

## **Public Perception on Social Distancing and Lock Down**

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## **ABSTRACT :**

The 2019 novel coronavirus (2019-nCoV) is rapidly spreading and it originates from Wuhan City of Hubei Province of China. Various preventive interventions or measures mainly social distancing, or physical distancing are taken to prevent the spread of a contagious disease. Many countries globally have announced lockdown, a state of isolation or restricted access instituted as a security measure in order to regain control. So the aim of this study is to evaluate the Perception of the general public on social distancing and lockdown. A cross sectional survey was conducted with a self structured questionnaire consisting of 15 questions about lockdown and social distancing and distributed to 100 general public members as a random sample of both gender through social networking sites. The survey had an overall response rate of 100 . The resulting data have been analysed using statistical software. The World Health Organization had notified that during previous such coronavirus outbreaks like SARS, human-to-human transmission occurred primarily through droplets, contacts, and fomites and the danger is amplified due to the lack of a vaccine and effective therapeutic agents against this novel virus so following social distancing and lockdown strictly is the best way to prevent transmission of the virus to others and to reduce the cases. Most of the participants(general public ) have positive opinion on following lockdown and social distancing for covid 19 pandemic and they are aware about the importance of lockdown and social distancing .

**KEY WORDS :** Covid 19; Pandemic; Lockdown; Social distancing; Non pharmaceutical intervention

## **INTRODUCTION :**

The 2019 novel coronavirus (2019-nCoV) is rapidly spreading and it originated from Wuhan City of Hubei Province of China. This has resulted in massive stresses on national health care systems, escalating deaths, and major disruptions in economic life in response to public health interventions designed to mitigate the pace of transmission (Spinelli and Pellino, 2020) .Social distancing, or physical distancing, is a set of non-pharmaceutical interventions or measures taken to prevent the spread of a contagious disease by maintaining a physical distance between people and reducing the number of times people come into close contact with each other

so governments implemented lockdown is a state of isolation or restricted access instituted as a security measure in order to regain control. Effectiveness of implementation of social distancing and lockdown is high in this pandemic due to its increased cases and deaths . But Public perceptions about social distancing and lockdown measures likely to be implemented during a pandemic is not acceptable. Participants expressed their panic about job security and economic strain on families if businesses or school closures are prolonged. Lockdown measures may be challenging to implement and sustain due to strains on family resources and lack of trust in government by the general public (Glass *et al.*, 2006).

A short period of lockdown is found insufficient to prevent a resurgence and instead, protocols of sustained lockdown with periodic relaxation were suggested .The effectiveness and impact of lockdown and social distancing will depends on credibility of the public health authorities ,political leader and institutions (Alvarez, Argente and Lippi, 2020).

Social distancing is only a viable response to local overcrowding. It is however only a local indication of a degree of global overpopulation currently impossible to constrain. The latter possibility is an issue which national, regional and global governance has been afraid to recognize let alone to address. Unfortunately, in systemic terms, pandemics would seem to be engendered by society to address that challenge otherwise (Ranjan, no date) . The combined intervention, in which quarantine, school closure, and workplace distancing were implemented together was the most effective compared with the no interventions; the combined intervention reduced the estimated median number of infections (Ashwin and Muralidharan, 2015) . Reducing the spread of infection during the COVID-19 pandemic prompted recommendations for individuals to socially distance. Youth are following social distance and lockdown due to motivations in social media and their knowledge about covid 19 pandemic and transmission (Pike and Saini, no date).

Wide range of indicators of social distancing and lockdown that pose mental health risks and feelings of loneliness. social disconnectedness and perceived isolation are independently associated with mental health so these lockdown and social distancing practices reduce the spread so the people must overcome psychological stress by involving them in extracurricular

activities like drawing, singing, dancing etc(Aslam, no date). Practicing lockdown , social distancing and enhancing hygiene are the very important factors to control the spread of covid 19 disease (Girija *et al.*, 2019) .Because clean water is often unavailable for hand wash , people can be infected through hand- mouth, hand- nose, or hand- eye contact before handwashing. It is important to have one item at hand, such as 75% alcohol, hand sanitizer gel, disinfecting wipes, for instant hand hygiene after we have touched something possibly contaminated by the virus. This is more important for those traveling long- distance using public vehicles or having touched some items frequently touched by other people (Shahzan *et al.*, 2019). Covid 19 virus is transmitted to a larger human population by stealthily entering the oral cavity and has established itself as a potential pathogen by expression of several virulence and can cause severe respiratory illnesses (Priyadharsini *et al.*, 2018b) . The government is taking test every individual in the with symptoms of covid 19 , foreign returns and the person staying in area of more covid 19 cases by using PCR test kit and positive patient must quarantine for 14 days and after they get rid from corona also they are advised by medical experts to follow physically distancing them from their family members to avoid spreading (Girija As and Priyadharsini J, 2019).

Physical distancing reduces transmission risks and slows the spread of COVID-19. Local and regional governments in many countries have issued shelter-in-place policies to mandate physical distancing. Yet compliance with the lockdown is uneven and may be influenced by their beliefs about science (Cornwell and Waite, 2009) .Pre-emptive interventions is to slow the transmission of disease and limit the impact on health services, particularly hospitals and intensive care units, to ensure access to high level care when needed (Girija, Jayaseelan and Arumugam, 2018) .Using countyday measures of physical distancing derived from cell phone location data, we demonstrate that the proportion of people who stay at home after lockdown policies go into effect is significantly lower in counties with a high concentration of climate change skeptics (Nair, Gandhi and Natarajan, 2020) . Hygiene enhancement and social distancing are the only ways to control community transmission of novel coronavirus COVID-19 should be considered (Shahana and Muralidharan, 2016). Most of the hypertension and cardiovascular disease patients are suffering a lot because of closure of most of the private clinics where they regularly for treatment (Paramasivam, Vijayashree Priyadharsini and Raghunandhakumar, 2020).

The lockdown and social distancing is practiced only by the public who are knowledgeable about covid 19 virus and transmission (Chatterjee, Dey and Jain, no date) . So lockdown and social distancing is important to avoid the spread until the scientific medicine and vaccination for coronavirus disease manufactured (M, Geetha and Thangavelu, 2019) .Due to rapid increase in case of covid 19 , the government of India enforced an immediate lockdown for long time is only reason for now tiny fraction of patient and death due to covid 19 disease.sustained transmission of COVID-19 will rapidly control the outbreak by the implementation of social distancing measures (Priyadharsini *et al.*, 2018a) .

Maintaining strictly social distancing and hygiene using methods like alternative impact of covid 19 shifts in industries which are allowed to work will resume the economy and limit the negative impacts of covid 19 pandemic (Lee *et al.*, no date) .As Indian education system all based on office education system has to the online classes for empowering the education system and for benefits of students so the education system schools , colleges are following the lockdown strictly and also doing their work wisely in online (Omary, no date) .The daily wages are more affected by physical health and their mental health , due to poor economic status. So these people are raising their voice against the lockdown (Vasavada, no date) . The schools and colleges must take measures to create awareness among students about the importance of social distancing during this pandemic (Pratha, Ashwatha Pratha and Geetha, 2017) . The social distancing in any public sphere, which in our model is partitioned into workplace, school and all others, re- moves all social contacts. This, of course, transfers the weight of these removed contacts to the household, where people must now be confined (Someshwar *et al.*, 2020).

The purpose of the initiatives like lockdown is to restrict social interaction in workplaces, schools, and other public spheres, except for essential public services such as fire, police, hospitals (Vijayaraghavan and Singhal, no date).The spread of this virus outbreak has seriously disrupted the life, economy and health of citizens. This is a great concern for everyone how long this situation will last and when the disease will be controlled so for now we have to follow the lockdown and social distancing is important to restrict the spread (Vaishali and Geetha, 2018) .

The typical approach in the epidemiology literature is to study the dynamics of the pandemic, for infected, deaths, recovered, as functions of some exogenously chosen diffusion parameters, which are in turn related to various policies, such as the partial lockdown of schools, universities, businesses, and other measures of diffusion mitigation, and where the diffusion parameters are stratified by age and individual covariates. The lockdown is now followed for instance . The novel aspect of the analysis is to explicitly formulate and solve a control problem, by using the diffusion parameter to maximize a given social objective and taking into account the dynamic nature of the problems of the lockdown and social distancing (Sigdel *et al.*, no date). Our team has rich experience in research and we have collaborated with numerous authors over various topics in the past decade (Ariga *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; Seppan *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; Sekar *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).

## **MATERIALS AND METHOD:**

The survey focused on perception of the general public towards following lockdown and social distancing for this pandemic .A Self structured questionnaire prepared has been typed in google forms and distributed to 100 general public members as a random sample of both gender through social networking sites. The survey had an overall response rate of 100 . The resulting data have been analysed using statistical software.

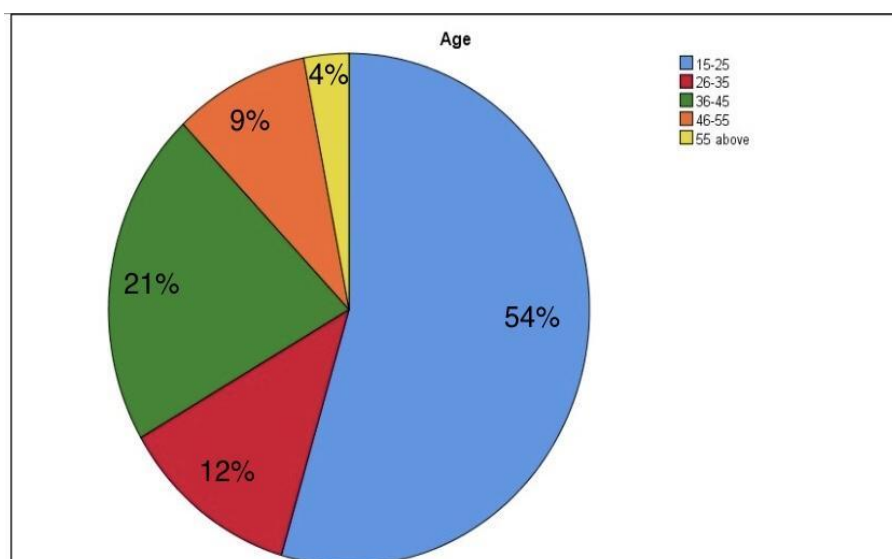
## **RESULTS AND DISCUSSION :**

An online survey, public perception on social distancing and lockdown following for covid 19 pandemic in the community during the corona pandemic, was conducted. A total of 100 responses were recorded. The study included only those participants who understood English and had access to the internet. The age of the participants were grouped into 4 groups I.e 15-25 years 54 members , 26-35 years 12 members ,36-45 years 21 members , 46-55 years 9 members, above 55 years - 4 members [Fig 1] . Among the participants, 73 were females and 26 were

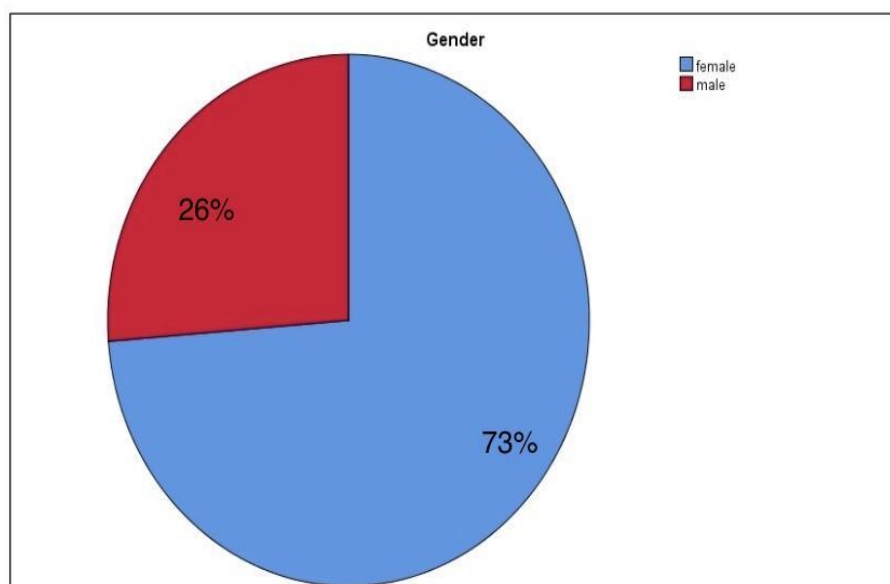
males [Fig 2] All the responders were passably aware of the basic elements of the covid 19 pandemic, as shown in [Fig.3]. Out of the total participants, 100 members answered that they are aware of mode of transmission of covid 19 virus only 3 members answered that they don't know about the mode of transmission of covid 19 virus [Fig4]. 80 members answered that virus transmitted through air droplet, 20 members answered that virus transmitted through water [Fig 5]. All the responders were passably aware of the lockdown and social distancing as shown in [Fig 6] and all the participants are agreeing that social distancing and most of the participants are agreeing lockdown were essential measure to prevent spreading of covid 19 virus [Fig 7]. 88 members answered that they are strictly following, 11 members answered that they are not following and 1 participant answered that they share sometimes following the lockdown and social distancing [Fig 8]. The participants reported that temperatures are the main reason for developed countries cases of covid 19 disease more than India, followed by not following social distancing and lockdown and diet [Fig 9]. Most of the participants (98 members) know the measures taken by the government to reduce spread of covid 19 virus [Fig 10] and most of participants (97 participants) also aware of 144 law [Fig 11]. For 88 participants felt that all their daily works are affected due to lockdown and for 12 participants not felt that all their daily works are affected due to lockdown [Fig 12]. In December while Wuhan city in China was witness of actual covid 19 pandemic. Now India is facing a massive and violent uprising. So the government has taken measures to avoid the spread of covid 19 earlier as lockdown and social distancing. The government has taken steps to increase the screening test (PCR) among the population to avoid contact and prevent the spread of the disease (Smiline, Vijayashree and Paramasivam, 2018). But not everyone is following strictly the lockdown and social distancing. So it is still increasing in number of cases. Early adoption of social distancing is more effective than delayed implementation. Achieving suppression represents a maximum possible reduction in transmission from initially high rates, then estimates based on their curve will undercount both the total deaths and maximum death rates after lock down in some countries. (Baum, Jacobson and Goold, 2009). With social distancing each individual should also follow hygiene procedures to prevent infection. Persons with other co morbid illness should take care of their health with proper medication (Marickar, Geetha and Neelakantan, 2014). Food that enhances or boosts immunity can be added to the daily diet. May herbal formulations have been recommended for boosting the immune status (Selvakumar and Np, 2017). Early 2020 saw the new coronavirus

pandemic spreading rapidly, which necessitated an emergency protocol beyond 'social distancing' akin to mass quarantine. Lockdowns limit movements or activities in the community while allowing essential services to function optimally [(Jayadev and Shetty, 2020)]. The world health organisation had noticed that during previous such coronavirus outbreaks like SARS , human to human transmission occurred primarily through droplets , contact and fortifications. The danger is amplified due to the lack of vaccine and effectiveness in therapeutic agent against the novel virus so following social distancing and lockdown strictly is the best way to prevent the transmission of virus to others and reduce the cases (Raj, no date) .Social distancing is impossible in urban slums for following social distancing and for following the protocol due to their economic status so this areas are more cases were admitted .The absence of vaccine and medication for coronavirus disease following social distancing and lockdown is the only way to reduce the spread of covid 19 virus (Oosterhoff *et al.*, 2020) . The World Health Organization had notified that during previous such coronavirus outbreaks like SARS, human-to-human transmission occurred primarily through droplets, contacts, and fomites. The danger is amplified due to the lack of a vaccine and effective therapeutic agents against this novel virus so following social distancing and lockdown strictly is the best way to prevent transmission of the virus to others and to reduce the cases. ('Post Covid'19 impact on Indian Market', 2020) . Although there may be more problems in following social distancing and lockdown but there is no way to prevent spread due to unavailability of medicine for covid 19 disease . 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; Vijayashree Priyadharsini, Smiline Girija and Paramasivam, 2018; Ezhilarasan, Apoorva and Ashok Vardhan, 2019; Ramadurai *et al.*, 2019; Sridharan *et al.*, 2019; Vijayashree Priyadharsini, 2019; Chandrasekar *et al.*, 2020; Mathew *et al.*, 2020; R *et al.*, 2020; Samuel, 2021)

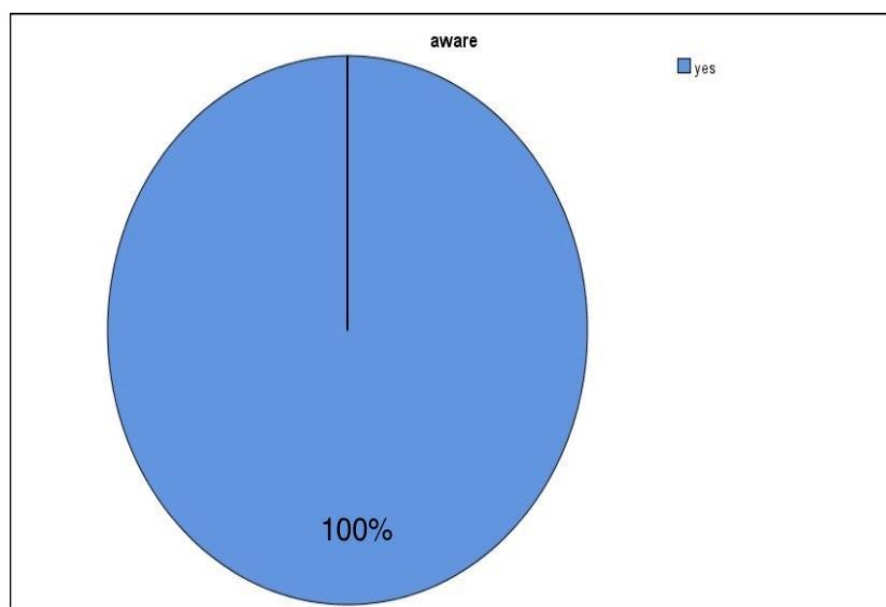




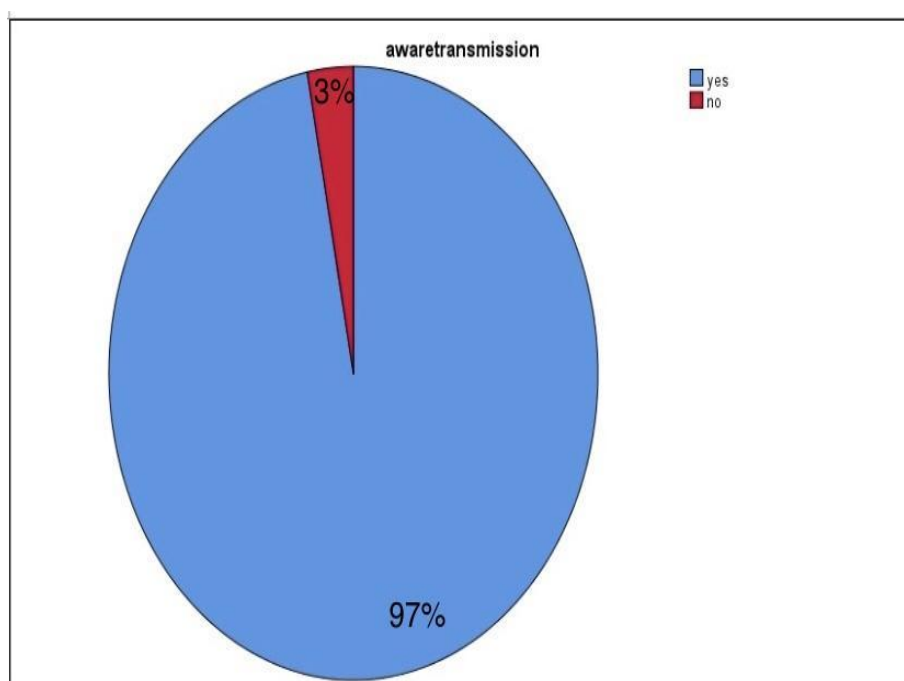
**Figure 1. Pie chart showing responses to the age of the participants who attended the survey where 54% are 15-25years ,12% are 26-35 years ,21% are 36-45years ,9% are 46-55 years ,4% are above 55 years .**



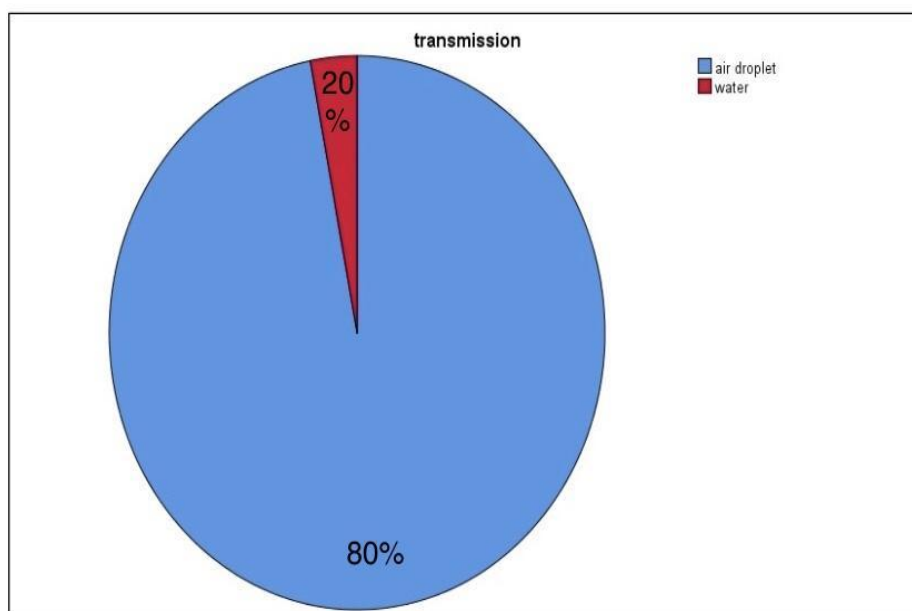
**Figure 2 . Pie chart showing responses to the gender of the participants where 73% are female and 26% are male**



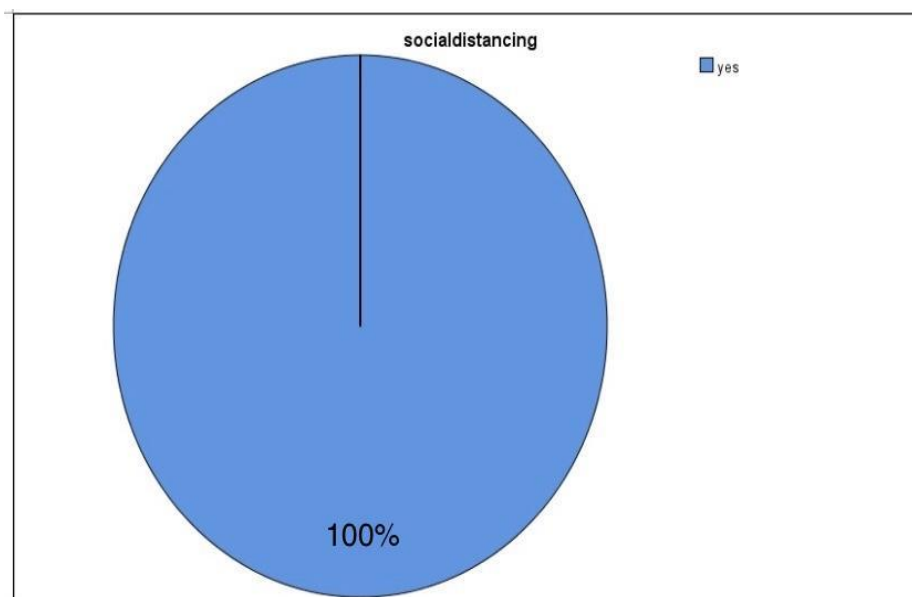
**Figure 3. Pie chart showing responses to the awareness of covid 19 pandemic where all the participants(100%) reported yes**



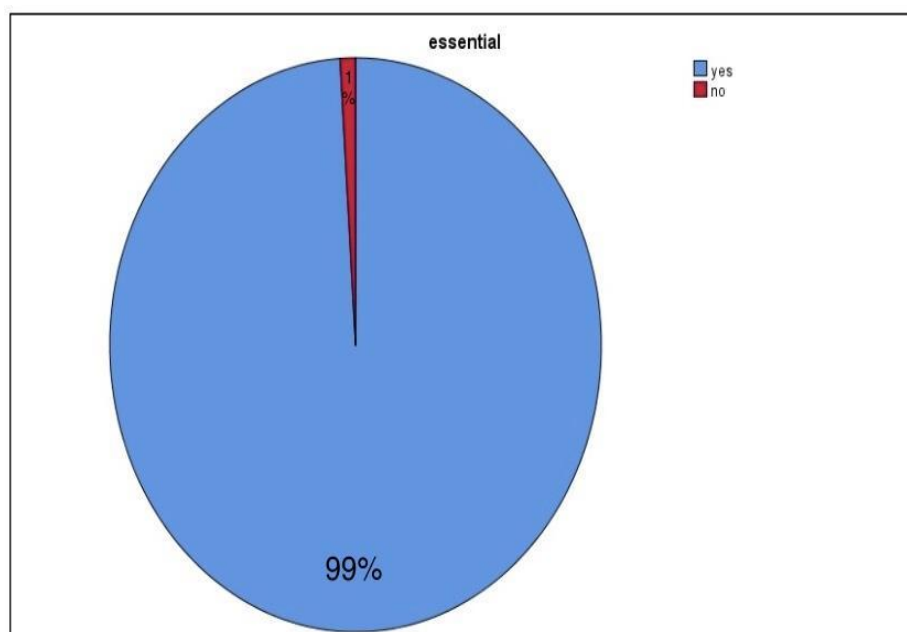
**Figure 4. Pie chart showing responses to the awareness of transmission of covid 19 virus where 97%of participants are reported yes and 3% of participants reported no**



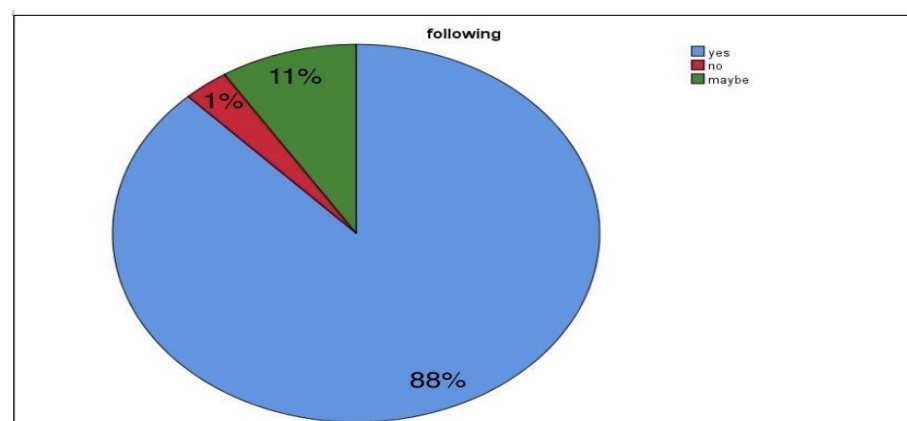
**Figure 5. Pie chart showing responses to the mode of transmission of covid 19 virus where 80% of participants reported air droplets , 20% of participants reported water**



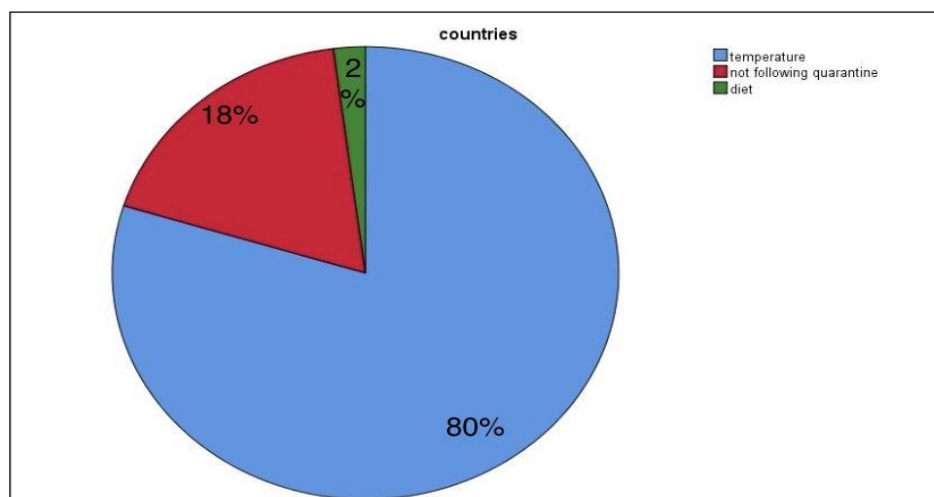
**Figure 6. Pie chart showing responses to the awareness of lockdown and social distancing of the participants where all the participants( 100%) reported yes**



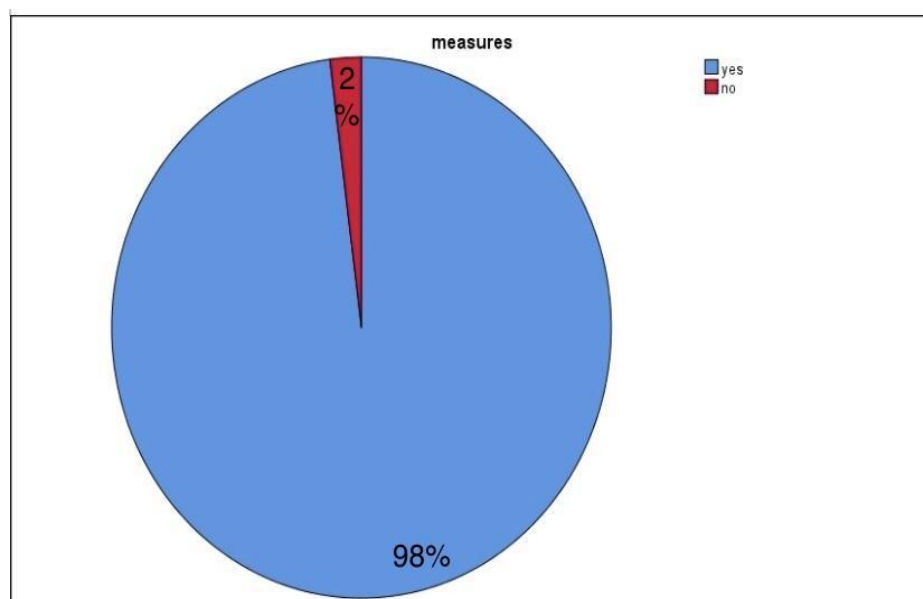
**Figure 7 . Pie chart showing responses to the opinion about following lockdown and social distancing during covid 19 pandemic of the participants where 99% of participants are reported yes which means lockdown and social distancing are essential and 1% of participants are reported no which means lockdown and social distancing are not essential**



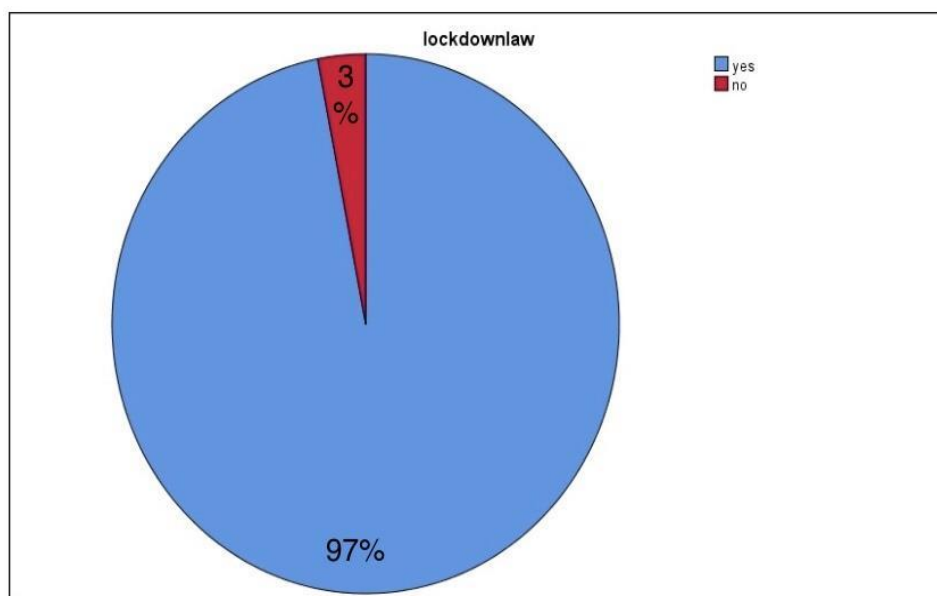
**Figure 8. Pie chart showing responses to the participants action on lockdown and social distancing where 88% of participants are reported yes which means they are following the lockdown, 1% of participants reported no which means the participant is not following the lockdown, 11% of participants reported maybe which means they are following sometimes**



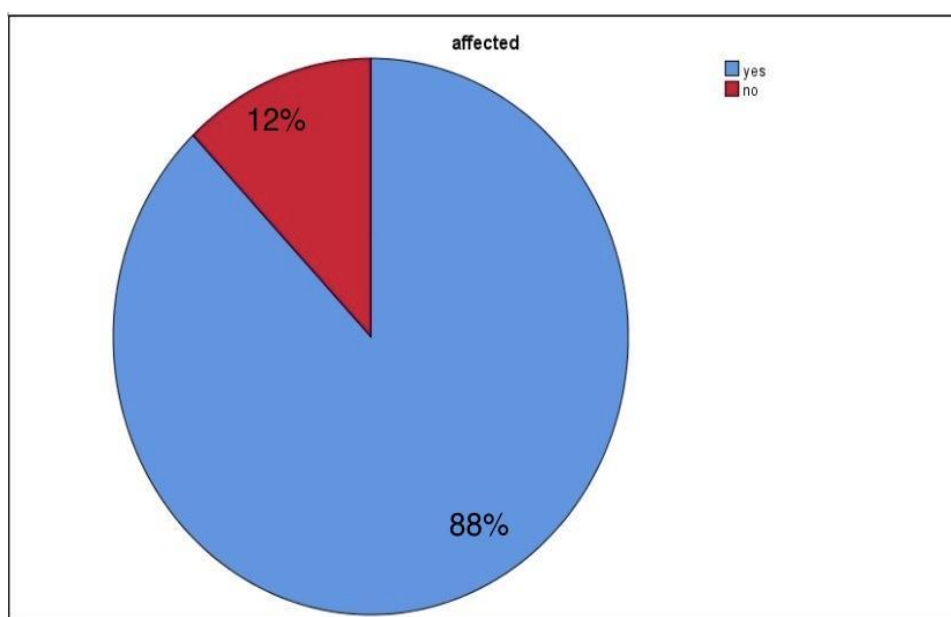
**Figure 9.** Pie chart showing responses to the reasons for the spread of covid 19 disease more in other developed countries than in India where 80% of participants are reported temperature, 18% of participants are reported not following the lockdown and social distancing strictly, 2% of participants are reported diet is the reason for the spread of covid 19 disease more in other developed countries than in India.



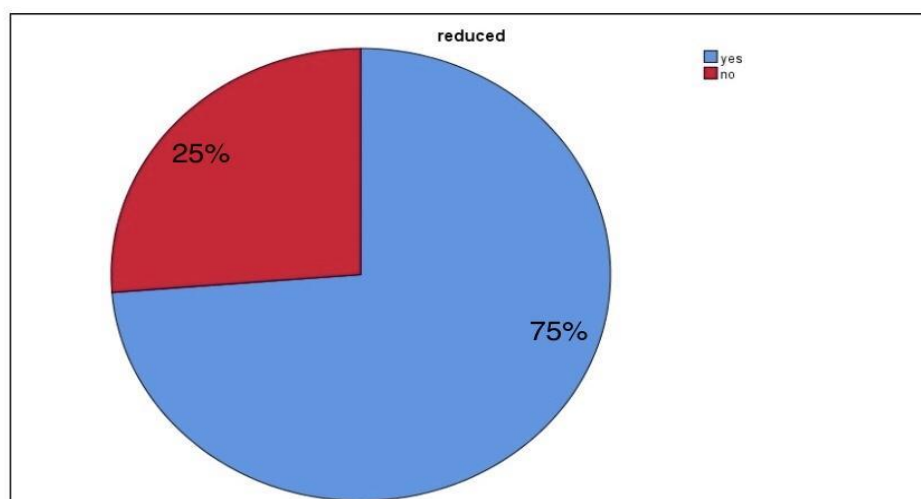
**Figure 10.** Pie chart showing responses to the awareness of measures taken by government to reduce the spread of covid 19 disease where 98% of participants reported yes and 2% of participants reported no .



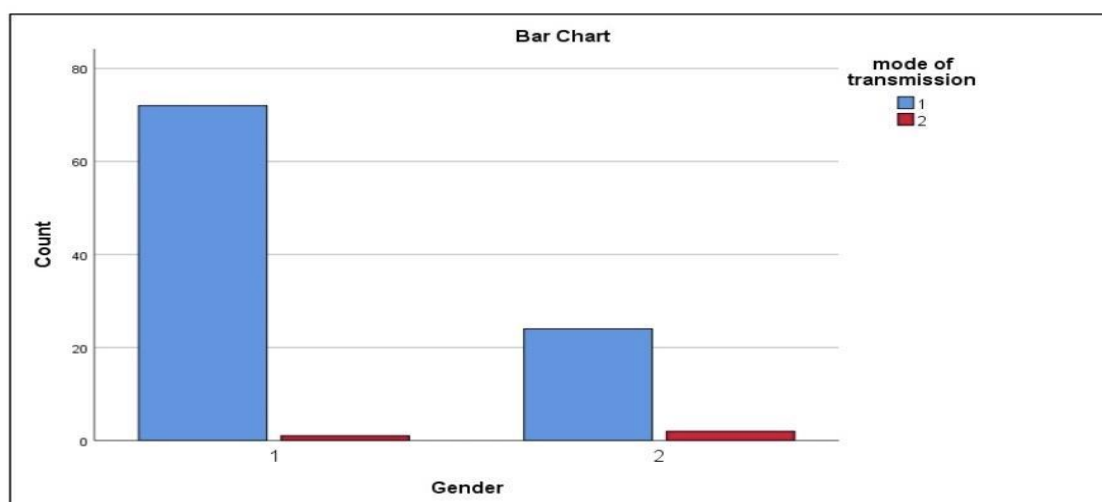
**Figure 11. Pie chart showing responses to the awareness about 144 law of the participants where 97% of participants are reported yes, 3% of participants are reported no .**



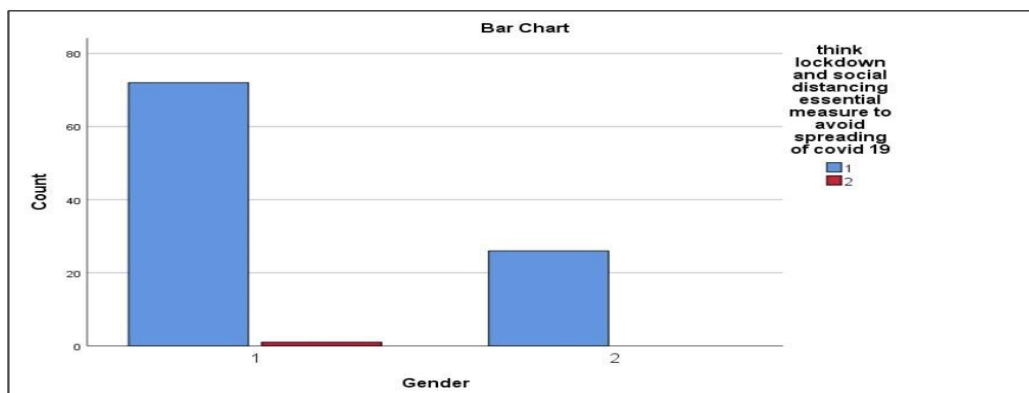
**Figure 12. Pie chart showing responses to the impact of lockdown on their daily work of the the participants where 88% of participants are reported yes and 12% of participants are reported no.**



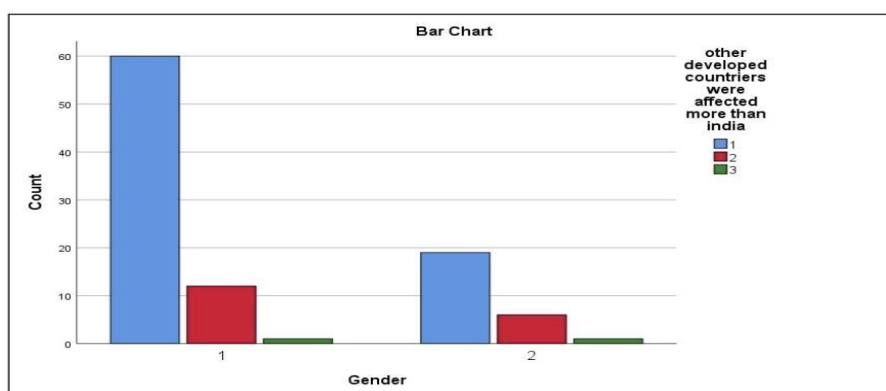
**Figure 13.** Pie chart showing responses to the participants opinion on status of covid 19 cases after lockdown where 75% of participants are reported yes, 25% of participants are reported no.



**Figure 14 .** Bar chart showing the association between gender and awareness of the model of transmission. X axis represents the gender and Y axis represents the number of responses for awareness of mode of transmission of covid 19 virus . 97.2% females and 96.1% males are reported airdroplets(blue) and 2.8% of females and 3.9% males are reported water( red) . Chi square test and pearson correlation analysis ;P value= 0.106 - statistically not significant.

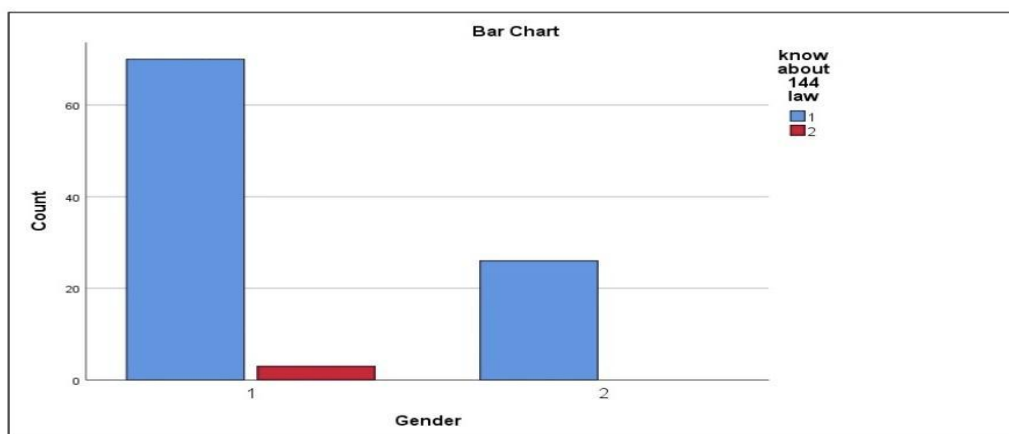


**Figure 15.** Bar chart showing the association between gender and awareness about the importance of following lockdown and social distancing .X axis represents the gender and awareness about importance of following lockdown and social distancing and Y axis represents the number of responses for awareness about the importance of lockdown . 98.6 % of females and all 100% of males are aware and 1.4% of female are not aware . Chi square test and Pearson correlation analysis ; P value=0.549 - statistically not significant.

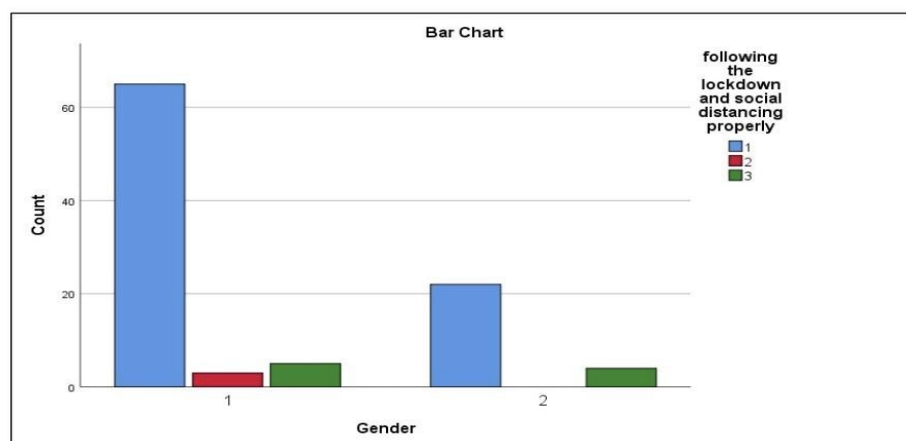


**Figure 16.** Bar chart showing the association between gender and opinion on the reason for more covid 19 infected case in developed countries than India . X axis represents the gender and Y axis represents the number of responses for opinion on the reason for more covid 19 infected case in developed countries than India. 82.1% females and 73% males are answering that not following social distancing and lockdown strictly( blue ) is the reason for more cases in developed countries than in India . Chi square test and Pearson correlation analysis ; P value=0.536 - statistically not significant.





**Figure 17 . Bar chart showing the association between gender and awareness about 144 law for lockdown .X axis represents the gender and Y axis represents the number of responses for awareness about 144 law . 95.8% females and 100% males are reported yes (blue) and 4.2% female are reported no (red) . Chi square test and Pearson correlation analysis ; P value= 0.294 - statistically not significant.**



**Figure 18. Represents the association between gender and lockdown followed by the participants . X axis represents the gender and Y axis represents the number of responses for following lockdown by the participants .89% females and 84.6% males are reported yes ( blue) which means they are strictly following the lockdown and 4.1% females are reported no ( red) which means they are not following the lockdown and 6.9% females and 15.4% males are reported maybe (green ) which means they are sometimes following the lockdown .**

## CONCLUSION :

Based on the findings of the present cross sectional study, It can be concluded that most of the general public have sufficient knowledge of social distancing and lock down for covid 19 pandemic and they are aware about the importance of lockdown and social distancing . General public have gained knowledge and are aware of the importance of lockdown and social distancing for covid 19 pandemic. Following social distancing and lockdown is the best way to prevent and slow down transmission of the COVID-19 virus.

## REFERENCE :

1. Alvarez, F., Argente, D. and Lippi, F. (2020) ‘A Simple Planning Problem for COVID-19 Lockdown’. doi: 10.3386/w26981.
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. Ashwin, K. S. and Muralidharan, N. P. (2015) ‘Vancomycin-resistant enterococcus (VRE) vs Methicillin-resistant Staphylococcus Aureus (MRSA)’, *Indian Journal of Medical Microbiology*, p. 166. doi: 10.4103/0255-0857.150976.
4. Aslam, F. (no date) ‘COVID-19 and Importance of Social Distancing’. doi: 10.20944/preprints202004.0078.v1.
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. Baum, N. M., Jacobson, P. D. and Goold, S. D. (2009) “‘Listen to the People”: Public Deliberation About Social Distancing Measures in a Pandemic’, *The American Journal of Bioethics*, pp. 4–14. doi: 10.1080/15265160903197531.
7. 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.
8. Chatterjee, P., Dey, S. and Jain, S. (no date) ‘Lives and Livelihood: An Exit Strategy from Lockdown for India’, *SSRN Electronic Journal*. doi: 10.2139/ssrn.3582497.
9. Cornwell, E. Y. and Waite, L. J. (2009) ‘Social disconnectedness, perceived isolation, and health among older adults’, *Journal of health and social behavior*, 50(1), pp. 31–48.
10. 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.

11. Ezhilarasan, D., Apoorva, V. S. and Ashok Vardhan, N. (2019) 'Syzygium cumini 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.
12. 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.
13. Girija, A. S. S. *et al.* (2019) 'Plasmid-encoded resistance to trimethoprim/sulfamethoxazole mediated by dfrA1, dfrA5, sul1 and sul2 among *Acinetobacter baumannii* isolated from urine samples of patients with severe urinary tract infection', *Journal of Global Antimicrobial Resistance*, pp. 145–146. doi: 10.1016/j.jgar.2019.04.001.
14. Girija As, S. and Priyadharsini J, V. (2019) 'CLSI based antibiogram profile and the detection of MDR and XDR strains of isolated from urine samples', *Medical journal of the Islamic Republic of Iran*, 33, p. 3.
15. Girija, S. A. S., Jayaseelan, V. P. and Arumugam, P. (2018) 'Prevalence of VIM- and GIM-producing *Acinetobacter baumannii* from patients with severe urinary tract infection', *Acta Microbiologica et Immunologica Hungarica*, pp. 539–550. doi: 10.1556/030.65.2018.038.
16. Glass, R. *et al.* (2006) 'Targeted Social Distancing Designs for Pandemic Influenza', *Emerging Infectious Diseases*, pp. 1671–1681. doi: 10.3201/eid1211.060255.
17. 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.
18. 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.
19. 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.
20. 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.

21. Jayadev, C. and Shetty, R. (2020) 'Commentary: What happens after the lockdown?', *Indian Journal of Ophthalmology*, p. 730. doi: 10.4103/ijo.ijo\_856\_20.
22. 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.
23. 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.
24. 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.
25. 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.
26. Kumar, D. and Antony, S. D. P. (2018) 'Calcified canal and negotiation-A review', *Journal of advanced pharmaceutical technology & research*, 11(8), p. 3727.
27. Lee, K. *et al.* (no date) 'Job Loss and Behavioral Change: The Unprecedented Effects of the India Lockdown in Delhi', *SSRN Electronic Journal*. doi: 10.2139/ssrn.3601979.
28. 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.
29. Marickar, R. F., Geetha, R. V. and Neelakantan, P. (2014) 'Efficacy of contemporary and novel Intracanal medicaments against enterococcus faecalis', *The Journal of clinical pediatric dentistry*, 39(1), pp. 47–50.
30. 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.
31. 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.
32. M, M. A., Geetha, R. V. and Thangavelu, L. (2019) 'Evaluation of anti-inflammatory action of Laurus nobilis-an in vitro study', *International Journal of Research in Pharmaceutical Sciences*, pp. 1209–1213. doi: 10.26452/ijrps.v10i2.408.

33. Nair, A. G., Gandhi, R. A. and Natarajan, S. (2020) 'Effect of COVID-19 related lockdown on ophthalmic practice and patient care in India: Results of a survey', *Indian journal of ophthalmology*, 68(5), pp. 725–730.
34. 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.
35. 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.
36. Omary, A. (no date) 'The COVID-19 Pandemic Mental Health Crisis Ahead'. doi: 10.31234/osf.io/xju6y.
37. Oosterhoff, B. *et al.* (2020) 'Adolescents' Motivations to Engage in Social Distancing During the COVID-19 Pandemic: Associations With Mental and Social Health', *Journal of Adolescent Health*. doi: 10.1016/j.jadohealth.2020.05.004.
38. Paramasivam, A., Vijayashree Priyadharsini, J. and Raghunandhakumar, S. (2020) 'N6-adenosine methylation (m6A): a promising new molecular target in hypertension and cardiovascular diseases', *Hypertension research: official journal of the Japanese Society of Hypertension*, 43(2), pp. 153–154.
39. 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>.
40. Pike, W. T. and Saini, V. (no date) 'An international comparison of the second derivative of COVID-19 deaths after implementation of social distancing measures'. doi: 10.1101/2020.03.25.20041475.
41. 'Post Covid'19 impact on Indian Market' (2020) *Journal of Xidian University*. doi: 10.37896/jxu14.5/034.
42. Pratha, A. A., Ashwatha Pratha, A. and Geetha, R. V. (2017) 'Awareness on Hepatitis-B vaccination among dental students-A Questionnaire Survey', *Research Journal of Pharmacy and Technology*, p. 1360. doi: 10.5958/0974-360x.2017.00240.2.
43. Priyadharsini, J. V. *et al.* (2018a) 'An insight into the emergence of *Acinetobacter baumannii* as an oro-dental pathogen and its drug resistance gene profile – An in silico approach', *Heliyon*, p. e01051. doi: 10.1016/j.heliyon.2018.e01051.
44. Priyadharsini, J. V. *et al.* (2018b) 'In silico analysis of virulence genes in an emerging dental pathogen *A. baumannii* and related species', *Archives of Oral Biology*, pp. 93–98. doi: 10.1016/j.archoralbio.2018.07.001.

45. 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.
46. 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', *Pesquisa brasileira em odontopediatria e clinica integrada*, 19(1), pp. 1–10.
47. Raj, U. (no date) 'Indian Education System in Fight against COVID-19 Pandemic', *SSRN Electronic Journal*. doi: 10.2139/ssrn.3597340.
48. 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.
49. 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.
50. Ranjan, R. (no date) 'Predictions for COVID-19 outbreak in India using Epidemiological models'. doi: 10.1101/2020.04.02.20051466.
51. Ravinthar, K. and Jayalakshmi (2018) 'Recent advancements in laminates and veneers in dentistry', *Journal of advanced pharmaceutical technology & research*, 11(2), p. 785.
52. 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.
53. 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.
54. 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.
55. Selvakumar, R. and Np, M. (2017) 'COMPARISON IN BENEFITS OF HERBAL MOUTHWASHES WITH CHLORHEXIDINE MOUTHWASH: A REVIEW', *Asian Journal of Pharmaceutical and Clinical Research*, p. 3. doi: 10.22159/ajpcr.2017.v10i2.13304.
56. 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.

57. Shahana, R. Y. and Muralidharan, N. P. (2016) 'Efficacy of mouth rinse in maintaining oral health of patients attending orthodontic clinics', *Research Journal of Pharmacy and Technology*, p. 1991. doi: 10.5958/0974-360x.2016.00406.6.
58. Shahzan, M. S. *et al.* (2019) 'A computational study targeting the mutated L321F of ERG11 gene in *C. albicans*, associated with fluconazole resistance with bioactive compounds from *Acacia nilotica*', *Journal de Mycologie Médicale*, pp. 303–309. doi: 10.1016/j.mycmed.2019.100899.
59. 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.
60. 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.
61. Sigdel, A. *et al.* (no date) 'Depression, Anxiety and Depression-anxiety comorbidity amid COVID-19 Pandemic: An online survey conducted during lockdown in Nepal'. doi: 10.1101/2020.04.30.20086926.
62. Smiline, A., Vijayashree, J. P. and Paramasivam, A. (2018) 'Molecular characterization of plasmid-encoded blaTEM, blaSHV and blaCTX-M among extended spectrum  $\beta$ -lactamases [ESBLs] producing *Acinetobacter baumannii*', *British journal of biomedical science*, 75(4), pp. 200–202.
63. Someshwar, H. *et al.* (2020) 'Does Social Distancing During The Lock Down Due To Covid-19 Outbreak In Mumbai Affect Quality Of Life?', *International Journal of Clinical and Biomedical Research*, pp. 1–4. doi: 10.31878/ijcbr.2020.62.01.
64. Spinelli, A. and Pellino, G. (2020) 'COVID-19 pandemic: perspectives on an unfolding crisis', *British Journal of Surgery*, pp. 785–787. doi: 10.1002/bjs.11627.
65. 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.
66. 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.
67. Vaishali, M. and Geetha, R. V. (2018) 'Antibacterial activity of Orange peel oil on *Streptococcus mutans* and *Enterococcus*-An In-vitro study', *Research Journal of Pharmacy and Technology*, p. 513. doi: 10.5958/0974-360x.2018.00094.x.
68. Vasavada, B. (no date) 'Effect of temperature and lockdown on daily growth of active cases of COVID-19 in gujarat, western India.- statistical analysis'. doi: 10.20944/preprints202005.0240.v1.

69. Vijayaraghavan, P. and Singhal, D. (no date) 'A Descriptive Study of Indian General Public's Psychological responses during COVID-19 Pandemic Lockdown Period in India'. doi: 10.31234/osf.io/jeksn.
70. Vijayashree Priyadharsini, 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.
71. Vijayashree Priyadharsini, J., Smiline Girija, 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.