

Statistical Analysis of Awareness about Covid-19 in Maharashtra, India

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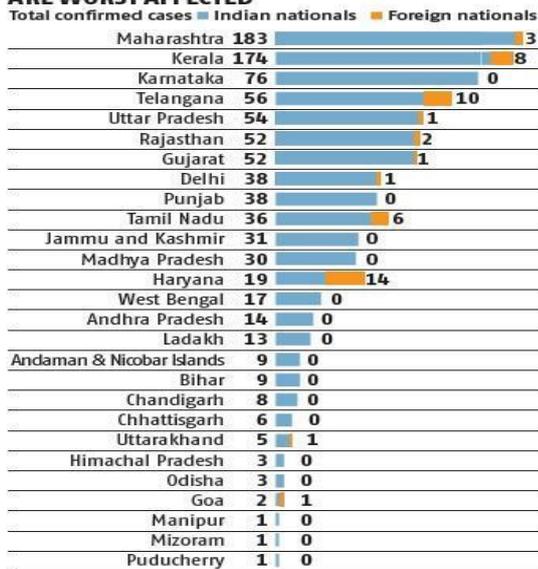
Abstract: *The world is infected immensely by the Covid-19 virus which becomes a major cause of concern. The global health crisis that has had a deep impact on our everyday lives and perhaps long-lasting for the poor. The transmission of virus threaten our health, but the efforts put in place to control the spread of the virus also require social distancing by refraining from doing what's inherently human, which is staying away from others. In the mid of this horrifying dream, awareness is the only key and thus the aim of this study is to assess the awareness of COVID-19 disease and related infection control practices among all the people within the Maharashtra.*

Key Words: *COVID-19, Awareness, Transmission, Impact, Horrifying, Crisis.*

1. INTRODUCTION:

It's a frightening time. In the mid of world-wide pandemic, with cities and even entire countries shutting down. COVID -19 was termed as 2019-nCoV and later International Committee on Taxonomy of Viruses (ICTV) called it a syndrome coronavirus 2 (SARS-CoV-2). In 2019 a new strain was discovered which was not found previously in humans. The severe acute respiratory syndrome-corona virus (SARS-CoV) and the Middle East respiratory syndrome-coronavirus (MERS-CoV) have been known to affect human. It is believed that the viruses seem to have originated in animals before moving into other hosts like humans. SARS-CoV was transmitted from civet cats to humans. SARS-CoV-2 seems to have originated from bats and first reports of cases were from Wuhan, Hubei Province in China, suggesting an possibility of animal-to-person spread from a live animal market. The spread was outside Hubei and subsequently, to the rest of the world via human transmission. Several countries have now reported community spread. March 11, 2020 WHO declared coronavirus disease as a pandemic. With this mode of transmission, doctors and all the health care workers are at high risk. The highly contagious SARS-CoV-2 virus has taken many lives and will leave people stranded across the globe for a long period of time. While in India, a 21-day lock-down across the country was imposed from 26 March to 14 April to curb the spread of the coronavirus pandemic. The impact of job losses, disruption in children's education and social isolation might turn out to be greater than those from the health emergency. Thermal screening has been installed at 21 airports including those in Delhi, Mumbai, Kolkata, Chennai, Bangalore, Hyderabad, and Cochin to check for coronavirus in India. Universal screening has been mandated for flights from China, Hong Kong, Singapore and Thailand at the aero-bridges ear-marked for the purpose. 12 major seaports and 65 minor seaports and land borders have screening measures.

3: MAHARASHTRA AND KERALA ARE WORST AFFECTED



Source: Ministry of Health and Family Welfare

The worst-affected states remain Maharashtra and Kerala. They accounted for more than a third of the cases for March 30.

Name of State/UT	Total Confirmed cases	Cured	Death
Andaman and Nicobar Islands	33	15	0
Andhra Pradesh	1259	258	31
Arunachal Pradesh	1	1	0
Assam	38	27	1
Bihar	366	64	2
Chandigarh	56	17	0
Chhattisgarh	38	34	0
Delhi	3314	1078	54
Goa	7	7	0
Gujarat	3744	434	181
Haryana	310	209	3
Himachal Pradesh	40	25	1
Jharkhand	103	17	3
Karnataka	523	207	20
Kerala	485	359	4
Madhya Pradesh	2387	377	120
Maharashtra	9318	1388	400
Manipur	2	2	0
Mizoram	1	0	0
Meghalaya	12	0	1
Odisha	118	38	1
Puduchery	8	3	0
Punjab	322	71	19
Rajasthan	2364	768	51
Tamil Nadu	2058	1168	25
Telangana	1004	321	26
UT of J&K	565	175	8
UT of Ladakh	22	16	0
Uttar Pradesh	2053	462	34
Uttarakhand	54	33	0
West Bengal	725	119	22
Tripura	2	2	0
Number of confirmed cases in India	31832*	7696	1007

Data as of April 29th, according to latest figures from the Ministry of Health and Family Welfare. From the source it was predicted that there was approximately 31,332 confirmed cases and among those 7,696 have been cured and rehabilitate.

2. OBJECTIVE:

The objective of this study is to appraise COVID-19 disease and its associated infection. The motive behind the survey was to let people understand that their views and action matters and the response rate gave a clear sign that people have one common purpose which is to defeat the pandemic with empathy, self-service, awareness. This was a questionnaire-based survey circulated to the people of Pune region and extended to multiple districts to check the awareness.

3. MATERIALS:

This survey was conducted in MIT ACSC, Alandi .The survey was prepared in the form of an online google form and was forwarded to potential responders who included students and staff at various Region in the state of Maharashtra, India.

4. METHOD:

The Google survey was conducted on 18/04/2020, and a total of 322 responders completed the survey with a response rate of 100%. The Google survey questionnaire consisting of 14 general awareness questions out of which 11 questions based on knowledge and infection control practices related to COVID-19 disease. There were questions regarding the lock down to make people aware of travelling and social distancing. The distribution of responses was presented as percentages. Sub-groups were classified on the basis of the positive and negative response .Data were tabulated in excel.

5. ANALYSIS:

Regardless of differing opinions about the virus, the majority of respondents were united in their desire to stay informed about its spread. Maximum no people contacted by the survey had seen, read or heard a great deal or a fair amount about the outbreak.

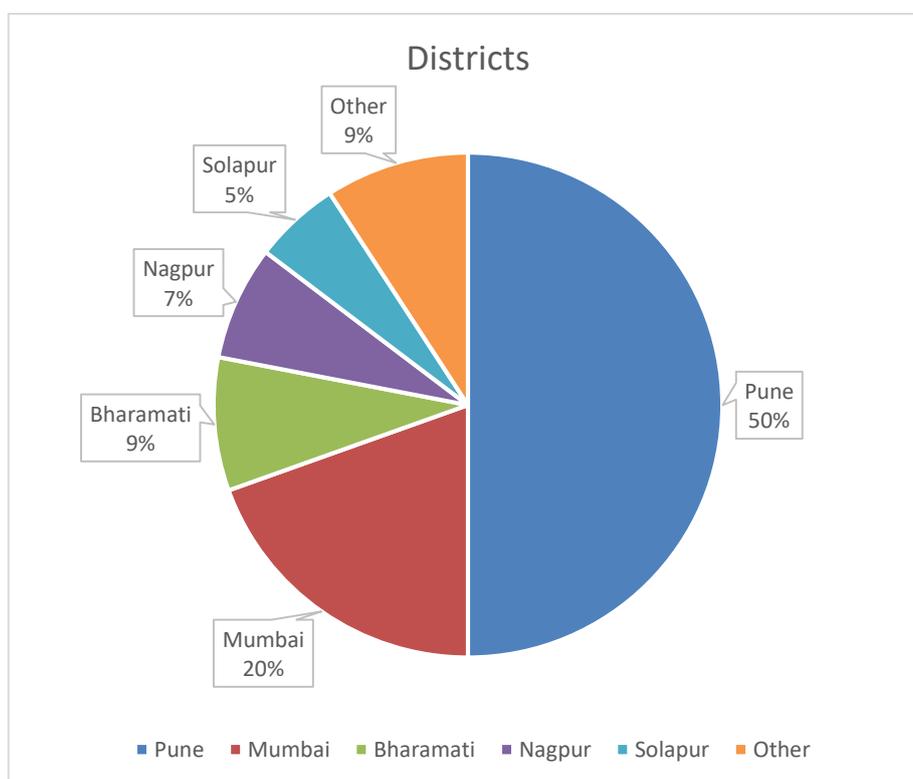


Figure 1: From the above pie chart, we can predict that 50% respondents were from Pune, 20% from Mumbai. Whereas 9% people are from Bharamati, 7% are from Nagpur, 5% are from Solapur and remaining 9% from other part of the country.

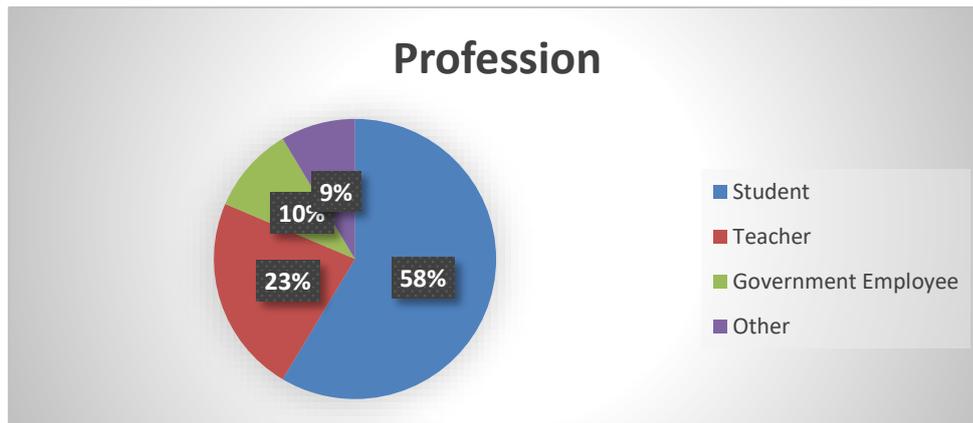


Figure 2: From the above pie chart, we can predict that 58% of the people who responded were students from various colleges in Pune and other districts. 23% people were teachers, whereas 10% were government employees and 9% who responded to the survey form are categorized to others.

Where Corona Virus Infection Was First Found In The World?

321 / 322 correct responses

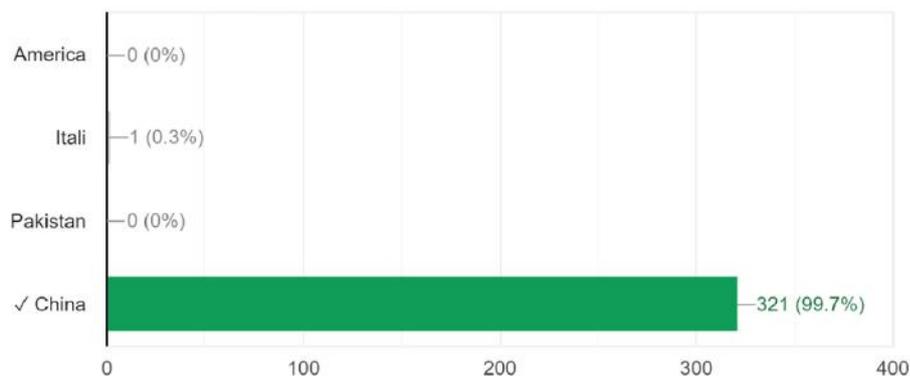


Figure 3: From the above graph it is clear that 99.7% of the people are completely aware that corona virus infection was first found in China. Rest 0.3% selected Italy.

Corona What is the most common name for this viral infection?

322 / 322 correct responses

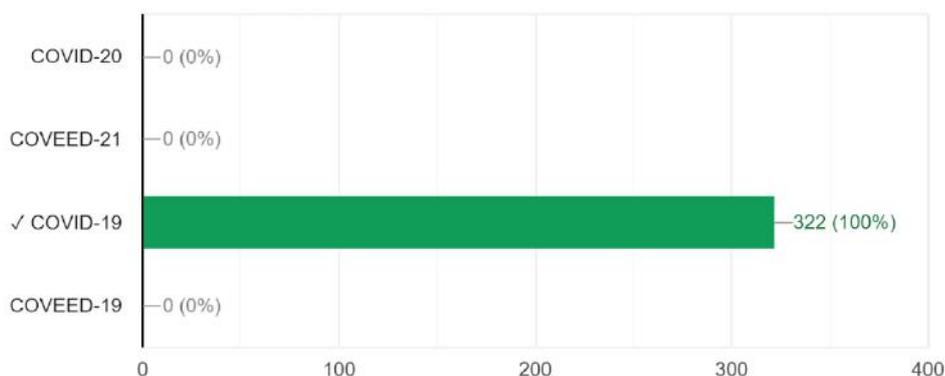


Figure 4: From the above graph it is clear that 100% of the people are completely aware about the common name for its viral infection.

In which city of China was the first Corona virus infected?

307 / 322 correct responses

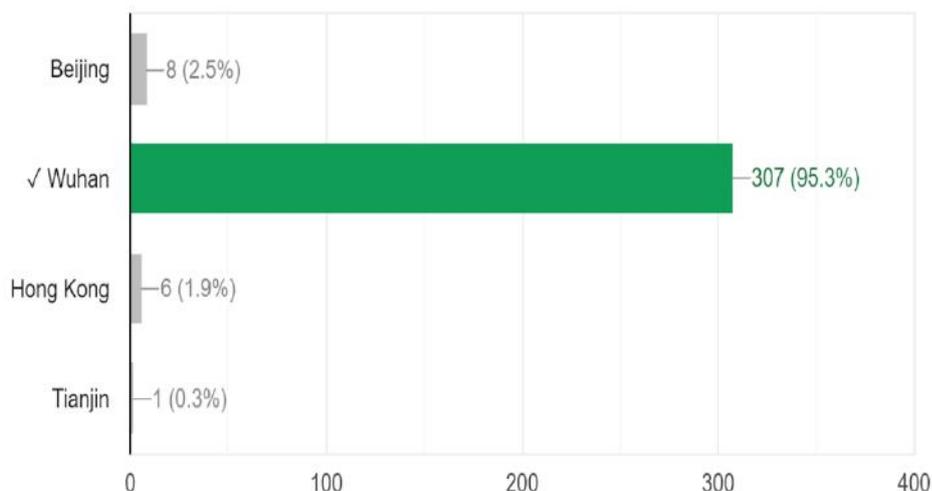


Figure 5: From the above graph it is clear that 95.3% of the people are completely aware that corona virus infection was first found in Wuhan and 2.5% thinks it was founded in Beijing .1.9% selected Hong Kong as an option. And rest 0.3% opted Tianjin.

What is a coronary infection or infection?

241 / 322 correct responses

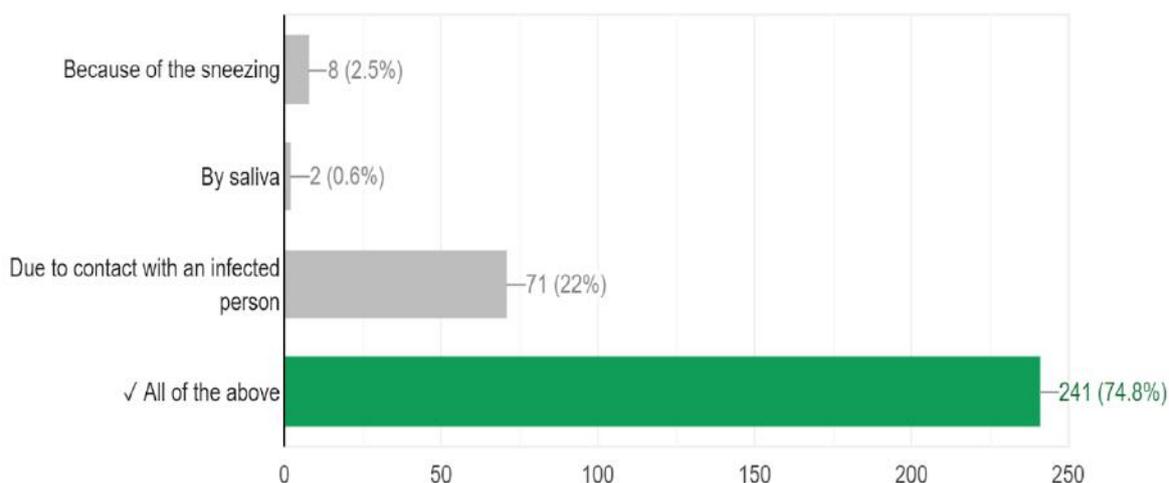


Figure 6: From the above graph it is clear that 74.8% of the people are completely aware of coronary infection. Rest 22.5% people selected only option C i.e., due to contact with an infected person. 2.5% thinks it's because of sneezing where as a very small percentage of 0.6% thinks it's because of saliva.

What is the special solution to prevent coronary infection?

293 / 322 correct responses

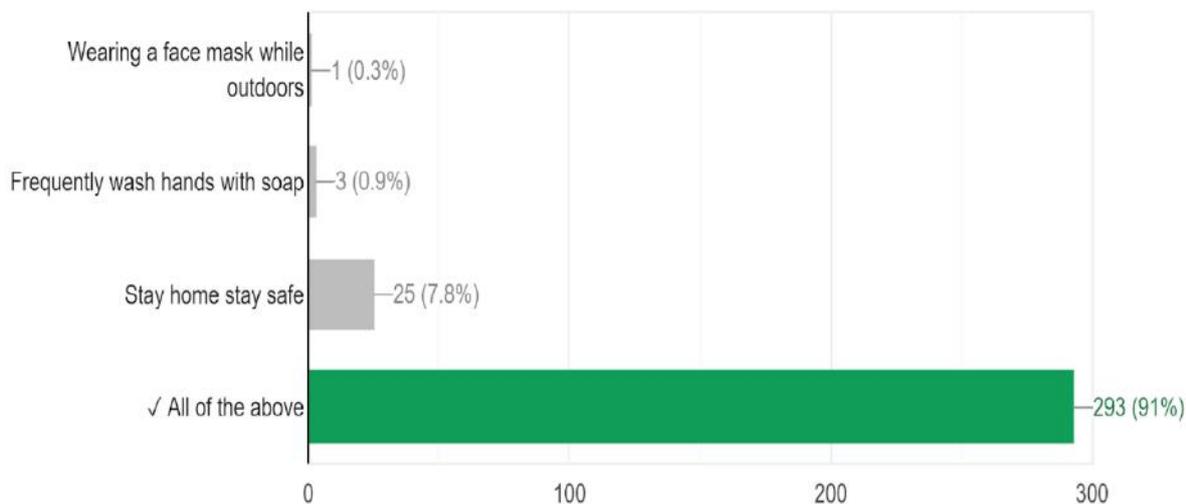


Figure 7: From the above graph it is clear that 91% of the people are completely aware about the special solution to prevent corona infection. 7.8% people selected option ‘Stay home Stay safe’ and 0.9% people selected option ‘frequently wash hands with soap’ whereas 0.3% people have selected option ‘wearing a face mask while outdoors’.

Is the vaccine available for the corona virus?

292 / 322 correct responses

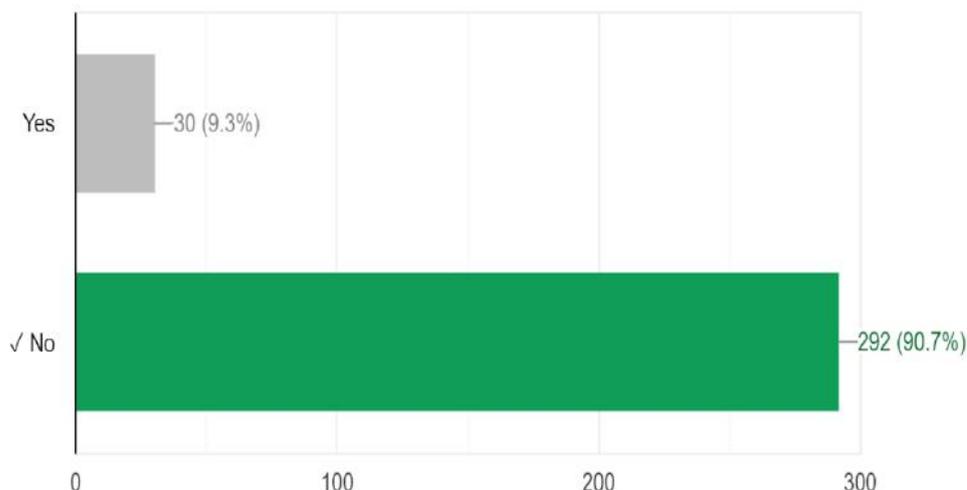


Figure 8: From the above graph it is clear that 90.7% people are aware that the vaccine of coronavirus has not been discovered yet. 9.3% people believe that it has been discovered and thus selected option Yes.

Which World Organization has declared 'COVID-19'?

315 / 322 correct responses

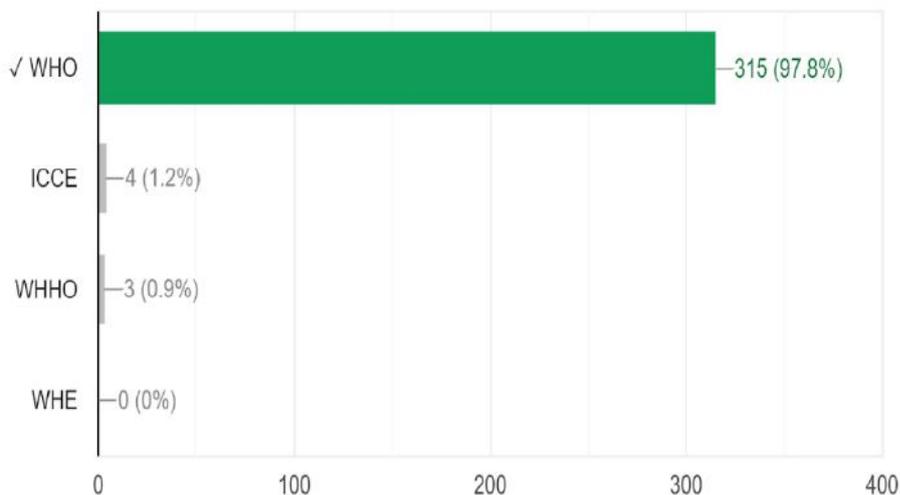


Figure 9: From the above graph it is clear that 97.8% people are aware that WHO has declared COVID-19. Rest 1.2% selected option B and 0.9% have selected option D.

Prime Minister Shri Narendra Modi has recently appealed which Covid-19 application to use?

311 / 322 correct responses

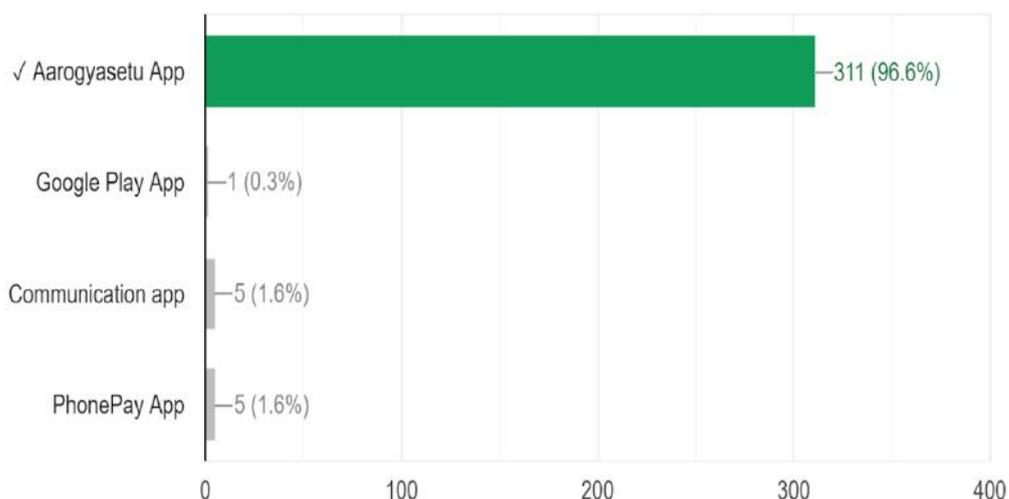


Figure 10: The Ministry of Electronics and Information Technology launched a smart phone application called Arogyasetu to help in "contact tracing and containing the spread" of COVID-19 pandemic in the nation. From the above graph it is clear that 96.6% people are aware about Arogyasetu application rest 1.6% people selected option C, 1.6% have selected option D (phone pay app) and 0.3% have selected Google pay app.

Can covid-19 be infected animals by infected humans?

201 / 322 correct responses

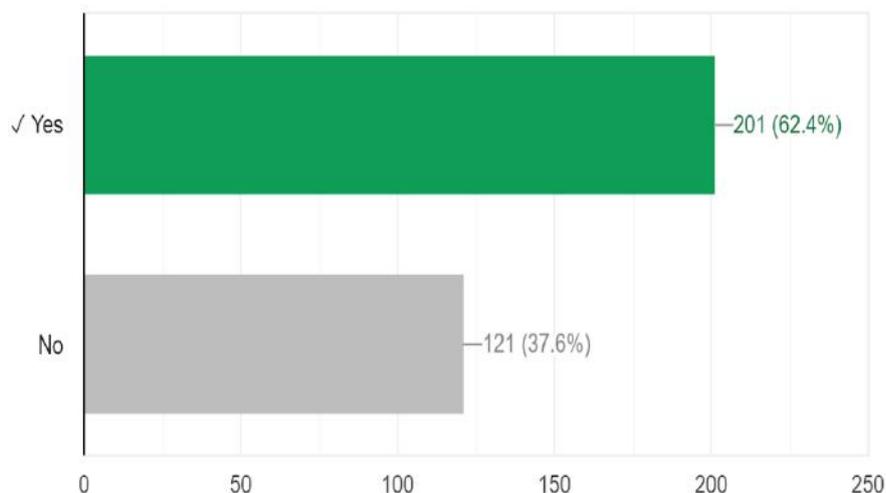


Figure 11: From the above graph it is clear that 62.4% people are aware about the fact that COVID-19 can infect animal. Rest 37.6% selected option NO.

To what date has Prime Minister Narendra Modi announced the second Lockdown?

299 / 321 correct responses

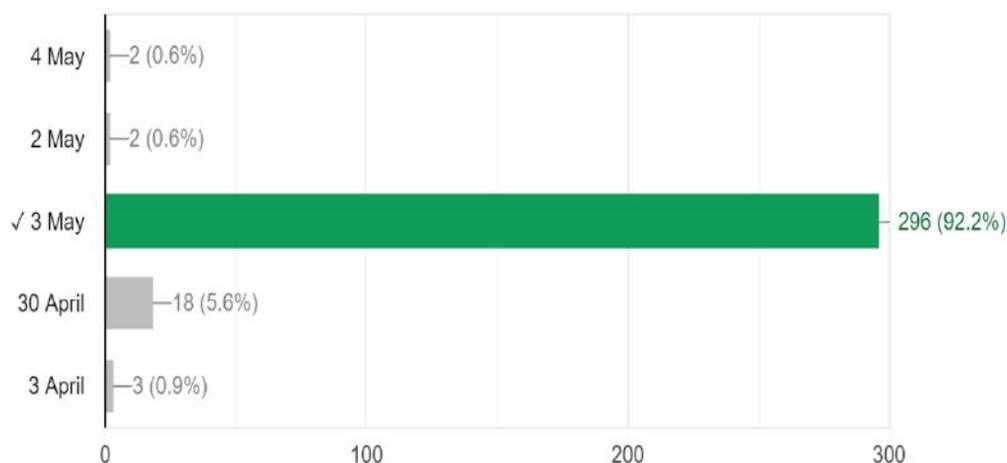


Figure 12: From the above graph it is clear that 92.2% people are aware about the 2nd lockdown date that was declared on 3rd May, 5.6% people feel it was declared on 30th April and 0.9% feels it was declared on 3rd April.

How many days did Prime Minister Narendra Modi announce the first lockdown?

304 / 322 correct responses

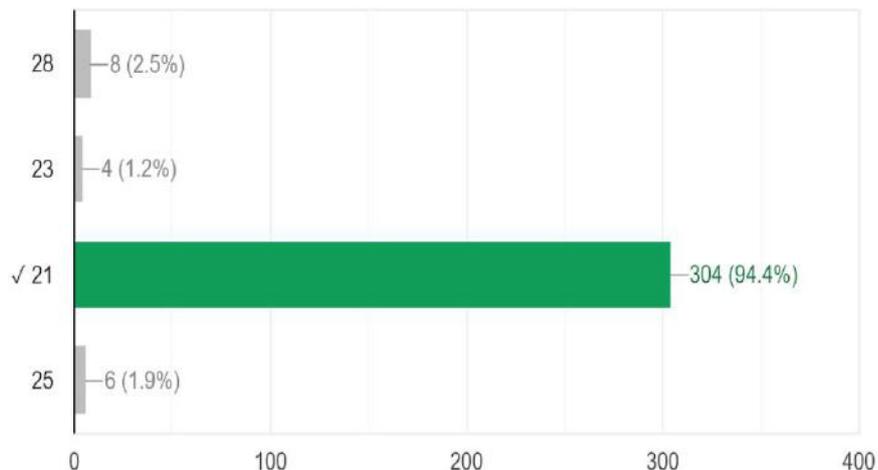


Figure 13: From the above graph it is clear that 94.4% people are aware about the duration of lockdown 1.0 and 5.6% were not aware about the duration of lockdown 1.0.

Isolation and Quarantine are public health practices that are used to protect the public.

320 / 322 correct responses

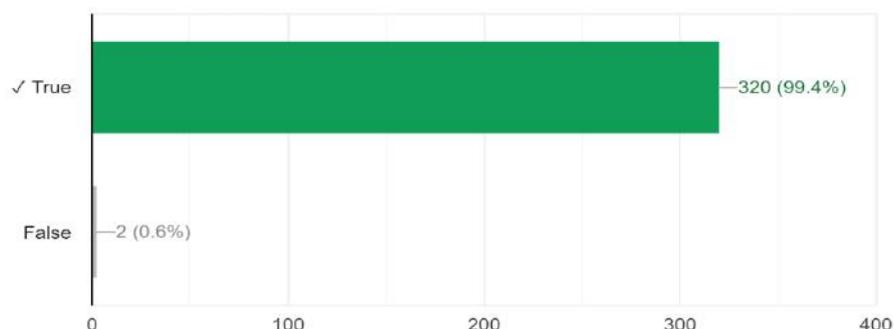


Figure 14: From the above graph it is clear that approximately 99.4% people consider isolation and quarantine as public health practices to protect the public. Whereas 0.6% feels it may not protect and best the best condition.

6. FINDINGS:

All although the scenario after the lockdown was not alluring. More than health, Covid-19 has built fear and agitation. Though officials feel lockdown can be a major reason to stop the spread of infection from one person to another, to protect ourselves and others. This clearly stops people to step outside of their house unless it is not necessary. If there is anyone in the house who is very sick and may need to get medical help, you must be aware of the health facility nearest to you. Because the vaccines are yet not discovered, and huge no of people are dying out there either because of the virus or maybe out of hunger. And in this type of situation even a small help or initiative matter. Making sure that people access the right information and believe only the most reliable sources of information for self-protection. And in this type of scenario survey helps to find out what people from different geographic location feel and is aware of. Example when asked about the common name of the virus, 100% of the people were completely aware about the common name for its viral infection. And 99.7% of the people were completely aware that corona virus infection was first found in China. Also when asked about the way the virus spreads, shockingly a lot of people didn't select the appropriate answer. Only 74.8% of the people were completely aware of coronary infection. Rest 22.5% people selected only option C i.e., due to contact with an infected person. 2.5% thinks it's because of sneezing where as a very small percentage of 0.6% thinks it's because of saliva.

7. RESULT:

Theoretically, health behaviour style of an individual may be helpful in leading people from awareness and perception of the severity to disease susceptibility, to action. Thus the survey helped us to unite, spread the right information and understand the following:

- 1) **Containing the outbreak** People seems to be more empathetic .Kalyan from Pune commented in the survey “We can defeat this virus only when all will cooperate with doctors & police administration and that one day will come soon when our doctors will say with a smile on their face " we did it. 0 cases of covid-19" While Khushbu from Alandi commented “This Covid-19 has taught us a lot of things. The main thing it has taught us that buy things when u need and not when u want. I just wanted to say just keep patience everything will be fine soon. Stay home stay safe.Jai hind jai bharat”
- 2) **Staying informed**-People find surveys more helpful, as it allows them to answers things that are necessary for them to know. Sanket from Alandi commented "Covid-19 awareness quiz" is good and after completing this quiz peoples aware and all people knows about the covid-19 those peoples who don't have advanced information about it. While Ankit from Indrayni Nagar commented “It provides us important questions related to pandemic situation which is required to know to citizens of India and maintain social distancing and avoid any other related problems, take care of ourselves and society.”
- 3) **Global spread and measures**-From the survey it was clear that the 91% of the responder are aware of the prevention and agree not to travel and step outside unless it is necessary.
- 4) **Vaccine Information**-90.7% responders are well aware that no proper vaccines have been discovered.
- 5) **Lockdown**- People are well aware of the lockdown scenario and agrees to the fact that the 21day lockdown period is to be used to identify more positive cases and quarantine all those who were in contact with them.
- 6) **Awareness campaigns &survey** on COVID19 targeting slums in urban areas and backward villages in all the districts will help to stop the spread.

8. RECOMMENDATIONS:

Although the current study reveals a better level of knowledge and awareness regarding the MERS-CoV, more effort should be paid to enhance the public misconceptions regarding the animal source of the disease and animal products handling, as well as cases who should be suspected to screening to MERS-CoV. The knowledge and awareness about the disease are important for the adoption of the protective measures that minimize the risk exposure for the disease.

9. CONCLUSION:

The awareness of COVID-19 made us realise how important it is to make people know how their knowledge is vital. A higher percentage of correct responses were satisfying. This study shows that there is a strong need to implement periodic educational interventions and training programs on infection control practices for COVID-19 across all healthcare professions. Thus conducting periodic webinars for educational intervention could be a useful and safe tool to create more awareness.

REFERENCES:

1. Pranav D. (April 2020) “COVID-19 Awareness Among Healthcare Students and Professionals in Mumbai Metropolitan Region: A Questionnaire-Based Survey”<https://www.cureus.com/articles/29822-covid-19-awareness-among-healthcare-students-and-professionals-in-mumbai-metropolitan-region-a-questionnaire-based-survey>”
2. Modi PD, Kumar P, Solanki R, Modi J, Chandramani S, Gill N(March 25, 2020): “Hand hygiene practices among Indian medical undergraduates: a questionnaire-based survey Curious”
3. Feng S, Shen C, Xia N, Song N, Fan M, Cowling BJ(Mar 20, 2020): “Rational use of face masks in the COVID-19 pandemic”.
4. Abdel-Moneim AS. (2014): Middle East respiratory syndrome coronavirus (Evidence and speculations)
5. Langade D, Modi PD, Sidhwa YF (March 3, 2020): Burnout syndrome among medical practitioners across India: a questionnaire-based survey.
6. Feng S, Shen C, Xia N, Song N, Fan M, Cowling BJ(Mar 20, 2020): Rational use of face masks in the COVID-19 pandemic Lancet Respir Med.