



Psychosocial Implications of Lockdown on Dental Professionals

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ABSTRACT

COVID-19 infection as described by Merriam Webster 2 as a mild to severe respiratory disease caused by a coronavirus that is mainly transmitted through interaction or contact with transmittable material such as respiratory droplets or with matter or surfaces contaminated with the virus causing it. The main aim of this article was to review Psychosocial Implications of Lockdown on Dental Professionals. Due to the lockdown situation attributed to COVID-19 infection around the world, a large number of dentists are affected in every aspect of life mentally, physically and economically. The self employed dentists were also concerned about their financial consequences personally. In a country like India, where a large number of cases are asymptomatic or with no or very little symptoms of infection have increased problems for dentists. On research front, very few studies are conducted till now to determine Psychological wellbeing of dental professionals and factors associated with it during COVID-19 health emergency.



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INTRODUCTION

“Sometimes Doing Nothing Is Doing Everything”

A title of a blog by Bedard (2020) is most suitable for Dental professionals in the period of COVID-19 Health emergencies around the globe. COVID-19 infection can be described as a mild to severe respiratory disease caused by a coronavirus that is mainly transmitted through interaction or contact with transmittable material such as respiratory droplets or with matter or surfaces contaminated with the virus causing it. It is particularly characterized by cough, fever, and shortness of breath,

which can lead to pneumonia and respiratory failure. The cause of this particular health hazard is a novel coronavirus, SARS-CoV2, proposed to be the cause of coronavirus disease 2019 (COVID-19) which began in the province of Wuhan in China and later stretched to the whole world (Tesini, 2020).

As described by Chen *et al.* (2020) SARS-CoV2 virus is a so-RNA enveloped virus with a size of ~350-kilo base-pair (kip). As coated by a couple of studies, infected humans suffer from severe acute respiratory tract infection this virus commonly transmitted from person to person through various medium such as saliva, hands, nasal droplets, and surface contacts (Khurshid *et al.*, 2020; Peng *et al.*, 2020). Four to fourteen days is the average incubation period range of COVID-19 virus (Backer *et al.*, 2020). The person infected with Novel Coronavirus displays the symptoms of high-grade fever, dry cough, upper respiratory tract infection (RTI) and dyspnea (Fu *et al.*, 2020). Respiratory samples of suspected person were sent to a laboratory to perform real-time polymerase chain reaction (RT-PCR) and are the assenting assessment for COVID-19 and patient was kept in isolation until further investigation can take place (Corman *et al.*, 2020).

It should be noted that infection cannot be excluded with just one negative RT-PCR test result from alleged patients. When the patients are examined clinically also, health professionals are cautious enough of patients with symptoms of COVID-19, epidemiological based history or any positive CT imaging results (Wax and Christian, 2020). As for now, managing COVID-19 has been quite supportive, as none of the randomized controlled trials have evidence to suggest any specific anti-no treatment (World Health Organization, 2020).

Presently, the strategy to control and to reduce the possibility of spread and transmission of COVID-19 infection is; early diagnosis, proper precautions, isolation, and the utmost special care for patients suffered (Wang *et al.*, 2020).

Around 80 percent of these patients have mild symptoms that mimic flu and cyclic or regular allergies based on the basis of seasons, which can add to the figure to the total undiagnosed cases. Such asymptomatic patients usually act as "carriers" and can result in recurrence of infection. Although symptomatic COVID-19 patients have been the key source of transmission, current findings recommend that both asymptomatic and symptomatic patients can act as carriers for the duration when the virus is in its incubation phase (Yuen *et al.*, 2020).

The body's immune system plays a vital role, and so, healthy individuals with a strong immune system

have a lower risk of getting infected compared to elderly patients with chronic debilitating diseases. This statement is supported by the data, which shows that most of the deaths due to Coronavirus pandemic occur above 60 years of age and person suffering from chronic debilitating diseases (Kolifarhood *et al.*, 2020).

The principle aim of this article was to review the Psychosocial Implications of Lockdown on Dental Professionals.

COVID-19 and Health care workers

While a large population all around the world is living at home, health workers are the frontline workers who are working at hospitals, putting them at high risk. Despite being the personnel for the calamity management, Health Care Workers are vulnerable to certain psychological implications owing to COVID-19. Amongst all healthcare workers, at greater risk than others, are the forefront workers those who are concerned unswervingly in the management of these patients. The reasons for such unpleasant psychological outcomes could be working for long hours, over-enthusiastic news on media, inadequate personal protective devices, feeling of being supported inadequately. Another important factor for such psychological effect among medical staff is the high infection rate among them (Cai *et al.*, 2020).

Previous studies have reported that the psychological repercussions amid health care workers to the 2003 SARS outbreak were adverse (Maunder *et al.*, 2003). Studies showed that those health care workers were in a state of panic of infection and contagion among their friends, family and relatives and contemporaries. They were reluctant to work or were considering resignation. High levels of anxiety, stress and depression symptoms as reported among health professionals (Bai *et al.*, 2004).

In rejoinder to COVID-19 outbreak, there are many psychosomatic support services, like internet-, telephone and application-based counseling, which have been extensively established by mental health institutions locally and nationally. The State Council of China, on February 2, 2020, announced that during the epidemic situation, they were setting up psychological assistance hotlines throughout the nation. However, evidence-based evaluations and mental health interventions targeting front-line health care workers are relatively scarce.

In a cross-sectional study by Kang *et al.* (2020) among the medical and nursing staff of 994, in Wuhan in 2020, the findings in this study were that the 36.9% had associated threshold regard-

ing mental health instability, 34.4% had mild turbulence, a moderate mental disturbance was seen in 22.4%, and there were 6.2% with severe disturbances. In another, by [Liang et al. \(2020\)](#) anxiety and depression were measured among 59 doctors and nurses from COVID-19 associated departments and others in Guangdong Province. The results of this study were that a huge number of staff was experiencing depressive symptoms which were clinically significant. A cross-sectional study by [Xiao et al. \(2020\)](#) among 180 medical staff including doctors and nurses in Wuhan, China, it was reported by this study that lots of social support were highly linked with sleep quality, self-efficacy and harmfully related with the level of anxiety and stress.

COVID-19 and Dental practice

Given the reports of the spread of SARS-CoV-2 to the health care workers and its widespread transmission, dentists are at high risk for nosocomial infection. They can also become probable carriers of the infection and in turn, disease. All these risks occur due to special feature of dental procedures, including, handling of sharps, and generation of aerosol and proximity of the dentist to the patients or pharyngeal region ([Ather et al., 2020](#)). Along with this, if sufficient precautions are not taken in the dental office, there can be a risk of potential exposure of cross-contamination of patients. As the knowledge of this novel disease is expanding, dentists must be prepared in a better way to recognize a possible COVID-19 infection, and refer the patients to appropriate treatment centers with a history of COVID-19 infections, confirmed, or even suspected. Since patients are being treated in close contact with the dentists, they are often the first line of diagnosis. New York Times published an article on 15 March 2020, entitled "The Workers Who Face the Greatest Coronavirus Risk", where massive drafted figures described that the dentists are the workers most exposed to the risk of being affected by COVID-19, much higher than compared to general physicians and nurses ([Gamio, 2020](#)).

Various personal protection measures have been advocated for the dentists. They have also been recommended to minimize or avoid treatments that can produce aerosols or droplets; such as the utilization of low volume or high volume saliva ejectors. In the light of the severity of the COVID-19 pandemic, it is of deemed importance for the prestigious dental journals and various dental associations to give easy and clear guidelines for the working dentists, to keep them safe. A basic conception which everybody knows that the virus gets transmitted essentially during unswerving mucosal contact

with saliva droplets, ingestion or inhalation; it is also essential to know that in the previous nine days if the hands, substance or matter or surfaces are open to the infected saliva, the virus can survive ([Singh et al., 2020](#)).

Psychosocial effect of covid-19 Lockdown among dental professionals and dental practice

Besides not being frontline health professionals against COVID-19, Dental professionals are at maximum risk either doing the only consultation of cases or doing full-fledged clinical work. Due to the lockdown situation due to COVID-19 infection around the world, a large number of dentists are affected in every aspect of life mentally, physically and economically. With the stoppage of dental practice and no clarity in future about the resumption of work, a wave of stress, depression and psychological breakdown is prevalent among dental professionals ([Meng et al., 2020](#)).

Powerful emotions like fear and anxiety could be linked with astounding reports on COVID-19 either by electronic, print or social media. Anxiety which is mild is usual help promotes the behavior, which is preventive and safeguarding ([Fazel et al., 2014](#)). In the present situation, people suffering from persistent anxiety are likely to get panicked and make mistakes resulting in decisions and behavior which are irrational. In the present COVID-19 condition, dentists are expected to develop severe anxiety as they belong to a high-risk profession, as reported in the literature. Although preventive guidelines have been published by ADA, most of the dentists are still in doubt and fear to treat patients in such a tensed situation ([Ng et al., 2020](#)).

The National Health Services (NHS) of UK had a previous view that routine care for asymptomatic patients who did not have any contact history with COVID patients should continue to be provided by dentists and their teams and should be discouraged attending symptomatic patients. Meanwhile, this advice was not taken comfortably by many general dental practitioners (GDPs) and felt a moral duty to stop their consultations to prevent diffusion of COVID-19 amongst their patients. They (Self-employed) were also as expected worried regarding their consequences financially. In-country like India, where a large number of cases are asymptomatic with no or very little Symptoms of infection has increased the problems for dentists ([Coulthard, 2020](#)).

To add to the psychological stress, loads of fake news related to dentistry, on various social media platforms is viral. The Indian government has not provided any specific guidelines for dentists, besides

discontinuing the dental practice. This has left dental professionals with many unanswered questions like when or how to start their practice. There is a scarcity of (PPE) personal protective equipment for the dental professionals and if at all available, the cost of de-sanitization of dental clinics is not affordable by a large number of dentists. This all has led to depression and stress among dental professionals. Additional aspects of precautionary measures when screening the patient, performing various procedures, and disinfecting the surgical area were discussed (Nimbalkar *et al.*, 2020). Myths about quarantine likewise must be taken consideration, and one needs to plan as indicated by the most recent real data accessible from the true sources (Reche *et al.*, 2020; Patel *et al.*, 2020).

On the research front, a large number of studies were conducted recently; measuring psychological stress among Health professionals, but not a single study is conducted till now to determine Psychological wellbeing of dental professionals and factors associated with it during a COVID-19 health emergency, neither on the various steps that must be followed to reduce the stress and anxiety among them.

CONCLUSION

From above, it has been concluded that, along with frontline Health workers, a huge number of dental professionals in India is suffering from psychological breakdown and stress. COVID-19 has a devastating effect on every aspect of dentistry and dental practice, leaving various unanswered questions in front of every dentist. Till now, no study has been conducted to determine the psychological condition of dentists and various associated factors with it during COVID-19. It is important to determine a coping mechanism for psychological breakdown, prevalent among dental professionals due to this COVID-19 health emergency.

Conflict of Interest

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