuals feel that they are able to meet their financial obligations, have the financial freedom to enjoy additional consumption and other fulfilling choices, control rather than be controlled by their finances, and have security and be free from financial anxiety now, in the future, and under possible adverse circumstances.

## **CHAPTER-THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Research Design**

For the research on Impacts of COVID-19 in workers of Sunsari District, Itahari Municipality, following the call from the WHO to immediately assess available data to learn what care approaches are most effective and evaluate the effects of therapies, this collection aims to report on original peer-reviewed research articles in methodological approaches to medical research related to COVID-19.

#### **3.2 Sampling Procedure**

Estimates of the true prevalence of COVID-19 in workers of Itahari Municipality can be made by random sampling and pooling methods. Here I use simulations to explore how to experiment sample size and degrees of sample pooling impact precision of prevalence estimates and potential for minimizing the total number of tests required to get individual-level effective results.

#### **3.3 Data Collection Methods**

The COVID-19 pandemic and associated lockdowns have forced us to shift from traditional approaches of in-person data collection for research and evaluation to different areas of Itahari practices. For example, in many cases, it is no longer allowable or ethical for data collectors to conduct fieldwork because of the risks associated with face-to-face interviews and observations. Although this has implications for evaluation design, the quality of the data collection, as well as our ability to work closely with our evaluation with people, I have committed to maintaining both the quality and integrity of the research by following proper hygienic habits and keeping social distance.

#### **3.4 Data Collection Tools**

Monitoring the health situation, trends, progress, and performance of health systems requires data from multiple sources on a wide variety of health topics. A core component of WHO's support to the Member States is to strengthen their capacity to collect, compile, manage, analyze and use health data mainly derived from population-based sources (household surveys, civil registration systems of vital

events) and institution-based sources (administrative and operational activities of institutions, such as health facilities).

### **3.5 Data Collection Procedures**

The coronavirus disease 2019 (COVID-19) pandemic, caused by the SARS-CoV-2 virus, has had unprecedented impacts on economic systems, public health, societies, and employees globally. In response to outbreaks, physical distancing measures, national lockdowns, and travel restrictions to control the spread of COVID-19 have been implemented in Nepal as well as in Itahari Municipality. In response to these measures, choosing to switch from standard face-to-face data collection methods has been chosen to the determined area data collection in support of continued research. Data collection is defined here as the collection of data via interviews with study participants and researchers physically distanced. The data is planned to be collected by both qualitative and quantitative methods.

### **3.6 Data Analysis**

It is very important to Analyse the data and find meaningful insight in the data so the graph of cases that are increasing day by day can be flattened out. For the current study, Itahari Municipality data has been taken and Chi-square test is selected to find the different impacts of COVID-19 in workers between gender (male and female), age group (less than 18, 19 to 40, 41 to 65 and greater than 65) and current status (recovered and hospitalized). The results show the number of dependent family members and what types of losses and crises they are bearing altogether.

### **3.7 Ethical Considerations**

There are some ethical considerations that should be followed while doing the research on the impacts of COVID-19 in workers. Research that was planned or ongoing before the pandemic may need to be reassessed and formally reviewed, for example, in relation to risks to study participants, particularly the impact on employees who are already suffering from life-threatening and economical hazards in some settings, or to comply with public health control measures such as social distancing requirements.

The researchers should maintain dignity and avoid any kind of harm to the participants. Validity and norms should be on high consideration. Participants are not supposed to be forced and their rights should be taken on main priority. During the

research, we should follow the protocols of COVID-19 transmission like maintaining social distance and wearing masks.



## CHAPTER- FOUR

### ANALYSIS AND INTERPRETATION OF DATA

This chapter is mainly concerned with the analysis and interpretation of data which were collected from the field survey, observed an interview, collected data were tabulated and kept in sequential order according to the objectives were analyzed on the basis of percentage, essential table, diagram, and figure we're used to making analysis more clear. The analysis was focused on the impacts of COVID - 19 on workers of the selected areas of Itahari municipality.

#### 4.1 Socio - Demographic Characteristics

In this segment, the analysis included Socioeconomic characteristics such as distribution of job, family pattern, age group literacy, and educational attainment, occupational status, types of employment are discussed.

##### 4.1.1 Details of Respondents by Age

Table number 1 gives the information about the impacts of COVID - 19 were existing on workers of Itahari municipality, ward no. 9 and 10 by different ages.

**Table No. 1: Distribution of COVID - 19 impacts on workers by age.**

Age group in years	Number of people	Percentage (%)
15 - 25	11	11%
26 - 35	37	37%
36 - 45	32	32%
46 - 55	15	15%
56 - 65	5	5%
<b>Total</b>	<b>100</b>	<b>100%</b>

Table number 1 shows that the different age group, 11 workers were between 15 - 25 age group, 37 workers were between 16 - 35 age group, 32 workers were between 26 - 45 age group, 15 workers were between 46 - 55 age group and 5 workers were between 56 - 65 age group. In total respondents were taken in a similar proportion. The highest numbers of workers were from age group 26 - 35 and the lowest is from 56 - 65 age group.

#### 4.1.2 Distribution and Crisis of Employment in Nepal during Covid 19 Pandemic

Nepal has a labor force of 16.8-million-workers, the 37th largest in the world as of 2017. Although agriculture makes up only about 28 percent of Nepal's GDP, it employs more than two-thirds of the workforce. Millions of men work as unskilled laborers in foreign countries, leaving the household, agriculture, and raising of children to women alone. Most of the working-age women are employed in the agricultural sector, contributions to which are usually ignored or undervalued in official statistics. Few women who are employed in the formal sectors face discrimination and a significant wage gap. Almost half of all children are economically active, half of which (almost a quarter of all children) are child laborers.

**Table No. 2: People who lost their job and still doing jobs during the pandemic**

S.N.	Report	Number	Percentage(%)
1	People lost their job	37	37%
2	People still doing the job	63	63%
		100	100%

According to the table around 37 people has lost their job and 63 people are still doing their job. Besides the data, many people tend to lose their job or do work for half salary only which cause an economic crisis. They are barely managing to maintain the household expenses.

#### 4.1.3 Employment Challenges during Covid-19 In Nepal



Nepal has a population of 26.5 million which is growing fast, resulting in a young country with 63.7 percent of the total population below the age of 30. The unemployment rate for youth

aged 15-29 is 19.2 percent compared to 2.7 percent for the whole population. Over 400,000 young people are estimated to enter the labor force every year. These figures indicate the quantitative dimension of the employment challenge in Nepal.

More challenging for Nepal is the quality aspect of employment, which is associated with the predominance of employment in the informal segments of the economy where productivity and earnings are low and conditions of work are poor. This, in turn, is manifested in large

numbers being underemployed - the so-called working poor. And an important part of the employment challenge is to raise the productivity and earnings of these workers and improve their working conditions.

Due to the situation of covid-19 in Nepal most of the people, especially the youth have opted for overseas migration in search of higher income and dignity at work. Our workers overseas are least protected.

**Table 3: Types of challenges on workers during a pandemic**

S.N.	Challenges on workers	Number	Percentage(%)
1	lost job	23	23%
2	suffering economic crisis	53	53%
3	no problem	24	24%
<b>Total</b>		<b>100</b>	<b>100%</b>

In table 3 it has explained the rate of challenges for workers. 23 people have lost their job already and 53 people are suffering from the financial crisis. Whereas 24 people do not have any problem during COVID-19 and the reason is they have other optional resources to earn money and most of them have an agricultural family background.

#### **4.1.4 Current State Of Covid-19 on Employment**

The latest study - “Rapid Assessment of the Social and Economic Impacts of COVID-19 on the vulnerable groups in Nepal” – commissioned by the UN Development Programme in Nepal and conducted by the Institute for Integrated Development

Studies shows that the COVID 19 pandemic has disrupted supply chains, shut or threatened the survival of small and informal enterprises, and made people highly vulnerable to falling back into poverty through widespread loss of income and jobs. The study recommends the government guard against vulnerabilities by strengthening social protection and livelihoods, reorienting public finance to augment human capabilities, and introducing measures to limit bankruptcies and create new sources of job-creating growth.

This pandemic has brought a lot of economic loss and unemployment problems in Nepal. People lost their jobs which cause poverty and many health issues.

**Table 4: workers opinion about the effects of COVID-19 On employment**

S.N	Does COVID-19 affect your employment?	Number	Percentage
1	Yes	95	95%
2	No	5	5%
<b>Total</b>		<b>100</b>	<b>100%</b>

Table 4 has described the worker’s opinion about the effect of COVID-19 on employment. 95 people think that the pandemic has been affecting employment whereas only 5 people think that the pandemic is not affecting employment at all.

#### **4.1.5 Awareness about the Pandemic**

According to the data, most of the employees are following the protocol about the transmission of covid-19.

Personal hygiene and public health practices such as handwashing and physical distancing are important in the quarantine of suspected or confirmed cases to minimize coronavirus spread. However, it will be challenging to adhere to these practices in many cities and rural areas, especially in developing countries. Without sustained bans on large gatherings such as culture-related behaviors and faith practices including mass prayer gatherings, large weddings, and funerals, these cases may create super-spreading events with the accelerated transmission.

**Table No. 5: Awareness of covid-19 in people.**

<b>S.N.</b>	<b>Report</b>	<b>Number</b>	<b>Percentage</b>
1	People well aware of covid 19	65	65%
2	People not aware of covid 19	13	13%
3	People have little knowledge about covid 19	22	22%
<b>Total</b>		100	100%

On the basis of the report, 65 people are well aware of the cause and harmful effects of the pandemic whereas 13 people are not well aware of the harmful causes and effects of the pandemic and 22 people are less aware of the harmful effects of covid 19. Aware people are educated work in respected sectors like the bank, college, school, hospitals, etc whereas non-aware people are not educated and mostly work on sites, bus drivers, and conductors. Some well-educated peoples are also not fully informed or they do not have sufficient knowledge about the pandemic.

#### **4.1.6 Obstacles Created Due To the Pandemic in Lifestyle**

COVID-19 is a global burden that continues to redefine daily lifestyle-related habits in a significant manner as the pandemic progresses through its different phases. Public health recommendations and government measures are taken to abate infection have indirectly impacted food availability, dietary quality, normal daily activities, access to recreational public settings, social activities, work, and financial security. These factors compound over time to radically change lifestyle-related behaviors, especially daily eating, activity, and sleep behaviors that are known to be independent risk factors for metabolic complications such as obesity, diabetes, and cardiovascular disorders.

Few preliminary studies from the west have highlighted a negative impact on various lifestyle-related behaviors as a potential implication of COVID-19. However, these studies were done during the complete lockdown phase and suffer from methodological limitations like less representative sample and non-validated tools for data collection. Moreover, the interplay of the severity of COVID-19 infection with different social, economic, and cultural constructs in determining the extent of changes in lifestyle-related behaviors might vary from place to place.

**Table 6: Obstacles created during the pandemic in the lifestyle of workers**

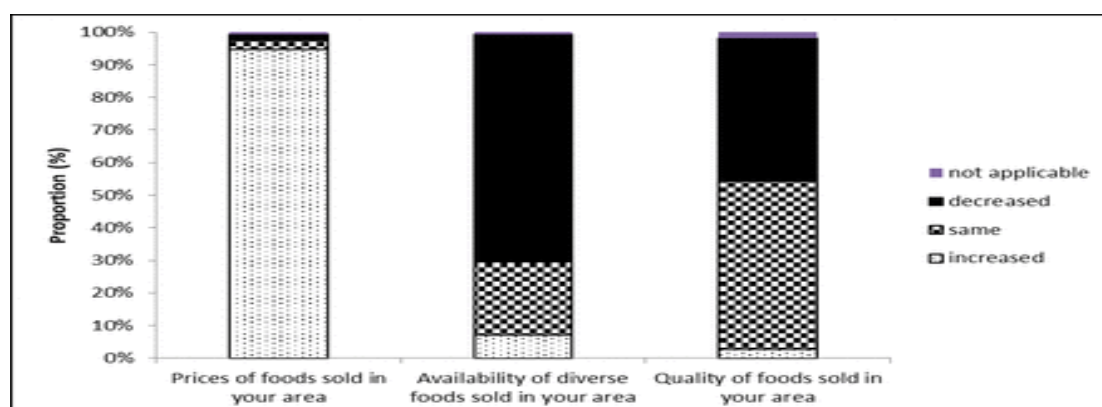
S.N	Types of obstacle	Number	Percentage
1	Rise food price	44	44%
2	Cant meet people and relatives	25	25%
3	Fear to go the hospital for a regular check-up	31	31%
<b>Total</b>		<b>100</b>	<b>100%</b>

In this study, 44 peoples feel there is a high increment in food prices during the lockdown and people are forced to buy date expired food because of closed import-export activities. 25 people are frustrated because they can't meet with distant family members and relatives. They are also sad for not being able to social gatherings. Whereas 31 workers are discouraged to go to hospitals for their regular physical check-ups because they are afraid to be infected by COVID-19 through the hospital. These people are mostly long-term patients with high blood pressure, diabetes, and depression.

#### 4.1.7 Effects of the Pandemic on Health and Nutrition

The lockdown period was associated with an increase in food prices, a decrease in dietary diversification, elevated GAD symptoms, disrupted diet and consumption patterns. There were low levels of physical activity and perceived weight gained during the lockdown period, thus increasing the risk of overweight and obesity. Further studies incorporating participants of different socioeconomic statuses are warranted to get more conclusive results.

**Figure No. 1: Effect of COVID-19-induced lockdown on food prices, availability, and diversity.**



shows that the lockdown resulted in glaring increases in food prices. This was reported by 94.8% of the study participants. In addition, 64% reported a decrease in the availability of diverse and nutritious foods, while 43.9% mentioned that the quality of foods sold in their areas had decreased. These results show a disturbing picture where the food security of most households appears to be compromised due to extortionate prices, availability of less nutritious food choices with poor quality (possible safety concerns as well).

## **4.2 Causes, Effects, And Situation Of Covid-19.**

### **4.2.1 Historical Background of Covid-19**

Many health experts believe that the new strain of coronavirus likely originated in bats or pangolins. The first transmission to humans was in Wuhan, China. Since then, the virus has mostly spread through person-to-person contact.

Coronaviruses are a group of viruses that can cause disease in both animals and humans.

The Severe Acute Respiratory Syndrome (SARS) virus strain known as SARS-CoV is an example of a coronavirus. SARS spread rapidly in 2002–2003.

The new strain of coronavirus is called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The virus causes coronavirus disease 19 (COVID-19).

Around 80% of people with COVID-19 recover without specialist treatment. These people may experience mild, flu-like symptoms. However, 1 in 6 people may experience severe symptoms, such as trouble breathing.

The new coronavirus has spread rapidly in many parts of the world. On March 11, 2020, the World Health Organization (WHO) declared COVID-19 a pandemic. A pandemic occurs when a disease that people are not immune to spreads across large regions.

### **4.2.2 How Coronavirus Spreads**

SARS-CoV-2 spreads from person to person through close communities.

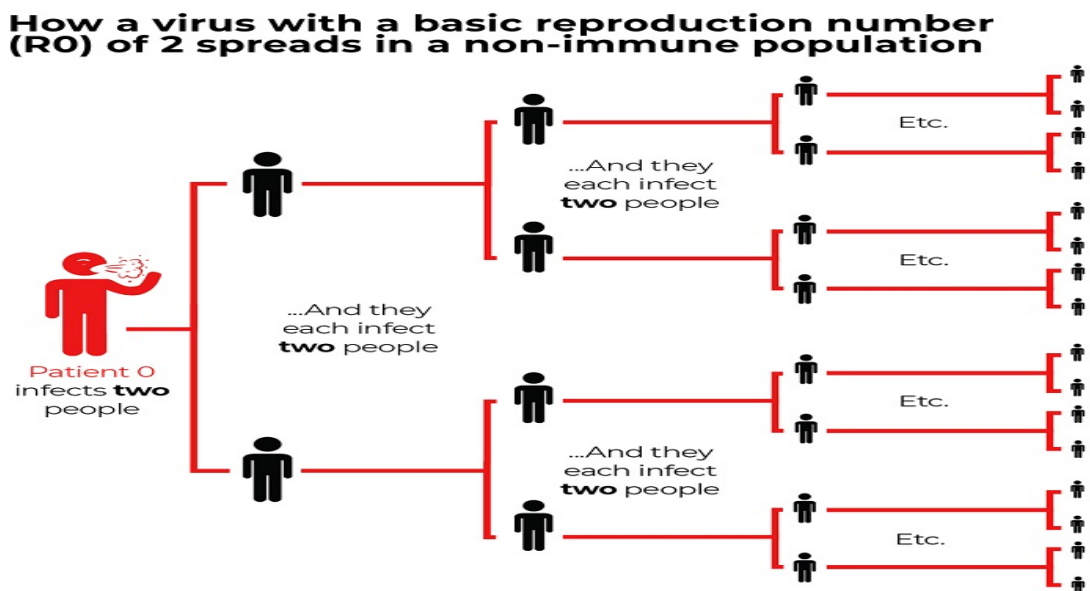
When people with COVID-19 breathe out or cough, they expel tiny droplets that contain the virus. These droplets can enter the mouth or nose of someone without the virus, causing an infection to occur.

The most common way that this illness spreads is through close contact with someone who has the infection. Close contact is within around 6 feet.

The disease is most contagious when a person's symptoms are at their peak. However, it is possible for someone without symptoms to spread the virus. A new study suggests that 10% of infections are from people exhibiting no symptoms. Droplets containing the virus can also land on nearby surfaces or objects. Other people can pick up the virus by touching these surfaces or objects. Infection is likely if the person then touches their nose, eyes, or mouth.

It is important to note that COVID-19 is new, and research is still ongoing. There may also be other ways that the new coronavirus can spread.

**Figure 2: The process of spread of coronavirus among the people**



The **basic reproduction number (R<sub>0</sub>)** is a measure of the average number of people that would be infected by an infectious individual in which no control measures are implemented.

The **effective reproduction number (R<sub>eff</sub>)** measures the average number of people that would be infected by a single infectious person, taking into account the public health interventions implemented to control the spread of the virus.

#### 4.2.3 SYMPTOMS OF COVID-19

COVID-19 affects different people in different ways. Most infected people will develop mild to moderate illness and recover without hospitalization.

Most common symptoms:

- fever
- cough



- tiredness
- loss of taste or smell

Less common symptoms

- sore throat
- headache
- aches and pains
- diarrhea
- a rash on skin or discoloration of fingers or toes
- red or irritated eyes

Serious symptoms

- difficulty breathing or shortness of breathe
- loss of speech or mobility or confusion
- chest pain

Seek immediate attention if you have serious symptoms. Always call before visiting the doctor. People with mild symptoms who are otherwise healthy should manage their symptoms at home.

On average it takes 5–6 days from when someone is infected with the virus for symptoms to show, however it can take up to 14 days.

**Table 7: Symptoms of COVID-19 on employees.**

<b>S.N.</b>	<b>Report</b>	<b>Number</b>	<b>Percentage</b>
<b>1</b>	fever	16	16%
<b>2</b>	fever, cough, and the common cold	33	33%
<b>3</b>	fever, cough, tasteless, smell-less	41	41%
<b>4</b>	fever, fatigue, and dizziness	10	10%
<b>total</b>		<b>100</b>	<b>100%</b>

According to the taken data, the symptoms vary from person to person. Most people i.e. symptoms of 41 people are fever, cough, tastelessness, and smell-lessness.

whereas fewer people i.e.10 people’s symptoms are fever, fatigue, and dizziness. The symptoms of 33 people are fever, cough, and the common cold and the symptoms of 16 people are the fever only.

#### 4.2.4 Sources of Covid-19 Transmission on Workers

The current rampant coronavirus infection in humans, commonly known as COVID-19, a pandemic that may cause mortality in humans, has been declared a global emergency by the World Health Organization (WHO). The morbidity and mortality rates due to the pandemic are increasing rapidly worldwide, Nepal is affected by the disease. The source COVID-19 is not absolutely clear; however, the disease may be transmitted by either COVID-19 positive individuals or from a contaminated environment. In this review, we focused on how the COVID-19 virus is transmitted in the community. An extensive literature search was conducted using specific keywords and criteria. Based on the published report, it is concluded that COVID-19 is primarily transmitted human-to-human via oral and respiratory aerosols and droplets with the virus-contaminated environment play a lesser role in the propagation of disease. Healthcare providers and the elderly with comorbidities are especially susceptible to the infection.

**Table 8: Sources of COVID-19 transmission**

S.N.	Report	Number	Percentage
1	From hospital	10	10%
2	From the office, school, and colleges	37	37%
3	From neighbor or market	25	25%
4	Unknown	28	28%
<b>Total</b>		<b>100</b>	<b>100%</b>

#### 4.2.5 Possible Spread of Covid-19 with Preventive Measures

- Get vaccinated as soon as it’s your turn and follow local guidance on vaccination.
- Keep a physical distance of at least 1 meter from others, even if they don’t appear to be sick. Avoid crowds and close contact.

- Wear a properly fitted mask when physical distancing is not possible and in poorly ventilated settings.
- Clean your hands frequently with an alcohol-based hand rub or soap and water.
- Cover your mouth and nose with a bent elbow or tissue when you cough or sneeze. Dispose of used tissues immediately and clean hands regularly.
- If you develop symptoms or test positive for COVID-19, self-isolate until you recover.

**Figure No. 3: Possible spread of COVID-19 with and without protective measures.**

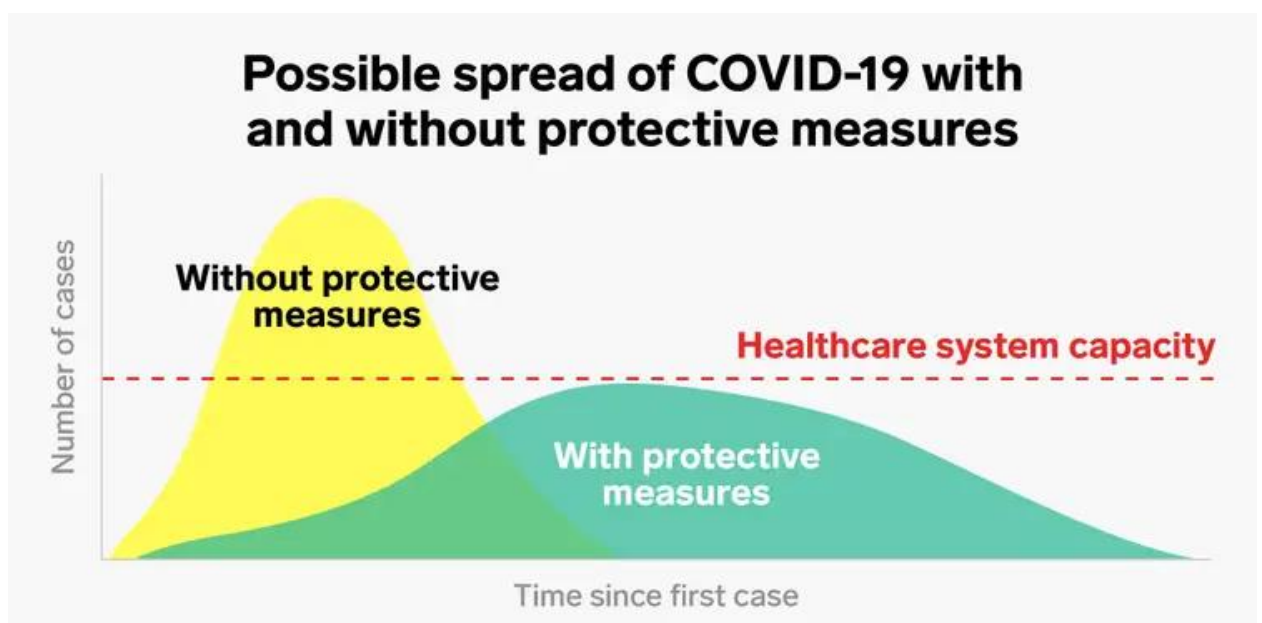


Figure no. 2 shows that the novel coronavirus spreads very least if in the case of following protective measures. Its all clear that the COVID-19 is a highly infectious disease so without protective measures it can lead to the worse epidemic condition.

#### **4.2.6 Protective Measures Used By the People**

Most people are very conscious about the transmission of covid-19. We discussed some possible preventive measures of covid-19, they have been using different preventive measures like a mask, sanitizer, handwash, soap, Dettol, etc.

**Table 9: Number of people following different preventive measures.**

S.N.	Report	Number	Percentage
1	People using masks only	23	23%
2	People using sanitizer only	15	15%
3	People using both masks and sanitizer	58	58%
4	People using Dettol	4	4%
<b>Total</b>		<b>100</b>	<b>100%</b>

#### 4.2.7 Types of Vaccines on Prevention Of Covid-19

Now that COVID-19 vaccines have reached billions of people worldwide, the evidence is overwhelming that no matter which one you take, the vaccines offer life-saving protection against a disease that has killed millions. The pandemic is far from over, and they are our best bet of staying safe.

There are more vaccine candidates simultaneously in the pipeline for COVID-19 than ever before for an infectious disease. All of them are trying to achieve the same thing – immunity to the virus, and some might also be able to stop transmission. They do so by stimulating an immune response to an antigen, a molecule found on the virus. In the case of COVID-19, the antigen is typically the characteristic spike protein found on the surface of the virus, which it normally uses to help it invade human cells.

#### COVID-19 vaccine types in development

##### Candidates in Clinical Phases I-III

Whole virus



Protein subunit



Nucleic



Viral vector



#### **4.2.8 Importance of Vaccine on Prevention of Covid-19**

WHO recommends that while vaccine supply is limited, the people at highest risk of COVID-19 are vaccinated first. This includes people who are more likely to get severe disease if they are infected (older persons and people with existing health conditions) and people who are more likely to be exposed to the virus (such as health workers). People who are pregnant have a higher risk of serious illness and preterm birth if they are infected with COVID-19, so WHO recommends that they are also prioritized for vaccination, once the first priority groups have been vaccinated.

If you live in a country where vaccines are available to more people beyond these priority groups, get vaccinated as soon as it is your turn.

WHO-authorized COVID-19 vaccines are safe for most people 18 years and older, including those with pre-existing conditions of any kind such as auto-immune disorders. These conditions include hypertension, diabetes, asthma, pulmonary, liver, and kidney disease, as well as chronic infections that are stable and controlled.

Getting vaccinated could save your life. COVID-19 vaccines provide strong protection against serious illness, hospitalization, and death. There is also some evidence that being vaccinated will make it less likely that you will pass the virus on to others, which means your decision to get the vaccine also protects those around you.

Even after getting vaccinated, keep taking precautions to protect yourself, family, friends, and anyone else you may come into contact with. COVID-19 vaccines are highly effective, but some people will still get ill from COVID-19 after vaccination. There is also still a chance that you could also pass the virus on to others who are not vaccinated. Stay at least 1 meter away from other people, wear a properly fitted mask over your nose and mouth when you can't keep this distance, avoid poorly ventilated places and settings, clean your hands frequently, stay home if unwell and get tested, and stay informed about how much virus is circulating in the areas where you travel, live and work.

**Table 10: Number of vaccinated and non-vaccinated people**

S.N.	report	number	percentage
1	vaccinated people	28	28%
2	non-vaccinated people	72	72%
<b>total</b>		<b>100</b>	<b>100%</b>

On the basis of data in spite of knowing the importance of vaccines most people couldn't get the vaccine due to its unavailability and lack of doses of vaccines. Among 100 people only 28 people got the vaccine whereas 72 people are still not getting the vaccine. They are waiting for their turn and some people are still afraid to get vaccinated because of the dangerous side effects of vaccines rumors.

#### **4.2.9 Importance of Vaccine on Workers Perception**

Most people think the vaccine is important to prevent COVID-19. Some people get vaccinated already and some people still waiting for the first dose and second dose of vaccine. Some rumors have been spread about the side effect of the covid vaccine so, people are quite afraid to get vaccinated.

**Table 11: What people think about the COVID-19 vaccine.**

S.N.	Is vaccine important to prevent COVID-19?	Number	Percentage
1	Yes it is very important	64	64%
2	No, it is dangerous for our health	36	36%
<b>Total</b>		<b>100</b>	<b>100%</b>

#### **4.2.10 Some Side Effects of Covid-19 Vaccine**

WHO recommends that while vaccine supply is limited, the people at highest risk of COVID-19 are vaccinated first. This includes people who are more likely to get severe disease if they are infected (older persons and people with existing health conditions) and people who are more likely to be exposed to the virus (such as health workers). People who are pregnant have a higher risk of serious illness and preterm birth if they are infected with COVID-19, so WHO recommends that they are also prioritized for vaccination, once the first priority groups have been vaccinated.

In our country where vaccines are available to more people beyond these priority groups, get vaccinated as soon as it is your turn.

WHO-authorized COVID-19 vaccines are safe for most people 18 years and older, including those with pre-existing conditions of any kind such as auto-immune disorders. These conditions include hypertension, diabetes, asthma, pulmonary, liver, and kidney disease, as well as chronic infections that are stable and controlled.

#### **4.2.11 Covid-19 Vaccination in Nepal**

Certainty over whether Nepal would be able to continue its vaccinations. By April, SII had only provided half of the 2 million doses for which Nepal had paid in full. A spokesperson for the Indian Ministry of Nepal began the administration of COVID-19 vaccines on 27 January 2021. 1 million Oxford-Astrazeneca vaccines were provided by India as a grant while Nepal brought 2 million doses from the Serum Institute of India (SII) and was one of the first to receive COVID-19 vaccines. The delivery of the first 1 million doses arrived on 21 February. In March, India's decision to ban exports of vaccines created external Affairs rejected the notion of an export ban and said “We will export vaccines taking into account the domestic demand.” By late July, there was still uncertainty in Nepal over when SII would deliver the vaccines that were purchased, although Prime Minister Narendra Modi said India would "resume the supply of vaccines soon."

Nepal approved the China Sinopharm BIBP vaccine (BBIBP-CorV) for emergency use on 15 February. The first doses arrived in Nepal on 29 March. By July, China had provided 1.8 million doses of the Sinopharm BIBP vaccine under grant assistance and committed to providing another 1.6 million doses. Separately, the government purchased 4 million doses in June for which delivery was expected to be complete in a few days, and was expected to purchase another 6 million doses in July.

About 1.52 million doses of single-dose Janssen vaccine (Johnson & Johnson) arrived in July as aid from the US. Similarly, Ambassador Berry assured that the U.S. had prioritized additional vaccine assistance to Nepal realizing the need. Nepal on 25 October 2021 received 100,620 doses of Pfizer-BioNTech Covid-19 vaccine provided by the United States through COVAX.

Nepal is set to receive 1.6 million doses of single-dose Oxford AstraZeneca as aid from Japan. Nepal has requested an additional 3 lakhs vaccine dosage from Bhutan which is under consideration.

### **4.3 The Problems Created By Covid-19 Pandemic**

There are many problems and hazards are created during the pandemic in this session on the basis of data the obstacles are pointed and elaborated briefly.

#### **4.3.1 Risk of Coronavirus Transmission On Workers During The Pandemic**

The risk of worker exposure to SARS-CoV-2, the virus that causes Coronavirus Disease 2019 (COVID-19), depends on numerous factors, including the extent of community transmission; the severity of resulting illness; existing medical conditions workers may have; environmental conditions that may affect exposure risk (e.g., working or living in close quarters); and the medical or other measures available to control the impact of the virus and the relative success of these measures.

Certain people are at higher risk of developing more serious complications from COVID-19, including older adults and those with underlying medical conditions such as heart or lung disease, chronic kidney disease requiring dialysis, liver disease, diabetes, immune deficiencies, or obesity. See CDC's page for additional information about health conditions that put individuals at higher risk of serious illness from COVID-19.

**Figure No. 4: Risk pyramid of COVID 19 on workers**





As workers' job duties change or they perform different tasks in the course of their duties, they may move from one exposure risk level to another. Employers should always rely on current hazard assessments to identify workers' initial exposure risk to the virus on the job and changes to exposure risk if and when job duties change.

risk pyramid as part of the Protecting Workers: Guidance on Mitigating and Preventing the Spread of COVID-19 in the Workplace. Our current understanding of how the SARS-CoV-2 virus spreads, combined with the risk of transmission by people who have the virus without knowing it, suggests that workers in areas with community transmission who have close contact with any other people—not just known or suspected COVID-19 cases—are at increased risk of exposure.

**Table 12: Probability of risk on COVID-19 transmission during work on workers point of view**

<b>S.N</b>	<b>How much risk of COVID-19 infection on your work field</b>	<b>Number</b>	<b>Percentage</b>
1	High risk	59	59%
2	Medium risk	34	34%
3	No risk	7	7%
<b>Total</b>		<b>100</b>	<b>100%</b>

In this study, 59 people are working at the high risk of transmission of coronavirus and most of them work in the hospital and banking sector. 34 workers are working at the medium risk of COVID-19 transmission whereas 7 people do not have any fear to get infected by COVID-19 infection.

#### **4.3.2 Physical Hazards Created During the Pandemic**

COVID-19 has been created a lot of physical problems. Infected and non-infected both people are facing physical hazards during the pandemic.

The COVID-19 pandemic means that many of us are staying at home and sitting down more than we usually do. It's hard for a lot of us to do the sort of exercise we normally do. It's even harder for people who don't usually do a lot of physical exercises.

But at a time like this, it's very important for people of all ages and abilities to be as active as possible. WHO's Be Active campaign aims to help you do just that - and to have some fun at the same time.

Remember - Just taking a short break from sitting, by doing 3-4 minutes of light intensity physical movement, such as walking or stretching, will help ease your muscles and improve blood circulation and muscle activity.

Regular physical activity benefits both the body and mind. It can reduce high blood pressure, help manage weight and reduce the risk of heart disease, stroke, type 2 diabetes, and various cancers - all conditions that can increase susceptibility to COVID-19.

It also improves bone and muscle strength and increases balance, flexibility, and fitness. For older people, activities that improve balance help to prevent falls and injuries.

**Table 13: Physical hazards created during COVID-19**

S.N.	Report	Number	Percentage
1	Obesity	35	35%
2	High blood pressure	16	16%
3	BP plus diabetes	11	11%
4	weakness and fatigue	32	32%
5	Short of breathe	6	6%
<b>Total</b>		<b>100</b>	<b>100%</b>

According to the data most people i.e. 35 people are suffering from obesity whereas 16 people are suffering from high blood pressure. Around 11 people are suffering from high blood pressure plus diabetes, 32 people suffering from weakness and fatigue and 6 people are suffering from shortness of breath.

By this data, it is clear that the COVID-19 has been created a lot of physical hazards in the context of Nepal.

#### **4.3.3 Mental Hazards Created During Covid-19**

COVID-19 was declared a global pandemic by the World Health Organisation on 11 March 2020.

The new coronavirus is an infectious respiratory illness that is transmitted from person to person like the regular flu, but with a relatively low fatality rate compared to SARS, MERS, and H1N1.

Not much is known about COVID-19 at this point, which understandably causes fear and distress especially for us who have anxiety-related conditions.

Amidst the panic-buying (a.k.a. toilet paper hoarding) and frequent handwashing, we think this is a good time to hit the pause button and remind ourselves that resilience and hope (even humor!) can be just as contagious.

We can rise above the chaos. Here are seven practical suggestions to empower ourselves:

1. Write down what you can and cannot control. Fear and anxiety are natural responses to the unknown. Journal your thoughts and see what are the things you can change and what are those you can't. For example, we can't confront every person who doesn't cover their mouths when they cough or sneeze, but we can walk away from them and keep a safe distance.
2. Do not skip your medical appointments. Consult your doctor to see if your appointments can be rearranged; whether it's possible to meet less frequently, or if there are other ways to have your sessions without meeting physically. Another way to minimize exposure each time you visit the hospital or clinic is to align your medical appointments on one day if possible or have them less frequently according to your doctor's advice.
3. Ask if your medication can be delivered instead of collected in person. Hospitals and polyclinics under sing health offer this option. Some hospitals like Khoo Teck Puat hospital have a Medibox which functions like a parcel delivery locker that allows you to collect your medication refills at your own time, so you need not wait at the hospital pharmacy with the crowd.
4. Limit your exposure to media and yes, that includes muting family chat groups that spread well-meaning but also fear-mongering fake news. Get your information from reputable sources, be updated once or twice a day, and then fill the rest of your day with other meaningful activities.

5. There are many of us who feel the need to wash our hands frequently which can trigger anxiety-driven compulsions and obsessive behavior. If possible, we could use this as an opportunity to practice personal self-care in a mindful, compassionate way. Take a warm shower at the end of each day before bedtime. Be present at the moment and gently massage your fingers, joints as you wash your hands. Keeping clean and hygienic doesn't have to be a chore. Other ways of caring for ourselves include having a balanced diet, some exercise, and adequate sleep. Participate in relaxing activities like deep breathing or hobbies like gardening to boost our immunity.

6. Social distancing does not mean social isolation. Reach out and check in regularly with people you care about. Make that phone call, or even video calls using Facetime and Skype. Or send a text or WhatsApp. Be part of social media community groups. There are also groups that screen Livestream events on Youtube and social media platforms. Gaming communities, Reddit are also other social ways of connecting with others. So even though we may all be keeping physical social distance, we can still connect with one another online in virtual spaces.

7. There is online help such as counseling hotlines, chats, emails. We have a comprehensive directory here. Remember, you don't have to go at this alone. Help is available.

As persons with mental health conditions, we are familiar with the battles in our minds. There aren't any easy solutions, but we are much stronger than we realize. We have already overcome so much in our lives, and likewise, we shall also get through this, one day at a time. Rooting for us all!

**Table 14: Mental hazards created during COVID-19**

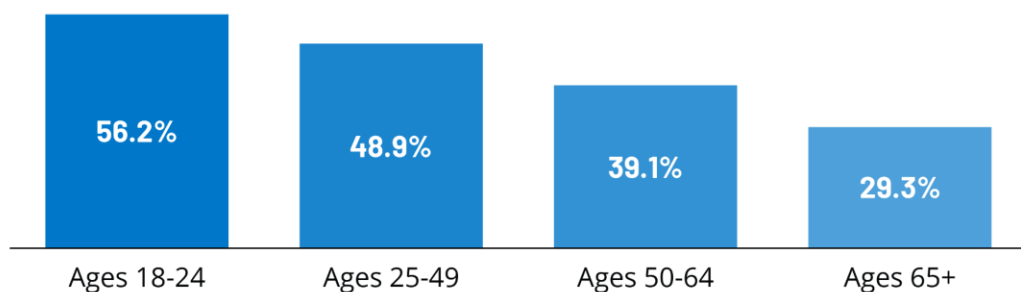
S.N.	Report	Number	Percentage
1	Depression, anxiety, and panic disorder	14	14%
2	mood swing and sadness	20	20%
3	antisocial prefer to be alone	35	35%
4	none of the above	31	31%
<b>Total</b>		<b>100</b>	<b>100%</b>

COVID-19 pandemic has brought a lot of mental hazards as well. It seems that people hesitate to discuss their mental problems with others because our society is not well aware of several mental problems and illnesses. 14 people are suffering from depression, anxiety, and panic disorder whereas 20 people are suffering from mood swings and sadness. 35 people prefer to be isolated they do not want to talk and have fun with family members and others. In 31 people no mental problem has been detected.

According to their hesitation to talk about the mental problems it can be guessed that much more people tend to be suffering from mental problems and disorders.

**Figure No. 5: Mental problems on the basis of age group**

### **Younger Adults are More Likely to Report Symptoms of Anxiety and/or Depressive Disorder During the COVID-19 Pandemic**

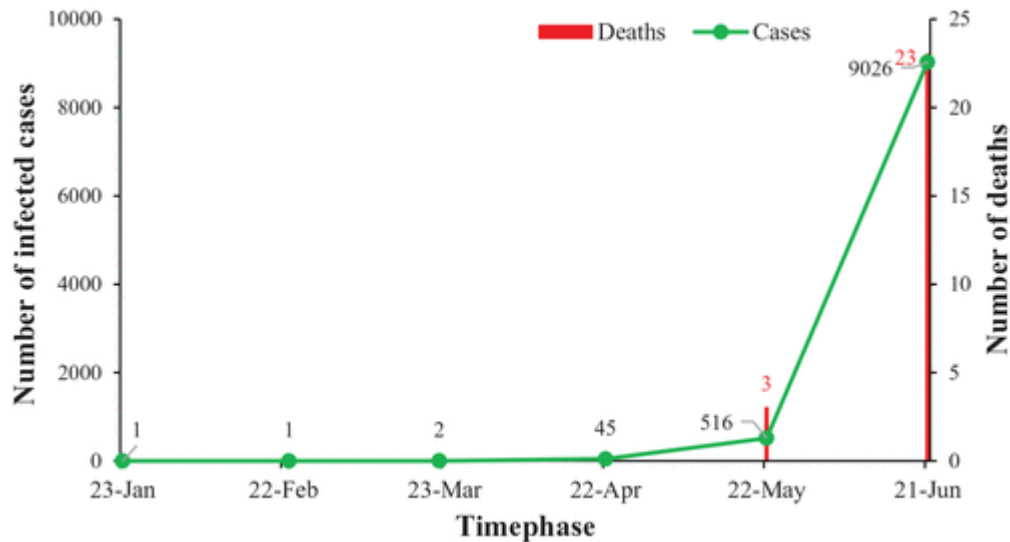


#### **4.3.4 Social Hazards Created During Covid-19**

The public health concern is increasing with the recent rise in the number of COVID-19 cases in Nepal. To curb this pandemic, Nepal is facing some forms of lockdown, encouraging people to implement social distancing so as to reduce interactions between people which could eventually reduce the possibilities of new infection; however, it has affected the overall physical, mental, social, and spiritual health of the people. On 13 January, a 31-year-old Nepali student of Wuhan University, who had returned home on 5 January, was admitted with mild symptoms (Bastola et al. 2020). He got discharged on 17 January after preliminary tests showed he may not be

infected. The public laboratories in Nepal did not have reagents required for testing and there were no suspected

**Figure 6. A number of COVID-19 infected cases and deaths in Nepal (as per 21 June 2020).**

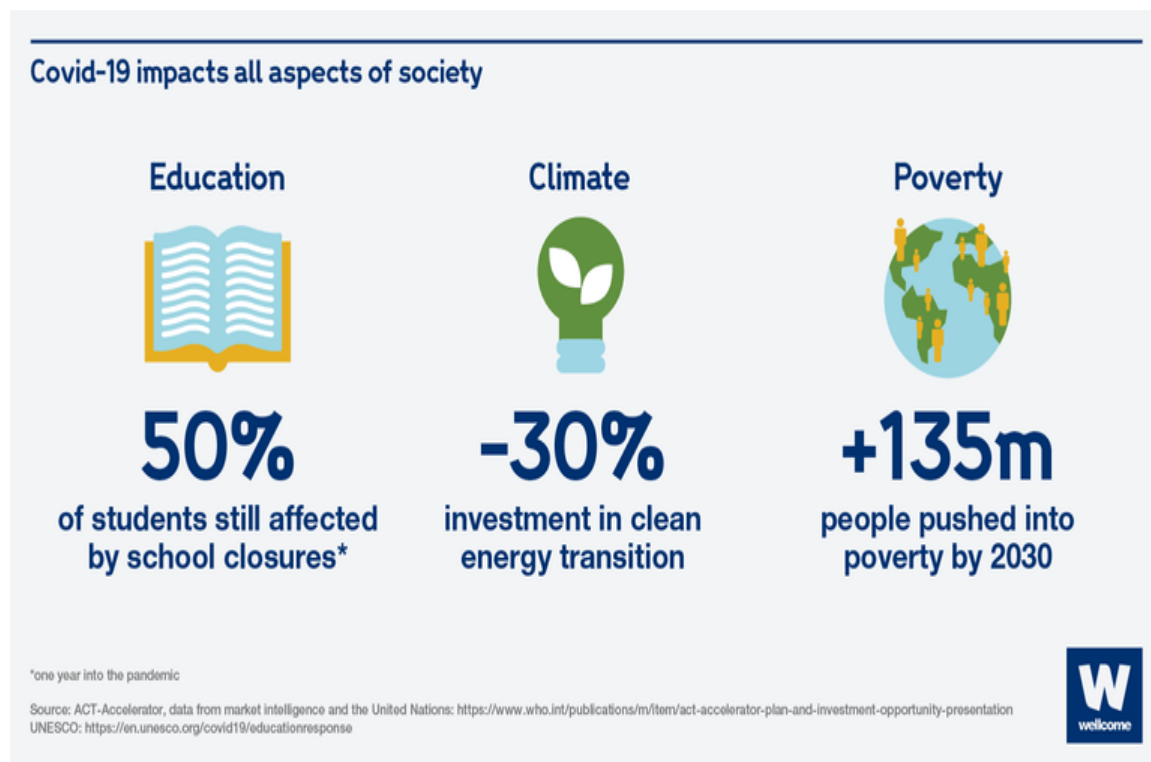


Lockdown is considered to be an effective measure in slowing the spread of coronavirus around the globe. To further stop the spread of the virus, many countries are currently in some degree of lockdown. Until then, extreme social distancing is pretty much the only intervention available to keep healthy individuals spaced from each other. Even in the best-case scenario, coronavirus vaccine development is likely to take 12–18 months.

While the preventive vaccine and treatment option are yet to be developed, the worldwide spread of the novel coronavirus has further led to neuropsychiatric issues such as fear, anxiety, depression, panic attacks, psycho-motor excitement, suicidal deaths, and a general decrease in overall wellbeing. Similarly, patients who are infected with COVID-19 are at a greater risk of developing mental health problems, as they are facing stigma and discrimination from their own family members. Similar situations were faced by the general public as well as many medical practitioners during previous outbreaks such as Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome. Until now, there is a paucity of information on the socioeconomic and psychological aspects of the Nepalese community in the face of COVID-19, which is critical for guiding policies and interventions to curb the

pandemic. Figure 6 shows the psychosocial relationship among COVID-19, media, government actions, and the public.

**Figure No. 7: Impacts of COVID-19 in social actions, and the public.**



**Table 15: Social problems faced by selective people**

S.N.	Report	Number	Percentage
1	avoiding social gatherings and events	52	52%
2	not able to go to school and colleges	32	32%
3	not able to perform social services	6	6%
4	not able to participate in ritual events	10	10%
<b>Total</b>		<b>100</b>	<b>100%</b>

Due to the fear of COVID-19 transmission and lockdown affect many social activities are affected badly. People are not being able to hold social gathering events like weddings, worship, bratbadh, party, sports, seminars, social meetings, etc.

Some social workers like political parties are unable to run social events. According to the data 52 peoples are unable to join social events, 32 students are not able to go to colleges and schools. 6 social workers are not able to hold social service activities and 10 people are not able to hold or join ritual events.

#### **4.3.5 Impacts of Covid-19 on The Economy of The Workers**

COVID-19 has left a deep impact on the economy of the workers. Workers are suffering from an economic crisis due to the lockdown. Among five people at least two people have lost their job which leads them to great loss in financial condition. Especially private-sector employees are facing such problems.

The latest study - “Rapid Assessment of the Social and Economic Impacts of COVID-19 on the vulnerable groups in Nepal” – commissioned by the UN Development Programme in Nepal and conducted by the Institute for Integrated Development Studies shows that the COVID 19 pandemic has disrupted supply chains, shut or threatened the survival of small and informal enterprises, and made people highly vulnerable to falling back into poverty through widespread loss of income and jobs. The study recommends the government guard against vulnerabilities by strengthening social protection and livelihoods, reorienting public finance to augment human capabilities, and introducing measures to limit bankruptcies and create new sources of job-creating growth.

**Table 16: Impacts of COVID-19 on the economy of the employees**

<b>S.N.</b>	<b>are you suffering from an economic crisis due to the COVID-19?</b>	<b>Number</b>	<b>Percentage</b>
1	yes exactly	76	76%
2	not at all	24	24%
<b>Total</b>		<b>100</b>	<b>100%</b>

On the basis of table 16 maximum people i.e. 76 employees are suffering from the economic crisis. These people are mostly work in the private sector and those who don't have any other earning hand in the family. 24 employees are not exactly affected and most of them work in the government sector. They do have another family member who earns money and mostly they are from the agricultural family background.



## **CHAPTER - FIVE**

### **SUMMARY, FINDINGS, CONCLUSION, AND RECOMMENDATION**

Summary, major findings, and conclusions are drawn from the previous chapter. This chapter presents major findings from the research with some recommendations for future orientation.

#### **5.1 Summary**

The presented study entitled ‘ ‘ Impacts of COVID-19 on workers of Itahari Municipality ‘ ‘ is based on the 100 employees with age group 15 - 65 years. The specific objective of the study was to identify the impacts of COVID-19 on workers.

The total population of the study was 100 employees with age groups 15 - 65. The specific objective of the study was to identify the impacts of COVID-19 on workers. The majority of workers were found within the 26 - 35 age group. It was found that most of the people who work in the private sector are having a great impact on COVID-19. 59% of people are at high risk of COVID-19 transmission; only 7% do not have any fear of getting infected by COVID-19. During pandemics, people are facing many physical, mental, and social hazards. 14% of people are suffering from many mental hazards like depression, anxiety, and panic disorder whereas 35% are suffering from antisocial behavior. 52% of people are not able to hold social work, gatherings, and meetings whereas 35% of people are not able to go to school and college. COVID-19 (coronavirus disease 2019) is a viral infectious disease caused by SARS-CoV-2 and is currently WHO declared a pandemic. As of November 2021, over 245 million people had been infected globally with over 5 million deaths<sup>13</sup>. The symptoms of COVID-19 vary from person to person. Usually, the symptoms are fever, common cold, cough, short breath, sore throat, etc. The symptoms of 16% of people are fever and the symptoms of 41% of people are fever, cough, shortness of breath, tastelessness, smell lessness. It was found 10% of respondents said the COVID-19 transmit from the hospital and 37% of respondents said it is from school, college and office. 25% said it spread through neighbors or market whereas 28% are not sure about the infection source. Most of the respondents 58% use mask and sanitizer as preventive measures of COVID-19, 23% of respondents use mask only whereas 15% of people use sanitizer only and 4% of respondents use Dettol as preventive measures of COVID-19.

## 5.2 Major findings

The major findings of the study are as follows:

1. All respondents are employees of different sectors.
2. The majority of the respondents 37% belong to the age group 26-35.
3. Nearly 23% lost their job and 53% of workers are suffering from the economic crisis.
4. It was found that 10% of workers get infected through hospitals and 37% through school college. 25% through neighbors and relatives and 28% sources are unknown.
5. It was found that 23% of people wear masks as a preventive measure of COVID-19 whereas 58% use both masks and sanitizer as a preventive measure of COVID-19.
6. The majority of the people 72% people are yet to get vaccinated whereas 28% of people are vaccinated already.
7. Most people 64% think that vaccine is very important to prevent COVID-19 whereas 36% are afraid of getting vaccinated.
8. 59% of workers are working under high risk of COVID-19 transmission and 37% are working in medium risk.
9. In this study as a physical hazard, 35% are suffering from obesity, 16% from high blood pressure, and the rest are suffering from diabetes, fatigue, etc.
10. It was found that the mental hazards created due to the pandemic are 14% suffering from depression, anxiety, and panic disorder, 20% are suffering from mood swings, 35% from antisocial behavior, and the rest do not have any problem.
11. In this study as a social hazard, the people who are not able to join social events are 52%, the people who are not able to go to school and college are 32%, 6% are not able to hold social service activities, and rest 10% are unable to conduct or join ritual events.
12. This study found that during COVID-19 workers are struggling too much to maintain financial balance.

13. The pandemic has been affecting both the lifestyle and health of the employees brutally.
14. The effects of COVID-19 are higher in adults and old than children.
15. This study found that the effect of COVID-19 was the more vulnerable condition.

### **5.3 Conclusion**

The government of Nepal has enforced a nationwide lockdown and activated its federal, provincial and local level mechanisms to respond to the crisis. While there is an urgent need to strengthen the existing health system to handle the situation in case of any sudden surge of the outbreak, standardize the quarantine facilities and provide immediate relief to the most affected, equally important is to help the country mitigate the socio-economic impacts and prepare for longer-term recovery.

Nepal Government has reported over 620K COVID-19 cases as of 20 June 2021. Meanwhile, the secondary impact of the global pandemic is huge and it is already taking a serious toll on an economy that relies heavily on remittances, imports fueled by remittances, informal labor, and tourism revenues.

UNDP is working with the Government of Nepal and the UN Country Team to support the country's preparedness to face the mounting public health emergency, respond to the socio-economic impact of the protracted lockdown on the most vulnerable, and support longer-term recovery measures.

The conclusion of this research is to suggest taking qualitative steps by formulating an appropriate law to minimize the problems.

### **5.4 Recommendations**

In order to promote reduce the impacts of COVID-19 on workers, the following recommendations are made on the basis of findings.

#### **5.4.1 Recommendations for the national policy**

- Such policy should be made that motivates to reduce various impacts of COVID-19 on workers.
- The distribution of vaccines should be increased in every corner of the country.

- Should be added more medical workers in every region and province.
- Preventive measures like masks, sanitizer should be provided at free cost in the working area.
- Instead of doing lockdown, should be found the option to prevent the transmission of COVID-19.

#### **5.4.2 Recommendation for improvement**

- Appropriate employment services should be managed.
- Protection to prevent transmission of COVID-19 should be distributed widely.
- Public awareness programs should be conducted to reduce the influence of coronavirus.
- People should be learned creative and skillful activities.
- Harmful impacts of COVID-19 on workers should be minimized.

#### **5.4.3 Recommendation for further research**

- The causes and consequences of COVID-19 in workers should be studied widely.
- The cooperative study on the impacts of COVID-19 on workers such as physical, mental, and social, should be carried out for the employees.
- More studies on the impacts of COVID-19 on workers should be done.
- The broad and nationalized research on the subject of Impacts of COVID-19 on workers should be studied.
- Economical aspects, Psychological aspects, and social aspects should be studied.

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## APPENDIX-I

### General Information

#### Part A: Demographics

1. Gender:    Male    Female

2. Age: \_\_\_\_\_

3. Education attainment

University: Bachelor

University: Master or PhD

4. Residential area during the COVID-19 outbreak

    Please specify City (County)

5. Marital status

Single

Married

6. Employment status

Student,

Employed

Unemployed

Others

7. Parental status?

Not applicable

No children

Has child 16 years or under

Has child older than 16 years

8. Household size:

1 person

2 persons

3-5 persons

6 persons or more

9. Have you traveled outside of your residential country in the past 14 days?

No

Yes, please specify visited countries

**Part B: Symptoms and physical health status**

1. Symptoms of body discomfort in the past 14 days (please check all that apply)

Persistent fever (>38°C for at least 1 day)

Chills

Headaches

Myalgia

Cough

Difficulty breathing

Dizziness

Coryza

Sore throat

Persistent fever and cough or difficulty breathing

Nausea, vomiting, diarrhea

2. Did you see a doctor in the clinic in the past 14 days?

No (skip to #6)

Yes

3. Were you admitted to the hospital in the past 14 days?

No

Yes

4. Were you tested for COVID-19 / 2019-novel coronavirus in the past 14 days?

No



Yes

5. Were you under quarantine by the health authority in the past 14 days?

No

Yes

6. Please self-rate your current health status

Very good

Fair

Poor

Very poor

7. Do you have medical insurance from the private sector?

Yes

No

8. Do you suffer from a chronic illness diagnosed by a physician?

No

Yes, please specify \_\_\_\_\_

9. Do you have experienced self-isolation?

Yes

No

### **Part C: Contact history**

1. Have you directly or indirectly contacted patients suffering from COVID-19?

No (skip to Part D)

Yes

[Don't know]

2. Extent of direct and indirect contact history of COVID-19 patients (please check all that apply)

Close contact with a confirmed case

Indirect contact with a confirmed case (“contact of direct contact”)

Contact with a suspected case

Contact with infected materials

[Don’t know]

**Part D: Knowledge and belief about COVID-19**

1. Does the COVID-19 transmit through...? Agree on Disagree Don’t know
  - a. Droplets
  - b. Contact via contaminated objects
  - c. Airborne
2. How satisfied you are with the amount of health information available about COVID-19?
  - Very satisfied
  - Satisfied
  - Dissatisfied
  - Very dissatisfied
3. From your experience can you explain the real causes of COVID-19?
4. How much does the COVID-19 affect your lifestyle?

**Thank you**