

## **Knowledge and Awareness on Practising Social Distancing in Prevention of COVID-19 Pandemic - A Questionnaire based Survey**

<sup>1</sup>R.kushali, <sup>\*2</sup>Leslie Rani, <sup>3</sup>M.P.Brundha, <sup>4</sup>R.V.Geetha

<sup>1</sup>R.Kushali

Saveetha Dental College,  
Saveetha Institute of Medical and Technical Sciences (SIMATS),  
Saveetha University,  
Chennai, India

Email ID: [151801050.sdc@saveetha.com](mailto:151801050.sdc@saveetha.com)

<sup>\*2</sup>Leslie Rani

Lecturer ,  
Department of pathology,  
Saveetha Dental College and Hospitals,  
Saveetha Institute of Medical and Technical Sciences (SIMATS),  
Saveetha University,  
Chennai, India

Email ID: [leslieranis.sdc@saveetha.com](mailto:leslieranis.sdc@saveetha.com)

Phone no: 9360293308

<sup>3</sup>M.P.Brundha

Associate professor  
Department of pathology,  
Saveetha Dental College and Hospitals,  
Saveetha Institute of Medical and Technical Sciences (SIMATS),  
Saveetha University,  
Chennai, India

Email ID: [brundha.sdc@saveetha.com](mailto:brundha.sdc@saveetha.com)

Phone number: 9884421482

<sup>4</sup>R.V.Geetha

Associate professor  
Department of Microbiology,  
Saveetha Dental College and Hospitals,  
Saveetha Institute of Medical and Technical Sciences (SIMATS),  
Saveetha University, Chennai, India

Email ID: [geetha@saveetha.com](mailto:geetha@saveetha.com)

Phone number: 9710456203

**\*Corresponding Author:**

Dr. Leslie Rani. S

Lecturer

Department of General Pathology

Saveetha Dental College and Hospitals

Saveetha Institute of Medical and Technical Sciences,

Chennai, India

E-mail ID: leslieranis.sdc@saveethal.com

Phone number:9360293308

**Abstract:**

**Aim:** The main aim of the study is to know if social distancing is a good option for COVID prevention among the general population.

**Introduction:** Social distancing is also called “physical distancing” meaning keeping space between yourself and others outside homes. Governments of various countries , hit by the COVID-19 pandemic introduced social distancing or are considering enacting measures of “social distancing” to slow down the spread of the contagion.

**Materials and method:** A study was conducted among the general population of Chennai in the month of April to may 2020 with a sample size of 100 individuals to assess their knowledge and awareness on social distancing and if it was a good option of prevention of COVID infection.

**Result and discussion:** The study reveals that 90% of the study population agreed that social distancing helps in preventing COVID, 10% of the population thought social distancing wouldn't help in preventing COVID infection. 77% of participants believed social distancing at public places is necessary whereas 23% do not prefer social distancing in public places.

**Conclusion:** The present study reveals that people agree that practising social distancing is a very good option for preventing one from viral infections, now and also for any infection. Also , people have awareness about the various preventive measures and the fact social gatherings can increase the risk of the COVID -19 spread

**Keywords:**

Social distancing, negative impact, awareness, COVID

**Introduction:**

Coronaviruses are a huge family of viruses and COVID-19 is a new strain discovered in the year 2019. The pandemic is a global health crisis of our time and the greatest challenge we have ever faced since World War 2 [1]. The current pandemic outbreak is an emergency call for numerous countries across the globe (Kalaiselvi and Brundha, 2016). All these countries are racing hard to slow down the spread of the virus's infection by treating the infected patients, carrying out

contact tracing, limiting the travel, quarantining citizens, and cancelling large gatherings such as sporting events, concerts, marriage , schools , colleges and other institutions (Prashanthi and Brundha, 2018). Online classes are proving helpful for students but the fact that it can cause troubles with vision cannot be neglected (Kushali and Brundha, 2020),(Mp, Brundha and Nallaswamy, 2019).

The disease spreads rapidly from an infected person to another even without contact. The droplets from an infected person once launched into the surrounding air lands on the nose or the mouth of the other person (Viner *et al.*, 2020). It is extremely essential to enforce prevention modes and measures to avoid future infection and social distancing is one such mode which can prove helpful in reduction of COVID. Social distancing is termed as “physical distancing”, literally meaning keeping space between yourself and others outside the home (Singh, Barai and Shinde, no date).

Governments of countries hit by the COVID-19 pandemic have introduced, or are considering enacting, measures of “social distancing”to slow down the spread of the contagion (Scherbina, no date).These provisions include canceling all the group events, mandating people to work from home closing schools and commercial activities and limiting people’s freedom to leave their homes (Briscese *et al.*, 2020). Limiting face to face contact with others outside the homes is the best way to reduce the infection COVID 19 spread (Ravichandran and Brundha, 2016). To practice social distancing, follow to stay at least 6 feet away from other people especially the ones who have symptoms like fever, dry cough,sore throat and gastrointestinal troubles (Harsha and Brundha, 2017). These symptoms occur in an individual after an asymptomatic period of 14 days and once the person realises the symptoms, testing is carried out (Hannah *et al.*, 2019).

Mass gatherings should be avoided (Wilder-Smith and Freedman, 2020). COVID 19 spreads mainly from people who are in close contact for a prolonged time. Staying 6 feet or 1.5 to 2 meters away from others in public places , grocery and pharmacy stirred are essentially importants(Sen-Crowe, McKenney and Elkbuli, 2020). Maintaining distance from daily vendors is significant because there are high possibilities that they might be the carriers (Greenstone and Nigam, no date).

Governments have ordered the shutdown of universities and institutions and also examinations not allowed to be conducted due to gatherings (Omary *et al.*, 2020). Other preventive measures are by not touching faces often, sanitising hands often , mass masking which works excellently well in huge gatherings (Leung, Lam and Cheng, 2020). Also, since there is no proper vaccine developed, it is safe to follow preventive measures. Social distancing can be helpful in other diseases like flu, chicken pox and dengue as well (Brundha and Haritha, 2019). In countries like the UK , social distancing started late after many deaths which was not a good notion at all (Mahase, 2020). Also previous studies reveal that earlier intervention of social distancing could significantly limit the epidemic in China and other places as well (Swetha, Rani and Brundha,

2020). Recent studies show that the amount of infections might be reduced up to 98.9% and the amount of deaths could be reduced by up to 99.3% as of Feb 23, 2020 (Zhang *et al.*, no date). Studies also reveal that populations above the age of 60 are highly susceptible to the infections and even high prone in case if these individuals are suffering from diabetes mellitus, heart diseases, high blood pressure and respiratory conditions and cancers (Brundha and Pathmashri, 2019; Rexlin, Preejitha and Brundha, 2020). Respiratory conditions can be helped by exercising lungs regularly like blowing balloons, inhaling and exhaling (Lakshmi, Rani and Brundha, 2020)-(Malay, Duraisamy and Brundha, 2018).

There are quite a handful of negative impacts of social distancing. It can cause physiological and psychological issues like depression, loneliness, anxiety and feeling of isolation (Venkatesh and Edirappuli, 2020). Staying and performing regular life activities like sleeping and eating separately can affect the mental health and stability of an individual (Sen-Crowe, McKenney and Elkbuli, 2020), (Engle, Stromme and Zhou, no date). Our team has rich experience in research and we have collaborated with numerous authors over various topics in the past decade (Arigaet *et al.*, 2018; Basha, Ganapathy and Venugopalan, 2018; Hannah *et al.*, 2018; Hussainy *et al.*, 2018; Jeevanandan and Govindaraju, 2018; Kannan and Venugopalan, 2018; Kumar and Antony, 2018; Manohar and Sharma, 2018; Menon *et al.*, 2018; Nandakumar and Nasim, 2018; Nandhini, Babu and Mohanraj, 2018; Ravinthar and Jayalakshmi, 2018; Seppanet *et al.*, 2018; Teja, Ramesh and Priya, 2018; Duraisamy *et al.*, 2019; Gheena and Ezhilarasan, 2019; Hema Shree *et al.*, 2019; Rajakeerthi and Ms, 2019; Rajendran *et al.*, 2019; Sekaret *et al.*, 2019; Sharma *et al.*, 2019; Siddique *et al.*, 2019; Janani, Palanivelu and Sandhya, 2020; Johnson *et al.*, 2020; Jose, Ajitha and Subbaiyan, 2020).

This study was conducted to assess the knowledge and awareness among people about the benefits of social distancing. Also the study enables one to know how far social distancing works and fulfilling the deficiency on how people respond to “social distancing “ in our county.

## **Materials and method:**

### **Study setting:**

This cross-sectional study was conducted in Chennai, Tamil Nadu, from March 2020 to May 2020. The pros of the current study included well educated people and access to online surveys. On the other hand, the cons are language and communication barriers, difficulties in understanding and lack of resources.

### **Sample size calculation:**

The sample size taken for the study is 100 people residing in Chennai.

### **Sampling technique:**

People were selected randomly from various localities of the Chennai city like Purasawalkam, Anna Nagar, Nungambakkam and this study was done by simple randomised sampling method. Measures were taken to minimise sampling bias by avoiding leading questions, evading difficult concepts and making use of simple and understandable language. Electronic distribution of the

questionnaire was followed since this was the best approach for the collection of data as a large number of the general population of the Chennai city were involved and also suitable in present conditions where people have to avoid gathering, close contact etc. for prevention of COVID-19.

### **Study procedure:**

Approval from 3 internal experts (from Saveetha Dental College) and 3 external experts. A structured questionnaire was developed using google forms, and it was validated with subject experts. Individual's details including age, gender, occupation were collected. The survey included 17 questions based on social distancing and if it was a good option as a mode of prevention and the inclusive criterias were age, sex, presence of any previous medical condition, awareness on COVID-19 and if preventive measures were followed.

### **Statistical analysis:**

Data entry was done by using SPSS software's latest version. The statistical tests used are descriptive analysis and mean variable. Chi square analysis test was used, with p value less than 0.05 to be statistically significant.

### **Results:**

In the current study, 43% were between the age group of 18-23, 39% between 23-27, 9% between 27-35 and 9% above the age group of 35. 49% of the study participants were females and 51% were male. 57% were students 43% were among the working population. In figure 1, the pie chart represents that 90% of the study population agree that social distancing can help in preventing COVID and 10% disagrees with this. In figure 2, 91% of the participants believe that social distancing is staying away from one another for 1.5-2 meters and 9% of the population think it's staying away for less than 1 meter. In figure 3, the bar graph represents the association between gender and distance to be maintained for social distancing. In figure 4, the pie chart shows the different types of preventive measures that could be helpful as well 51% of the individuals prefer using a mouth mask to cover their faces in public, 11% of individuals prefer not touching their faces, 38% prefer using sanitizers often. In figure 5, 77% agree that people follow social distancing 23% disagree with this. In figure 6, The bar graph represents the association between gender and people practising social distancing in public reveals that 95% of the study population agree that mass gathering like marriages can lead to COVID and 5% do not. In figure 7, the pie chart shows the responses to the impact of mass gathering at public places. 95% of the study population agree that mass gathering like marriages can lead to COVID and 5% (red) do not. In figure 8, the result shows that 11% of the respondents think practising social distancing at public is essential, 8% at pharmacy, 7% with neighbours and a large population of 74% think it is necessary to follow social distancing at all of the above places. In Figure 9, the bar graph represents the association between gender and different public places where social distancing should be followed. Pie chart of figure 10 shows 91% of the participants think it is necessary to practise distancing with the daily vendors as well but 9% of them disagree and consider it less important. Result of figure 11 illustrates that 90% of the population thinks that infection that can spread by droplets can be simply prevented by social distancing and 10% disagree with it. Figure 12, the pie chart showing the responses to awareness of prevention of

droplet infections by practising social distancing. 90% (blue) of the population thinks that infection that can spread by droplets can be simply prevented by social distancing and 10% (red) disagree with it. In figure 13, the bar graph represents the association between gender and prevention of droplet infections by practising social distancing. In figure 14, when asked about reduction in cases, 92% of the respondents believe that social distancing can be helpful and 8% of the population through it cannot be helpful. In Figure 15, 10% of the population agrees that social distancing can cause depression, 4% think it can cause loneliness, 7% think of the anxiety and stress but 53% of the individuals think it can cause all of the above. On the other hand, 26% of the people in the study population think it causes none. In Figure 16, 15% of the population thinks the positive effect of social distancing is prevention in infection, 28% thinks it can reduce the number of cases and 57% agrees to both the positive effect.

### Discussion:

In the current study, there was almost equal participation of both the genders and included all the age groups. It can be observed that, a majority of 90% of the study population thinks that social distancing can be helpful in COVID prevention and to this only 10% disagrees. Social distancing staying away from one another for 1.5 to 2 meters 491% of the participants and less than 1 m for 9% of the study population. Social distancing aims to slow the spread of the disease by stopping chain transmission and measures to secure physical distances and reduce contact ('Coronavirus - African Situation Report as at March 31st', 2020). Other preventive measures like covering faces with masks, sanitising hands and not touching faces often are followed by about 51%, 38%, 11% of the study population respectively. 27% of the people of the study think that people follow social distancing at public places but 23% of the study population disagree with this (Balaji, Brundha and Path, 2016). Our institution is passionate about high quality evidence based research and has excelled in various fields (Pc, Marimuthu and Devadoss, 2018; Ramesh *et al.*, 2018; VijayashreePriyadharsini, SmilineGirija and Paramasivam, 2018; Ezhilarasan, Apoorva and Ashok Vardhan, 2019; Ramadurai *et al.*, 2019; Sridharan *et al.*, 2019; VijayashreePriyadharsini, 2019; Chandrasekar *et al.*, 2020; Mathew *et al.*, 2020; R *et al.*, 2020; Samuel, 2021)

It is necessary to practise social distancing in public places to reduce the touching contaminated surfaces and coming in contact with the infected articles (Fong *et al.*, 2020). Mass gathering like marriages is thought to be avoided by 95% of the population which is a happy outcome of the study and 5% disagree with this (Shreya and Brundha, 2017). 74% of the population is wise enough to choose and think that public places like pharmacies, public gatherings, neighbour social distancing should be practised (Brundha, 2015).

Do there is wastage of time by standing in a long queue, there are more benefits than that of the side-effects (Garoon and Duggan, 2008). Even with the daily vendors, 91% of the study population think social distancing is important and 9% disagree with this. 90% of the respondents agreed that spread of the infection by droplets can be prevented by social distancing and 10% disagreed with this (Shenoy and Brundha, 2016). Other diseases like dengue, chickenpox, flu and malaria can also be controlled by social distancing (Dhivyadharshini and

Brundha, 2020). This is believed by 84%, 4%, 8% and 4% of the study population respectively (Timothy, Samyuktha and Brundha, 2019).

Droplet transmission occurs from person to person in close contact MIT researchers state that droplets can travel at a speed of 8 m/s and a 2 meter of a social distancing cannot prove to be helpful anymore (Barrot, Grassi and Sauvagnat, no date). If it infects the eye, it causes eye infection like sty (P Jannathulferdiaz, no date)]. 81% of the study population agrees that eating and sleeping separately at home should be followed as well and 19% of them disagree to this due to various reasons.

92% of the study population thinks that just by practising social distancing, court cases can be reduced to a greater extent. 73% of the participants agree that social distancing can bring about physical or psychological changes in one's behaviour and 27% of the study population disagree with this fact. 4% of them think that it can cause loneliness, 10% of them think it can cause depression, 7% of them believe that it can be a great reason for stress and anxiety, 53% of the people think it can cause all of the above in a human being. On the other hand 26% of people think it doesn't bring about any such change in a person's health and mind (Varshini, Rani and Brundha, 2020).

Positive effects like preventing infection is a choice made by 15% of the individuals, 28% of the population think the positive effects of social distancing can decrease the number of court cases and 57% of the people believe that it can cause both of the above mentioned positive effects (Ananya, Rani and Brundha, 2020).

Researchers say that negative consequences like reduction in interaction, there can be the existence of loneliness and depression, exclusion and avoidance can also be experienced (Verelst, Willem and Beutels, 2016). Other researchers also say in contradicting this that social distancing has caused no such behavioural change and instead human mankind needs adaptations to such situations (Madera and Hebl, 2013; Kumar, Ashok Kumar and Brundha, 2016). The study has limitations like its conducted online and few might not have access to the internet, it was conducted among a smaller population, not much quantitative data. The study has future scopes which can help in preventing any upcoming infections by practising social distancing in the future. The study can prove to be helpful in spreading awareness among the future population on social distancing.

### **Conclusion:**

From the current study, despite limitations, it can be concluded that people had knowledge and were aware of the importance and the implications of social distancing. They also followed social distancing in public places like pharmacies and with the daily vendors. Also other preventive measures were followed by the study population. The study revealed that there will be a positive outcome, if all people follow social distancing.

### **Acknowledgement:**

The authors are thankful to Saveetha Dental College for providing a platform to express our knowledge.

### Author contribution:

R.Kushali executed the work by data collection and drafting of manuscript. S.Leslie Rani devised the concept, design of the study and validated the data collection. S.Leslie Rani and M.P.Brundha carried out the work of revision and proof-reading of the survey. R.V.Geetha validated the data collection.

### Conflict of interest:

The author declares no conflict of interest.

### Reference:

1. Ananya, B., Rani, S. L. and Brundha, M. P. (2020) 'Knowledge and attitude of probiotics among outpatients visiting dental operator', *Drug Invention Today*, 14(2).
2. Ariga, P. *et al.* (2018) 'Determination of correlation of width of Maxillary Anterior Teeth using Extraoral and Intraoral Factors in Indian Population: A systematic review', *World journal of dentistry*, 9(1), pp. 68–75.
3. Balaji, S., Brundha, M. P. and Path, D. N. B. (2016) 'Awareness of About Breast Cancer among Dental Surgeons', *Research journal of pharmaceutical, biological and chemical sciences*, 8(8), p. 797.
4. Barrot, J.-N., Grassi, B. and Sauvagnat, J. (no date) 'Sectoral Effects of Social Distancing', *SSRN Electronic Journal*. doi: 10.2139/ssrn.3569446.
5. Basha, F. Y. S., Ganapathy, D. and Venugopalan, S. (2018) 'Oral hygiene status among pregnant women', *Journal of advanced pharmaceutical technology & research*, 11(7), p. 3099.
6. Briscese, G. *et al.* (2020) 'Compliance with COVID-19 Social-Distancing Measures in Italy: The Role of Expectations and Duration'. doi: 10.3386/w26916.
7. Brundha, M. P. (2015) 'A Comparative Study-The Role of Skin and Nerve Biopsy in Hansen's Disease', *Research journal of pharmaceutical, biological and chemical sciences*, 7(10), p. 837.
8. Brundha, M. P. and Haritha, P. S. (2019) 'Awareness of dengue fever among the parents of children coming to the dental outpatient department – A questionnaire study', *International Journal of Clinicopathological Correlation*, p. 60. doi: 10.4103/ijcpc.ijcpc\_14\_19.
9. Brundha, M. P. and Pathmashri, V. P. (2019) 'Quantitative Changes of Red Blood cells in Cancer Patients under Palliative Radiotherapy-A Retrospective Study', *Research Journal of*. Available at: <http://www.indianjournals.com/ijor.aspx?target=ijor:rjpt&volume=12&issue=2&article=041>.
10. Chandrasekar, R. *et al.* (2020) 'Development and validation of a formula for objective assessment of cervical vertebral bone age', *Progress in orthodontics*, 21(1), p. 38.
11. 'Coronavirus - African Situation Report as at March 31st' (2020) *Africa Research Bulletin: Political, Social and Cultural Series*. doi: 10.1111/j.1467-825x.2020.09375.x.



12. Dhivyadharshini, J. and Brundha, M. P. (2020) 'Comparison of effects of interpretation of lab reports among the undergraduate dental students', *Drug Invention Today*, 14(3).
13. Duraisamy, R. *et al.* (2019) 'Compatibility of Nonoriginal Abutments With Implants: Evaluation of Microgap at the Implant-Abutment Interface, With Original and Nonoriginal Abutments', *Implant dentistry*, 28(3), pp. 289–295.
14. Engle, S., Stromme, J. and Zhou, A. (no date) 'Staying at Home: Mobility Effects of COVID-19', *SSRN Electronic Journal*. doi: 10.2139/ssrn.3565703.
15. Ezhilarasan, D., Apoorva, V. S. and Ashok Vardhan, N. (2019) 'Syzygiumcumini extract induced reactive oxygen species-mediated apoptosis in human oral squamous carcinoma cells', *Journal of oral pathology & medicine: official publication of the International Association of Oral Pathologists and the American Academy of Oral Pathology*, 48(2), pp. 115–121.
16. Fong, M. W. *et al.* (2020) 'Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—Social Distancing Measures', *Emerging Infectious Diseases*, pp. 976–984. doi: 10.3201/eid2605.190995.
17. Garoon, J. P. and Duggan, P. S. (2008) 'Discourses of disease, discourses of disadvantage: a critical analysis of National Pandemic Influenza Preparedness Plans', *Social science & medicine*, 67(7), pp. 1133–1142.
18. Gheena, S. and Ezhilarasan, D. (2019) 'Syringic acid triggers reactive oxygen species-mediated cytotoxicity in HepG2 cells', *Human & experimental toxicology*, 38(6), pp. 694–702.
19. Greenstone, M. and Nigam, V. (no date) 'Does Social Distancing Matter?', *SSRN Electronic Journal*. doi: 10.2139/ssrn.3561244.
20. Hannah, R. *et al.* (2018) 'Awareness about the use, ethics and scope of dental photography among undergraduate dental students dentist behind the lens', *Journal of advanced pharmaceutical technology & research*, 11(3), p. 1012.
21. Hannah, R. *et al.* (2019) 'Liquid Paraffin as a Rehydrant for Air Dried Buccal Smear', *Research Journal of Pharmacy and Technology*, p. 1197. doi: 10.5958/0974-360x.2019.00199.9.
22. Harsha, L. and Brundha, M. P. (2017) 'Prevalence of dental developmental anomalies among men and women and its psychological effect in a given population', *Research journal of pharmaceutical, biological and chemical sciences*, 9(6), p. 869.
23. Hema Shree, K. *et al.* (2019) 'Saliva as a Diagnostic Tool in Oral Squamous Cell Carcinoma - a Systematic Review with Meta Analysis', *Pathology oncology research: POR*, 25(2), pp. 447–453.
24. Hussainy, S. N. *et al.* (2018) 'Clinical performance of resin-modified glass ionomer cement, flowable composite, and polyacid-modified resin composite in noncarious cervical lesions: One-year follow-up', *Journal of conservative dentistry: JCD*, 21(5), pp. 510–515.
25. Janani, K., Palanivelu, A. and Sandhya, R. (2020) 'Diagnostic accuracy of dental pulse

- oximeter with customized sensor holder, thermal test and electric pulp test for the evaluation of pulp vitality: an in vivo study', *Brazilian dental science*, 23(1). doi: 10.14295/bds.2020.v23i1.1805.
26. Jeevanandan, G. and Govindaraju, L. (2018) 'Clinical comparison of Kedo-S paediatric rotary files vs manual instrumentation for root canal preparation in primary molars: a double blinded randomised clinical trial', *European archives of paediatric dentistry: official journal of the European Academy of Paediatric Dentistry*, 19(4), pp. 273–278.
27. Johnson, J. *et al.* (2020) 'Computational identification of MiRNA-7110 from pulmonary arterial hypertension (PAH) ESTs: a new microRNA that links diabetes and PAH', *Hypertension research: official journal of the Japanese Society of Hypertension*, 43(4), pp. 360–362.
28. Jose, J., Ajitha and Subbaiyan, H. (2020) 'Different treatment modalities followed by dental practitioners for Ellis class 2 fracture – A questionnaire-based survey', *The open dentistry journal*, 14(1), pp. 59–65.
29. Kalaiselvi, R. and Brundha, M. P. (2016) 'Prevalence of hysterectomy in South Indian population', *Research Journal of Pharmacy and Technology*, p. 1941. doi: 10.5958/0974-360x.2016.00398.x.
30. Kannan, A. and Venugopalan, S. (2018) 'A systematic review on the effect of use of impregnated retraction cords on gingiva', *Journal of advanced pharmaceutical technology & research*, 11(5), p. 2121.
31. Kumar, D. and Antony, S. D. P. (2018) 'Calcified canal and negotiation-A review', *Journal of advanced pharmaceutical technology & research*, 11(8), p. 3727.
32. Kumar, M. D. A., Ashok Kumar, M. D. and Brundha, M. P. (2016) 'Awareness about nocturia-A questionnaire survey', *Research Journal of Pharmacy and Technology*, p. 1707. doi: 10.5958/0974-360x.2016.00344.9.
33. Kushali, R. and Brundha, M. P. (2020) 'Prevalence and awareness on computer vision syndrome among individuals in information technology', *Drug Invention Today*, 14(3).
34. Lakshmi, S., Rani, S. L. and Brundha, M. P. (2020) 'Blow the balloon for the ease--A cross-sectional study on wheezing patients', *Drug Invention Today*, 14(2).
35. Leung, C. C., Lam, T. H. and Cheng, K. K. (2020) 'Mass masking in the COVID-19 epidemic: people need guidance', *The Lancet*, p. 945. doi: 10.1016/s0140-6736(20)30520-1.
36. Madera, J. M. and Hebl, M. (2013) 'Social Exclusion of Individuals through Interpersonal Discrimination', *Oxford Handbooks Online*. doi: 10.1093/oxfordhb/9780195398700.013.0006.
37. Mahase, E. (2020) 'Covid-19: UK starts social distancing after new model points to 260 000 potential deaths', *BMJ*, p. m1089. doi: 10.1136/bmj.m1089.
38. Malay, K. K., Duraisamy, R. and Brundha, M. P. (2018) 'Awareness regarding anemia among 1st year dental undergraduate students', *Drug Invention*. Available at: <http://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype>

=crawler&jrnl=09757619&AN=130903213&h=6IXGXY2FNBcKId5DHNd2dXCfxQJr  
 %2BzLQ09XGxxxBIbvGS1xdIHRzzZ6fYcY3h1vs3IDexIiUCaAeQcyAj0uKKQ%3D%  
 3D&crl=c.

39. Manohar, M. P. and Sharma, S. (2018) 'A survey of the knowledge, attitude, and awareness about the principal choice of intracanal medicaments among the general dental practitioners and nonendodontic specialists', *Indian journal of dental research: official publication of Indian Society for Dental Research*, 29(6), pp. 716–720.
40. Mathew, M. G. *et al.* (2020) 'Evaluation of adhesion of Streptococcus mutans, plaque accumulation on zirconia and stainless steel crowns, and surrounding gingival inflammation in primary molars: Randomized controlled trial', *Clinical oral investigations*, pp. 1–6.
41. Menon, S. *et al.* (2018) 'Selenium nanoparticles: A potent chemotherapeutic agent and an elucidation of its mechanism', *Colloids and surfaces. B, Biointerfaces*, 170, pp. 280–292.
42. Mp, B., Brundha, M. P. and Nallaswamy, D. (2019) 'Hide and seek in pathology- A research on game-based histopathology learning', *International Journal of Research in Pharmaceutical Sciences*, pp. 1410–1414. doi: 10.26452/ijrps.v10i2.606.
43. Nandakumar, M. and Nasim, I. (2018) 'Comparative evaluation of grape seed and cranberry extracts in preventing enamel erosion: An optical emission spectrometric analysis', *Journal of conservative dentistry: JCD*, 21(5), pp. 516–520.
44. Nandhini, J. S. T., Babu, K. Y. and Mohanraj, K. G. (2018) 'Size, shape, prominence and localization of gerdy's tubercle in dry human tibial bones', *Journal of advanced pharmaceutical technology & research*, 11(8), p. 3604.
45. Omary, M. B. *et al.* (2020) 'The COVID-19 pandemic and research shutdown: staying safe and productive', *Journal of Clinical Investigation*, pp. 2745–2748. doi: 10.1172/jci138646.
46. Pc, J., Marimuthu, T. and Devadoss, P. (2018) 'Prevalence and measurement of anterior loop of the mandibular canal using CBCT: A cross sectional study', *Clinical implant dentistry and related research*. Available at: <https://europepmc.org/article/med/29624863>.
47. P Jannathulferdiaz, B. M. (no date) 'Awareness of Styer', *Int. J. Pharm. Sci. Rev. Res.*, 40(1), pp. 30–32.
48. Prashanthi, N. and Brundha, M. P. (2018) 'A Comparative Study between Popplet Notes and Conventional Notes for Learning Pathology', *Research Journal of Pharmacy and Technology*, 11(1), pp. 175–178.
49. Rajakeerthi and Ms, N. (2019) 'Natural Product as the Storage medium for an avulsed tooth – A Systematic Review', *Cumhuriyet Üniversitesi Diş Hekimliği Fakültesi Dergisi*, 22(2), pp. 249–256.
50. Rajendran, R. *et al.* (2019) 'Comparative evaluation of remineralizing potential of a paste containing bioactive glass and a topical cream containing casein phosphopeptide-amorphous calcium phosphate: An in vitro study', *Pesquisabrasileira em Odontopediatria*

*e clinicaintegrada*, 19(1), pp. 1–10.

51. Ramadurai, N. *et al.* (2019) 'Effectiveness of 2% Articaine as an anesthetic agent in children: randomized controlled trial', *Clinical oral investigations*, 23(9), pp. 3543–3550.
52. Ramesh, A. *et al.* (2018) 'Comparative estimation of sulfiredoxin levels between chronic periodontitis and healthy patients - A case-control study', *Journal of periodontology*, 89(10), pp. 1241–1248.
53. Ravichandran, H. and Brundha, M. P. (2016) 'Awareness about personal protective equipments in hospital workers (sweepers and cleaners)', *International Journal of Pharmaceutical Sciences Review and Research*, 40(1), pp. 28–29.
54. Ravinthar, K. and Jayalakshmi (2018) 'Recent advancements in laminates and veneers in dentistry', *Journal of advanced pharmaceutical technology & research*, 11(2), p. 785.
55. Rexlin, P. E., Preejitha, V. B. and Brundha, M. P. (2020) 'Age-related differences of heart rate and respiratory rate in the age group of 45-55 years--A regression analysis', *Drug Invention Today*, 14(2).
56. R, H. *et al.* (2020) 'CYP2 C9 polymorphism among patients with oral squamous cell carcinoma and its role in altering the metabolism of benzo[a]pyrene', *Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology*, pp. 306–312. doi: 10.1016/j.oooo.2020.06.021.
57. Samuel, S. R. (2021) 'Can 5-year-olds sensibly self-report the impact of developmental enamel defects on their quality of life?', *International journal of paediatric dentistry / the British Paedodontic Society [and] the International Association of Dentistry for Children*, 31(2), pp. 285–286.
58. Scherbina, A. D. (no date) 'Determining the Optimal Duration of the COVID-19 Suppression Policy: A Cost-Benefit Analysis', *SSRN Electronic Journal*. doi: 10.2139/ssrn.3562053.
59. Sekar, D. *et al.* (2019) 'Methylation-dependent circulating microRNA 510 in preeclampsia patients', *Hypertension research: official journal of the Japanese Society of Hypertension*, 42(10), pp. 1647–1648.
60. Sen-Crowe, B., McKenney, M. and Elkbuli, A. (2020) 'Social distancing during the COVID-19 pandemic: Staying home save lives', *The American journal of emergency medicine*. doi: 10.1016/j.ajem.2020.03.063.
61. Seppan, P. *et al.* (2018) 'Therapeutic potential of Mucuna pruriens (Linn.) on ageing induced damage in dorsal nerve of the penis and its implication on erectile function: an experimental study using albino rats', *The aging male: the official journal of the International Society for the Study of the Aging Male*, pp. 1–14.
62. Sharma, P. *et al.* (2019) 'Emerging trends in the novel drug delivery approaches for the treatment of lung cancer', *Chemico-biological interactions*, 309, p. 108720.
63. Shenoy, P. B. and Brundha, M. P. (2016) 'Awareness of polycystic ovarian disease among females of age group 18-30 years', *Research journal of pharmaceutical, biological and chemical sciences*, 8(8), p. 813.

64. Shreya, S. and Brundha, M. P. (2017) 'Alteration of Haemoglobin Value in Relation to Age, Sex and Dental Diseases-A Retrospective Correlation Study', *Research Journal of Pharmacy and Technology*, 10(5), pp. 1363–1366.
65. Siddique, R. *et al.* (2019) 'Qualitative and quantitative analysis of precipitate formation following interaction of chlorhexidine with sodium hypochlorite, neem, and tulsi', *Journal of conservative dentistry: JCD*, 22(1), pp. 40–47.
66. Singh, A., Barai, A. K. and Shinde, A. (no date) 'Modelling and data-based analysis of COVID-19 outbreak in India : a study on impact of social distancing measures'. doi: 10.1101/2020.05.12.20099184.
67. Sridharan, G.*et al.* (2019) 'Evaluation of salivary metabolomics in oral leukoplakia and oral squamous cell carcinoma', *Journal of oral pathology & medicine: official publication of the International Association of Oral Pathologists and the American Academy of Oral Pathology*, 48(4), pp. 299–306.
68. Yang, G., Hamacher, J., Gorshkov, B., White, R., Sridhar, S., Verin, A., Chakraborty, T., Lucas, R. The dual role of TNF in pulmonary edema(2010) *Journal of Cardiovascular Disease Research*, 1 (1), pp. 29-36. DOI: 10.4103/0975-3583.59983
69. Teja, K. V., Ramesh, S. and Priya, V. (2018) 'Regulation of matrix metalloproteinase-3 gene expression in inflammation: A molecular study', *Journal of conservative dentistry: JCD*, 21(6), pp. 592–596.
70. Timothy, C. N., Samyuktha, P. S. and Brundha, M. P. (2019) 'Dental pulp Stem Cells in Regenerative Medicine – A Literature Review', *Research Journal of Pharmacy and Technology*, p. 4052. doi: 10.5958/0974-360x.2019.00698.x.
71. Varshini, A., Rani, S. L. and Brundha, M. P. (2020) 'Awareness of annual doctor checkups among general population', *Drug Invention Today*, 14(2).
72. Venkatesh, A. and Edirappuli, S. (2020) 'Social distancing in covid-19: what are the mental health implications?', *BMJ*, p. m1379.
73. Verelst, F., Willem, L. and Beutels, P. (2016) 'Behavioural change models for infectious disease transmission: a systematic review (2010–2015)', *Journal of The Royal Society Interface*, p. 20160820. doi: 10.1098/rsif.2016.0820.
74. VijayashreePriyadharsini, J. (2019) 'In silico validation of the non-antibiotic drugs acetaminophen and ibuprofen as antibacterial agents against red complex pathogens', *Journal of periodontology*, 90(12), pp. 1441–1448.
75. VijayashreePriyadharsini, J., SmilineGirija, A. S. and Paramasivam, A. (2018) 'In silico analysis of virulence genes in an emerging dental pathogen *A. baumannii* and related species', *Archives of oral biology*, 94, pp. 93–98.
76. Viner, R. M. *et al.* (2020) 'School closure and management practices during coronavirus outbreaks including COVID-19: a rapid systematic review', *The Lancet. Child & adolescent health*, 4(5), pp. 397–404.
77. Wilder-Smith, A. and Freedman, D. O. (2020) 'Isolation, quarantine, social distancing and community containment: pivotal role for old-style public health measures in the

novel coronavirus (2019-nCoV) outbreak', *Journal of Travel Medicine*. doi: 10.1093/jtm/taaa020.

78. Zhang, Y. *et al.* (no date) 'The impact of social distancing and epicenter lockdown on the COVID-19 epidemic in mainland China: A data-driven SEIQR model study'.doi: 10.1101/2020.03.04.20031187.

### List of figures:

Figure 1: The pie chart shows the responses on the awareness of social distancing and if it can help in preventing COVID-19 infection.

Figure 2: The pie chart showing the responses to distance to be maintained for social distancing .

Figure 3: The bar graph representing the association between gender and distance to be maintained for social distancing.

Figure 4: A pie chart showing the responses to the various preventive measures preferred.

Figure 5: A pie chart showing the responses to people practising social distancing in public.

Figure 6: The bar graph representing the association between gender and people practising social distancing in public.

Figure 7: A pie chart showing the responses to impact of mass gathering at public places.

Figure 8: A pie chart showing the responses to different places to follow social distancing

Figure 9: The bar graph representing the association between gender and different public places where social distancing should be followed.

Figure 10: A pie chart showing the responses on the awareness of Importance of social distancing with daily vendors.

Figure 11: The bar graph representing the association between gender and importance of social distancing with daily vendors.

Figure 12: A pie chart showing the responses to awareness of prevention of droplet infections by practising social distancing.

Figure 13: : The bar graph representing the association between gender and prevention of droplet infections by practising social distancing.

Figure 14: A pie chart showing the responses to the question "reduction in COVID cases by practising social distancing.

Figure 15: A pie chart showing the responses to the negative effect of social distancing.

Figure 16: A pie chart showing the responses to the positive effect of social distancing.

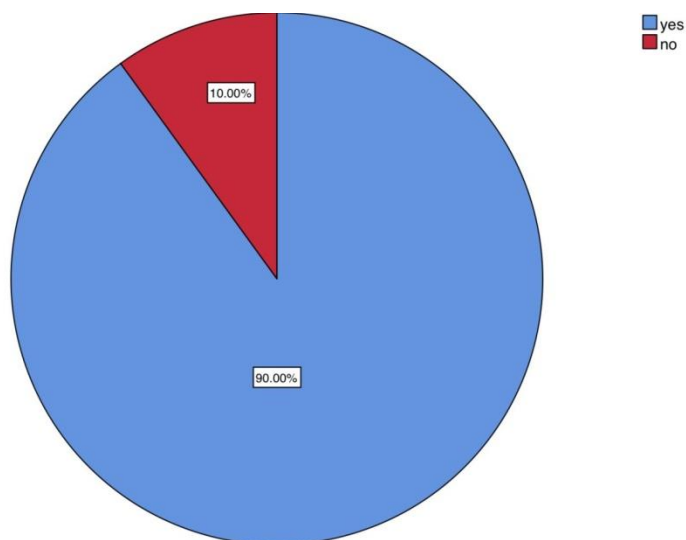


Figure 1: The pie chart shows the responses on the awareness of social distancing and if it can help in preventing COVID-19 infection. 90% ( blue) of the population think social distancing can help in preventing COVID and 10% (red) do not agree with it .

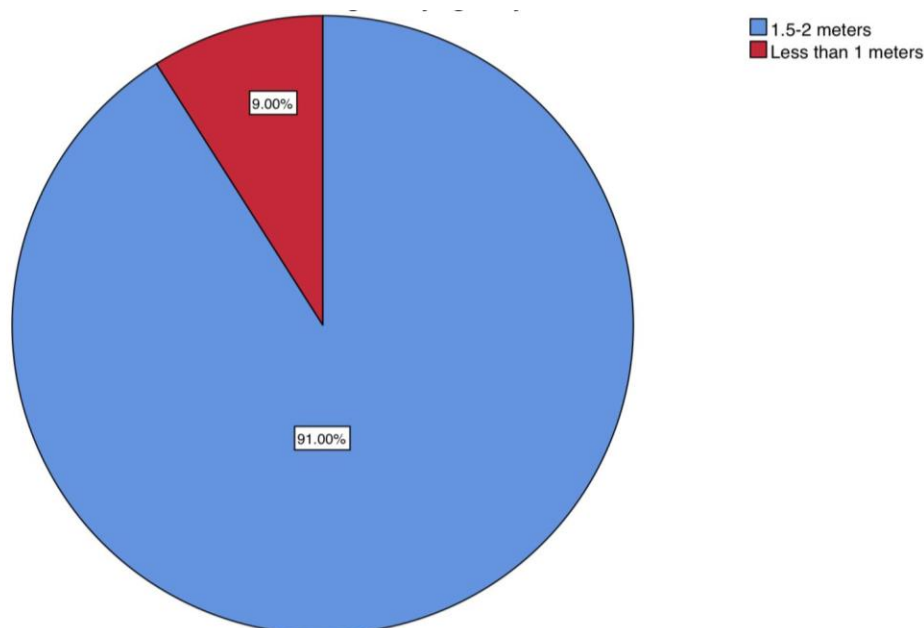


Figure 2: The pie chart showing the responses to distance to be maintained for social distancing . 91% (blue) of the population agreed that social distancing is maintaining 1.5-2 meters , 9% ( red) chose less than 1 meters.

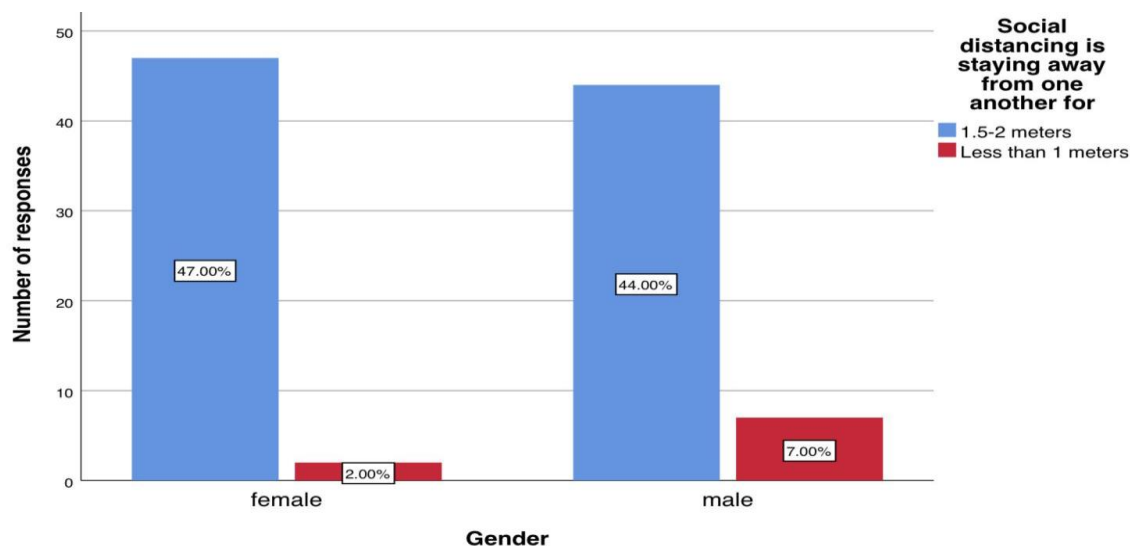


Figure 3: The bar graph representing the association between gender and distance to be maintained for social distancing. X- axis represents gender and y-axis represents percentage of responses. The blue color denotes 1.5-2 meters and red color denotes less than 1 meters. Majority of females ( 47%) have agreed that social distance means maintaining distance for 1.5-2 meters when compared to males. Chi square test was done to associate the variables. Chi square test value is 2.838 ,p value is 0.092 ( $p > 0.05$ ) hence, there is no statistical significant difference between the gender and the distance to be maintained for social distancing.

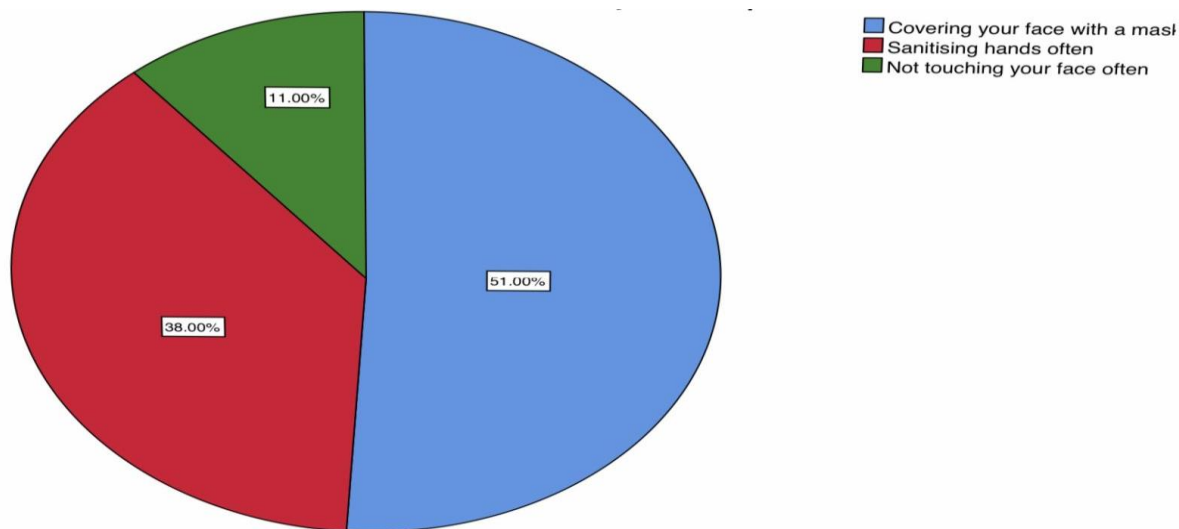


Figure 4: A pie chart showing the responses to the various preventive measures preferred. 51% ( blue) preferred mouth masks to cover their faces in public , 11% (green) preferred not touching their faces , 38% ( red) preferred sanitising their hands often .



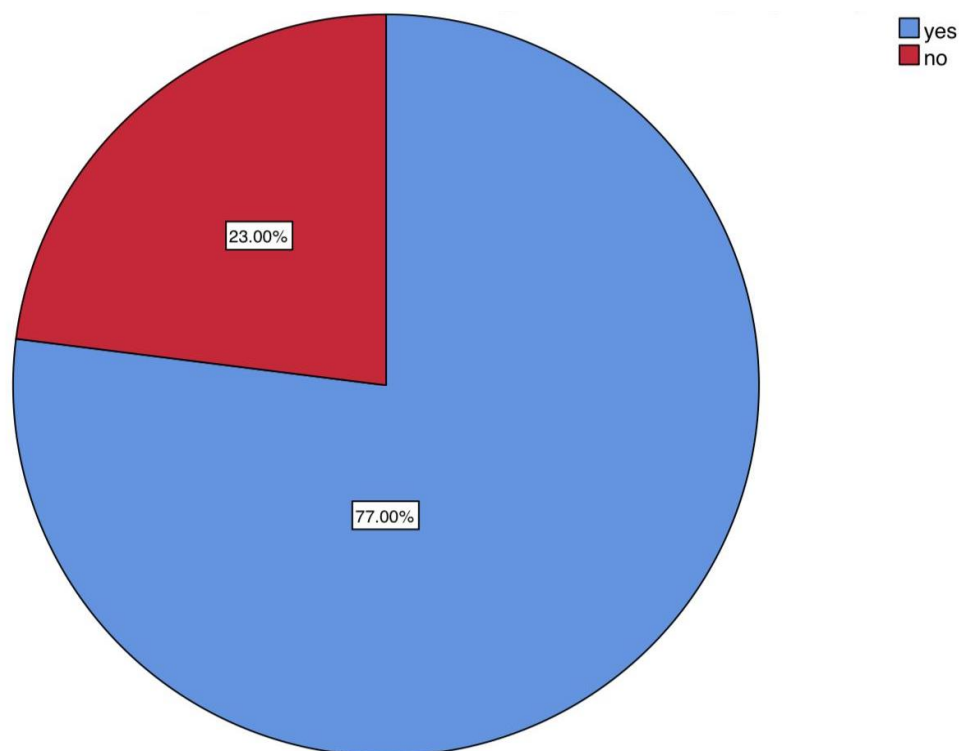


Figure 5: A pie chart showing the responses to people practising social distancing in public. 77% ( blue ) of the participants agreed that social distancing is followed in public and 23% (red) disagree with this.

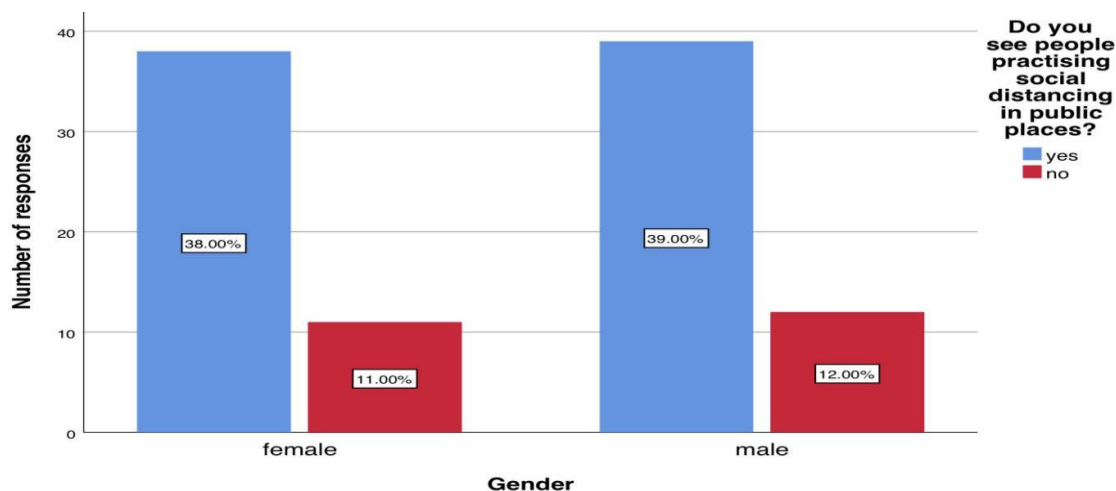


Figure 6: The bar graph representing the association between gender and people practising social distancing in public. X- axis represents gender and y-axis represents percentage of responses .The blue color denotes yes and red color denotes no. Majority of males (39%)have agreed that people practise social distancing in public when compared to females. Chi square test was done to associate the variables. Chi square test value is 0.016 , p value is 0.898( $p >$

0.05). Hence, there is no statistical significant difference between the gender and the people practising social distancing in public.

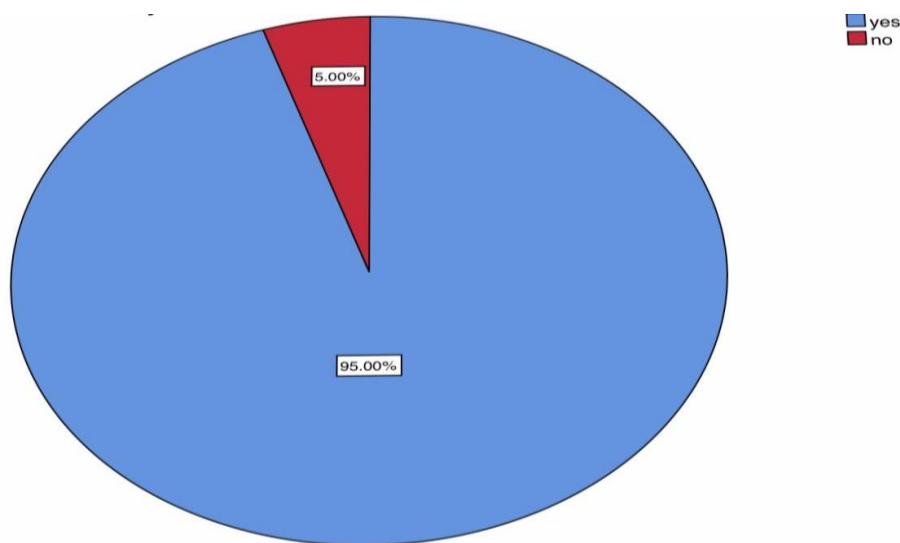


Figure 7: A pie chart showing the responses to impact of mass gathering at public places. 95% (blue) of the study population agree that mass gathering like marriages can lead to COVID and 5% (red) do not .

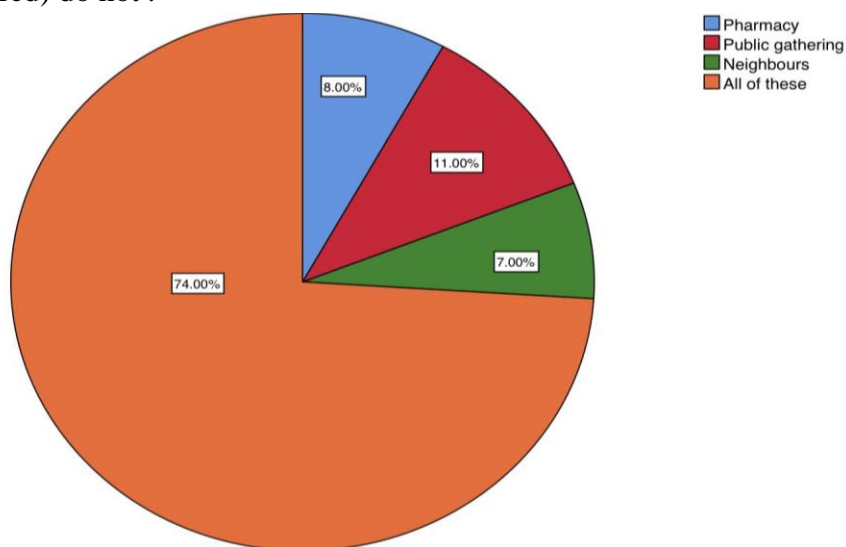


Figure 8: A pie chart showing the responses to different places to follow social distancing and shows that 11% (red) of the respondents think practising social distancing at public is essential, 8% (blue) at pharmacy, 7% (green) with neighbours and large population of 74% (orange) think it is necessary to follow social distancing at all of the above places .

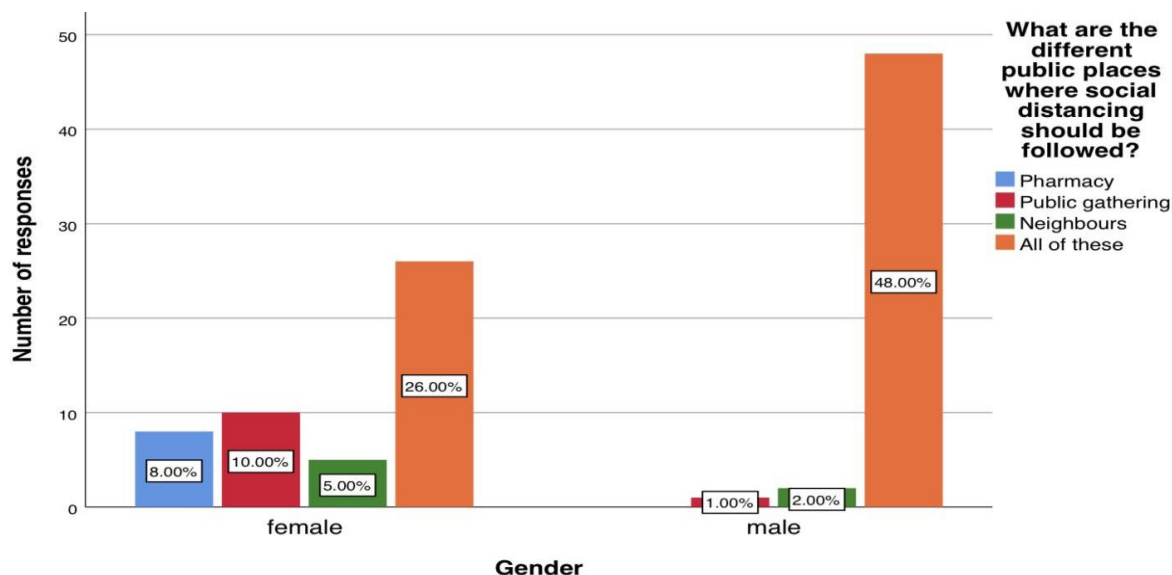


Figure 9: The bar graph representing the association between gender and awareness on different public places where social distancing should be followed. X- axis represents gender and y-axis represents percentage of responses. The blue color denotes pharmacy, red color denotes public gathering, green color denotes neighbourhood and orange color denotes all of these. Majority of the males (48%) agreed that in all of the above places social distancing should be followed when compared to the females. Chi square test was done to associate the variables. Chi Square test value is 23.159, p value is 0.000 ( $p < 0.05$ ). Hence, there is a significant difference between gender and the awareness of different public places where social distancing should be followed.

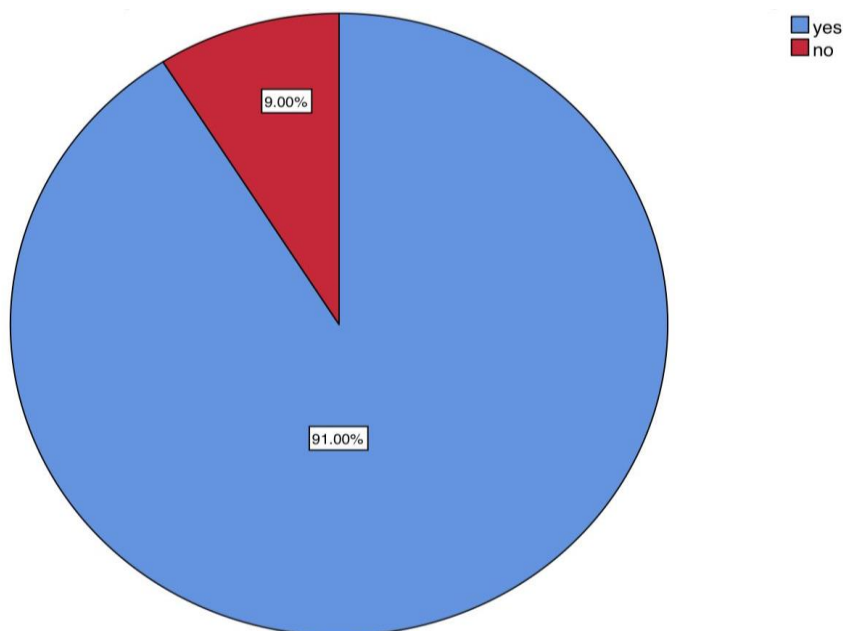


Figure 10: A pie chart showing the responses on the awareness of Importance of social distancing with daily vendors. 91% (blue) of the participants think it isn necessary to practise

distancing with the daily vendors as well but 9% (red) of them disagree and consider it less important.

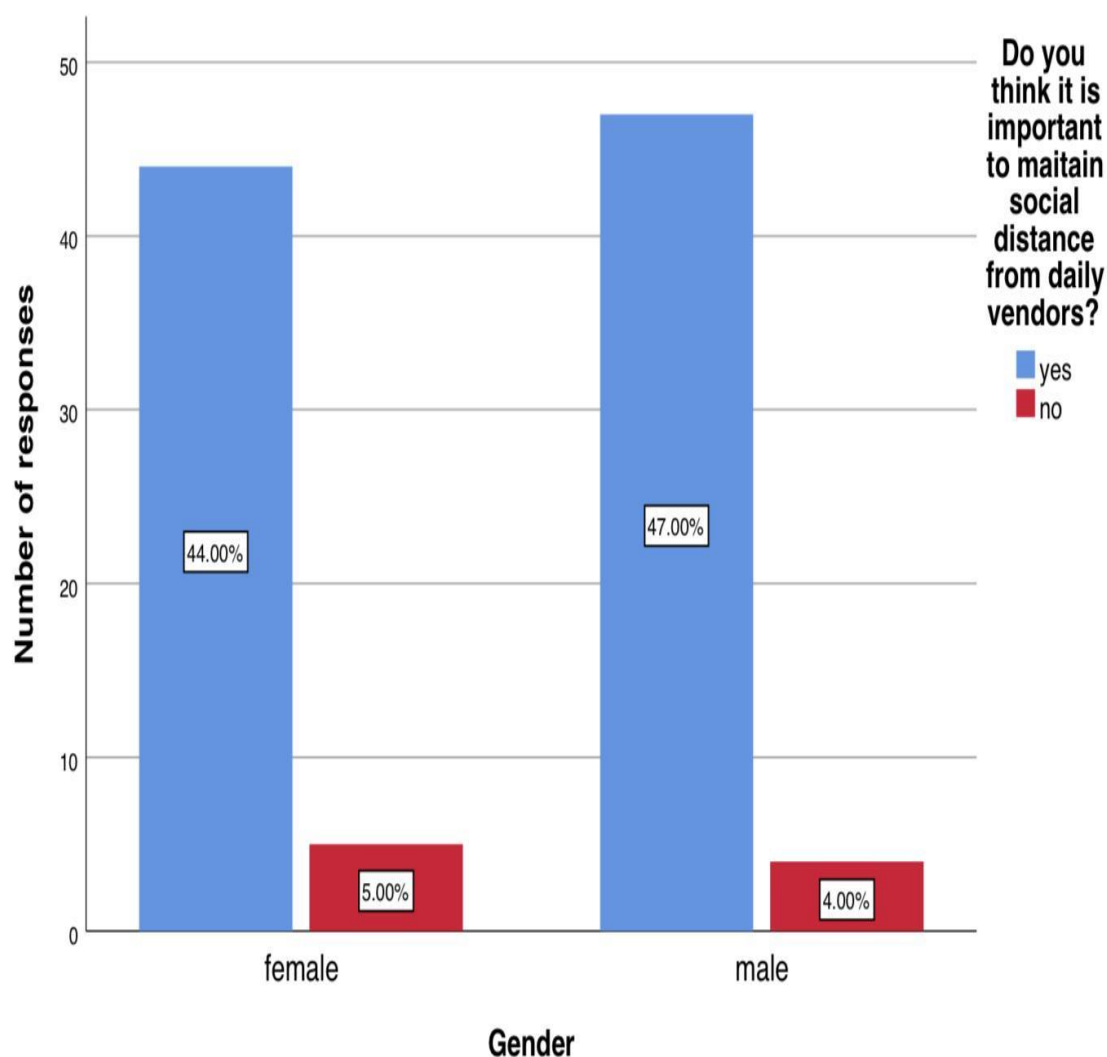


Figure 11: The bar graph representing the association between gender and importance of social distancing with daily vendors. X- axis represents gender and y-axis represents percentage of responses .The blue color denotes yes and red color denotes no. Majority of the males ( 47%) agreed that it is important to practice social distancing with daily vendors when compared to the females. Chi square test was done to associate the variables. Chi square test value is 0.170 , p value is 0.680( $p > 0.05$ ). Hence, there is no significant difference between the gender and the importance of social distancing with daily vendors.

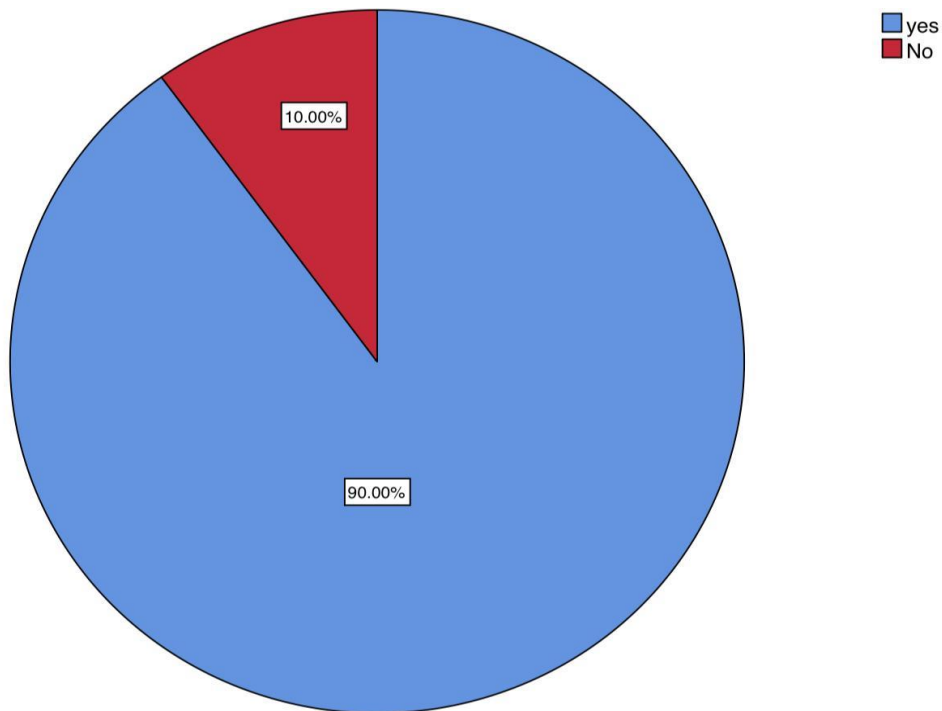


Figure 12: A pie chart showing the responses to awareness of prevention of droplet infections by practising social distancing. 90% (blue) of the population thinks that infection that can spread by droplets can be simply prevented by social distancing and 10% (red) disagree with it .

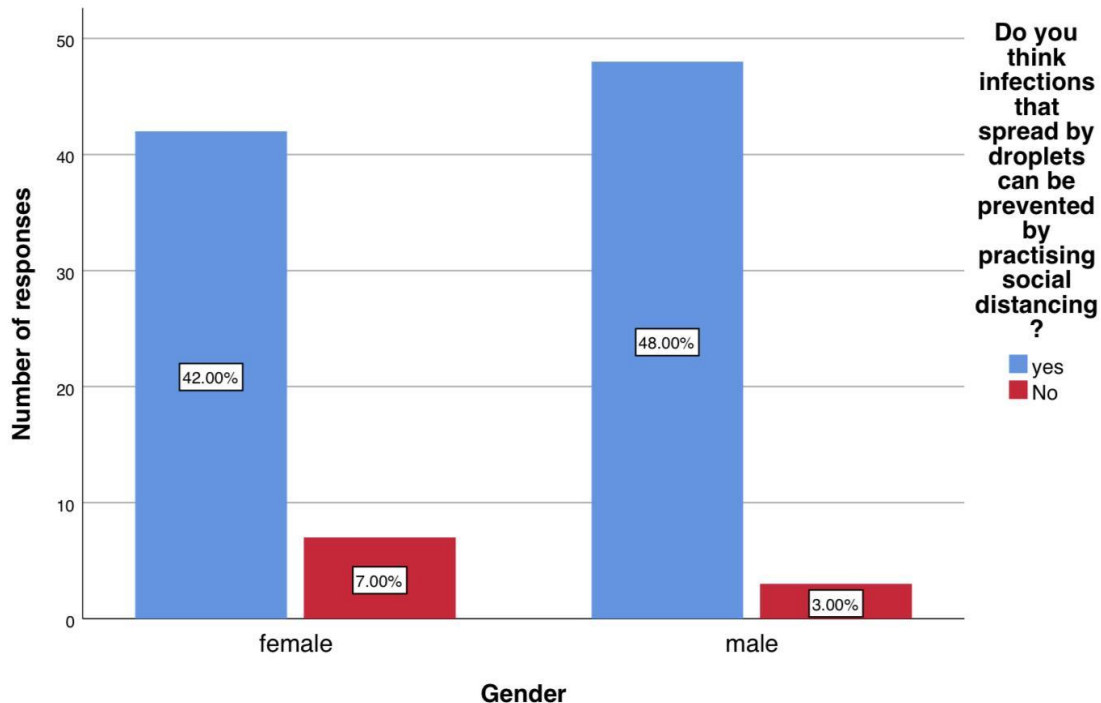


Figure 13: The bar graph representing the association between gender and prevention of droplet infections by practising social distancing. X- axis represents gender and y-axis represents percentage of responses .The blue color denotes yes and red color denotes no. Majority of the

males ( 48%) agreed that social distancing can prevent droplet infections when compared to the females. Chi square test was done to associate the variables. Chi square test value is 1.961 p value is 0.161 ( $p > 0.005$ ), hence, there is no significance between the gender and the importance of social distancing with daily vendors.

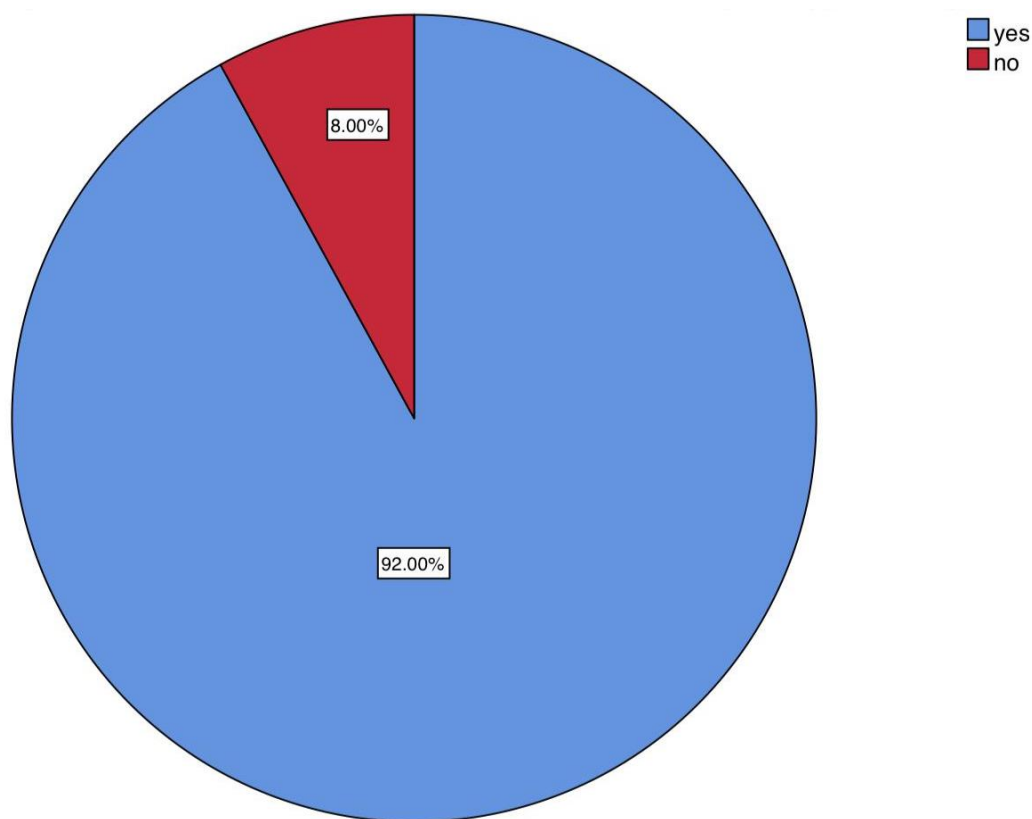


Figure 14: A pie chart showing the responses to reduction in COVID cases by practising social distancing. 92% (blue) of the respondents believe that social distancing can be helpful and 8% (red) of the population through it cannot be helpful.

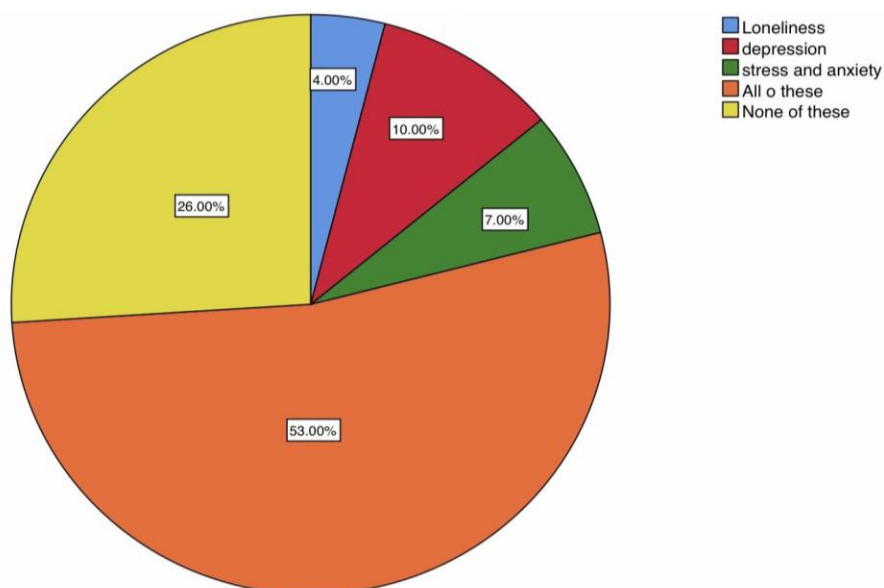


Figure 15: A pie chart showing the responses to the negative effect of social distancing. 10% (red) of the population agrees that social distancing can cause depression, 4% (blue) think it can cause loneliness, 7% (green ) think of the anxiety and stress but 53% (orange) of the individuals think it can cause all of the above. On the other hand, 26% ( yellow) of the people in the study population think it causes none.

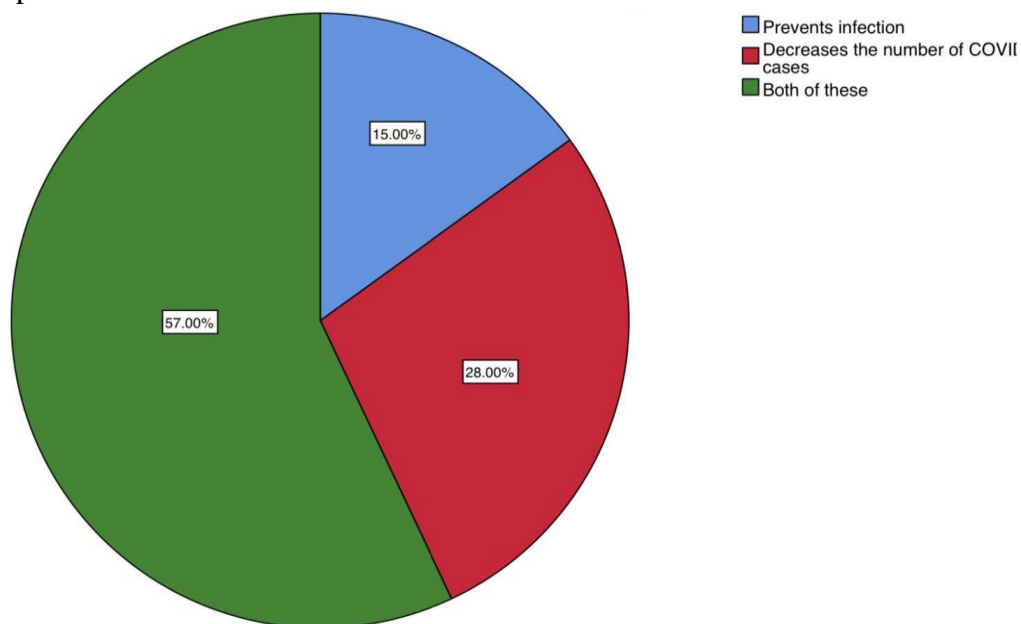


Figure 16: A pie chart showing the responses to positive effect of social distancing. 15% ( blue) of the population thinks the positive effect of social distancing is prevention in infection, 28% (red) thinks it can reduce the number of cases and 57% (green) agrees to both the positive effects.