

# A Study on the Impact of Covid-19 on the Mental Health, Economy and Social Life of the People in Dhaka City

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**Abstract** - The ongoing Covid-19 pandemic is an international public health emergency creating a devastating threat of economic depression worldwide. Isolation, quarantine, and economic loss have led to mental turmoil among all classes of people. Prolonged unemployment, loss in business, family income reduction, increased health risks, unpredictable educational life and uncertainty about the future are the possible consequences of the pandemic in Bangladesh, Dhaka city in particular. This study analyzes the economic, social, and psychological impact of the Covid-19 pandemic among Dhaka city dwellers using primary data. Qualitative responses of the respondents regarding the precautionary measures and the adverse impact of Covid-19 have been analyzed using descriptive statistics. Chi-square test reveals that there is a significant difference in the perception among the respondents employed in different sectors(private, public, informal, and self-employed) regarding the adverse impact on income, job loss, loss in business, risk of losing the job in the future, living standard and decrease in expenditure on luxury goods due to the outbreak of Coronavirus. Ensuring job security, building savings tendency, creating a company reserve fund, creating structured job opportunities for the people, soft skill development- all these aspects should be taken into consideration by the government and other stakeholders.

**Keywords:** Covid-19, isolation, quarantine, social distance, job security.

## I. INTRODUCTION

The World Health Organization (WHO) declared a pandemic and an international public health emergency with the outbreak of the rapidly evolving novel Corona virus-2(n-CoV 2) (Anwar et al., 2020). A new strain of the Coronavirus family emerged in Wuhan (capital of Hubei province) of China in December 2019 (Wang et al., 2020a), which infected thousands of people worldwide. The number of cases outside China quickly surpassed the number of cases inside China. Corona Virus outbreak is the largest outbreak of typical pneumonia since the severe acute respiratory syndrome (SARS) outbreak in 2003 (Bhat et al., 2020). Bangladesh is a lower-middle-income country struggling to combat the spread of the disease as it is one of the world's densely populated areas (Anwar et al., 2020). On March 8, 2020, the first case of Covid-19 was

reported in Bangladesh by the Institute of Epidemiology, Disease Control and Research (IEDCR, 2020). As of December 19, 2020, according to <https://www.worldometers.info/coronavirus/country/bangladesh/>, there are 4,99,560 confirmed cases of Covid-19; with 7,242 deaths and 4,35,601 recovered cases. The situation intensified so fast that it was beyond imagination. Infections remained low until the end of March but saw a steep rise in April (Dhaka Tribune, April 14 2020). Towards the middle of April, new cases in Bangladesh grew by 1,155 percent, the highest in Asia, ahead of Indonesia, with 186 percent (Mint Covid Tracker, April 11 2020). On June 13, the number of cases in Bangladesh exceeded the number of cases in China, where the outbreak began ([https://en.wikipedia.org/wiki/COVID19\\_pandemic\\_in\\_Bangladesh](https://en.wikipedia.org/wiki/COVID19_pandemic_in_Bangladesh)). The government of Bangladesh took immediate measures to address the situation. However, there is an ongoing debate as to whether adequate measures have been adopted and implemented efficiently (Anwar et al., 2020). Covid-19 is the greatest fear to the world community at the moment. According to Bhat et al. (2020), there are no therapeutics and vaccines available till now, and there is presumably no pre-existing immunity in the population (Bhat et al., 2020). However, scientists and researchers worldwide are leaving no stone unturned for the invention of the vaccine of Covid-19. There are many potential Covid-19 vaccine candidates currently in development.

During the initial phase of the outbreak, panic surged in the society (Begum et al., 2020). Billions of people worldwide are staying at home to minimize the transmission of the virus. Some of the measures adopted by different countries of the world to control the spread of Coronavirus include the imposition of movement restrictions, restriction of non-essential activities, closure of educational institutions, the partial or full lockdown of cities, running of emergency services on a minimal scale, work-from-home and skeletal operations of essential businesses (Ozili, 2020). These restrictions inevitably paid a role in influencing the economic activities of the affected countries negatively. 218 countries have already been affected by this global pandemic (<https://www.worldometers.info/coronavirus/> as of December 19, 2020). Strategies for preventing transmission of the disease include maintaining overall good personal hygiene; washing hands; avoiding touching



the eyes, nose, or mouth with unwashed hands; and coughing or sneezing into a tissue, and putting the tissue directly into a waste container. Those who may have the infection already have been advised to wear a surgical mask in public. Those who are suspected to be affected must self-isolate themselves (Begum et al., 2020). Health care providers taking care of someone who may be infected are recommended to use standard precautions, contact precautions, and eye protection (Verbeek et al., 2020; Covid-19 Vaccine Tracker, 2020; CDC, 2020).

In response to the virus's emergence, Bangladesh admittedly reduced international flights, imposed thermal scanner checking, shut down educational institutions, and banned public gatherings (Anwar et al., 2020). When the situation worsened, the government of Bangladesh enforced lockdown, travel bans, transportation suspension, and closing down of all non-essential organizations, except for pharmacies, groceries, and other unavoidable necessities. These have hit the society and economy hard. The Asian Development Bank (ADB) forecasts that this Covid-19 pandemic will wipe out \$3.02 billion off Bangladesh's \$300 plus economy in the worst-case-scenario of a significant outbreak followed by a reduction of about 0.2% to 0.4% of GDP of Bangladesh (Lalon, 2020). People became unemployed and experienced homelessness. The weak health care system of the country is fighting to survive the catastrophic consequences of this pandemic. At the initial phase of the outbreak, Bangladesh did not impose any strict protocol. Millions of people were out on the streets, especially in Dhaka, a megacity with 46 thousand people living per square kilometer (Population and Housing Census 2011, BBS Report-2015). More than 1.1 million slum dwellers live in Dhaka (Slum Census and Floating population 2014, BBS Report-2015). It isn't easy to maintain social distancing protocol in Dhaka city's massively populated areas (Anwar et al., 2020).

Moreover, it has been reported that despite the high mortality rate by Covid-19 infection, Bangladesh is among the worst-ranked countries for nCoV-2 testing rate (<https://www.worldometers.info/coronavirus/>). Testing rates have fallen to around 0.8 tests per 1000 people per day, with a low of just 0.06 tests per 1000 people in August 2020 (World Report, 2020). Bangladesh is a low-middle-income country with a major proportion of the population employed in the informal sector. It is difficult to maintain strict lockdown for an extended time period. Aggressive tracing of cases and contacts, strict quarantine, good hygiene practices, and personal consciousness can effectively address the ongoing crisis (Wilder-Smith and Freedman, 2020; Webster et al., 2020). Therefore, it is important to analyze the level of consciousness among the dwellers of Dhaka City and take necessary measures accordingly.

Lockdown, isolation, quarantine, and economic loss lead to mental turmoil among all classes of people. The pandemic did bring the risk of death from viral infection and unbearable psychological pressure to people worldwide (Xiao, 2020; Duan, 2020). The rising pandemic affected social interaction through the imposed social distancing policies (Ozili, 2020). Prolonged unemployment

in the informal sector, loss in business, fear of losing a job, reduced income, being home-ridden, and fear of being affected by Covid-19 undoubtedly negatively impact people's mental health. The outbreak of Covid-19 has already placed health services in developed countries under extensive pressure (Bhat et al., 2020). Like other countries of the world, the economy of Bangladesh has been observing a stark hit due to this pandemic. Nath et al. (2020) reported that order cancellation, disruption of the global supply chain, fall in demand of buyers has resulted in falling revenue from RMG (Ready-Made Garment) industry leading to a loss in export revenue reaching up to \$4.00 billion. There has been a significant disruption in remittance flow as the outbreak of Covid-19 forced Bangladeshi expatriates working in several Middle-East, Asia, Europe, Australia, and the United States to return home the stern impact of the disease (Lalon, 2020). Falling opportunities for small and medium entrepreneurs, imminent unrest in financial institutions, volatility in the capital market, the constant increase of trade deficit, lack of confidence among domestic and foreign investors, and depletion of GDP growth are the projected economic consequences of the Covid-19 pandemic in Bangladesh (Lalon, 2020). Under the prevalent circumstances, epidemiological, demographic, and clinical issues of the virus and its outbreak have been focused on numerous studies. Studies have been conducted to analyze the economic impact of the covid-19 pandemic in Bangladesh's economy using secondary data. However, the pandemic has a major social and psychological impact on the country's entire population with increased unemployment, reduced family income, increased health risks, unpredictable educational life, and uncertainty about the future. This study analyzes the economic, social, and psychological impact of the Covid-19 pandemic among Dhaka city dwellers using primary data.

## II. IMPACT OF COVID-19: GLOBAL EVIDENCES

### A. Global Economic Recession

The virus has already spread within communities in large parts of the world, with many not knowing where or how they were infected. The Covid-19 global pandemic has caused significant global economic and social disruption (The New York Times, February 29 2020), including the largest global recession since the Great Depression (IMF Blog, Retrieved April 23 2020). Poverty situations have declined worldwide. Up to 100 million people have fallen into extreme poverty (World Bank, June 8 2020; Yahoo News, August 10 2020). Global famines are affecting 265 million people (UN News, April 21 2020). These poor and homeless people have a higher probability of exposure to the virus. Sporting, religious, political, and cultural events worldwide have either been postponed or canceled (UN News, April 21 2020). This global pandemic has led to widespread supply shortages exacerbated by panic buying (The New York Times, April 1 2020; CNB, Retrieved March 19 2020). Haleem et al. (2020) reported that Covid-19 has affected day-to-day life and slowed

down the global economy. According to them, Coronavirus's economic effects include the slowing of the manufacturing of essential goods, disruption of the supply chain of products, losses in national and international business, poor cash flow in the market, and significantly slowing down the revenue growth. There has been a negative supply shock due to the pandemic (Fornaro and Wolf, 2020). The pandemic affected financial markets all over the world (Zhang et al., 2020). Tourism is one of the worst affected sectors due to travel bans, closing public places, including travel attractions, and governments' advice against travel (Deb and Nafi, 2020). Ozili and Arun(2020) reported that the increasing number of lockdown days, monetary policy decisions, and international travel restrictions severely affected global economic activities.

The pandemic, alongside lockdowns and travel restrictions, has prevented aid and greatly impacted food production. As a result, several famines are forecast worldwide. According to the "2020 Global Report on Food Crises" (WFP, April 20, 2020), 55 countries are reported to be at risk, with three dozen succumbing to crisis-level famines or above in the worst-case scenario. It is estimated that without intervention, 30 million people may die of hunger, with Oxfam reporting that "12,000 people per day could die from Covid-19 linked hunger" by the end of 2020(Oxfam International, July 9, 2020).

### **B. Social and Political Consequences**

The social consequences include the cancellation or postponement of large-scale sports and tournaments; disruption of the celebration of cultural, religious, and festive events; undue stress among the population; social distancing with peers and family members; closure of hotels, restaurants, and religious place; closure of places for entertainment such as movie and play theatres, sports clubs, gymnasiums, swimming pools and so on (Demirbas et al., 2020).

The pandemic has affected multiple countries' political systems, causing suspensions of legislative activities, isolations or deaths of multiple politicians, and rescheduling elections due to fears of spreading the virus. Since the start of the outbreak, heightened prejudice, xenophobia, and racism have been documented worldwide toward Chinese and East Asian descent(Burton et al., 2020; Burton, 2020). Following the outbreak's progression to new hotspot countries, people from Italy (the first country in Europe to experience a serious outbreak of Covid-19) were also subjected to suspicion and xenophobia, as were people from hotspots in other countries. This racism and xenophobia were criticized by foreign governments and diplomatic corps (The Daily Beast, February 29, 2020).

### **C. Closure of Educational Institutions**

Most governments worldwide have temporarily closed educational institutions in an attempt to control the spread of Covid-19. Schools, colleges, and universities have been closed either on a nationwide or local basis in 161 countries, affecting approximately 98.6 percent of the

world's student population (Carbon Brief, February 19, 2020). As of September 4, 2020, approximately 1.277 billion learners are currently affected due to school closures in response to the pandemic. According to UNICEF monitoring, 46 countries are currently implementing nationwide closures, and 27 are implementing local closures, impacting about 72.9 percent of the world's student population (UNICEF Report, 2020). The impact was more severe for disadvantaged children and their families, causing interrupted learning, compromised nutrition, childcare problems, and consequent economic cost to families who could not work due to the closing down of educational institutions (UNICEF Report, 2020).

### **D. Deterioration of Mental Health**

The present pandemic has a major economic, social, and psychological impact on the world's entire population, increasing unemployment, separating families, and various other changes that are generally considered major psychological risk factors for anxiety, depression, and self-harm (Bhat et al., 2020). To add to the sufferings, lockdowns, and disease contamination probabilities might also be deleterious to the mental health of the people suffering from starvation, joblessness, and homelessness (Bhullar and Schutte, 2020). People are suffering from severe anxiety, stress, and depression (Cao et al., 2020).

Besides, pandemic-related restraints (e.g., spatial distancing, isolation, home quarantine, etc.) is impacting economic sustainability and well-being, which may induce psychological mediators, such as sadness, worry, fear, anger, annoyance, frustration, guilt, helplessness, loneliness, and nervousness (Mukhtar, 2020; Mamun and Griffiths, 2020). A study conducted by Wang et al. (2020b) reported that most of the respondents were suffering from mental stress due to the Covid-19 pandemic. Domestic violence has increased worldwide (Moutafis, 2020). Suicide cases are reported every day. Economic recession, unemployment, and poverty are strongly associated with severe psychological comorbidities such as suicidal behaviors (Goldman-Mellor et al., 2010). Besides, stress increases the risk of heart attack, stroke, and other health hazards(Bhat et al., 2020).

Under the prevalent circumstances, epidemiological, demographic, and clinical issues of the virus and its outbreak have focused on numerous studies. Studies have been conducted to analyze the economic impact of the Covid-19 pandemic in Bangladesh's economy using secondary data. However, the pandemic has a major social and psychological impact on the country's entire population with increased unemployment, reduced family income, increased health risks, unpredictable educational life, and uncertainty about the future. This study analyzes the economic, social, and psychological impact of the Covid-19 pandemic among Dhaka city dwellers using primary data.

### III. RATIONALE OF THE STUDY

The end of this pandemic is still uncertain. Under this situation, it is important to understand the changing economic condition due to this pandemic and cope with the new normal. In addition to insecurity in the job market, lack of access to basic healthcare and hygiene knowledge has always been a challenge for this cohort, and the pandemic is likely to increase these challenges exponentially. The current economic situation may seriously undermine the livelihood of the underprivileged cohort of the population. In addition to physical health, this pandemic is also imposing a shark hit on the people's mental health. So, the study is expected to contribute to the stock of knowledge by analyzing the possible impacts of the global pandemic caused by the corona virus on the people's mental health, economy, and social lives in Dhaka City. The study also examines the respondents' views about the adversities caused by Covid-19 in their job field or income-generating activities, academic life, and social life. The research will also recommend policy measures to withstand the crisis period and regain the momentum back in the economy.

### IV. DATA AND METHODOLOGY

The present study is based on primary data collected from the residents of Dhaka, the capital city of Bangladesh. The survey has been conducted with great care, which covers the socioeconomic information of 200 general people. Data was collected through conducting a primary cross-sectional survey via an online platform. An online survey was conducted from July to August 2020, using a stratified random sampling technique through social media (Facebook, Whatsapp, Imo, and WeChat) and e-mails. The respondents were made clear about the purpose of the survey to get their consent. A structured questionnaire consisting of closed-ended, open-ended, numerical questions and some non-numerical questions was used in interviewing the respondents. Before data collection, the questionnaire was duly pre-tested. A comprehensive statistical analysis has been conducted to achieve the objective of the study. Qualitative responses of respondents have been analyzed by descriptive statistics.

### V. FINDINGS AND DISCUSSION

#### A. Demographic Information

**Table-1: Demographic Distribution of Respondents**

Indicators	Group	Frequency	Percentage
Age	Less than or Equal 20	17	8.5
	21-30	129	64.5
	31-40	28	14
	41-50	14	7
	Above 50	12	6
Gender	Male	114	57
	Female	86	43
Marital Status	Married	104	52
	Unmarried	93	46.5
	Others	3	1.5
Employment Sector	Public Sector	54	27
	Private Sector Formal	78	39
	Informal Sector	28	14
	Business	40	20
No. of Earning Members in the Family	1	90	45
	2	85	42.5
	3	19	9.5
	More than 3	6	3

Table-1 shows that 64.50% of the respondents under this study are within the age group 21-30. 14% of the respondents fall within the age group 31-40 years. The

other age groups only consist of a small proportion (less than 10%) of the respondents. So, it can be interpreted that the majority of the respondents under this study are young.

The above table further shows that 57% of the respondents are male, and 43% are female. So, the study gathers information from respondents of both genders. Moreover, 52% of the respondents are married, 46.5% are unmarried, and the remaining 1.5% of the respondents are divorced/widow/widower. So, the study gathers information from different categories of people in the society stratified by marital status.

Formal employment is government regulated, and workers have ensured a wage and certain rights. Public sector formal employment means the government jobs with precise job security, fixed salary, and pension schemes. Private sector formal employment comprises the formal jobs in private institutions. The salary is fixed but can vary according to the performance of the employee and prevailing circumstances. Moreover, the private sector employees may be terminated without prior notice depending on the organization's profitability. This is the scenario in Bangladesh. The informal economy is the diversified set of economic activities, enterprises, jobs, and workers not regulated or protected by the state. The concept originally applied to self-employment in small

unregistered enterprises. It has been expanded to include wage employment in unprotected jobs. Employment in the business sector comprises the businessmen across the economy.

Table-1 illustrates that 27% of the respondents are employed in formal public jobs, mainly government jobs. 39% of the respondents are employed in the private sector formal institutions, including private banks, private educational institutions, and other such organizations. 14% of the respondents are informal sectors; they are mainly street vendors, hawkers, and small traders. The remaining 20% of the respondents are businessmen. So, the study covers data from people engaged in various activities to earn their living.

The dependency ratio is high in Bangladesh; that is, a number of members of the family rely on the income of a single bread-earner. According to this study, there is only one earning member in the family of 45% of the respondents. 42.5% of respondents' families have 2 earning members. It has been found that 9.5% of the respondents' family have 3 and 3% of the respondents' family have more than 3 earning members.

#### ***B. Precautionary Measures adopted by study population in current Covid-19 Situation***

**Table-2: Precautionary Measures adopted by study population in current Covid-19 Situation**

Sl. No.	Precautionary Measures	Response	Percentage
1	Wearing mask regardless of the presence or absence of symptoms	Always	44.1
		Most of the time	35.3
		Sometimes	11.8
		Occasionally	3.9
		Never	4.9
2	Wearing hand gloves regardless of the presence or absence of symptoms	Always	8.8
		Most of the time	10.8
		Sometimes	21.6
		Occasionally	20.6
		Never	38.2
3	Washing hands after touching objects brought from outside with soap, hand wash, or using a hand sanitizer	Always	63.4
		Most of the time	26.7
		Sometimes	7.9
		Occasionally	1
		Never	1
4	Covering mouth when coughing and sneezing	Always	68.3
		Most of the time	18.8
		Sometimes	7.9
		Occasionally	2
		Never	3
5	Washing hands immediately after coughing, sneezing, or rubbing the nose	Always	69
		Most of the time	19
		Sometimes	7
		Occasionally	2
		Never	3
6	Avoid sharing utensils (e.g., plates, mugs, spoons, etc.) during meals	Always	46.5
		Most of the time	17.2
		Sometimes	10.1
		Occasionally	13.1
		Never	13.1

7	Avoid any kind of public gathering	Always	30
		Most of the time	45
		Sometimes	18
		Occasionally	4
		Never	3
8	Taking a shower immediately after returning home from outside	Always	53
		Most of the time	20
		Sometimes	14
		Occasionally	9
		Never	4
9	Disinfecting the goods after taking those home from outside	Always	46.5
		Most of the time	25.3
		Sometimes	13.1
		Occasionally	4
		Never	11.1
10	Not going out without urgent need/ office/ employment purpose	Always	49
		Most of the time	33
		Sometimes	11
		Occasionally	1
		Never	6
11	Try to avoid public transportation	Always	39
		Most of the time	33
		Sometimes	11
		Occasionally	9
		Never	8
12	Checking daily details about Covid-19 spread	Always	28
		Most of the time	26
		Sometimes	25
		Occasionally	15
		Never	6

Lockdown is the best-known measure to mitigate the Covid-19 situation, as there are no effective therapeutic strategies available at the current moment (Lau et al., 2020a; Lau et al., 2020b). However, in a country like Bangladesh, where a significant proportion of the population lives from hand to mouth with almost zero savings, lockdown is not a feasible idea (Anwar et al., 2020). Among the preventive measures for Covid-19, strict quarantine, aggressive tracing of cases and contacts, screening, immediate expansion of testing labs, and adequate supply of testing kits are required (Wilder-Smith et al., 2020; Webster et al., 2020). Besides, the government should emphasize promoting good hand hygiene practices to fight the global pandemic.

The data collected from 200 respondents regarding the precautionary measures adopted by them in the current Covid-19 situation was analyzed and presented in table-2. It was revealed that 44.1% of the respondents always wear masks regardless of the presence or absence of symptoms; 35.3% wear masks most of the time, whereas 4.9% reported that they never wear masks. Besides, only 8.8% of the respondents always wear hand gloves regardless of the presence or absence of symptoms; 10.8% wear hand gloves most of the time, and 38.2% never wear hand gloves. It was found that the majority, that is, 63.4% of the respondents wash hands after touching objects brought from outside with soap, hand washes, or use a hand

sanitizer; whereas 26.7% do it most of the time and 1% of them never do it. Besides, 68.3% of the respondents always cover their mouth when coughing and sneezing, 18.8% do it most of the time, and 3% reported that they never do it.

The study reveals that about 70% of the respondents wash their hands immediately after coughing, sneezing, or rubbing their nose, but 3% never practice it. Furthermore, 46.5% of the respondents avoid sharing utensils (e.g., plates, mugs, spoons, etc.) during meals; 17.2% avoid this most of the time; 13.1% avoid occasionally, and 13.1% never avoid sharing utensils. The study's findings interpret that 30% and 45% of the respondents avoid any public gathering always and most of the time, respectively. More than 70% of the respondents always or most of the time take a shower immediately after returning home from outside.

The study's findings conclude that 46.5% of the respondents disinfect the goods after taking those home from outside, 25.3% disinfect most of the time, and 11.1% never disinfect the goods taken from outside. Besides, 49% of the respondents do not always go out without urgent need/ office/ employment purpose. So, a sense of self-restraint has already been developed among the study population.



The risk of getting contaminated by Covid-19 increases if one travels by public transportation. It has been revealed that more than 70% of the respondents try to avoid public transportation always or most of the time. By dint of technology, people can keep themselves updated about the ongoing pandemic via television, newspaper, and social media. More than 50% of the respondents check daily details about Covid-19 spread always or most of the time. Expansion of healthcare education, general consciousness, and proper adoption of precautionary measures can play a vital role in fighting the Covid-19 pandemic.

### C. Perception about the Adverse Impact of Covid-19

The outbreak of the global pandemic has hit the world economy hard. The Covid-19 pandemic has far-reaching consequences beyond the spread of the disease itself and efforts to quarantine it. People employed in the informal sector suffered the most. Besides, those having a formal and structured job also faced a salary cut, increment, and other fringe benefits. The International Labor Organization (ILO) informed that the income generated in the first nine months of 2020 from work across the world dropped by 10.7 percent, or \$3.5 trillion, amidst the coronavirus outbreak (Reuters, Retrieved September 23, 2020).

**Table-3: Perception about the Adverse Impact of Covid-19**

Attributes	Opinion	Employment Status					Percentage(%)	Chi-square (P-Value)
		Private	Public	Informal Sector	Self-employed	Total		
Adverse Impact on Income	Yes	67	29	14	25	135	67.5	17.300 (0.001)
	No	37	24	04	00	65	32.5	
	Total	104	53	18	25	200	100	
Impact on Job Loss	Yes	74	00	17	10	101	50.5	6.998 (0.072)
	No	30	53	1	15	99	49.5	
	Total	104	53	18	25	200	100	
Impact on Loss in Business	Yes	67	26	14	23	130	65	15.240 (0.002)
	No	37	27	00	2	70	35	
	Total	104	53	18	25	200	100	
Risk of Losing Job in Future	Yes	68	32	14	23	137	68.5	9.204 (0.027)
	No	36	21	04	02	63	31.5	
	Total	104	53	18	25	200	100	
Decrease in Expenditure	Yes	63	37	15	19	134	67	5.218 (0.157)
	No	41	16	03	06	66	33	
	Total	104	53	18	25	200	100	
Adverse impact on Living Standard	Yes	54	39	16	23	134	67	22.276 (0.000)
	No	50	14	02	02	66	33	
	Total	104	53	18	25	200	100	
The decrease in Expenditure on Luxury Goods	Yes	73	38	15	25	151	75.5	10.7078 (0.013)
	No	31	15	03	00	49	24.5	
	Total	104	53	18	25	200	100	

The data collected from 200 respondents employed in different sectors (Private sector= 104, Public sector=53, Informal sector= 18 and Self-employed=25) was analyzed and presented in table-3.

According to table-3, 67.5% of the respondents believed that Covid-19 had an adverse impact on current income. Moreover, 50.5% of the respondents were of the opinion that the pandemic was responsible for massive job loss among the population. Besides, 65% of the respondents believed that this pandemic caused the loss in the business venture. A considerable portion of the economic and business operations have shifted to online

mode to survive. From big companies to small entrepreneurs, everyone has faced the havoc of the ongoing situation.

The Covid-19 pandemic has caused serious ramifications on global communities' income opportunities due to a total system breakdown. A demand-supply mismatch in the labor market and a nosedive in demand by consumers for commodities and services can lead to higher unemployment rates, firing of employees, and temporary layoffs in the near future. In this study, 68.5% of the respondents had the perception that there is uncertainty

regarding future income generation. Employment contraction has already begun on a large scale in many countries, including Bangladesh. As a result, people are bound to use up their savings to meet their expenses. According to this study, 67% of the respondents believed that there had been a decrease in the expenditure amidst the pandemic. Massive unemployment, fall in production and reduced per capita income have possibly deteriorated the standard of living of a major portion of the global community affected by Covid-19. The study found that 67% of the respondents perceived that their living standards deteriorated due to the Covid-19 outbreak.

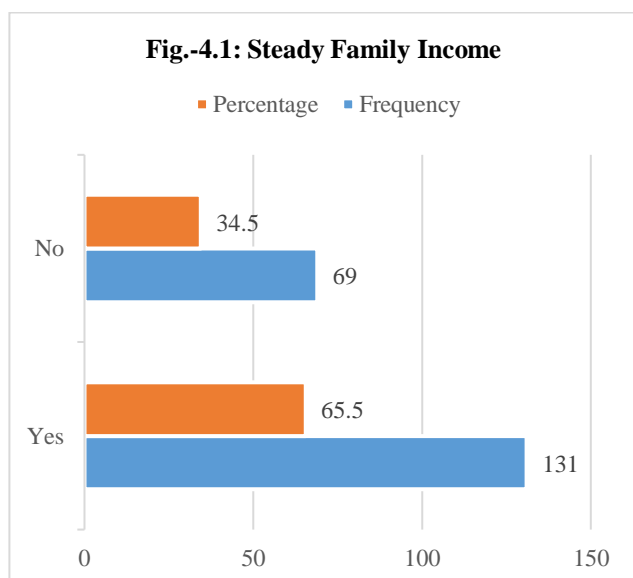
The pandemic has been blamed for several instances of supply shortages of essential goods leading to the high probability of inflation in the near future. As a result, consumers are demonstrating a higher propensity to save and a reduced propensity to consume. On top of that, considering the health issues, people are less interested in going to the marketplaces to purchase commodities with inelastic demand that is mainly for luxury and comfort. The study reported that 75.5% of the respondents believed that there had been a decrease in the expenditure on luxury goods amidst the pandemic.

Statistically, it has been observed that there is a significant difference in the perception among the respondents employed in different sectors regarding the adverse impact on income, impact on job loss, impact on loss in business, risk of losing a job in the future, adverse impact on living standard and decrease in expenditure on luxury goods due to the outbreak of coronavirus. The perception of the respondents employed in different sectors does not vary significantly regarding the decrease in expenditure due to Covid-19.

#### D. Impact of Covid-19 on Mental Health

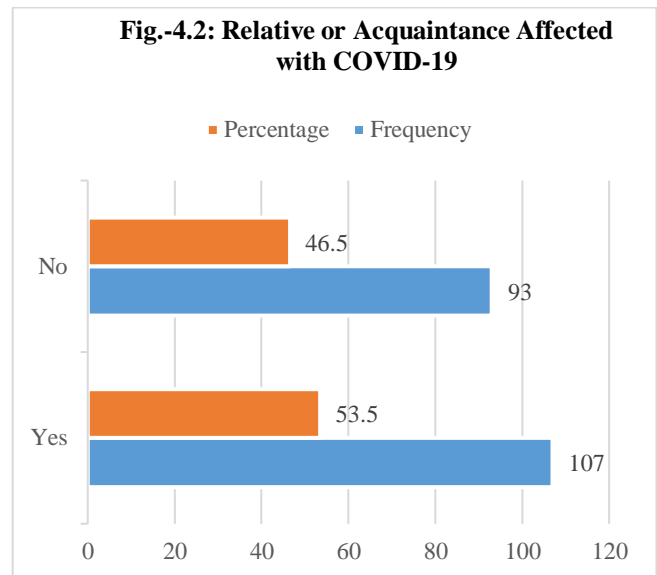
Here we are analyzing the different factors which are related to the mental health of the respondents.

##### a) Steady Family Income



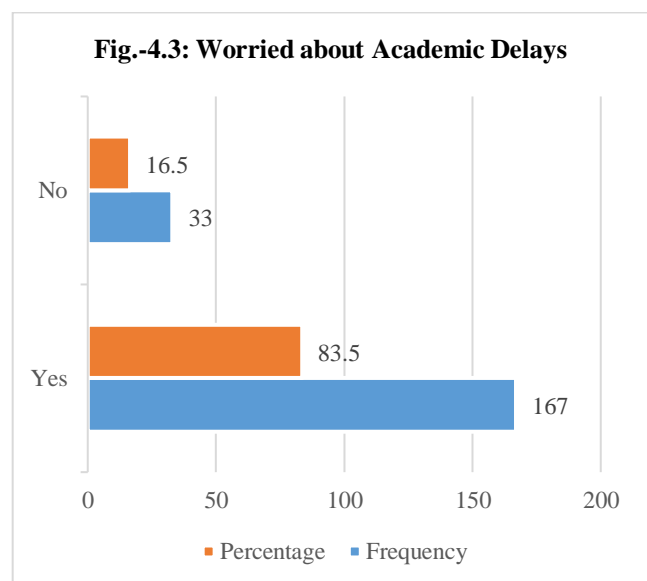
The data shows that 65.5% of the respondents had a steady family income, whereas the family income of 34.5% of the respondents became unstable due to the adversities caused by Covid-19. An unstable family income puts immense pressure on the mental health of the affected families.

##### b) Relative or Acquaintance Affected with Covid-19



The data in figure-4.2 reveals that the relatives or acquaintances of more than 50% of the respondents were affected with Covid-19, suffering from health issues being attacked by the virus. This has certainly an adverse impact on the family, friends, and associates of the Covid-19 positive patient. The disease being highly contagious, the affected ones and their associates need to isolate themselves. The disease and creating health hazards create a psychological impact of severe stress, anxiety, and panic among the sufferers and their near ones.

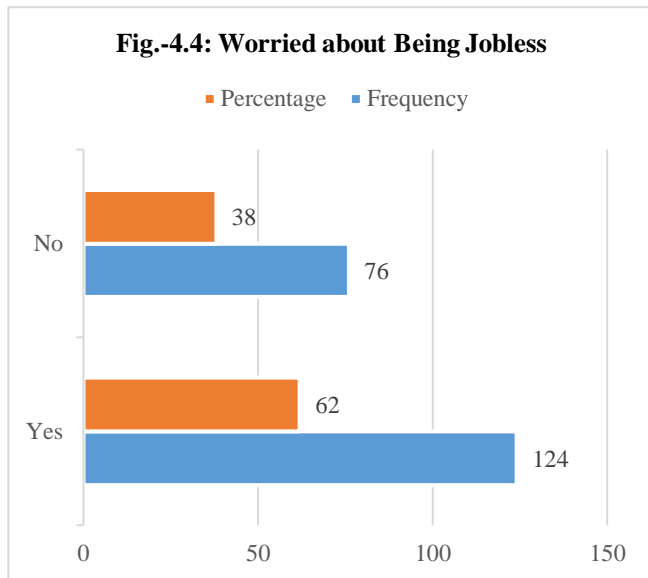
##### c) Worried about Academic Delays





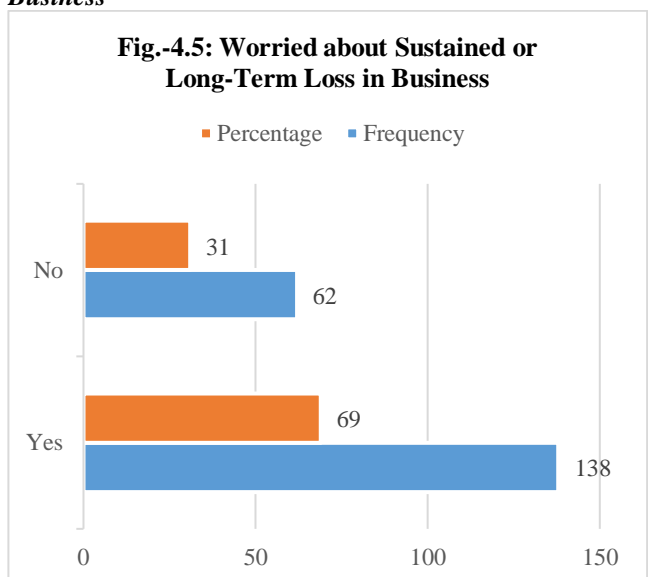
The study reported that 83.5% of the respondents are worried about academic delays due to lockdown, quarantine, closure of educational institutions, and massive spread of the novel Coronavirus. This may reduce their skill, efficiency, and productivity due to long break from studies and academic activities. However, as the pandemic is still not over and sustaining for quite a long time, most educational institutions have moved to online teaching mode.

#### d) Worried about Being Jobless



The study revealed that a major portion, that is, 62% of the respondents, are worried about being jobless due to the global pandemic. This will not only reduce their income and expenditure but also lead them to a mental breakdown.

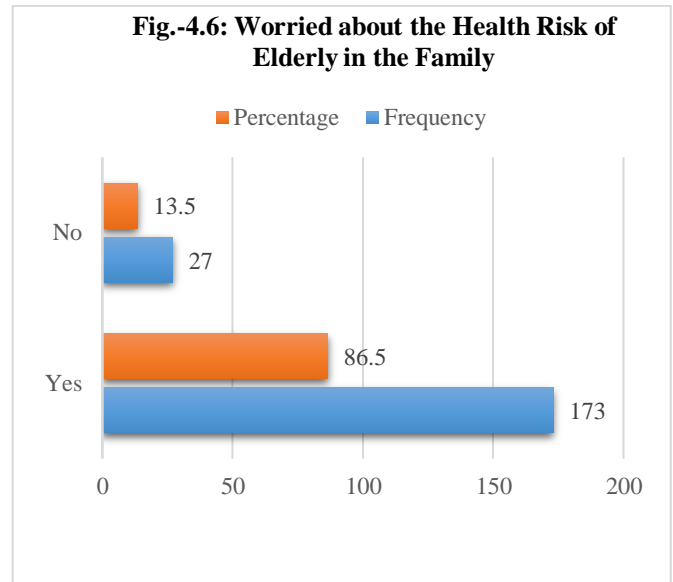
#### e) Worried about Sustained or Long-Term Loss in Business



Multinational corporations, big companies, small and medium entrepreneurs- all kinds of businesses have

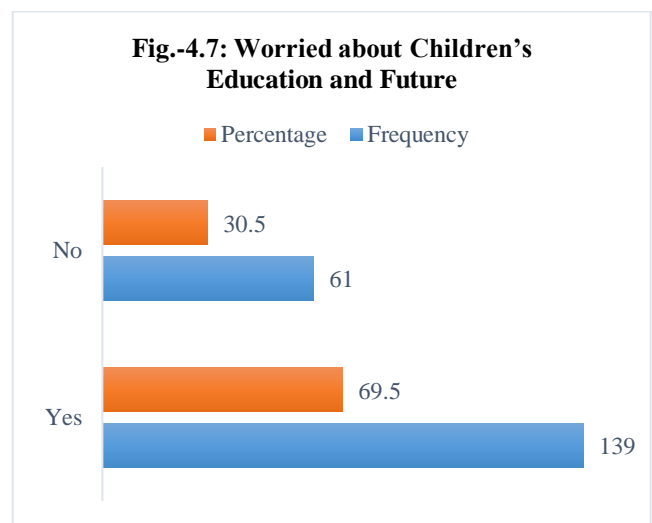
suffered losses due to the pandemic's outbreak. The data reveals that 69% of the respondents are worried about the sustained or long-term loss in business. This financial loss will certainly affect their mental health adversely.

#### f) Worried about the Health Risk of Elderly in the Family



The data reveals that 86.5% of the respondents are worried about the health risk of the elderly in the family. Older people and those with pre-existing medical conditions, such as cardiovascular disease, chronic respiratory disease, or diabetes, are at greater risk of developing severe or critical illness if infected with the virus. Besides, routine checkups and treatments of other regular diseases are being disrupted due to the pandemic, increasing the health hazards and creating mental turmoil among the patients and their families.

#### g) Worried about Children's Education and Future



Children are not beyond the grasp of the pandemic. Evidence shows that whenever children are beyond schooling, they become physically less active, have much-

Prolonged screen time, irregular sleep schedules, and less healthy diets resulted in excess weight and a lack of cardio-respiratory performance (Wang et al., 2020b). Furthermore, pandemic stressors such as terror of infection, dissatisfaction and boredom, lack of personal space at home, and family's financial loss may have even more troublesome and enduring impacts on children's mental health (Brooks et al., 2020). According to Dunleavy(2020), one in five children (20 percent) in China

suffered from depression or anxiety or the pandemic and lockdown. This puts the parents under immense stress about their children's education, mental health, and sound future. Data collected in this study revealed that 69.5% of the respondents are worried about their children's education and future.

### *E. Perceptions Regarding Lockdown, Covid-Test, and Vaccine*

**Table-4: Perceptions Regarding Lockdown, Covid-Test, and Vaccine**

<b>Perceptions</b>	<b>Yes (in %)</b>	<b>No (in %)</b>
Lockdown is the only solution to prevent the spread of Covid-19	70.4	29.6
The Covid-19 lockdown may result in social problems like crime and corruption	84.5	15.5
The continuous lockdown will have an adverse impact on the mental health of the people	91	9
The steps taken by the government to control the spread are satisfactory	21.1	78.9
If you show symptoms, are you afraid of testing for Covid-19	35.1	64.9
Are you hopeful that a vaccine to fight Covid-19 will be invented in the near future	88.8	11.2

The global pandemic outbreak has already castigated a number of countries with harsh economic and social consequences due to prolonged lockdown and disruption of regular activities. Table-4 shows that 70.4% of the respondents believe that lockdown is the only solution to prevent the spread of Covid-19. In addition to that, 84.5% of the respondents have agreed that social problems like crime and corruption may increase due to this lockdown. 91% of the respondents further believe that the continuous lockdown will adversely affect people's mental health. Besides, only 21.1 % of the respondents are of the perception that the steps taken by the government to control the spread are satisfactory.

In these circumstances, many people showing symptoms are often afraid to go for a Covid test. 35.1% of the respondents are with this mind-set. Fear of self-isolation and layoff from work are some of the reasons behind this. Amidst all this stress and suffering, 88.8% of the respondents hope that the vaccine to fight Covid-19 will be invented in the near future.

## **VI. CONCLUSION**

Almost all the world countries are going under a devastating threat of economic recession, vigorous revenue deficit, extreme health emergency, and social anarchy to some extent due to the outbreak of novel Coronavirus. With no exception, Bangladesh is also capitulated under a significant threat of economic disparity and navigating a colossal crisis during and after this pandemic. In a developing country like Bangladesh, lack of access to basic healthcare, knowledge of hygiene, and the social safety net has always been a challenge, and the pandemic is likely to increase these challenges exponentially. Until the invention of the vaccine, precautionary measures are the only way to fight the pandemic. Besides, this pandemic has taught us the importance of health care providers. The

government should treat the health sector with utmost importance while determining every fiscal year's recurring expenditures. Ensuring job security, both in public and private sector, building savings tendency among the common people, creating a company reserve fund to fight any unexpected situation, creating structured job opportunities for the people in the informal sector, soft skill development- all these aspects should be taken into consideration by the government and other stakeholders.

Coping with the mental stress due to Covid-19 is another challenge. While rumors and mixed messages pile up the stress, sharing the real facts, understanding the actual situation, and adapting the precautionary measures reduces the stress. Social activists, social media, print and electronic media, and religious and political leaders should come forward to help in the dissemination of scientifically factual information on Covid-19 among the mass population of Bangladesh, especially the marginalized communities. Proper knowledge about the pandemic and basic hygiene practice would be the key to controlling the virus's spread.

The impact of Covid-19 will impose a shark hit on low-income people, especially the day laborers, wage earners, informal workers, and retail traders. The government of Bangladesh has already taken numerous measures to minimize the economic loss due to Coronavirus. Loans at a concessional rate to the industrialists, stimulus package, increase in social safety net programs, decrease in the tax rate(income tax)- are the initiatives taken by the government of Bangladesh to mitigate the pandemic effects. International organizations like World Bank, International Monetary Fund (IMF), and Asian Development Bank(ADB) have already extended their help to countries like Bangladesh to fight the pandemic.

Bangladesh, being a lower-middle-income country, has numerous limitations in restricting the spread of the virus. In addition to self-practicing of hygiene, maintaining social distancing, strict quarantine if required, and carrying on economic activities with precautionary measures, the country has to expand its testing and healthcare facilities. Improvised and timely measures taken with proper coordination may help the country to fight the deadly virus. Government alone cannot mitigate the situation; a supportive and empathic collaborative effort from the citizens, top business organizations, the nation's public health experts, and international funders are required to navigate this crisis.

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