Factors Associated with Burnout in Dentistry from Occupational Therapy Perspective: A Systematic Review

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Abstract

Background: Burnout is a high risk mental problem for dentists and dental students and risk factors must be highlighted. There is limited literature on the factors effecting level of burnout among dentists and dental students.

Aims: To show the most relevant factors related with burnout among dentists and dental students from occupational therapy view.

Methods: The literature was searched via EMBASE, PUB MED, MEDLINE, and HMIC databases to review and show the factors associated with burnout in dentists and dental students. Critical Appraisal Skills Programme was used to find the statistically significant affecting factors.

Results 95 studies were identified but 25 studies were found suitable for the review. The most prevalent and statistically significant factors associated with burnout were: older age, female, gender, student status, doing postgraduate education and level of occupational participation.

Conclusions This review showed several factors related to burnout among dentists and dental students. Further longitudinal and prospective studies are needed.

Key words Burnout; Dentist; Occupational participation

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Introduction

Burnout is a psychological stress which is characterized by emotional exhaustion, cynicism and lack of enthusiasm among professionals working in healthcare system (1). Burnout is analyzed in three dimensions. These are increased level of depersonalization (DP), increased level of emotional exhaustion (EE), and reduced level of personal accomplishment (PA). Burnout is measured by different ways (2). The Maslach Burnout Inventory (MBI) is still the most known 22-item questionnaire which is widely used for measuring burnout in areas of assesses DP, EE, and PA (1, 2).

Level of burnout has been investigated by various authors in the literature. According to Gorter and Forbes (2014) >26% of dental professionals showed very high risk of burnout, according to Singh’s systematic review (2016) which analyzed the factors effecting burnout in dentists and Huri et al. published two studies evaluating the relationship between burnout and occupational participation (4,5,6,7). In 2016, according to review of Singh et al. [2] showed the factors associated with burnout in dentists and Huri et al enriched the literature with evidence of the relationship between burnout and occupational participation among dentists and dental students form occupational therapy perspective (5,6,7,8).

Our review study was designed to give the findings of studies on burnout of dentists and dental students and investigate the factors most associated with level of burnout in dentists and dental students.

Research Design and Methods

Our research group deemed that the most appropriate method to extract evidence of relationship between the factors associated with burnout would be investigating the related studies in the literature with a systematic review study. For reaching suitable studies to the aim of our review the research group searched PUB MED, HMIC, MEDLINE, EMBASE electronic databases.

Some key words such as burnout, occupation, dentist, activity were included. To choose the suitable studies for our review study exclusion criteria were preliminary review without abstract, not written in English, inaccessible through Hacettepe University system and studies examining studies other than dentists and dental students; inclusion criteria were focusing on burnout in dentists and/or dental students and also activity and occupation. Additionally, the reference lists of the identified studies were checked and the suitable ones were included (snowballing). The Critical Appraisal Skills Programme (CASP) was used to critically appraise the studies and a thematic analysis were conducted with ‘‘What are the results of the review? Are the results valid? Will the results help locally?’’ questions. After evaluation of each studies strength and the limitations the most frequently appeared themes were identified. As our study did not deal with the personal information, the ethical community of Hacettepe University indicated that ethical committee approval is not needed for the present study.
Results

The authors of the research identified totally 94 studies but 25 studies were suitable for the present systematic review (Figure 1). The studies based on age, gender, status and activity performance were included. Most of the literature support that age is a vital factor related with burnout in dentists (9). A recent study including 337 dentist showed that 38% of dentists had increased EE, 22% showed increased depersonalization and 12% showed decreased PA. In this group dentists between 36-40 years showed significant burnout characterized with increased EE and DD (10). One other study including 35 Swiss dental residents found a score of 36% and younger dentists showed decreased level of burnout. Additionally, one another study supported that 84% of the dentists showed feelings of burnout and 84% of the dentists had mental health complains about burnout and this study supports that getting older effects mental health of dentists and dental students positively (11). However according to a study among Spanish dentists did not find any significant burnout scores between different ages (12). Additionally, Gorter et al. supported that there is no relationship between burnout and among dentists but found that dentists older than 40 years had higher DP and EE subscale scores than the younger ones (13).

When the relationship between gender and burnout was evaluated there are some studies supporting that males reported higher level of burnout than female dentists in DP subscales (14). However, Huri et al. supported that Turkish female dentists have increased level of stress and burnout than male Turkish dentists (6,7,8). Furthermore, two studies also found higher level of burnout among Swiss and Jordanian female dental residents and dental students (15). Additionally, among 307 Jordanian dental student’s prevalence of burnout was greater than male dental students in female dental students with high EE scores. Also in this study, approximately 40 of 99 postgraduate female dental students showed high scores in the EE subscale (16).

According to study of Divaris et al. (10) showed that late term residents with special on periodontal, oral surgery and orthodontics showed higher levels of EE (23%) and DP (15%) than early year residents in the same specialities. Huri et al. supported that intern dental students had higher level of burnout than the first and second year students while post graduate students had higher level of burnout than intern students (7).

A study of relationship between burnout and job strain and depression showed that long term burnout caused depression among Finnish dentists but further research is needed (17). Also Huri et al. showed that depression is common in dentists and dental students (7). Dentists and dental students with lower level of occupational participation which is known as the imbalance of occupational performance and occupational satisfaction, had higher level of burnout and limited occupational participation (6,7,8). According to literature it is discussed that the multifactorial nature of the development of burnout among dentists can be affected by specific roles for gender, age, status and occupational participation.

Discussion

The present literature review supported that higher age, female gender, being in post graduate education and limited occupational participation can be related with increased level of burnout prevalence in dentists and dental students. Our study is the only first study to identify the
statistically significantly related factors with burnout in dentists form occupational therapy perspective. It discusses literature from different countries that search answers for the same research question including large and small samples. Our findings may therefore give information for dentist and dental students with possibility of high-risk for burnout. However, analyzing studies from different cultures and population may decrease the validity of the findings but some of the analyzed studies were cohorts of dentists so the results are not need to be generalized to other populations.

One of the limitation of the present study is that burnout in dentists and dental students is a multifactorial area which needs further exploration. In other hand the databases that we reached for the study included four databases. Additionally, most burnout measures are self-reporting indexes that participants give their information voluntary which can cause bias. Because it is possible that the participants who wanted to accept to participate the study were inclined to burnout.

This study supports that burnout must be identified in early stages and factors related to burnout must be known by dentists and dental students. Although there is a strong relationship between various factors and burnout among dentists and dental students there is still a lock of research. Because there are many studies supporting various relationships such as some studies support that prevalence of burnout is higher in female dentists or the opposite. Moreover, there are some studies that support that female dental students were more keen to have burnout than men. Although these finding is still confusing it is thought that gender effects dentists and dental students in different ways in their career. And also the cultural features, lifestyles, familial pressure or the pregnancy may affect the female dentists more than men and these must be analyzed by further research.

Longitudinal studies must be planned to explore burnout which may affect the dentist’s mental health and professional life among dentists and dental students. However, these studies are complex and expensive and most of them showed just the different dimensions of burnout according to demographic information such as age, gender or the occupational status so studies investigating the entire dimensions of burnout and are still required. Furthermore, there are limited literature on the effects of occupational participation which may affect the dentists level of burnout (5,6). There are studies in the literature which support that limited level of occupational participation may restrict the skill of dealing with problems and may cause increased level of burnout. Furthermore, decreased occupational participation can be associated with depression and may be sign of increased level of burnout.

This present review study shows the importance of factors related to burnout syndrome in dentists and dental students. The points discussed in the present review supported by the findings of the recent literature (18,28). Untreated burnout could have pissing effect on dentists and dental students. Early detection of burnout and effective interdisciplinary client-centered self-management skills education programs, including time use, stress management, and relaxing techniques with occupational participation and occupational balance education may be useful to improve the quality of oral and dental health services and may help to reduce the incidence of mental health problems and burnout among dentists and dental students.
REFERENCES


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