



Assessment of Awareness among General Population Regarding the Use of Face Masks amid Covid-19 Pandemic

Simran Ukey , Tushar Singh, Ashish Bodhade, Alka Dive, Parijit Wagh

Intern, VSPM Dental college and Research centre Nagpur, Maharashtra.

Intern, VSPM Dental college and Research centre , Nagpur, Maharashtra

Reader, department of Oral Pathology and Microbiology, VSPM DCRC, Nagpur , Maharashtra

Head of Department, department of Oral Pathology and Microbiology, VSPM DCRC, Nagpur , Maharashtra

Tutor, Department of Public Health Dentistry, VSPM DCRC , Nagpur, Maharashtra

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ABSTRACT

Background: The COVID -19 pandemic hit the world terribly back in November 2019. Even after following all the protocols and taking precautions the spread of disease till date has not improved a lot. Thus , the proper use of face mask still remains the most important protection measure which can help us in moving ahead in our lives and live a disease free life.

Aim: Assessment of awareness among general population regarding the use of face masks amid COVID -19 pandemic.

Materials and method: A questionnaire based cross-sectional study was done among the general population.

Results: Majority of participants were from the age group of 18-30 years [82.6%] and are graduates [68.4%]. Majority of them wear mask while stepping out of their home [89.6%]. 63.7% participants feel that N95 mask provides maximum protection and think that the mask should be at affordable prices [90.8%] . Majority of them could not breath properly and went through sweating, suffocation, fogging of eye glasses, rashes , irritation while wearing the face masks.

Conclusion: As the COVID -19 pandemic has not yet left us and continues to inflict terror over the entire world, face masks are being used by the people judiciously. The accurate use of face mask will help to prevent spread , break the chain, flatten the curve and will reduce the burden of COVID-19.

KEYWORDS : COVID-19, pandemic, face mask, N95, Awareness.

I. INTRODUCTION

The pandemic of novel Corona virus disease 2019 (COVID-19) which is an ongoing latest threat to global health, was initially recognized in Wuhan, China, in December 2019 and has since spread worldwide [1]. It is the second pandemic of the 21st century after the influenza A

and H1N1 pandemic, 2009.[3]. The Government of India confirmed India's first case of COVID-19 on 30 January 2020, in the state of Kerala. Extreme prevention methods like closing schools and universities, complete lockdown, social distancing, hand sanitization, use of face masks, contact tracing, and quarantine facilities became the new normal [4].

Corona virus disease (COVID)-19 is transmitted mainly by two ways of contact – direct and indirect.

Direct contact – The virus is transmitted from the infected person to the susceptible person, when there is physical contact between the two.

Indirect contact – When infection spreads through infected surfaces and objects.

Extra-pulmonary atypical symptoms like anosmia/hyposmia, dysgeusia, and diarrhoea can also be seen. Asymptomatic individuals can transmit the disease during incubation period.[1]. The virus can survive on surfaces up to 5 days depending on the type of surfaces [4]. Face masks are recommended to control the COVID-19 pandemic transmission, and are made of different materials and designs which influence their filtering capability.

In the event of any pandemic such as severe acute respiratory syndrome (SARS), it is likely that antiviral drugs and vaccines will be in short supply or that delivery could be delayed. Therefore, non-pharmaceutical interventions such as usage of mouth masks, hand washing, and other hygiene measures might be effective as early control strategies [2].

Medical masks are a type of personal protective equipment used to prevent the spread of respiratory infections. These masks cover the mouth and nose of the wearer and, if worn properly, may be effective at helping prevent transmission of respiratory viruses and bacteria[2].

Public mask wearing is most effective at stopping the spread of the virus when the



compliance is high. In this way, the decreased transmissibility could reduce the death toll and economic impact and the cost of the intervention is also low as well. The use of face masks among public has become ubiquitous in almost all countries. In this crucial time of COVID-19, the concerned factors of face mask among general public are inappropriate use of face mask such as not changing it during intervals, touching the mask while wearing and removing it, reusing the single use mask can decrease the protective effect and can ultimately pose greater risk for infection. Also, WHO affirms that incorrect use of face masks might actually increase the chance of being infected, rather than decreasing. In curbing this contagious illness, facemasks are undoubtedly, a very much useful preventive measure. However, it is effective only and only if they are worn properly. While wearing the mask, one should be assure that there remains no passageway, after wearing it, for any microbes to enter the body [5].

In order to minimize the risk, the public is required to follow accepted infection control practice and these include community-based measures such as self-isolation, use of alcohol-based hand sanitizer or hand-washing with soap ,restriction of movements with lockdown measures, sanitization of surfaces and use of non-medical cloth mask or face covering. During the on-going COVID-19 pandemic, recommendations and common practices regarding face mask use by the general public have varied greatly [6].

There has been much debate globally and locally about whether members of the general public should be advised to wear face-masks during the COVID-19 pandemic. However as the epidemic rages on, support for the wide use of cloth face-masks, including people who are not ill is growing [6]. Thus, acquiring and adhering to the Universal Safety Precautions (USP) is the only preventive measure in controlling the widespread of COVID-19 across the globe in which Universal masking is one such way to reduce the transmission probability per contact in public, among other measures.

Demographic details

AGE	Participants	Percentage
18-30yrs	420	82.6%
31-50yrs	48	9.44%
51yrs and above	40	7.87%

TABLE NO. 1 – Age of participants

II. MATERIALS AND METHODOLOGY

The study was approved by the institutional ethical committee of the college. The study was conducted on general population.

STUDY DESIGN

A cross sectional questionnaire based study was conducted to assess the awareness among general population regarding the use of face mask amid COVID 19 pandemic over a period of 3 months from July 2021 to September 2021.

STUDY POPULATION

A total of 510 participants , above the age of 18 years willingly participated in the study and filled the questionnaire.

STUDY PROCEDURE

A questionnaire was prepared and validated . The study comprised of demographic details such as participants age and education and the questionnaire comprised of total 10 questions out of which first 9 were open ended questions and the last one was closed ended question.

The inclusion criteria was the general population above the age of 18 yrs who were willing to participate and the population below 18yrs and not willing to participate were excluded.

The questionnaire was uploaded to online survey administration software, google forms and was distributed via whatsapp , facebook and instagram among the general population.

III. STATISTICAL ANALYSIS

The collected data from the questionnaire was analyzed and the information was also recorded in the excel sheet.

IV. RESULT

Majority of participants [82.6%] were from age group 18-30 years and graduates. Majority of them wear mask while stepping out of their homes. 63.7% participants feel that N95 mask provides maximum protection think that the mask should be at affordable prices [90.8%]. Majority of them could not breath properly and faced suffocation, sweating, fogging of eye glasses ,rashes and irritation while wearing the face mask.



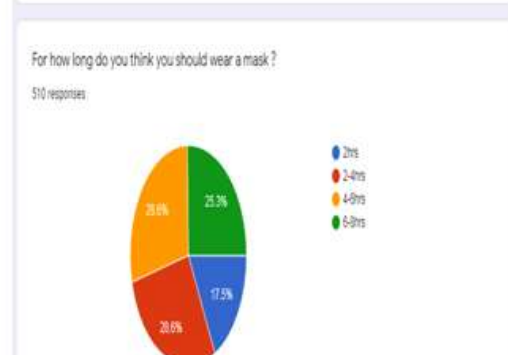
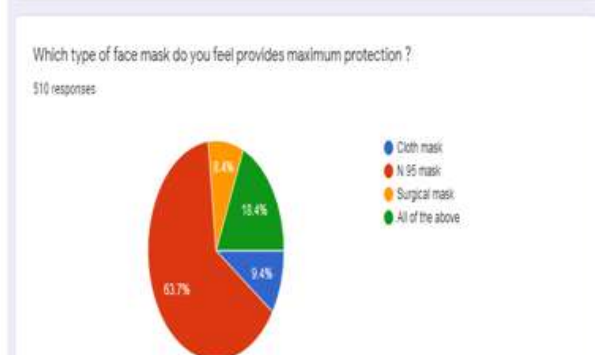
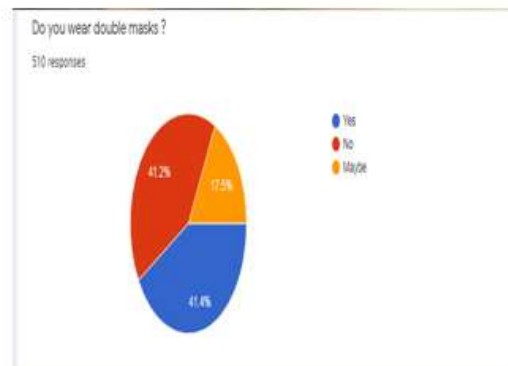
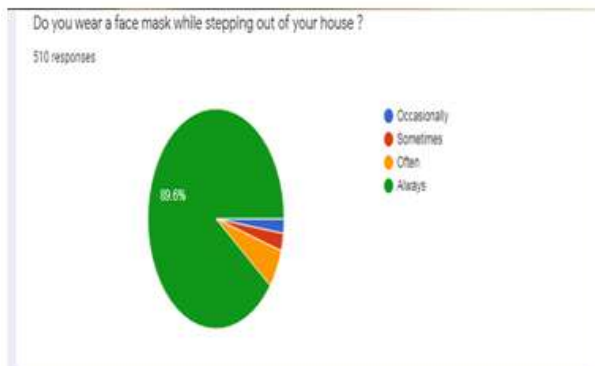
Education

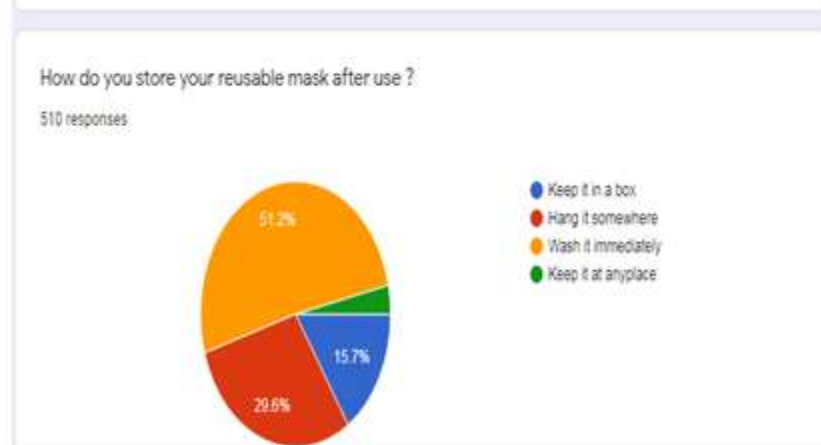
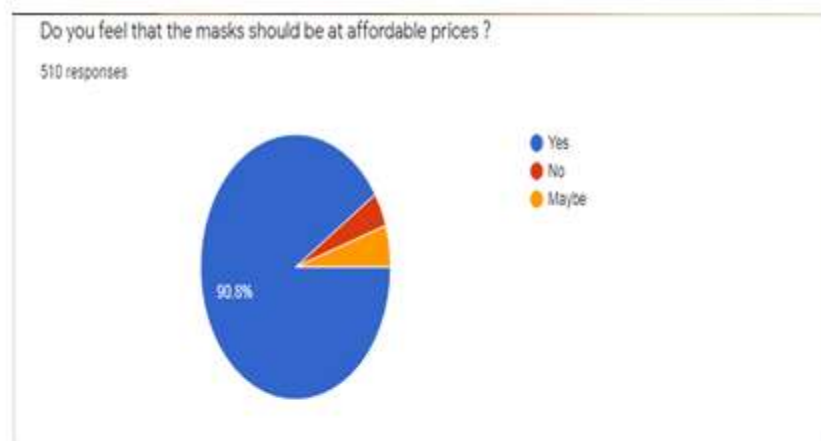
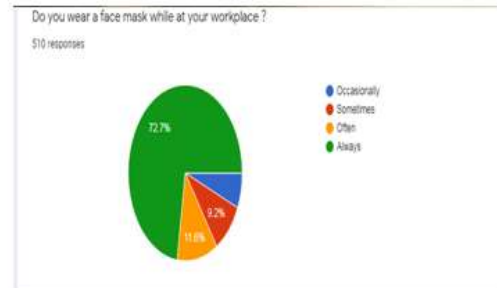
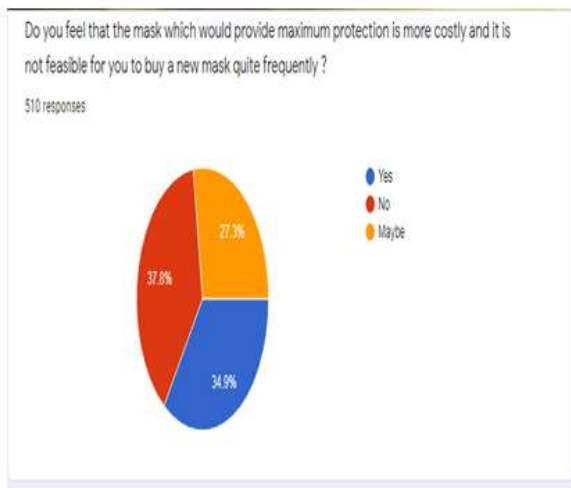
Education	Participants	Percentage
Primary education	40	7.8%
Under Graduate	4	0.78%
Graduate	350	68.4%
Post Graduate	115	22.5%
PhD	1	0.19%

TABLE NO.. 2- Educational Qualification of Participants

Total 510 people participated in the survey. Out of 510 participants in the survey, majority of participants were from the age group of 18-30 years [82.6%]. Remaining participants were from age group 31-50 years [9.4%] and above 51 years [7.8%].

The educational qualifications of participants shows that majority of them were graduates [68.4], post graduates [22.7%], primary education [7.8%], under graduates [0.78%] and PhD [0.19%].





The pie chart shows that majority of people always wear a mask while stepping out of house [89.6%]. According to 63.6% people N95 mask provides maximum protection from COVID-19 virus. Not many of participants wear

double mask only 0.2% difference can be seen in between people wearing and not wearing double mask. Equal number of participants [28.6%] think that 4-8 hrs are maximum to wear a mask. Majority of them [72.7%] always wear a face mask while at



work place. Due to higher prices of mask during pandemic only [33.9%] of participants often thought to discard their used mask and buy a new one . 37.8% of them feel that the mask providing maximum protection is not costly and can be bought frequently . Majority of them [90.8%] feel that masks should be at affordable prices. Majority of them [51.1%] wash their mask immediately after use. when asked about difficulties they face while wearing a mask maximum of them could not breath properly followed by excessive sweating , suffocation, fogging of eye glass, rashes, irritation of the area covered by mask, ear pain when used for long time.

V. DISCUSSION

The current study focuses on assesment on awareness of general population regarding use of face mask amid covid 19 pandemic. The COVID 19 pandemic hit the whole world terribly, since then all the safety measures like avoiding social gathering, travelling ,etc. were stopped. The lockdown was being imposed in India in March 2020. At that time there were no treatment options available and thus proper use and disposal of face mask along with washing hands was most important protocol to be followed .The study started at the end of second wave of COVID-19 i.e. july 2021. Second wave had lead to lots of mortality in India . also by then a lots of people were vaccinated. The previous studies were carried out during the first wave of COVID- 19 pandemic when no treatment options were available . The present study depicts that majority of them are aware of proper use and disposal of face masks and the knowledge regarding the fact that even after vaccination or any advanced treatment options available, proper use of face mask can only help us to get rid of this deadly Corona virus disesase. Majority of them know that N95 mask provides maximum protection and should be available at affordable prices.

As this study depicts the status of awareness of use of face mask among general population, it might not be representation of the entire population of India, many of the parameters might change with time to follow.

VI. CONCLUSION

As the covid 19 pandemic has not yet left us and continues to inflict terror over the parts of entire world, face mask are being used by people properly. By the above data obtained it is clear that general population is aware about the proper use and disposal of face masks and has knowledge regarding the fact that vaccination and advanced

treatments would not work if we do not follow the basic safety measures like wearing the face mask and washing hands frequently. Thus accurate use of face mask will help us prevent the spread, break the chain, flatten the curve and improve the health care system of the country due to covid 19 pandemic.

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