INTRODUCTION

COVID-19 is rapidly spread from Wuhan to other areas. It is soon discovered that a novel coronavirus is responsible. The novel coronavirus was named as the severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2, 2019-nCoV) due to its high homology (~80%) to SARS-CoV, which caused acute respiratory distress syndrome (ARDS) and high mortality during 2002-2003 (Ksiazek et al., 2003). The outbreak of SARS-CoV-2 is considered to have originated via a zoonotic transmission associated with the seafood market in Wuhan, China. Later it is recognized that human to human transmission played a major role in the subsequent outbreak (Li et al., 2020). The disease caused by this virus is called Coronavirus disease 19 (COVID-19) and a pandemic was declared by the World Health Organization (WHO). COVID-19 has been impacting a large number of people worldwide, being reported in approximately 200 countries and territories (Zhang et al., 2020; Zheng et al., 2020). As of April 7th, 2020, around 1,400,000 cases worldwide have been reported according to the Center for Systems Science and Engineering (CSSE) at John Hopkins University (Ma et al., 2020).

The SARS-CoV-2 virus primarily affects the respiratory system, although other organ systems were also involved. Lower respiratory tract infection-related symptoms including fever, dry cough, and dyspnea were reported in the initial case series from Wuhan, China (Li and Maruyama, 2019). Besides, headache, dizziness, generalized weakness, vomiting, and diarrhea were observed (Shi et al., 2020). It is now widely recognized that respiratory symptoms of COVID-19 are extremely heterogeneous, ranging from minimal symptoms to significant hypoxia with ARDS. In the report from Wuhan mentioned above, the time between the onset of symptoms and the development of ARDS was as short as 9 days, suggesting that the respiratory symptoms could progress rapidly (Li and Maruyama, 2019). This disease could be also fatal. A growing number of patients with severe diseases have continued to succumb worldwide. Epidemiological studies have shown that...
mortalities are high in the elderly population (Zhou et al., 2020) and the incidence is much lower in children (Qiu et al., 2020; Sun et al., 2020). Current medical management is largely supportive with no targeted therapy available. Several drugs including lopinavir-ritonavir, Remdesivir, hydroxychloroquine, and azithromycin have been tested in clinical trials (Cao et al., 2020; Gautret et al., 2020), but none of them have proven to be a definite therapy yet. More therapies are being tested in clinical trials. A large number of countries have implemented social distancing and lockdown to mitigate the further spread of the virus. Here we will review our current knowledge of COVID-19 and consider the underlying mechanism to explain the heterogeneous symptomatology, particularly focusing on the difference between children and adult patients.

Considering the vital role of the body’s immune system, elderly patients with chronic debilitating diseases have a higher risk of getting infected compared to young, healthy individuals with a strong immune system (Ather et al., 2020). To date, three-quarters of a million cases have been reported, and more than thirty-three thousand patients have died around the world (Source WHO situation report-70). Although the mortality associated with COVID-19 is low, it has a high spreading potential (Meng, Hua and Bian, 2020). Since the COVID-19 outbreak is so fast and devastating, many countries have shut down teaching institutions, social gatherings, sports activities, events, airports, and even banks in an attempt to control the spread of the infection. Besides this, several individuals went into self-quarantine to play their part in society by limiting the spread of disease.

On the other hand, healthcare facilities are necessarily required for any society and are rarely closed under such pandemic conditions. Healthcare professionals are exposed to a higher risk of getting infected due to their close contact with infected patients (Fazel et al., 2014). In particular, dentists perform their duties not only in close contact with patients but also while exposed to aerosol and droplets splashing out of patients’ oral cavity (Lydeard, 1991; Ng et al., 2020). Therefore, dentists have a high risk of getting infected from patients and potentially spreading it to their peers, families, and other patients. Under these circumstances, it may be natural for dentists to develop a fear of being infected by their patients.

Fear and anxiety are powerful emotions that may be associated with the overwhelming reports on the COVID-19 pandemic by social, electronic, and print media. Mild anxiety is natural and fosters preventive and safeguarding behavior (Tam et al., 2004). At the current juncture, people with persistent anxiety may panic and are more likely to make mistakes leading to irrational decisions and behavior. Being on the list of high-risk professions, dentists are very much expected to develop severe anxiety about the current pandemic situation (McAlonan et al., 2007; Moorby et al., 2020; Wilder-Smith and Freedman, 2020). Considering the current rapid spread of infection, the American Dental Association (ADA) highlighted key steps to be taken by dentists in addition to the standard universal precautions such as taking patients’ recent travel history; assessing signs and symptoms of RTI; recording patients’ body temperature; mouth rinsing with 1% hydrogen peroxide before and after the appointment; dentist should perform their duties not only in close contact with patients but also while exposed to aerosol and droplets splashing out of patients’ oral cavity.

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Although the ADA has published preventive guidelines, the majority of dentists are still in such a situation (Source ADA-COVID-19 Reso3uorfce1s1 for Dentists). Most dentists may not be aware of the recent guidelines. Therefore, we have conducted a questionnaire-based study to evaluate medical professionals’ responses globally. The present study aimed to assess anxiety and fear of getting infected among dentists working during the current viral outbreak. Besides, the med practitioner’s knowledge about various practice modifications to combat the novel coronavirus disease (COVID-19) outbreak. (Kalaiselvi and Brundha, 2016; Shreya and Brundha, 2017; Brundha, Pathmashri and Sundari, 2019; Sowbaraniya, Preejitha and Brundha, 2020)

Social distancing is designed to reduce interactions between people in a broader community, in which individuals may be infectious but have not yet been identified hence not isolated. As diseases transmitted by respiratory droplets require certain proximity of individuals, the social distancing of persons will reduce transmission. (Brundha and Nallaswamy, 2019; Timothy, Samyuktha and Brundha, 2019; Ananya, Rani and Brundha, 2020) Social distancing is particularly useful in settings where community transmission is believed to have occurred, but where the linkages between cases are unclear, and where restrictions placed only on persons known to have been exposed is considered insufficient to prevent further transmission. Examples for social distancing include the closure of schools or office buildings and suspension of public markets and cancellation of gatherings. (Kumar, Ashok Kumar and Brundha, 2016; Prashaanthi and Brundha, 2018)

If these measures are deemed to be insufficient, community-wide containment may need to be implemented. (Preethika and Brundha, 2018; Akshaya, Preejitha and Brundha, 2020; Varshini, Rani and Brundha, 2020) Community-wide containment is an intervention applied to an entire community, city, or region, designed to reduce personal interactions, except for minimal interaction to ensure vital supplies. (Amrithaa, Rani and Brundha, 2020; Dhivyadharshini and Brundha, 2020) It is a continuum to expand from social distancing to community-wide quarantine with major movement restrictions of everyone. Enforcement of community-wide containment measures is far more complex given the larger number of persons involved. Such measures are also ethically more challenging with individual human rights weighing against the public health imperative. (Balaji,
The advent of social media is an additional challenge to ensure compliance. During such community-wide quarantine it is particularly important to wisely use social media as social media provides an opportunity for communicating the reasons for quarantine, reassurance, and practical advice and to pre-empt false rumors and panic. Implementation requires close partnerships and cooperation with law enforcement at the local and state level, and often involves checkpoints, and may need legal penalties if quarantine violations occur. A community-wide quarantine is currently happening in China on an order of magnitude that mankind has never witnessed before. (Brundha, no date; Ferdiao and Brundha, 2016; Ravichandran and Brundha, 2016)

The lacunae of this survey are to describe the social distancing and its uses and the role of medical practitioners during this pandemic COVID-19 and certain recommended guidelines from WHO can be given, as considerations. There are no special guidelines given for medical professionals regarding social distancing and the pandemic COVID-19 outbreak.

This survey type of study aims to create awareness of ironic social distancing/physical distancing and the role of medical practitioners during pandemic COVID-19.

**MATERIALS AND METHODS**

This is a survey type study setting. This survey is taken among three different groups of the population, students, medical professionals, and the random public. The sample size of this study is 100 participants and 25 each group. Medical professionals are mainly included in this study. Search engines used in this study are PubMed and Elsevier accordingly. The self-structured questionnaire (mentioned below) of 100 questions has been prepared and circulated through an online survey portal link among the participants. The results were collected and then analysed through SPSS software. Descriptive statistical analysis was carried out and chi square test was used and p value was calculated.

**Questionnaire**

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
<td>1. Gender</td>
<td>Male, Female</td>
<td></td>
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<tr>
<td>2. Occupation</td>
<td></td>
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<td>3. Did you change any of your routine works due to pandemic COVID-19?</td>
<td>Yes, No</td>
<td></td>
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<td>4. What kind of routine works did you change?</td>
<td></td>
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<tr>
<td>5. Does these changes help full to your health?</td>
<td>Yes, No</td>
<td></td>
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<tr>
<td>6. Are you aware of social distancing?</td>
<td>Yes, No</td>
<td></td>
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<td>7. Are you currently practicing social distancing?</td>
<td>Yes, No</td>
<td></td>
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<tr>
<td>8. Approximately how many times did you wash your hands in the past 24 hours?</td>
<td>None, Once in an hour, Twice in an hour</td>
<td></td>
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<tr>
<td>9. Are you aware of right sequence for the application of a Mask/respirator?</td>
<td>Yes, No</td>
<td></td>
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<tr>
<td>10. Are medical practitioners aware of the various infection control measures like rapid triage, respiration hygiene, and cough etiquette and having a separate, well-ventilated waiting area for suspected COVID-19?</td>
<td>Yes, No</td>
<td></td>
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<tr>
<td>11. Are the medical practitioners aware of the severity of the disease during this pandemic COVID-19?</td>
<td>Yes, No</td>
<td></td>
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<tr>
<td>12. How are the medical practitioners protecting themselves during this pandemic COVID-19 condition?</td>
<td>Using PPE,</td>
<td></td>
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<tr>
<td>13. Do you agree, Incidences took place in India say that Medical practitioners are not treated properly by people?</td>
<td>Agree, Disagree</td>
<td></td>
</tr>
<tr>
<td>14. Do you agree, Medical practitioners don’t take their life into consideration and are working hard for us?</td>
<td>Agree, Disagree</td>
<td></td>
</tr>
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</table>
RESULTS AND DISCUSSION

The results of this survey, as per responses for the questionnaire collected from the participants. From this survey which was conducted on the three groups of the population, it is seen that majority of them are aware of social distancing and most of them have had knowledge about the role of medical professionals during this pandemic COVID-19 outbreak. Figure 1 shows that 72% are females and 28% are males. Figure 2 shows that 72% of the participants are students, 17.33% are medical professionals and 10.67% are random public. Figure 3 shows that 96% answered that they are changing their routine works during this lockdown period and 4% of them responded that they are not changing their daily routine works. Figure 4 shows that 56% of participants are following all the three measures, the rest of them are practicing one or two measures to their healthy life like 21.3% of them responded washing hands regularly, 20% of the participants answered maintaining social distance, and 2% of them responded that staying at home. Figure 5 shows that 81.3% of the participants responded that these changes help them to maintain their healthy life and 18.7% of them responded that these changes are not helpful to them. Figure 6 depicts that 100% of the participants are aware of social distancing/physical distancing. Figure 7 shows that 44% of the participants are practicing social distancing in their daily routine and 56% of the people are not practicing social distancing in their daily routine. Figure 8 depicts that 97% of the people wash their hands once in an hour and 3% of participants responded that they wash their hands twice an hour. Figure 9 shows that 93.3% of participants responded that Medical practitioners use Personal protective equipment for protecting themselves from the suspects of COVID-19 and 6.7% of participants are unaware. Figure 10 shows that 94.67% of them answered that Medical professionals are creating awareness about the severity of pandemic COVID-19 and 5.3% of participants answered that they are not creating awareness among public. Figure 11 shows that 98.67% of them are aware of the right sequence of wearing Masks/respirators and 1.3% of them answered that there are not aware of right sequence of wearing Masks. Figure 12 depicts that 90.67% of Medical practitioners are aware of various infection control measures like rapid triage, respiratory hygiene, and cough etiquette, and having a separate, well-ventilated waiting area for suspected COVID-19 and 9.3% of them answered that they are unaware. Figure 13 depicts that 76% of participants answered that Medical professionals are not treated properly by the people and 24% responded that they were treated properly by public. Figure 14 depicts that 94.67% of Medical practitioners are not considering their life and working hard for the patients and 5.3% responded that Medical practitioners are considering their lives and not working hard for the patients’ health safety. The results were analysed using Chi-square test and correlation graphs were added accordingly. Figure 15 Bar graph represents correlation between the gender and healthy life of the public by making changes with Chi square test showing p=1.885.(>0.05) indicating that data is statistically insignificant. Figure 16 Bar graph represents correlation between the gender and practicing social distancing with Chi square test showing p=0.015 (<0.05) indicating that data is statistically significant. Figure 17 Bar graph represents the correlation between the gender and the public awareness by medical practitioners with Chi square test showing p=0.019 (<0.05) indicating that data is statistically significant. Figure 18 Bar graph represents the correlation between the gender and the awareness of medical practitioners with Chi square test showing p=0.001(<0.05) indicating that data is statistically significant. Figure 19 Bar graph representing the correlation between gender and treating of medical practitioners by the public with Chi square test showing p=3.177 (>0.05) indicating that data is statistically insignificant.

Fig.1: Pie chart represents that 72% are females (red) and 28% are males (blue) participated in the survey.
Fig. 2: Pie chart represents that 72% of the participants are students (blue), 17.33% are medical professionals (red) and 10.67% are random public (green).

Fig. 3: Pie chart represents that 96% (blue) of participants answered that they are changing their routine works during this lockdown period and 4% (red) of them answered that they are not changing any of their routine works.

Fig. 4: Pie chart represents that 56% (orange) of participants are following all the three measures, the rest of them are practicing one or two measures to their healthy life like 21.3% (blue) of them washing hands regularly, 20% (red) of the participants Maintaining social distance, and 2.67% (green) of them staying at home.
Fig. 5: Pie chart represents that 81.3% (blue) of the participants responded that these changes help them to maintain their healthy life and 18.67% (red) of them responded that these changes are not helpful to their healthy life.

Fig. 6: Pie chart represents that 100% (blue) of the participants are aware of social distancing/physical distancing.

Fig. 7: Pie chart represents that 44% (blue) of the participants are practicing social distancing in their daily routine and 56% (red) of them are not practicing social distancing.
Fig. 8: Pie chart represents that 97% (blue) of the participants wash their hands once in an hour and 3% (red) of them wash their hands twice an hour.

Fig. 9: Pie charts represent that 93.3%(blue) of participants responded that Medical practitioners use Personal protective equipment for protecting themselves from the suspects of COVID-19 and 6.67%(red) of them responded that they are unaware.

Fig. 10: Pie chart represents that 94.67%(blue) of them answered that Medical professionals are creating awareness about the severity of pandemic COVID-19 and 5.33%(red) of them responded that they are not aware of the severity and Medical practitioners are not creating awareness.
Fig. 11: Pie charts represent that 98.67% (blue) of them are aware of the right sequence of wearing Masks/respirators and 1.3% (red) of them are unaware.

Fig. 12: Pie chart represents that 90.67% (blue) of Medical practitioners are aware of various infection control measures like rapid triage, respiratory hygiene, and cough etiquette, and having a separate, well-ventilated waiting area for suspected COVID-19 and 9.33% (red) of them answered that they are unaware.

Fig. 13: Pie chart represents that 76% (blue) that Medical professionals are not treated properly by the people and 24% (red) of them answered that Medical professionals are treated properly by the people.
Fig. 14: Pie chart represents that 94.67%(blue) of these Medical professionals are not considering their life and working hard for the patients and 5.33%(red) of them responded that they are not working hard for us.

Fig. 15: Bar graph represents the association between gender and healthy life of the public by making changes. X axis represents genders and Y axis represents the number of participants who responded changes and unchanges helpful in healthy life. Chi-square test was done and association found to be statistically insignificant. Pearson's chi square test showing p=1.885.(>0.05) hence statistically insignificant, proving males have better healthy lifestyles than females. Blue represents yes, red represents no.

Fig. 16: Bar graph represents the association between the gender and practicing social distancing. X axis represents the various genders of participants and Y axis represents the count of participants who responded practicing social distancing or not. Chi-square test was done and association found to be statistically significant. Pearson’s Chi square test showing p=0.015 (<0.05) hence statistically significant, proving males practicing social distancing more than females. Blue represents yes, red represents no.
Fig. 17: Bar graph represents the association between the gender and the public awareness by medical practitioners. X axis represents the various genders of the participants and Y axis represents the count of participants who responded aware and unaware about severity of pandemic COVID-19. Chi square test was done and association found to be statistically significant. Pearson’s Chi square test showing p=0.019 (<0.05) hence statistically significant, proving males have better awareness than females. Blue represents yes, red represents no.

Fig. 18: Bar graph represents the association between the gender and the awareness of medical practitioners. X axis represents the various genders of participants and Y axis represents the count of participants who responded that medical professionals were aware and unaware. Chi square test was done and association found to be statistically significant. Pearson’s Chi square test showing p=0.001 (<0.05) hence statistically significant, proving males have better awareness than females. Blue represents yes, red represents no.
In response to the question, Countings of washing hands(Figure 8), hand tidiness is seen as the most critical and convincing defilement control measure to prevent transmission of nosocomial pathogens in social protection settings. The eventual outcomes of crisis center based examinations, circulated some place in the scope of 1977 and 1995, on the impact of hand tidiness on the threat of nosocomial sickness have been checked by (Larson and Killien, 1982). Regardless, consistency with handwashing techniques by social protection workers has been and continues being, unacceptably low. Considering the centrality of hand neatness, a couple of examinations have watched out for the issue of defiance with hand tidiness rules. The usage of waterless Alcohol-based hand sanitizers and rubs, as opposed to cleanser and water hand washing, have been appeared to beat these obstacles to consistency to provoke basically higher hand tidiness rates among social protection workers and to decrease truancy as a result of illness among elementary school understudies. (Patnayak et al., 2008).

The protection of Medical practitioners have been said to follow the guidelines given by CDC (Figure 9), the key recommendations are as follows: 1) Apply the guidance found in the Framework for Healthcare Systems Providing Non-COVID-19 Clinical Care during the COVID-19 pandemic to determine how and when to resume non-emergency dental care, 2) Stay informed and regularly consult with state or local health departments for region-specific information and recommendations, 3) Compulsory screening for fever and symptoms of COVID-19 for all people patients, visitors, and staff who enter the dental facility and 4) Ensure that DHCP has the appropriate type of personal protective equipment (PPE) and supplies to support the patient volume.(Centers for Disease Control and Prevention (CDC), 2019).

Awareness should be created among the public through strict rules and regulations for which there have been certain prescribed guidelines(Figure 10), a strict adherence to hand hygiene procedures, including:1) Before and after all patient contact, contact with potentially infectious material, and before putting on and after removing PPE, including gloves, 2) Use alcohol-based hand rub (ABHR) with 60-95% alcohol or wash hands with soap and water for at least 20 seconds. If hands are visibly soiled, use soap and water before returning to ABHR and 3) Ensure that hand hygiene supplies are readily available(Prevention and Chinese Center for Disease Control and Prevention, 2020).

Various protective measures have marked its way through this pandemic in which facemask plays an important role(Figure 11), although N95 respirators are a protecting advantage over surgical masks within the laboratory, there was meager information to verify whether or not N95 respirators are a unit superior to surgical masks in protecting health care employees against transmissible infections.(Smith et al., 2016)

In response to the question on awareness among medical practitioners regarding the ongoing pandemic, COVID-19(Figure 12), dental specialists continue to be in the front line of contact with the patient's oral cavity for a more drawn out period and their instruments will scatter the oral fluids. Specialists for all intents and purposes and the clinical specialties have given in to forestall COVID-19.(Tanne, 2020)Experts like dentists, otolaryngologists and anesthesiologists are at high risk. 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;
CONCLUSION
From this survey analysis, it has been concluded that most of the medical professionals are aware of social distancing and infectious control measures. But, due to the nature of their profession health care workers are unable to practice social distancing in an absolute manner. However, they are securing themselves with the utilization of PPE units, masks, hand sanitizers etc. Medical professionals likewise assume a significant role in making the public aware of the necessary conventions to be taken while at home, while visiting the dental facilities, or while venturing out of the house. Medical professionals act as a first line of defense during this pandemic period, and thus, the protection of the workforce should be of utmost importance.

REFERENCES
Allour Vaishnavi et al / Awareness on The Role of Medical Professionals Practicing Social Distancing During Covid-19


