

Guest Commentary

Worried Sick: Anxiety, depression, and the impact on dental health care workers

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“Given the severe impacts of mental health disorders on dental health care workers and the potential for related maladaptive behaviors, dental health care workers must evaluate the impact of such disorders on the dental community and patients.”

Dental health care workers (DHCWs) encounter myriad stressors in their day-to-day work including financial pressures, tightly booked schedules, paperwork demands, practice management issues, reimbursement concerns, uncooperative patients, and physical demands inherent to oral health care delivery.^{1,2} These pressures are often accompanied by personal characteristics, such as perfectionism and prioritization of others’ needs, leaving DHCWs vulnerable to distress, mental health disorders, and burnout.³ This stress endemic,^{4,5} owing to prolonged exposure to internal and external stressors, can take a heavy physical and emotional toll on DHCWs.

Studies suggest that the COVID-19 pandemic has exacerbated mental health disorders.⁶⁻⁸ Given the severe impacts of mental health disorders on DHCWs and the potential for related maladaptive behaviors, DHCWs must evaluate the impact of such disorders on the dental community and patients, explore methods to improve recognition of mental health disorders, and implement protocols for enhanced communication, prevention, screening, and referral.

Understanding Mental Health

Stress is the reaction of the brain and body to a demand. Stress can push us to learn and grow personally or professionally or become the impetus for making beneficial changes in our lives.⁹ But there are negative impacts to prolonged or unusually intense stress. Distress is characterized by low mood, difficulty relaxing, and subjective feelings of being tense. If left untreated, distress can progress and impair physical well-being and personal and professional functioning.^{2,9} Both distress and depression have been associated with decreased function of the limbic system and prefrontal cortex as well as systemic vascular inflammation and elevated serum cytokine levels.^{10,11} Furthermore, anxiety and depression often overlap; 20% through 70% of patients with depression also meet the lifetime criteria for an anxiety disorder, and anxiety disorders

have been implicated in the underlying etiology of depression in many cases.^{12,13} The interaction of stress and anxiety suggests a bidirectional relationship; psychological stress can lead to depression in susceptible people, and depression may exacerbate anxiety disorders and stress.

Signs and symptoms of depression and anxiety include the following:¹⁴

- Excessive worry
- Distress or impairment in social, occupational, or other important areas of functioning
- Feeling restless
- Fatigue or sleep disturbances
- Difficulty concentrating
- Significant changes to mood (irritability, decreased enjoyment)
- Somatic pain
- Suicidal thoughts or thoughts about death and injury

Recognition of Mental Health Disorders in the Dental Office

Given the prevalence and potential impact of anxiety and depression, increasing awareness of the signs of these mental health disorders among DHCWs is imperative. Readily available tools that can allow DHCWs to screen people for anxiety and depression can be used easily, and in-office screening may be beneficial for both patients and providers, particularly in light of reports that oral health is affected adversely in people with mental illness.^{9,15-17} It is also critically important that DHCWs look inward and identify potential signs and symptoms of mental health disorders within the profession, promote healthy work environments, and reduce the impact of stress on the profession.

Anxiety and depression symptoms have differed between dentists and dental hygienists throughout the pandemic, independent of other factors, including sex, type of practice, time in practice, and geographic area. Differences may be related to diverse information sources and messaging targeted at these

different groups, particularly on social media, which underscores the need for open communication among the dental team and cohesive and effective messaging for DHCWs.¹⁸

Impact of Stress on Personal and Professional Functioning: The Stress-Distress-Burnout Continuum

DHCWs experience common societal stressors and occupation-specific stressors, both of which have been compounded by the ongoing pandemic. Chronic unresolved stress in DHCWs can erode well-being and lead to feelings of distress, leading to long-term stress and burnout. A significant number of dental hygienists reported that COVID-19 was an impetus for permanently exiting the profession,¹⁹ which may be related to distress.

If left untreated, distress can progress and impair personal and professional functioning. Physical and emotional health may suffer, including negative impact on immune, cardiovascular, digestive, attentional, and reproductive systems. Mood disorders, such as anxiety and depressive disorders, may develop and DHCWs may experience difficulties in relationships and interpersonal functioning.^{5,9} Furthermore, DHCWs under distress may show impaired professional functioning.^{5,19-22} Professional burnout may develop, characterized by physical or emotional exhaustion, negative or indifferent attitudes, and feelings of personal and professional dissatisfaction.¹⁹⁻²²

Call to Action

As members of the dental profession, we are committed to improving the oral and overall health of our patients and communities. As such, improved awareness regarding the prevalence of mental health disorders, the risk factors for such disorders, and their potential oral manifestations is critical to our mission. Furthermore, as health care professionals, it is also important that we acknowledge that our mental health affects our ability to care for others optimally. Thus, creating professional environments that allow for open communication about mental health among members of the dental team can reduce the stigma around mental health diagnoses and treatment for DHCWs. Experiencing stress, anxiety, and depression as a DHCW can be an isolating experience, and we cannot dismiss those who exhibit severe signs of anxiety and depression as outliers. However, it is apparent that suboptimal mental health is common among DHCWs and can be affected by external forces, such as the COVID-19 pandemic. Adoption of the following concrete steps is suggested to improve identification and prevention of mental health disorders for DHCWs and reduce stigmas associated with seeking mental health care: 1) beginning in training programs, instruction to recognize the signs and symptoms of stress, distress, and burnout; 2) greater focus on

developing and monitoring self-care plans for DHCWs; 3) ongoing continuing education offerings focused on DHCW self-care; 4) peer support programs to discuss self-care and mental health care; 5) easily accessible information through local, state, and national dental organizations to connect with mental health care providers; 6) systematic efforts to elucidate treatment barriers among DHCWs.

Conclusions

The COVID-19 pandemic has highlighted the importance of both physical and mental well-being of health care providers and the workplace stressors that seriously can affect mental health among DHCWs. The current environment should serve as a call to action to improve support for mental health among all members of the dental team.

Disclosures

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References

1. Basudan S, Binanzan N, Alhassan A. Depression, anxiety and stress in dental students. *Int J Med Educ.* 2017 May;8:179-86.
2. Rada RE, Johnson-Leong C. Stress, burnout, anxiety, and depression among dentists. *J Am Dent Assoc.* 2004 Jun;135(6):788-94.
3. Westerman GH, Grandy TG, Erskine CG. Personality types of dentists. *Am J Dent.* 1991 Dec;4(6):298-302.

4. Lee CY, Wu JH, Du JK. Work stress and occupational burnout among dental staff in a medical center. *J Dent Sci*. 2019 Sep;14(3):295–301.
5. Miron C, Colosi HA. Work stress, health behaviours and coping strategies of dentists from Cluj-Napoca, Romania. *Int Dent J*. 2018 Jun;68(3):152–161.
6. Cullen W, Gulati G, Kelly BD. Mental health in the COVID-19 pandemic. *QJM*. 2020 May;113(5):311-12.
7. Taylor S. *The psychology of pandemics: preparing for the next global outbreak of infectious disease*. Newcastle: Cambridge Scholars Publishing; 2019. 179p.
8. Wang C, Pan R, Wan X, et al. Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *Int J Environ Res Public Health*. 2020 mar 6;17(5):1729.
9. Lingawi HS, Afifi IK. COVID-19 associated stress among dental students. *Open Dent J*. 2020 Nov;14:554-62.
10. Lu XT, Zhao YX, Zhang Y, Jiang F. Psychological stress, vascular inflammation and atherogenesis: potential roles of circulating cytokines. *J Cardiovasc Pharmacol*. 2013 Jul;62(1):6-12.
11. Krishnan V, Nestler EJ. The molecular neurobiology of depression. *Nature*. 2008 Oct;455(7215):894-902.
12. Kessler RC, Sampson NA, Berglund P, et al. Anxious and non-anxious major depressive disorder in the World Health Organization World Mental Health Surveys. *Epidemiol Psychiatr Sci*. 2015 Jun;24(3):210-6.
13. Kalin NH. The critical relationship between anxiety and depression. *Am J Psych*. 2020 May;177(5):365-7.
14. Delgado-Angulo EK, Sabbah W, Suominen AL, et al. The association of depression and anxiety with dental caries and periodontal disease among Finnish adults. *Community Dent Oral Epidemiol*. 2015 Dec;43(6):540-9.
15. Kisley S, Sawyer E, Siskind D, Lalloo R. The oral health of people with anxiety and depressive disorders: a systematic review and meta-analysis. *J Affect Disord*. 2016 Aug;220:119-32.
16. Warren KR, Postolache TT, Groer ME, et al. Role of chronic stress and depression in periodontal diseases. *Periodontol 2000*. 2014 Feb;64(1):127–38.
17. Vahratian A, Blumberg SJ, Terlizzi EP, Schiller JS. Symptoms of anxiety or depressive disorder and use of mental health care among adults during the COVID-19 pandemic: United States, August 2020-February 2021. *MMWR Morb Mortal Wkly Rep*. 2021 Apr;70:490-4.
18. Al-Amad SH, Hussein A. Anxiety among dental professionals and its association with their dependency on social media for health information: insights from the COVID-19 pandemic. *BMC Psychol*. 2021Jan;9(1):9.
19. Gurenlian JR, Morrissey R, Estrich CG, et al. Employment patterns of dental hygienists in United States during the COVID-19 pandemic. *J Dent Hyg*. 2021Feb;95(1):17–24.
20. Ahola K, Hakanen J. Job strain, burnout, and depressive symptoms: a prospective study among dentists. *J Affect Disord*. 2007 Dec;104(1-3):103–10.
21. Yansane A, Tokede O, Walji MF, et al. Burnout, engagement, and dental errors among US dentists. *J Patient Saf*. 2021 Sep;17(8):e1050–e1056.
22. Kulkarni S, Dagli N, Duraiswamy P, et al. Stress and professional burnout among newly graduated dentists. *J Int Soc Prev Community Dent*. 2016 Nov;6(6):535–41.