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## Work stress and burnout among dental hygienists

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**Abstract:** *Objectives:* The aim of this study was to describe the factors associated with work stress and burnout among dental hygienists. Furthermore, how to deal with work stressors in order to prevent burnout in the dental hygienist work environment will be discussed. *Methods:* From a small literature search, only a few empirical studies could be traced that describe work stress or burnout among dental hygienists. *Results:* Burnout incidence among dental hygienists appears to be relatively favourable, when compared with other professions, according to a 20-year-old study. On the contrary, in a recent study, it was described that one out of eight dental hygienists felt emotionally exhausted from work. Dental hygienists, when compared with other professionals, are relatively negative about the variety of tasks they find in their work. Factors associated with experienced work stress are, according to another study, musculoskeletal pain, combining work and private life, highly efficient organization of work, long working hours, working without assistant, difficult or demanding patients, lack of leisure time, lack of support by practice management and doubts about one's own capabilities. Some factors that may prevent burnout are: recognition of one's own work pressure, learning to unwind, time management and organization of work, realistic career expectancies, social skills, healthy life-style, peer-group contacts and pre-graduate reflection. *Conclusions:* There appears to be a lack of recent data on burnout among dental hygienists. Although some knowledge exists on work stressors, a thorough investigation on burnout incidence, risk factors, as well as job resources is needed.

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## Introduction

Psychological stress and burnout are recognized to be professional risk factors (1, 2). Among a wide range of professions, from hospital nurses, social workers, or physical therapists, to police officers or clergymen, risk factors for professional burnout have been the subject of research. In dentistry, especially among general dental practitioners, burnout risk is described regularly, and is a subject of research occasionally (3). Among dental hygienists, the subject of work stress and burnout has also been addressed occasionally, although empirical data are rather sparse (4). The purpose of this article is to summarize factors associated with work stress and burnout among dental hygienists, as described in the research literature. Furthermore, how to deal with work stressors in order to prevent burnout in the dental hygienist work environment will be discussed.

### Cause and effect?

With stress, cause and effect are not always clearly distinguishable. For example, do you feel work pressure from a full waiting room, or is it the other way around: does the waiting room press on you because you are not feeling well already? Therefore, it is not always easy to state that this or that is *the* stressful aspect in dental hygiene. Besides, what can be a burden to one dental hygienist may be a joy to another. Many dental hygienists do not have the feeling that they have seen it all with regard to technical aspects and manual skills, but are still happy to be able to work with people. On the contrary, quite a few dental hygienists still enjoy new achievements in technique and consider difficult treatments as a challenge, but seriously regret that behind each denture is a patient with all his wimps.

### From stress to burnout

Originally, stress has a physical meaning. It originates from material sciences and has to do with the pressure that can be put upon tissue without deforming it. When there is too much pressure, and the tissue gets damaged, we talk about strain. When this idea is brought into the context of the human psyche, it means that most of us are capable of enduring some pressure and then recover. When the pressure is going on for too long a time, or is happening too frequently, it will be difficult to recover to a normal, pleasant state of mind. The mental strain can be expressed by negative thoughts, depressive mood, irritated behaviour, social withdrawal, or an unhealthy

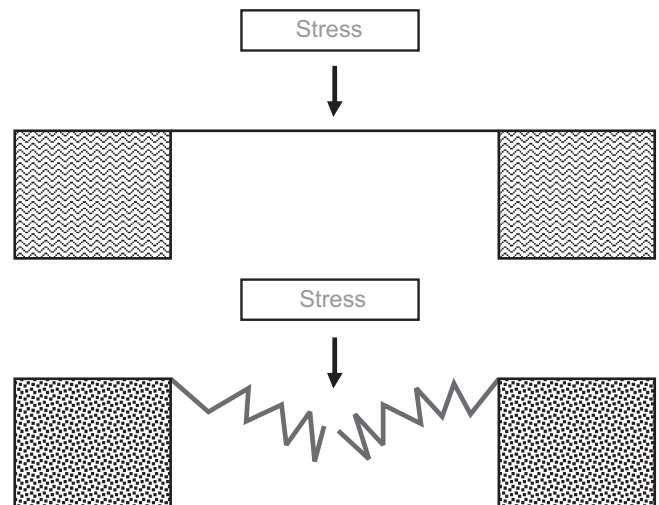


Fig 1. Stress as a stimulus.

life style, to mention some typical reactions. When stress has a chronic character, and it is work related, burnout comes into the picture (Fig. 1).

Essentially, burnout means that one is emotionally exhausted. Physical symptoms may very well show up in parallel, but emotional fatigue is the core. There is no more elasticity left to recover. With regard to patients, a dental hygienist experiences a growing need to keep distance, even turning into cynicism. A patient becomes more of a 'case' than a normal human being. To give a patient personal attention is too demanding for a dental hygienist who already fights with him/herself. Moreover, one may sense a diminishing personal accomplishment; this refers to the feeling that one's work has been better in earlier days. Too demanding tasks, technical or with regard to patient health education, are easily postponed.

Apart from describing the mechanisms of burnout, the purpose of this article is to summarize factors associated with work stress and burnout among dental hygienists, as described in the research literature.

## Methods

A search on PubMed, using the keyword 'dental hygienist burnout' resulted in nine references, with a time range of 1984 to 2001. From these references, two appeared to describe research on burnout among dental hygiene educators, and six described the subject without underlying original research. Only one reference was based upon empirical research data. Therefore, additional references that describe work stress and other factors associated with burnout, also including general dental practitioners were used.

Results

Burnout among dentists

From research among dentists, quite some information on work stress and burnout is available. In the Netherlands, a large-scale research project was conducted between 1995 and 2004 by the Department of Social Dentistry & Dental Health Education at the Academic Centre for Dentistry Amsterdam (ACTA) (5, 6). The background of this research was the observation by an insurance company – Movir Insurances – that dentists had the highest percentage of claims for disability for other than physical reasons among all insured professionals (7). With the insurance company’s financial support, during several surveys, a representative group of more than 1400 practising Dutch general dental practitioners answered questions about work stress, burnout and related aspects. In Table 1, some of the major work-related stressors as reported by dentists are summarized.

The remarkable thing about this list, which is not exhaustive, is that it does not only mention the things we associate with having to do too much in too little time. Routine of work and lack of career perspective, for example, are quite different from the pressures of a full waiting room. For dentists, this is a highly important observation: apparently, work stress does not only come forth from ‘overpressure’, it may also be caused by ‘underpressure’. Consider a dentist who has been working for about 15 years, has his practice running smoothly, is financially secure, and is now thinking: ‘Do I really have to do this for 20 more years? Do I always have to see these same faces and do the same treatments? Do I always have to be in this room?’ Too little challenge in work may frustrate a highly educated professional, as a dentist is.

It appeared that the mean level of burnout among dentists was not unfavourable when compared with other professions. The majority of dentists seemed to be able to cope with the daily stress in a positive way. However, one out of eight dentists was at a certain risk for burnout. When dentists were at a serious risk for burnout, it was difficult for them to recognize this and seek professional help. Three to four per cent of all

dentists continued practising while showing burnout levels usually only found among professionals ill at home (5). Those dentists who cope passively with new situations, those who feel little control over their situation, and those who experience little social support appeared to be most vulnerable for burnout. Therefore, it is not the fact that a dentist works in a solo-practice, or sees many patients, or works long hours that makes one prone to burnout. Much more important is the feeling that one has control over his situation.

Work stress and burnout among dental hygienists

From the literature available on this subject, which is not overwhelming in general, and when it comes to empirical research is absolutely sparse in particular, one classic article was chosen, and two recent ones to illustrate the subjects that emerge.

Two decades ago, in 1984, Deckard & Rountree published research findings on burnout among dental hygienists in the US (8). As literature indicates, it was the first research report on this subject among dental hygienists. Their main conclusion, based upon 111 respondents visiting the 1982 University of Missouri alumni meeting, was that 14% of the dental hygienists reported high levels of emotional exhaustion, and 15% reported high levels of depersonalization. These percentages could be interpreted as relatively favourable, when compared with other professions. When it comes to diminished personal accomplishment, also a burnout dimension, dental hygienists reported more unfavourable percentage, 29%. It appeared that no single respondent fell in the unfavourable level on all three dimensions. Dental hygienists, when compared with other professions, were relatively negative about the variety of tasks they found in their work.

More recently, career satisfaction among dental therapists, dental hygienists, and dental practioners in the UK was described (9). The data described were based upon 227 dental therapists (80% response), 2251 dental hygienists (64% response), and 970 dental practitioners (63% response). Mean level of job satisfaction on a 1 (no satisfaction) to 10 (complete satisfaction) scale among dental hygienists was 7.25 (SD 1.75). Among dental therapists mean level was 7.34 (SD 1.94), and among dental practioners 6.83 (SD 2.13). Both by comparing mean values and by comparing those who scored above or below 8 on the 10-point scale, dental practitioners reported lowest levels of career satisfaction. Among the dental hygienists, those aged ≥37 years were more likely to express high career satisfaction. Neither childcare responsibilities, nor part-time versus full-time working could explain differences in satisfaction score.

Table 1. Some important stressors among dentists (source: Gorter, (5))

Lack of career perspective
Work pressure
Negative influence of work on private life
Having to deal with difficult patients
Routine of work
Problems with dental staff
Restrictions by government or insurances

In another recent study, among 495 Swedish and 254 Australian dental hygienists (response rates 86 and 71%, respectively), health, mental well-being, and musculoskeletal disorders were investigated (4). Among the factors found to contribute to work stress are:

- musculoskeletal pain;
- combining work and private life;
- highly efficient organization of work: full working hours with no buffer time, patient reservations scheduled weeks ahead;
- long working hours: many hours a day, many days a week;
- working without assistant;
- difficult or demanding patients;
- lack of leisure time;
- lack of support by practice management;
- doubts about one's own capabilities.

The researchers also investigated why dental hygienists left the profession prematurely. The main reasons accounting for this were:

- monotonous work;
- lack of career perspective;
- health complaints such as musculoskeletal complaints.

Of the dental hygienists under research, 15% reported mental exhaustion (which is one of the core elements of burnout). Furthermore, 18% reported physical complaints, 16% reported chronic headaches, and 13% reported feelings of anxiety (note: these percentages may overlap).

### Job resources in dental hygiene

Whereas job-stress factors are those provoking professional burnout, those aspects of working as a dental hygienist that are experienced to be stimulating and satisfying should not be neglected. In organizational psychology, job rewards, or resources, are seen as potential buffers that help prevent burnout. Ramsay (10) described several job resources as reported by dental hygienists.

Being a dental hygienist, in most countries, offers the professional stability of *steady employment*. Dental hygiene is a rapidly expanding field, to be counted among the top 10 expansion categories. The growth potential of this kind of dental care offers *unlimited opportunities*. The professional enjoys much *flexibility* in the work environment: there is much variety, such as private practice, public health clinic, educational institution, commercial dental product firm, nursing home, or hospital setting. Moreover, in work conditions, flexibility can be found: full- or part-time working hours, evening openings, etc., offer many possibilities for combining work with other life

domains such as family responsibilities. *Monetary rewards* in dental hygiene are equal to many other health care professions. Furthermore, *recognition* by respect and prestige associated with being a highly skilled professional are immaterial rewards that cannot be expressed in financial terms. Although some dental hygienists are confronted with the routine of work, many enjoy the *variety* of tasks. Both working chairside and elsewhere in the office, a varied number of functions are performed. Finally, *personal satisfaction* can be found in working with both hands and mind, blending technical know-how with human-relations skills.

### What can be done to prevent burnout?

There is no formula that guarantees success in preventing burnout, unfortunately. On the contrary, when a dental hygienist neglects certain factors, one should not be surprised to find oneself somewhere on the road to burnout. Some of these factors are:

- *Recognition of one's work pressure*: too often a dental hygienist feels he/she fails when admitting the difficulty to cope with daily stress.
- *Learn to unwind*: while at work, there are plenty of opportunities to relax in between demanding situations, both physically and mentally. Out of work, leisure activities are great in distracting from daily work.
- *Time management and organization of work*: which dental hygienist had running a dental hygienist office as a part of the curriculum? Hardly any dental hygienist has. The good thing about this major stressor is that it is relatively easy to implement practical improvements.
- *Realistic career expectancies*: many may have the expectation to work as a free entrepreneur, and are very disappointed when they find out that there are governmental and insurance restrictions. Moreover, perfectionism in treatment is not always possible because of a patient's shortage of financial possibilities.
- *Social skills*: there is hardly any profession imaginable in which one works as intimate with a human being as a dental hygienist does. Patients need a stable dental hygienist, as some of them also do have unreasonable demands upon which a dental hygienist must react professionally. Therefore, training in social skills should not only be a core element of any dental hygienist's curriculum, but also be offered as part of post-graduate courses.
- *Healthy life-style*: Probably no advice is given as often as this one to prevent burnout. But, most likely no other advice is as useful. Get out of the office frequently, pay attention to eating

and drinking patterns, protect your nightly rest, bring some variety in daily routine, etc. Enjoy non-competitive physical activities.

– *Peer-group contacts*: In most work settings, one gets feedback from colleagues, either compliments or critical comments. A dental hygienist has to create these possibilities for him/herself. How many actually do this? You deserve compliments when you have done a difficult cleansing successfully, so make sure you get one! Everybody needs a little tap on the shoulder occasionally.

– *Dental hygiene schools*: Finally, dental hygiene schools could help in preventing burnout by not only focussing on technical aspects of the profession, but also by giving opportunities to young people to find out how they would like to work. Not everyone is made to work in a team, and not everyone is happy to be the manager of an office. So, moments to reflect upon which work environment may fit the person are needed as a part of the curriculum.

## Conclusion

Burnout is a serious risk among many professionals, especially among those who work with people. Therefore, one may expect that among dental hygienists burnout is also a pitfall. It appeared that, apart from a study 20 years ago, no thorough scientific investigation has been conducted on this topic. Although some information exists on work stressors, empirical research among dental hygienists in various coun-

tries is needed in order to answer questions on burnout incidence, factors of influence and factors preventing burnout risk.

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