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## Knowledge and Awareness of General People about Covid19 Infection, an Online Study in Eastern India

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### Abstract

**Background:** The biggest pandemic of this decade has caused global, social, and economic disruption <sup>(1)</sup>. Misinformation spread via news and social media has created widespread xenophobia, discrimination, fear, misbehavior to people, doctors, other health care workers <sup>(2)</sup>. All these factors put a huge burden on the mental health of the population. In this background, we tried to assess the awareness about covid 19 after about one year of struggle during the second wave.

**Methodology:** An anonymous questionnaire was prepared by the Department of Psychiatry of College of Medicine & Sagore Dutta Hospital, Kolkata. The Questionnaire includes basic knowledge of the people, epidemiological characteristics, anxiety, and depression. The Questionnaire circulated through the online platform. Responses were recorded in the excel sheet.

**Result:** Most of the respondents (594, 98.7%) know that Covid 19 is a viral disease. 82.6% (497) people believe that the most important aspect of this disease is infectivity and not mortality (93,15.4%). 80.6% believe that hand washing, social distancing, lockdown all three are essential in containing the disease. Most of the participants were happy with the steps taken by Government.

**Discussion:** Most of the participants in this study knew that covid 19 is a viral infection and the important aspect of the disease is infectivity, not mortality. So the majority of the persons were aware of the basic pathology of the disease. And they believe that safety measures will restrict disease.

**Key Word:** Covid 19, HADS, Depression, Anxiety.

### Introduction

Covid 19 pandemic, the biggest pandemic of

this decade is caused by the SARS CoV2 virus. It originated in Wuhan, China in December 2019 and

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rapidly infected over 4.89 million people in over 188 countries taking a toll of 323000 deaths up to May 2020<sup>(3)</sup>. WHO has already declared it to be a global pandemic on 11 th March 2020<sup>(4)</sup>. It is a highly infectious and contagious disease, spreads via droplets while talking, coughing, sneezing, or by touching the face after touching the infected surface<sup>(5)</sup><sup>(6)</sup>. Common symptoms are fever, fatigue, cough, anosmia. Serious symptoms are shortness of breath, pneumonia, Acute Respiratory Distress Syndrome<sup>(7)</sup>. Though many remain asymptomatic throughout the illness. No specific therapy is available to date. Ignorance, unpreparedness, and casual approach by many countries have already taken the lives of a huge number of people, mainly the elderly and those with comorbidities. The pandemic has caused global, social, and economic disruption including the biggest recession of the world economy in this decade<sup>(1)</sup><sup>(8)</sup>. It has led to postponement and cancellation of sporting, academic, political, religious, and cultural events, widespread shortage of supply of food, medicine, industrial raw material, human Resource, etc leading to exacerbation of panic buying, storing, and black marketing. Misinformation spread via news and social media has created widespread xenophobia, discrimination, fear, misbehavior to Chinese people<sup>(9)</sup>, doctors, other health care workers, a particular religion, overseas, migrant population, and those belonging to regions of high infection rate<sup>(10)</sup>.

All these factors put a huge burden on the mental health of the population. These constant worries have put them in a higher incidence of stress, anxiety, worry, obsession, post-traumatic stress, depression. They are stressed by their rigorous daily duty and along with that being isolated<sup>(11)</sup>, cornered, abuse, and sometimes getting assaulted by neighbors for fear of spreading infection.

Older people are likely to be less tech-savvy- so social isolation/ distancing have made them more worried about non-Covid health issues<sup>(12)</sup><sup>(13)</sup>, running out of money due to lesser interest rates on fixed deposits imposed upon them by the Government, procuring food by going outside, paying bills of electricity, telephone, medicine due to inadequate money, lack of Government supply

initiative, inadequate knowledge of digital payments, uprising cost of daily commodities due to ample black marketing. Covid affects mainly the elder age group with comorbidities. This is another cause of worry in the elderly age group. All these hinder elderly people from venting out or sharing their anxiety, worry with others.

People belonging to a lower socioeconomic group like daily wagers, migrant workers stationed away from home who merely have any savings for the future are worried about getting daily food either by Government supply or on payment with the higher price due to inadequacy or black marketing. They are likely to develop anxiety, depression, suicidality, worry, stress, impulsivity, etc<sup>(14)</sup>.

In this background, we tried to assess the awareness about covid 19 after about one year of struggle during the second wave.

**Methodology:** An anonymous questionnaire was prepared by the Department of Psychiatry of College of Medicine & Sagore Dutta Hospital, Kamarhati, Kolkata. The Questionnaire was based on knowledge of people regarding this pandemic, basic epidemiological data, and questions based on the Hospital Depression and Anxiety Scale (HADS) which is a patient rating questionnaire having 14 questions. Score 0-7 is normal, 8-10 borderline abnormal, 11-21 abnormal. The questionnaire was prepared in Google forms and relevant links sent via SMS, mail, WhatsApp, and Facebook. The inputs of participants were automatically stored in an Excel sheet which later was analyzed in statistical software. There were no inclusion and exclusion criteria, all inputs were taken into account.

We followed Helsinki guideline and obtained informed consent in digital formal. As it was an anonymous questionnaire participant's identity was not disclosed.

### Result:

Most of the respondents (594, 98.7%) know that Covid 19 is a viral disease. 82.6% (497) people believe that the most important aspect of this disease is infectivity and not mortality (93,15.4%).

**Table 1: Distribution of the participants according to their awareness regarding COVID-19 and its effect**  
**Awareness regarding COVID-19 and its effect**

Awareness regarding COVID-19 and its effect		Frequency	Percent
Heard about COVID-19 pandemic	No	8	1.3
	Yes	594	98.7
COVID-19 caused by	Bacteria	17	2.8
	Virus	585	97.2
Most dreadful aspect of this disease	Infectivity	497	82.6
	Morbidity	12	2.0
	Mortality	93	15.4
Most important step to stop its spread	All of them	485	80.6
	Hand washing	2	.3
	Lock down	18	3.0
	Social distancing	97	16.1
Lockdown will affect economy of India	No	31	5.1
	Yes	571	94.9
Lockdown will affect state (West Bengal) economy	No	47	7.8
	Yes	555	92.2
Lockdown will affect World economy	No	32	5.3
	Yes	570	94.7
Lockdown will affect personal economical status	No	96	15.9
	Yes	506	84.1
Lockdown will affect personal mental health	No	218	36.2
	Yes	384	63.8
Lockdown will affect the mental health of the children	No idea	130	21.6
	No	217	36.0
	Yes	255	42.4

Most (80.6%) believe that hand washing, social distancing, lockdown all three are essential in containing the disease. Most people believe that lockdown is going to affect the world economy

(94.7%), Indian economy (94.9%), the economy of West Bengal (92.2%), personal economic status (84.1%), personal mental health status (63.8%), mental health of children (42.4%).

**Table 2: Distribution of the participants according to their satisfaction regarding the steps taken by the Government**

Satisfaction regarding the steps taken by Government

Satisfaction regarding the steps taken by Government		Frequency	Percent
Happy with lockdown	No	126	20.9
	Yes	476	79.1
Happy with the forced social distancing	No	99	16.4
	Yes	503	83.6
Happy with procuring essential services	No	234	38.9
	Yes	368	61.1

Most of the participants were happy with the steps taken by Government e.g, Lockdown (79.1%), forced social distancing (83.6%), procuring essential services (61.1%).

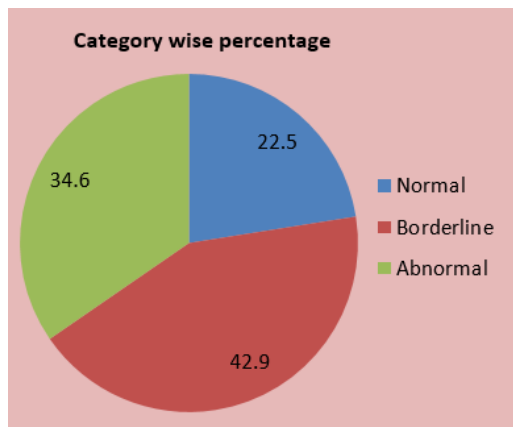
**Table 3: Distribution of the participants according to their health-seeking behavior during the last week**

**Health seeking behavior**

Health seeking behavoiur		Frequency	Percent
Called the doctor regarding minor issues (throat pain, feverish,bodyache etc)	0	305	50.7
	1-2	289	48.0
	3-5	7	1.2
	> 5	1	.2
Thought of checking routine blood tests	0	324	53.8
	1-2	256	42.5
	3-5	18	3.0
	> 5	4	.7

The health-seeking behavior during this pandemic increased. 48% (289) participants thought at least once or twice to call doctor regarding minor issues like throat pain, feverish feeling, body aches, etc. 42.5% (256) participants thought at least once or twice in last week to check blood for fear of coronavirus infection. The most important finding of the study shows that 34.6% population qualified for abnormal scores in HADS indicating depression and anxiety both.

**Figure 1: Distribution of participants according to their Category based on HAD scale**



the majority of the persons were aware of the basic pathology of the disease. So they believe that safety measures will restrict disease and for that reason they support the steps taken by the Government and knows sanitization, social distancing will stop the spread of the virus. Though lockdown will affect the country's, as well as the state economy, and will affect all segments of the society, it is helpful to survive.

During the lockdown of the first wave, many people lost their job and is running into a financial crisis. Even with all those odds most of the people were happy with the Governments role regarding lockdown, social safety measures, and providing essential services.

But the uncertainty of the course of the disease makes the people psychologically distressed. Health-seeking behavior is increased and people are more anxious about minor issues and frequently see the doctor in trivial issues and go for lab tests.

Though we reside in a third-world country our people are aware of the basic pathophysiology of Covid 19 which helps us to fight the disease efficiently with limited resources.

**Discussion**

In our study, most of the participants knew that covid 19 is a viral infection and the most important aspect of the disease is infectivity, not mortality. So

**Conclusion**

After about one year of struggle, we have gained the basic knowledge of Covid 19 infection and preventive measures. We have sacrificed our job,

our entertainment at the cost of survival. During the lockdown, many people lost their job which put a lot of burden on our economy. People are using health services from the government sector and it caused a lot of pressure in the government-run health sectors. In this hugely populated area where the doctor-patient ratio is also low, it is very difficult to serve all the people. It is necessary to increase the health care staff in the health sector to improve the service and to serve the increased number of people who are going through psychological problems in this crisis.

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**Conflicts of interest:** There are no conflicts of interest

**Ethical Clearance:** Informed consent was obtained from each participant. Only willing parents participated in the study. They were assured to keep the information confidential.

Respondents were asked that they have full right to withdraw from the study if they feel embarrassed to answer any question. Ethical clearance was not obtained for the study.

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