*Article*

# Satisfaction Level of Slum Dwellers with the Assistance of the City Corporation during COVID-19: The Bangladesh Context

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**Abstract:** The COVID-19 pandemic has affected Bangladesh's economic and social well-being in many ways. Slum dwellers, including day laborers, rickshaw pullers, CNG (Compressed Natural Gas) drivers, housemaids, hawkers, and street vendors, were the worst victims of this pandemic. Besides the voluntary organizations, the City Corporation (urban local government), instructed by the central government, took the initiative to distribute necessary food as well as financial assistance to the city dwellers to survive during the lockdown. The objective of this study is to identify the satisfaction level of slum dwellers with the assistance received from the City Corporation and obtain an idea of whether these supports were enough for them to maintain their livelihood. This is a mixed method research consisting of both qualitative and quantitative approaches. Researchers conducted a field survey in Sylhet City Corporation, in the northeastern part of Bangladesh, and collected primary data from one hundred and fifty-five respondents through a structured questionnaire along with an interview (semi-structured) schedule. Samples were selected by applying a multistage sampling technique. Researchers analyzed quantitative data using SPSS software and qualitative data using the thematic analysis method. Study findings reveal that nepotism, patron–client relation, corruption, unequal treatment, management flaws, low level of community engagement, political consideration, and lack of monitoring were the major issues in providing effective service delivery to slum dwellers during COVID-19. Citizen participation, well coordination, proper monitoring, impersonality, and good governance are indispensable for dealing with any crisis.

**Keywords:** satisfaction; slum dwellers; assistance; City Corporation; COVID-19; Bangladesh

## 1. Background of the Study

The COVID-19 epidemic in Wuhan, China, was caused by a novel coronavirus (SARS-CoV-2), which was identified in late December 2019. The disease developed into a pandemic after beginning with small chains of spread and then growing into larger chains in numerous nations, resulting in a global transmission that has since affected all continents (Anderson et al. 2020). Eventually, Bangladesh also came under the attack of this viral disease. Due to its high population density (1115 people per $km^2$), poor governance system, weak economy, bad healthcare arrangement, and poverty, Bangladesh is one of the most vulnerable nations (Islam et al. 2020). The healthcare system of Bangladesh is characterized with a lack of responsiveness, reliability, and empathy that has already been proved inadequate to deliver proper healthcare to the public during many pandemics (Mohiuddin 2019). With only 5309 public and private hospitals serving a population of 170 million, 5.3 doctors per 10,000 residents, 0.3 nurses per 1000 residents, 0.87 hospital beds per 1000 residents, 0.72 ICU beds, and 1.1 ventilators per 100,000 residents, Bangladesh has relatively few health service facilities compared with other affected countries (Islam et al. 2020). The new coronavirus had a significant negative impact on Bangladesh's economy. Almost all economic activity was suspended due to the prolonged national lockdown, which put thousands of people's jobs at risk (R. Islam 2020). COVID-19 had a disproportionately

negative impact on the lives of slum dwellers compared with other urban people. Almost 10 million people in metropolitan Bangladesh live in slums, which are characterized by overcrowding and poor living conditions (Swapan et al. 2017). Urban poverty is still a significant problem in Bangladesh, with a headcount of 21.3% compared with the national rate of 31.5% (GOB 2022). Slums developed in urban areas due to the growth of the informal economy (Hasam et al. 2017). People who live in slums work in low-wage informal jobs. Day laborers, rickshaw pullers, tea stallers, CNG (Compressed Natural Gas) auto-rickshaw drivers, housemaids, small business owners, mass-transport workers, street hawkers, and garment workers are common slum inhabitants. When the authorities declared a lockdown, slum dwellers faced a significant loss of income (Raju et al. 2021). During the lockdown, just a few people moved unless it was an emergency. Tea booths, restaurants, and roadside shops were forced to close, public transportation was prohibited from operating on the streets, and no family employed maidservants. As a result, many who lived in slums lost all of their income during this period of turmoil (Sakamoto et al. 2020). Slum dwellers who rely on their daily wages to feed themselves and their families frequently faced food insecurity at home (Kimani-Murage et al. 2014). Despite a provision for equitable access to healthcare facilities, slum dwellers are underprivileged in many areas of life. Due to poverty, poor information, and a lack of contacts, more than 80% of slum dwellers sought care from informal health care providers (Mahmood et al. 2022). In order to lessen the suffering caused by the pandemic, the Bangladeshi prime minister unveiled 19 incentive programs totaling USD 12.13 billion. Due to their proximity to the community, these programs were carried out by the decentralized rural and urban local governments (Islam et al. 2020). The government of Bangladesh provided directions to the urban local government authorities (City/Pouroshava Mayors and Ward Commissioners) to form different committees for enlisting the poor and provide USD 23.14 cash support as a one-time payment for every poor family along with other assistance during the COVID-19 pandemic (Alam 2020). The urban local government provided hand-washing supplies and food packages to the poor families including rice, lentils, oils, potatoes, and onions (Barkat et al. 2020). The government created a USD 2253 million financing facility with a long-term interest rate of 5% for the expansion of small enterprises and artisans. In addition to USD 12 million in incentives for doctors and nurses to keep the health system running, the prime minister set aside USD 589 million to cover the wages of the workers and employees in the garment business. The extra initiatives included USD 294.5 million for the free distribution of food supplies to the needy, USD 29.5 million for the selling of rice at 'Rice for TK. 10 per KG' (about 12 cents/kg), and approximately USD 148 million for the distribution of cash to the target population (Islam et al. 2020). Furthermore, in collaboration with the government, the National Urban Poverty Reduction Program (NUPRP) supported in triggering balanced, sustainable, and pro-poor development of four million low-income informal settlements in urban areas through the formation of town-level coordination and standing committees to scale up the urban governance during COVID-19 (GOB 2022). Besides providing credits, NUPRP organized awareness-raising programs among the slum community about continuing study at school, creating alternative employment, reducing or exempting house rent, using face mask and hygiene materials, and maintaining social distance (Barkat et al. 2020). Many community-based NGOs and other voluntary organizations came forward to provide daily necessities to slum dwellers during the COVID pandemic. However, given the worsening national corruption, it was uncertain how successful these efforts would be. The majority of those accused of corruption are elected officials, public representatives, and leaders of the dominant party (New Age 2020). They either used and took the public assistance or used the medical supplies as a weapon (Al-Zaman 2020). Law enforcement investigations in hospitals were hampered by a government regulation that was implemented on 5 August 2020 during COVID-19. This resulted in an aggravation of corruption in the healthcare industry (Chowdhury 2020). Hence, there was little concern about whether these assistances were enough for the poor people to lead their lives and how these were managed to deliver required services to slum dwellers. For this, the study explores the satisfaction levels of

slum dwellers with the assistance of the City Corporation provided to them. The research would be groundbreaking and add to existing information about the nature of managing relief assistance by the urban local government authority to slum dwellers. The findings of this study will hopefully serve as a guide for future researchers, academics, donors, and development practitioners eager to investigate the issue from different angles and urge policy makers to take actions with regard to enhancing the urban governance system to manage assistance given to the city dwellers during any crisis.

## 2. Assistances of City Corporation to Slum Dwellers during COVID-19: A Theoretical Overview

During the Corona outbreak, the economic sector saw a significant transformation. While the entire globe was battling to alleviate the critical stress of COVID-19, Bangladesh was not an exception, as it was likewise drowning in every aspect of its life (Haque et al. 2020). It is notable that many slum dwellers in cities received relief support from the government, NGOs, and the rich from the onset of this crisis. However, many of them were deprived of these supports because of their temporary (floating) identity (Obeng-Odoom 2020), which prevented them from receiving financial support from government sources (Sakamoto et al. 2020). Urban areas' marginalized and criminalized informal sectors have been permitted by municipal governments for a long time. Furthermore, it has been noted that the state treats some low-income groups unfairly as criminals in the name of enforcement strategies that violate the mandated lockdown policy (Matamanda et al. 2022). Although the government wanted to manage COVID-19 through administrative decentralization by emphasizing the involvement of local leaders, government officers, elected representatives, and communities, due to a lack of state aid, and corruption, the urban poor were forced to rely on NGOs, CBOs (Community-based Organizations), and other forms of self-help to end hunger (Recio et al. 2021). In India, the state's long-term investments in democratic local government and incorporation of women within the grassroots state functions built a high degree of public trust and cooperation, with the state actors having proved themselves ethically successful in implementing disease control programs during COVID-19 (Dutta and Fischer 2021). However, in Kenya and Nigeria, the slum community started taking less meals and less doses of drugs due to uncontrolled prices of medicine and daily essentials. Despite having government guidelines regarding access care for COVID-19, health workers and managers were unconscious and unaware of it to continue the provision of healthcare for slum dwellers; even the community-level health workers stopped visiting slum people and age-specific vaccination programs (Ahmed et al. 2020).

Governments on a national and local level are finding it difficult to respond to the crisis that the COVID-19 epidemic has caused. The most prominent issues with municipal government in Latin America are contextual, including low levels of professionalism, especially in less developed cities; rewards systems; corruption; scarce financial resources; and political distraction from local authorities (Ramírez de la Cruz et al. 2020). Some rules were suspended in certain policy areas in Europe due to the COVID-19 emergency; however, this flexibility resulted in rising corruption and functional irresponsibility (Schmidt 2020). The government of Kenya's use of social exclusion, lockdowns, and curfews to stop the spread of COVID-19 came across to slum residents as a cruel joke because it neglected the fundamental requirements for their survival (Nyadera and Onditi 2020). Although the South African government, with the help of local organizations and authorities, gave food boxes to community members, major mishandling of the food supply in informal settlements led to riots and clashes with security forces (Stiegler and Bouchard 2020). Comparatively speaking to rural Africa, slum people in cities have a wretched existence. The situation deteriorated under COVID-19 because of corruption and a flimsy economic and political system that failed to provide the necessary services to the residents of slums (Chirisa et al. 2020). Even in a few developed nations, managing the COVID-19 crisis was hampered by syndicates setting exorbitant prices for the goods they supplied, nepotism in the hiring of PPE (Personal Protective Equipment) and medical equipment contractors,

corruption in the distribution of food packages, and incompetent and dishonest local level authorities (Rose-Ackerman 2021). For instance, hundreds of millions of dollars' worth of contracts were given to firms in Slovenia and the U.S.A. that had little to no prior expertise in making the required items. When the husband of the president's spokesperson earned PPE contracts, the South African ruling party was confronted with a public backlash (Sishi and Winning 2020). In the same vein, during the COVID-19 crisis, local governments in Colombia with a history of high levels of corruption were more likely to give contracts to donors of political campaigns and face cost overruns and insufficiencies (Gallego et al. 2020). Furthermore, most of the NGOs lending policies involved providing loans with high interest rates to those who have the proven capacity to repay the loan instalments, and they closed the loan scheme during any disasters (Seddiky et al. 2022a). Most of the NGOs prefer to work with small relief materials during the post-disaster phase that unfairly target their own credit borrowers (Seddiky 2021).

Primarily, many people may think that no measures would be feasible in the slum setting during any crisis because of the structural and sociological elements like lack of access to safe water and sanitation, proximity of houses, overcrowding, and shared latrines of many slums (Tampe 2021). However, for slum inhabitants who found it challenging to maintain social distance, the Indian municipal corporation developed an optimal COVID-19 control mechanism. The Dharavi slum in Mumbai, India, which is the most densely populated slum in Asia, was managed by the city authority by blocking off the entrance and exit for slum residents, disinfecting 425 public toilets, starting door-to-door screening, maintaining strict surveillance, strengthening partnerships with NGOs to foster community trust, providing food for the hungry population, and expanding quarantine and treatment facilities for them (Golechha 2020).

Many researchers have conducted a good number of research works on the COVID-19 pandemic issue both in the world and Bangladesh contexts. Thanh Le et al. (2020) conducted a study on the COVID-19 vaccines development landscape. Study findings revealed that the strong coordination among Epidemic Preparedness Innovation, Global health authorities, research centers, and humanity (great sacrifice for human clinical testing) is hopeful for the development of vaccines against COVID-19. Daniel (2020) researched the impacts of COVID-19 on education and found that this pandemic turned the global education system to a standstill and that most of the students were living with mental trauma. Beigel et al. (2020) focused on the effectiveness of social awareness and herbal home remedies for boosting immunity. Grover et al. (2020) conducted their study on the psychological impact of COVID-19, and the study findings revealed that most of the people around the world were experiencing mental disorders with anxiety and depression due to the long-term lockdown and prevailing Corona pandemic. Further, researchers have investigated suicidal behavior in the context of COVID-19 (Mamun 2021); COVID-19 and household food security (Mandal et al. 2021); and many other aspects. However, very few studies have been conducted on measuring the satisfaction level of poor slum dwellers with the assistance provided by the City Corporation—an urban local government authority in Bangladesh. This inspired the current researchers' interest to fill the gap.

## 3. Research Methodology

To provide a comprehensive understanding of the satisfaction level of slum dwellers with the assistance they received from the City Corporation, the study used mixed method approaches. Mixed methods research enables the integration of qualitative and quantitative procedures throughout the research process (Doyle et al. 2009).

The mixed method approach is now the most popular methodology in the research field for producing reliable results (Creswell 2009). Therefore, it is logical to think that the mixed method is less controversial and superior to the single method (Bryman 2016). The researchers carried out the study in Sylhet, a metropolitan city in the northeastern part of Bangladesh (Figure 1) and the administrative headquarters of the Sylhet Division. Sylhet has a subtropical climate and attractive highland topography and is located on the

north bank of the Surma River at the eastern tip of Bengal. It is one of the largest cities in Bangladesh after Dhaka, Chittagong, and Khulna. Sylhet is an important spiritual and cultural center in Bangladesh. The city is linked by road, rail, and air to the different cities of Bangladesh and the Indian states of Assam and Meghalaya (Nath et al. 2022).
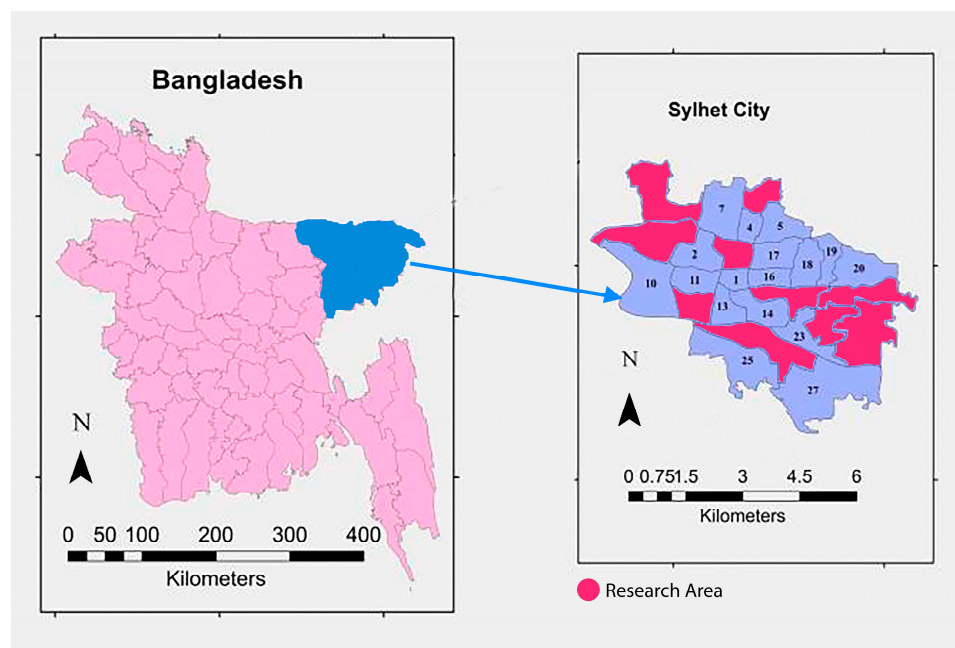


**Figure 1.** Sylhet City in Bangladesh. Source: Author.

Furthermore, it is one of the most economically significant cities in Bangladesh, behind Dhaka and Chittagong, and is also well known for its cane products, including tea, fertilizer, and liquefied petroleum (propane) gas (Alam et al. 2022). There are also various cottage enterprises, such as mat weaving and bamboo work. The majority of Bangladesh's tea production comes from the farms of southeast Sylhet. The city is the largest producer of tea and natural gas. The lower living cost and better employment opportunities attract people from both their homes and India to migrate to the city.

Researchers selected these study areas randomly using the lottery method and collected data from 155 respondents from the research area by conducting a field survey, among which 14 respondents were selected from each of the ten wards, two FGDs (each consisting of 5) were conducted with daily laborers, and Five City Corporation officials were interviewed (semi-structured) as Key Informants. Data were collected from the respondents living in slums employing multi-sampling (simple random sampling and purposive sampling) techniques (Table 1). Targeted people were chosen as samples for this study to learn about their experiences with the problems they faced throughout COVID-19. Researchers should consider the experience of the participants aligning with the objectives of the research before including them as samples in the relevant study (Seddiky et al. 2021). The survey questionnaire was designed focusing on different aspects such as challenges faced by slum dwellers during COVID-19, the impact of economic loss on their livelihood, the types of assistance they received from the City Corporation, and their satisfaction level with the quality and quantity of assistance.

**Table 1.** Respondents of this study.

| Serial No. | Nature of Inquiry | Types of Participants | Numbers |
|:---:|:---:|:---:|:---:|
| 1 | Interview (Structured) | Households (Slum Dwellers) | 140 |
| 2 | FGDs 2 × 5 (2 focused groups consisting of 5 persons in each) | Daily laborers | 10 |
| 3 | Key Informant Interviews (KII) | City Corporation officials | 5 |
| | | =Total | 155 |

The survey method provides clear information about the respondent's behavior, attitude, characteristics, expectation, self-classification, and knowledge for reaching the objectives of the study (Creswell and Creswell 2017). This study carefully reviewed relevant journal articles, newspaper articles, and book chapters as secondary sources from Google Scholar and Web of Science for building a better theoretical and conceptual background. Materials published in languages other than English were not considered in this study. This study set a timeline for resources used with only materials published between 2010 and 2023 being referenced. COVID-19, crisis, assistance, slum dwellers, and Bangladesh were the key terms for searching the literature for this study. All references employed in this study were managed using the endnote library. APA 6th reference style was used to maintain and harmonize the bibliographic section.

### 3.1. Ethical Consideration

Researchers maintained values and ethical issues strictly while conducting research. Before conducting interviews, an informed consent form was served to every respondent. The interviews were conducted and recorded with the consent of the respondents. Researchers maintained anonymity and de-identification responses for each of the respondents to keep their personal information and contribution confidential in this study. Data sharing and access protocols were strictly maintained by the researchers, keeping the hard copy of data in a locked cabinet and the soft copy in a secured Google drive. The researchers assured the respondents that the data of this study would not be used for any business purpose. Respondent's right to erase, delete, or even withdraw their names from the research is reserved at any time up to the point of publication.

### 3.2. Data Analysis

The researcher collected qualitative data and used a thematic analysis method to analyze them. Thematic analysis for qualitative research is frequently used when a wide range of study objectives are needed due to its interpretive capacity. Additionally, because qualitative data analysis is mostly inductive, themes might emerge from the data rather than being tested against a hypothesis (Seddiky et al. 2022b). The researchers utilized open and selective coding in two cycles. To define the distinct concepts for classification, open coding was used; selective coding was used to integrate homogeneous material and organize it under categories to generate precise thoughts toward the formation of the story or meaningful themes (Table 2). Researchers classified primary non-number information into groups and then applied numerical codes to these groupings to code them for quantitative data analysis. Data conversion and measurement comparison are made easier by numerical coding. Then, comparable themes emerged from both the qualitative and quantitative data and were combined to build the study's narrative to fulfill the objectives (Figure 2).
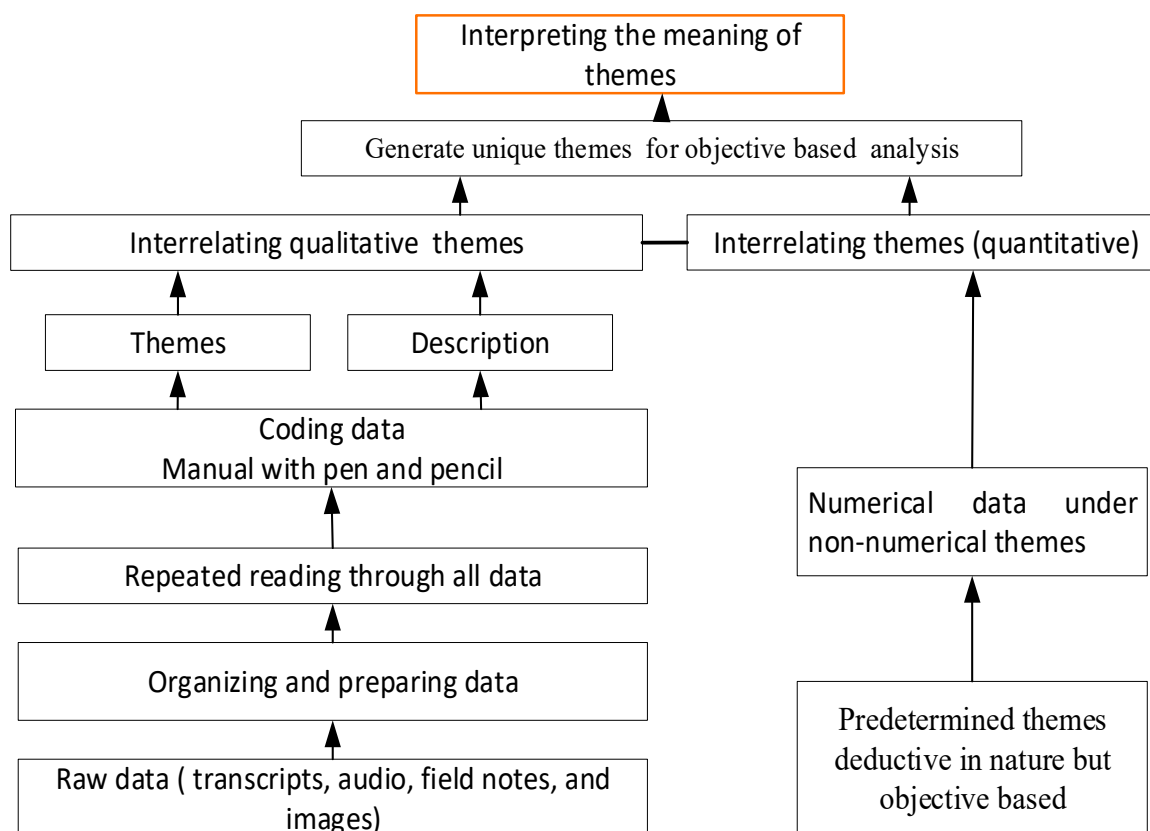
**Figure 2.** Stages of mixed method data analysis. Source: adapted from Creswell and Creswell (2017).

**Table 2.** Coding systems of both numerical and no numerical data and emerging themes.

| Open Coding | Selective Coding | Emerging Themes |
|---|---|---|
| Financial crisis<br>Job loss<br>Salary cut<br>Food insecurity<br>Unable to afford house rent<br>Difficulties in maintaining family expenditure<br>Inadequacy of treatment | Challenges | Slum dwellers faced different types of challenges for their livelihood during COVID-19 |
| Food package<br>Cash support<br>Handwashing materials<br>Medicines<br>Kits<br>Awareness raising | Types of Assistance | City Corporation provided various types of assistance to slum dwellers during a pandemic |
| Adequacy of assistance<br>The distribution and management system of assistance<br>Quality of services of relief providers | Satisfaction levels | The Assistance provided by the City Corporation was like a " Drop of water in a hot desert" to slum dwellers |

Numerical data were analyzed by applying Microsoft Excel and SPSS (Statistical Package for the Social Sciences) software covering frequency distribution for showing different variables along with their nature through graphs and charts.

## 4. Data Presentation and Findings with Qualitative and Quantitative Approaches

### 4.1. Slum Dwellers and Crisis during COVID-19

During the COVID pandemic, a drastic change came in the lives of low-income people. The COVID-19 crisis has had a disproportionately detrimental impact on the lives of

slum dwellers compared with other city dwellers due to their sociopolitical and economic environment. The lockdown measures taken by the Bangladesh Government created significant challenges for the livelihoods of slum dwellers who depend mostly on daily earnings or very negligible income. Most of the respondents opined that they earned their livelihood by driving rickshaws, working as day laborers, serving as housemaids, and operating small businesses. They suffered a lot during the lockdown since their earning scope was stopped. The police force of Bangladesh kept a close eye on the movement of the people and treated anyone who went out of their houses badly. Even for the street hawkers who went out due to pangs of hunger, the administration vandalized their shops and vehicles. It was difficult for them to run the household with limited or no savings. Each of the respondents faced a drastic change in their livelihood during the COVID lockdown. One of the respondents stated

> *"People were concerned about the virus, and many lost their jobs as a result of the lockdown. Expenses were rising, but there was a limited supply of goods, and there was no alternative source of income. We all were in an economic crisis. Wage-earners like us were very worried about maintaining the family expenditure".*

The sufferings of the inhabitants of the slums were beyond imagination. It was a great challenge for them to maintain their households during the lockdown.

According to Figure 3, amidst the pandemic, many people faced a financial crisis. Among the respondents, 32% reported that they lost their job and most of them were housemaids, 10% said that they faced a salary cut from the workplace, 44% said their income was reduced, and the other 14% of respondents' income levels remained the same. Most of the respondents reported that they were worried about low income and losing jobs. The female respondents who were engaged as housemaids became unemployed during the lockdown. People put restrictions on them to enter the home for work due to fear of the spread of the virus. However, it is evident that men still worked during the lockdown and earned a limited amount of money for the survival of their family members. Although transport workers (e.g., rickshaw pullers and van drivers (three-wheel vehicles) and small business holders continued to do their jobs, their income was visibly reduced due to less movement of people outside. One of the female respondents noted the following:

> *"The owner of the house where I worked thought that poor people like us live in unhygienic conditions, and we can spread the virus quickly, that's why he forbade me to visit his house during COVID-19. My Husband is a rickshaw driver. During the lockdown, he used to bear the expenses of the household with the little he earned".*

As per Figure 4, among the respondents, almost everyone had to face a lot of suffering due to loss of income. Many could not afford house rent while many had to face trouble in affording food and other expenses. According to the survey, 58% were unable to afford house rent while 42% managed to pay the rent; 44% faced difficulties in bearing food expenses and the remaining 56% managed them with outside support and little income; and 76% reported facing difficulties in maintaining other necessary expenditures for the family while 24% did not have any other difficulties. The loss of income of the earning members of slum dwellers during the lockdown had an adverse impact on their families and they were unable to maintain the necessary family expenditures. The majority of them said that they were unable to afford their house rent. Many were threatened by their property owners to leave their houses if they could not pay the rent. Some of them had to break their savings to run the household, which they had saved for their future security. One of the respondents said

> *"As there was very limited income, I could not pay the house rent for two months. The owner of the colony did not even waive the rent rather he said if I couldn't pay the rent, I shall leave the colony".*
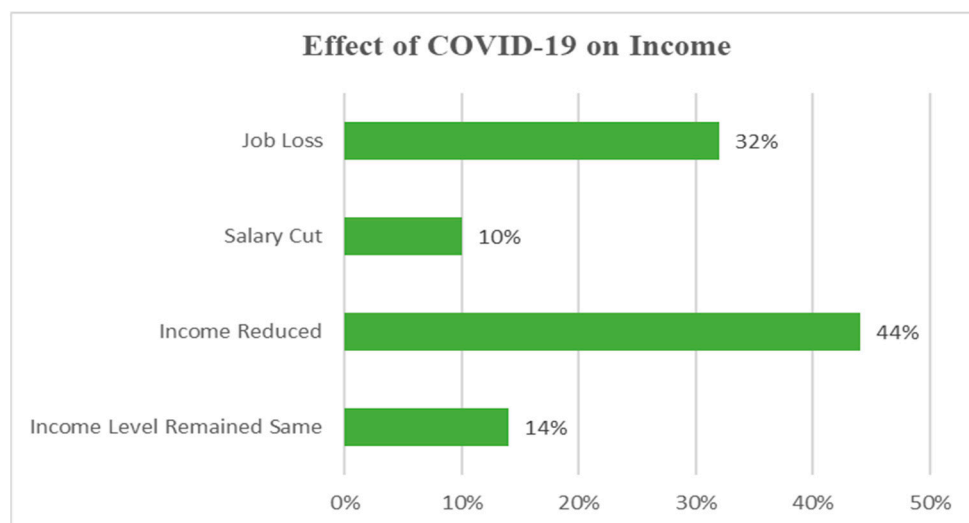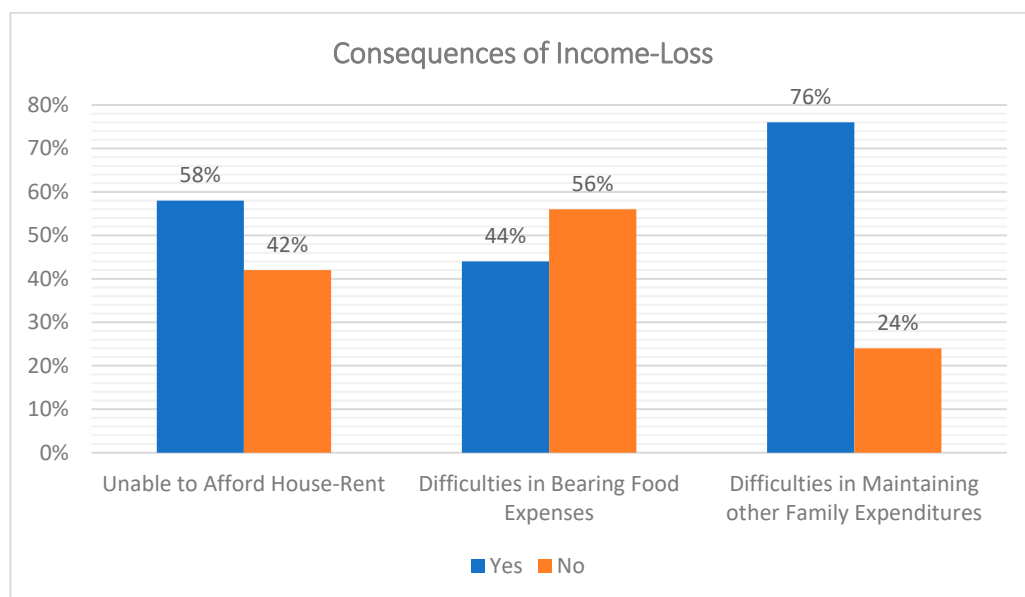
**Effect of COVID-19 on Income**

| | |
|---|---|
| Job Loss | 32% |
| Salary Cut | 10% |
| Income Reduced | 44% |
| Income Level Remained Same | 14% |

**Figure 3.** Effect of COVID-19 on income.

**Consequences of Income-Loss**

| | Yes | No |
|---|---|---|
| Unable to Afford House-Rent | 58% | 42% |
| Difficulties in Bearing Food Expenses | 44% | 56% |
| Difficulties in Maintaining other Family Expenditures | 76% | 24% |

**Figure 4.** Consequences of income loss.

Many respondents had borrowed money during the lockdown to run their households. They borrowed from community leaders or wealthier persons in their community, even from their family members. The daily wage earners could not go to work as there were strict restrictions imposed by government authorities. Thus, to maintain the family expenditure, many had to take a loan, which became difficult for them to return later. One of the respondents said

> *"I had to borrow money from relatives and others from my village to survive the crisis. To date, I have not been able to fully repay my loans, which has resulted in a rift in my relationship with them".*

The food security of the respondents was dramatically impacted due to economic loss. Obtaining food became very difficult for almost every household in the slums. Most of them reported that the families had to skip meals and ate less than two meals a day. One of the participants noted

> *"It became difficult to run the family as the income stopped. Sometimes I could manage 2 meals, sometimes 1 meal, and there were even many days when I could not feed my five years child ... crying".*

Most slum dwellers took homemade herbal medicine to curb COVID and stayed at home due to having a lack of information, money, connection, quality of services, and negligence of hospital authority.

### 4.2. Types of Assistance Received during COVID-19

The Bangladesh Government rolled out a financial assistance scheme in the country to support the poor in facing the economic fallout of the pandemic. Sylhet City Corporation helped the low-income and unemployed during difficulties of the coronavirus pandemic. Assistance was provided simultaneously in the slums across the 27 wards of Sylhet City Corporation according to the guidelines of the government's humanitarian assistance program. The City Corporation decentralized the program of assisting each of the Ward Commissioners. The assistance included awareness programs, food packages, baby food, cash support, and handwashing materials.

Figure 5 shows that regarding the assistance slum dwellers received, 96% of the respondents received food aid as assistance from the City Corporation whereas 20% received financial assistance and 10% received medical equipment. Only 6% of the respondents received all three types of assistance from the respective authority, which was a matter of concern as all types of support were equally needed by slum dwellers. The City Corporation staff provided the majority of the assistance to slum dwellers. A total 84% of the respondents stated that they received assistance from City Corporation staff, 12% received it from the Commissioners, and only 4% received it from volunteers. The Government of Bangladesh instructed to include vegetables, potatoes, oil, pulses, rice, soap, etc. in the relief packages. The Sylhet City Corporation decided to provide food packages with the fund allocated by the Government. From the respondents, the researchers came to know that the relief packages mostly contained rice, pulses, oil, onions, potatoes, and salt. However, in some of the wards, a package of only 5 kg of rice was provided, excluding other items. The food packages were distributed to households through local representatives. 66% of them stated that the assistance was provided to their home, 20% of the respondents stated that they went to the Commissioner's office, and 14% received it in both ways.
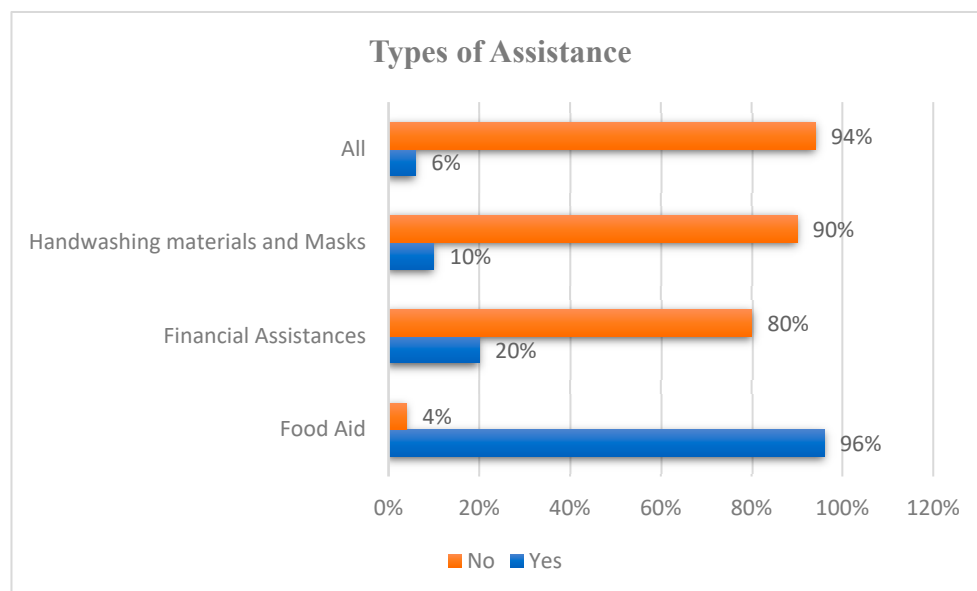


**Figure 5.** Types of assistance.

Aside from food packages, the government decided to provide a one-time cash support of USD 23.14 to 5 million low-income families affected by the coronavirus. The money was transferred through a mobile banking service (bKash). The City Corporation authority worked to provide the cash support given by the government. They took the national

identity number (NID) and contact number of slum dwellers for this purpose. One of the respondents said

> *"The people from the City Corporation came to our colony and took my contact and NID number. Then I received the money through my bKash number".*

Apart from the City Corporation, slum dwellers mentioned that they received assistance from neighbors, NGOs, moneylenders, local influential persons, and employers during the pandemic. During this time, some people helped with good intentions but most people or institutions helped them for personal gain or political interest. They were bound to taking loans from other informal sectors for their livelihoods as the banks or NGOs check the borrower's loan repayment capacity before granting the loan. Some voluntary organizations distributed small amounts of antibiotics, cold relievers, water purification tablets, and soap or sanitizers for hand washing to slum dwellers. Further, NGOs and community-based organizations tried to build a strong platform at the local level for community engagement in managing government support. Their main objective was to create awareness among people to tackle the COVID crisis.

According to the survey as shown in Figure 6, 68% of slum dwellers stated that they received assistance from other sources and the remaining 32% denied receiving any assistance from sources other than the City Corporation.
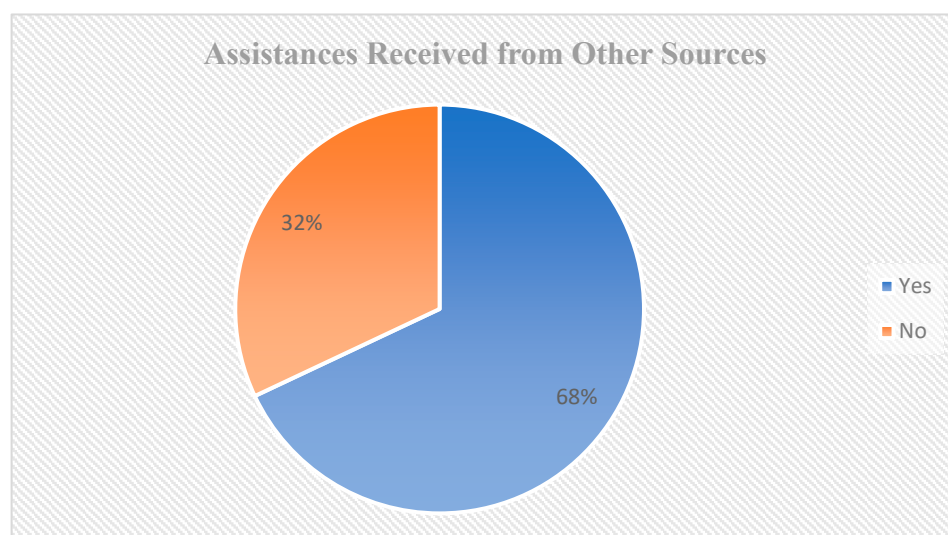


**Figure 6.** Assistance received from other sources.

### 4.3. Distribution and Management System of Assistance and Level of Satisfaction

According to the directions given by the Prime Minister of Bangladesh, the Sylhet City Corporation along with the collaboration of local representatives (Ward Commissioners) distributed assistance among slum dwellers. The majority of the respondents received assistance from home. The members who were engaged in providing assistance distributed the relief packages door-to-door in the slums. Most of the respondents expressed their gratitude to the City Corporation authority for the help in complicated times. However, when the respondents were asked about whether the assistance they received fulfilled their basic needs or not, some of the respondents expressed their views about the inadequacy and mismanagement of the assistance. A similar food package was provided to each family. No special consideration was given to a family with ten members. Apart from this, even though regular help reached other people in the city during the COVID period, the quantity and quality of the help reaching slum people were different due to their socioeconomic environment. One of the participants said

> *"We are poor if even we live or die. So, no one wants to be by our side in our crisis. Everyone in the world is human except us. The smell of sweat comes out of our body ..."*

Most of the respondents stated that the provided items in the food packages were insufficient to support their family members. Sylhet City Corporation allotted food packages for selected families of all 27 wards with all necessary items included. The food packages usually included rice, lentils, onions, oil, and potatoes. Nevertheless, some families claimed that they received packages that contained only 5 kg of rice twice from the commissioner. Here, a question remains as to why some families did not receive the other food items that should have been included in the food packages? One of the respondents noted

*"It is not enough to eat only rice. It would be better if there were at least other basic ingredients with rice. Because the price of the items was so high that I could not afford to buy it myself. Some got all the items, but food packers know well why we didn't get all the items in the aid pack".*

In the food packages, the quantity of oil, onions, lentils, and potatoes was not sufficient to last long, even a week. Slum dwellers did not have the capacity to buy those items, as the price of these daily commodities was high during the lockdown. Many respondents who received the relief packages were only somewhat happy with the support, as the pandemic continued for a long time and the food relief they received was not enough to last longer, especially for people with a large number of family members. The slum leaders' community maintained a patron–client relationship with the political parties, which served the interests of each other. In times of providing assistance, the followers of those slum leaders received preference. Some elected representatives provided huge government assistance to their own localities and acquaintances, depriving the truly needy. One of them stated

*"Politicians and public representatives distributed and looted the relief materials at their own will without following any instructions from the government. I trust you, please don't tell anyone about me".*

According to Figure 7, 58% of respondents said that the packages did not contain all the essentials whereas 42% said that the packages contained the essentials necessary for them. It was difficult to meet the need for a healthy diet for the children and elderly people with the limited items included in the relief packages. Prime Minister Sheikh Hasina requested the relief providers to add baby food like milk to the relief packages. However, from the respondents, researchers discovered that families who have little children did not receive any baby food. In response to the question of whether the baby foods were necessary, one of the respondents said
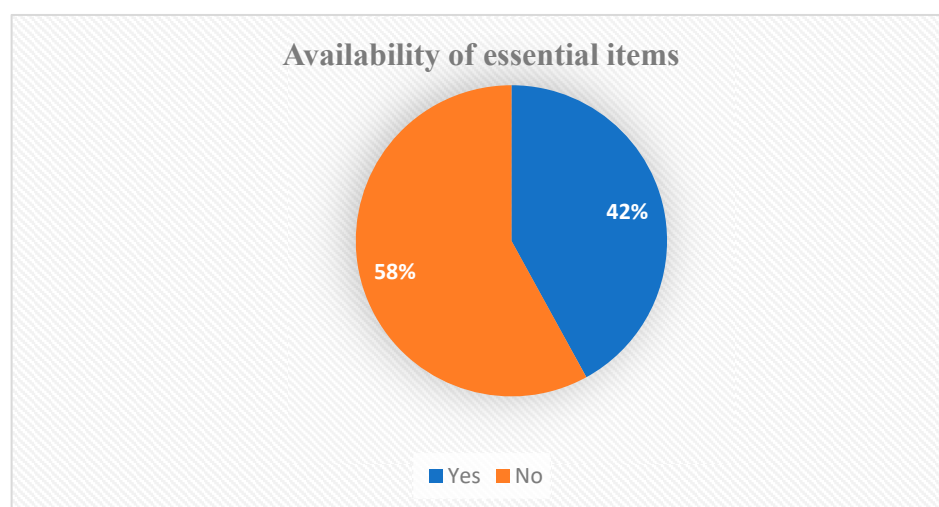


**Figure 7.** Availability of essential items. Source: Authors, based on filed data.

*"I am a poor person. Somehow, my family survived by eating 1 or 2 meals a day. With such a low income during the lockdown, it was difficult for me to meet the needs of my children. I could not even afford to buy milk for my 4 years youngest child".*

Furthermore, the majority of the respondents opined that the food packages provided by the City Corporation did not ensure food security to them. The government of Bangladesh decided to provide around USD 24 for low-income families that include rickshaw pullers, van drivers, daily laborers, construction workers, transport workers, and street hawkers. People of these professions usually live in slums. In Sylhet, the list of these families was made by the City Corporation via the commissioners of each ward. They would receive cash support through accounts of mobile financial services (MFSs). MFS services Nagad, bKash, Rocket, and Sure Cash were given the responsibility to transfer the funds (Gomes 2020). The respondents said that their NID and mobile numbers were collected for preparing the list. However, it was found that the majority of the respondents did not receive cash support despite providing their ID and mobile numbers. The majority of the receivers had to give bribes to the concerned authority taking the amount from them. Due to the lack of technological knowledge of the slum people, the officers concerned with cash support embezzled the money earmarked for the relief of slum dwellers. One of the respondents claimed

> *"Some people came and took numbers and passwords to transfer us government cash support through bkash account, but most of us did not get any money. It is very clear to us who embezzled that money".*

The food packages were provided based on the list of slum dwellers living in the respective wards. The list of slum dwellers of every ward was sent to the City Corporation. Although the Ward Commissioners delivered the packages to the doors of slum dwellers following the instruction of the City Corporation, many of them claimed not to be included in the list of ward distributions for getting these supports. They mentioned this self-mistake of the commissioners as a political motive. They refused to write the name of those slum people on the list who were not permanent residents or voters in that particular region, ignoring their vulnerability. The mismanagement of the hospitals was eye-popping. Hospital doctors, nurses, and staff stayed at home for months fearing for their lives. Those who stayed in the hospital did not come in contact with the patients, instead talking from behind the glass. Many respondents claimed the involvement of hospital owners in influential and nepotistic politics as the source of corruption in the health sector of Bangladesh. The poor city dwellers faced discrimination regarding healthcare issues due to their poverty and status in society. Although the ward committee, town coordination committee, and standing committee were formed in Bangladesh to scale up the urban governance, during COVID-19, these committees were dysfunctional in nature. One of the participants stated

> *"Brother, life comes first. There was no guarantee of human life during covid. Will the members of the committee give their lives? All these committees were working well before Corona".*

Furthermore, NGOs and banks were reluctant to provide financial support to slum dwellers due to the fear of not receiving the loan money back in future. In fact, corruption and mismanagement have become evident in the distribution of government relief at the urban local level due to a lack of proper and regular monitoring of the central authority.

## 5. Discussion

The coronavirus has significantly hurt Bangladesh's economy, and the country's economic growth has slowed down (Mahmood 2020). More crucially, COVID-19 has revealed how vulnerable the marginal population section is. This study sheds light on the adjustments, difficulties, and worries of Bangladeshi slum inhabitants during the lockdown. The study demonstrates a high level of loss of income, unemployment, food insecurity, and stress of maintaining the household that arose among the slum inhabitants of Sylhet City during the COVID-19 lockdown. The major themes that emerged from this study are discussed below.

*5.1. Slum Dwellers Faced Different Types of Challenges for Their Livelihood during COVID-19*

The lockdown measures during COVID-19 taken by the Bangladesh government have posed considerable obstacles to the livelihoods of slum dwellers, who rely on daily earnings or with very little income. The sufferings of slum dwellers of Sylhet City Corporation were no exception to it. The COVID pandemic has made their lives miserable in different contexts. They suffered from the financial crisis, health-seeking problems, as well as food insecurity due to the threats of COVID-19 and government restrictions on free movement for earning. Normally, slum dwellers live an inhuman life and survive on the earnings of their daily hard labor, but the prolonged lockdown has made their condition even more deplorable. Dramatic decreases in the income of daily wage earners, an increase in unemployment, and food insecurity were key challenges faced by the urban poor. The women of the slums of Sylhet usually work as house cleaners and construction workers. During this pandemic, all of them were bound to stay at home, with restrictions on people's gatherings to avoid the spread of this virus. Although women and other daily laborers were willing to perform their job, they were strictly forbidden by the owners to enter the house or office.

Loss of employment opportunities, joblessness, difficulties in maintaining family expenditures, returning borrowed money, etc. were the key issues faced by slum dwellers. Similarly, in their study, Fattah et al. (2022) found that the financial crisis of slum dwellers significantly increased stress and affected their livelihood. Rising unemployment and limited income also triggered many families to be unable to pay their house, water, and rent bills at the end of the month, which led to the risk of becoming homeless. Food insecurity was a serious social and public health problem that was exacerbated by the COVID-19 pandemic, especially in developing countries (Singh et al. 2021). In Bangladesh, a huge portion of the population lives in slums, and they are usually low-income people. During the lockdown, the food security of these slum dwellers had been disturbed. The respondents expressed sorrow that they were unable to meet the basic food demands of their families. They could not manage to maintain the food expenses and fulfill the necessary diet for themselves and their children. Likewise, a BIGH survey documented the impact on the livelihoods and food security of the urban poor, which showed a 32% decrease in food expenditures and a 23% decrease in the percentage of families eating three meals a day in urban slums (Rahman and Matin 2020).

During COVID-19, the scarcity of goods had a special effect on the rise in the prices of daily necessities. As a result, the poor and day laborers struggled to meet their minimum basic needs due to their lack of income. Similar findings from a study revealed that the unavailability of food items and price hike directly affected dwellers' access to primary/staple food (Akter et al. 2021). Most failed to store food as bulk purchasing was unaffordable. Many breast-feeding babies suffered from malnutrition along with their mothers due to the lack of a balanced diet. During this difficult time, slum dwellers put pressure on nature in various ways. They tried to survive by hunting forbidden herbs, fish, and other animals from sewers, forests, and water bodies. The trends of theft, robbery, and extortion increased tremendously in urban areas. Finding no other alternatives, poor people indulged in such misdeeds to survive during this critical period. Not only for the poor, but also for middle-income people, this trend has been shown to be exemplary (Pérez-Escamilla et al. 2020). The government of Bangladesh took administrative initiatives to control these types of misdeeds; however, complete healing was not possible due to political dysfunctions and uncontrolled COVID pandemic (Ruiu 2022). Many respondents claimed that COVID-19 affected poor slum dwellers and they did not receive any type of social or medical support in emergencies. When they advised the location while calling an ambulance on an emergency basis, the medical authority either cut off the call after hearing about the slum or did not send an ambulance on any pretext. Even if the poor patients were taken to the hospital in some other way, the authorities neglected them and did not attend to them properly. During COVID-19, 80% of slum people affected by the novel coronavirus stayed at home and received traditional herbal treatment due to a lack of

money and connections to the hospital authority (Mahmood et al. 2022). Furthermore, slum dwellers were also deprived of the benefits of decentralized healthcare services. During the pandemic, community-level physicians and volunteers at times provided health services in other parts of the city but stopped visiting slum dwellers (Ahmed et al. 2020). Slum dwellers approached banks, NGOs, and moneylenders for loans; however, they did not lend to them for fear of non-repayment. Some moneylenders made only a few loans at high interest rates, the balance of which they are still carrying. The relatives of most slum dwellers did not have the capacity to lend them money in those difficult times. In fact, slum dwellers were plagued with several different problems during the COVID-19 pandemic.

*5.2. The Assistance Provided by the City Corporation Was like a "Drop of Water in a Hot Desert" to Slum Dwellers*

To aid the underprivileged citizens of the nation in coping with the economic impacts of the pandemic, the Bangladesh government established a financial support program. The majority of assistance came in the form of food, money, and cleaning supplies (Barkat et al. 2020). During the tough times of the lockdown brought on by the coronavirus pandemic, according to government support, the Sylhet City Corporation assisted the low-income unemployed people. In accordance with the regulations of the government's humanitarian assistance program, support was provided at the same time in the slums spread over the 27 wards of Sylhet City Corporation. In the program of providing assistance, the City Corporation decentralized the duty of distributing assistance to each Ward Commissioner. In addition to food packages, the government also announced to provide around USD 24 as a one-time cash payment to 5 million low-income households that were affected by the coronavirus. The government ordered the concerned urban local authority to transfer the money to the eligible slum people through mobile banking services with a focus on quick delivery. Enamur Rahman, the State Minister for disaster management and relief, stated that a list of 5 million families mostly impacted by the coronavirus had been made and each family would receive a handsome amount of monetary assistance. The list of families includes rickshaw pullers, van pullers, day laborers, construction workers, agricultural laborers, transport workers, and street hawkers (F. Islam 2020). However, the survey revealed that only 20% of the respondents received financial assistance. The remaining portion of the respondents did not receive cash support despite giving their National Identification Number (NID) and mobile number for the prepared list by the City Corporation. The authority provided this amount to some people of their preference while the majority claimed to be deprived. Many involved in the process cited it as a technical glitch. Nepotism and corruption of the concerned authority, and the temporary identity of the slum people, were the main barriers preventing them from receiving financial aid (Sakamoto et al. 2020).

Alongside the City Corporation, various NGOs, local political leaders, and local rich city dwellers came forward to help the slum inhabitants during that time (Sohel et al. 2022). The study revealed the generosity of the local rich city dwellers towards the slum people during COVID pandemic. The food packages were delivered to the slum people by the City Corporation authority along with the collaboration of NGOs, CBOs, and other voluntary organizations.

However, many of them expressed anger at the management system of the distribution authority. Sometimes, the commissioners did not follow the government's instructions in making a list of the package receivers. The government ordered the authority to provide help in such a way that no one was left out; however, many times, they gave more priority to political partisanship. If someone came to a ward from another area, instead of helping them, they were asked to go to the ward they belong to and seek help. When the list of families of a particular ward was made, their names were not included in the list of the ward they were living in and their names remained missing from the ward in which they were enlisted as voters. Additionally, the amount of assistance they received was too little to meet their basic demands. They also received aid from the City Corporation only twice

during this long period of COVID-19. Usually, the food packages contained a limited amount of rice, pulses, onion, salt, and oil. A greater portion of slum dwellers in Sylhet City received food packages that contained only rice. Most of the respondents claimed that these packages were not adequate.

Another important factor is the absence of handwashing supplies (such as soap and sanitizers), masks, and other essential medications in the packages to prevent transmission of coronavirus. According to the study findings conducted by Sharma Waddington et al. (2023), inadequate WASH (water, sanitation, and hygiene) practices and facilities are also significant contributors to the transmission of infectious diseases within communities. Handwashing is frequently challenging in slums due to the lack of municipal WASH services, particularly in the absence of in-house provisioning. The concerned authority should have kept in mind that low-income people like slum dwellers do not have the tendency to spend money buying sanitizers or masks, while these kinds of equipment were necessary to avoid the spread of coronavirus.

The mismanagement of hospitals, death of people without treatment, and concealment of familiar persons crushed people cruelly. Slum dwellers took one meal in a day, avoided using oil and spices in food, and sold household goods to survive during the COVID lockdown (Sohel et al. 2022). The unequal treatment facilities and corruption in health sectors discouraged and deprived slum people from seeking health services in hospitals. Another study finding revealed that 79% of the COVID-affected patients in Bangladesh did not have a hospital bed (Morol 2020). This type of dire circumstance had not previously occurred in Bangladesh. Since the disease was treated in China three months ago, the Bangladeshi government has not put contact tracking, antigen-based fast diagnosis kits, or the establishment of multidisciplinary teams into practice (Islam et al. 2020). Either they stole the money intended for public assistance or they created fake medical equipment budgets. With the help of some trustworthy individuals, some dishonest hospital owners and managers are engaged in the business of selling fraudulent COVID certificates. Even though they took samples from house to house and discarded them in the trash without any pathological testing, they were praised by the public for their misleading reports (Sadia and Rahaman 2022).

NGOs' awareness-raising, training, and social capital building programs effectively changed the capacity of communities to cope with the COVID risk. The NGO contribution to the formation of community-level associations (Samity) reinforced community networking capacity and existing social capital through the proper utilization of local resources, meetings and informal discussions, skilled development training, and development of human rights. However, the NGO microcredit program trapped poor people in a vicious cycle of poverty due to its disciplinary payment rules, high interest rate, and exclusion of the absolute poor who deserve welfare services. During COVID-19, some NGOs reduced their support towards urban poor. They are more reactive than proactive functions and prefer to work with risk-free projects (Seddiky 2021). NGOs and banks were reluctant to provide loans to the slum people due to the fear of receiving a return. Further, most of the banks were almost creditless to sanction the loan for the common people. The COVID pandemic nearly caused the Bank of Bangladesh to run out of credit because of the excessive demand for cash from paying customers. Following their observations of the fraudulent market system during COVID-19, many felt hesitant to deposit money in banks (Mohiuddin 2020).

## 6. Limitations and Scope of the Study

The researcher faced some problems while conducting the study. Since most of the respondents of slum dwellers are daily wage earners like rickshaw pullers and three-wheeler drivers, or small business holders like tea sellers, pickle sellers, etc., it was difficult for the researcher to reach them at home. The researcher waited a long time for the targeted respondents to obtain their responses. The researchers also scheduled the interviews well considering the time and maintained regular communication with them overcoming the complexity. The suffering respondents expected to receive tangible assistance from the

researcher. The researchers explained that there were no instant benefits for the respondents but their views would assist the researchers to address the particular issue of the study, which may influence the future management system of these types of disasters.

The study findings are contextualized in the Sylhet division of Bangladesh, and results may not apply to other developed countries since the picture of slums in other countries may be diversified and does not match the scenario of Bangladesh. Hence, the generalization of the findings to other developed and developing countries requires careful interpretation.

## 7. Conclusions with Policy Implications

COVID-19 is likely to have a disproportionately negative impact on slum dwellers' life compared with other urban residents around the world. The majority of the families that depended on daily wages for their subsistence went through financial hardship and food insecurity throughout the pandemic. They relied on a variety of methods to manage their food, such as asking certain members of their immediate neighborhood for food, borrowing money from relatives, drawing on their savings, or taking out loans to manage. However, the government had instructed to organize committees at the ward level to provide relief to slum dwellers, supervised by the City Corporation. The Sylhet City Corporation came forward and distributed relief packages from the fund allocated by the government. This study made an effort to illustrate the socioeconomic difficulties that Sylhet City's slum dwellers faced. Through this study, researchers learned how satisfied slum dwellers were with the aid they received from the City Corporation and obtained a better notion of whether such aids were sufficient for them to support themselves. Study findings revealed that although the relief packages were not adequate to fulfill the basic needs of slum dwellers during the pandemic, it made them satisfied for the time being. Many families were deprived of this assistance because of their temporary relocation and different political ideologies. The local-level authorities should consider every slum dweller when providing support in times of danger, even if they live in other wards. In the distribution of assistance, the list of help-seeking families must not be made on the basis of the voter list of a particular ward; rather, the authorities should conduct a household survey, make a list of families suffering during the crisis, and ensure that every help-seeking families get assistance. Moreover, the slum people received assistance only one or two times, which was not actually enough to help them maintain their livelihood during the prolonged lockdown. They were not satisfied with the governance and management systems regarding the distribution of the government relief by the urban local government authority due to the lack of community engagement, malpractices, political consideration, nepotism, and corruption. The government authorities along with other private groups should allocate funds for providing assistance during any future pandemics to ensure at least one meal per day for low-income groups of people. Alongside food and financial assistance, the respective authorities should provide the necessary medicines and hygiene kits (soap, facemasks, Savlon, tissue paper, etc.) for the slum people. Ethical standards, coordination, impersonality, and good governance are essential to scale up the urban governance. The study findings can help NGO officials, policymakers, communities, local elected representatives, and practitioners to integrate effective management initiatives of assisting the slum people during any pandemic. Future researchers can apply institutional theory, risk management theory, and social capital theory incorporating a broader range of people and areas to evaluate the satisfaction level of slum dwellers with the assistance of the urban/local government authorities. This would help to support and challenge the findings of this study and address the missing perspectives in similar fields.

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## References

Ahmed, Syed A. K. Shifat, Motunrayo Ajisola, Kehkashan Azeem, Pauline Bakibinga, Yen-Fu Chen, Nazratun Nayeem Choudhury, Olufunke Fayehun, Frances Griffiths, Bronwyn Harris, and Peter Kibe. 2020. Impact of the societal response to COVID-19 on access to healthcare for non-COVID-19 health issues in slum communities of Bangladesh, Kenya, Nigeria and Pakistan: Results of pre-COVID and COVID-19 lockdown stakeholder engagements. *BMJ Global Health* 5: e003042. [CrossRef]

Akter, Salma, Sheikh Serajul Hakim, and Md Saydur Rahman. 2021. Planning for pandemic resilience: COVID-19 experience from urban slums in Khulna, Bangladesh. *Journal of Urban Management* 10: 325–44. [CrossRef]

Alam, M. Aslam. 2020. Leading in the shadows: Understanding administrative leadership in the context of COVID-19 pandemic management in Bangladesh. *International Journal of Public Leadership* 17: 95–107. [CrossRef]

Alam, Mohammad Sadman, Shetu Akter, Shahnaj Shemul, Tayabur Rashid Chowdhury, and Sabrin Ara. 2022. Assessing the quality and heavy metal contamination of soil in tea gardens around Magurchara gas blowout in Bangladesh using multivariate and soil quality index methods. *Journal of Hazardous Materials Advances* 7: 100127. [CrossRef]

Al-Zaman, Md. Sayeed. 2020. Healthcare crisis in Bangladesh during the COVID-19 pandemic. *The American Journal of Tropical Medicine and Hygiene* 103: 1357–59. [CrossRef]

Anderson, Sean C., Andrew M. Edwards, Madi Yerlanov, Nicola Mulberry, Jessica E. Stockdale, Sarafa A. Iyaniwura, Rebeca C. Falcao, Michael C. Otterstatter, Michael A. Irvine, and Naveed Z. Janjua. 2020. Quantifying the impact of COVID-19 control measures using a Bayesian model of physical distancing. *PLoS Computational Biology* 16: e1008274. [CrossRef] [PubMed]

Barkat, Abul, Asmar Osman, Faisal M. Ahamed, Md. Mahmudul Hasan Mamun, Md. Fazel Rabby, Laila Begum, Nurunnahar, and Md. Nawal Sarwer. 2020. *Socio-Economic Assessment of COVID-19 under National Urban Poverty Reduction Programme*. Dhaka: HDRC and UNDP. Available online: https://www.hdrc-bd.com/socio-economic-assessment-of-covid-19-under-national-urban-poverty-reduction-programme-conducted-for-undp-year-2020 (accessed on 12 February 2023).

Beigel, John H., Kay M. Tomashek, Lori E. Dodd, Aneesh K. Mehta, Barry S. Zingman, Andre C. Kalil, Elizabeth Hohmann, Helen Y. Chu, Annie Luetkemeyer, and Susan Kline. 2020. Remdesivir for the treatment of COVID-19. *New England Journal of Medicine* 383: 1813–26. [CrossRef]

Bryman, Alan. 2016. *Social Research Methods*, 5th ed. Oxford: Oxford University Press.

Chirisa, Innocent, Tafadzwa Mutambisi, Marcyline Chivenge, Elias Mabaso, Abraham R. Matamanda, and Roselin Ncube. 2020. The urban penalty of COVID-19 lockdowns across the globe: Manifestations and lessons for Anglophone sub-Saharan Africa. *GeoJournal* 87: 815–28. [CrossRef]

Chowdhury, Shahjahan. 2020. How Much the Permission-Based Investigation in Hospitals Would Be Effective. *BBC News Bangla*, August 6. Available online: https://www.bbc.com/bengali/news-53683132 (accessed on 16 January 2023).

Creswell, John W. 2009. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 3rd ed. Thousand Oaks: Sage Publications.

Creswell, John W., and J. David Creswell. 2017. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 5th ed. New Delhi: Sage Publications.

Daniel, Sir John. 2020. Education and the COVID-19 pandemic. *Prospects* 49: 91–96. [CrossRef]

Doyle, Louise, Anne-Marie Brady, and Gobnait Byrne. 2009. An overview of mixed methods research. *Journal of Research in Nursing* 14: 175–85. [CrossRef]

Dutta, Anwesha, and Harry W. Fischer. 2021. The local governance of COVID-19: Disease prevention and social security in rural India. *World Development* 138: 105234. [CrossRef] [PubMed]

Fattah, Md. Abdul, Syed Riad Morshed, Md. Mojammel Hoque, Md. Fazle Rabbi, and Irin Akter Dola. 2022. Impacts of COVID-19 outbreaks on the lower-income groups and attainments of SDGs: A study of the fast-growing commercial capital city, Chittagong, Bangladesh. *Frontiers in Engineering and Built Environment* 2: 107–20. [CrossRef]

Gallego, Jorge A., Mounu Prem, and Juan F. Vargas. 2020. Corruption in the Times of Pandemia. Available online: https://ssrn.com/abstract=3600572 (accessed on 28 January 2023).

Golechha, Mahaveer. 2020. COVID-19 containment in Asia's largest urban slum Dharavi-Mumbai, India: Lessons for policymakers globally. *Journal of Urban Health* 97: 796–801. [CrossRef]

Gomes, Veronica. 2020. Mobile Financial Services Soaring in a Pandemic Stricken Bangladesh. *The Daily Star*, May 8. Available online: https://www.thedailystar.net/toggle/news/mobile-financial-services-soaring-pandemic-stricken-bangladesh-190050 (accessed on 12 February 2021).

Government of the People's Republic of Bangladesh. 2022. National Urban Poverty Reduction Program. Project Number: 00084928. Available online: https://info.undp.org/docs/pdc/Documents/BGD/Signed_Prodoc_NUPRP.pdf (accessed on 17 December 2022).

Grover, Sandeep, Swapnajeet Sahoo, Aseem Mehra, Ajit Avasthi, Adarsh Tripathi, Alka Subramanyan, Amrit Pattojoshi, G Prasad Rao, Gautam Saha, and KK Mishra. 2020. Psychological impact of COVID-19 lockdown: An online survey from India. *Indian Journal of Psychiatry* 62: 354–62. [CrossRef] [PubMed]

Haque, Md. Nazmul, Saifullah Bin Ansar, Gitisree Biswas, Md. Razzakul Islam, and Abdullah Al Mamun. 2020. The impact of COVID-19 on socio economic condition of city people: Lessons from the selected KCC area. *Journal of Engineering Science* 11: 117–26. [CrossRef]

Hasam, Abul, Shahida Arafin, Saima Naznin, Md. Mushahid, and Mosharraf Hossain. 2017. Informality, poverty and politics in urban bangladesh: An empirical study of Dhaka City. *Journal of Economics and Sustainable Development* 8: 158–82.

Islam, Fakhrul. 2020. Cash Support: Govt to Give Tk 2500 to Each of 5 m Families. *Prothom Alo*, May 10. Available online: https://en.prothomalo.com/bangladesh/cash-support-govt-to-give-tk-2500-to-each-of-5m-families (accessed on 11 May 2020).

Islam, Rizwanul. 2020. *The Impact of COVID-19 on Employment in Bangladesh: Pathway to an Inclusive and Sustainable Recovery*. Dhaka: Bangladesh Institute of Labour Studies-BILS.

Islam, Taimur, Anup Kumar Talukder, Nurealam Siddiqui, and Tofazzal Islam. 2020. Tackling the COVID-19 pandemic: The Bangladesh perspective. *Journal of Public Health Research* 9: 1–18. [CrossRef]

Kimani-Murage, Elizabeth W., Lilly Schofield, Frederick Wekesah, Shah Mohamed, Blessing Mberu, Remare Ettarh, Thaddaeus Egondi, Catherine Kyobutungi, and A. Ezeh. 2014. Vulnerability to food insecurity in urban slums: Experiences from Nairobi, Kenya. *Journal of Urban Health* 91: 1098–113. [CrossRef] [PubMed]

Mahmood, Muhammad. 2020. COVID-19: Economic Challenges Facing Bangladesh. *The Financial Express*, June 13. Available online: https://thefinancialexpress.com.bd/views/covid-19-economic-challenges-facing-bangladesh-1592064588 (accessed on 4 September 2020).

Mahmood, Shehrin Shaila, Md. Zahid Hasan, A. M. Rumayan Hasan, Md. Golam Rabbani, Farzana Begum, Tariq Bin Yousuf, Syed Manzoor Ahmed Hanifi, Daniel D. Reidpath, and Sabrina Rasheed. 2022. Health system impact of COVID-19 on urban slum population of Bangladesh: A mixed-method rapid assessment study. *BMJ Open* 12: e057402. [CrossRef]

Mamun, Mohammed A. 2021. Suicide and suicidal behaviors in the context of COVID-19 pandemic in Bangladesh: A systematic review. *Psychology Research and Behavior Management* 14: 695–704. [CrossRef]

Mandal, Shankar C., Puja Boidya, Md. Inja-Mamun Haque, Anwar Hossain, Zubair Shams, and Abdullah-Al Mamun. 2021. The impact of the COVID-19 pandemic on fish consumption and household food security in Dhaka city, Bangladesh. *Global Food Security* 29: 100526. [CrossRef] [PubMed]

Matamanda, Abraham R., Verna Nel, Nelson Chanza, Lucia Leboto-Khetsi, Fortune Mangara, and Partson Paradza. 2022. The Political Economy of COVID-19 Pandemic: Lessons Learned from the Responses of Local Government in Sub-Saharan Africa. In *Local Government and the COVID-19 Pandemic: A Global Perspective*. Berlin/Heidelberg: Springer, pp. 103–28.

Mohiuddin, Abdul Kader. 2020. A pandemic review of Covid-19 situation in Bangladesh. *Journal of Bioscience & Biomedical Engineering* 1: 1–9.

Mohiuddin, Ahmed. 2019. Diabetes fact: Bangladesh perspective. *Community and Public Health Nursing* 4: 39–60.

Morol, Shishir. 2020. 79% of Patients Get Treatment over the Phone. *Daily Prothom Alo*, April 26. Available online: https://www.prothomalo.com/bangladesh/article/1653078/ (accessed on 9 August 2020).

Nath, Biswajit, Niru Choudhury, and Atin Kumar Mitra. 2022. Observing tectonic-geomorphological changes along the Dawki Fault and adjoining areas of Sylhet, Bangladesh from 1980 to 2020 using remote sensing and GIS techniques. *Journal of Earth System Science* 131: 160. [CrossRef]

New Age. 2020. TIB Finds Gross Corruption in COVID-19 Purchases. *New Age*, June 16. Available online: https://www.newagebd.net/article/108515/tib-finds-gross-corruption-in-covid-19-purchases (accessed on 7 August 2023).

Nyadera, Israel Nyaburi, and Francis Onditi. 2020. COVID-19 experience among slum dwellers in Nairobi: A double tragedy or useful lesson for public health reforms? *International Social Work* 63: 838–41. [CrossRef]

Obeng-Odoom, Franklin. 2020. COVID-19, inequality, and social stratification in Africa. *African Review of Economics and Finance* 12: 3–37.

Pérez-Escamilla, Rafael, Kenda Cunningham, and Victoria Hall Moran. 2020. COVID-19 and maternal and child food and nutrition insecurity: A complex syndemic. *Maternal & Child Nutritione* 16: e13036.

Rahman, Hossain Zillur, and Imran Matin. 2020. *Livelihoods, Coping, and Support during COVID-19 Crisis*. Dhaka: BRAC Institute of Governance and Development.

Raju, Emmanuel, Anwesha Dutta, and Sonja Ayeb-Karlsson. 2021. COVID-19 in India: Who are we leaving behind? *Progress in Disaster Science* 10: 100163. [CrossRef]

Ramírez de la Cruz, Edgar E., Eduardo José Grin, Pablo Sanabria-Pulido, Daniel Cravacuore, and Arturo Orellana. 2020. The transaction costs of government responses to the COVID-19 emergency in Latin America. *Public Administration Review* 80: 683–95. [CrossRef]

Recio, Redento B., Lutfun Nahar Lata, and Ishita Chatterjee. 2021. Rising inequalities, deepening divides: Urban citizenship in the time of COVID-19. *Geographical Research* 59: 500–13. [CrossRef]

Rose-Ackerman, Susan. 2021. Corruption and COVID-19. *EUNOMÍA Revista en Cultura de la Legalidad* 16–36. [CrossRef]

Ruiu, Maria Laura. 2022. Mismanagement of COVID-19: Lessons learned from Italy. In *COVID-19*. London: Routledge, pp. 175–88.

Sadia, Tasmiha Tabassum, and Arafat Rahaman. 2022. Neo-Liberal Pitfalls and the COVID-19 Pandemic Challenges in Bangladesh. *South Asia: Journal of South Asian Studies* 45: 800–16. [CrossRef]

Sakamoto, Maiko, Salma Begum, and Tofayel Ahmed. 2020. Vulnerabilities to COVID-19 in Bangladesh and a reconsideration of sustainable development goals. *Sustainability* 12: 5296. [CrossRef]

Schmidt, Vivien A. 2020. Theorizing institutional change and governance in European responses to the Covid-19 pandemic. *Journal of European Integration* 42: 1177–93. [CrossRef]

Seddiky, Md. Assraf. 2021. Mainstreaming Approaches for Disaster Risk Reduction in Non-Disaster Risk Reduction Nongovernmental Organizations Interventions in Bangladesh. Ph.D. dissertation, School of Architecture and Built Environment, University of Newcastle, Callaghan, NSW, Australia.

Seddiky, Md. Assraf, Helen Giggins, and Thayaparan Gajendran. 2021. Philosophical Underpinnings of Disaster Risk Reduction Research: The Case for Social Constructivism. *Studies of Applied Economics* 39: 10–18. [CrossRef]

Seddiky, Md. Assraf, Helen Giggins, and Thayaparan Gajendran. 2022a. Impact of Non-DRR NGOs' interventions for community-based DRR mainstreaming in Bangladesh. *International Journal of Disaster Risk Reduction* 77: 103088. [CrossRef]

Seddiky, Md. Assraf, Helen Giggins, and Thayaparan Gajendran. 2022b. Non-DRR NGOs strategies for livelihood development in the coastal communities of Bangladesh: A case study. *Natural Hazards* 111: 2155–75. [CrossRef]

Sharma Waddington, Hugh, Edoardo Masset, Sarah Bick, and Sandy Cairncross. 2023. Impact on childhood mortality of interventions to improve drinking water, sanitation, and hygiene (WASH) to households: Systematic review and meta-analysis. *PLoS Medicine* 20: e1004215. [CrossRef]

Singh, Devendra Raj, Dev Ram Sunuwar, Sunil Kumar Shah, Lalita Kumari Sah, Kshitij Karki, and Rajeeb Kumar Sah. 2021. Food insecurity during COVID-19 pandemic: A genuine concern for people from disadvantaged community and low-income families in Province 2 of Nepal. *PLoS ONE* 16: e0254954. [CrossRef]

Sishi, Siyabonga, and Alexander Winning. 2020. COVID-19 Graft Scandals Fuel South Africans' Anger with Ruling ANC. *Reuters*, September 16.

Sohel, Md. Salman, Babul Hossain, Md. Kausar Alam, Guoqing Shi, Rubaiyat Shabbir, Md. Khaled Sifullah, and Most Monowara Begum Mamy. 2022. COVID-19 induced impact on informal migrants in Bangladesh: A qualitative study. *International Journal of Sociology and Social Policy* 42: 473–97. [CrossRef]

Stiegler, Nancy, and Jean-Pierre Bouchard. 2020. South Africa: Challenges and successes of the COVID-19 lockdown. *Annales Médico-Psychologiques, Revue Psychiatrique* 178: 695–98. [CrossRef] [PubMed]

Swapan, Mohammad Shahidul Hasan, Atiq Uz Zaman, Tahmina Ahsan, and Fahmid Ahmed. 2017. Transforming urban dichotomies and challenges of South Asian megacities: Rethinking sustainable growth of Dhaka, Bangladesh. *Urban Science* 1: 31. [CrossRef]

Tampe, Tova. 2021. Potential impacts of COVID-19 in urban slums: Addressing challenges to protect the world's most vulnerable. *Cities & Health* 5: S76–S79.

Thanh Le, Tung, Zacharias Andreadakis, Arun Kumar, Raúl Gómez Román, Stig Tollefsen, Melanie Saville, and Stephen Mayhew. 2020. The COVID-19 vaccine development landscape. *Nature Reviews Drug Discovery* 19: 305–6. [CrossRef]