Disastrous consequence of coronavirus pandemic on the earning capacity of individuals: an emerging economy perspective

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Abstract
This study aims to explore the consequence of COVID-19 pandemic on the income flow of individuals in Bangladesh from sociodemographic perspective. Multinomial logistic regression model has been applied to achieve the objectives using primary data which were collected from respondents covering different professions, income levels, education, marital status, age and area. The results indicate employees of informal sectors and daily labors are the worst sufferers having no income followed by private sector employees with partial income loss and public sector employees with either slight or no income loss. It is further observed that individuals with higher education and people living in rural areas are less affected. This study recommends a few short-term policies to resolve immediate crisis caused by pandemic and long-term policies to alleviate inequality by providing necessary facilities to the marginalized and vulnerable population in the society.

Keywords  COVID-19 · Financial crisis · Income inequalities · Marginalized people · Multinomial logistic regression model · Poverty

JEL  D31 · J23 · I131

Abbreviations
ADB  Asian Development Bank
CGE  Computable General Equilibrium
CPD  Center for Policy Dialogue
GDP  Gross Domestic Products
IFPRI  International Food Policy Research Institute
ILO  International Labor Organization
IMF  International Monetary Fund

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1 Chittagong Independent University, Chattogram, Bangladesh
MLR  Multinomial Logistic Regression
RMG  Readymade garments
SSA  Sub-Saharan Africa
TIN  Taxpayers Identity Number
WB  The World Bank

Introduction

People in every single corner across the world have experienced both health and financial threats simultaneously due to the arrival of an unexpected guest known as Coronavirus 2019 widely known as COVID-19. This virus has infected 579,908,225 people and took away 6,415,101 lives till date covering 228 countries and territories. The impact of COVID-19 on Bangladesh economy is easily comprehended when Asian Development Bank (ADB), International Monetary Fund (IMF), and The World Bank (WB) revise their forecasted GDP growth rate from 7.8–8.2% to 2.0–4.5% for the financial year 2020 (Byron and Rahman 2020). Prior to pandemic, the banking sector in Bangladesh was suffering from increasing rate of non-performing loans, continuous losses, and reduced demand for loanable funds and now COVID-19 has put the sector in more trouble resulting in salary cut of bankers as high as 15% and terminating staff at different levels in 80 private commercial banks (Hasan 2020). The leading export sector, readymade garments (RMG) is expected to encounter a decline in exports of $10 billion in 2020 due to decreasing apparel consumption rates across the world. The export rate of RMG sector dropped by 14% during the last ten months which is the lowest of last 5 years (Uddin 2020). Due to continuous decline in apparel, RMG and other export sectors, the business activities have gone down and directly hit the insurance sector (Anik 2020). There are total 79 insurance companies of which 33 are life and 46 are non-life insurance where 35,000 people are working. The pandemic has brought the non-life insurance business down by 40% putting 2000 people jobless and approximately 400,000 agents without any income and many employees are in queue to lose the job (Rahman 2020). As Bangladesh government has taken different development projects recently, cement and steel companies have expanded their capacity to be part of their megaprojects. ADB estimates this sector may lose $400 million as all sorts of construction activities have been suspended until further notice due to coronavirus (Chowdhury et al. 2022a, b). The supply of raw materials is also running short as major export countries namely UK, Italy, Canada and USA are in complete shutdown (The woes of the construction sector 2020). To protect the major sectors and people from the attack of COVID-19, Bangladesh government has announced $11.90 billion financial stimulus packages, taken a few remarkable economic stimulus measures such as extension of usance period, reduction in Repo interest rate, buy-back of government securities, promotion of payment services, and reduction in liquidity ratio requirements for banks (KPMG 2020). Approximately, $12,139 million, which is around 3.7% of

1 https://www.worldometers.info/coronavirus/coronavirus-death-toll/.
GDP has already been distributed in 19 packages (Govt allocates Tk 103, 117 crore 2020).

The impact of COVID-19 is horrible in those areas where income inequality is high (Oronce et al. 2020; Chowdhury et al. 2021). Even after 49 years of independence, the income inequality is remarkably significant in Bangladesh. The GINI index in Fig. 1 clearly indicates the increase in inequality in Bangladesh.

The hostile impact of pandemic has increased the poverty rate in Bangladesh from 24.3% in 2016 to 35% in 2020 (Khatun et al. 2020). Center for Policy Dialogue (CPD) estimates the GINI coefficient will jump to 0.52 in 2020 from 0.48 in 2016 and GDP growth rate of Bangladesh should not expect more than 2.5% in 2019–2020 fiscal year, which is going to be the lowest in the last 32 years (Bangladesh poverty rate rises 2020). Policy makers should focus on the economic recovery prioritizing employment generation and eradicating poverty and inequality. More than 90% people in Bangladesh work in the informal sector and significant portion of them do not have any internet connection. Unfortunately, 85% of workers earn less than US$6 a day. After spending for food, shelter, and other daily expenses, nothing remains in their hands to save. It clearly indicates the pathetic consequences of continuous lockdown amid COVID-19 pandemic. Despite many bitter challenges, government declared areawide lockdown early in this year and finally announced nationwide lockdown from 24 March restricting passengers travel through air, rail, water and land (Sakib and Kamruzzaman 2020). On May 31, government was lifted lockdown at the time when confirmed and death cases were in increasing trend just to save lives from starvation.

It is observed in Fig. 2 that the daily cases were below 500 till mid-April and touched 4000 a day on June 16. The number started to fall from July 2 onwards and decreased to 2772 on July 31.

It is noticed in Fig. 3 that from first week of April to mid-April the death cases were in increasing trend and reached up to 15 deaths on 16 April and surprisingly the number started to fall and reached to only 1 on 4 May. People saw a ray of hope.
but the death toll started to fly high from the very next day and were as high as 64 death cases on 29 June.

**Problem statement**

In Bangladesh, the first COVID patient was diagnosed on 8th March 2020. The increasing death rate, new cases, imposition of lockdown, restrictions on movement put people in serious trouble. Though the trend began to fall from 29th July onwards, due to continuous lockdown, many marginalized people lost their jobs and their income was reduced by a whopping 98.3% (COVID-19: Decreased income 2020).

\footnote{\url{https://corona.gov.bd/}.}
Research objective

Considering the above situation, this study attempts to know the changes in income of individuals before and during COVID-19 pandemic outbreak focusing on potentially unequal distribution of economic vulnerability based on age, profession, education level, gender, marital status and area. It further investigates whether individuals consider COVID-19 pandemic as a major or a minor threat.

Till date, no study is available on the impact of COVID-19 on the income level of a developing country in the world. This study contributes to the socioeconomic literature by measuring the impact of COVID-19 on the income level of individuals in an emerging developing economy like Bangladesh covering different sociodemographic groups. It also measures the attitude of different groups of people toward the COVID-19 pandemic.

The following part continues as follows. "Literature review" section reviews the previous literature followed by development of hypotheses. "Data, variables and model" Section elaborates data nature, data collection process, and statistical models. "Empirical findings and discussion" represents the empirical findings with interpretations and "Conclusion" section concludes the paper.

Literature review

Most of the governments across the world have imposed lockdown on billions of people for their well-being. But this restriction has put the socially and economically deprived people in severe financial crisis (Patel et al. 2020). People from least developed countries are more exposed to COVID-19 as they are likely to live in congested accommodations.

Due to living in overcrowded environment, they fail to maintain physical and social distancing. Poor people are engaged in informal occupations which include but not limited to retail shops, direct sales, supermarket, public bus driving, and factories. These jobs do not allow them to work from home. Incomes of poor people are not stable and the working environment is not healthy. Unstable salary and poor working environment hamper the workers’ mental stability (Algren et al. 2018). Severe stress is responsible to weaken the immune system of human body (Segerstrom and Miller 2004). Patel et al. (2020) have recently observed that people living under poverty line are more exposed to COVID-19. Diabetes, obesity and hypertension increase the possibility of death from COVID-19 (Guan et al. 2020). Poor people cannot afford good health services due to financial problems, language barriers, fearful sentiment toward healthcare professionals and discriminating pricing practices of healthcare businesses for poor class of the society (Szczepura 2005). These factors are responsible to prevent poor people from getting appropriate treatment for disease (Marmot 2009).

Muriel and Sibieta (2009) observed a gradual decrease in poverty rate in the UK from 1970 to 1990s as the number of pensioners which is labor market centric decreased. In a recent study on 6000 workers, 36 per cent of people at bottom quintile encountered either job loss or pay cut in hours or furloughing compared to 16
per cent at top quintile due to coronavirus in the UK (Gardiner and Slaughter 2020). A negatively significant impact of COVID-19 has also been observed on the working hours for women (Benzeval et al. 2020), closure of schools (Andrew et al. 2020), employment of youngest and oldest workers (Gustafsson 2020).

Sumner et al. (2020) have estimated the short-term economic impact of COVID-19 on global monetary poverty. They have observed that COVID-19 is a significant threat to the UN Development Goal of alleviating poverty by 2030 as it upsurges the global poverty at a faster rate. International Labor Organization (ILO) and the International Food Policy Research Institute (IFPRI) have measured the impact of COVID-19 on the poverty of developing countries. In 2020, there will emerge 9 to 35 million new working poor in developing countries (The ILO 2020). McKibbin and Fernando (2020) have observed that most of the poor people will live in the middle-income developing countries. Vos et al. (2020) have conducted a survey on thirty households in Sub-Saharan Africa (SSA) and South Asia by applying the global computable general equilibrium (CGE) model developed by IFPRI and noticed that 1% reduction of global domestic product will increase the number of poor people by 14 to 22 million with a daily income less than US$1.9. A significant portion of them live in rural area and half of the total new poor people will live in SSA.

After analyzing the above literature, it is observed that there is a scope to measure the impact of COVID-19 on the income level of individuals in one of the south Asian developing countries like Bangladesh.

Development of hypotheses

Though Bangladesh is moving ahead gradually with a GDP growth rate of 8.153%, it is very pathetic to observe that she has severely been struggling with insufficient equipment and manpower to combat COVID-19 attack on every spare of life. People are infected both physically and mentally. Bangladesh is in a vulnerable position to handle the heat of country wide lockdown due to pandemic with 21.8% population living under national poverty line. The continuous lockdown results in economic stagnation stimulating job loss, pay cut and ultimately financial crisis in the long run. Considering the impact of COVID-19 on the income level and overall lifestyle of individuals, this study attempts to test the following hypotheses:

Null hypothesis (H$_{01}$): there is no adverse impact of COVID-19 on the income level of individuals.

Null hypothesis (H$_{02}$): COVID-19 pandemic is not a major threat to the individuals.

Against the alternative hypotheses (H$_{a1}$ and a$_{2}$), there is adverse impact.

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3 https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=BD.
4 Asian Development Bank < https://www.adb.org/countries/bangladesh/poverty#:~:text=Poverty%20Data%3A%20Bangladesh,2016%20to%202019.2%25%20in%202019&gclid=EAIaIQobChMIyuX1GIzj2gIVwet2Ch05dA4DEAQYASABEgJvQfD_BwE>.
Data, variables and model

Data

To achieve the objectives of this study, primary data have been collected using structured questionnaire from May 1 to June 10, 2020. Judgmental sampling process has been followed in selecting respondents to ensure representations from different professions, age, area and income brackets. Data have been collected through face-to-face meeting and online using google docs. To ensure the understandability of questions, pilot test survey was conducted. Necessary changes were made as per suggestions of respondents. Eliminating the irrational and incomplete responses, 531 responses out of 540 have been used finally. Respondents include public (government job) and private (non-government job) service holders, businessmen, drivers, domestic helpers, daily labors, security guards, farmers, self-employed or small shop owners, and vegetable sellers. The survey was conducted intending to know the immediate effect of pandemic on the household income level in Bangladesh and to recommend appropriate policy measures in the short and long-run.

Variables

Respondents from different sub-groups have been selected to ensure the variety and were asked to choose their income level before and during COVID-19 pandemic outbreak. Based on their responses, three categories namely (a) no income loss (same or higher income), (b) partial income loss (decrease in income) and c) no income (job loss or salary withheld) have been created. To know the threat level of COVID-19 on their life, three levels namely (a) major, (b) minor have and (c) neutral have been used. Sociodemographic status of respondents has been measured by their level of education, profession, age, gender, and marital status.

On the other hand, socioeconomic status of respondents has been measured through education level (1 = primary school, 2 = higher secondary, 3 = bachelor and 4 = master degree), and employment sector (1 = self-employment, 2 = private service, 3 = public service and 4 = others). Demographic variables which have been used as control series include: gender (1 = male, 2 = female), age (1 = below 30, 2 = 30 to 40, 3 = 40 to 50, 4 = 50 to 60 and 5 = above 60), marital status (1 = married, 2 = never married and 3 = others), and area representation (1 = rural and 2 = urban).

Multinomial Logistic Regression (MLR) Model

To measure the risk of income losses due to COVID-19 pandemic and to know their perceptions toward COVID-19, this study applies MLR model. MLR model generalizes logistic regression where there are more than two possible discrete results (Greene 2012). As the dependent variables of this study are nominal and each variable has more than two outcomes, MLR model is appropriate. This study applies the methodology of Qian and Fan (2020) where in model 1, income level is dependent
and age, gender, marital status, area of belongingness, education, and employment sector are independent variables with an extension of level of threats as dependent variable in model 2. The MLR model is specified below as:

\[
P_r(L_{i=L}) = \frac{\exp(X_i\beta_j)}{\sum_{j=0}^{J}\exp(X_i\beta_j)} j = 0, 1, 2
\]

\(L_i\) represents three categories of dependent variables. \(L_1\) is the no income for model 1 and major threat for model 2. \(L_2\) is the partial income loss for model 1 and minor threat for model 2. \(L_0\) is the no income loss for model 1 and neutral position for model 2. Where, \(L_0\) is the reference case for both the models. The independent variables are: \(X_1\) represents age, \(X_2\) as gender, \(X_3\) as education, \(X_4\) as employment sector, \(X_5\) as area representation, and \(X_6\) as marital status.

**Empirical findings and discussion**

To have a superficial idea about the nature of variables, Table 1 represents the descriptive summary. The survey reports significant portion (84.6%) of respondents have received either no salary or reduced salary during the COVID-19 period, while only 15.4% of them received regular income. Most of the respondents (73.8%) have taken COVID-19 pandemic as a major threat whereas very insignificant portion (1.5%) is undecided.

All the sectors in Bangladesh have severely been affected by the COVID-19 pandemic. The multinomial logistic models will unearth which groups are affected and to what extent in the following discussion.

Individuals with higher educations are less likely to loss income as they work in financially sustainable organizations (Table 2). Individuals who are less educated and work in different shops are the worst sufferers while most of the bachelor degree holders experience partial income loss as they work on fixed salary and commission basis. Due to continuous lockdown, they have either received their full salary without commission or partial salary without commission. Public service holders are in better position comparing to private and other service holders as both their income and job are secured by government. People who work on daily basis such as day labors, taxi drivers, and domestic helpers’ loss their full income and guards, mechanics, vegetable vendors, and fishermen loss partial income. People who work in rural areas are less affected as lockdown was strictly observed in urban areas only. Surprisingly, married and people aged between 30 and 40 years are less likely to loss full or partial income. Model 2 indicates individuals aged above 60 have significantly taken COVID-19 as a serious threat while most of the middle-aged people also find it a serious threat but not significant. Individuals whose earnings are not secured and most often commission based, find it risky, whereas people with higher degrees consider COVID-19 as a minor threat. Government employees are
less worried about COVID-19, while other professionals take it as a serious threat. People living in the rural areas and married are less worried about the pandemic.

Table 3a, b represents how well the models are performing in correctly predicting category membership on the dependent variables. The row percentages reflect the classification accuracy rates. The overall classification accuracy for income model is 67.4%, whereas that of threat model is 77.4%. The models perform extremely good who fall in partial income loss and major threats, respectively.

| Table 1 | Descriptive Statistics for variables used in the analysis |
|------------------|----------------------------------|
|                   | Mean (%)                         |
| Income change     |                                  |
| No income         | 18.3                             |
| Partial income loss| 66.3                             |
| Unchanged income  | 15.4                             |
| Age               |                                  |
| 30 to 40          | 37.3                             |
| 40 to 50          | 21.7                             |
| 50 to 60          | 12.6                             |
| Above 60          | 4.7                              |
| Below 30          | 23.7                             |
| Gender            |                                  |
| Female            | 26.0                             |
| Male              | 74.0                             |
| Education         |                                  |
| Bachelor degree   | 16.9                             |
| Higher secondary  | 24.5                             |
| Master degree     | 31.1                             |
| Primary school    | 27.5                             |
| Employment sector |                                  |
| Others            | 11.1                             |
| Private           | 34.8                             |
| Public            | 11.3                             |
| Self employed     | 42.7                             |
| Area representation|                                 |
| Rural             | 13.7                             |
| Urban             | 86.3                             |
| Marital status    |                                  |
| Married           | 78.9                             |
| Never married     | 21.1                             |
| Level of threat   |                                  |
| Major             | 73.8                             |
| Minor             | 24.7                             |
| Neutral           | 1.5                              |
Table 2 Multinomial Logistic Regression Models

|                | Model 1 |                      | Model 2 |                      |
|----------------|---------|----------------------|---------|----------------------|
|                | No Income vs. | Partial Income Loss vs. No Income Loss | Major Threat vs. neutral | Minor Threat vs. neutral |
| Age            |         |                      |         |                      |
| Below 30 (Ref.)|         |                      |         |                      |
| 30 to 40       | 0.370   | 0.382                | 0.595   | − 0.423              |
|                | (0.461) | (0.372)              | (0.949) | (0.974)              |
| 40 to 50       | 0.591   | 0.663                | 17.069  | 16.379               |
|                | (0.566) | (0.460)              | (2105.317) | (2105.317) |
| 50 to 60       | 1.453***| 1.087**              | 17.042  | 15.218               |
|                | (0.711) | (0.618)              | (2728.023) | (2728.023) |
| Above 60       | 1.380   | 1.751                | 15.661***| 16.745               |
|                | (1.225) | (1.101)              | (0.575) | (0.000)              |
| Gender         |         |                      |         |                      |
| (1 = Male†, 2 = female) | 0.117   | 0.043                | 1.422   | 1.911*               |
|                | (0.368) | (0.307)              | (1.159) | (1.173)              |
| Education      |         |                      |         |                      |
| Primary school (Ref.) | 0.372   | 0.120                | 0.150   | 1.315                |
|                | (0.451) | (0.374)              | (1.356) | (1.383)              |
| Bachelor degree | 0.423   | 0.746*               | 0.210   | 0.472                |
|                | (0.546) | (0.448)              | (1.253) | (1.290)              |
| Master degree  | 0.212   | 0.199                | − 0.501 | 0.524                |
|                | (0.429) | (0.345)              | (0.975) | (1.007)              |
| Employment sector |         |                      |         |                      |
| Self-employed (Ref.) |     |                      |         |                      |
| Private        | − 0.012 | − 0.431              | 0.141   | 0.379                |
|                | (0.367) | (0.305)              | (0.875) | (0.898)              |
| Public         | − 0.656 | − 0.555              | − 0.230 | 0.217                |
|                | (0.545) | (0.422)              | (1.327) | (1.333)              |
| Others         | 0.433   | 0.496                | 14.569  | 15.902               |
|                | (0.671) | (0.589)              | (2881.065) | (2881.065) |
| Area representation |       |                      |         |                      |
| (Rural = 1, urban = 2†) | − 0.448 | − 0.233              | − 0.883 | 0.431                |
|                | (0.484) | (0.381)              | (1.007) | (1.031)              |
| Marital status | − 0.346 | − 0.113              | − 0.892 | − 0.354              |
| (Married = 1, never married = 2†) | (0.474) | (0.389)              | (1.039) | (1.065)              |
| Constant       | − 18.14***| − 2.04**            | 1.90    | − 0.29               |
|                | (0.601) | (1.143)              | (1.237) | (1.296)              |

Standard errors are in parentheses
ref. reference category
***p < 0.001, **p < 0.01, *p < 0.05 are significance levels
†This parameter is set to zero because it is redundant
Stability of the models

Model fitting information are presented in Table 4. This model assumes the null hypothesis that, there is no significant difference between null model and final model. As the significance values of both income and threat models are less than 5% (0.029 and 0.000), the null hypothesis can be rejected and therefore, the final models are fit for further analysis.

The goodness of fit is shown in Table 5. This model considers the null hypothesis that, the model is adequately fit. As the models have significance levels higher than 5% under Pearson and Deviance criterion, the null hypothesis cannot be rejected. Therefore, it proves, the models are adequately fit.
Pseudo R-square models are presented in Table 6. This measures how much independent variables show variations in the dependent variables. Zero indicates no variation and 1 indicates perfect variation. The values are very small and it clearly indicates the independent variables cannot impact the income and threat levels adequately. Apart from the selected variables, other factors are responsible for the changes.

Over the last few decades, employment generation has been one of the vital problems in Bangladesh. The elasticity of employment growth is in decreasing trend. In recent years, employment in most of the sectors namely agricultural, manufacturing, and services is falling and the average payment rate is also very low. As the number of informal jobs is increasing with no such desirable working environment, migration from rural areas to urban areas has increased and the profession of many people has changed to informal jobs. The vulnerable attack of COVID-19 on these people in the form of job cut, salary cut, and shifting to inferior jobs result in reverse migration from urban area to rural area. Most of the returnees will suffer further as there is no necessary arrangements like infrastructure and financing facilities in rural areas (Raihan 2020). People dealing with small and medium scale businesses have lost their capital due to sluggish economy and may never get back as situation is worsening day by day. To address this economic disaster, necessary policies like expansion of social safety net programs, comprehensive and rigorous management of economic crisis, health hazard, and social crisis including job loss and poverty reduction are required to frame well in advance. Being a corruption ridden country, necessary attention should be paid on optimum utilization of limited support, ensuring proper crisis management with appropriate coordination among the stakeholders and prioritizing the critical or urgent issues (Chowdhury 2012).

When the economy of Bangladesh got a momentum to fly with an envying GDP growth rate of more than 8%, exactly at that time, the horrifying COVID-19 has arrived. As the results indicate, the worst target of this pandemic is the daily wage earners. Their income level has come down to as close as poverty level. In Bangladesh, more than 34 million people which is around 20.5% of total population live under poverty line (BBS 2018). This number will jump by another 36 million people if the poverty level is increased by only 1.25% due to this pandemic (Ahmed 2020). The impact of COVID-19 on the income of individuals will not have the same effect as their professions and nature of jobs are different. Announcing stimulus packages for different sectors, lifting lockdown, and resuming economic activities are the rapid solutions to tackle COVID-19 threat. To reduce poverty level, increase job opportunity and above all to ensure a sustainable economic base, government needs to attract more foreign direct investment providing necessary facilities, modernizing

| Table 6 | Pseudo R-square |
|---------|-----------------|
|         | Model 1 | Model 2 |
| Cox and Snell | 0.084    | 0.185  |
| Nagelkerke   | 0.101    | 0.258  |
| McFadden     | 0.050    | 0.162  |
physical infrastructures like rail, roads, sea ports, air ports, and establishing more power generating projects. Government should spend more on development projects rather than unproductive sectors. Though people have savings tendency, they are reluctant to invest in productive sectors as the investment in defense certificate and post office savings plans are quite attractive. As savings is higher than investment in Bangladesh, it necessitates rationalization of interest rates to ensure a well-functioning market economy bringing equilibrium between savings and investment. Economic sustainability is backed up by strategic human resource development. Labor productivity depends on the improved health and education system of a nation. Private investment in the field of health and education should be encouraged by giving tax-free investment, tariff free import of medical equipment, updating curricula, encouraging technical education, providing low or interest free loan to fresh graduates, removing all sorts of bureaucratic tangles, reducing corruptions by taking stern actions and effective implementation of mission “Digital Bangladesh- 2021”. Local government plays an active role in reducing poverty by taking benefits of economic development to the root levels in the society (Chowdhury et al. 2022b). Therefore, it is highly recommended to constitute an effective local administration through merit and performance-based reform policy. Government needs sufficient funds to support its massive development projects. Expansion of tax net by making taxpayers identity number (TIN) a compulsory requirement for most of the economic activities, introduction of tax on non-farm land, increase of tax on luxury and socially undesirable goods and encouraging individuals to pay tax in time by ensuring hassle-free payment system and removing harassment can facilitate the achievement of goal.

Conclusion

At the initial stage, COVID-19 emerged as a health threat but it turned into a financial threat very quickly due to continuous lockdown, restrictions on movement, and shut down of different ports across the world. It has taught us the importance of having a proper strategic plan for sustainability of business and economy. This study has attempted to know the real losers of the society during this pandemic considering sociodemographic factors namely age, gender, education level, employment sector, area representation, and marital status. The results indicate most of the private service holders experienced partial income loss and people working in the informal sectors even received no salary. Public service holders are the least affected though few of them reported partial income loss. Due to income loss, many people have gone back to rural areas to reduce expenses. Senior citizens and non-public service holders have taken COVID-19 as a serious threat. This pandemic may trigger the income inequality in the country. The income inequality in Bangladesh is the consequence of several mixed factors namely unequal distribution of income, corruptions, lack of sufficient job opportunity, poor financial system, lack of far-sighted vision, and non-employability of graduates. To address the post-pandemic disaster, policy makers need to focus on interest of relegated and vulnerable population of Bangladesh immediately. Different periodic strategic plans are required to reduce the income inequality with a proper coordination of concerned organizations. This
study has been conducted using data of only 531 respondents. Potential researchers may consider other factors and more data to comprehend a better scenario.

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Author contribution Author has conceived the idea, collected data, performed analysis of the data, and written the manuscript.

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Declarations

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Ethical approval There is no ethical conflict.

Consent for publication Author approves the consent to publish this paper.

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