



## KNOWLEDGE, ATTITUDE AND PRACTICE TOWARDS COVID 19 AMONG THE URBAN COMMUNITY: A CROSS SECTIONAL STUDY

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**ABSTRACT** **Background:** Corona virus disease 19 (COVID-19) is an infectious disease caused by newly discovered corona virus. In order to reduce the cases of COVID-19, it is important to practice strict control measures. People adherence to control measures is affected by their knowledge, attitude and practices towards COVID-19. **Objectives:** Hence, this study was conducted with an objective to assess the knowledge, attitude and practice towards COVID-19 in the urban community in Kolkata. **Methods:** A cross sectional study was conducted among peoples age more than 15 years in an urban area of Kolkata. Total 200 individuals were interviewed during January 2021 to March 2021 by using predesigned and pretested questionnaire after taking written informed consent. Data was entered in MS Excel and descriptive statistical measures like percentage, mean, and standard deviations were calculated. **Results:** Among 200 participants, majority (54.6%) of the interviewed subjects were less than 40 years old. Majority, 85% of the respondents responded correctly that the spread of the disease is by close contact with an infected person and respiratory droplets, 81% knew correctly the early signs of COVID-19. 80% of them had the confidence that the world will win the battle against COVID-19. Most (86%) of the study subjects were taking proper preventive measures while leaving home. **Conclusions:** Majority of the study participants exhibited good knowledge, favorable attitude, and sensible practices regarding COVID-19. This good knowledge of the study population towards COVID-19 was mainly due to wide awareness created by the Government through various social media.

**KEYWORDS :** Attitude, COVID 19, Knowledge, Practices

### INTRODUCTION

COVID-19 pandemic first appeared in Wuhan City, Hubei Province of China, in December 2019. With the constant rise in reported cases, the World Health Organization (WHO) declared this outbreak as a global pandemic on the 12 March 2020.<sup>1</sup>

This disease which originated from bats and pangolins from Wuhan, China manifests as symptoms of fever, dry cough, and dyspnoea. Extra-pulmonary atypical symptoms like anosmia/hyposmia, dysgeusia, and diarrhoea can also be seen. Asymptomatic individuals can transmit the disease during incubation period. The virus can survive on surfaces up to 5 days depending on the type of surfaces<sup>2,3</sup>

Awareness is the greatest agent for change” Eckhart Tolle Corona virus disease 19 (COVID-19) is an infectious disease caused by newly discovered corona virus. Severe acute respiratory syndrome Corona virus-2 (SARS-CoV-2) which was first identified in December 2019 in Wuhan, China has spread rapidly, evolving into a full blown pandemic.<sup>4</sup> Most people infected with Covid-19 experiences mild to moderate respiratory illness. Symptoms may appear 2 to 14 days after exposure to virus and include symptoms like fever, chills, dry cough, sore throat, pneumonia and may lead to further fatal complications especially among people with associated co morbid conditions The best way to prevent and slow down transmission is to be well informed about the COVID-19 virus, the disease and its spread. The COVID-19 virus spread primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes. At this time, there is no specific vaccine or treatment for COVID-19. However, there are many ongoing clinical trials evaluating potential treatment.<sup>5</sup> Two kinds of tests are available for COVID-19; Viral test and Antibody test. A viral test tells if a person have current infection. An antibody test tells if the person had a previous infection. An antibody tests may not be able to show if the person have a current infection, because it can take one to three weeks after infection to make antibodies.<sup>6</sup>

In India, 44,223,557 confirmed cases, 5,26,928 deaths, out of which 13,43,442 confirmed cases and 15,120 deaths in West Bengal.<sup>7</sup>

Protective measures like regularly and thoroughly cleaning once hands with an alcohol based hand rub, or washing them with soap and water, maintain at least one meter distance between oneself and others, avoid going to crowded places, avoid touching eyes, nose and mouth can prevent from COVID 19 infection. Other measures include following good respiratory hygiene by covering mouth and nose with bent elbow or tissue when the person cough or sneeze and dispose the used tissue and further wash hands. Staying home and self-isolate even with minor symptoms such as, cough, headache, mild fever, until one recover is advisable to prevent the spread. If anybody present with symptoms like fever, cough or difficulty breathing, it is advisable to seek medical attention.<sup>8</sup>

In order to reduce the cases of COVID-19, it is important to practice strict control measures. People adherence to control measures is affected by their knowledge, attitude and practices towards COVID-19. Hence, this study was conducted in order to assess the knowledge, attitude and practice towards COVID-19 in the urban community in Kolkata

### MATERIAL AND METHODS

The present study was a population based cross sectional study conducted in Tangra area of Kolkata. Sample size calculated as 200 considering this population with expected probability of awareness as 50%, at confidence level 95%, acceptable error 5% and non-response rate 5%. Individuals were selected by simple random sampling method. Study participant were more than 15 years of age and resident of the same area was used as inclusion criteria. Data collection was done for 3 months (i.e. from January 2021 to March 2021) by using predesigned and pretested questionnaire regarding knowledge about signs, preventive measures about COVID-19, attitude regarding social distancing, lock down practices and practice regarding stocking food items at home and preventive measures after taking written informed consent. Consent of participant age less than 18 years was taken from their parents.

**Inclusion criteria and Exclusion criteria :**

People who consented to participate were included in the research work. Houses which were locked were excluded.

Information was cleaned and entered in Microsoft Excel 2016 software and analysed using SPSS version 20.0 and findings were reported in the form of descriptive statistics.

**RESULTS**

A total of 200 respondents were included in the study. Majority (54.6%) of the interviewed subjects were aged less than 40 years old, while rest were between 30-40years (26.6%). 62% of the participants were male. Almost all respondents (96.6%) were Hindu. 68.8% of study subjects had education less than 10th standard, while 6.2% were illiterate. 34.2% were private employees followed by laborer (26.8%).

**Table 1: Knowledge about COVID-19 among study participants**

Knowledge about Covid 19	Yes		No	
	Frequency	%	Frequency	%
COVID-19 spreads by contact with an infected person and through respiratory droplets.	170	85.0	30	15.0
Early sign of COVID-19 are fever, difficulty breathing, cough and sore throat.	162	81.0	38	19.0
Do you agree washing hands regularly is an effective measure to kill the novel Corona virus?	172	86.0	28	14.0
Do you think that risk of spread of the novel corona virus is both from symptomatic as well as non- symptomatic cases?	138	69.0	62	31.0
Symptomatic treatment, early screening, social distancing are important measures to stop the spread of the novel Corona virus.	188	94.0	12	6.0
The disease is more dangerous in people with cancer, diabetes and chronic respiratory disease.	168	84.0	32	16.0
Do you agree that isolation and quarantine are an important step to stop the spread of the novel corona virus?	166	83.0	34	17.0
An isolation period of 14 days is important for a person who had contact with corona virus infected patients.	170	85.0	30	15.0
Currently there is no specific vaccine and cure for COVID-19.	138	69.0	62	31.0
Do you think pregnant women are more at a risk towards COVID-19?	132	66.0	68	34.0
Do you think eating non-vegetarian food is responsible for spread of COVID-19?	56	28.0	144	72.0
Do you agree that eating citrus fruits and gargling with salt water can help prevent infection with novel corona virus?	152	76.0	48	24.0
Do you think drinking alcohol can prevent you from COVID-19?	42	21.0	158	79.0

Regarding knowledge on mode of spread of COVID-19 disease, 85% of the respondents responded correctly that the spread is by close contact with an infected person and through respiratory droplets, 81% knew the early sign/s of COVID-19. Most of the respondents (86%) agreed that washing hands regularly is an effective measure to kill the novel Corona virus, 31% didn't know that risk of spread of the novel corona virus is both from symptomatic as well as non symptomatic cases. 94% of participants were aware that symptomatic treatment, early screening, social distancing are important measures to stop the spread of the novel Corona virus. Most of them were aware of the fact that the disease is more dangerous in people with co-morbidities (84%). About 17% % didn't agree that isolation and quarantine are an important step to stop the spread of the novel corona virus, 69% of

them believed that there is no specific vaccine and cure for COVID-19. Majority 66% of study participants felt that pregnant women are more at a risk towards COVID-19. 28% had wrong notion that eating non-vegetarian food is responsible for spread. Majority 76% of participants agreed that eating citrus fruits and gargling with salt water can help prevent infection with novel corona virus. 21% felt that drinking alcohol can prevent oneself from covid-19 infection. (Table 1).

**Table 2: Attitude of the study participants towards COVID-19**

Attitude towards Covid 19	Yes		No	
	Frequency	%	Frequency	%
In recent days, have you gone to populated place?	58	29	142	71
Are you confident that the world will win the battle against COVID-19?	160	80	40	20
Do you agree with the idea of lockdown to prevent the spread of COVID-19?	166	83	34	17

Majority of participants (71%) had not been to any populated place recently. Majority of participants (80%) believed that world will win the battle against covid-19 pandemic. Only 17% didn't agree with the idea of lockdown. (Table 2)

**Table 3: Practices of the study participants against COVID-19**

Practices against COVID-19	Yes		No	
	Frequency	%	Frequency	%
Do you agree with the idea of grocery and medicine stocking?	98	49	102	51
Are you taking proper preventive measures while leaving home?	172	86	28	14
Do you feel more bonded to your family and friends in the duration of a lockdown?	158	79	42	21

About half of the study participants (49%) were stocking the groceries and medicines. While leaving home, almost all (86%) of them were following proper preventive measures. 79% of participants were feeling more bonded to their family and friends during lockdown. (Table 3)

**DISCUSSION**

The present study was aimed in assessing the knowledge about COVID-19 in community and population of urban area in Kolkata regarding the information about COVID-19 prevention and treatment plan as well as to create awareness regarding age groups being affected.

COVID-19 disease was first identified during the outbreak of severe acute respiratory syndrome in Wuhan, China in December 2019.<sup>9</sup> On the 11th of March 2020, the World Health Organization (WHO) characterized the disease as the first pandemic caused by Corona virus.<sup>10</sup> The disease had spread in more than 200 Countries with a mortality rate of about 5.7%.<sup>11</sup> In general, participants in our study had good knowledge about the disease, its methods of spread and prevention.

Majority of the study population (76%) believed that, eating citrus fruits and gargling with salt water can help to prevent infections, whereas more than 1/3rd of the participants in Indian community study had similar positive attitude towards this.<sup>12</sup> This may be mainly due to ancient myths and concepts followed by the participants. According to W.H.O., gargling warm or salt water and consuming citrus fruits will not kill novel corona virus.<sup>13</sup>

21% of the respondents believed that, drinking alcohol can prevent COVID-19, 14% of the respondents had similar belief in Indian community study.<sup>12</sup> Excessive consumption of alcohol can cause severe health related complications and no study substantiates that, consumption of alcohol can kill the virus. 66% of the respondents were aware of higher risk of developing COVID-19 in pregnancy, similar school of thought was found in Indian community study (83.19%).<sup>12</sup> According to our study, 83% of participants believed that, isolation is important for a person who had contact with Corona infected patients, whereas 99.1% of respondents in Malaysian study had similar opinion. This can be attributed to the study setting and population.<sup>14</sup>

In the present study participants had notable positive attitude and practice with a strong coalition of knowledge. Majority of the population showed an optimistic attitude towards the idea of lockdown, grocery and medicine stocking, way of taking proper preventive measures while leaving home and to keep themselves away from crowded places. Apart from that, they strongly believed that world can win the battle against COVID-19, similar findings were founded in the community study.<sup>12</sup>

## CONCLUSION

The study participants in community and population of urban area in Kolkata exhibited satisfactory knowledge, attitude, and sensible practices regarding COVID-19. This satisfactory knowledge of the study population towards COVID-19 was mainly due to wide awareness created by and by Ministry of health and family welfare departments of state and central government through various social media, helpline numbers, television advertisements and mobile messages.

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**Ethical approval:** The study was approved by the institutional ethics committee

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