

Does Social Isolation Aggravate Psychiatric Problem - Popular Perception In Covid -19 Lockdown

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Abstract: COVID -19 is an infectious disease caused by the newly discovered coronavirus. As there is no vaccine discovered, the only way to prevent the spread is through following the practice of social isolation.

Objectives: Prolonged isolation may also lead to psychological stress and problems. Hence the scenario is to measure the level of awareness among the people about psychiatric problems created due to prolonged social isolation. The aim of the survey is to measure the level of awareness among the participants on the psychological stress created due to social isolation through the imposed lockdown.

Materials And Methods: A questionnaire was prepared and administered to a hundred participants through google form an online platform. The study participants included people belonging to the general population of Tamilnadu. The answers obtained from the participants are recorded and analysed and the answers given by each participant to each question were represented in the form of flow charts.

Results: Around 70% of people said that social isolation affects mental health and 72% of people said that social isolation creates stress. 60% of people were aware that prolonged social isolation can create psychiatric problems.

Conclusion: The level of awareness among the participants is moderate and hence a complete awareness on social isolation and its consequences must be created among the study population.

Keywords : Covid-19, lockdown, perception, psychiatric problems.

1. INTRODUCTION

The Covid-19 virus is the current ongoing pandemic across the world. (Bayham and Fenichel). This belongs to the family of Corona Viruses, SARS, AIDS(HIV) etc. It was first identified in Wuhan district of China in December 2019. (Tesch-Roemer and Huxhold) Today nearly 216 countries have been affected by this. Many people are getting affected day by day. Also the death ratio is getting increased as days pass by it also gets spread only through the touch of contaminated goods from infected persons. (Kumaret al.) Till day no vaccine has been found. The only way to prevent the spread of infection is through the implication of social isolation. Social isolation is a mitigatory measure and is a policy of state to ensure complete lack of physical contact of an individual to another individual, (Tesch-Roemer and Huxhold) more precisely even to the society. It's an age-old practice of prevention of the spread of any contagious disease. Social isolation is different from loneliness, but prolonged social isolation leads to loneliness. Social isolation requires a temporary, involuntary lack of contact with other individuals. Social isolation is an issue for individuals of old age. A prolonged isolation can result in change in the life cycle of the individual and has a greater input on the both physical and mental status of the individuals. Social isolation can contrarily influence psychological wellness, just as physical well being. (Sanders) Research has discovered that apparent social detachment and loneliness are related with wretchedness, intellectual decrease, poor rest quality, a poor immune system, and potential heart issues. The stress thus created has its overall effect on the individual in three ways. First on the body it can lead to headache, muscle tension, chest pain and fatigueness which in turn have its immense effect on the mood of the individual and may lead to personal and social disturbances. In adverse conditions it may also make the person to behave so erratic that he may lose his or her control over themselves. There are different types of isolation such as self quarantine, social distancing, lockdown etc. All these isolation strategies are now being followed effectively by the government. self quarantine also known as self isolation where people need to stay at home. A person in isolation cannot leave to attend public places, including work, school, childcare etc. Social distancing is being away from the places where the people gather for many purposes such as for entertainment, purchasing goods, spiritual purposes etc. ("Effect of Transport Measures and Curfew against COVID-19 Spread on Air Pollution (TSP) in Ecuador's Three Most Populous Cities"; Baker and Clark) Lock down popularly known as the Junta Curfew in our country is the practice of complete shutdown of all the public, government and private sectors except important centres such as the hospitals police stations etc. This is followed strictly to reduce the Covid -19 virus spread and it is an effective way for preventing the (Roy) But this practice of social isolation is the only way of preventing Covid- 19. Previously our team had conducted numerous clinical trials (Johnson et al.; Sekar et al.; Seppan et al.; Krishna et al.; Website)- (Subashri and Thenmozhi; Thejeswar and Thenmozhi) and lab animal studies (Sriram et al.; Keerthana and Thenmozhi; Pratha et al.) and in vitro studies (Menon and Thenmozhi; Samuel and Thenmozhi; Hafeez and Thenmozhi; Choudhari and Thenmozhi; Kannan and Thenmozhi) and reviews on upcoming topics. The idea for this survey stemmed from the current interest in our community. The main purpose of the study is to make them aware that this isolation can cause psychiatric problems and help them to find a way to relieve mental

stress and keep them hail and healthy.([Khan et al.](#))

2. MATERIALS AND METHODS

An online survey was conducted with self prepared with sample seeing of 100 participants comprising the general population. The questionnaire consists of questions that help in providing awareness among the participants. Questionnaire also comprised of questions selected from the participants were from a short introduction about the need to study whether this social isolation aggravates psychiatric problems. The questionnaire was validated in a standard manner. Measures such as selection of participants randomly, Steps to prevent , asking irrelevant questions to the participant and age groups are taken to minimize the bias occurring in sampling. The questionnaire was evaluated using the online survey Google forms. Descriptive Analysis was corrected using the statistical softwares - SPSS software 20. The results of the survey are well published as pie charts.

3. RESULTS AND DISCUSSION

In fig 1 around 65.1% of people were aware of Covid-19 and the rest 34.9% of people were not aware of this. In fig 2 around 62.8% of people were following the practice of social isolation and 37.2% were not aware of this practice. In fig 3 around 69.8% of people said that social isolation affects mental health and 30.2% of people said social isolation does not affect mental health. In fig 4 around 72.1% of people said that social isolation creates stress and 27.9% of people said that social isolation does not create stress. In fig 5 around 60.5% of people say that prolonged social isolation can create psychiatric problems and 39.5% of people disagree. In fig 6 around 65.1% of people agreed that social isolation leads to insanity and 34.9% of people disagreed to this statement. In fig 7 shows responses for younger age is easily affected by psychiatric problems than adults due to isolation: 60.5% of people agree to this statement and show blue colour and 39.5% of people disagree to this statement and show red colour. fig 8 shows responses for prolonged isolation leading to adverse conditions like suicide: 51.2% of people agreed and 48.8% of people disagreed . Fig 9 shows responses for practicing yoga will relieve stress caused due to social isolation: 65.1% of people strongly agree and show blue colour and 34.9% of people strongly and show red colour.

In this present scenario Covid-19 is a pandemic disease that has lead to noticeable incline in India. Therefore the first question is whether they are aware of Covid-19. It depicts that 65 percent of the population are aware on Covid-19 and its symptoms. But it's contradictory to the survey done by ([Zhu et al.](#)) on American population that all hundred percent were aware of it. fig 2 represents 62.8 percent of the population following the practice of social isolation. This is in accordance with the study of ([Mustari and Rahman](#)) in which the majority of the population are aware of practising social isolation. The response of fig 3 represents that nearly 72.1 percent of the population agrees that prolonged social isolation affects mental health. The similar findings of the study in previous literature. Fig(4) represents how many people think that this practice of social isolation causes psychiatric problems. For this 60.5

percent of them agree whereas the rest 39.5 percent disagree. This is in contrast to the work done by (Bhuiyan et al.) in which more people agree that prolonged social isolation causes psychological problems. Fig (7) is about whether the prolonged isolation creates an awkward situation and leads to suicide. For this nearly 51.2 percent agree and 48.8 percent disagree. This was proved in the previous study. Limitations are since the minimum articles were used and also done on a limited study population. The results and outcome may vary on a larger population. (Tantam) The future scope of this survey is that it creates an awareness on the spread of CoronaVirus, importance of social isolation, whether prolonged isolation cause stress and help them to find a way to overcome this stress. (Baker and Clark)

4. CONCLUSION

This study shows a holistic picture of the current research in response to whether social isolation aggravates psychiatric problems. A proper perception towards Covid Virus and lock down. This study concludes that there is a positive perception among the public that prolonged isolation aggravates psychiatric problems

AUTHOR CONTRIBUTIONS

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

CONFLICT OF INTEREST

The authors have none to declare

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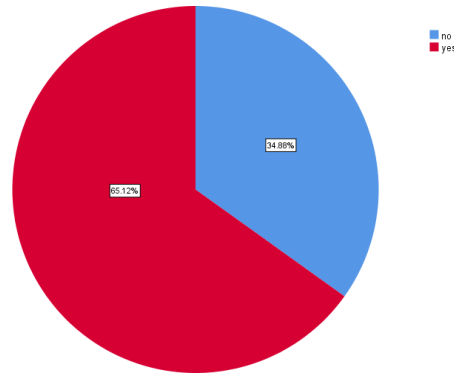


Figure 1: Pie chart representing the percentage distribution of awareness about Covid-19 virus. Majority of participants (65.12%) answered yes (red) and 34.86% answered no (blue)

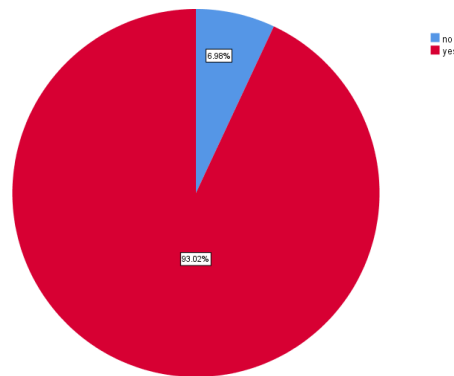


Figure 2: Pie chart representing the percentage distribution on the practice of social isolation. Majority of participants (93.02%) answered yes (red) and 6.96% answered no (blue)

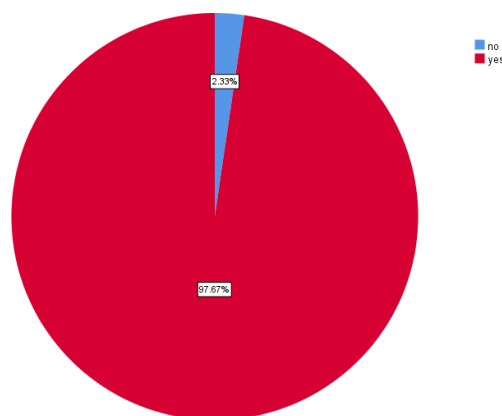


Figure 3 : Pie chart representing the percentage distribution on the awareness of the effect of Coronavirus on mental health of social isolation. Majority of participants (97.67%) answered yes (red) and 2.33% answered no (blue)

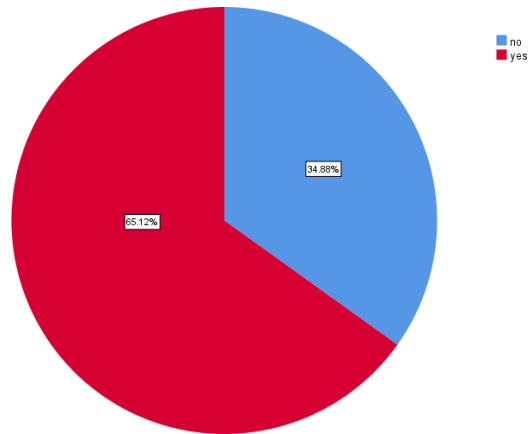


Figure 4: Pie chart representing the percentage distribution on the effect of prolonged social isolation on mental health and psychological problems. Majority of participants (65.12%) answered yes (red) and 34.88% answered no (blue)

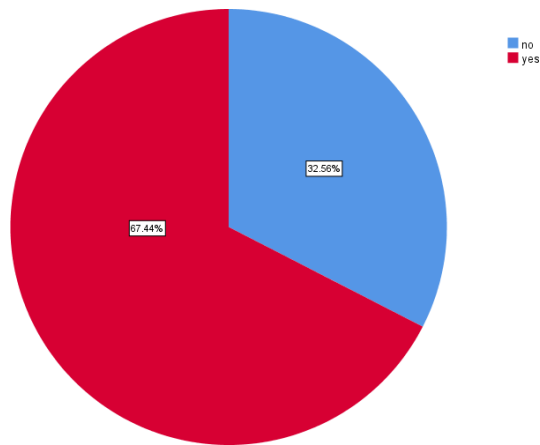


Figure 5: Pie chart representing the percentage distribution on the the awareness on social isolation and insanity. Majority of participants (67.44%) answered yes (red) and 32.56% answered no (blue)

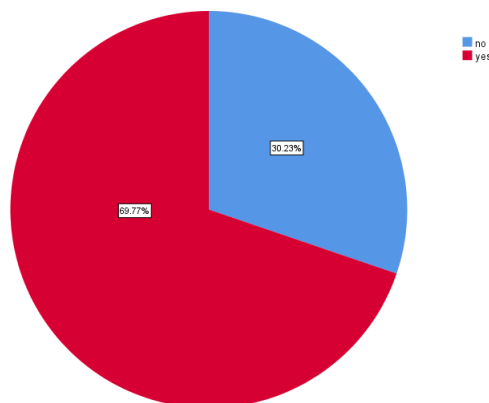


Figure 6: Pie chart representing the percentage distribution on the fact that older age people are easily psychologically affected than the younger people. Majority of participants (93.02%) answered yes (red)and 6.96% answered no (blue)

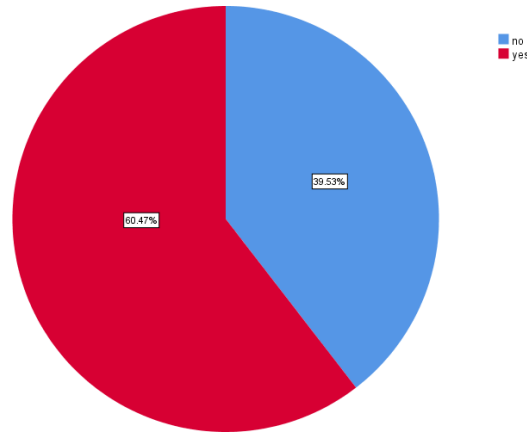


Figure 7:Pie chart representing the percentage distribution on the fact that prolonged social isolation leadsto suicide. Majority of participants (60.47%) answered yes (red) and 39.53% answered no (blue)

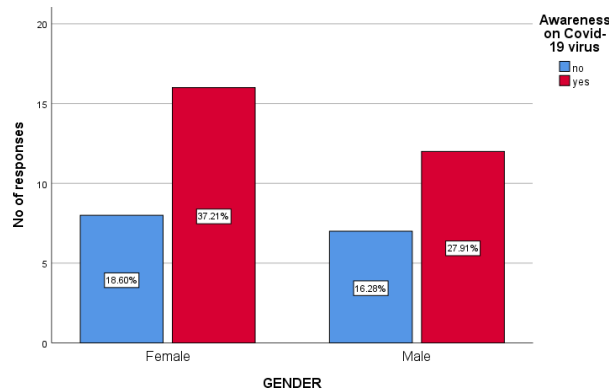


Figure 8: Bar chart representing the association between the gender and awareness of COVID-19 where red colour denotes ‘yes’ and blue colour denotes ‘no’..The X axis represents the gender and Y axis represents the number of responses.Among the participants, 65.12% were aware of Covid-19 virus. Withinthem, females (37.21%) were more aware of COVID 19 than males (27.91%). Association between the

variables were tested using chi square analysis [chi square value - 0.57, df-1 and p value was 0.811(P>0.05)] and was found to be statistically not significant which shows that males and females are more likely to have same levels of awareness about COVID-19.

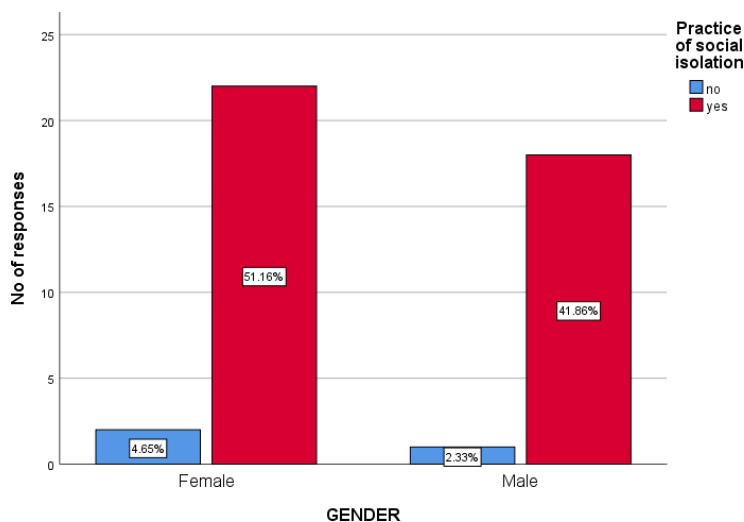


Figure 9: Bar chart representing the association between the gender and the practice of social isolation where red colour denotes ‘yes’ and blue colour denotes ‘no’.The X axis represents the gender and Y axis represents the number of responses.Out of 93.02% of the participants are aware of Covid-19 virus .Withinthem, (51.16%) females were more aware of the practice of social isolation than males (41.86%).Association between the variables were tested using chi square analysis[chi square value 0.154,df-1 and p value was 0.695(P>0.05)] and was found to be statistically not significant which shows that males and females are more likely to have same levels of awareness about social isolation

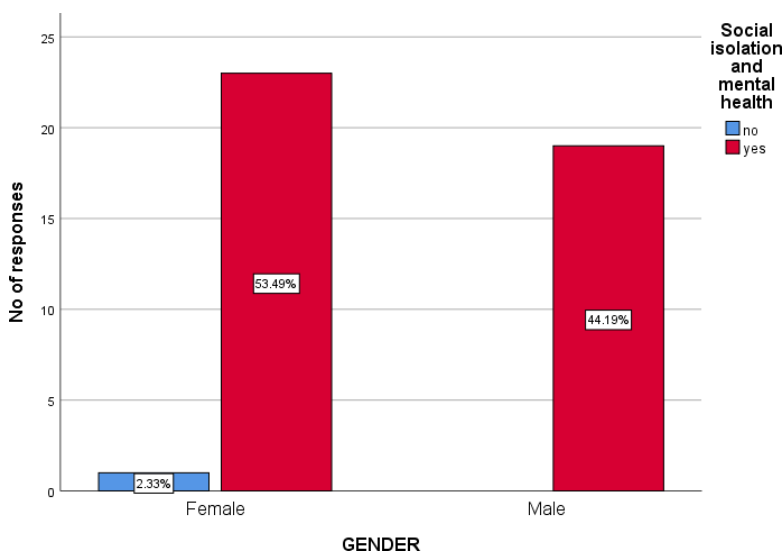


Figure 10: Bar chart representing the association between the gender and awareness of social isolation andmental health, where red colour denotes ‘yes’ and blue colour denotes ‘no’.The

X axis represents the gender and Y axis represents the number of responses. Out of (97.68%) of the participants are aware of Covid-19 virus. Within them, (53.49%) of the females were more aware of the fact that prolonged social isolation affect mental health than males (44.19%). Association between the variables were tested using chi square analysis [chi square value 0.811,df-1 and p value was 0.368 ($P > 0.05$)] found to be statistically not significant which shows that males have females are more likely to have same levels of awareness about social isolation and mental health.

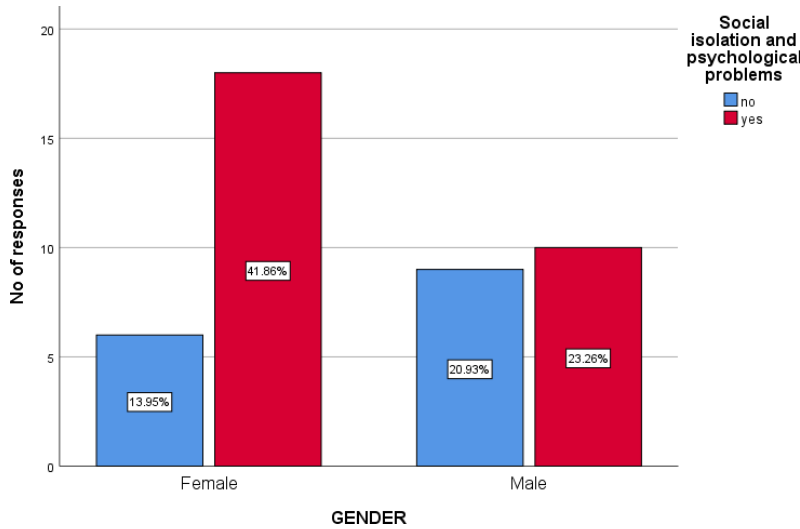


Figure 11: Bar chart representing the association between the gender and awareness of social isolation and psychological problems, where red colour denotes ‘yes’ and blue colour denotes ‘no’. The X axis represents the gender and Y axis represents the number of responses. Out of (65.12%) of the participants are aware of the fact that social isolation can cause psychological problems. Within them, (41.86%) of the females were more aware than males (23.26%). Association between the variables were tested using chi square analysis [chi square value 2.336,df-1 p value was 0.126] ($P > 0.05$) found to be statistically not significant which shows females are more likely to have same levels of awareness of social isolation and psychol

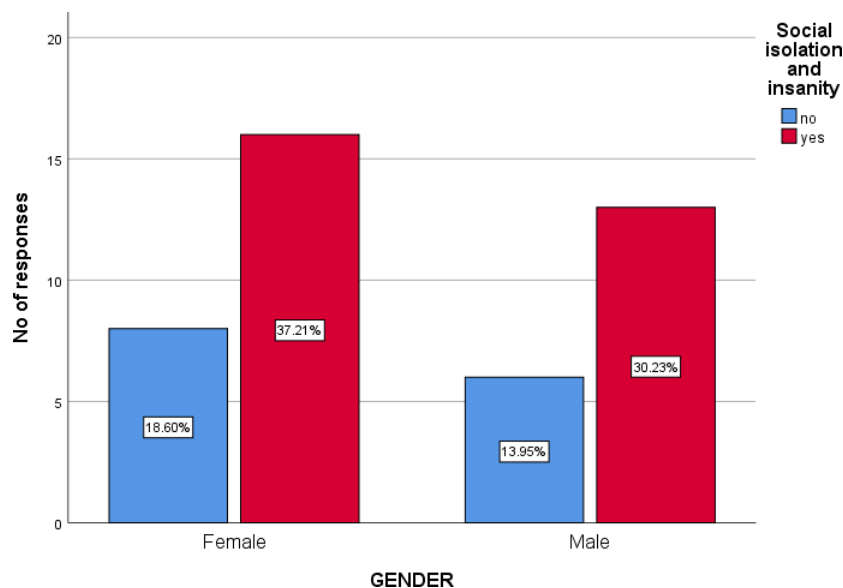


Figure 12: Bar chart representing the association between the gender and awareness of social isolation and insanity where red colour denotes ‘yes’ and blue colour denotes ‘no’.The X axis represents the gender and Y axis represents the number of responses.Out of (67.44%) of the participants are aware of the fact that prolonged social isolation leads to insanity.Within them, (37.21%) of the females were more aware of COVID 19 than males (30.23%).Association between the variables were tested using chi square analysis [chi square value 0.015,df-1, p value was 0.903]($P > 0.05$) found to be statistically not significant which shows that males and females are more likely to have same levels of awareness about social isolation and insanity.

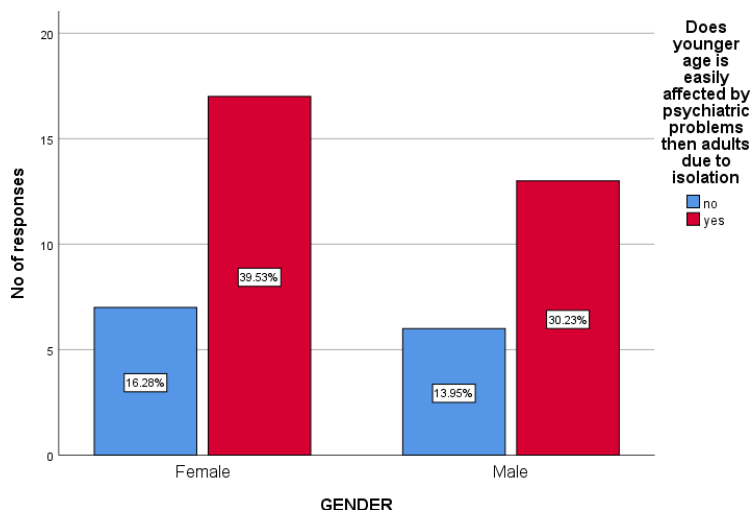


Figure 13: Bar chart representing the association between the gender and awareness on age and effect of social isolation and psychiatric problems where red colour denotes ‘yes’ and blue colour denotes ‘no’.The X axis represents the gender and Y axis represents the number of responses.Out of (69.76%) of the participants are aware of Covid-19 virus.Within them,

(39.53%) of the females were more aware that old age people can be easily affected by psychiatric problems due to isolation than males (30.23%). Association between the variables were tested using chi square analysis [chi square value 0.029, df-1, p value was 0.854]($P > 0.05$) found to be statistically not significant which shows that males and females are more likely to have same levels of awareness on age and effect of social isolation and psychiatric problems.

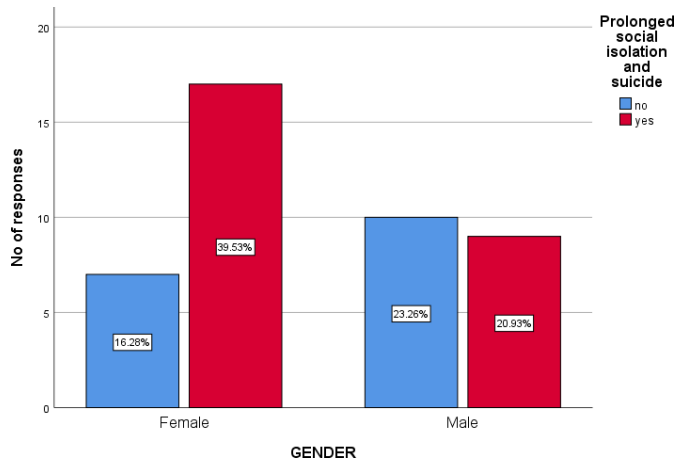


Figure 14: Bar chart representing the association between the gender and awareness of social isolation and suicide where red colour denotes ‘yes’ and blue colour denotes ‘no’. The X axis represents the gender and Y axis represents the number of responses. Out of (60.43%) of the participants are aware of Covid-19 virus. Within them, (39.53%) of the females were more aware that this prolonged social isolation can adversely lead to suicide than males (20.93%). Association between the variables were tested using chi square analysis [chi square value 2.443, df-1, p value was 0.118] ($P > 0.05$) found to be statistically not significant which shows that males and females are more likely to have same levels of awareness of social isolation and suicide.