

PSYCHOLOGICAL FRAGMENTATION SYNDROME IN DENTAL PROFESSIONALS: A CLINICAL EVALUATION

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Abstract

Background: This research investigates the prevalence and predictors of emotional burnout syndrome within the dental profession, specifically focusing on the interplay between age, gender, longitudinal work experience, and clinical specialization.

Materials and Methods: A comprehensive psychological assessment was conducted among 200 dental professionals associated with the Faculty of Dentistry at Samarkand State Medical University during the 2024–2025 period. The study utilized V.V. Boyko's "Diagnostics of Emotional Burnout Level," a validated methodology for identifying the phases and symptoms of professional exhaustion.

Results: The data indicated that burnout manifestations were present in 53.8% of the surveyed cohort. While demographic variables such as age and gender, along with career duration, showed no statistically significant correlation with exhaustion levels ($p > 0.05$), clinical specialization emerged as a critical determinant. Specifically, the "trapped in a cage" symptom showed significant prevalence among general practitioners and oral surgeons ($p = 0.02$), whereas "emotional detachment" was most prominent among orthodontists and prosthodontists ($p = 0.03$).

Conclusion: The findings suggest that the specific nature of a dentist's professional focus is a primary driver in the development of emotional depletion.

Keywords: Dentistry, emotional burnout, professional specialization, occupational stress.

Introduction

The phenomenon of burnout among medical residents and established practitioners has profound implications for patient safety, institutional stability, and the long-term retention of healthcare staff. In the dental field, high levels of occupational stress frequently result in a marked increase in clinical errors, a significant erosion of professional empathy, and a "brain drain" effect that destabilizes medical organizations [5, 2]. Burnout-related distress not only impairs the quality of patient-provider communication but also imposes substantial economic burdens on clinics due to diminished productivity and high staff turnover [5]. Chronic workplace stress culminates in a state of holistic mental and physical fatigue, a condition predominantly identified in high-interaction professions such as education, social work, and healthcare [1, 3, 5]. As defined by Maslach and Leiter [6], burnout is essentially a systemic "mismatch between the job requirements and the individual's personal resources."

Materials and Methods

The study analyzed the development of burnout phases among 180 subjects, including dental students and practicing clinicians at Samarkand State Medical University (2024–2025). The demographic profile of the participants included 85 women and 95 men, predominantly within the 40–55 age range. The cohort was stratified by clinical focus: General Practitioners (66%), Prosthodontists (18%), and Surgeons (16%).

Psychometric evaluation was performed using the V.V. Boyko methodology to identify specific symptom clusters [2]. For robust data interpretation, statistical analysis was executed via **Stata v.18**, utilizing arithmetic means, correlation coefficients, standard errors, and **Pearson's chi-squared test**.

Results and Discussion

The statistical analysis revealed that age did not serve as a significant predictor for burnout during the phases of *Tension* ($p=0.69$), *Resistance* ($p=0.28$), or *Exhaustion* ($p=0.18$). Furthermore, no gender-based disparities were observed across these developmental stages ($p=0.75$, 0.75 , and 0.55 , respectively). The duration of professional experience also failed to show a significant correlation with the progression of burnout symptoms.

However, clinical specialization was identified as a decisive factor in the manifestation of particular symptoms:

- **"Trapped in a Cage" Symptom ($p=0.0118$):** This psychological state, characterized by a sense of hopelessness, entrapment, and depressive ideation stemming from severe emotional pressure, was most frequently reported by general practitioners and oral surgeons.

- **"Emotional Detachment" ($p=0.0277$):** This symptom was notably prevalent among prosthodontists. It reflects a state of professional "neutralization" where the clinician adopts a mechanical approach to patient care, exhibiting apathy and a loss of personal involvement, which signifies a deep-seated professional personality deformation.

Commonly identified indicators across the different phases included "experiencing psychotraumatic circumstances" (35%) and "anxiety and depression" (28%) during the *Tension* phase. The *Resistance* phase was dominated by "inadequate selective emotional response" (55% and 33%), while the *Exhaustion* phase was marked by early-onset and persistent "emotional detachment" (22.5% and 28.5%). Overall, 25% of the dentists exhibited a fully manifested burnout syndrome, with an additional 40% currently in the formative stages of the condition.

Conclusion

Professional burnout remains a critical challenge for the modern healthcare sector. In dentistry, the primary markers of this condition include emotional withdrawal, heightened anxiety, and maladaptive emotional responses. While traditional demographic factors like age, gender, and seniority are not primary drivers of this syndrome, the specific clinical specialization plays a transformative role in how burnout symptoms manifest. General practitioners and surgeons are uniquely vulnerable to the sensation of professional entrapment, while prosthodontists are more likely to undergo emotional withdrawal. This study confirms that the inherent nature of specific dental specialties is a decisive element in the trajectory of professional emotional exhaustion.

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