



## EFFECTIVENESS & AWARENESS OF WEARING MASK TO CONTROL COMMUNITY SPREAD OF SARS-COV2 -A QUESTIONNAIRE BASED STUDY

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### ABSTRACT

**Introduction:** Masks should be used as part of a comprehensive strategy of measures to suppress transmission and save lives; the use of a mask alone is not sufficient to provide an adequate level of protection against SARS COV2-19. The SARS-CoV-2 virus that causes Coronavirus Disease (SARS COV2-19) that is a viral infection.

The majority of persons who are affected by the disease will have mild to moderate respiratory symptoms and will recover without needing any specific therapy<sup>1</sup>. Some, on the other hand, will become critically unwell and require medical assistance. People over the age of 65, as well as those with underlying medical diseases such as cardiovascular disease, diabetes, chronic respiratory disease, or cancer, are at a higher risk of developing serious illness<sup>3</sup>. Anybody of gender can obtain SARS COV2-19 by becoming severely ill or die. Staying at least 1 meters away from people, wearing a properly fitted mask, and washing your hands or using an alcohol-based rub often are the best ways to prevent and slow it down infection. When it's your turn, get vaccinated and follow local advice. Whenever an infected individual coughs, sneezes, speaks, sing or breaths, the virus is spread in microscopic droplets from their mouth or nose. Larger respiratory droplets to smaller aerosols are among the particles.

**Aim:** To analyze the effectiveness & awareness of wearing mask to control Community spread of SARS-CoV2

**Materials and methods:** A questionnaire study was conducted among health care workers to assess the effectiveness & awareness of wearing masks. The Characteristics of survey includes age, race, household income, SARS COV2 vaccination status, health status, results of analysis for different models on mask-wearing and statistical values for various factors were analyzed.

**Conclusion:** Masks can prevent the spread of SARS COV2-19 in two ways: by preventing a healthy person from acquiring the disease and by preventing an infected person from spreading the disease. Besides, the mask also decreases the hand-face contacts, which prevents the infection through contaminated fomites.

**Result:** The justification for wearing masks has switched from patient safety to health care provider protection. Currently, there is no evidence that wearing a surgical mask provides adequate protection from all of the risks that may have been faced in an intensive health care setting; in some cases, the use of a respirator and face shield may be considered. As the coronavirus disease 2019 (COVID-19) pandemic spreads, one point of contention is whether or not members of the public must wear face masks. Covering the mouth to decrease pulmonary droplet spread have fundamental causes, and cough etiquette is based on these concerns rather than proof.

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### INTRODUCTION

Coronavirus disease (SARS COV2-19) is an infectious disease caused by the SARS-CoV-2 virus. Most people infected with the virus will experience mild to moderate respiratory illness and recover without requiring special treatment<sup>1</sup>. However, some will become seriously ill and require medical attention. Older people and those with underlying medical conditions like cardiovascular disease, diabetes, chronic respiratory disease, or cancer are more likely to develop serious illness<sup>3</sup>. Anyone can get sick with SARS COV2-19 and become seriously ill or die at any age.

The best way to prevent and slow down transmission is to be well informed about the disease and how the virus spreads<sup>4</sup>.

Protect yourself and others from infection by staying at least 1 metre apart from others, wearing a properly fitted mask, and washing your hands or using an alcohol-based rub frequently<sup>2</sup>. Get vaccinated when it's your turn and follow local guidance.

The virus can spread from an infected person's mouth or nose in small liquid particles when they cough, sneeze, speak, sing or breathe<sup>6</sup>. These particles range from larger respiratory droplets to smaller aerosols. It is important to practice respiratory etiquette, for example by coughing into a flexed elbow, and to stay home and self-isolate until you recover if you feel unwell<sup>10</sup>.

**Aim and Objective:** To analyze the effectiveness & awareness of wearing mask to control Community spread of SARS-CoV2

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## MATERIALS AND METHODS

A questionnaire study was conducted among Health Care Workers (HCW's) to assess the effectiveness & awareness of wearing masks among them. The study was approved by Institutional Review Board. HAW's who were interested to participate in this study were included. They were not forced to do it. The Characteristics of survey includes age, race, household income, SARS CoV2 vaccination status, health status, results of analysis for different models on mask-wearing and statistical values for various factors were analyzed (200 Participants), The questionnaire was prepared based on the reference articles.

## RESULTS

Community mask wearing substantially reduces transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in 2 ways. First, masks prevent infected persons from exposing others to SARS-CoV-2 by blocking exhalation of virus-containing droplets into the air (termed source control). This aspect of mask wearing is especially important because it is estimated that at least 50% or more of transmissions are from persons who never develop symptoms or those who are in the presymptomatic phase of SARS COV2- illness. The responses collected were depicted in figure 1-22.

Majority of participate around age 68% between age 17 to 25, 71% participants were female. About 42% people live in well-spaced house i.e 4 members. 67% participants were from urban and among which 54% complete schooling and 43% completed university degree. Among which the health status is good in general which about 80% people had on long standing illness. 33% of participants were exposed about SARS CoV2 patients. In which 94.9% people were wearing mask regularly. 66.3% participants change the mask frequently once in a day 17.1% people twice a day. 59% participants mostly preferred surgical mask on daily basis. Category of health care workers among the participants are 65% student, 8% Nursing staff, 13% Medical professionals and 12% pharmacists. 71% people agreed to wearing the Mask. 57% people agreed that wearing mask help to reduce the spread of SARS COV2. SARS COV2 status among participants 45.7% were affected by SARS CoV2-19 infection, 23.3% were not affected. Based on Awareness and effectiveness 49% participants strongly agree, 39% agree to wear mask or another face covering to protect from SARS CoV2. 61% people were agreed, 37% people strongly agreed medical/surgical mask will be protecting from SARS CoV2.

Fig 1 Graph showing the wearing of mask by Age wise

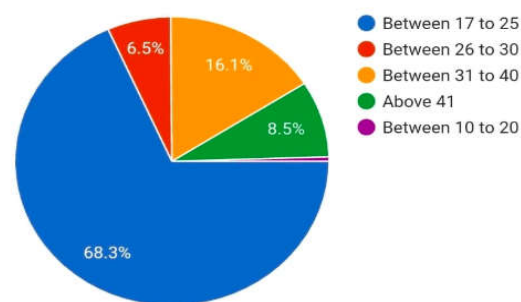


Fig 2 Graphical distribution showing wearing of mask by Gender wise

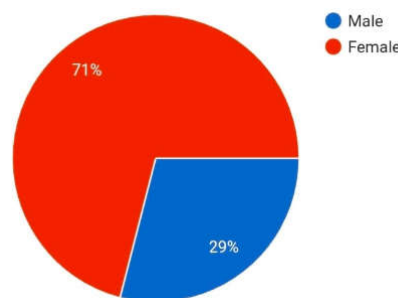


Fig 3 Graph showing the wearing of mask by Family members

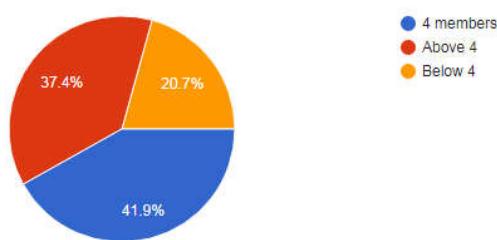


Fig 4 Graph showing the wearing of mask by Living location

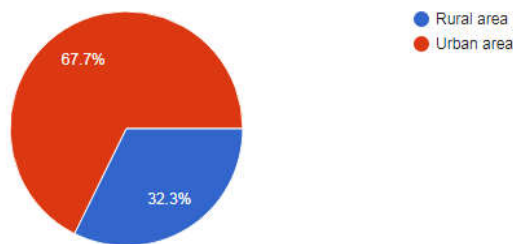


Fig 5 Graph showing the wearing of mask by education

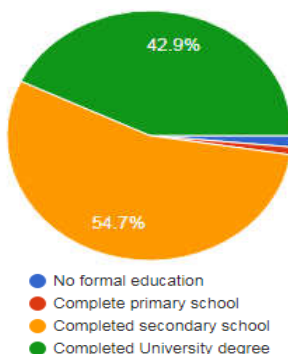
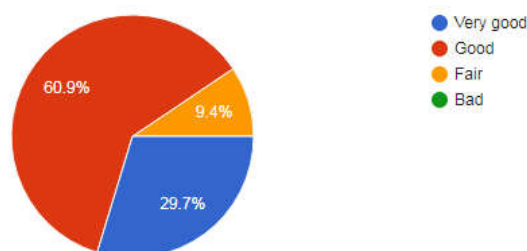
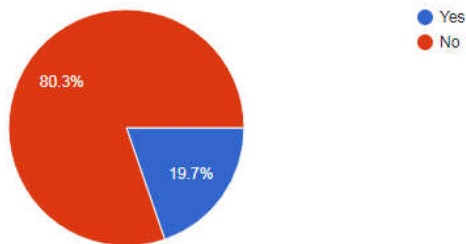


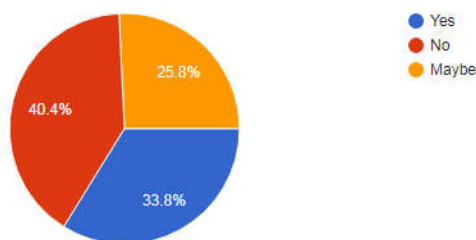
Fig 6 Graph showing the wearing of mask by Health



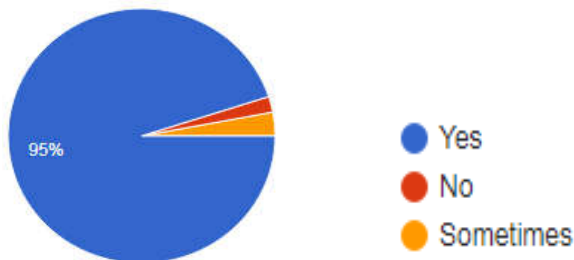
**Fig 7** Graph showing the wearing of mask by Past illness or Health issue



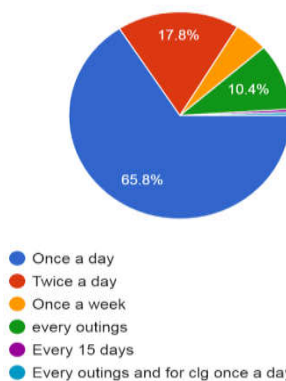
**Fig 8** Graph showing about the exposed SARS CoV2 patients



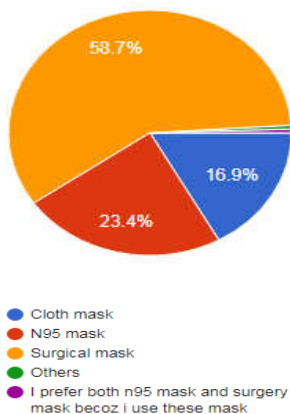
**Fig 9** Graph showing about the wearing of mask regularly



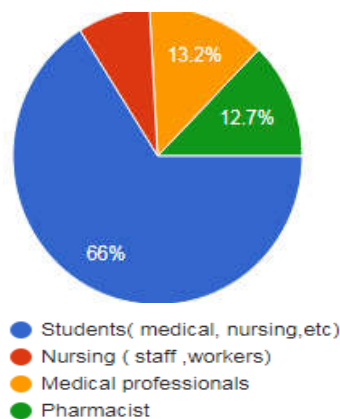
**Fig 10** Graph showing about the Changing of wearing of mask regularly



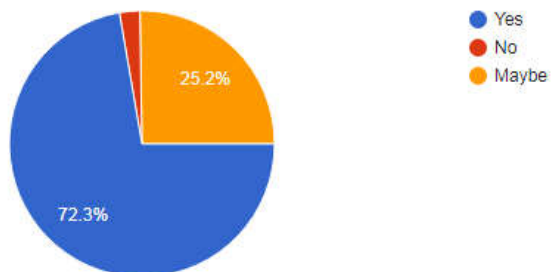
**Fig.11** Graph showing about the kind of mask regularly



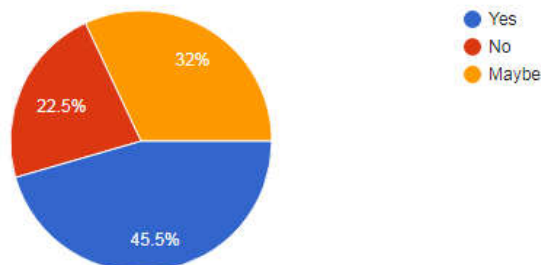
**Fig.12** Graph showing about the category of health care workers belongs



**Fig 13** Graph showing about the wearing of mask to reduce the SARS CoV2



**Fig 14** Graph showing about the SARS CoV2 affected person



61% people strongly agree, 38.7% people agreed, that hand washing/sanitizing will be protecting from SARS CoV2. 98% people agree that cleaning and disinfecting surface will also protect from SARS CoV2. 88% people agree that work, school, business area and other closing area will also be protecting from Covid.

92% people agree that “stay at home” will also protecting from SARS CoV2. 100% people agree that maintaining physical distance of 6 feet social distance between people will also effective and protecting from SARS CoV2. Vaccination status 67% were vaccinated both doses, 27% were vaccinated only single dose and 6% not vaccinated.

Fig.15 Graph showing about the effective think of wearing of Mask

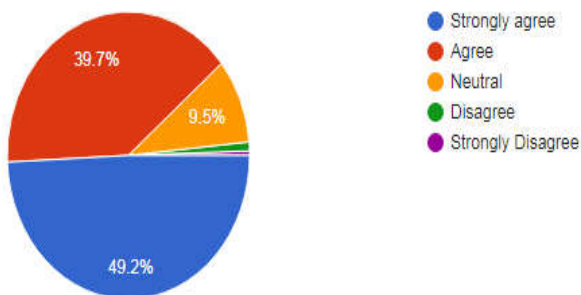


Fig.17 Graph showing about the effective think of hand washing of sanitizing the hands to protect from SARS CoV2

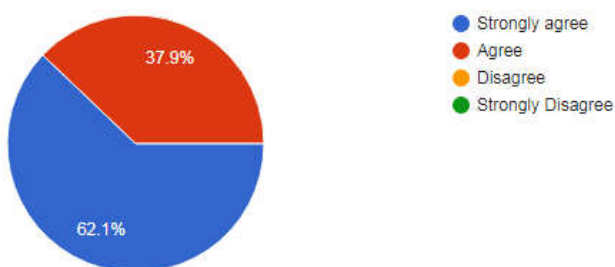


Fig.19 Graph showing about the effective think of school, work, business and other closing area to protect from SARS CoV2

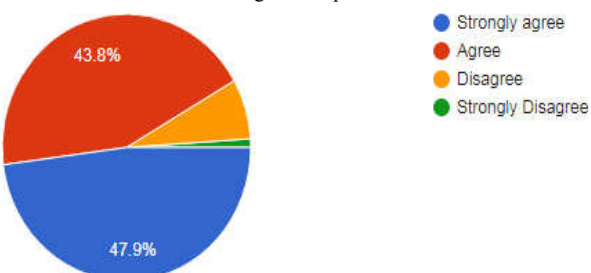


Fig.21 Graph showing about the effective think of maintain the physical distance of 6ftaprt from other people will be protect from SARS CoV2

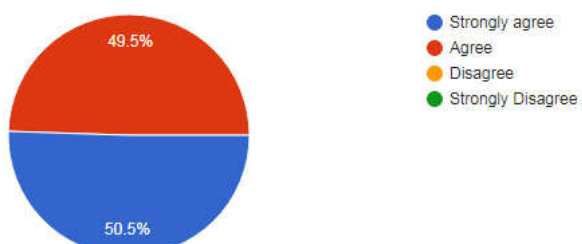


Fig.16 Graph showing about the effective think of wearing of medical or surgical mask

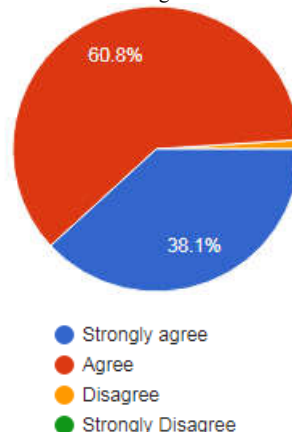


Fig.18 Graph showing about the effective think of cleaning or disinfecting surface to protect from SARS CoV2

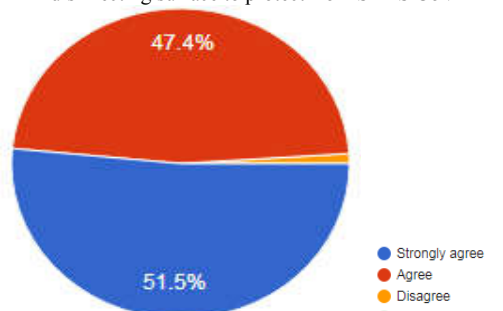


Fig.20 Graph showing about the effective think of stay at home will be protect from SARS CoV2

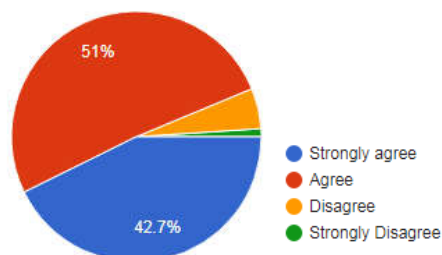
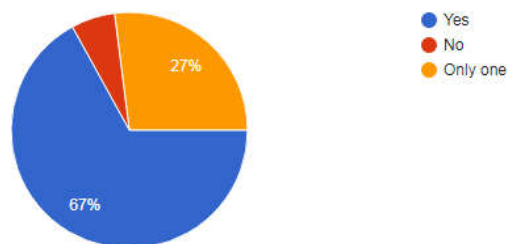


Fig.22 Graph showing about the vaccination doses taken



**DISCUSSION**

Having a mask is a common preventive measure. In this study, we looked at how mask-wearing factors can influence epidemic dynamics in the setting of SARS COVID-19<sup>11</sup>. Every susceptible individual decides whether or not to protect themselves in the following time step based on an assessment of the prospective costs and perceived risk of infection. When the cost of infection is considerable<sup>13</sup>, the majority of the population opts to wear masks, and this is when worldwide awareness comes into play<sup>2</sup>. If the mask source is limited, however, global awareness may have a detrimental outcome.

Additional mask sources must be allocated to the high-risk individuals within that instance<sup>5</sup>.

Mask are a simple barrier to prevent your respiratory droplets from fall into the hands of others. Usually wear mask over the nose and mouth research shows that mask reduce the spread of particles<sup>10</sup>. SARS COVID-19 is transmitted mostly through respiratory droplets. Whenever you cough, sneeze, talk, shout, and sing the droplets spreads into the environment. These droplets can then land in the mouths or nostrils of those who are close to you, or they can inhale them inn<sup>15</sup>. Even though you're not sick, you should wear a mask. This is because

multiple studies have found that patients with SARS COVID-19 who have never developed symptoms (asymptomatic) or who have not yet developed symptoms (presymptomatic) can still disseminate the virus to others<sup>7</sup>. If you're infected but just don't show illness and wear a mask may help you to protect from the viruses. Because SARS COV2-19 spreads mostly among persons who are really in close contact with one another<sup>1</sup>, it really is especially necessary you wear masks when you are indoors people you do not live with but are unable to stay at least 6 feet apart<sup>9</sup>.

## CONCLUSIONS

To conclude the study, Awareness and effectiveness of wear Mask is highly prevents spread of SARS CoV2-19 and the finding suggest that wearing of mask helps prevent spread of SARS CoV2-19 to some extent. But other precautions should also be done (Social distancing etc.). Increasing the awareness among community can help in alleviating, the burden of spread of SARS CoV2-19 as it affects the daily activities, academics and lowers their quality of life and also to decrease the mortality among community.

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