

# Knowledge, Attitude and Anxiety about the Novel Coronavirus Pandemic among the Urban Community of Mumbai: A Cross Sectional Study

Sheetal Aurangabadkar<sup>1</sup>, Asmita Karajgi<sup>2</sup>

<sup>1</sup>Assistant Professor, The SIA College of Health Sciences, College of Physiotherapy, Dombivli, Maharashtra

<sup>2</sup>Professor and Head, The SIA College of Health Sciences, College of Physiotherapy, Dombivli, Maharashtra

Corresponding Author: Sheetal Aurangabadkar

## ABSTRACT

The Coronavirus (COVID-19) outbreak was declared a public health emergency of international concern by the World Health Organisation. Pandemics can lead to increased level of stress and anxiety. This is especially true for COVID -19 when there is speculation surrounding the mode and rate of transmission, with the disease spreading at such a magnitude all around the globe. This online survey, related to the knowledge, attitude and anxiety about the novel Corona virus, was conducted among the urban population of Mumbai, India. A total of 155 responses were obtained. All the participants were above 18 years and of Indian origin. Among the participants, 74.2% were females and 25.8% were males. A majority of responders were aware of the basic knowledge of the disease COVID 19. About 65.2% participants reported that Corona virus can spread through touching, sneezing, kissing and food. Most of the participants had positive attitude towards the disease and the social practises related to the COVID 19. Majority of the participants complained of high anxiety and stress related to their personal hygiene, keeping a stock of all the essentials in their home and a constant fear of getting infected.

**Conclusion** – There is moderate level of awareness about the knowledge related to the mode and spread of COVID 19 among the study population due to their high level of education and internet access. Though there is a positive attitude towards the practise of COVID protocol like isolation and the need for avoiding crowded places, there is still fear of getting infected among the study population.

**Keywords** – Corona virus, Knowledge, Attitude, Anxiety, World Health Organisation.

## INTRODUCTION

Coronavirus disease (COVID19) is an acute respiratory disease caused by novel corona virus and was first detected in December 19 in Wuhan, China. [1] Over a period of few weeks, the infection spread throughout the globe. On the 11 TH March, WHO declared COVID -19 a pandemic as by then 114 countries were affected. [2] Coronaviruses so named due to the outer fringe of envelope proteins resembling a crown (corona in Latin) are a family of enveloped RNA viruses [3] COVID 19 is highly contagious and characterised by

symptoms of mild fever, myalgia, dry cough, fatigue, headache, gastrointestinal symptoms such as vomiting, abdominal pain and diarrhoea. [4, 5] SARS-COV-2 is transmitted through direct contact and in the form of droplets. [6]

India is a country of vast socio-cultural diversity, having a wide urban and rural divide, disparities in health and economic sector, provide lot of challenges and threats in controlling the spread of infection. Various efforts by government like nationwide lockdown since 24<sup>th</sup> March, 2020, upgrading necessary health care

facility have kept a check on rapid spread of disease. The Government Health Ministries of India and WHO is providing expert guidance and helping people manage fear, stigma and discrimination during COVID-19. [2] But in the times of wide spread use of social media, the facts keep changing and the myths regarding corona are also spreading rapidly.

The government, media, doctors, researchers and other stake holders of the society have appealed to the public to avoid public gathering, wearing of masks, importance of social distancing but many people ignore the importance of it due to attitudinal issues. Also, the anxiety, confusion and fear in society are affecting the psychological health of the individuals to a great extent. Stigma associated with the diagnosis of COVID 19 has made few people hide their illness and prevents them to seek health care immediately. Poor knowledge, attitude and practice pattern among the people might increase the risk of possible high transmission.

In the given scenario, people s adherence to control measures will be affected by their knowledge and attitude towards the corona virus transmission. Identification of people s concerns / anxiety levels will help in increasing the resilience and restoring mental health of the people during this pandemic. This cross-sectional study was conducted to explore the knowledge, attitudes and anxiety about COVID 19, among the Urban community in Mumbai.

## **MATERIAL AND METHODOLOGY**

Questionnaire – After going through the review of literature and WHO resource material of COVID 19, a semi structured questionnaire was prepared. The questionnaire was validated and a pilot study was conducted on 20 participants. The questionnaire was modified and final corrections were done. The Questionnaire consisted questions on demographics like age, sex, occupation and education of the participants. There were 13 questions

related to knowledge regarding corona virus. There were 3 questions on attitude of the community towards Corona virus like whether they considered travelling during this period as safe, whether the participants will quarantine themselves if they had fever and cough and whether patients who are cured from Corona be allowed to stay within the community. Participant's anxiety levels were assessed through seven questions and were asked how often they felt anxious on doing the following activities over last two weeks.

This cross-sectional study was conducted from the month of May to June, 2020 in Urban parts of Mumbai, India. An online semi structured questionnaire was developed by using google forms. Informed consent from the participants was also taken through a consent form attached to the questionnaire. The link of the questionnaire was sent through e mails, Wats app to the contacts of the Investigators. Participants with age more than 18 years of age, able to understand English and willing to give informed consent were included. The online data was collected during the mentioned period and descriptive statistics was used to analyse and determine the results of the study.

## **RESULTS**

A total of 155 responses were obtained from the online survey. All the participants were above 18 years and of Indian origin. The study included those participants who had access to the internet and who understood English. About 19.2% participants were post graduate and 51.7 % graduate and remaining 29.1% had done their higher secondary education. About 67.7% responders were students, 27 % were private company employees and remaining 5.3% were self-employed. Among the participants, 74.2% were females and 25.8% were males.

## Part 1: Awareness about COVID-19 pandemic.

A majority of responders were aware of the basic knowledge of the disease COVID 19 as shown in Table s below. When asked if getting pneumonia virus vaccination will protect against corona virus, 47.1% said no, 46.5 % don't know and remaining said yes. 76.1 % participants agreed that corona virus cannot spread through chicken and 16.8 % said don't know.

**Table 1 depicts the participants knowledge about the different ways in which corona virus can spread**

Touching	7.1%
Sneezing	26.5%
Kissing	1.2%
All of the above	65.2%

**Table 2 depicts participants knowledge regarding the symptoms of coronavirus infection**

Breathing difficulty	35.5%
Fever	11%
Loss of smell	5%
Cough	2%
All of the above	46.5%

**Table 3 – Which of the following statement about Corona virus is true**

Coronavirus is highly contagious	78.1%
Self- isolation cannot prevent its transmission	8.4%
It is highly fatal	8.5%
We cannot prevent corona infection	5%

**Table 4 – COVID 19 virus spreads via respiratory droplets of infected individuals**

Yes	92.3%
No	2%
Don't know	5.7 %

## Part C: Anxiety related to COVID 19 –

**Table 12 depicts the perceived anxiety of the participants related to COVID 19 for the following questions over a period of last two weeks.**

Questions	Not at all	Rarely, less than day	More than seven days	Nearly, everyday over last 2 weeks
I feel worried about myself getting COVID 19	18%	25.2%	14.2%	42.6%
I feel need to buy and stock all essential at home	17.4%	41.3%	25.8%	15.5%
I feel the need to avoid social contact and gatherings	65.9%	9%	14.8%	10.3%
I get afraid if anyone in social circle report of being sick	24.6%	27.1%	20.6%	27.7%
I get affected by news of Corona virus on news, post on media	32	32	14	22
I often feel the need to wash my hands, sanitise ,wear gloves	5.7%	9.7%	12.3%	72.3%

## DISCUSSION

The COVID 19 pandemic has created lot of challenges to the community

**Table 5 – Safe practices in the Community to prevent the spread of Corona virus is**

Social distancing	87.1%
Hand hygiene	7.1%
Identification of high risk	3%
Respiratory hygiene	2.8%

**Table 6 – High risk group are people who are at high risk of having severe illness if they acquire COVID 19 , these include**

Older adults	9%
People with underlying medical conditions like diabetes, kidney ailments, cancer medications	12.3%
Pregnant females	0 %
All of the above	78.7%

**Table 7 – Use of masks should be done –**

When coughing, sneezing	60%
When contact tracing	9%
Carrying for ill patients	19.4%
When visiting health care facility	11.6%

**Table 8 – With summer season going on, the corona virus will be killed**

Yes	11.6 %
No	56.1%
Don't know	32.3 %

## Part B: Attitude regarding COVID 19.

**Table 9 – Patients who are cured from Corona virus infection, should not be allowed to stay within the community**

Yes	33.5 %
No	58%
Don't know	8.5%

**Table 10- Do you think travelling across/within the country is safe during this time.**

Yes	92.3%
No	3.85
Don t know	3.85

**Table 11- Will you quarantine yourself if you have fever and cough.**

Yes	92.3%
No	1%
Don't know	6.7%

all around the globe. The Impact of this pandemic has been quite intense which has led to a great toll on physical, mental, social

and financial aspects of human life. It is crucial to provide health education and create awareness during such situation for effective prevention of the disease spread. [7] In our present cross-sectional study, we have attempted to study the knowledge, attitude and anxiety regarding COVID -19 among urban population of Mumbai. This study was done in an urban city like Mumbai, which is highly populated and has a large number of working populations who have to travel every day for their jobs and livelihood. Also, a large migrant labour population were forced to travel to their native places during lockdown which could be a reason for the spread of pandemic. Most of the participants in our study were educated, either graduated or post graduates and had a moderate level of awareness about the spread of infection, its symptoms and prevention. Since most of the population belonged to urban class with access to internet, scientific journals, social media they had better awareness regarding the knowledge about COVID 19. A study done by Erfani et al showed that the participants whose source of information was from social media, scientific articles, journals had a significant higher knowledge of the disease ( $p < 0.001$ ) as compared to the news media users who had significantly lower knowledge regarding transfer, routes and groups at higher risk regarding COVID 19 ( $p = 0.06$ ). [8] Similar studies have been done regarding the Knowledge, attitude and anxiety about COVID 19 among Indian population. A study done by Deblina Roy et al revealed that most of the educated people had the knowledge about the preventive measures, importance of social distancing but there was a need to intensify the awareness regarding mental health issues. [9]

Increased level of sensitization of the general population regarding the need of personal and respiratory hygiene as well as the need of isolation and practice of social distancing by the Indian and State Ministry of health has moderately helped the community in having positive attitude towards the acceptance of COVID patients

in the community. Majority of the participants felt it was not safe to travel within the country and outside during the pandemic. Approximately 92 % population felt it was necessary to isolate if they have fever and cough. However, almost 50% participants had the fear of including the infected patients within the community. So, adequate awareness is necessary to reduce the discrimination against the COVID infected patients in this community.

The unprecedented nature of the pandemic, the new social norms adapted like social distancing, isolation during the lockdown period and the worldwide global media attention has led to a state of panic and anxiety among the population. Similar study done by Banerjee, 2020, reported isolation, self-quarantine, fake news in social media are likely to affect mental health adversely. [10] In our study, approximately 65 % participants felt the need to avoid social contacts and large gatherings. Also most of the participants were anxious about maintaining their personal hygiene, need to wash their hands, face several times nearly every day. Approximately forty percent of population rarely felt the need to stock the essentials at the home. This was due to the panic regarding exhaustion of the resources. Almost forty percent participants were worried nearly every day about getting infected. Thus, there is a need to address the mental health issues of the study participants through proper counselling by the psychiatrist. Similar study done by Yao et al. 2020, established that online mental health counselling can be considered to be more beneficial and practical during this pandemic. [11]

## **LIMITATION**

This study is limited to the urban population who had smart phones, internet access and were able to communicate in English. The findings are applicable only to the study population.

## CONCLUSION

There is increased level of awareness regarding the source and spread of COVID 19 infection. Most of the educated people are aware of the new social norms like importance of social distancing, avoiding travel, self- isolation (if the symptoms persist) due to their high level of education and access to the internet. Though most of the participants had positive attitude towards the pandemic, some people have apprehension regarding inclusion of the infected patients within the community. There is a need to address mental health issues like anxiety among the participants as most of the people are pre occupied about the thought of getting infected and the need to wash their hands and face very often.

## ACKNOWLEDGEMENT

We are thankful to all the study participants for participating in this online study.

**Conflict of Interest:** None

**Source of Funding:** None

**Ethical Approval:** Approved

## REFERENCES

1. Hui.D.S, Azhar E, Madani T A, Ntoumi F et al. The continuing 2019- n Cov epidemic threat of novel coronaviruses to global health – The latest 2019 novel coronavirus outbreak in Wuhan, China, *Int J Infect Dis* 2020,91:264-266.
2. WHO Director -General s opening remarks at the media briefing on COVID 19 – 11 March 2020. World Health organisation 2020. URL. <https://www.who.int/org/speeches/detail/who-director-general-opening-remarks-at-the-media-briefing-on-COVID-19-11-March-2020>(accessed 2020-05-26)
3. Burrell C.J, Howard C.R, Murphy F.A. Chapter 31- coronaviruses. In : Burrell C Howard C.R, Murphy .F.A, Fenner and White s Medical Virology (Fifth edition)

- Academic Press :London:2017.PP.437-446.[Cross Ref] [Google Scholar]
4. Cameron MJ, Bermejo-Martin JF, Danesh A, Muller MP, Kelvin DJ. Human immunopathogenesis of severe acute respiratory syndrome (SARS). *Virus Res* 2008;133(1):13-9.
  5. Wevers BA, van der Hoek Recently discovered human coronaviruses. *CLIN Lab Med* 2009;29(4):715-24.
  6. Baseer MA, Ansari SH, Alshamrani SS, Alakras AR, Mahrous R, Alenazi AM. Awareness of droplet and airborne isolation precautions among dental health professionals during the outbreak of corona virus infection in Riyadh city, Saudi Arabia. *J Clin Exp Dent* 2016;8(4):e379-87.
  7. Johnson E.J, Hariharan S. Public health awareness. Knowledge, attitude and behaviour of the general public on health risks during H1N1 influenza pandemic. *J. Public. Health.* 2017;25:333-337.
  8. Roy D, Tripathi S, Kar SK, Sharma N, Verma SK, Kaushal V. Study of knowledge , attitude, anxiety and perceived mental health care need in Indian population during COVID -19 pandemic. *Asian J Psychiatr* 2020; 1:102083. doi.10.1016/2020-102803.
  9. Erfani A, Shahriarrirad R, Ranjbar K, Mirahmadizadeh A, Moghadami M. Knowledge, attitude and practice toward novel coronavirus outbreak. Population based survey in Iran. *Bull World Health Organ*: 2020. doi.h.10.2471/BLT20.256651.
  10. Banerjee D. The COVID 19 outbreak : crucial role the psychiatrist can play. *Asian J. Psychiatry.* 2020. doi.10.1016/j.ajp.2020.102014.10214.
  11. Yao.H, Chen J.H, Xu. Y-F. Rethinking online mental health services in China during the COVID -19 epidemic. *Asian J. Psychiatry* .2020. doi:10.1016/j.ajp.2020.102015.

How to cite this article: Aurangabadkar S, Karajgi A. Knowledge, attitude and anxiety about the novel Coronavirus pandemic among the Urban community of Mumbai: a cross sectional study. *Int J Health Sci Res.* 2021; 11(4): 288-292. DOI: <https://doi.org/10.52403/ijhsr.20210433>

\*\*\*\*\*