

IS COVID-19 REALLY A LIFE THREATENING PANDEMIC - A SURVEY ON POPULAR PERCEPTION

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ABSTRACT:

Coronaviruses are named for the crown-like spikes on their surface and belong to the family Coronaviridae within the order Nidovirales. Coronaviruses broadly infect vertebrates including humans, birds, bats, snakes, mice, and other wild animals. The COVID-19 virus spreads primarily through droplets of Saliva or discharges from the nose when an infected person coughs or sneezes. At this time, there is no specific vaccine way or treatment for COVID 19. A self-administered questionnaire was prepared to comprise about 13 questions based on the topic of the survey and circulated to about 100 people through an online google form. The questions were studied carefully and corresponding answers were marked by the participants. The data were collected and statistically analyzed. From the results, the majority of the study population gave positive responses that COVID-19 is really a life-threatening pandemic. 100% of the population were aware of the pandemic, its outbreaks in several countries and its devastating effects. This study gives an insight into popular perception of COVID-19 as a life-threatening pandemic and awareness on its spread and ways to control it.

KEYWORDS: Awareness, COVID-19, Deadly, Pandemic, Popular perception.

INTRODUCTION:

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus (Maurya, et.al). The disease causes a respiratory illness with symptoms such as cough, fever, and in more severe cases, difficulty breathing can protect yourself by washing your hands frequently, avoiding touching face, and avoiding close contact with people who are unwell. People may be sick with the virus for 1 to 14 days before developing symptoms (Zheng *et al.*, 2020). The most common symptoms of coronavirus disease are high fever, tiredness, and dry cough (Li *et al.*, 2005). Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness (Cattaruzza *et al.*, 2020). The current pandemic of coronavirus disease 2019 is severely affecting health symptoms worldwide and changing both our Lifestyle and our work. In these difficult times, the priority of all health care professionals is to take care of the infected sick. According to the coronavirus study group of the international committee on taxonomy SARS- COV-2 belongs to the coronaviridae family since its discovery, the virus has spread globally, causing thousands of death and having an enormous impact on our health system and economies (Tan *et al.*). The popularity of this disease is spread all over the world and

increases the rate of death of the population. The impact of coronavirus infection in adult diabetic patients is well established, with the evidence showing a link between type-2 diabetes and disease severity. SARS-COV infection has been associated mainly with upper respiratory tract symptoms and exacerbation of asthma and pneumonia in some groups in institutional group settings (Emert, Shah, and Zampella, 2020). Previously our team had conducted numerous studies and review on upcoming topics (Menon and Thenmozhi, 2016) (Menon and Thenmozhi, 2016; Subashri and Thenmozhi, 2016; Seppan *et al.*, 2018) (Subashri and Thenmozhi, 2016) (Samuel and Thenmozhi, 2015; Sriram, Thenmozhi and Yuvaraj, 2015; Thejeswar and Thenmozhi, 2015; Subashri and Thenmozhi, 2016; Sekar *et al.*, 2019) (Johnson *et al.*, 2020). The virus has also been associated with severe neurological disorders like acute disseminated encephalomyelitis in children. This research is needed for awareness about their hygiene. People with severe immunodeficiency, including those undergoing bone marrow (stem cell) transplant are at high risk from all infections. Coronavirus genome replication and transcription take place at cytoplasmic membranes and involve coordinated processes of both continuous and discontinuous RNA synthesis that are mediated by the viral replicase, a huge protein complex encoded by the 20-kb replicase gene (Nanchahal and Layton, 2020). Besides RNA-dependent RNA polymerase, RNA helicase, and protease activities, which are common to RNA viruses, the coronavirus replicase was recently predicted to employ a variety of RNA processing enzymes that are not extremely found in other RNA viruses and include putative sequence-specific endoribonuclease, 3'-to-5' exoribonuclease, 2'-O-ribose methyltransferase, ADP ribose 1'-phosphate and, in a subset of group 2 coronaviruses, cyclic phosphodiesterase activities (Han, 2020). The replicase complex is believed to be composed of up to 16 viral subunits and a number of cellular proteins. Previously our team had conducted numerous studies and reviews on upcoming topics (Choudhari and Thenmozhi, 2016) (Kannan and Thenmozhi, 2016) (Nandhini *et al.*, 2018) (Keerthana and Thenmozhi, 2016; Nandhini *et al.*, 2018) (Hafeez and Thenmozhi, 2016) (Pratha, Ashwatha Pratha and Thenmozhi, 2016) (Krishna, Nivesh Krishna and Yuvaraj Babu, 2016)

The aim of this study is to know the general perception about life threatening nature of the COVID-19 pandemic among the population and to create awareness on the same.

MATERIALS & METHODS:

An online survey was conducted with a self- prepared questionnaire with a sample size of participants compressing the general population. The questionnaire consists of the questions that help in providing awareness among the participants. A compressed question selected for the participants was from a short introduction about the need to study that COVID-19 is really a life threatening pandemic disease. The questionnaire was validated in a standard manner. Measures such as selecting participants randomly, steps to prevent asking irrelevant questions to the participant's group, and age groups are taken to minimize the bias occurring to sampling. The questionnaire was evaluated using the online 'google forms'. Descriptive analysis was carried out using the statistical software "SPSS software version 20". The result of the survey was represented in the form of pie charts and bar charts.

RESULTS AND DISCUSSION:

The results were collected and analyzed. COVID-19 is Pandemic disease and has led to a noticeable rise in cases in India. The total participants had positive views over the lockdown and they thought social distancing is the best way to control the pandemic diseases. This proves it to be an outright positive report. Therefore, In figure:1, 100% of the participants were found aware of the presence of the COVID-19 virus and the similar responses collected in another previous study(Boero, 2020). In figure:2, 70% of the participants agreed that COVID-19 is a pandemic disease, which is similar to the statement proved in the previous study. (Tekes and Thiel, 2016). In Figure:3, 98% of the participants experienced severe cough, shortness of breath, and other symptoms and are related to similar findings done in a previous study(Levy

and Talbot, 2012). From Figure:4, 92% of the participants agreed that by avoiding touching our eyes, nose, and mouth one can reduce the incidence of COVID-19 infection which echoes the same result in another study by Curry (Curry, et.al; J 2020). In Figure:5, 96% of participants were aware to wash their hands frequently for 20 seconds and similar findings done in a previous study (Wang *et al.*, 2020). In Figure:6, 90% of participants were aware of COVID-19 disease spread through the air and by touching others and food. With that awareness, the result shows a sharp decline of disease, which is similar to the statement proved in a previous study (Harrison *et al.*, 2020). In Figure:7, 100% of the participants were aware that preventing ourselves from droplet transmission by wearing masks is essential and is similar to the findings done by a previous study(Printza and Constantinidis, 2020). In figure:8, 100% of people are aware that preventing COVID-19 by wearing masks is essential and the resulting awareness shows a sharp decline of disease which is similar to the statement proved in a previous study (Seirafi Pour *et al.*, 2020).In figure:9, 89% of the participants were aware of the high transmission rate and high mortality rate of the COVID-19 infection. Then, the similar findings done by a previous study (Mallya and D’Silva, 2020).In figure:10, 86 % of participants were aware that non-availability of any effective medicine to treat COVID-19 and similar findings were done by a previous study(Emert, Shah, and Zampella, 2020). In Figure:11, 88% of participants on the essentiality of imposed lockdown and the similar findings done by a previous study(Lala *et al.*, 2020). In figure:12, 98 % of the participants were aware that social distancing even after the lockdown is over and the similar findings done by a previous study(ElKadhi *et al.*, 2020).In Figure:13, 100 % there is a non-availability of vaccine for the COVID-19 virus and a similar statement is proved in a previous study(Cavanagh, 2005; 2020). The limitations of this study about the awareness of pandemic showed that it led to the serious spread and lack of information about COVID-19 outbreaks. (Iba *et al.*, 2020). In figure 14, The bar graph represents the association between gender and awareness of prevention of COVID-19 was done using the chi-square test. Out of 90% of the participants are aware, 41% constitutes male and 49% constitutes female. Hence females are more aware of the prevention of COVID-19 than males. In figure15, The bar graph represents the association between gender and awareness of agreed lockdown is essential was done using the chi-square test. Out of 86% of the participants are aware, 41% constitutes male and 45% constitutes females. Hence females are more aware of agreed lockdown is essential than males. In figure16, The bar graph represents the association between gender and awareness of home safety is essential for this situation was done using the chi-square test. Out of 98% of the participants are aware, 43% constitutes male and 55% constitutes female. Hence females are more aware of home safety is essential for this situation than males. In figure 17, the bar graph represents the association between gender and awareness agreed that COVID-19 is a pandemic disease was done using the chi-square test. Out of 70% of the participants who are aware, 38% constitutes male and 32 % constitutes females. Hence males are more aware of awareness regarding agreed that COVID-19 is a pandemic disease than females. The future scope of awareness on pandemic disease awareness on preventive measures by succeeds to find a vaccine for disease perception of the population reduced the death rate due to this pandemic Disease.

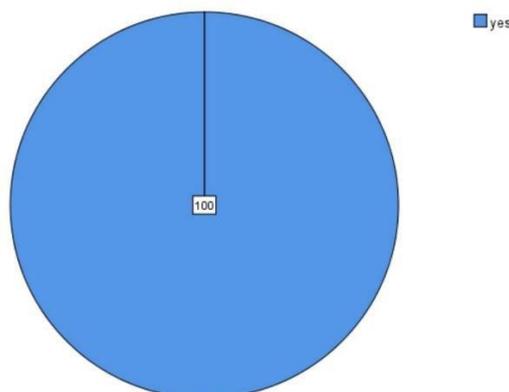


Figure 1: Pie chart showing percentage distribution of responses about awareness

among study participants regarding COVID-19. 100% responded they were aware (blue).

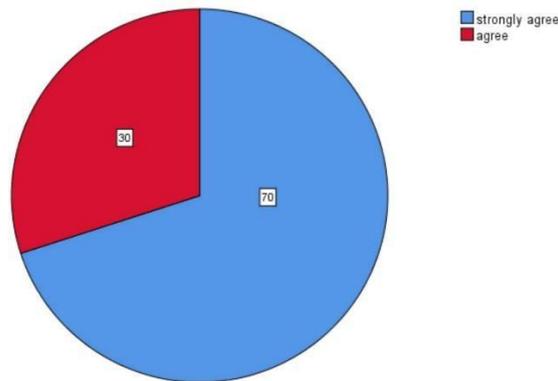


Figure 2: Pie chart showing percentage distribution of responses about opinion among study participants regarding whether COVID-19 is a pandemic disease. 70% strongly agreed to it (blue), while 30% agreed (red) to the statement.



Figure 3: Pie chart showing percentage distribution of responses about awareness among study participants regarding awareness of a severe cough, shortness of breath, or other concerning symptoms as symptoms of COVID-19. A vast majority of 98% responded to be aware (blue) of it, while 2% were not aware about it (red).

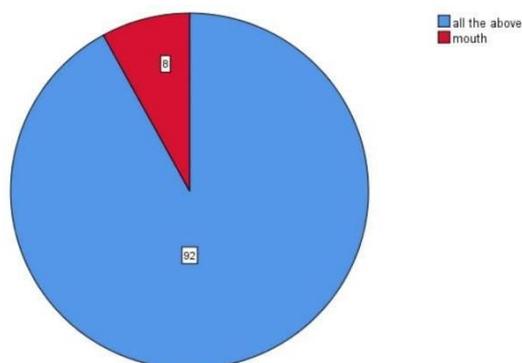


Figure 4: Pie chart showing percentage distribution of responses about awareness among study participants regarding avoiding touching our eyes, nose, and mouth to avoid getting infected with COVID-19. A majority of 92% responded that all of the above mentioned parts should be avoided from touching (blue) and 8% responded with only mouth to be avoided from touching (red)

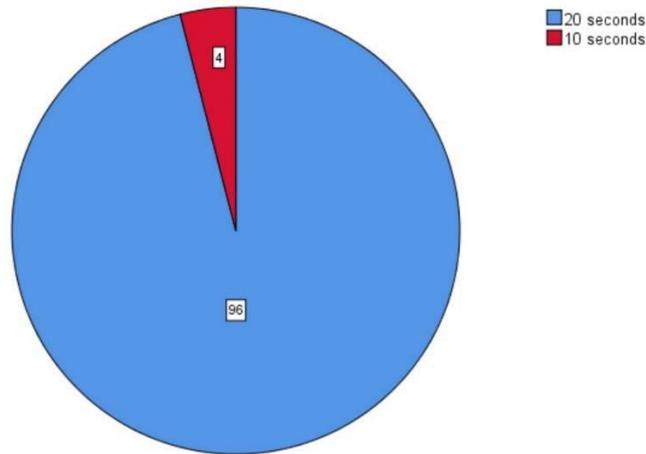


Figure 5: Pie chart showing percentage distribution of responses about awareness among study participants regarding the duration of washing hands. A majority of 96% responded with 20 seconds (blue), and 4% responded as 10 seconds (red) as the duration for washing hands.

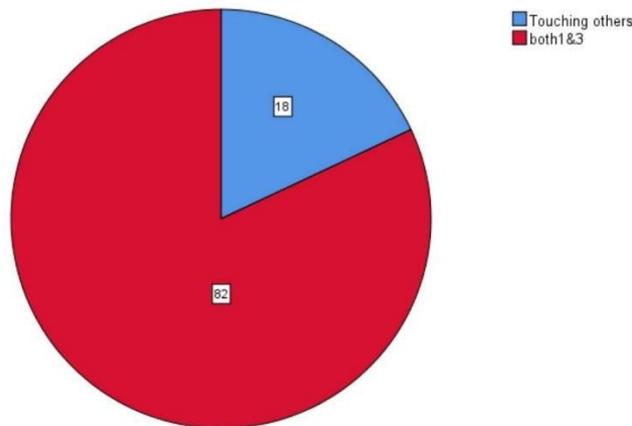


Figure 6: Pie chart showing percentage distribution of responses about awareness among study participants regarding COVID-19 route of transmission through air, food, and touching others. 18 % responded for touching others (blue), while a majority of 82% responded for transmission through air and also by touching others (red) .

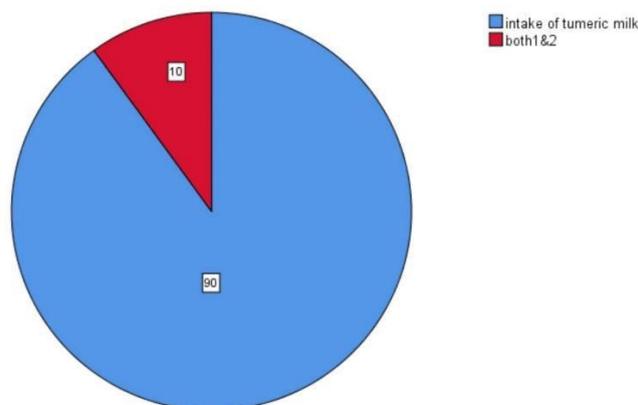


Figure 7: Pie chart showing percentage distribution of responses about awareness among study participants regarding the prevention of COVID-19 by the intake of turmeric milk and turmeric in hot water. 90 % responded affirmatively for turmeric milk (blue), 10% responded for prevention through drinking turmeric milk and turmeric in hot water (red) .

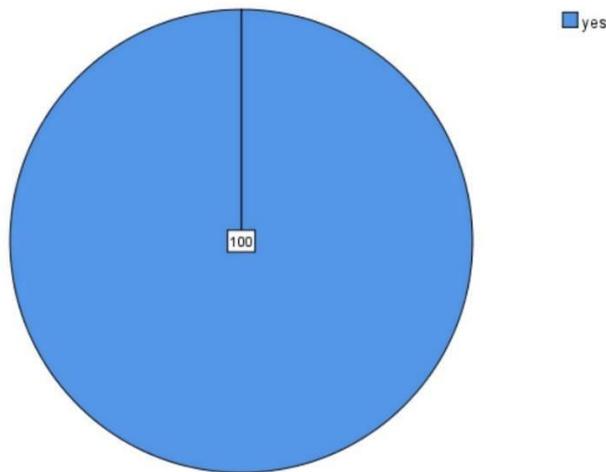


Figure 8: Pie chart showing percentage distribution of responses about awareness among study participants regarding essentiality of wearing masks to prevent from getting infected. All the participants (100%) accepted it (blue).

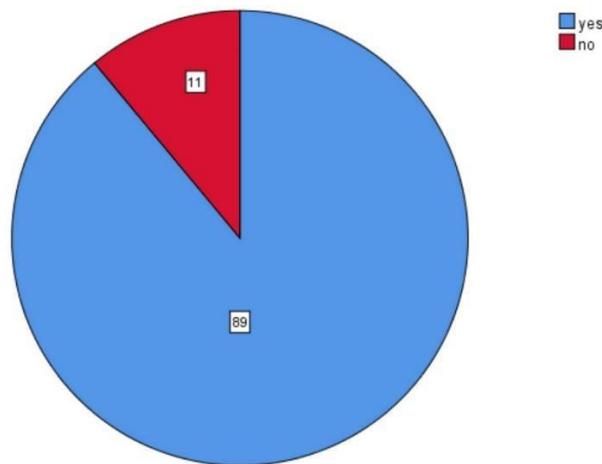


Figure 9: Pie chart showing percentage distribution of responses about awareness of the high transmission rate and high mortality rate of the COVID-19 infections among study participants. A majority of 89 % respondents were aware (blue), and 11% were not aware (red) of it.

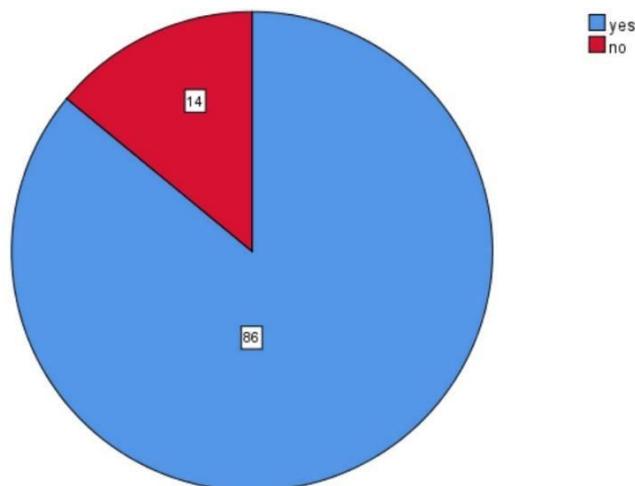


Figure 10: Pie chart depicts that awareness among study participants regarding the awareness of non availability of any effective medicine to treat COVID-19. 86 % responded they were aware (blue) , while 14% responded they were not aware (red) of it .

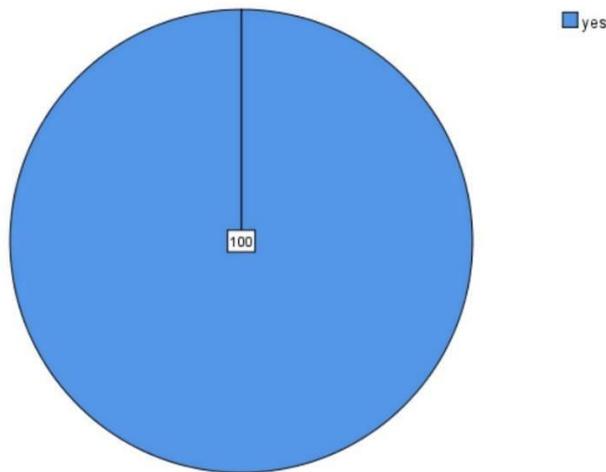


Figure 11: Pie chart depicts that percentage distribution of responses of study participants on the essentiality of imposed lockdown, a majority of 88% were affirmative (blue) about it and 12% marked a negative(red) response for it.

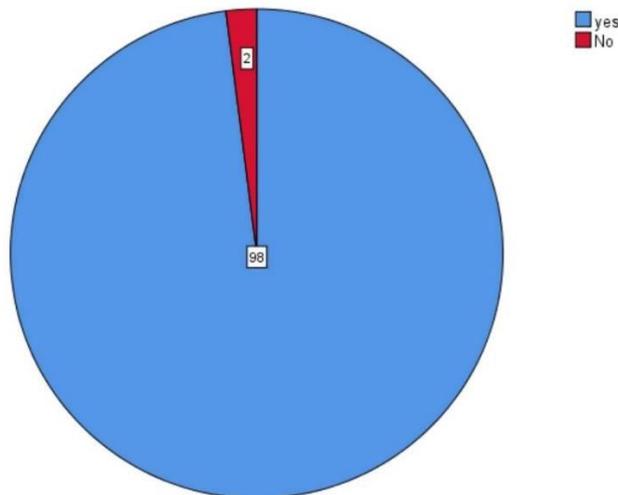


Figure 12: Pie chart depicts the percentage distribution of responses for awareness among study participants on social distancing even after the lockdown is over, a majority of 98 % were aware of it (blue), while 2% were not aware of it(red) .

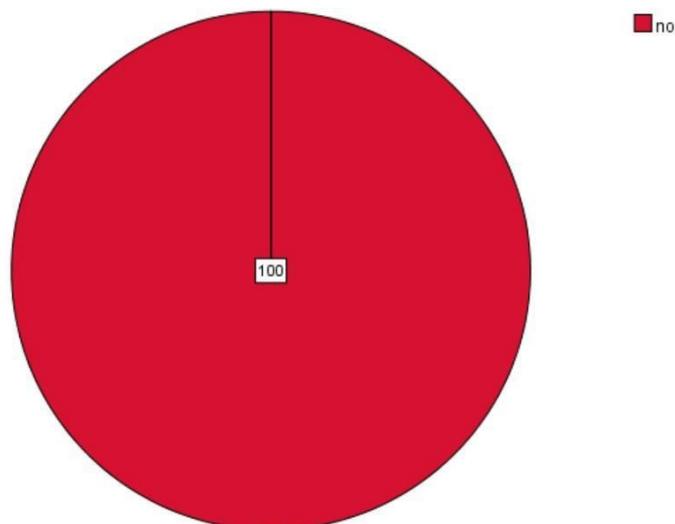


Figure 13: Pie chart depicts that awareness among study participants regarding the non availability of vaccines for COVID-19. All the study participants were aware of it (blue).

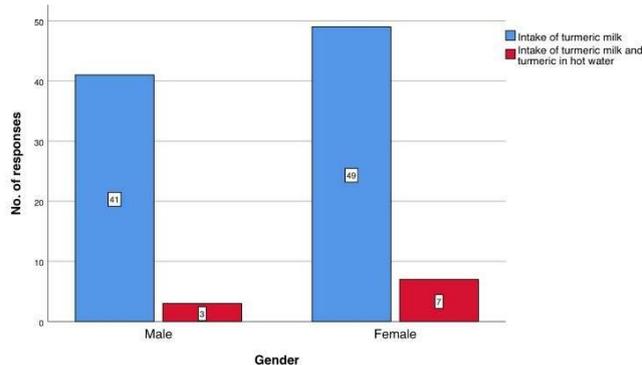


Figure 14: Bar chart represents the association between gender and opinion regarding turmeric can prevent COVID-19 infection. X-axis represents the gender and y-axis represents the number of participants responded in favour of turmeric(blue) and against turmeric(red) in preventing COVID-19 infection. Females (49%) are more positive about the benefits of turmeric against COVID-19 than males (41%). Chi-square test was done and the association was found to be statistically not significant. p-value - 0.347 (>0.05). Hence both males and females think that intake of turmeric can prevent COVID-19.

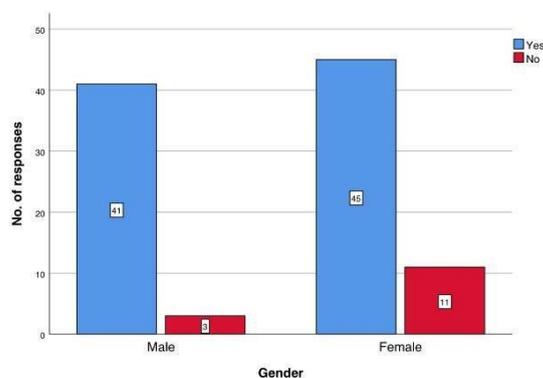


Figure15: Bar chart represents the association between gender and awareness on the essentiality of imposed lockdown in containing COVID-19. X-axis represents the gender and y-axis represents the number of participants responded yes(blue) and No (red). Females (45%) are more aware of the essentiality of imposed lockdown in containing COVID-19 than males (41%). Chi-square test was done and the association was found to be statistically not significant.p-value - 0.067 (> 0.05). Hence males and females were equally aware of the essentiality of imposed lockdown in containing COVID-19.

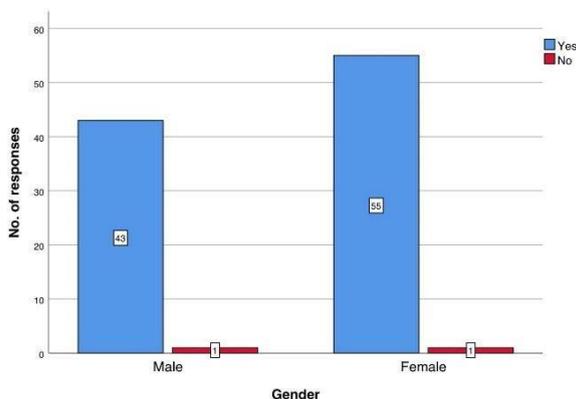


Figure16: Bar chart represents the association between gender and awareness of following social distancing beyond the lockdown. X-axis represents the gender and y-axis represents the number of participants responded to yes(blue) and No (red). Females (55%) are more aware that following social distancing beyond the lockdown is essential than males (43%). Chi-square test was done and the

association was found to be statistically not significant. p-value - 0.836 (>0.05). Hence males and females are equally aware of following social distancing beyond the lockdown.

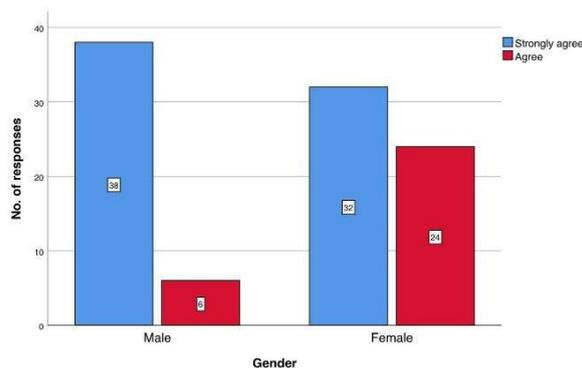


Figure 17: Bar chart represents an association between gender and awareness of pandemic nature of COVID-19. X-axis represents the gender and y-axis represents the number of participants responded to yes (blue) and No (red). Males (38%) are more aware of the pandemic nature of COVID-19 than females (32%). Chi-square test was done and the association was found to be statistically not significant. p-value - 0.852 (>0.05). Hence males are more aware about the pandemic nature of COVID-19 than females.

CONCLUSION:

This study shows a holistic picture of the current research in response to the COVID - 19 and it is well accepted that it is really a life threatening pandemic in popular perception. This study gives a picture of the public perception towards awareness among COVID-19 viruses. From this study, it can be concluded that the public accepts COVID 19 as a life threatening pandemic disease.

AUTHOR CONTRIBUTIONS:

All the authors contributed equally in concept, design, carrying out the research, and analysis of the study.

CONFLICT OF INTEREST:

All the authors declare no conflict of interest in the study.

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