

# Aspects of Contemporary Dental Practice

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## Abstract

Contemporary dentistry is a high-tech field that constantly improves treatment and prevention practices of dental problems. Dentistry is one of the most prestigious, demanded and highly paid specializations in the field of medicine. However, the evidence increasingly suggests that dental practitioners are exposed to sustainable occupational stress and often suffer from burnout syndrome. These negative aspects are closely related to the nature of the work itself – introduction of new technologies, long-term contact with a high number of patients and lack of patient-physician time. Lack of high standards of professional health lead to worsening of health status (mental and physical). Many of the existing problems physicians are facing are related to patients, while issues that patients are having are related to their subjective perception of health care. Therefore, in the binary doctor-patient relationship both parties should adapt to each other: physician as his/her profession requires and patient – as he/she has a problem treatable by the physician.

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**Keywords:** Dentist, patient, communication, occupational health

## Introduction

The profession of a medical doctor is one of the most human, dignified and essential professions in the world requiring highest sense of reasonability as doctors are responsible for saving people. Dentistry is among the most prestigious, demanded and highly paid specializations in the field of medicine. Technological advancements touch every field of medicine and dentistry is not an exception. Contemporary dentistry is a high-tech field that constantly improves treatment and prevention practices of dental problems.

In recent years, sustainable occupation stress and burnout syndrome have been documented among doctors. Emotional burnout syndrome (EBS) is defined as physical, emotional and mental burnout, including development negative self-esteem, negative attitude towards work, diminishing the

capacity to understand and feel compassion towards patients. In the initial stages of EBS, an individual exhibits long-term emotional distress and increased anxiety. At a later stage, a person starts to have an inadequate emotional reaction and his/her capacity to perform professional duties diminishes and then, his/her energy levels drop. These negative aspects are closely related to the nature of the work itself – introduction of new technologies, long-term contact with a high number of patients and lack of patient-physician time. In recent years, sustainable occupational stress and burnout syndrome have been documented among dentists (4). According to the American Association of Dentists, average life expectancy of dentists is lower than average of the general population in the USA. Morbidity with neurological disorders among dentists is 2.5 higher than among physicians in general. In addition, dentists are more likely to have depression and doctors of other professions. More the half of pediatric dentists have symptoms of professional stress.

Many of existing problems physicians are facing are related to patients, while issues that patients are having are related to their subjective perception of health care (13). Many patients are afraid of dental care since childhood. Tooth pain and visits to a dentist for those patients is a stressful experience. Those patients, while in pain, do not understand the severity of their condition and therefore, as they wait for their appointment, they experience growing feeling of anxiety, uncertainty, and fear. This is determined by the unpleasant memories of previous visits to a dentist. Patients experience not only emotional changes, but physiological changes as well such as: increased levels of adrenaline, changes in blood circulatory systems, etc. Mental health professionals name this condition as “dental phobia”. Different dental equipment and tests that are necessary for effective treatment impose a gap between a patient and a physician. Furthermore, means of mass communication also play an important role. Potential patients form their attitudes towards doctors of different professions based on this information. Very rarely do media portray positively dentists.

The relationship between a dentist and a patient is further stressed by the increased legislative knowledge of the patient. Therefore, work of dentists is associated with significant professional risks that are mostly due to emotional stress (3). Professional Associations worldwide evaluate the issues of patient-doctor relationship and try to mitigate worrying statistical data and prevent professional risks. First of all, stereotypes, expectations, and attitudes that patients seeking dental care hold should be altered. Since relationship “dentists-patient” has an impact on the effectiveness and the outcome of the treatment, the nature of this relationship is very important for a doctor who has his/her own practice or works for a commercial organization (11). Therefore, it is essential that the doctor has skills to

converse with the patient and provide effective treatment without diminishing patient's hopes and expectations in this process. Unfortunately, dentist training programs do not include topics related to stress management, behavioral skills, and conflict management skills (2). Modern day patient is not satisfied with the traditional passive role and he/she wants to be an active party in a patient-doctor relationship – wants to be heard and understood. If a clinician demonstrates that he/she understands a patient, level and anxiety of the patient drop. Studies in effective communication skills among clinicians demonstrate that level of emotional stress in the patient lowers if doctors give an empathic response to the patient's emotional reactions, provides the patient with understandable and clear information (15, 16). Review of randomized studies shows that if communication between a doctor and a patient is positive, the patient's attitude towards the decisions made in the process of treatment is also positive (17). Building design where a clinic is located also plays important role in formation of patient's attitudes and can support communication between a patient and a doctor. Color and finishing of walls play an important role (desirable, walls should be in light color), as well as decorative imitations of nature. Medical furniture and dental equipment should be convenient and should be in the same color as the doctor's room. Therapeutic qualities of music should not be forgotten. Music should be selected individually.

It should be noted that in the binary doctor-patient relationship both parties should adapt to each other: physician as his/her profession requires and patient – as he/she has a problem treatable by the physician (8). Patients who are satisfied with a physician's attitudes exhibit higher levels of mental well-being, have fewer complaints and are more realistic in evaluating their health condition and proposed methods of treatment. When a patient addresses the doctor, he/she has to describe related health complaints in details and share this information. One of the defining aspects of modern day medicine is that patients are increasingly willing to take an active and decisive role in decision-making related to their health, and this includes the selection of treatment options as well (10). Patients are confused by the medical terminology, some patients who are more prone to suspicious can actually interpret the lack of communication with the doctor as the sign that some of their health information is being withheld (9). Generally, this communication should have the following pattern: doctor asks the questions, patients provides the answer and a question for clarification to a doctor.

Stuart and his colleagues demonstrated that individualized relationship of a physician to a patient, detailed explanation of the cause, course and outcomes of the condition significantly lowers patient's anxiety and improve mental health of patients with chronic conditions (18). Result-oriented communication with the patient requires that patient is addressed by

his/her name and with a welcoming smile, a physician should be patient, a careful listener and encouraging. The doctor should convey all necessary information to a patient about his/her health, choice of options for treatment, potential risks of treatment and chances of recovery [11, 13]. In order to assist the patients to understand his/her condition and focus his/her attention on the necessary option of the treatment, the physician should employ not only verbal communication skills but also non-verbal communication skills and those are the inseparable part of the professional dialogue. Body language and facial expressions play a crucial role as they trigger desirable positive emotions from the patient and establish general positive attitude in through the course of treatment.

Higher morbidity among dentists then among physicians of different specialties (18) is linked to more stressful work schedule, monotonic nature of the work and emotional and intellectual workload (higher responsibility the results of his/her work and safety of the patient), complexity of working process (attention to the signs and their evaluation in the short time-frame). It should be noted that dentists spend over 50% of working time in a constraint work position. Visionary tension also plays an important role. It has a negative impact on health and other physical factors (local vibration, noise level, artificial lighting) (1, 3), potential allergic reactions (as a result of exposure to high level of chemicals) and risk of infection (in the process of treatment). Deficiency in occupational health safety standards result in negative outcomes and worsening of physical and mental well-being [6, 7]. Artificial working pose results in problems with a skeleton-muscular system and problems with muscles, nervous system, joints, spinal cord, etc. Some of the most common health problems include arthritis, scoliosis, others. Many dentists experience worsening of vision during their career. Working in a standing position also causes problems in a circulatory system including veins and others. Working with the drill machine causes vibratory diseases that are linked with the changes in a central nervous system. Similar cardiovascular conditions, such as cardiac failure, hypertension, and others are very common. Allergies are also very common, including dermal conditions in hands. Dentists are more prone to certain blood-borne infections due to exposure to cuts and blood and other bodily fluids and they are part of their occupational health hazard. Those include hepatitis B and C (20), which has been a cause of closure of 20 dental clinics in Georgia due to HCV risk (21).

## Conclusion

In order to mitigate those multiple occupational health hazards for dentists, it is important to develop prevention measures to create an optimal working environment and avoid development of those diseases. Occupational stress related to dentistry requires dentists to learn methods of stress management and mitigation. In order to maintain occupational health, working schedule should be amended. Complex preventive measures for occupational health hazards for dentist should include the development of rational work schedule and allocation of time for rest, strict adherence to occupational health standards, active lifestyle, massage, vision training and an overall reduction in mental and physical stress.

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