

Burnout in Dentistry: An Overview

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ABSTRACT

Burnout has been the focus of research in psychiatry since a long time. Often described as a process, condition or syndrome, it is too complex a phenomenon. There are varying philosophies, opinions and different models behind this malady. It is a phenomenon encompassing emotional exhaustion, depersonalization and reduced personal accomplishment. Despite the plethora of proposed mechanisms, its diagnosis is challenging. Research in this area has led to the development of various tools, Maslach Burnout Inventory being the most commonly used one. Being a serious threat to the dental profession, burnout syndrome is considered as a public health issue. This literature review (Google search and PubMed) focuses on the development of burnout, evaluating the contributing factors in dentistry, with an emphasis on its diagnosis, management and prevention.

Keywords: Burnout, Dentistry, Occupation, Stress

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INTRODUCTION

Dentistry is a noble profession providing benevolent care and a great opportunity to meet new people on a regular basis. However, it also has a reputation of being a stressful occupation.¹ The reactions to stress depend on the coping mechanisms a person develops. One such mechanism is burnout,² a response to the chronic emotional strain of dealing extensively with other human beings.³

A literature review (Google search and PubMed) discussing the term “burnout” and its components; potentiating factors in dentistry; with an emphasis on its diagnosis, treatment, and prevention is presented.

HISTORY OF THE TERM “BURNOUT”

Many speculations have been made about the reason why this powerful metaphor came into being at that particular time and place. Till date, no satisfactory comprehensive explanation exists and most probably there never will. Those interested in the literature find its descriptions in Shakespeare’s writings.⁴ The usage dates back to 1940s, wherein it is related to the cessation of a jet or rocket engine. In Graham Greene’s novel (1961) burn out case, the main character is a disillusioned and spiritually tormented person. However, the term that

we understand today was introduced to the medical lexicon as a behavioral entity, in 1974 by a German psychiatry resident in the US, Herbert Freudenberger.^{5,6} Freudenberger elaborated it as a state of exhaustion (emotional and mental) observed among volunteer workers with varied physical and behavioral outcomes.⁷ In 1976, Cristina Maslach introduced the term “burnout” into the public domain at the Annual Congress of American Psychology Association. Over a stretch of time, these relations sum up to an extent leaving the professionals “burnt” out.⁶

Burnout was “in the air” after its “discovery,” becoming a very popular topic in the USA - The home country of burnout. The first so-called pioneering phase marked the publishing of many articles and periodicals for professionals such as teachers, social workers, and nurses; with tremendous proliferation of workshops, training, and other interventions. The empirical phase marked the discovery of self-report inventories in the early 1980’s - most notably the Maslach Burnout Inventory (MBI) and research pitched up. Whereas a slightly different picture was seen in the Netherlands where the concept of “overstrain” (Dutch: “overspannenheid”) had a long tradition. This means that already before the introduction of burnout, Dutch practitioners were trained to diagnose and treat “overstrain;” and burnout was labeled to indicate chronic and severe “overstrain.”⁴

What is Burnout?

As per Maslach (1981): "Emotional exhaustion, depersonalization and reduced personal accomplishment that can occur among individuals who do 'people work' of some kind".⁸

As per Maslach and Leiter (1997): "Burnout is the index of the dislocation between what people are and what they have to do. It represents erosion in value, dignity, spirit, and will - An erosion of the human soul. It is a malady that spreads gradually and continuously over time, putting people into a downward spiral from which it's hard to recover."⁹

What is not Burnout?

Burnout has often been mistaken for stress. Stress can intensify burnout with time although it may not be the main cause of burnout. The time aspect implicates that the two can be differentiated retrospectively.¹⁰ In addition, stress symptoms may be more physical rather than emotional. Stress produces urgency and hyperactivity. Burnout, on the other hand, produces helplessness. Stress leads to over reactive emotions; whereas burnout leads to a more blunted state.⁹ Stress refers to temporary adaptation to changing conditions which can be performed successfully, whereas burnout reflects a breakdown in adaptation, causing structural deviation from normal functioning.¹⁰

Burnout also demonstrates similar symptoms as specific mood disorders. Depression, for instance, may extend over every life domain (e.g., work, family, leisure). Burnout, however, is specific to work context. Another entity is the post-traumatic stress disorder, described as a sequelae to a traumatic event/extreme stressor. Whereas burnout occurs in response to stressors (interpersonal or emotional) in the workplace and is characterized by different reactions (e.g., exhaustion).⁹

CAUSES AND POTENTIATING FACTORS OF BURNOUT IN DENTISTRY

Dental work is a unique social interaction of specific demands of the clinical practice, personal characteristics and emotions of a health care provider and its recipient. Dentists conform to their professional role in such a way that becomes difficult for them to seek help if required.¹¹ The dentist is expected to remain in control in all situations and to disguise personal vulnerability in this job.¹² Burnout is commonly said to be a result of the chronic occupational stress, basically interplay of many factors.¹³⁻¹⁵

Forrest¹³ (1978) listed a few factors which would potentiate occupational burnout in the daily life of dentists: Confinement, patient anxiety, compromised treatment, stress of perfection, economic pressures, and low self-esteem. Cooper *et al.*¹⁴ (1987) outlined stressors in dentistry such as: Time and scheduling pressures, pay related stressors, patient's unfavorable perception of the dentist, staff and technical problems and problems dealing with patients. Others have also¹⁵ (1990) reported dissatisfaction in the relationships with the patients, problems relating to the physical environment, uncomfortable working posture, and unhappy marriages, as contributors to burnout in dentistry.

Etiopathogenesis of Burnout

Burnout has been alternately described both as a condition and a process (Figure 1). As per Weber and Jaekel-Reinhard, it is a dynamic process on a continuum with various stages between hyperactivity and despair. In this process, a wide variety of symptoms ranges from fatigue, loss of cognitive function to psychosomatic disorders.^{16,17} It is insidious, often developing as an adaptation to short-term stress, which becomes ineffective and harmful over the long-term. What may begin as protective emotional distancing may transform itself into emotional exhaustion

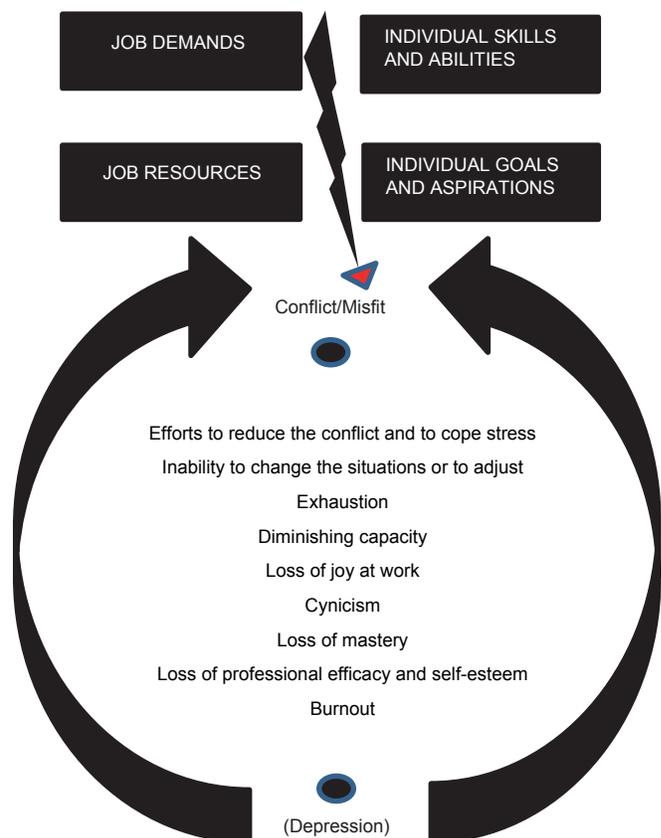


Figure 1: Process of burnout: Structure, antecedents and consequences.¹⁷ (Adapted from permission: Toppinen-Tanner S.)

(EE) and callousness. The result is the transformation of a previously committed professional to the one who is disengaged from one's work.¹⁸

The social-medical point of view describes burnout development at three levels (Figure 2). Micro-level discrepancies are explained by the job-strain model: "Negative stress" (accretion of stress i.e. psycho-social or psycho-mental with a decreased threshold of stress tolerance) can result in a high level of strain. Apart from psychological and social factors, biological and biochemical factors are also suggested to play a major role. Hormonal and endocrinological changes during burnout (increase in the cortisol level) are presently under research. The "person-environment misfit" concept explains the meso and macro level interactions that emphasizes the role of "social support" systems and "coping" strategies.¹⁶ Dentists pass through various stages in burnout development before reaching the stage of "pulpout" - The final stage (Box 1).^{19,20}

COMPONENTS AND MEASUREMENT OF BURNOUT

The existing literature mainly describes three components as under:

1. Emotional exhaustion (EE): Continuous interpersonal interactions might lead to emotional wasting and the progressive loss of energy.⁷

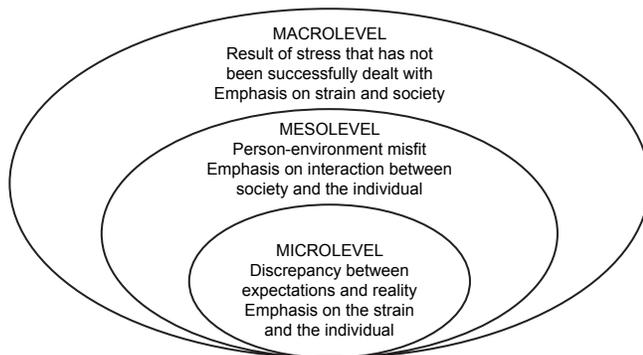


Figure 2: Development of burnout syndrome at three levels: Socio-medical point of view

Box 1: Stages in development of burnout in dentistry^{19,20}

Stages in burnout development

Practice honeymoon: Where one overworks oneself due to enthusiasm and ambition to develop one's practice

The drill and fill blahs: Where one's laboratory becomes boring due to monotonous work

The operatory blues: Where depression sets initially as a result of monotonous work

The crisis: Where agitation and frustration appear due to conflicting mental state

The pulpout: "Burnout" the final stage

2. Depersonalisation (DP): Negative attitude and cynical responses toward the clients, reaching a point where the latter ones are considered as simple objects.¹¹
3. Reduced Personal accomplishment (RPA): Reduced personal realization, associated with loss of self-confidence, development of negative self-concept and low self-esteem, all of which lead to a decrease in productivity on a job and poor or complete absence of personal realization.¹¹

In the literature, theoretical models have been proposed:²¹

1. Golembiewski *et al.*, 1986 ($DP \Rightarrow PA \pm EE$)
Detachment in the work settings might cluster as depersonalization, undermining performance and triggering emotional strain.
2. Leiter MP, Maslach *et al.*, 1988 ($EE \pm DP \Rightarrow PA$)
The second model considers chronic job stress as a precursor to burnout. Job strain triggers EE, which in turn leads to depersonalization. When depersonalization persists, the achievement of work goals can be hampered leading to feelings of RPA.
3. Lee and Ashforth, 1996: ($EE \pm DP, EE \Rightarrow PA$)²¹
Another model considers depersonalization to develop from EE. However, it is additionally proposed that RPA develops independently from depersonalization, evoked directly by EE. Overall, EE and DP are considered the core burnout dimensions. Conceptually, professional efficacy has been criticized as reflecting a personality characteristic rather than a genuine burnout-component.²²

Currently, a number of screening instruments are available that seem to "measure" burnout. Broadly, they measure burnout as one-dimensional construct (Burnout Measures; Shirom-Melamed Burnout Measure)²³ and as dimensional construct (MBI;^{23,24} Oldenburg Burnout Inventory;²⁴ Copenhagen Burnout Inventory;²⁵ MBI-Students Survey²⁶). Among these, MBI is the most commonly used among dental personnels.²⁷

Diagnosis

As per the International Classification of Diseases - 10th edition, burnout is included in the residual category "problems related to life management difficulty" (Z73.0)²⁸ and discussed as a syndrome. Table 1 shows the various signs/signals encountered at different levels.⁹

Apart from these indicative "signals," both statistical and diagnostic criteria have been used to diagnose burnout.

Table 1: Burnout signals at individual, interpersonal and organizational levels⁹

Cognitive signals	Affective signals	Motivational signals	Behavioral signals	Physical signals
Signals at individual level				
Helplessness/loss of meaning and hope, feelings of powerlessness/feelings of being "trapped", sense of failure, poor self-esteem, guilt, suicidal ideas, inability to concentrate/forgetfulness/difficulty with complex tasks	Depressed mood/ changing moods, tearfulness, EE, increased tension/anxiety	Loss of zeal/ loss of idealism, resignation, disappointment, boredom	Hyperactivity/impulsivity, increased consumption of: caffeine, tobacco, alcohol, illicit drugs, abandonment of recreational activities, compulsive complaining/denial	Headaches, nausea, dizziness, muscle pain, sleep disturbances, ulcer/gastrointestinal disorders, chronic fatigue
Signals at interpersonal level				
Cynical and dehumanizing perceptions of clients/service recipients/patients, negativism/pessimism with respect to clients/service recipients/patients, labeling recipients in derogatory ways	Irritability being oversensitive lessened emotional empathy with clients/service recipients/patients, increased anger	Loss of interest, indifference with respect to clients/service recipients/patients	Violent outbursts, propensity for violent and aggressive behavior, aggressiveness toward clients/service recipients/patients, interpersonal, marital and family conflicts, social isolation and withdrawal	Not applicable
Signals at organizational level				
Cynicism about work role, distrust in management, peers and supervisors	Job dissatisfaction	Loss of work motivation, resistance to go to work, low morale	Reduced effectiveness/poor work performance/declined productivity, turnover, increased sick leave/ absenteeism, being over-dependent on supervisors, increased accidents	Not applicable

EE: Emotional exhaustion

Statistically, cut-off points are determined, for "low," "average," and "high" scores, as recommended in the test-manual of the MBI.²⁹ Diagnosis of burnout should be preceded by adequate medical, social and occupational history, details of symptoms, followed by physical examination. It should be measured using appropriate psychometric tool as MBI and special laboratory tests as needed ("stress biomonitoring"). A good interdisciplinary co-operation interspersed with a communication rapport among the diagnostic team and medical connoisseurs are as important.¹⁶

Treatment and Prevention

Burnout can be managed either by: Person directed, organization directed and combined approaches. Person directed intervention programs are usually cognitive-behavioral measures whereas organization directed interventions are usually a change in the work procedures. Intervention can be either etiological and/or symptomatic (Box 2).⁹

Besides these, two kinds of psychotherapeutic methods have been suggested: Experiential group therapy (creative methods, such as drawing, music, telling stories, body expression and relaxing) and psychoanalytic group therapy (free associations within the group).

Levels of Prevention

As per the levels of prevention following measures are:¹⁶

- Primary prevention: Avoidance/elimination of the factors that make the patient ill

Box 2: Burnout intervention⁹

Symptomatic intervention	Etiological intervention
Physical relaxation - simple solutions for fatigue	Distinguishing and developing the rational ideas about self-requests, to others/job/world (cognitive restructuring)
Life program reorganization - highlighting your favorite activities	Management of emotions related to exhaustion/fatigue and irrational ideas
Search and use external resources as social support	System values reorganization/reappraise
Task reorganization	Self-control training
Identify areas of interest/motivation of the person	Rational training to frustration
	The training of active coping
	The training of role playing simulation/ scenarios and role playing

- Secondary prevention: Early recognition/intervention of manifest disease; and
- Tertiary prevention: Coping with the consequences of disease/rehabilitation and relapse prophylaxis.

Coping Strategies

Coping strategies, customarily being defined as specific methods, directed to specific objectives:³⁰

- Coping oriented to the problem (by retorting to the stressful situation directly)
- Coping oriented to the emotion (to restrain the emotional response to stressful events)

Three categories of coping are identified:

- Active-cognitive coping-management of assessing potentially stressful events

- Active-behavioral coping-apparent efforts to manage a stressful situation
- Coping by avoidance to face a problematic or stressful situation.

Burnout as a Public Health Issue

Burnout can be considered a serious risk to the dental profession, causing both a threat to the work force and a tragedy to the individual dentist³¹ and thus is considered as a public health issue.²⁶ Physiological, psychological and behavioral dimensions are affected by burnout, and several symptoms can subsequently occur. The continuous exposure to stress inducers may cause depressive symptoms.³² Burnout is considered as an occupational health issue, one of the most important work related problems in today's society.¹¹²⁶

The ignorance of the burnout risk may contribute to the negative implications for the dentist, patient, and the work quality. A burned out dentist may be subject to accuse from the professional community as a professional who is not strong enough to carry on doing what has to be done. An over stressed dentist today might burnout in the long run.

CONCLUSIONS

There is no uniformly agreed definition of burnout syndrome. Burnout is both a process as well as a condition. Being categorized as a stress coping strategy initially, it has now become increasingly clear that burnout is not a helper syndrome. Health professionals including dentists are particularly prone to burnout. Hence, there is a need to discover innovative preventive strategies, to protect the dental workforce from the ravages of this sinister.

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