

# QUALITY OF LIFE OF PATIENT AFTER COVID-19 IN BANGLADESH



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Submitted by-

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**QUALITY OF LIFE OF PATIENT AFTER COVID-19 IN  
BANGLADESH**

Submitted by **Md: Abul kalam**, for the partial fulfilment of the requirement for the degree of Bachelor of Science in Physiotherapy (B.Sc. PT).

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## DECLARATION

This work has not previously been accepted in substance for any degree and isn't concurrently submitted in candidature for any degree. This dissertation is being submitted in partial fulfillment of the requirements for the degree of B.Sc. in Physiotherapy.

I confirm that if anything identified in my work that I have done plagiarism or any form of cheating that will directly awarded me fail and I am subject to disciplinary actions of authority. I confirm that the electronic copy is identical to the bound copy of the Thesis.

In case of dissemination the finding of this project for future publication, research supervisor will highly concern, it will be duly acknowledged as graduate thesis and consent will be taken from the physiotherapy department of Saic College of Medical Science and Technology (SCMST).

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## **Acronyms**

SSC:	Secondary school certificate
HSC:	Higher Secondary School Certificate
QoL	Quality of life
SCMST:	Saig College of Medical Science and Technology
WHO:	World Health Organization
COVID-19	Corona Virus Disease-2019

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## Abstract

*Purpose:* The coronavirus disease (COVID-19) is an infectious illness caused by the worldwide transmission of the severe acute respiratory coronavirus 2 (SARS-CoV-2) (WHO, 2020). Severe acute respiratory infection symptoms are common in the early stages of this illness. *Objectives:* So, the objective this research was carried out To assess the quality of life of patients in Bangladesh after covid 19 affected. *Methodology:* The prospective quantitative research was carried out to accomplish the objective of the study. 100 participants among people in different part t were selected as simple random sampling technique. The investigator used a mix of both structured and semi-structured questionnaire and participants were requested to give opinion based on the structure of the question. Data were numerically coded and put in both Excel and SPSS 25 version software program. Descriptive statistics was performed to obtain the result of the study. *Results:* This study's participant means and standard deviation of participant age where are Mean± SD= 221±.967.; here 21-31 years were 23.3%, 32-42 years 20.9, 43-53 years were 27.1% and >53 years 6.2% of the participant. In this study 90% participant were male and 10% participant were female That the chi value was .002 and the P-value was 17.256. So, there is significant Association between Age group of the participant and general health of the participant. The table shows that the chi value was 0.006 and the P-value was 18.072 So, there is no significant association between Age group of the participant and Overall quality of life during the past week. *Conclusion:* Joint or muscle pain. hose who were admitted to hospitals during infection had a low QoL score in physical, psychological, and social domains. However, QoL improved in all aspect except the psychological domain for each day passed after the diagnosis. These findings call for a focus on the quality of life of the COVID-19 affected population, with special emphasis given to females, older adults, unemployed, and people with comorbidities

*Key words: Quality of life, Covid 19*

## 1.1 Background of the Study

The coronavirus disease (COVID-19) is an infectious illness caused by the worldwide transmission of the severe acute respiratory coronavirus 2 (SARS-CoV-2) (WHO, 2020). Severe acute respiratory infection symptoms are common in the early stages of this illness (Huang et al., 2020).

The COVID-19 pandemic is affecting significant change throughout the world, but little is known about its influence on Covid19 survivors' quality of life and psychological well-being. COVID-19's immediate and long-term impact on persons impacted must be determined. The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) or 2019 novel coronavirus (2019- nCoV) is rapidly spreading from its origin in Wuhan, Hubei Province, China, to the rest of the world (Wang, 2020). Coronaviruses (CoVs) are a virus family that causes respiratory and gastrointestinal disorders in humans and livestock. People normally get minor colds from them, but the severe acute respiratory syndrome (SARS) outbreak in China in 2002–2003 and the Middle East respiratory syndrome (MERS) on the African Continent in 2012 demonstrate that they can potentially cause serious illness (Cui, Li & Shi, 2019). Another coronavirus has been attacking the world since December 2019. The virus responsible for the current pandemic of coronavirus illness (COVID-19) is the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It was originally detected in Wuhan, China, after complaints of severe pneumonia (Wu et al., 2020). COVID-19 virus transmission can occur through direct contact with infected persons as well as indirect contact with surfaces in the local environment or products used on infected people (Ong et al., 2020).

COVID-19 virus is typically spread between persons by respiratory droplets and contact routes, according to existing findings (WHO, 2020). COVID-19 has had a fast impact on daily life, business, and global commerce and transportation. This pandemic has far-reaching consequences for individuals' everyday lives as well as the global economy (Campbell & Bannock, 2020).

The respiratory system is the most usually impacted by SARS-CoV-2. The virus, on the other hand, might infect any organ in the body. Multiple organs are frequently impacted in severely ill individuals. The virus binds to ACE2 receptors

in vascular endothelial cells, the heart, the brain, the kidneys, the colon, the liver, the pharynx, and other tissues.

COVID-19 instances that have been confirmed and published have a wide variety of symptoms, ranging from minor complaints like fever and cough to more serious cases like trouble breathing (CDC, 2020). The aged, a vulnerable group with comorbidities such as diabetes and cardiovascular or lung disease, are at a higher risk of not just getting severe sickness, but also of dying if they become ill (BCCDC, 2020). Hypertension (15.8%), cardiovascular and cerebrovascular disorders (11.7%), and diabetes were the most frequent comorbidities found (Paudel, 2020). COVID-19 has had a negative influence on the population's quality of life and psychological wellbeing in different ways (Algahtani et al. 2021). Furthermore, reduced health status and quality of life is linked to increased morbidity and death (Brown et al., 2015).

The number of cases began to rise dramatically, some of which had no connection to the live animal industry, implying that human-to-human transmission was taking place (Huang & Wang, 2020). In late December 2019, Wuhan, Hubei Province, China, saw an outbreak of an unknown disease identified as pneumonia of unclear etiology. On January 11th, 2020, the first fatal case was reported. The outbreak was fueled by the enormous migration of Chinese around the Chinese New Year. People returning from Wuhan reported cases in other Chinese provinces and other countries (Thailand, Japan, and South Korea in fast succession). On the 20th of January, 2020, transmission to healthcare staff caring for patients was outlined. By the 23rd of January, Wuhan's 11 million residents had been placed under lockdown, with entry and exit restrictions in effect. This curfew was quickly expanded to other cities in Hubei province. COVID-19 cases have been documented in nations outside of China that have no history of travel to China, implying that local human-to-human transmission is occurring in these countries (Rothe, 2020). In January 31, 2020, the outbreak had infected 9720 people in China, resulting in 213 deaths, and 106 persons in 19 other countries (Feng, Deng & Weina, 2020).

Coronaviruses (CoV) are a broad group of viruses that can cause everything from a typical cold to more serious illnesses. The Chinese public health, clinical, and scientific communities acted quickly to enable rapid recognition of the new virus, and the viral 3 gene sequence was shared with the rest of the world (Zhu, Zhang & Wang, 2020). Concerns developed as the epidemic spread faster in the

United States (US), Brazil, and India, raising fears that the numbers might worsen. Because Europe has a large population of seniors, most European countries have taken steps to safeguard adults over the age of 70.

Coronaviruses (CoVs) are a collection of enclosed, positive-sense, single-stranded RNA viruses with a wide range of characteristics (Zumla et al., 2016). They produce a variety of illnesses in humans and animals that affect the respiratory, gastrointestinal, hepatic, and neurological systems (Chan, Lau & Woo, 2013). Two novel CoVs, severe acute respiratory syndrome CoV (SARS-CoV) and Middle East respiratory syndrome CoV (MERS-CoV), have appeared in the last two decades and are responsible for serious human diseases (Cheng, Lau, Woo & Yuen, 2007).

SARS-CoV-2 is the seventh member of the human-infecting CoV family. Fever, tiredness, and cough were the most common symptoms of COVID-19 infection, which were comparable to those of SARS-CoV and MERS-CoV infections. The pathophysiology and pathogenesis of these CoVs that cause serious disorders in humans have some overlapping and discrete characteristics (Lui, Zheng & Tong, 2020).

The term "long COVID" was coined by the National Institute for Health and Care Excellence to describe people who experience signs and symptoms that persist or worsen after being exposed to COVID-19. It encompasses both symptomatic COVID19 (from 4 to 12 weeks) and post-COVID-19 syndrome (from 12 weeks). Patients with symptoms six months after an acute illness appeared to have a lower quality of life, functional status, and work productivity (Vaes et al., 2021)

COVID has the potential to cause a wide range of problems. Physical, emotional, and psychic complications are all possible. Many studies suggest that numerous complications such as tiredness, shortness of breath, muscular discomfort, joint pain, headache, cough, chest pain, changed smell, taste, cognitive impairment, memory loss, anxiety, and sleep disturbances are prevalent. Various forms of LONG COVID Complications might affect quality of life and cause work problems (Aiyegbusi et al., 2021).

The global COVID-19 outbreak has wreaked devastation. It took millions of lives, destroyed billions of people economically and mentally, and had a lasting influence on those who survived the epidemic. The most noteworthy conclusion in the research was that COVID-19 recovered patients' physical, social, and environmental quality of life improved with time, with the exception of the

psychological domain, which suffered the most from this dreadful condition (Hawlder et al., 2021). COVID-19 has had a significant influence on a variety of levels and has been linked to considerable physical and psychological disability, as well as a worse quality of life (Arab-Zozani et al., 2020). COVID-19 survivors also report poor quality of life 1–3 months after infection, as well as considerable physical and psychological damage (Chen, Gong, Zhang & Li, 2020). Among other symptoms, many COVID-19 survivors have prolonged dyspnea, fatigue (Taquet et al., 2021). Patients with severe COVID-19 may continue to have dyspnea after being discharged from the hospital, both at rest and during exercise or regular activities (Vitacca et al., 2020). Anxiety, depression, and sleep difficulties have been documented in 30-40% of COVID-19 survivors (Vaes et al., 2021).

Physical health is linked to quality of life, and patients who had detectable declines in pulmonary function as a result of COVID-19-related pulmonary complication had lower quality of life (Van der Sar-van der Brugge et al., 2021). It has been linked to considerable physical and psychological harm, as well as a reduction in quality of life. According to studies, due to quarantine and lockdown had an impact on people's quality of life in all sectors (Slimani et al., 2020). Researcher found several studies have lower quality of life in recovered COVID-19 cases, general community, hospitalized patients, and chronic illness patients (Algahtani et al., 2021). COVID-19-related symptoms might last a long time after recovery, and organ-specific sequelae necessitate interdisciplinary comprehensive care. The two most prevalent persisting symptoms of post-COVID-19 syndrome are exhaustion and dyspnoea, both of which can continue regardless of the severity of the initial sickness (Townsend et al., 2020).

## 1.2 Justification

COVID-19 has become a global pandemic, affecting millions of individuals worldwide, with more than 24 crore peoples (as of October 28, 2021) verified, and more than 4 million people already dead. Fortunately, the survivor rate outnumbers the mortality rate. More than 15 million individuals have been verified as covid-19 patients in Bangladesh (28 October-2021) and more than 27 thousand people have died (28 October-2021). According to the WHO, 30-40 % of COVID-19 patients experience symptoms for months following infection, and decline quality of life and impact on psychological status. These types of Patients suffer various types of common complications, there are a few numbers of quality of life. The COVID-19 pandemic has disrupted the normal existence of the world's population. Social isolation and economic uncertainty result have led to change the quality of life for the person and also improve highly significant mental health problems. Too many people died due to Covid19. Many lost their beloved ones due to Covid19. Normally People with functional limitations or bodily impairments are generally disadvantaged in their opportunities to participate in social life. Due to Covid19 pandemic they also suffer. They cannot participate in social life. Also they suffer from mentally due to their disability. This affect their life style and make an impact on their Quality of life. Due to isolation in pandemic this also make an impact on their mental health. There are no proper study about the mental resilience and quality of life among disabled persons in Covid19 pandemic. In this study researchers try to find out the mental resilience and quality of life among the disabled persons in Covid19 pandemic. It will help to find out the impact of Covid19 to and how their quality of life affected by the pandemic. It will also help the health professionals to modify the treatment protocol and to improve their mental health and improve quality of life.

### **1.3 Research Question**

What is the quality of life of patients after COVID-19 in Bangladesh?

## **1.4 Objective of the study**

### **1.4.1 General objectives:**

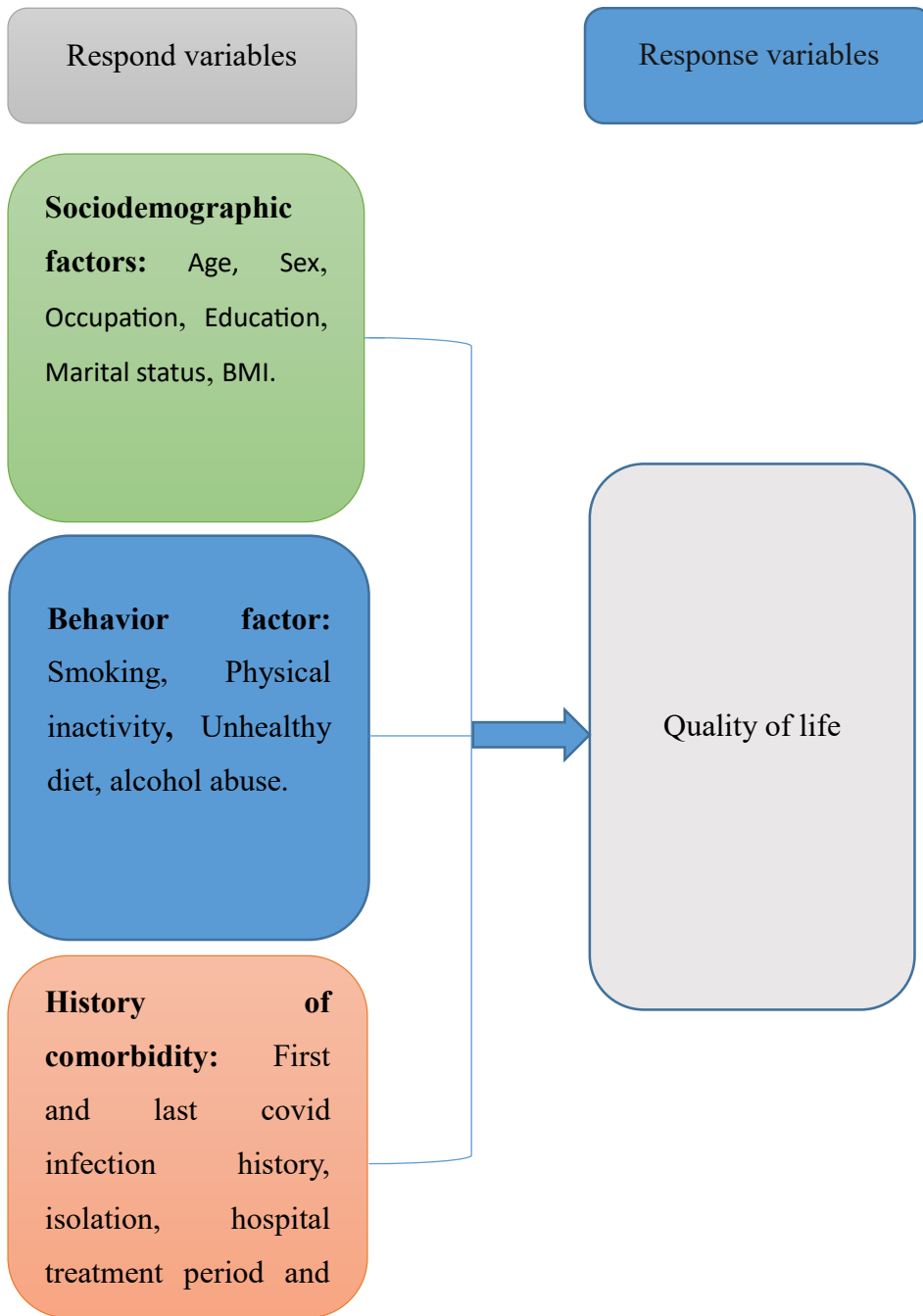
To assess the quality of life of patients in Bangladesh after covid 19 affected.

### **1.4.2 Specific objectives:**

- i. To find out the social activities post covid period among affected patients.
- ii. To fine out social economical study at the covid patient
- iii. To assess the respiratory problem
- iv. To identify the social impact in job section
- v. To assess the quality of life of post covid patient.
- vi. To explore the association between normal person and post covid patient



## 1.5 List of variables of the study



## 1.6 Operational definition

**Disability:** A disability is any condition that makes it more difficult for a person to do certain activities or effectively interact with the world around them (socially or materially). These conditions, or impairments, may be cognitive, developmental, intellectual, mental, physical, sensory or a combination of multiple factors

**COVID-19:** A mild to severe respiratory illness caused by a corona-virus (severe acute respiratory syndrome corona-virus 2 of the genus Beta corona-virus), transmitted mainly by contact with infectious material (such as respiratory droplets) or with objects or surfaces contaminated by the causative virus, and is characterized in particular by fever, cough, and shortness of breath and can progress to pneumonia and respiratory failure. It was first identified in December 2019 in Wuhan, China.

**Quality Of Life Quality of life (QOL)** is the general well-being of individuals and societies, outlining negative and positive features of life. It observes life satisfaction, including everything from physical health, family, education, employment, wealth, religious beliefs, finance and the environment.

A global pandemic was declared due to the novel SARS-CoV-2 (COVID-19) at the end of 2019, which resulted in more than 22 million cases by August 20, 2020. The ongoing COVID-19 pandemic, as well as the associated isolation and protective measures, is significantly changing society across the globe. In addition to the potential for COVID-19 and its health-related complications, the general public is also dealing with significant effects in their day-to-day lives, including increased stress exposure, depressed mood, disrupted sleep habits, and financial worry and sadness. According to projections, this pandemic could lead to an increase in suicide rates. Overall, COVID-19 has had a significant impact on the population of individuals without disabilities (Soltan et al., 2020).

Individuals with disabilities compensate 15% of the world's population. Without the COVID-19 framework, people frequently face difficulties going about their daily lives, including barriers to community mobility, difficulties using public transportation, limited access to healthcare services, and communication difficulties. People with impairments are more likely than the general public to experience depression, have lower life satisfaction, and feel more lonely (Buchanan, 2020).

Over 11 million disabled persons live in the United Kingdom. They make up about 20% of the total population of the country. At the beginning of the pandemic, there was a significant amount of worry about their vulnerability to the SARS-CoV-2 virus and the ensuing COVID-19 infections. According to the Office for National Statistics' 2019a and 2019b reports, 45% of those 65 and older are disabled, and it is well known that the virus is more likely to affect elderly people (Harrison et al., 2020).

Nowadays, there are more than a billion disabled persons in the world. People who experience disability or functional decline for significantly extended periods of their life are becoming increasingly frequent according to the present demographic and health developments. In part because of aging populations and a rise in chronic health issues, this figure is rising internationally. As a result, these developments lead to rising demand for health and rehabilitation services, which is far from being satisfied, especially in low and middle-income nations (Lugo-Agudelo et al., 2022).

The prevalence of disability in Bangladesh is about 9%. In rural areas, the prevalence of disability is found to be much greater than urban area. In urban areas 3%

and rural area 5% people are disabled. Among them most are female (4% in male & 5% in female) and the elderly population (3% in 15–59 years, 16% in 60 years). The most frequent form of disability is physical impairment, which is followed by visual, speech, mental, and hearing impairment (39%, 20%, 13%, 13%, and 9%, respectively). Bangladesh has also been found to have a high incidence of chronic and incapacitating diseases, indicating a greater need for rehabilitation services. However, it is unclear how Bangladesh plan to meet this disproportionate demand for rehabilitative services (Al Imam et al., 2021).

Public health professionals increasingly realize that there are considerable health differences among people with disabilities. According to studies from the Centers for Disease Control and Prevention, despite its massive size, 20% of children and 26% of adults in the United States are obese. This community is still very underdeveloped, largely unexplored, and marginalized. People with disabilities are less educated, have greater economic, food, housing, and employment insecurity, and have less access to the online world than the general population (Krahn et al., 2015).

Coronavirus Disease-2019 (COVID-19) quickly surged the whole world and affected people's physical, mental, and social health thereby upsetting their quality of life. Therefore, we aimed to investigate the quality of life (QoL) of COVID-19 positive patients after recovery in Bangladesh. This was a study of adult (aged  $\geq 18$  years) COVID-19 individuals from eight divisions of Bangladesh diagnosed and confirmed by Reverse Transcription-Polymerase Chain Reaction (RT-PCR) from June 2020 to November 2020. Given a response rate of 60% in a pilot study, a random list of 6400 COVID-19 patients was generated to recruit approximately 3200 patients from eight divisions of Bangladesh and finally a total of 3244 participants could be recruited for the current study. The validated Bangla version of the World Health Organization Quality of Life Brief (WHOQOL-BREF) questionnaire was used to assess the QoL. Data were analyzed by STATA (Version 16.1) and R (Version 4.0.0). All the procedures were conducted following ethical approval and in accordance with the Declaration of Helsinki. The mean scores of QoL were highest for the physical domain ( $68.25 \pm 14.45$ ) followed by social ( $65.10 \pm 15.78$ ), psychological ( $63.28 \pm 15.48$ ), and environmental domain ( $62.77 \pm 13.07$ ). Psychological and physical domain scores among females were significantly lower than the males ( $p < 0.001$ ). The overall quality of life was lower in persons having a chronic disease. Participants over 45 years of age were 52% less likely to enjoy good physical health than the participants aged below 26 years (AOR: 0.48,

CI: 0.28–0.82). The quality of life of employed participants was found 1.8 times higher than the unemployed (AOR: 1.80, CI: 1.11–2.91). Those who were admitted to hospitals during infection had a low QoL score in physical, psychological, and social domains. However, QoL improved in all aspects except the psychological domain for each day passed after the diagnosis. These findings call for a focus on the quality of life of the COVID-19 affected population, with special emphasis given to females, older adults, unemployed, and people with comorbidities (Mondal et al., 2021).

In December 2019, an unknown disease resulting in pneumonia was first identified in Wuhan, Hubei Province, China. The COVID-19 pandemic has subsequently resulted in a global public health problem and threat to human health. COVID-19 is a highly infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). On 12 February 2020, a total of 43,103 COVID-19 cases were recorded; 42,708 of these cases (99.1%) in China. On the 19th March 2020, the World Health Organisation (WHO) declared COVID-19 to be a pandemic, with 118,000 cases and 4291 deaths in 114 countries. The Johns Hopkins University database revealed that due to the COVID-19 pandemic, the worldwide case-fatality ratio increased by 6.2% (120,450/1,930,780) as of 14 April 2020. Recently, several studies have started to explore tension, anxiety, psychological symptoms and other mental health manifestations during the COVID-19 pandemic. According to a British Medical Journal report, the psychological impact of the COVID-19 pandemic is being observed among residents in the UK. China's National Health Commission (NHC) has published various guidelines at different times during the pandemic following identified psychological stress from home quarantine, effective treatment procedures for COVID-19 patients, and side effects of treatment or fear of the infection itself. The overall mean age of respondents was  $28.42 \pm 7.07$  years, and 63.4%, 44.1% and 50.3% were unmarried, were in the middle-income family group and had a masters or PhD qualification, respectively. The overall mean IES score of respondents was  $80.89 \pm 8.91$ , which reflects a stressful impact of the COVID-19 pandemic on physical and mental health problems. Only 27.75% of respondents had an IES score  $\geq 75$ . More than half of respondents (57.8%) reported that they did not feel lonely and hopeless. In terms of preventative measures, the majority of the respondents (80.2%) reported that they did not wash their hands frequently with soap and sanitiser for at least 20 s to reduce spread of the virus. During the pandemic, more than half of the respondents (56.8%) claimed that they faced serious problems in education (Rashid et al., 2022).

The Coronavirus Disease 2019 (COVID-19) caused by the SARS-CoV-2 virus has taken the lives of more than 100,000 healthcare workers (HCWs) so far. Those who survived continuously work under immense physical and psychological pressure, and their quality of life (QoL) is impacted. The study aimed to assess the QoL among HCWs in Bangladesh who recovered from COVID-19. This cross-sectional, telephonic interview-based study was conducted among 322 randomly selected HCWs from Bangladesh who were positive for COVID-19 and recovered from the infection before the interview. Data were collected from June to November 2020. We examined the impact of COVID on the QoL of the participants using the validated Bangladesh version of the World Health Organization (WHO) Quality of life questionnaire brief (WHOQOL-BREF). All analyses were done by STATA (Version 16.1). More than half of the health care professionals were male (56.0%), aged between 26–35 years (51%), and completed graduation (49%). The majority of the study participants in the four domains were married (n=263, 81%) and living in Dhaka. The average score of the participants was  $70.91 \pm 13.07$ ,  $62.68 \pm 14.99$ ,  $66.93 \pm 15.14$ , and  $63.56 \pm 12.11$  in physical, psychological, social relationship and environmental domains, respectively. HCWs in urban areas enjoyed 2.4 times better socially stable lives (OR: 2.42, 95% CI: 1.18–4.96) but 72% less psychologically satisfactory lives. HCWs' post-COVID quality of life depended on variable interaction of demographic socioeconomic, including old age, female sex, graduation, and higher monthly income. The findings indicate the issues which should be addressed to improve the quality of life of frontline workers who fight against the pandemic (Hossain et al., 2022).

This study aims to investigate the health-related quality of life and coping strategies among COVID-19 survivors in Bangladesh. This is a cross-sectional study of 2198 adult, COVID-19 survivors living in Bangladesh. Data were collected from previously diagnosed COVID-19 participants (confirmed by an RT-PCR test) via door-to-door interviews in the eight different divisions in Bangladesh. For data collection, Bengali-translated Brief COPE inventory and WHO Brief Quality of Life (WHO-QoLBREF) questionnaires were used. The data collection period was from October 2020 to March 2021. Males 72.38% (1591) were more affected by COVID-19 than females 27.62% (607). Age showed significant correlations ( $p < 0.005$ ) with physical, psychological and social relationships, whereas gender showed only a significant correlation with physical health ( $p < 0.001$ ). Marital status, occupation, living area, and co-morbidities showed significant co-relation with all four domains of QoL ( $p < 0.001$ ).

Education and affected family members showed significant correlation with physical and social relationship ( $p < 0.001$ ). However, smoking habit showed a significant correlation with both social relationship and environment ( $p < 0.001$ ). Age and marital status showed a significant correlation with avoidant coping strategies ( $p < 0.001$ ); whereas gender and co-morbidities showed a significant correlation with problem-focused coping strategies ( $p < 0.001$ ). Educational qualification, occupation and living area showed significant correlation with all three coping strategies ( $p < 0.001$ ). Survivors of COVID-19 showed mixed types of coping strategies; however, the predominant coping strategy was avoidant coping, followed by problem-focused coping, with emotion-focused coping reported as the least prevalent. Marital status, occupation, living area and co-morbidities showed a greater effect on QoL in all participants. This study represents the real scenario of nationwide health-associated quality of life and coping strategies during and beyond the Delta pandemic (Rashid et al., 2022).

Health care workers have been facing difficulties in coping with the COVID-19 infection from the beginning. The study aimed to compare Quality of Life (QOL) among health care workers (HCWs) with and without prior COVID-19 disease. This study was conducted from July 2020 to January 2021 among 444 HCWs. We randomly interviewed 3244 participants for our earlier nationwide survey from a list of COVID-19 positive cases after their recovery, and we found 222 HCWs among the respondents. We randomly chose 222 HCWs unaffected by COVID as a comparison group from our selected hospitals. We measured QOL using World Health Organization's WHOQOL-BREF tool. Physical, psychological, environmental, and social ties were the four areas assessed on a 5-point Likert scale where a higher score suggests better QOL. Due to pandemic restrictions, we used telephonic interviews for data collection. A higher QOL score was observed in HCWs with prior COVID-19 infection in all four domains than HCWs without previous COVID-19 conditions. Comorbidity was negatively associated with QOL scores of the physical ( $p = 0.001$ ). Governmental and non-governmental stakeholders should focus on potentially modifiable factors to improve health care workers' quality of life (Rahman et al., 2022).

Considering the severity of the effects of COVID-19 on psychological health and quality of life, the present study investigates the direct effects of government strategies and social distancing and the moderating effect of emotional recovery on psychological distress and quality of life using the tenets of the theory of attachment and learned helplessness. The snowball sampling technique was used to recruit

respondents from Bangladesh who completed a self-administered questionnaire via Google Forms, which provided cross-sectional data. The results revealed that both social distancing and government strategies have significant negative influences on psychological distress. Besides, government strategies have a significant positive influence on social distancing. Although psychological distress has a significant negative influence on quality of life, emotional recovery shows no moderating effect on the relationship between psychological distress and quality of life during the COVID-19 pandemic. The study provides insights for regulatory bodies and policymakers for developing effective policy interventions to ensure the well-being of people during this pandemic. Finally, the study highlights the implications for both theory and practice and a few notes for further research (Khan et al., 2021).

Mental health problems significantly increased worldwide during the coronavirus (COVID-19) pandemic. At the early stage of the outbreak, the government of Bangladesh imposed lockdown and quarantine approaches to prevent the spread of the virus, which impacted people's daily life and health. The COVID-19 pandemic has also affected people's economic status, healthcare facilities and other lifestyle factors in Bangladesh. We aimed to assess the impact of the COVID-19 pandemic on mental health among the Bangladeshi population. We conducted an online cross-sectional survey among 672 Bangladeshi people aged between 15 and 65 years all over the country from 15 April to 10 May 2020. After obtaining electronic consent, we conducted a survey assessing people's sociodemographic profiles and psychometric measures. We used The University of California, Los Angeles (UCLA) Loneliness Scale-8, Patient Health Questionnaire-9, Generalized Anxiety Disorder 7-Item Scale and Pittsburgh Sleep Quality Index to assess loneliness, depression, anxiety and sleep disturbance, respectively. The prevalence of loneliness, depression, anxiety and sleep disturbance was estimated at 71% (mild: 32%, moderate: 29%, severe: 10%), 38% (mild: 24%, moderate: 11%, severe: 3%), 64% (mild: 30%, moderate: 17%, severe: 17%) and 73% (mild: 50%, moderate: 18%, severe: 5%), respectively. In Bangladesh, the key factors associated with poor mental health during COVID-19 were female sex, unemployment, being a student, obesity and living without a family. The present study also identified statistically significant interrelationships among the measured mental health issues. A large portion of respondents reported mental health problems during the COVID-19 pandemic in Bangladesh. The present study suggests longitudinal assessments of mental health among Bangladeshi people to determine the gravity of



this issue during and after the pandemic. Appropriate supportive programmes and interventional approaches would address mental health problems in Bangladesh during the COVID-19 pandemic (Das et al., 2021).

**3.1 Study design**

Descriptive type of cross-sectional study

**3.2 Study place**

The Study was conducted in different corona dedicative Hospital in Dinajpur, Nilphamari, Thakurgaon, Panchgarh.

**3.3 Study period**

The duration of the study was 6 months form 3rd January 2023 to 31th July 2023

**3.4 Study population**

Patients after Covid 19 affected.

**3.5 Sample size**

Desired sample Size wasbe calculated by formula

$$n = z^2 p(1-p) / d^2$$

Where, n= Desired sample size

z= standard normal variable which in 90% confidence level = 1.96

p=21% (Wise, 2021).

=0.21

d= Degree of accuracy desired, usually set at 0.05

So, calculated sample size

$$n = (1.95)^2 \times 0.21(1-0.21) / (0.05)^2$$

$$= 3.8416 \times 0.21 \times 0.79 / 0.0025$$

$$= 255$$

$$n = 255$$

So, sample size was 255.

So, the initial sample size is 241. But limitation of as this research, the feasible 100 samples were selected for this study

### **3.6 Sampling technique**

Purposive sampling technique was applied for the study.

### **3.7 Inclusion criteria**

- People with COVID-19 (i.e., diagnosed with COVID-19 and/or discharged from the hospital)
- 18 years and above.
- Both male and female are included
- No medical diagnosis of mental illness

### **3.8 Exclusion criteria**

- People who did not affected by covid 19.
- Patients who are not willing to communicate or participate.
- Significant physical and mental illness.
- Refusal to give consent

### **3.9 Method of data collection**

Data collection procedure was included by face to face with semi-structured questionnaire interview.

### **3.10 Instrument and tools of data collection Management of data**

Pen, pencil, paper, scale etc. An interview administered self-developed questionnaire (both open and closed ended) was used to collect data by self-developed Questionnaire.

### **3.11 Data analysis**

After collection of data, all the data was check and for their completeness and consistency and finally will be enter into the SPSS. Descriptive analysis will be showing the distribution of different QOL of PCP and QOL of normal population which included mean, SD, frequency, percentage, median interquartile range. Continuous variable will be present as mean and standard deviation. Categorical will be present frequency and percentage.

### **3.12 Ethical consideration**

This study conducted with the prior permission from the ethical review committee of saic College of Medical Science & Technology (SCMST)

Before start data collection I obtain a permission letter from authority and will maintain all kinds of ethics strictly.

I keep all information secure and maintain confidentiality of the respondents and acknowledged them.

### **3.13 Rigor**

It was always aimed to avoid introducing personal viewpoints, values, and biases during the data collecting and processing. No judgements were made, and no leading questions were asked. When conducting the study, the researcher was taken help from the supervisor when needed. Researcher always tried not to influence the process by his own value and biases. No leading question were asked or no important question is avoided. The participant's information was coded accurately and checked by the 20 research supervisor to eliminate any possible errors. The entire information was handled with confidentiality. In the result section researcher was not find influenced about outcome by showing any personal interpretation during conduct the study every section of the study is checked by the research supervisor.

The study aimed to assess the quality of life of patients in Bangladesh after covid 19 affected. The data was collected by the researcher himself. Structured questions were used with both open-ended and close-ended questions in the questionnaire. The data were analyzed with the Microsoft Office Excel 2019 with SPSS 25 version software program. In this study researcher use bar, Colum, Figure, Pie chart so show the result of the body.

#### 4.1: Socio-demographic condition:

##### 4.1.1: Age of participant

This study's participant means and standard deviation of participant age where are Mean± SD= 221±.967.; here 21-31 years were 23.3%, 32-42 years 20.9, 43-53 years were 27.1% and >53 years 6.2% of the participant.

Age Group	Frequency (n=10)	Percentage	Mean	SD
21-31	30	23.3	40.18	9.731
32-42	27	20.9		
43-53	35	27.1		
>53	8	6.2		

Table-1: Age of participant

#### 4.1.21: Gender of participant

In this study 90% participant were male and 10% participant were female.

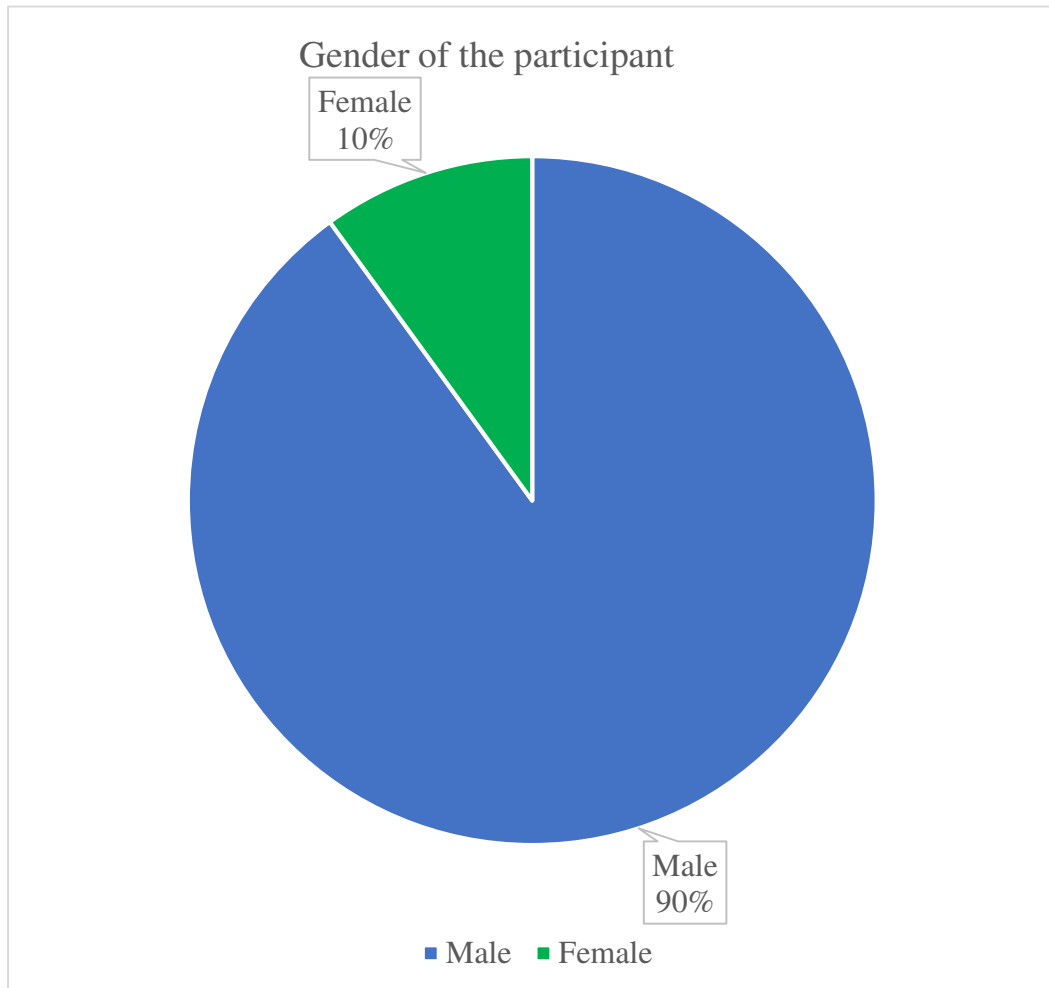


Figure-1: Gender of participant

### 4.1.3: Living area of the participant

In this study 82% participant were living in city, 3% participant were living in half of the city and 15% participant were living in village.

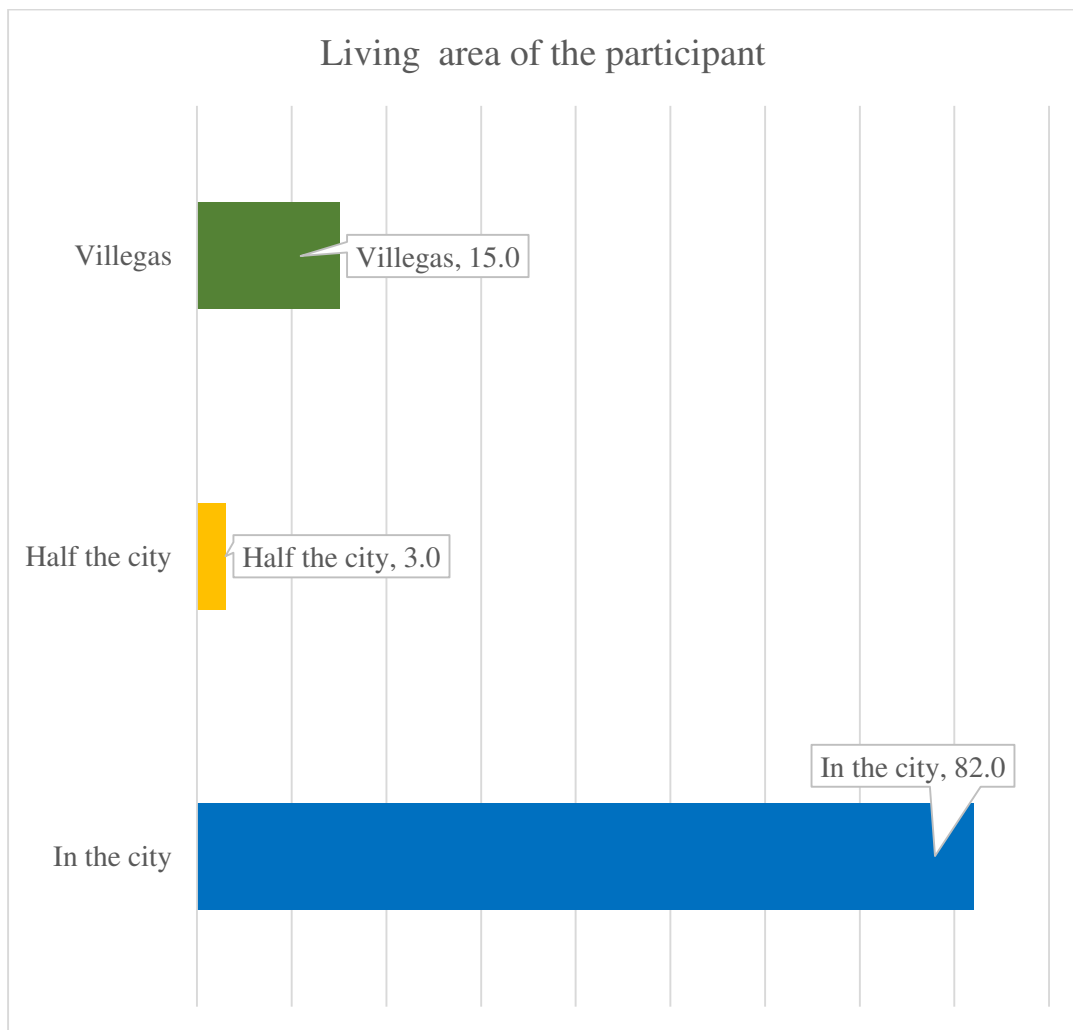


Figure-2: Living area of the participant

#### 4.1.4: Education level of the Participant

In this study 3% were illiterate, 6% were primary, 6% were SSC, 12% were HSC, 43% were graduation, and 30% were post graduate

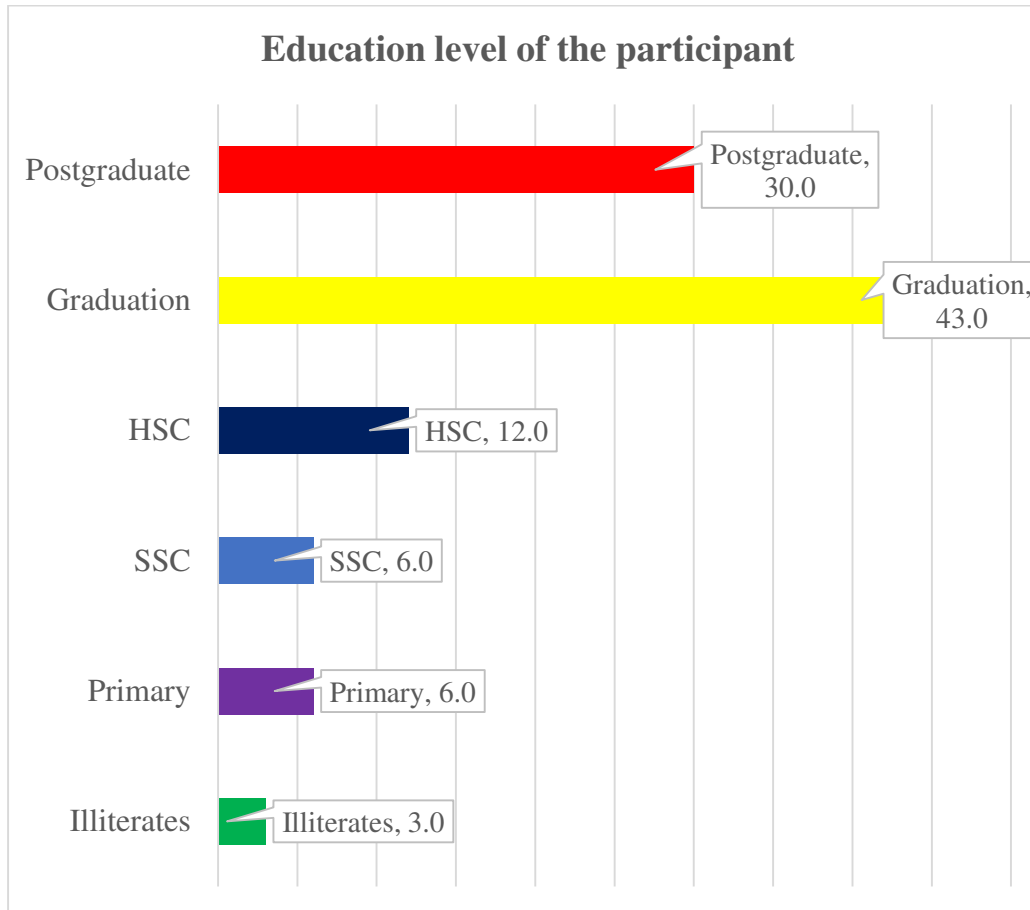


Fig-3: Education level of the Participant



#### 4.1.5: Types of family of the participant

In this study 52% were join family and single was 48%.

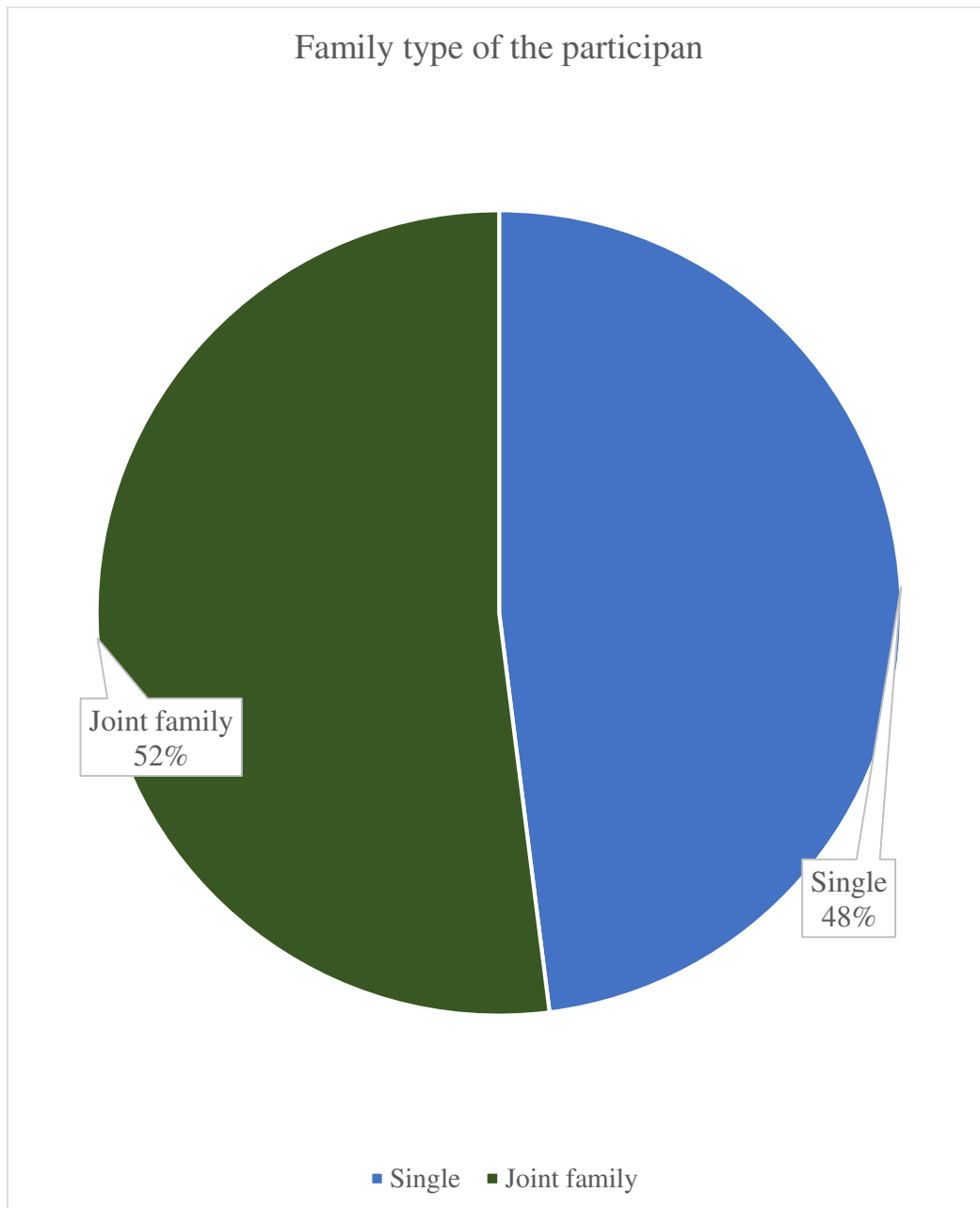


Figure-4: Types of family of the participant

#### 4.1.6: Occupation of the participant

In this study were 19% government job, 39% were private job, 6% were business and 36% were others job.

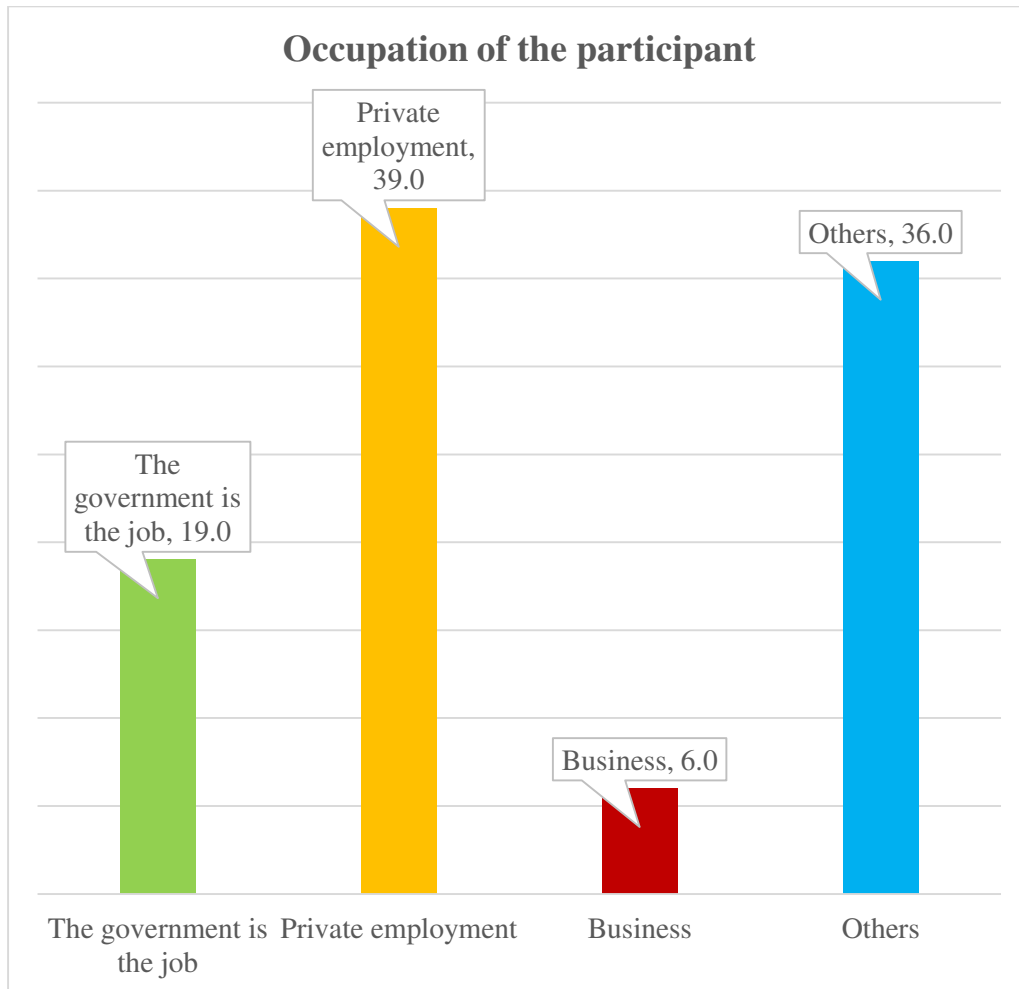


Fig- 5: Occupation of the participant

#### 4.1.7: Religion of the participant

In this study 82% were muslim 12% were hindu and 6% were charistan.

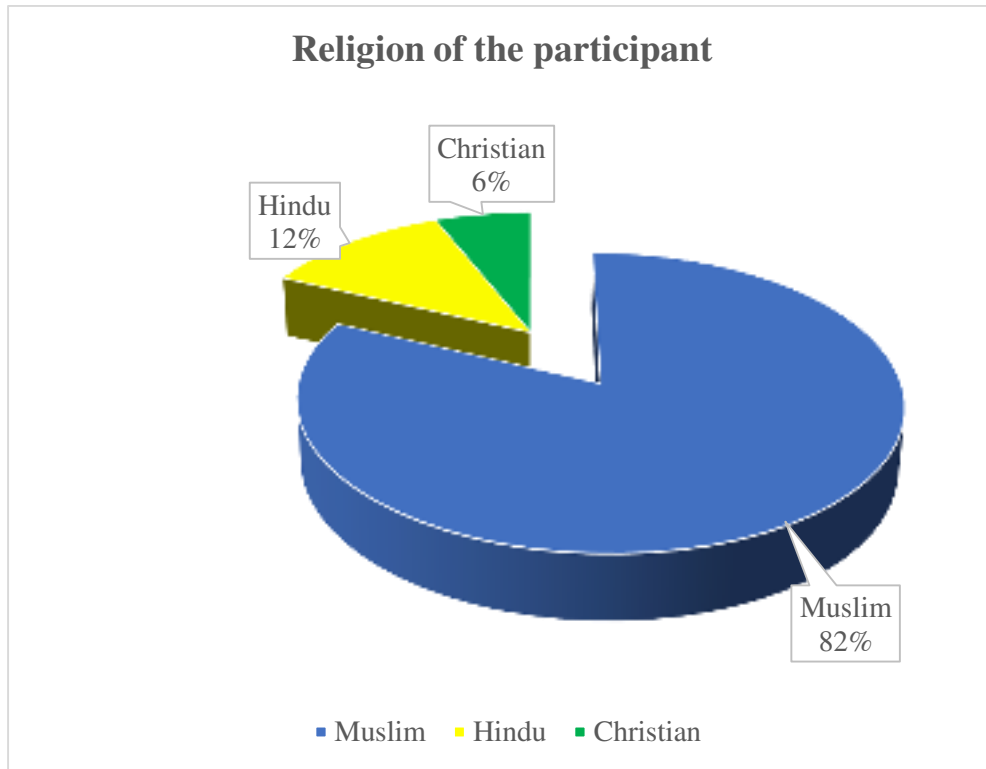


Figure-6: Religion of the participant

#### 4.1.8: Martial status of the participant

In this study 74% were married and 26% were unmarried

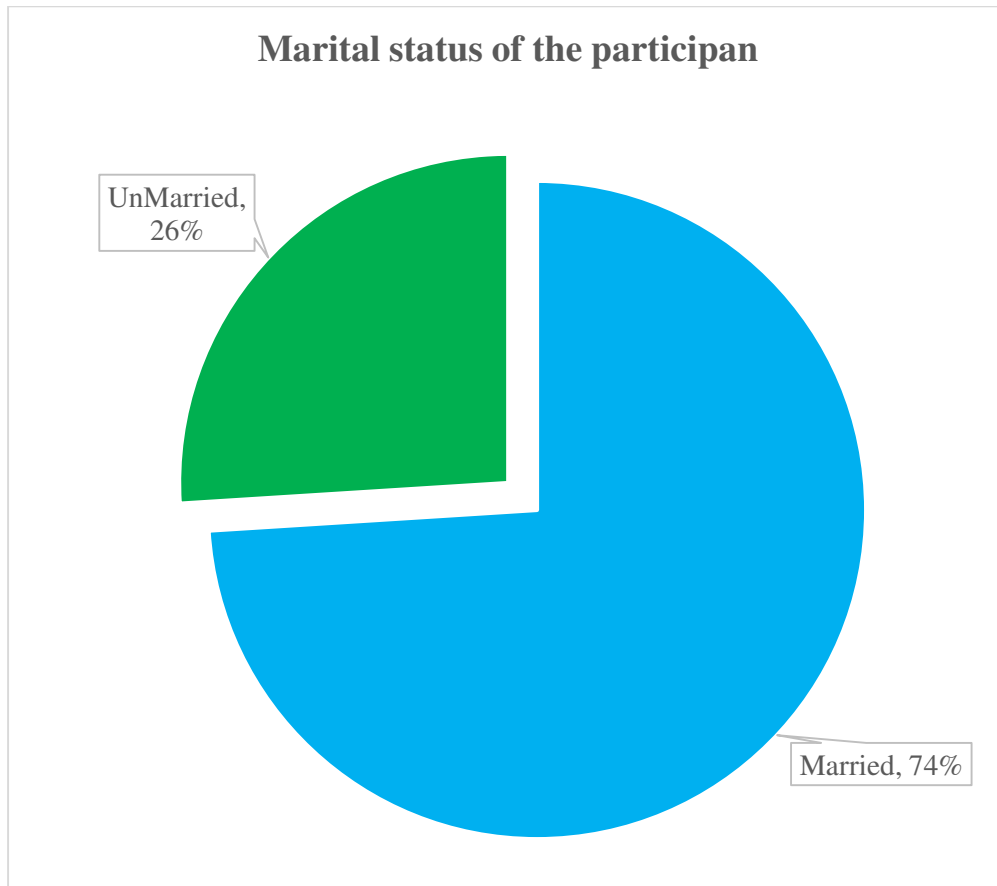


Figure-7: Martial status of the participant

#### 4.1.9: Monthly income of the participant

This study's participant means and standard deviation of participant income was Mean  $\pm$  SD= 27800.00 $\pm$ 14552.587; here 0-10000 taka were 13%, 11000-21000 taka were 25% , 22000-32000 taka were 30% and >32000 were 32% of the participant.

Amount	Frequency	Percentage	Mean	SD
0-10000	13	13.0	27800.00	14552.587
11000-21000	25	25.0		
22000-32000	30	30.0		
>32000	32	32.0		

Table-2: Income of the participant

## 4.2: General Health Information

### 4.2.1: BMI of the Participant

This study's participant means and standard deviation of participant BMI where are Mean  $\pm$  SD= 2.37 $\pm$  .597; here Normal were 51%, Overweight were 53% and Underweight were 6%.

BMI	Percentage	Mean	SD
Underweight	6.0	24.6950	4.21937
Normal	51.0		
Overweight	43.0		

Table-3: BMI of the Participant

#### 4.2.2: General health of the participant

Tn this study 74% were in total, 6% were bad and 20% were good.

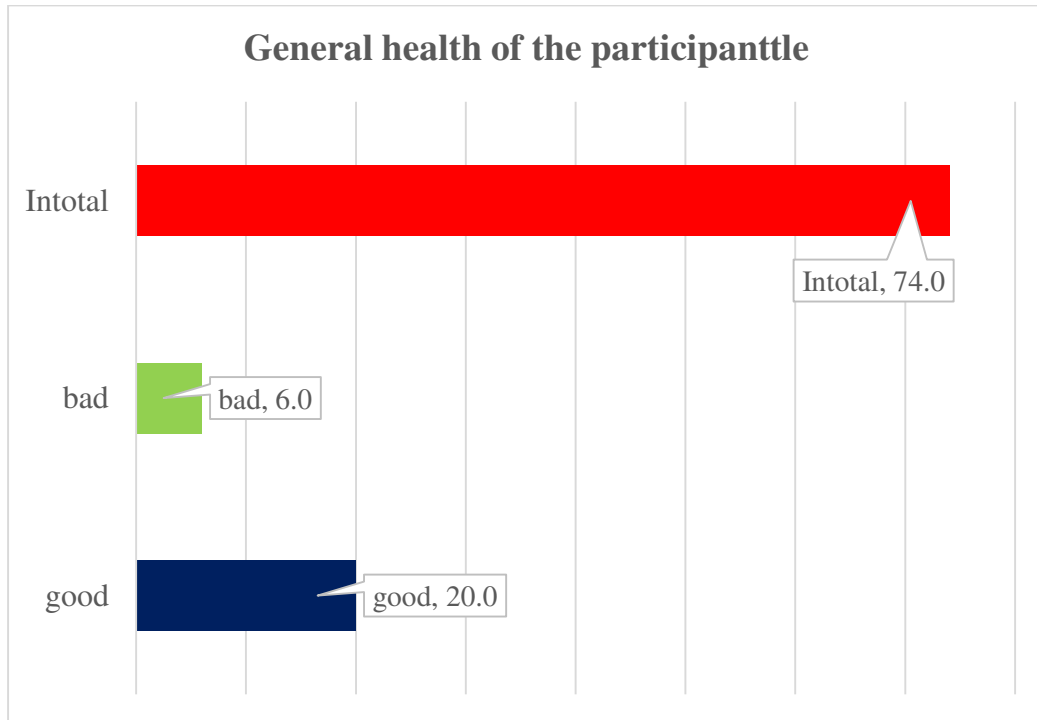


Figure- 8: General health of the participant

### 4.2.3: Suffering from any of the following diseases of the participant

In this study 77% were The history of any disease is not known, 10% were Respiratory system, 6% were liver disease and 7% were others.

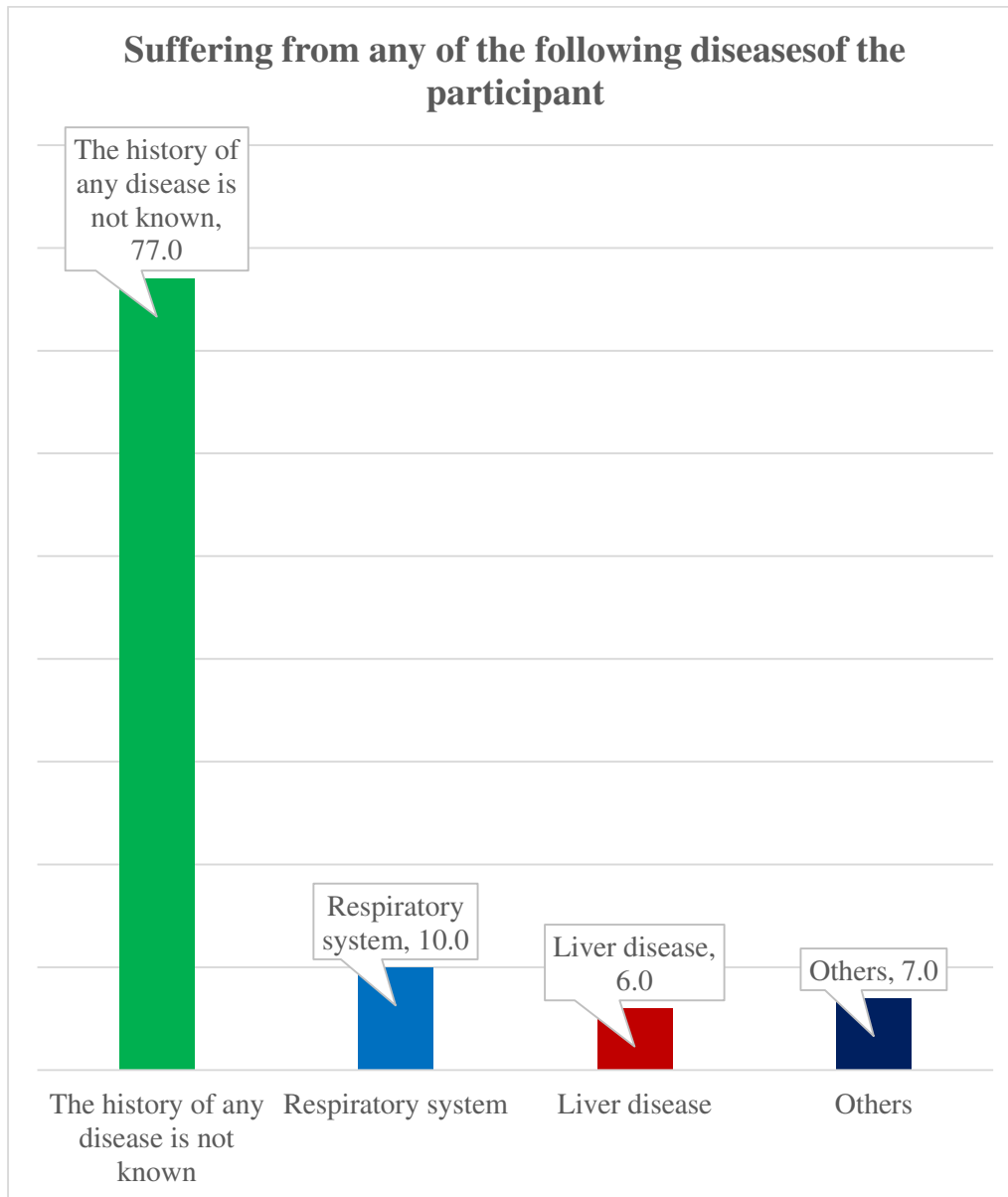


Fig-9: Suffering from any of the following diseases of the participant



#### 4.2.4: Smoking habit of the participant

In this study 24% were yes and 76% were no.

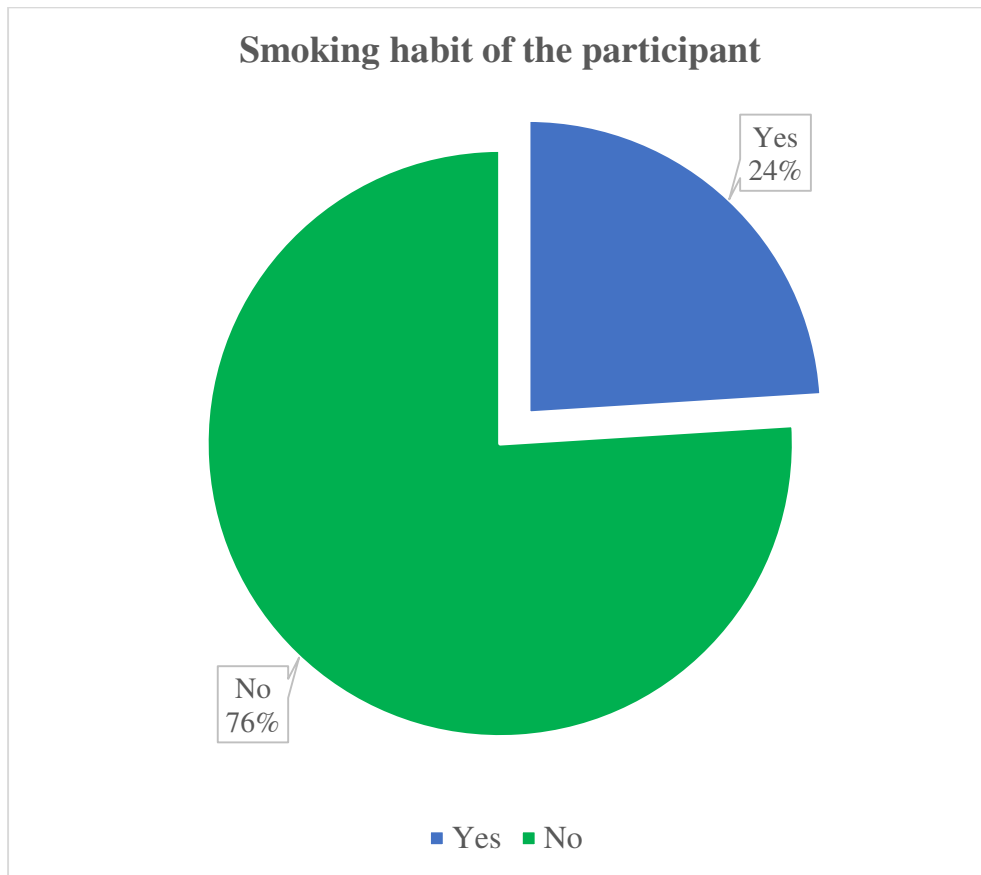


Fig-10: Smoking habit of the participant

### 4.3: EORTC QLQ-C30-PAL

4.3.1: During the past week: In this study show following

	<b>Not at All</b>	<b>A Little</b>	<b>Quite a Bit</b>	<b>Very Much</b>
Any trouble doing strenuous activities, like carrying a heavy shopping bag or a suitcase	43.0	44.0	13.0	6.0
Any trouble taking a long walk	25.0	55.0	14.0	6.0
Any trouble taking a short walk outside of the house	31.0	49.0	14.0	6.0
Need to stay in bed or a chair during the day	41.0	39.0	7.0	13.0
Need help with eating, dressing, washing yourself or using the toilet	47.0	46.0	7.0	
Limited in doing either your work or other daily activities	41.0	47.0	12.0	
Limited in pursuing your hobbies or other leisure time activities	44.0	56.0		
Short of breath	43.0	44.0	13.0	
Had pain	13.0	56.0	13.0	
Need to rest	22.0	53.0	19.0	6.0
Trouble sleeping	31.0	57.0	12.0	
Felt weak	16.0	72.0	6.0	6.0
Lacked appetite	22.0	53.0	19.0	6.0
Felt nauseated	84.0	16.0		
Vomited	91.0	9.0		
Constipated	76.0	24.0		
Diarrhea	81.0	19.0		
Tired	55.0	44.0	6.0	
Daily activities	40.0	54.0	6.0	
Difficulty in concentrating on things, like reading a newspaper or watching television	31.0	56.0	13.0	
Feel tense	19	68.0	13.0	
Worry	19.0	74.0	7.0	
Irritable	23.0	63.0	13.0	
Feel depressed	23.0	60.0	16.0	
Difficulty remembering things	38.0	56.0	6.0	
Physical condition or medical treatment interfered with your family life	66.0	35.0		
Physical condition or medical treatment interfered with your social activities	72.0	28.0		
Physical condition or medical treatment caused you financial difficulties	72.0	28.0		

Table no- 5: During the past week

### 4.3.2: Overall health during the past week

In this study 6% very poor 20% good and 74% excellent.

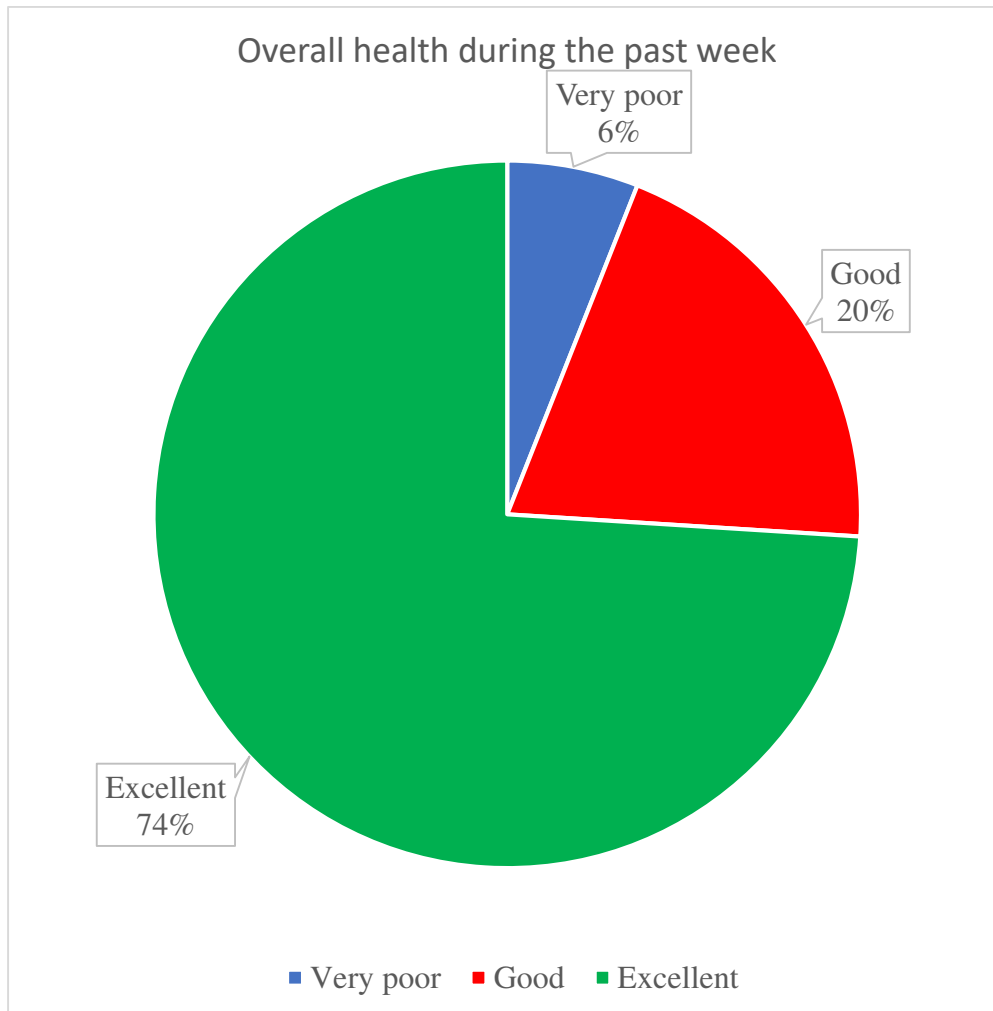


Fig-11: Overall health during the past week

### 4.3.3: Overall quality of life during the past week

In this study 6% very poor 21% good and 73% excellent.

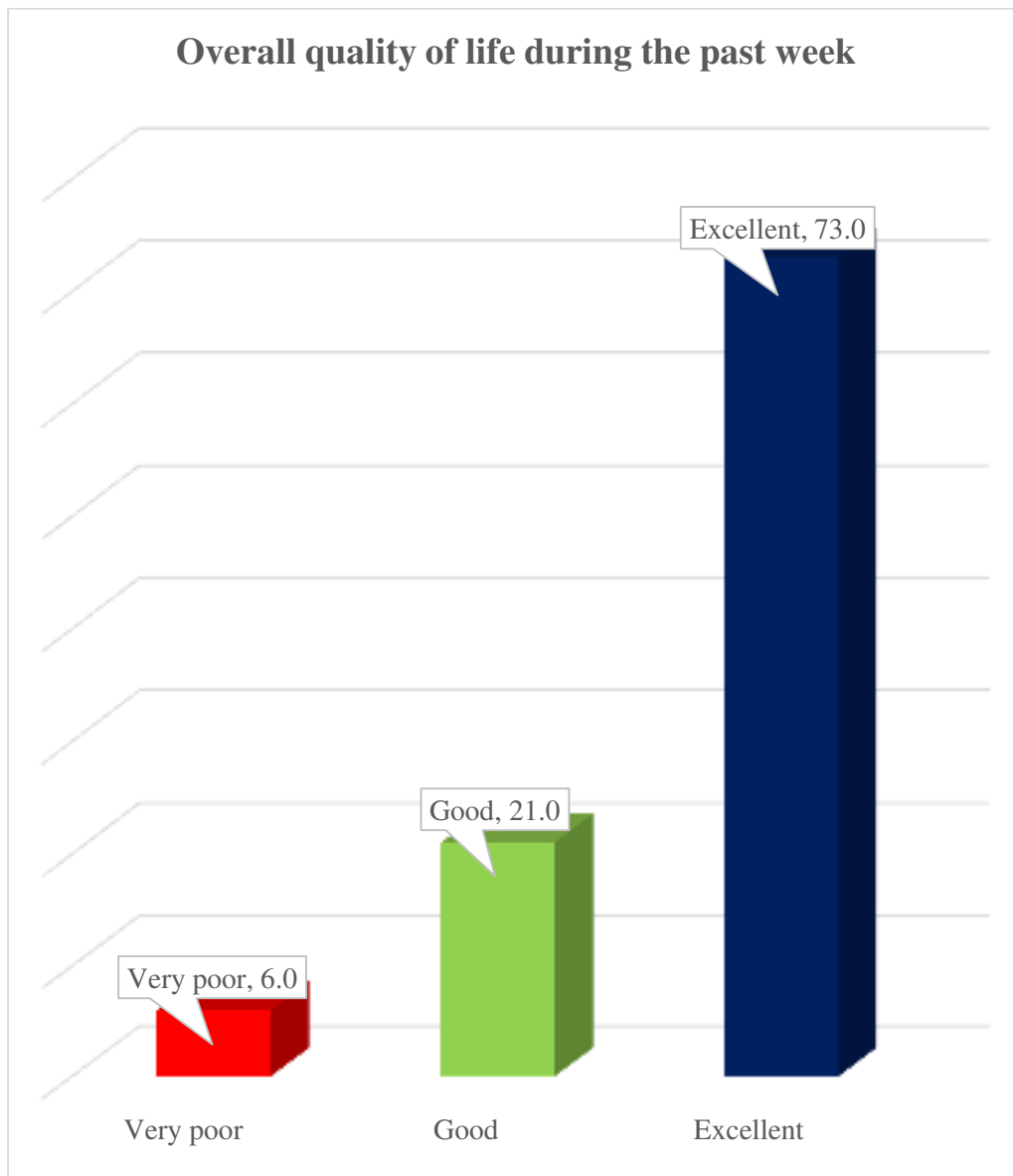


Fig-12: Overall quality of life during the past week

#### 4.4: ASSOCIATION

##### 4.4.1: Association between Age group of the participant and general health of the participant

The table shows that the chi value was .002 and the P-value was 17.256. So, there is significant Association between Age group of the participant and general health of the participant

Association between Age group of the participant and general health of the participant					P value	Chi value
Age of the participant	General health of the participant				.001*	46.853
Total	good	bad	In total			
21-31	1	0	29	30		
32-42	16	0	11	27		
43-53	3	6	26	35		
>53	0	0	8	8		
Total	20	6	74	100		

(\* significant at 95% CZ)

Table no:6- Association between Age group of the participant and general health of the participant

#### 4.4.2: Association between Age group of the participant and Overall quality of life during the past week

The table shows that the chi value was 0.006 and the P-value was 18.072 So, there is no significant association between Age group of the participant and Overall quality of life during the past week

Association between Age group of the participant and Overall quality of life during the past week					P value	Chi value
Age of the participant	Overall quality of life during the past week				0.006*	18.072
Total	Very poor	Good	Excellent			
21-31	0	8	22	30		
32-42	0	6	21	27		
43-53	6	3	26	35		
>53	0	4	4	8		
Total	6	21	73	100		

(\* significant at 95% CZ)

Table no:7- Association between Age group of the participant and Overall quality of life during the past week.

#### 4.4.2: Association between Age group of the participant and Overall health during the past week

The table shows that the chi value was 0.001 and the P-value was 18.072 So, there is significant association between Age group of the participant and Overall health during the past week

Association between Age group of the participant and Overall health during the past week					P value	Chi value
Age of the participant	Overall quality of life during the past week				0.001*	22,524
Total	Very poor	Good	Excellent			
21-31	0	7	23	30		
32-42	0	5	22	27		
43-53	6	3	26	35		
>53	0	5	3	8		
Total	6	20	74	100		

(\* significant at 95% CZ)

Table no:8- Association between Age group of the participant and Overall health of life during the past week.

The purpose of the study is to find out the mental resilience and quality of life of person with disabilities in covid-19 pandemic.

Now-a-days the quality of life has become a major topic of research in the area of health and the findings contribute to the definition and approval of treatments and evaluation of cost benefits of the disabled persons. During covid-19 situation the disabled persons suffer more and that impact on their mental health.

In this study, EORTC QLQ-C30-PAL (version 3) scale is used to measure the quality of life of the during covid-19 pandemic situation . EORTC QLQ-C30-PAL (version 3) and a demographical questionnaire were used to measure the level of mental resilience of during the COVID-19 pandemic. Socio- demographic characteristics played an important role in association with resilience and quality of life in this study. There had an association between socio- demographic factors and Also there had an association between socio- demographic and quality of life

The prevalence of loneliness, depression, anxiety and sleep disturbance was estimated at 71% (mild: 32%, moderate: 29%, severe: 10%), 38% (mild: 24%, moderate: 11%, severe: 3%), 64% (mild: 30%, moderate: 17%, severe: 17%) and 73% (mild: 50%, moderate: 18%, severe: 5%), respectively. In Bangladesh, the key factors associated with poor mental health during COVID-19 were female sex, unemployment, being a student, obesity and living without a family. The present study also identified statistically significant interrelationships among the measured mental health issues (Das et al., 2021)

A higher QOL score was observed in HCWs with prior COVID-19 infection in all four domains than HCWs without previous COVID-19 conditions. Comorbidity was negatively associated with QOL scores of the physical ( $p=0.001$ ) and and psychological ( $p=0.05$ , and ( $p<0.05$ ) domains for non-COVID and COVID-affected groups, respectively. Current smoking was significantly associated with lower psychological ( $p=0.019$ ) and environmental ( $p=0.007$ ) QOL scores among HCWs with prior COVID-19 infection. Hospitalization history due to COVID infection was a contributing factor for lower physical QOL scores ( $p=0.048$ ). Environmental ( $p=0.016$ ) QOL scores were



significantly associated with the monthly income in the prior COVID-19 infection group, and physical scores were significantly associated ( $p=0.05$ ) with a monthly income in the non-COVID group (Rahman et al., 2022).

More than half of the health care professionals were male (56.0%), aged between 26–35 years (51%), and completed graduation (49%). The majority of the study participants in the four domains were married ( $n=263$ , 81%) and living in Dhaka. The average score of the participants was  $70.91\pm 13.07$ ,  $62.68\pm 14.99$ ,  $66.93\pm 15.14$ , and  $63.56\pm 12.11$  in physical, psychological, social relationship and environmental domains, respectively. HCWs in urban areas enjoyed 2.4 times better socially stable lives (OR: 2.42, 95% CI: 1.18–4.96) but 72% less psychologically satisfactory lives (Rashid et al., 2022).

The overall mean age of respondents was  $28.42 \pm 7.07$  years, and 63.4%, 44.1% and 50.3% were unmarried, were in the middle-income family group and had a masters or PhD qualification, respectively. The overall mean IES score of respondents was  $80.89 \pm 8.91$ , which reflects a stressful impact of the COVID-19 pandemic on physical and mental health problems. Only 27.75% of respondents had an IES score  $\geq 75$ . More than half of respondents (57.8%) reported that they did not feel lonely and hopeless. In terms of preventative measures, the majority of the respondents (80.2%) reported that they did not wash their hands frequently with soap and sanitiser for at least 20 s to reduce spread of the virus. During the pandemic, more than half of the respondents (56.8%) claimed that they faced serious problems in education (Mondal et al., 2021).

The study aimed to assess the quality of life of patients in Bangladesh after covid 19 affected. The data was collected by the researcher himself. Structured questions were used with both open-ended and close-ended questions in the questionnaire. The data were analyzed with the Microsoft Office Excel 2019 with SPSS 25 version software program. In this study researcher use bar, Colum, Figure, Pie chart so show the result of the body.

This study's participant means and standard deviation of participant age where are Mean $\pm$  SD=  $221\pm 967$ .; here 21-31 years were 23.3%, 32-42 years 20.9, 43-53 years were 27.1% and >53 years 6.2% of the participant. In this study 90% participant were male and 10% participant were female. In this study 82% participant were living in city, 3% participant were living in half of the city and 15% participant were living in village. In this study 3% were illiterate, 6% were primary, 6% were SSC, 12% were HSC, 43%

were graduation, and 30% were post graduate. In this study 52% were join family and single was 48%. In this study were 19% government job, 39% were private job, 6% were business and 36% were others job. In this study 82% were muslim 12% were hindu and 6% were charistan. In this study 74% were married and 26% were unmarried.

This study's participant means and standard deviation of participant income was Mean  $\pm$  SD= 2.81 $\pm$ .1.032; here 0-10000 taka were 13%, 11000-21000 taka were 25% , 22000-32000 taka were 30% and >32000 were 32% of the participant. This study's participant means and standard deviation of participant BMI where are Mean  $\pm$  SD= 2.37 $\pm$  .597; here Normal were 51%, Overweight were 53% and underweight were 6% . Tn this study 74% were in total, 6% were bad and 20% were good. In this study 77% were The history of any disease is not known, 10% were Respiratory system, 6% were liver disease and 7% were others. In this study 24% were yes and 76% were no. In this study 6% very poor 20% good and 74% excellent. In this study 6% very poor 21% good and 73% excellent.

That the chi value was .002 and the P-value was 17.256. So, there is significant Association between Age group of the participant and general health of the participant. The table shows that the chi value was 0.006 and the P-value was 18.072 So, there is no significant association between Age group of the participant and Overall quality of life during the past week. The table shows that the chi value was 0.001 and the P-value was 18.072 So, there is significant association between Age group of the participant and Overall health during the past week

The study aimed to assess the quality of life of patients in Bangladesh after covid 19 affected. The ongoing COVID-19 pandemic has resulted in significant mental and physical health problems. The present study found that the QoL of COVID-19 recovered people improved after recovery, particularly in psychological, social, and environmental domains. However, age, sex, the severity of COVID-19, smoking habits, and comorbidities were significantly negatively associated with QoL. The pandemic changed the way most of us lived. We learned how to work remotely or gained new appreciation for human connection. And, for the loved ones of the roughly 1 million Americans who died from the virus, life will forever feel incomplete. While the worst of the pandemic may be behind us, its effects linger. Neurological symptoms or mental health conditions, including difficulty thinking or concentrating, headache, sleep problems, dizziness when you stand, pins-and-needles feeling, loss of smell or taste, and depression or anxiety. Joint or muscle pain. hose who were admitted to hospitals during infection had a low QoL score in physical, psychological, and social domains. However, QoL improved in all aspect except the psychological domain for each day passed after the diagnosis. These findings call for a focus on the quality of life of the COVID-19 affected population, with special emphasis given to females, older adults, unemployed, and people with comorbidities.

## CHAPTER-VII      LIMITATION AND RECOMMENDATIONS

### **Limitation:**

COVID-19 has been spreading swiftly over the world since November 2019, and the first instance of the virus was detected in Bangladesh on March 8, 2020. COVID-19 has been designated a global pandemic by the World Health Organization. Data gathering was difficult in this scenario since the government had proclaimed statewide lockdown multiple times. The calculated sample size was larger, however owing to the time constraints, this investigation was completed with just 305 samples. It was extremely difficult to persuade individuals to participate in full anger due to limited movement and maintaining social distance. Few participants were not agree to phone call record.

### **Recommendation:**

There might be some limitations in every research. In this study, a small sample size may constitute a limitation. As the study was conducted at the selected area of the which might not represent the whole population within the context of Bangladesh. Another major limitation was time and resources which have a great impact on the study and affect the result to generalize for a wider population. As the study period was short so an adequate number of samples could not arrange for the study.

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APPENDIX- I

প্রশ্নাবলী

শিরোনাম

বাংলাদেশে কোভিড-১৯-এর পর রোগীর জীবনযাত্রার মান

উত্তরদাতার আই ডি

তারিখঃ...../...../.....

অংশগ্রহন কারীর নাম :

.....

ঠিকানা

.....

.....

.....

কোভিড পজেটিভের

তারিখঃ.....

মোবাইল নাম্বারঃ

.....

সিরিয়াল	প্রশ্ন	উত্তর
১	আপনার বয়স কত ?	<input type="text"/>
২	আপনার লিঙ্গ কি ? ১. পুরুষ ২. মহিলা	<input type="text"/>
৩	আপনি কোথায় থাকেন? ১. শহরে ২. আধা শহরে ৩. গ্রামে	<input type="text"/>

৪	আপনার শিক্ষার স্তর কি ? ১. নিরক্ষর ২. প্রাথমিক ৩. এস এস সি ৪. এইচ এস সি ৫. স্নাতক ৬. স্নাতকোত্তর ৭. অন্যান্য		
৫	আপনার পরিবারের ধরন কি ? ১. একক ২. যৌথ পরিবার ৩. অন্যান্য		
৬	আপনার পেশা কি ? ১. সরকারি চাকুরী ২. বেসরকারি চাকুরী ৩. ব্যবসা ৪. অন্যান্য		
৭	আপনার ধর্ম কি ? ১. মুসলিম ২. হিন্দু ৩. বৌদ্ধ ৪. খ্রিস্টান ৫. অন্যান্য		
৮	আপনার বৈবাহিক অবস্থা কি? ১. বিবাহিত ২. অবিবাহিত		
৯	আপনার মাসিক আয় কত ?		

সাধারণ স্বাস্থ্য সম্পর্কিত তথ্য

	প্রশ্ন	উত্তর
১	অংশ গ্রহণকারীর উচ্চতা ( ফুট )	
২	অংশ গ্রহণকারীর ওজন (কেজি)	
৩	অংশ গ্রহণকারীর বিএমআই	
৪	সাধারণ ভাবে আপনার স্বাস্থ্যের অবস্থা কি? ১. ভাল	

	২.খারাপ ৩.মোটামটি	
৫	আপনি নিম্নলিখিত কোন রোগে ভুগছেন কি? (নিচের সবগুলোর মধ্যে যেটিতে বেশিতে গুরুতর ভুগছেন সেটিতে টিক ( ✓ ) দিন।) ১. কার্ডিওভাস্কুলার ..... ২. গ্যাস্ট্রোইনটেস্টাইনাল ..... ৩.স্নায়বিক ..... ৪.শ্বাসতন্ত্র ..... ৫.এন্ডোক্রাইন ..... ৬.যকৃতের রোগ..... ৭.প্রজনন রোগ ..... ৮.মাংসপেশির রোগ..... ৯.অন্যান্য ..... ১০.কোন রোগের ইতিহাস জানা নাই	
৬	আপনার কি ধূমপানের অভ্যাস আছে? ১. হ্যাঁ ২. না	

ই ও আর টি সি কিউ এল কিউ স্কেলে রোগীর আপন জীবন মান কেমন?

সিরিয়াল	কোভিড-১৯ সম্পর্কিত তথ্য	একেবারেই না	একটু সমস্যা	একটু বেশী সমস্যা	খুব বেশি সমস্যা
১	আপনার কি কঠিন কাজকর্ম করতে কোন সমস্যা হয়েছিল, যেমন ভারী শপিং ব্যাগ বা একটি স্যুটকেস বহন করার মত?	১	২	৩	৪

২	দীর্ঘ সময় হাঁটাহাঁটি করতে আপনার কি কোন অসুবিধা হয়েছিল?	১	২	৩	৪
৩	বাড়ির বাইরে একটু হাঁটাহাঁটি করতে আপনার কি কোনো সমস্যা হয়?	১	২	৩	৪
৪	আপনার কি দিনের বেলা বিছানায় বা চেয়ারে থাকতে প্রয়োজন হয়েছিল?	১	২	৩	৪
৫	আপনার কি খাওয়া, কাপড় পরা, কাপড় ধোয়া, টয়লেট ব্যবহারে সাহায্য প্রয়োজন হয়?	১	২	৩	৪

সিরিয়াল	গত সপ্তাহে তথ্য	একেবারেই না	একটু সমস্যা	একটু বেশী সমস্যা	খুব বেশি সমস্যা
৬	আপনার দৈনন্দিন কাজকর্মে সীমাবদ্ধ আছে?	১	২	৩	৪
৭	আপনার শখ বা অন্যান্য অনুধাবনে সীমাবদ্ধ আছে? অবসর সময় কার্যক্রম?	১	২	৩	৪
৮	আপনার কি শ্বাসকষ্ট হয়েছিল?	১	২	৩	৪
৯	আপনার কি ব্যথা হয়েছিল?	১	২	৩	৪
১০	আপনার কি বিশ্রামের দরকার হয়েছিল?	১	২	৩	৪
১১	আপনার কি ঘুমাতে সমস্যা হয়েছিল?	১	২	৩	৪
১২	আপনার কি দুর্বল বোধ হয়েছিল?	১	২	৩	৪
১৩	আপনার কি ক্ষুধা মন্থতা হয়েছিল?	১	২	৩	৪
১৪	আপনি বমি বমি ভাব অনুভব করেছেন?	১	২	৩	৪
১৫	আপনি কি বমি করেছেন?	১	২	৩	৪
১৬	আপনি কি কোষ্ঠকাঠিন্যে আক্রান্ত হয়েছেন?	১	২	৩	৪

সিরিয়াল	গত সপ্তাহে তথ্য	একেবারেই না	একটু সমস্যা	একটু বেশী সমস্যা	খুব বেশী সমস্যা
১৭	আপনার কি ডায়রিয়া হয়েছে?	১	২	৩	৪
১৮	আপনি কি ক্লান্ত ছিলেন?	১	২	৩	৪
১৯	ব্যথা কি আপনার দৈনন্দিন কাজকর্মে হস্তক্ষেপ করেছে?	১	২	৩	৪
২০	আপনার কোন বিষয়ে মনোনিবেশ করতে সমস্যা হয়, যেমন সংবাদপত্র পড়া বা টেলিভিশন দেখার মত?	১	২	৩	৪
২১	২১. আপনি কি টেনশন অনুভব করছেন?	১	২	৩	৪
২২	আপনার কি দৃষ্টিভ্রান্ত হয়েছিল?	১	২	৩	৪
২৩	আপনি বিরক্ত বোধ হয়েছিল?	১	২	৩	৪
২৪	আপনি কি বিষণ্ণ বোধ করেছেন?	১	২	৩	৪
২৫	আপনার কি কোন বিষয়ে সরন রাখতে সমস্যা হয়েছিল?	১	২	৩	৪
২৬	আপনার শারীরিক চিকিৎসা ক্ষেত্রে আপনার পারিবারিক কোন সমস্যা হয়েছিল?	১	২	৩	৪
২৭	আপনার শারীরিক চিকিৎসা নিতে সামাজিক কোন সমস্যা আছে কিনা?	১	২	৩	৪
২৮	আপনার শারীরিক চিকিৎসা নিতে আর্থিক অসুবিধার আছে কিনা?	১	২	৩	৪

নিম্নলিখিত প্রশ্নের জন্য অনুগ্রহ করে ১ এবং ৭ এর মধ্যে সংখ্যাটিকে বৃত্ত করুন

সবচেয়ে ভালো আপনার জন্য প্রযোজ্য

২৯. আপনি গত সপ্তাহে আপনার সামগ্রিক স্বাস্থ্যকে কীভাবে মূল্যায়ন করবেন?

১	২	৩	৪	৫	৬	৭
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খুব দরিদ্র

চমৎকার

৩০. আপনি গত সপ্তাহে আপনার জীবনের সামগ্রিক মানকে কীভাবে মূল্যায়ন করবেন?

১	২	৩	৪	৫	৬	৭
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খুব দরিদ্র

চমৎকার

**APPENDIX- II**

QUESTIONNAIRE (English)

Title

Quality of life of patient after Covid- 19 in Bangladesh

Respondent ID

--	--	--

Date: ..... /...../.....

Participant Name: .....

Address: .....

Covid positive date: .....

Mobile number: .....

Serial	Question	Answer
1	How old are you?	
2	What is your gender? 1. Male 2. Female	
3	Where do you live? 1. In the city 2. Half the city 3. Villegas	
4	What is your level of education? 1. Illiterates 2. Primary 3. SSC 4. HSC 5. Graduation 6. Postgraduate 7. Others	
5	What is your family type? 1. Single 2. Joint family 3. Others	
6	What is your occupation? 1. The government is the job 2. Private employment 3. Business 4. Others	



7	What is your religion? 1. Muslim 2. Hindu 3. Buddhist 4. Christian 5. Others	
8	Your marital status is life? 1. Married 2. Unmarried	
9	What is your monthly income?	

Section 2 General Health Information

Serial	Question	Answer
1	Participant height (feet)?	
2	The weight of the participant?	
3	Participant BMI?	
4	What is the state of your health in general? 1. good 2. Bad 3. in total	
5	Are you suffering from any of the following diseases? The one that is the most serious of the following ( <input type="checkbox"/> ) tick 1. Cardiovascular ..... 2. Gastrointestinal ..... 3. Nervous ..... 4. Respiratory system ..... 5. Endocrine ..... 6. Liver disease ..... 7. Reproductive Diseases ..... 8. Muscle Disease ..... 9. Others ..... 10. The history of any disease is not known	
6	Do you have a smoking habit? 1. Yes 2. No	

We are interested in some things about you and your health. Please answer all of the questions yourself by circling the number that best applies to you. There are no "right" or "wrong" answers. The information that you provide will remain strictly confidential.

<b>Not at All</b>	<b>A Little</b>	<b>Quite a Bit</b>	<b>Very Much</b>
-------------------	-----------------	--------------------	------------------

1. Do you have any trouble doing strenuous activities, like carrying a heavy shopping bag or a suitcase?	1	2	3	4
2. Do you have any trouble taking a long walk?	1	2	3	4
3. Do you have any trouble taking a short walk outside of the house?	1	2	3	4
4. Do you need to stay in bed or a chair during the day?	1	2	3	4
5. Do you need help with eating, dressing, washing yourself or using the toilet?	1	2	3	4

<b>During the past week:</b>	<b>Not at All</b>	<b>A Little</b>	<b>Quite a Bit</b>	<b>Very Much</b>
6. Were you limited in doing either your work or other daily activities?	1	2	3	4
7. Were you limited in pursuing your hobbies or other leisure time activities?	1	2	3	4
8. Were you short of breath?	1	2	3	4
9. Have you had pain?	1	2	3	4
10. Did you need to rest?	1	2	3	4
11. Have you had trouble sleeping?	1	2	3	4
12. Have you felt weak?				
13. Have you lacked appetite				
14. Have you felt nauseated?				
15. Have you vomited?				
16. Have you been constipated?				

<b>During the past week</b>	<b>Not at All</b>	<b>A Little</b>	<b>Quite a Bit</b>	<b>Very Much</b>
17. Have you had diarrhea?	1	2	3	4
18. Were you tired?	1	2	3	4
19. Did pain interfere with your daily activities?	1	2	3	4
20. Have you had difficulty in concentrating on things, like reading a newspaper or watching television?	1	2	3	4
21. Did you feel tense?	1	2	3	4

22. Did you worry?				
23. Did you feel irritable?				
24. Did you feel depressed?				
25. Have you had difficulty remembering things?				
26. Has your physical condition or medical treatment interfered with your family life?				
27. Has your physical condition or medical treatment interfered with your social activities?				
28. Has your physical condition or medical treatment caused you financial difficulties?				

**For the following questions please circle the number between 1 and 7 that best applies to you**

29. How would you rate your overall health during the past week?

1	2	3	4	5	6	7
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Very poor

Excellent

30. How would you rate your overall quality of life during the past week?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Very poor

Excellent

## APPENDIX- III

 **SAIC COLLEGE OF MEDICAL SCIENCE AND TECHNOLOGY**  
Approved by Ministry of Health and Family Welfare  
Affiliated with Dhaka University

Ref: \_\_\_\_\_ Date: \_\_\_\_\_

Ref. No. ERB/SCMST/PT/4<sup>th</sup> 2016-2017/045  
Date: 3<sup>rd</sup> April 2022

To  
Md. Abul Kalam  
4<sup>th</sup> Professional B.Sc. in Physiotherapy  
Saic College of Medical Science and Technology (SCMST)  
Mirpur-14, Dhaka-1216

Sub: Permission to collect data

Dear Abul Kalam,

Ethical review board (ERB) of SCMST pleased to inform you that your proposal has been reviewed by ERB of SCMST and we are giving permission you to conduct study entitle of "Quality of life of patient after Covid-19 in Bangladesh" and for successful completion of this study you can start data collection from now.

Wishing you all the best.

Thanking You,

  
Head of ERB  
Ethical Review Board  
Saic College of Medical Science and Technology

  
Principal  
Saic College of Medical Science and Technology  
MBBS, MPH (DU)  
Mirpur-14, Dhaka-1216  
SAIC College of Medical Science and Technology (SCMST)  
Mirpur-14, Dhaka

Address: Saic Tower, M-1/6, Mirpur-14, Dhaka-1216. Mobile: 01936005804  
E-mail: simt140@gmail.com, Web: www.saicmedical.edu.bd

**APPENDIX- IV**

**Gant Chart**

