COVID-19 STRESS AND COPING STRATEGIES FOR HEALTH CARE STUDENTS

Dr. Vandana Gade¹, Dr. Noopur Kokane², Dr. Nancy Yadav³, Dr. Neelam Rahul⁴, Dr. Reema Asani⁵, Dr. Kalyani Umale⁶

¹MDS, Professor, Department of Conservative Dentistry & Endodontics, Swargiya Dadasaheb Kalmegh Smruti Dental College and Hospital, Nagpur, India. Email id: gade.vandana@gmail.com

²Dr. Noopur Kokane, Assistant Professor, Department of Public Health Dentistry, Dr. Rajesh Ramdasji Kambe Dental College and Hospital, Akola, India Email id: nkokanegupta@gmail.com

³Dr. Nancy Yadav, Senior Lecturer, Department of Public Health Dentistry, ITS Dental college and Hospital, Greater Noida. Email id: Nancy.Vikram1@gmail.com

⁴Dr. Neelam Rahul, Assistant professor, Department of Conservative Dentistry, VYWS Dental College and Hospital, Amravati, India. Email Id: dr.neelamrahul@gmail.com

⁵Dr. Reema Asani, Post graduate student, Department of Conservative Dentistry, Swargiya Dadasaheb Kalmegh Smruti Dental College and Hospital, Nagpur, India. Email id: asani.reema@gmail.com

⁶Dr. Kalyani Umale, Post graduate student, Department of Conservative Dentistry, Swargiya Dadasaheb Kalmegh Smruti Dental College and Hospital, Nagpur, India. Email Id: kalyaniumale@gmail.com

Corresponding Address: Dr. Vandana J. Gade, Professor, Department Of Conservative Dentistry, Swargiya Dadasaheb Kalmegh Smruti Dental College & Hospital, Wanadongri Road, Hingna, Nagpur. 441110.

Abstract

Stress and anxiety are one of the main risk factor for mental health problems. It may further lead to physical and psychological illness also. Medical, Dental and other health care students experience more stress and anxiety as compared to other students. These students are the future of our healthcare workforces. Current COVID-19 pandemic situation has further worsened the conditions and increased the stress and anxiety among students.
It is the prime responsibility of Educators to reduce the stressors and help their students to cope with these stresses. This article gives an overview of the stress causing problems students faced during this pandemic and suggest few stress coping strategies. Stress free environment and happy mind capable of coping problems may help in building quality and efficient future healthcare professionals.

**Keywords:** Covid 19, Stress, Health care students, Stress coping strategies

**Introduction:** In December 2019, when COVID-19 was first detected in Wuhan, China it was a mysterious disease with lots of unknown parameters. Because of its unfamiliar nature, it created havoc all around the world. The covid-19 disease has affected all aspects of life, personal, professional, and emotional. Rapid lockdowns were implemented, educational institutes were closed, and work from home was initiated. All these uncertainties, changes, and restrictions lead to major mental health burdens among the public, increased depressive symptoms, decreased sleep quality, and elevated anxiety during the COVID-19 outbreak.

Stress, anxiety, and depression were more prevalent among students and healthcare professionals in comparison with other professions. Medical education is the most demanding of all the other professional programs in terms of academics as well as the emotional components of the students. Prior to the COVID-19 pandemic, up to 54% of health professions students experienced elevated levels of stress and burnout. There are multiple sources of stress for health professions students academics e.g. exams and classroom performance, fear of failure, clinical e.g., productivity demands, complex cases quota fulfillment and personal e.g., work-life balance, family pressure, financial concerns, concern about future. Stress is common among healthcare students because there is tendency of these students toward perfectionism because they usually have history of high achievement and excellence since school times. And the pressure to excel continues in med schools causing constant stress. And the stress, anxiety caused by the recent pandemic has worsened the situation.

Healthcare students are facing challenges such as sudden changes in their training routine, including teaching and assessment through online sessions, decreased patient contact, and interactions with peers. These changes result in increased screen time, possible hindrance to their training, and increased risk of infection mainly among the students in clinical postings. All these
factors could eventually cause Stress and anxiety which negatively impact students’ personal as well as professional lives⁶,⁷.

During the pandemic, the role of health care providers including health care students cannot be ignored. Health care students including medical, dental, and nursing are the first individuals who may have close contact with the infected people during their clinical training or their voluntary clinical roles. In addition to this, they have a role in educating the public and creating awareness of the COVID-19 pandemic⁹. These students are the future health labor force. It is important to understand how the pandemic has affected them. What are the coping strategies that may help in keeping future healthcare professionals happy and stress-free?

**Stress caused by pandemic.**

Pandemic caused many changes in everybody’s live. Few changes that caused stress and anxiety in lives of medical students are discussed below. Initially, all educational institutes were closed and the health care students were forced to stay home. Closing of universities was one major stressor among students when universities closed, so did student societies, removing peer support networks. It also hindered celebrating various milestones of university life like a, graduation ceremony, or white coat ceremony which brings a sense of achievement in students. Sudden lockdown hindered saying goodbye to friends, and dealing with the loss of loved ones without peer support causes loneliness which may cause stress and anxiety. Expecting young people to move on, emotionally and geographically, without closure may lead to mental health crises¹¹.

Another effect of the pandemic is that it increased the use of telecommunication that enables teleconferencing, telecommuting, online learning, and virtual socializing¹². Due to the coronavirus pandemic novel methods of delivering education to healthcare students were introduced. Lectures and webinars were delivered using online platforms such as Zoom, Google meets etc with such technologically enhanced approaches already being proven to have high levels of engagement with medical students¹³. Online education proved to be double edge sword.

Various online courses and webinars increased the students’ knowledge. But not all students are comfortable with online learning; many medical students who find online learning as burden are found to be more under stress than the students who enjoy online learning¹⁴. The intense shift to online based learning system also causes increased levels of prolonged screens time. Excessive
Screen time is proven to cause increases in stress and anxiety. And eventually lead to addiction to internet and mental and social problems.

Another problem caused by pandemic is due to complete shift in education method. Education of a healthcare student’s especially dental mainly composed of three parts: The first is lectures or the theory part. This part can be easily switched to online mode. There are different systems available on the internet like ZOOM meetings, Google Classroom, Google Meet, Skype, and so on for online learning.

The second part is a Simulation laboratory course. In which the teacher demonstrates a procedure that is practice on stimulation models by students. And the procedure is evaluated step by step by the teacher. For this part, it is possible to use modern digital or virtual reality (VR) techniques. However, it will be very difficult to achieve as the current facilities are not good enough. This part is very important as students gain confidence before treating the real live patients. Not being able to practice on a model lowers the confidence in students and causes stress.

The third part is Clinical skill training that is treating patients. There will be close contact between doctor and the patient as well as the teacher. This part is impossible to achieve in a pandemic environment. In most disciplines where patient care is a primary goal, students need to attend clinics and provide patient treatment while acquiring their competencies. No new technologies with simulation and virtual reality techniques can replace the direct in-person experience. This created a feeling of self doubt among the students and causes frustration and stress thinking about the future and their competency to treat patients. Students are stressed because they feel that due to lockdown they have not acquired enough skill to work in the hospital, which makes them feel less confident and less prepared for next year. This may be the reason why more stress was perceived by the students during their 3rd year which is transitional year, from pre-clinical to clinical.

Another reason of stress is inconsistency among the various universities, for example, some but private colleges have suspended clinics and internship but government colleges have not suspended internships. The major concern among students of the colleges who have suspended internship is that with an absence of direct student patient contact, they will not be confident enough to step up on the professional front without experience. Lack of confidence causes stress.
Another major stressor is witnessed in students who had to return to college. Healthcare professionals are more prone to acquire the infection due to close proximity they work with patients. It is impossible to maintain social distancing while treating the patient. Stress due to fear of getting infected was found more among interns and final year students. Dental students were more stressed as they are more prone to get infected because when using dental devices such as high-speed dental handpieces and work with running water, a large amount of aerosol and droplets mixed with the patient’s saliva or even blood get generated. Particles of droplets and aerosols are small enough to stay airborne for an extended period before they settle on environmental surfaces or enter the respiratory tract.

The majority of students were concerned about the as well as health of others: their family, friends, patients, and colleagues. Students were worried about people’s physical health and risk of contracting COVID-19 from them, and even the possibility of being an asymptomatic carrier.

Another major stressor is due to financial worries many students were concerned about the long-term financial implications of the quarantine and how this might affect their future.

**Educators lead coping strategies for students.**

The level of stress, anxiety, depression, suicidal ideation, suicide rates, substance abuse, and mental health disorders were also found to be higher among medical students. Although healthcare students have better access to mental health care, they were less likely to seek mental health help compared to the general population, mainly due to the stigma surrounding mental health disorders. To mitigate the stress caused by pandemic students have started to cope on their own. Some of the most commonly used coping strategies according to students were “regular exercise,” “watching movies & playing games online,” “online fun and virtual celebrations with family and friends,” religious activities, sleeping, eating, and “learning to live with new normal.” However if not monitored some students may use harmful coping methods like unhealthy lifestyle, excessive eating, internet addiction, excess alcohol consumption, and substance abuse. Here the healthcare educators need to aid the transition of emerging adults into full adulthood and support them in areas such as dealing with uncertainty, learning to cope with stress, assessment of risk, self-reflection, and goal setting.
To help students’ educators may use two types of coping strategies; problem-oriented that may include solving the problem and emotion-oriented coping\textsuperscript{10}. Coping strategies are a set of acts or a method of thinking used to cope with a stressful or uncomfortable situation or to change one’s response to such a situation\textsuperscript{22}.

Some stressors were due to problems caused by the closing of universities and isolation effective factors in alleviating stress include resilience training, universities can organize virtual ceremonies, cultural and scientific programs more often. Mentor student group should be arranged with 5-8 students per teacher, this group should meet once a week virtually to celebrate and grief together. One on one interaction of faculty and students should be arranged, where the stress related to the pandemic and other issues can be discussed. This will be a very effective way to create belongingness among students especially among the new batch of students. A friendly educational environment even though virtually may go a long way in creating happier and stress-free students.

Another major stress-causing problem is the shift to virtual education. This issue can be dealt with with various approaches such as (a) creating awareness about the physical and emotional consequences of increased online time. (b). Increase the number of breaks between online lectures to allow participants to release eye strain and regain interest. (c) podcast-based learning can be introduced as a substitute to online visual encounters to decrease eye strain and limit screen exposure. (d) Healthy practices such as breathing exercises, meditation, and yoga can be implemented in between online sessions. (e) Providing online participants with the opportunity to share their feelings and mental struggles so that proper help and support can be administered.

Another stressor is the worry about the future; students are stressed because they feel less confident in treating patients due to limited or no exposure to patients. The only that can help that will help in such a situation is the assurance from faculty to students. Teachers should go for a coaching approach rather than a judgmental approach. The judgmental approach tends to encourage the defensive, grade-orientated response in the students and the current pandemic situation may cause more stress in students, whereas a coaching approach allows the trainee to reflect on their experience and take feedback to improve their performance.
Another major stressor can be seen in students who have gone back to work; this stressor is due to anxiety and fear of getting infected. These stressors can be reduced by creating an environment in universities that follow proper protocols advised by CDC, WHO, or other medical and dental associations. The teaching can be performed with precautions. Like teaching in small groups, maintaining proper ventilation, sterilization, rigorous cleaning providing proper PPE kits to students coming in contact with patients.

However, the best and effective way of coping is emotional coping. The first step here is accepting the fact that it’s OK to be stressed and anxious. And it’s fine to talk about your insecurities and mental problems. Students should know they are not alone these feelings are universal. Educators can break the ice by sharing their own stressors and encourage students to talk and seek help from the peer group or some professionals. Educators should induce the practice of coping mechanisms among the students. Educators should promote the self-care activities such as exercise, yoga, meditation, good diet and engaging in fulfilling interpersonal relationships, and having personal character traits such as joy, self-efficacy, and optimism. The presence of these factors can buffer against stressful and emotional situations, especially students who are prone to mental health problems.

Some students may not feel comfortable confiding in their teachers or peer group. In such cases, educators should encourage such students to take help from a professional counselor. Now a day’s many apps are available online to support mental health. More than 15,000 mobile apps, 29% have been designed in the field of mental health. Educators may advise using some of the apps to students which are proven effective in stress coping strategies.

Two effective Evidence-based coping mechanisms that have proven wonders in coping with stress are the Implementation of mindfulness programs into academic training which has the potential to teach important skills for stress management and academic success. And another one is indulgence in religious activities. A study reported the most effective coping strategy to deal with severe stress was “religious activities” Coping with religion includes cognitive, emotional, or behavioral responses to stress.
Conclusion

Being a health care student stress is inevitable and some amount of stress is necessary as exposure for making students ready for all challenges the profession brings to them. However, the stress should not be to such extend to cause a mental problem or depression. The healthcare educators, faculty should try to make the learning years happier because a happy mind is a fast and effective learner. The role of teachers and educators has increased during the pandemic; they need to make sure their students are not under massive stress. It’s their duty to create a stress-free environment as well as teach coping mechanisms to deal with stress. At last, we all should remember the pandemic will pass, so the stress and anxiety caused due to the pandemic should also pass and not leave a permanent effect on the mental state of our future healthcare professionals.

References


23. Anthes, E. (2016). Pocket psychiatry: Mobile mental-health apps have exploded onto the market, but few have been thoroughly tested. Nature, 532(7597), 20–23. https://doi.org/10.1038/532020a
