COVID-19 PANDEMIC AWARENESS AND ITS IMPACT ON BANGLADESHI PEOPLE: A COMMUNITY BASED SURVEY

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ABSTRACT

Background: The present study has been carried out to find out the people’s perception about the COVID-19 pandemic and the effects of this pandemic on their daily lives.

Methods: A Google form was used to create an online survey questionnaire distributed via personal relationships and social media. Data were collected using questionnaires consisting of socio-demographic status of participants, COVID-19 concepts and changes in the participants’ lifestyle. A total of 1088 respondents took part in the survey, and the results were evaluated using several statistical approaches. The results were presented in a variety of tables and graphs.

Results: Males made up 53.3% of the participants, while females made up 46.7% who were from villages (29.87%), cities (53.77%), and semi-urban areas (16.36%). Most participants reported that they got information about the COVID-19 pandemic from social media, and they cited ‘fever’ as an indicator of the sickness. Although the amount of physical interactions with friends and family has not dropped much, working conditions and employment status have significantly altered. The majority of the participants claimed they have no concerns about the COVID-19.

Conclusion: For up-to-date information regarding COVID-19, people in Bangladesh from all walks of life rely largely on social media. COVID-19 awareness isn’t enough to inhibit the spreading of the virus from community to community. Employees’ work schedules have also been drastically altered. To prevent transmission, we should all follow the safety rules strictly.

Keywords: awareness, Bangladesh, COVID-19, impact, knowledge.

INTRODUCTION

Individuals’ socio-economic status, job schedules, psychological behavior, and overall lifestyles have all changed substantially since the discovery of the novel corona virus disease caused by SARS-CoV-2. Bangladesh, a developing country in Southeast Asia, is also experiencing such changes in the daily lives of its citizens. The virus was originally discovered on March 8, 2020 in Bangladesh, when three COVID-19 positive patients were confirmed. Following that, the Bangladeshi government took a number of steps to prevent the virus from spreading and give critical medical care to COVID-19 sufferers. As part of these preparations, all educational institutions were closed, numerous hospitals were prepared to isolate COVID-19 patients, all sorts of public meetings were outlawed, and various law enforcement agencies coordinated to stop the virus from spreading.

According to a survey conducted on Bangladeshi people, the participants were mentally agitated and worried about the COVID-19 spread in the country. Various factors that contributed to the worry, includes weak healthcare management systems, low test rates, insufficient healthcare facilities, and shaky planning and implementation by Bangladesh’s Government. According to another report, the country does not practice complete lockdown. As a result, people are commuting on the streets of Dhaka city of Bangladesh. According to the study, slum dwellers in the city have a tough time maintaining social distance because each 10-16 families share only one bathroom. Bangladesh's healthcare system differs slightly from that of other countries throughout the world. In the same way that European countries run their hospitals, the hospitals in the United States are managed by a single umbrella. Government hospitals are rarely equipped with current equipment, and the system is disconnected. Although private hospitals provide exceptional care, they are
only accessible to the wealthy. Most private hospitals remained closed due to a lack of Covid-19 prevention equipment\(^2\). The objectives of the study includes-

a. Identifying the source of knowledge about the pandemic,

b. Estimating changes in people's day-to-day lives including income status,

c. Comparing family events caused by mental stress.

The study will help to recognize people’s source of knowledge about the pandemic and the effects of it on their daily lives. By using the results effective measures may be implemented by policy-makers to make the situation easy.

METHODS

A google form with the survey questions was made and disseminated to people from all walks of life via Facebook, WhatsApp and individual contacts. Health research based on Facebook surveys is becoming increasingly common, and various funding agencies support them\(^6\). The survey questions were chosen from the 'Covid-19 community response survey guidance'\(^7\), with some modifications to fit the country’s circumstances. The questionnaire was divided into three sections: (a), demographic information, (b), participant perceptions of the COVID-19, and (c) changes in their overall life as a result of the pandemic.

The participants’ demographic data (age, sex, residential details, educational status, and employment position) were included in the section (a). section (b). reviewed the participants’ basic understanding of COVID-19 and the source of their learned knowledge about the pandemic. The changes in people's lifestyles during the epidemic, social distancing, family crises as a result of the pandemic, and changes in employment status (if any) were discussed in section (c). The Google form was open for answers from July 14, 2020 until July 21, 2020. The assumed confidence level and margin of error were 95% and 5%, respectively, thus the required sample size was 385\(^9\). During this time, however, 1088 persons from various occupations completed the survey and their answers were taped. Students, employees, business people, and other professions were among the attendees. The questions were written in very simple and easy-to-understand language for simplicity of comprehension. There was also a phone number for people who didn't understand any of the terms used in the survey form in the questionnaire. The survey's goal was clearly indicated in the questionnaire's description. The information provided by the participants would not be utilized for commercial reasons or transferred to a third party.

During the survey, no sensitive and personal information was taken from the participants. The survey data was unprocessed, and it took extra investigation to make sense of it. MS Excel was used to run various statistical procedures (t-test, ANOVA test, etc.) on the data. Using the MS Excel program, many graphs and charts were created to depict numerical data better.

RESULTS AND DISCUSSION

Information on the population

Males made up 53.3% of the 1088 participants, while females were 46.7%. City, village, and semi-urban parts of the country were home to their residents. Figure 1 shows the actual number of participants in each age group.

![Figure 1: The number of participants based on their age and gender.](image)

However, it was obvious from the statistics that individuals from cities were better educated than those from other parts. Table 1 shows the educational qualifications of the participants in greater detail. To compare the situation, the participants’ work status was documented before and after the epidemic.

Before the pandemic, 25.1% of the participants were jobless, 16.1% were employed full-time, 10.8% were worked part-time, 31.5% were students, 5.1% were part-time, and 11.3% were self-employed. The following graph helps understand the employment situation (Figure 2).

| Residence      | Post graduate | Graduate | HSC | SSC | High School | PSC | Total |
|----------------|---------------|----------|-----|-----|-------------|-----|-------|
| Village        | 14            | 68       | 162 | 34  | 14          | 33  | 325   |
| Semi-city      | 16            | 46       | 79  | 16  | 10          | 11  | 178   |
| City           | 41            | 178      | 266 | 44  | 38          | 18  | 585   |
| Total          | 71            | 292      | 507 | 94  | 62          | 62  | 1088  |

PSC= Primary School Certificate, SSC=Secondary School Certificate; HSC= Higher Secondary Certificate
Source of COVID-19 knowledge
Some questions asked throughout the poll were used to gauge people's perceptions about COVID-19. When asked how they acquire information on COVID-19, 11.76% of respondents answered they use only social media (Facebook, Twitter, Instagram, etc.) as a source of information. In other circumstances, users combine social media posts with information from many sources (television, newspaper, friends and relatives, and various websites). However, when asked about the symptoms of COVID-19 sickness, the most common response was “fever”. Fever is a prevalent symptom in the other responses as well. Table 4 summarizes the most prevalent responses to the disease's symptoms. A set of questions were used to assess the participants' understanding of the COVID-19 disease transmission pathway. According to 47.33% of the participants, the virus can be spread by close contact with an infected person, contact with surfaces touched by the patient, and using the infected person's clothing and other belongings. Table 2 depicts the overall outcome.

Table 2: Participant's knowledge about COVID-19 spreading process.

| Process                                                                 | Number of participant |
|-------------------------------------------------------------------------|-----------------------|
| Contact of surfaces which are touched by patient, using the cloths and other things of infected person | 28                    |
| Close contact with infected person, using the cloths and other things of infected person | 43                    |
| Using the cloths and other things of infected person                   | 59                    |
| Close contact with infected person, contact of surfaces which are touched by patient | 77                    |
| Contact of surfaces which are touched by patient                        | 118                   |
| Close contact with infected person                                      | 248                   |
| Close contact with infected person, contact of surfaces which are touched by patient | 515                   |

COVID-19's impact on people's lifestyles
Individuals in the COVID-19 countries have experienced changes in their daily lives due to the pandemic. Bangladesh is not exempt from these problems. Due to the lockdown, many people cannot go out for their daily requirements. COVID-19 has a greater impact on men, who have died as a result of it, and who are at a higher risk. Some countries adopt several measures to control the situation. Several offices operate online, and their employees work from home. Many staff has been placed on leave as a result of the pandemic. Table 3 depicts the general situation of employees. Social gatherings with friends and relatives have also fallen significantly. The cause for this could be public awareness of the COVID-19 transmission or a government directive. No statistically significant decrease in social connections with friends and family (\(p=1\)). As a result, people must exercise greater caution. Figure 3 has more information regarding this. Personal and familial data were collected from the individuals to assess psychological stress. Due to the pandemic condition, 64.79% of the total participants reported that among their family members, there were no violent activities, whereas 23.71% stated that their family members were sometimes irritable with one another.

Table 3: Change of employment status due to this pandemic.

| Working condition                        | Number of participants |
|------------------------------------------|------------------------|
| No change                                | 184                    |
| Office from own resident                 | 432                    |
| Working the same hours but earning a lower salary | 45                    |
| Going to work for a shorter period of time | 127                   |
| Workplace suspension                     | 81                     |
| Total                                    | 869                    |

Regarding individual mental health, 53.5% of respondents said they are not bothered at all, whereas 25% said they are mildly stressed and have occasional worries. On the other hand, 21.5% said they are
CONCLUSION

According to the survey, most people use social media posts and videos to spread information about COVID-19 illness. As a result, the relevant authority should assess the content posted on social media sites relating to the epidemic. Establishing certain standards for sharing content on social media is also crucial. Physical encounters with friends and relatives have remained quite consistent. The government should initiate measures to keep people at home and provide sufficient personal protection equipment for those who go out.

CONFLICT OF INTEREST

No conflict of interest associated with this work.

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AUTHOR’S CONTRIBUTION

Authors MMI and AZ planned and designed the protocol of the study. MMI and MINM collected the data. MMI and MA drafted the manuscript. MMI supervised the whole study. All authors read and approved the final manuscript for publication.

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