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## COVID-19 AWARENESS ASSESSMENT - A SURVEY STUDY AMONGST THE INDIAN POPULATION

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### ABSTRACT

*The objective of this review study was to evaluate the degree of awareness among Indian populace with respect to the COVID-19. A review was directed among 3131 people to survey their degree of awareness with respect to COVID-19 and steps to be taken for its avoidance. The outcomes revealed that an extensive level of people found out about the pandemic, may be through online networking and news and knew about the method of spread of the infection and furthermore steps to be taken to keep it from spreading. This study will help government and peoples to understand and handle this coronavirus pandemic effectively and in prevention of COVID-19, which is crucial for the awareness of society in coming time.*

**Keywords** – COVID-19, SARS-CoV-2, Coronavirus

### 1. INTRODUCTION

Coronavirus disease 2019 (COVID-19) is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The disease was first identified in December 2019 in Wuhan, the capital of China's Hubei province, and has since spread globally, resulting in the ongoing 2019–20 coronavirus pandemic. The World Health Organization announced in February 2020 that COVID-19 is the official name of the disease. World Health Organization chief Tedros Adhanom Ghebreyesus explained that CO stands for corona, VI for virus and D for disease, while 19 is for when the outbreak was first identified: 31 December 2019. The name had been chosen to avoid references to a specific geographical location (e.g. China), animal species, or group of people, in line with international recommendations for naming aimed at preventing stigmatisation.<sup>1-3</sup>

Common symptoms include fever, cough, and shortness of breath. Other symptoms may include muscle pain, diarrhoea, sore throat, loss of smell, and abdominal pain. While the majority of cases result in mild symptoms, some progress to viral pneumonia and multi-organ failure. Most infections are self-limiting. COVID-19 tends to cause more severe illness in elderly population or in patients with underlying medical problems. As of 5 April 2020, more than 1.2 million cases of have been reported in more than two hundred countries and territories, resulting in over 64,700 deaths. More than 246,000 people have recovered.<sup>4-8</sup>

### 2. MATERIALS AND METHOD

This study was conducted using a survey (Table 1) which was disseminated via social media and other electronic medias. The survey was sent to 3200 people. The survey rendered 3131 responses. This survey, which was conducted, contained 15 questions

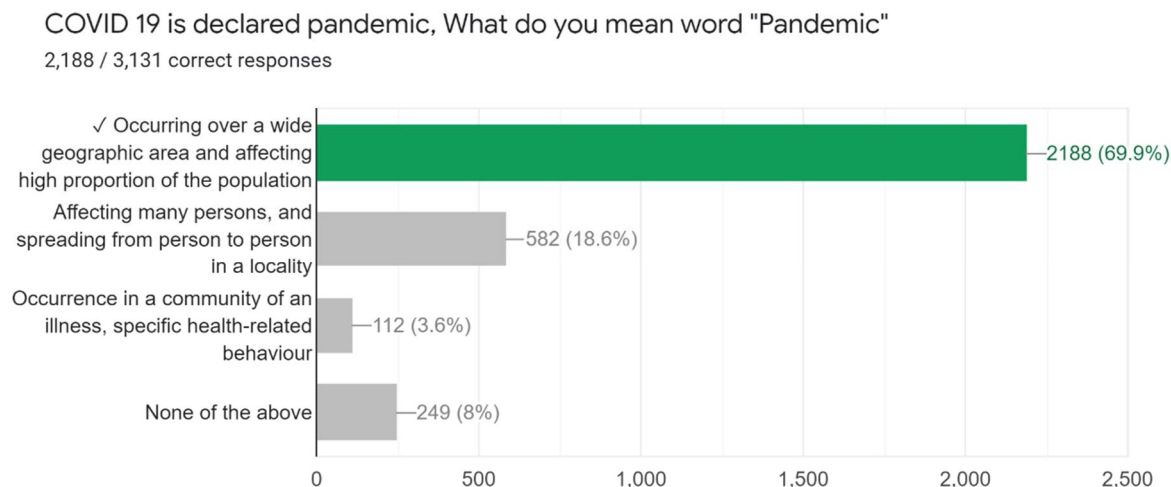
with multiple choice questions. All the individuals who answered the survey were informed about the confidentiality of their response and were also informed about the purpose of conducting this survey. Each and every individual of India of all age groups were included in this survey. The evaluation of this survey was done electronically using the interphase provided by the common survey software conducting site available on internet.

**Table 1: Survey questionnaire**

Q. No.	Question	Options given
1	What is original source of new corona-virus?	<input checked="" type="checkbox"/> Bats <input checked="" type="checkbox"/> Chicken <input checked="" type="checkbox"/> Vegetables <input checked="" type="checkbox"/> Fruits
2	New corona-virus can be spread by.....	<input checked="" type="checkbox"/> Personal contact of infected person <input checked="" type="checkbox"/> Patient associated Contaminated objects <input checked="" type="checkbox"/> Mass gathering with infected patient <input checked="" type="checkbox"/> All of the above
3	Which type of people can be infected by new corona virus?	<input checked="" type="checkbox"/> Young age <input checked="" type="checkbox"/> Old age <input checked="" type="checkbox"/> Adults <input checked="" type="checkbox"/> All of the above
4	New corona-virus can be transmitted in.....	<input checked="" type="checkbox"/> Hot climate <input checked="" type="checkbox"/> Humid climate <input checked="" type="checkbox"/> Cold climate <input checked="" type="checkbox"/> All weather conditions
5	To protect yourself from new corona-virus, you should *	<input checked="" type="checkbox"/> Wash your hand with water and soap <input checked="" type="checkbox"/> Use sanitizer <input checked="" type="checkbox"/> Use mask <input checked="" type="checkbox"/> Follow all of the above
6	After using mask, you should.....	<input checked="" type="checkbox"/> Dispose it properly in closed dustbin <input checked="" type="checkbox"/> Reuse them as it is <input checked="" type="checkbox"/> Not follow Social distancing <input checked="" type="checkbox"/> Not worry about Corona-virus
7	Social distancing is *	<input checked="" type="checkbox"/> to avoid/decrease contact between infected and non-infected <input checked="" type="checkbox"/> a non-pharmaceutical infection prevention <input checked="" type="checkbox"/> to stop or slow down the rate and extent of disease transmission <input checked="" type="checkbox"/> Combination of all of the above
8	Government of India launched ..... app as COVID 19 tracker	<input checked="" type="checkbox"/> Aarogya Setu App <input checked="" type="checkbox"/> e-Hospital App <input checked="" type="checkbox"/> e-Aushadhi App <input checked="" type="checkbox"/> e-Prisons App
9	India followed 14-hour voluntary public curfew on	<input checked="" type="checkbox"/> 22nd March 2020 <input checked="" type="checkbox"/> 24th March 2020 <input checked="" type="checkbox"/> 22nd April 2020 <input checked="" type="checkbox"/> 20th March 2020
10	_____ on Covid 19 are important for virus entry in cells. *	<input checked="" type="checkbox"/> Protein <input checked="" type="checkbox"/> Fat <input checked="" type="checkbox"/> Carbohydrate <input checked="" type="checkbox"/> Vitamins
11	COVID 19 is declared pandemic, What do you mean word "Pandemic" *	<input checked="" type="checkbox"/> Occurring over a wide geographic area and affecting high proportion of the population <input checked="" type="checkbox"/> Affecting many persons, and spreading from person to person in a locality <input checked="" type="checkbox"/> Occurrence in a community of an illness, specific health-related behavior <input checked="" type="checkbox"/> None of the above
12	Coronavirus affects which part of of Human body first? *	<input checked="" type="checkbox"/> Brain <input checked="" type="checkbox"/> Throat, Airways and Lungs <input checked="" type="checkbox"/> Stomach <input checked="" type="checkbox"/> Liver
13	SARS is *	<input checked="" type="checkbox"/> Severe acute circulatory syndrome <input checked="" type="checkbox"/> Severe chronic circulatory syndrome <input checked="" type="checkbox"/> Severe acute respiratory syndrome <input checked="" type="checkbox"/> Acute respiratory syndrome
14	Type of Sample collected for COVID Test include *	<input checked="" type="checkbox"/> Nasal and throat swab <input checked="" type="checkbox"/> Urine <input checked="" type="checkbox"/> Stool <input checked="" type="checkbox"/> Semen
15	Studies have shown that the COVID-19 virus can survive for _____ on plastic and stainless steel *	<input checked="" type="checkbox"/> 100 hours <input checked="" type="checkbox"/> 72 hours <input checked="" type="checkbox"/> 8 hours <input checked="" type="checkbox"/> 12 hours

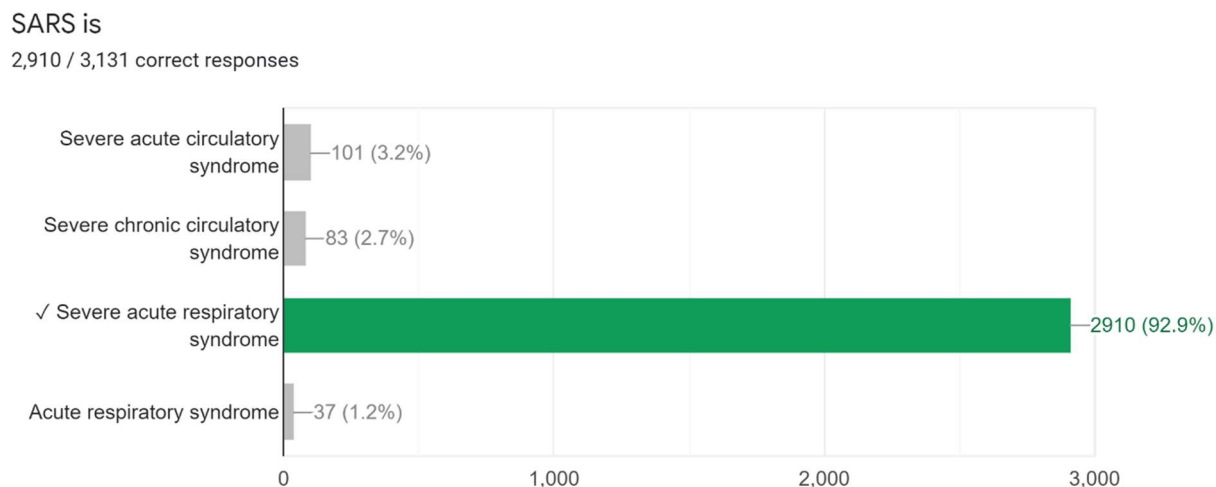
### 3. RESULTS

The survey was sent to 3200 people. The survey generated 3131 responses.



**Fig. 1: Awareness about the term Pandemic**

About 2188 (69.6%) people know the correct meaning of the term Pandemic, whereas 18.6% population believes that pandemic means virus affecting many persons, and spreading from person to person in a locality.

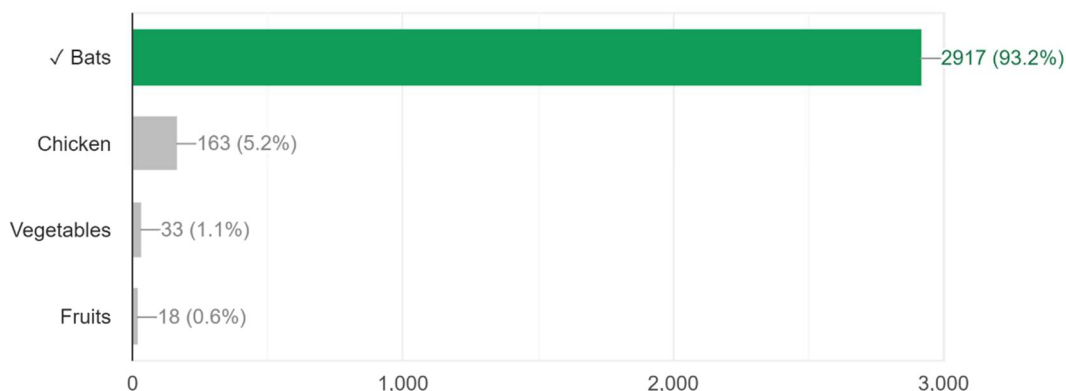


**Fig. 2: Awareness about SARS**

92.9 % people correctly know that SARS is Severe acute respiratory syndrome, 7.1 % didn't know full form of SARS.

What is original source of new corona-virus

2,917 / 3,131 correct responses

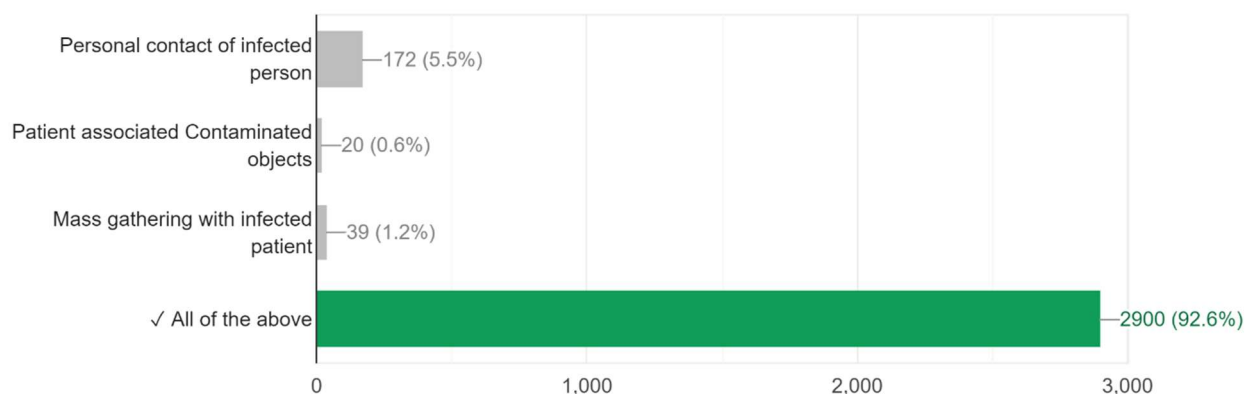


**Fig. 3: Awareness about source of SARS-CoV-2**

93.2% people believe that COVID-19 came from bats and 5.2 % from Chicken. 1.1 % people believe that SARS-CoV-2 came from vegetables whereas 0.6 % from fruits.

New corona-virus can be spread by

2,900 / 3,131 correct responses

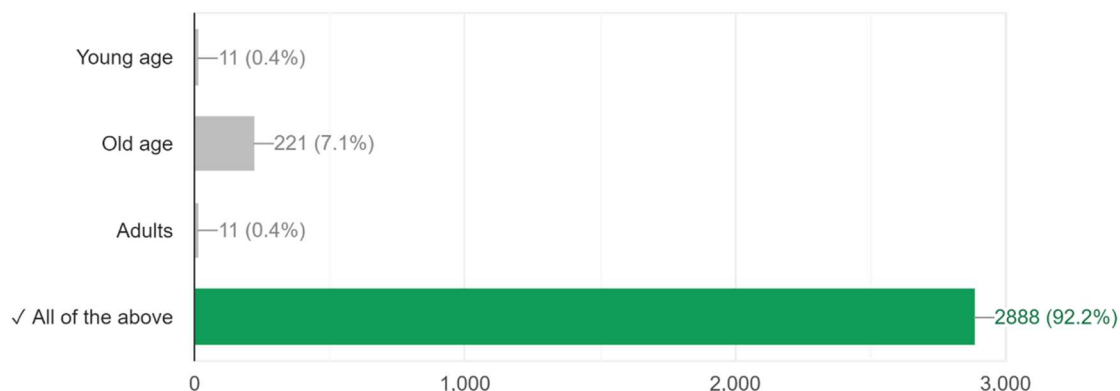


**Fig. 4: Awareness about spread of SARS-CoV-2**

5.5 % people believe that new corona virus is spread through personal contact of infected person, 1.2 % believes that it spreads through mass gathering with infected patient. 0.6 % people opted that for corona virus spreads through patient associated with contaminated objects and 92.6 % people believes that virus can be spread through all of the above medium.

Which type of people can be infected by new corona virus

2,888 / 3,131 correct responses

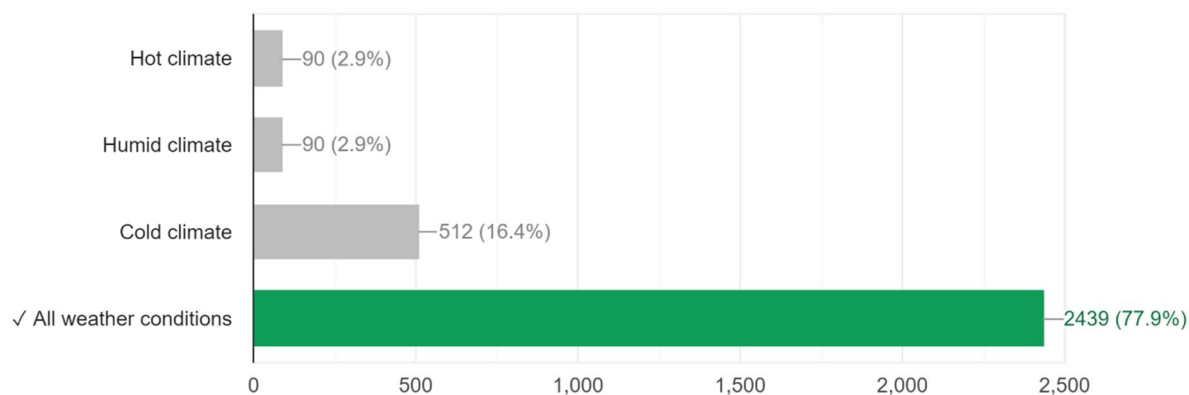


**Fig. 5: Awareness about age group of people more susceptible to SARS-CoV-2**

92.2 % people believed that all age groups are affected equally, 7.1 % believed that old age are infected by new corona virus, and 0.4 % believed that young age and adults are infected by new corona virus.

New corona-virus can be transmitted in

2,439 / 3,131 correct responses

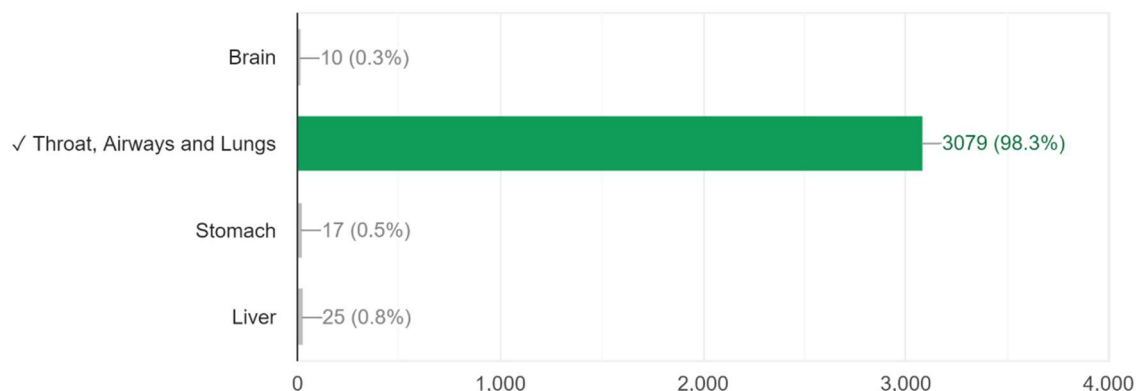


**Fig. 6: Awareness about transmission of corona virus**

Around 2.9 % people responded that new corona virus is transmitted in hot and humid climate, but 16.4 % people responded that it is transmitted in cold climate. 77.9 % people believes that new corona virus transmitted in all weather conditions.

Coronavirus affects which part of Human body first?

3,079 / 3,131 correct responses

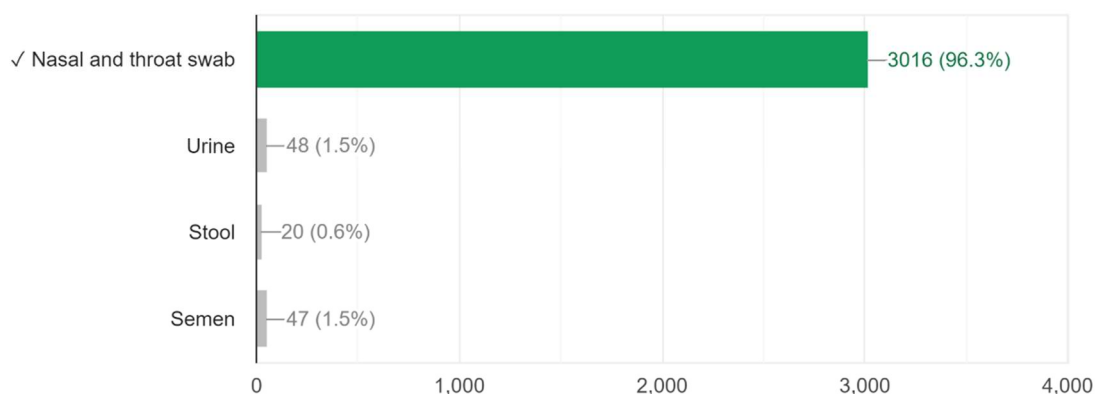


**Fig. 7: Awareness about corona virus infects which part of the human body**

Majority (98.3 %) of the population believes that corona virus affects throat, airways, and lungs of human body. Negligible population feels that it affects brain, stomach, and liver.

Type of Sample collected for COVID Test include

3,016 / 3,131 correct responses

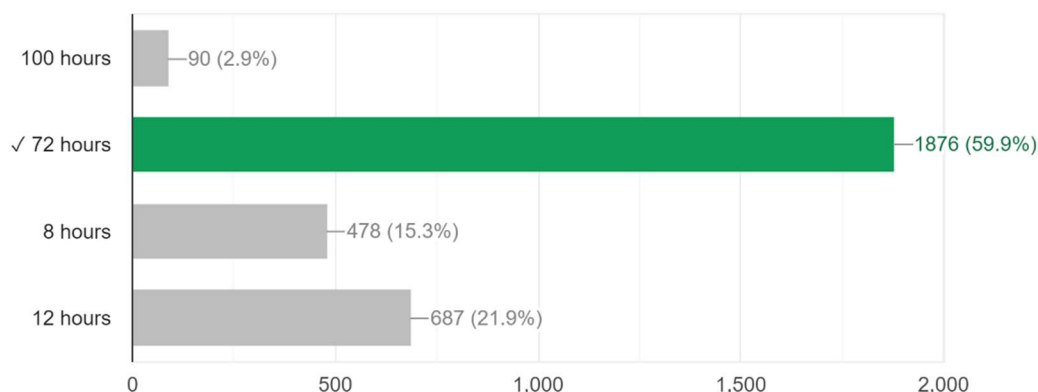


**Fig. 8: Awareness about sampling technique**

According to 96.3 % people, nasal and throat swabs are collected for COVID -19 test.

Studies have shown that the COVID-19 virus can survive for \_\_\_\_\_ on plastic and stainless steel

1,876 / 3,131 correct responses

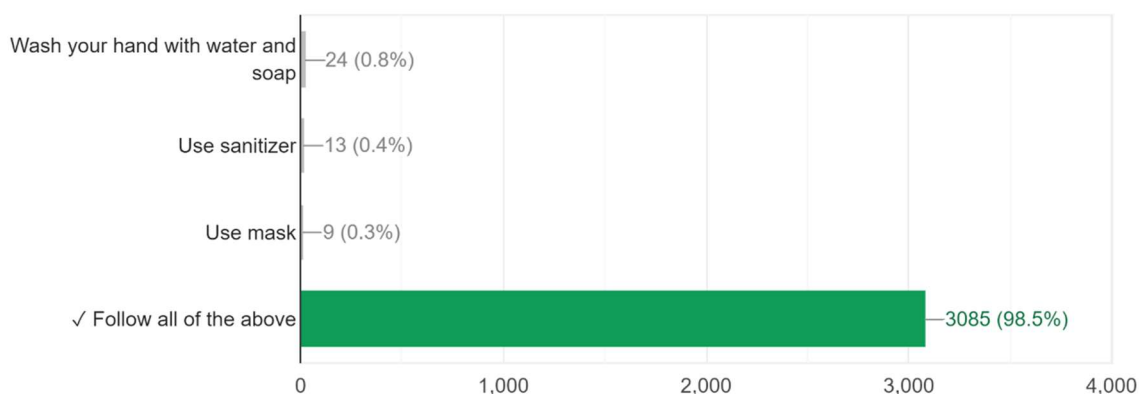


**Fig. 9: Awareness about survival of virus on plastic & steel**

According to 59.9 % COVID-19 virus can survive for 72 hours, 21.9 % for 12 hours, 15.3 % for 8 hours and 2.9 % for 100 hours on plastic and stainless steel.

To protect yourself from new corona-virus, you should

3,085 / 3,131 correct responses

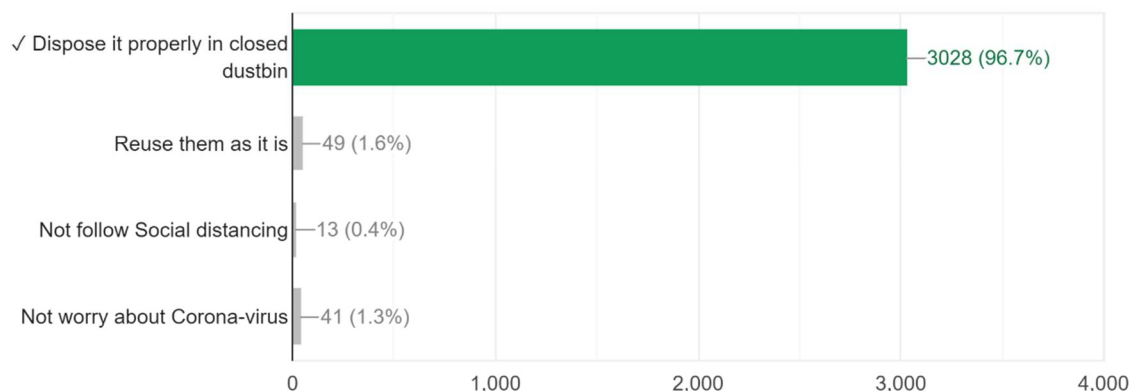


**Fig. 10: Awareness about prevention from new corona virus**

0.4 % population believed that prevention for COVID-19 was can be achieved through washing hands with sanitizer, 0.8 % believed that washing hand with water and soap can protect from new corona virus, 0.3 % believed that use of mask can prevent from new corona virus and 98.5 % believed all of the steps should be followed for preventing from new corona virus.

After using mask, you should

3,028 / 3,131 correct responses

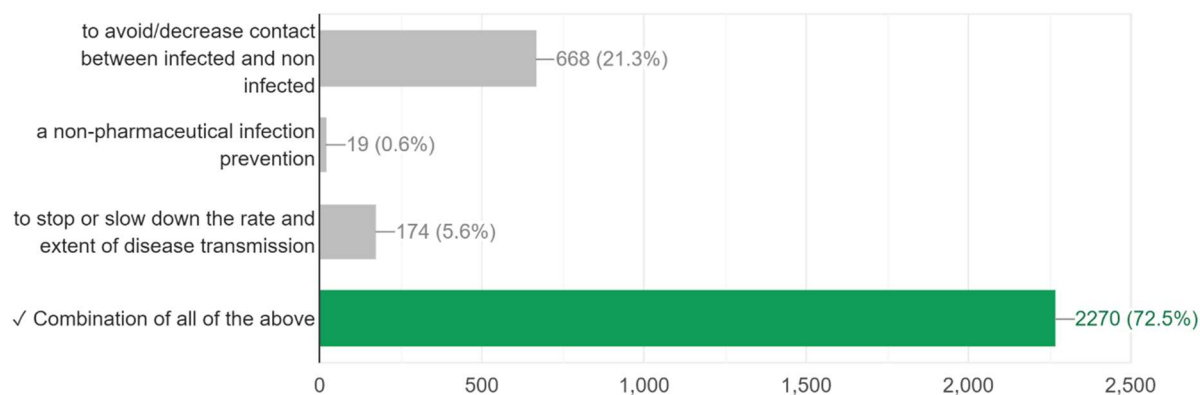


**Fig. 11: Opinion about use and disposal of the mask after use**

96.7 % people felt that mask should be disposed properly in a closed dustbin, whereas 1.6 % people think that mask can be reused.

Social distancing is

2,270 / 3,131 correct responses

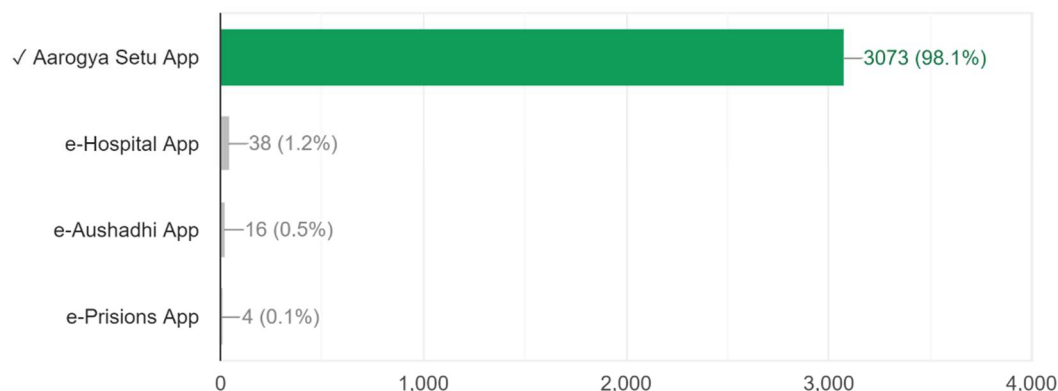


**Fig. 12: Understanding about social distancing**

As per 21.3 % population, social distancing means to avoid or decrease contact between infected and non-infected person, 5.6 % people means to stop or slow down the rate and extent of disease transmission, 0.6 % means a non-pharmaceutical infection prevention and 72.5 % means combination of all.



Government of India launched ..... app as COVID 19 tracker  
3,073 / 3,131 correct responses



**Fig. 13: Awareness about Arogya Setu App launched by Indian Govt**

About 98.1 % people knew about Arogya Setu App launched by Government of India as COVID-19 tracker.

#### 4. DISCUSSION

The overview study directed targets helping the health care professionals and health regulatory agencies to assess the absence of information on the respondents and the number of inhabitants in India with respect to the data about COVID-19 and its anticipation and treatment plan just as to make awareness in regards to the spread and transmission of new corona virus, SARS-CoV-2.

The ailment COVID-19 spreads through respiratory beads and individual contact with the tainted individual<sup>9</sup>. Social removing and keeping up cleanliness with sanitizers is the most ideal approach to forestall the spread of this infection as the individual stays asymptomatic from the introduction till the main side effect is indicated that is for around 2-14 days which is the hatching time of the infection<sup>10-13</sup>.

This virus mainly affects the person with lower immunity levels irrespective of their age that is older people, immunocompromised people, people with chronic conditions, diabetes and people on radiation therapy<sup>14-17</sup>. It is believed that COVID-19 is spread from bats and civet cats but it is still not confirmed<sup>18,19</sup>.

The virus is mainly spread during close contact, and by small droplets produced when people cough, sneeze, or talk. These small droplets may be produced during breathing but the virus is not generally airborne. People may also catch COVID-19 by touching a contaminated surface and then their face. The virus can survive on surfaces up to 72 hours. It is most contagious during the first three days after symptom onset, although spread may be possible before symptoms appear and in later stages of the disease. Time from exposure to onset of symptoms is generally between two and fourteen days, with an average of five days. The standard method of diagnosis is by reverse transcription polymerase chain reaction (rRT-PCR) from a nasopharyngeal swab. The infection can also be diagnosed from a combination of symptoms, risk factors and a chest CT scan showing features of pneumonia.<sup>20-28</sup>

The Indian council of medical research (ICMR), the apex head body of research India, has stated that isolation of the virus is the first step towards expediting the development of drugs, vaccines and rapid diagnostic kits in the country.

## 5. CONCLUSION

Corona virus disease 2019 (COVID-19) has been spread to almost all continents of the world except Antarctica. WHO has declared COVID-19 as a pandemic. Elderly persons with co-morbidities are more affected. It spreads mainly via Respiratory droplets. Pneumonia is the most common complication. Severe cases have a mortality rate of 2.3 to 5%. Presently there is no standardized treatment or vaccine available for COVID-19. Therefore, prevention is only the best option lying with all of us. Strictly follow the instructions given by local government and health authorities for prevention and spread of COVID-19.

Stay aware of the latest information on the COVID-19 outbreak, available on the WHO website and through national and local public health authority. Most people who become infected experience mild illness and recover, but it can be more severe for others. Within the limitations of this study, it is clear that, by following these little steps, the prevention of spread can successfully be reduced and controlled:

- 1) Wash your hands frequently with soap, alcohol-based sanitizers
- 2) Cover nose, mouth while sneezing or coughing with mask or tissue and dispose it immediately followed by washing hands and sanitizing hands.
- 3) Do not touch face, nose, mouth, eyes with hands after touching any object on public place.
- 4) Maintain social distancing and avoid roaming on the streets and gathering in groups. This is the best way to prevent the spread of the virus.
- 5) Make sure you, and the people around you, follow good respiratory hygiene. This means covering your mouth and nose with your bent elbow or tissue when you cough or sneeze. Then dispose of the used tissue immediately.
- 6) Eat healthy, exercise at home and maintain good immunity levels to fight against the virus.

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