ADVANCING THROUGH INNOVATION

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Decreasing performance anxiety in the clinical setting during COVID-19 pandemic

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1 | PROBLEM

In response to the coronavirus disease 2019 (COVID-19) pandemic, dental schools closed their clinics, disrupting dental students' clinical training. Dental school is a time of immense stress for most dental students, and professional students suffer from performance anxiety more than ever.¹ This can be a debilitating experience for students during preparation and while performing dental procedures. In planning the reopening of our dental clinics, we acknowledged that students would potentially experience increased anxiety when returning to practice² (Figure 1).

2 | SOLUTION

In response to this concern, Tufts University School of Dental Medicine (TUSDM) brought in an evidence-based diaphragmatic breathing intervention as a tool to help with possible performance anxiety when resuming clinical activities (Table 1). Diaphragmatic breathing, or "Deep Breathing" (DB), is a technique that involves slow breathing where the exhale is twice as long as the inhale. DB has been shown to have a calming effect on the autonomic nervous system, relaxing the muscles of the body and alleviating stress, anxiety, and overwhelming feelings among students³ (Figure 2).

During the month of April 2020, a faculty member formally trained in yoga and meditation met virtually with 18 practice coordinators and educated them on the benefits of diaphragmatic breathing as a way to mitigate stress and performance anxiety. After the didactic portion of the lecture, the faculty members met in small groups virtually to experience the breathing intervention for themselves and to train in how to guide this experience during the brief meetings (huddles) that take place prior to the start of each clinical session. Starting on the first day the fourthyear (D4) students returned to the clinic, the diaphragmatic exercise was implemented in the clinic by the faculty trainer at the end of the huddles/beginning of the clinical sessions with 16 students, 16 faculty, and 12 staff and administration in attendance. The faculty trainer guided the exercises for the first week and then were continued to be guided daily by the practice coordinators. The staff and administration did not have a role in guiding the exercises, the practice coordinators were trained for that.

3 | RESULTS

3.1 | What went well

This unconventional activity in the dental school environment was welcomed by all stakeholders with appreciation and strong interest for it to be continued. The trained practice coordinators began guiding their own versions of this exercise in the huddles. The staff and administration benefitted as the students did from the calming and anxiety lowering effects that created a more relaxed clinical environment better suited for operator performance and patient care. TABLE 1 Logic model plan for implementing diaphragmatic breathing in the clinical setting

Purpose	Inputs	Activity	Outputs	Outcomes
To relax and calm dental students before donning their PPE and seeing their patients after a 3-month hiatus from the clinic	 Allocated time for the activity Train faculty on the benefits of diaphragmatic breathing and how to guide a breathing exercise in the clinic before patient appointments 	Students were guided by the faculty through a 60–90 second standing diaphragmatic exercise	 Students seemed to welcome the exercise with appreciation Faculty seemed comfortable guiding the exercise Identification of faculty that requested additional training 	 Reduce clinical stress for students Improved procedure and patient outcomes Awareness that more stress reducing interventions are needed in the dental school curriculum Fostering a community sense of wellbeing

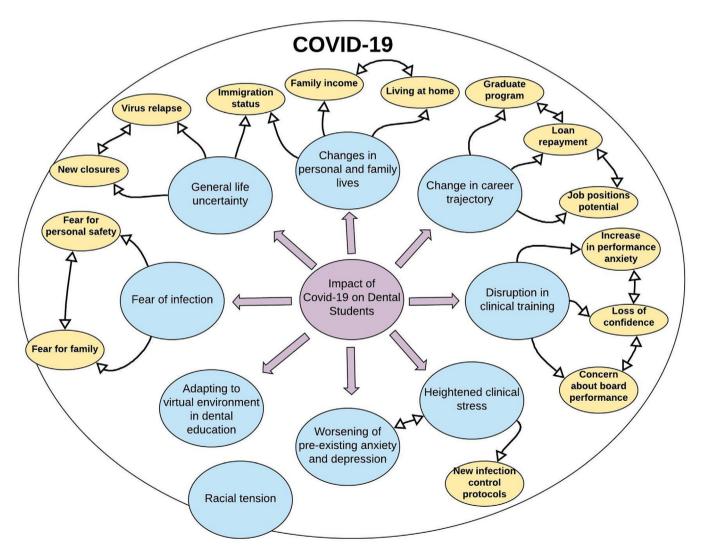


FIGURE 1 Impact of Covid-19 on dental students

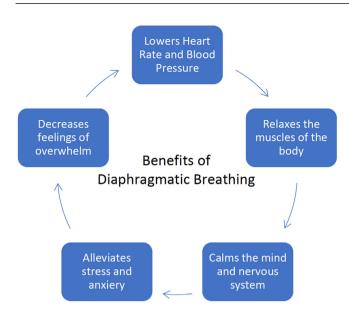


FIGURE 2 Benefits of diaphragmatic breathing

3.2 | What did not go well

There seemed to be a discomfort by some of faculty members facilitating the breathing exercises, due to lack of confidence. However, many of the participants were open to continued training in this exercise to become more comfortable.

3.2.1 | Lessons learned

The American Dental Education Association Commission on Change and Innovation in Dental Education (ADEA CCI) 2.0 compass points toward innovation to provide support to addressing mental health consequences and stress among millennials.⁴ We learned through this intervention that there is a strong interest among faculty, staff, and administration to implement supportive mind-body interventions as a positive intervention to easing the stress of COVID-19 in the clinic as well as in other aspects of the dental curriculum. This intervention will address the need to lessen student anxiety and stress, but foster resilience in their clinical performance and professional development. This intervention also made us aware of the interconnection we share at all levels as a professional community, but more so as human beings recognizing and supporting the vulnerability of all of us during this time. There is much to be gained by this pandemic through collaboration and compassion.⁵ We found this exercise a spring board to enrich our TUSDM community relationships and clinical experiences for our students, faculty, staff, and administration during this pandemic and beyond.

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