

## CHAPTER 3

# FACTORS IN THE DENTAL PROFESSION THAT CAUSE OCCUPATIONAL STRESS, ANXIETY AND BURNOUT

### 3.1 Introduction

The researcher, as a dentist, has personally experience of dentistry as a very stressful profession with many occupational stress factors. By definition, occupational stress implies that an individual perceives stress as a result of his/her profession. Roth *et al.* (2002: 43) are of the opinion that occupational stress is associated with many professions, including general dentistry. Hillman (1995: 50) claimed that stress-control is a major factor that contributes to the success of any dental practice and there is no single definition for stress, as people experience it in different ways. For this reason, Gorter *et al.* (1999: 144) reported that work-stress among dentists is not the same for all dentists. Work-stress, among dentists is determined as what is experienced as work-stress. The researcher supports this statement of Gorter *et al.* because what the researcher perceives as being very stressful in the dental profession, appears to be less stressful for some of his colleagues, and vice versa.

### 3.2 Definition of key concepts

#### 3.2.1 Dentist and Dentistry

The Concise Oxford Dictionary (1999: 383) defines “dentist” as follows: “A person who is qualified to treat the diseases and conditions that affect the teeth and gums”. The researcher, being a dentist himself, is of the opinion that this definition does not actually describe the complexity of the profession, and agrees more with the following definition: “A dentist is a person who has received a degree from an accredited school of dentistry and is licensed to practice dentistry

by a state board of dental examiners. Also called odontologist. Dentistry is: (1) That department of the healing arts which is concerned with the teeth, oral cavity, and associated structures, including the diagnosis and treatment of their diseases and the restoration of defective and missing tissue. (2) The work done by dentists, such as the creation of restorations, crowns, and bridges, and surgical procedures performed in and about the oral cavity (Dorland's Illustrated Medical Dictionary, 2000: 473). The researcher, as a dentist himself, defines dentistry as a complex profession which includes aspects of multiple other professions, such as general medicine and psychology. The researcher agrees that dentistry is that department of the healing arts which is concerned with the oral cavity, the teeth, and associated structures, which includes disciplines such as restorative dentistry, prosthodontics, community dentistry, orthodontics, periodontology, oral medicine, oral pathology, oral radiology and oral surgery. However, the researcher is of the opinion that the broad knowledge of a dentist, concerning the practice of general medicine and other disciplines should be included in definitions as defined by different authors.

### **3.2.2 Stress**

According to Van der Merwe (2004: 13), "stress is the physiological, emotional and behavioural response of a person seeking to adapt and adjust to internal and external pressures or demands. It is basically a physical survival response, leading to a fight or flight reaction". Stress can be anything that impairs the homeostasis (stability and balance) of the body. According to Bailliere's Nurses' Dictionary (2007: 370), stress can be any factor, mental or physical, the pressure of which can adversely affect the functioning of the body. The researcher defines stress among dentists as all those factors linked to the dental profession that result in behavioural changes by the dentist in order to cope.

### **3.2.3 Occupational stress**

According to the Dictionary of Psychology (2001: 480, 716), an occupation is “specifically, any activity or set of activities carried out for purposes of earning a living” and the term stress in this sense is an effect; it is the result of other occupational pressures. Any occupation can have a lot of occupational stressors. According to Bailliere’s Nurses’ Dictionary (2007: 371), a stressor is any life event or change that causes a person stress and which in some circumstances may precipitate distress or deterioration in mental health. These factors may be physical, psychological or psychosocial. For the purpose of this study, the researcher defines occupational stress as the physical or mental strain that an individual endures as a result of the work he/she does for a livelihood.

### **3.2.4 Burnout**

According to Bailliere’s Nurse’s Dictionary for nurses and health care workers (2007: 61), burnout is a term used to describe the result of chronic stress amongst workers, and commonly in members of the helping professions. It is characterized by chronic low energy, dissatisfaction and tension. According to Shelly *et al.* (1989: 9), burnout is a syndrome of emotional exhaustion, depersonalization, and reduced accomplishment that may occur among individuals who do “people work” of some kind.

### **3.2.5. Anxiety**

The Dictionary of Psychology (2001: 42) defines anxiety as “a vague unpleasant emotional state with qualities of apprehension, dread, distress and uneasiness”. Anxiety is distinguished from fear in the sense that it is objectless whereas fear assumes a specific feared object, person or event. According to Gillis (1986: 37), anxiety is not merely a by-product of stress, its biological purpose is to mobilize

physiological and psychological resources for survival so that a person can fight or flee.

### **3.3 Stress**

Van der Merwe (2004:14) describes two different kinds of stress, i.e. external and internal stress. External stress comes from outside and is associated with stress resulting from workplace, interpersonal conflicts, relationships and balancing career and family life. Internal stress comes from inside us and it results from our body's ability to respond to external stress, and is determined by a variety of factors such as nutritional status, habitual behaviours, attitudes, thoughts, self-image, anger, fear, anticipation, imagination, memory, health, fitness, emotions and the amount of sleep and rest. The researcher is of the opinion that a dentist experiences both external and internal stress factors. Dental practice provides a dentist with numerous external stressors such as workplace, interpersonal conflict, relationship and balance between family and career stressors. The stressful nature of dentistry, resulting from external stressors, causes a lot of internal stress in dentists. A dentist is human and his/her ability to handle external stress will also depend on his/her nutritional status, habitual behaviours, attitudes, thoughts, self-image, anger, fear, anticipation, imagination, memory, health, fitness, emotions and the amount of sleep and rest he/she gets that results in internal stress.

Gale (1998: 30) claimed that dentists believe their profession is stressful because of patient behaviours and economic pressures. They say that physical symptoms of stress are easily observed but emotional stress is difficult to recognise, therefore the dental practitioner should become aware of physical and emotional problems as a result of stress in himself as well as others.

The researcher supports the findings of Meyers and Meyers (2004: 89) who claimed that research on stress in the health professions has mainly focused on

medical doctors and nursing staff and that, although dentistry is recognised as being stressful, only limited studies on stress linked to dentists have been conducted. These authors claim that dentistry is more stressful than any other health care profession, because of the nature and working conditions of the dentist. O'Shea *et al.* (1984: 48) claimed that although most dentists identified dentistry as more stressful than other occupations, they believed that other dentists were under more stress than themselves and that although dentists use a variety of ways to cope with their stress, a great percentage do nothing to cope with stress. When capability to perform dental procedures and practice management are taken into account, the researcher believes that certain dentists experience more stress than others. The researcher also believes that several dentists have ways to cope with their stress. However, he strongly believes and has observed that some dentists utilize unhealthy methods, such as alcohol abuse to cope with such stress.

According to Meyers and Meyers (2004:89), statistics on cardiovascular disease, alcoholism, drug abuse, divorce rates and elevated rates of suicide, among dentists, are considered to be relatively high. They link this to the fact that the typical life of a dentist is very stressful. Goldberger and Breznitz (1993) cited in Roth *et al.* (2002: 43) define stress as “all that is unpleasant, noxious, or excessively demanding”, and Holt (1993) cited in Roth *et al.* (2002: 43) states that “the field of occupational stress is the study of those aspects of work that either have or threaten to have bad effects”.

The researcher is of the opinion that all dentists practising dentistry, do not necessarily find it unpleasant, but for a great number of dentists it is very demanding, and for some dentists it even leads to bad consequences. Rada and Johnson-Leong (2004: 788) reported that dentists encounter numerous sources of professional stress that may have a negative impact on their personal and professional lives. They say that dentists are prone to professional burnout, anxiety disorders and clinical depression because of the nature of clinical

practice, and the specific personality traits common among those who decide to pursue careers in dentistry. Linked to this Freeman, Main and Burke (1995: 214) claimed that dental practice is the most stressful of the health care professions and dentists experience more physical and mental ill health than other health professionals as a result of occupational stress. According to them, dentists perceive potential occupational stressors on a daily basis, therefore they should attempt to achieve a relatively stress-free working environment and assess their emotional responses to the practice of dentistry. Moller and Spangenberg (1996: 347) surveyed the literature on stress in dentistry and found that research in this field has rendered conflicting results. They also found that not many studies compare the work stress of dentists with that of other professionals, making it difficult to know whether the stresses of dentists are specific to dentistry. The researcher believes that the nature of dentistry makes it a very stressful profession. In all professions there are certain factors, linked to a specific profession, that are stressful. However, a dentist works all day long in close contact with scared and fearful people, nobody enjoys visiting a dentist. The researcher is of the opinion that the fear of patients is transferred in a form of stress to the dentist.

Rada and Johnson-Leong (2004: 788) stated in a practice management article that “How much stress a person can tolerate comfortably varies not only with the accumulative effect of the stressors, but also with such factors as personal health, amount of energy or fatigue, family situation and age. Stress tolerance usually decreases when a person is ill or has not had adequate amount of rest”. They are further of the opinion that major life events, such as death and divorce reduces one’s ability to tolerate stress, but past experience enhances peoples’ ability to manage stress and to develop coping skills. As a dentist, the researcher has personally experienced in his years of practice that the effect of stress accumulates and coping will depend largely on the dentist’s state of mind and how he physically feels at that time.

Van der Merwe (2004: 30) makes it clear that those most susceptible to stress are people who have, amongst others, also anxious thoughts or feelings and they feel anxious, fearful and are tense most of the time. The researcher believes that dentists are very susceptible to stress because he experienced that dentists are anxious, fearful and tense, especially when they have to perform difficult procedures on difficult patients, children, and physically handicapped patients, or when they are forced to perform procedures they are not comfortable in doing.

### **3.4 Burnout**

The researcher believes that burnout can easily occur in a dentist because of the nature of his/her work that involves close contact with patients on a daily basis and being under intense stress and pressure constantly. Van der Merwe (2004: 32) claimed that people who are under stress for a long time, who try to achieve too much, who are unable to turn down additional work, have high standards, do not like to delegate, provide emotional support constantly to others, and feel guilty when they spend time on themselves are at risk for burnout. The researcher is of the opinion that dentists fulfil many of these criteria. In a study to determine burnout and its causes in Finnish dentists, three aspects of burnout emerged, namely fatigue, loss of enjoyment of work, and hardening emotionally. Hardening implies that some dentists ceased to care greatly what happened to some of their patients (Murtomaa, Haavio-Mannila and Kandolin, 1990: 208). According to Shelly *et al.* (1989: 9-14) burnout is a syndrome of emotional exhaustion, depersonalization, and reduced accomplishment that may occur among individuals who do “people work” of some kind. The researcher is of the opinion that some dentists are emotionally exhausted, cease to enjoy what they are doing, and that they reach a state where they do not care much for their patients anymore. This can be contributed to burnout amongst these dentists.

Van der Merwe (2004:32) states that a person gets burntout when dealing continuously with a job or difficult situation. Hard driven, highly committed people

who try to accomplish too much in a short time, are most likely the candidates for burnout. Van der Merwe (2004: 32) describes the symptoms of burnout as loss of purpose, loss of motivation, detached from relationships, feeling tired, feeling that one is accomplishing less, and an increased tendency to think negatively. The researcher, as a dentist, has observed burnout symptoms as described by Van der Merwe (2004: 32) amongst several of his colleagues over the years. Most dentists are highly committed people, but unfortunately some try to achieve too much in too little time.

The researcher agrees with Van der Merwe (2004: 33) that dentists can avoid burnout by doing the following:

- They must make sure that they are still enjoying doing dentistry.
- They must have fun, pleasure and relaxation.
- They must get plenty of restful sleep and relaxation.
- They must learn to practice stress management techniques.
- They must learn to say “no”.
- They must constantly re-evaluate their goals and decide on what is important to appreciate life.
- They must reduce their commitments.
- They must follow a healthy diet.
- They must learn to delegate.
- They must exercise moderately, but regularly, by doing exercise that they enjoy doing.

### **3.5 Factors in the dental profession that cause occupational stress**

Van der Merwe (2004: 16) describes stress in terms of mild, moderate and severe stress. The mild or brief type of stress is perceived in situations such as missing a bus, braking hard to prevent an accident, presenting a business proposal or losing a movie ticket. The moderate type of stress is found in

situations, such as working late once in a while to meet a deadline, preparing for a wedding and temporary absence of a child or partner. The severe, chronic, long term types of stress are found in situations such as divorce, death of a spouse or child, work stress (always working late and under pressure with little job satisfaction), constant feeling of fear and financial difficulties. The researcher believes that dentists also perceive these three types of stress. Mild stressors are: coming late once in a while, missing an appointment with a patient once in a while, his/her dental assistant being absent or late now and then, and a patient not turning up for a dental appointment. The researcher has experienced moderate dental stressors as working late once in a while, being called out on weekend days and public holidays, and doing advanced surgical procedures in a theatre using general anaesthetic. Severe, chronic and long term stressors, also experienced by the researcher, include financial issues, patients' demands and expectations, close contact with patients, the fear a patient has for you as a dentist, constant long working hours, and the fear of litigation. Subsequently, a description of sources of stress for dentists is discussed as reported by different authors:

### **3.5.1 Economic stressors**

According to Mazey (1994: 13), stressors are particular to the individual but there are potential stress factors in each dental office, such as economic conditions, difficult patients, inherent personality traits and physical constraints. The researcher agrees that stress is a personal matter, what stresses one person does not necessarily stress another. However, there are stress factors in each dental surgery, such as economic conditions, difficult patients, inherent personality traits and physical constraints that have the potential to cause a dentist stress. Moller and Spangenberg (1996: 347) from the University of Stellenbosch investigated stress and coping amongst South African dentists in private practice and found that about 40% of the respondents reported extremely high stress levels, irrespective of where they were employed. Financial issues

were reported to be the most stressful stressor, followed by dealing with patients. The researcher, as a dentist, is aware that financial issues can be a major stressor for dentists because running a practice not only has high overhead costs, but a dentist also has to provide for himself and his family.

### **3.5.2 Practice management and stress**

The researcher agrees with O'Shea, Corah and Ayer (1984: 48) that a dentist's stress is derived from the following sources: patient's compliance, pain and anxiety, interpersonal relations, the physical strain of work, economic pressures, third party constraints and the strain of seeking ideal results. All of these factors are linked to good practice management. The dentist has to motivate a patient to be compliant and he has to inform a patient that ideal results are not always possible. A dentist's practice has to be organized in such a way that a patient feels comfortable to visit him, the physical strain of the work is reduced, economic pressures are limited and third party constraints are minimal. Wilson *et al.* (1998: 499) found that factors related to time management were, at that time, rated as major job stressors by dentists. Moller and Spangenberg (1996: 347) reported that dentists have difficulty in handling rising costs and have problems with medical aid schemes. The researcher is of the opinion that time management is an important factor in any dental practice. The researcher has experienced that once one runs late, with one patient, the time schedule for the rest of one's day is interrupted.

Gorter, Eijkman and Te Brake (2001: 54) are of the opinion that patient related aspects as well as external interference by government and insurance companies are considered the most stressful by dentists. The researcher fully agrees with this because legislation and the lack of payment from insurance companies places a big burden upon dentists. Moller and Spangenberg (1996: 347) reported that stressors which posed few coping problems, among South African dentists, were staff related problems, difficulties in keeping to

appointment schedules, working under constant time pressure, repetitive nature of the work, feeling isolated and the possibility of contracting viral disease. In the researcher's personal experience these factors have caused him stress but not as much as financial issues and working with patients (dental procedures).

Moore and Brodsgaard (2001: 73) reported that nearly 60% of 216 Danish private dentists perceived dentistry as more stressful than other professions. They ranked the most intense stressors as running behind schedule, causing pain, heavy work load, patients being late and anxious patients. They found that a patient's fear of pain, trauma in dental treatment, general psychological problems, shame about dental status, and economic excuses contributed to perceived stress among dentists. They concluded that some dentists appear to require more knowledge about dental anxiety and managing their own stress. The researcher agrees that dentistry is more stressful than other professions. The reason for this is that a dentist has to work all day long with fearful patients, nobody enjoys visiting a dentist and the fear of patients is directly transferred to the dentist. Humphris and Cooper (1998: 404) identified new stressors for general dental practitioners by qualitatively interviewing ten general dental practitioners. They identified new stressors in the dental profession for the period 1986-1996, that were not included in original classifications of dental work pressure. These new stressors included system changes in running a practice, patient expectations that were rising, aggression exhibited by some patients, the risk of cross-infection, and litigation. They found that the uncertainty in the feature of the organization of dental care provision was the most important new pressure of work that originated in that time. The researcher has also observed this phenomenon in South Africa and attributes this to the oversupply of dentists and fewer job opportunities. System changes, problems with medical aids, rising costs and the risk of HIV infection contribute a great deal to stress among South African dentists.

### 3.5.3 Job satisfaction and stress

Gilmour *et al.* (2005: 701) studied job satisfaction among general dental practitioners and came to the conclusion that stress was the factor that mostly contributed to job dissatisfaction among dentists. Moller and Spangenberg (1996: 347) investigated stress and coping amongst South African dentists and found that limited future career options were intense stressors among dentists. Shugars *et al.* (1990: 661) reported that the most satisfied dentists were older, reported higher income, attended more continuing education, and employed more dental auxiliaries than dentists who were the most dissatisfied. According to them, job satisfaction as a dentist can be linked to respect received as being a dentist, the actual process of delivering care, income derived from dentistry, relationship with patients, and reduced levels of job related stress. Linked to this Logan *et al.* (1997: 39) are of the opinion that every career has the potential for producing personal satisfaction and dissatisfaction, which is dependent on what an individual values in life. They found that variables that best predicted work satisfaction among dentists, were income, respect and patient relations. Variables that best predicted dentists' overall quality of life were income, professional time, and personal time. Although more than a half of the dentists that Logan *et al.* (1997: 39) surveyed were satisfied with their career, they were dissatisfied with their level of stress, professional environment (threat of malpractice litigation), and amount of personal time. The researcher is of the opinion that many dentists are not satisfied with their jobs and this can be attributed to the fact that dentistry is such a stressful profession. However, the researcher has also known dentists who actually love dentistry and have extreme job satisfaction. These dentists have a good income, respect from others and a very good relationship with their patients.

### **3.5.4 Dental procedures and stress, as well as overall stress**

Bourassa and Baylard (1994: 65) indicated that stress is inherently present in the dental practice. They claimed that, apart from office organization and interpersonal relationships, stress is also related to dental procedures. Work stress forms an integral part of the overall stress that a dentist perceives in his lifetime. Meyers and Meyers (2004: 89) found that there are many factors that can cause occupational or job related stress among dentists, and to highlight the stressful nature of a dentist's work, they conducted a study to investigate overall stress, work stress and health in general dental practitioners. They found that work stress contributed highly to overall stress in a dentist's life. The researcher has personally experienced that in his job as a dentist, especially performing very difficult dental procedures, has contributed a lot to the overall stress in his life. The researcher is also of the opinion that a lack of updated knowledge (not attending continuous professional development courses) contributes a lot to the overall stress of a dentist.

### **3.5.5 Age and stress**

Age differences may affect the stress patterns of dentists. Brand and Chalmers conducted a study in 1990 where stress levels of dentists over the age of 54 were compared with a group of dentists below the age of 35 and found that the older dentists reported lower levels of stress. This contradicted the general belief that getting older is accompanied by adaptation problems to life changes and more stress. Their findings actually indicated that older dentists have favourable adaptation to life changes and lower stress levels. However, they found that certain stress factors, such as finance and patient management affected younger and older dentists more or less equally, which suggests that these issues are global rather than specific for dentistry (Brand and Chalmers, 1990: 461). The researcher agrees that older dentists are more satisfied with their jobs than younger dentists and he attributes it to the fact that older dentists have learned to

overcome the pitfalls of dental practice and have learned to cope with dental stress in a healthy manner.

### **3.5.6 Working environment and stress**

The researcher is of the opinion that the stress levels of dentists working in private practice are higher than those working in a more protected environment ,such as public hospitals and dental schools. The researcher has worked as a dentist in both the private sector and the public sector, and personally experienced that the private practice caused him more stress than working for the government sector. However, Moller and Spangenberg (1996: 347) reported that 40% of dentists' perceive extremely high stress levels, irrespective of type of employment.

### **3.5.7 Personality (Individual aspects) and stress**

According to Weller (2007: 300), personality is the sum total of heredity and inborn tendencies, which influences from environment and education, which forms the mental make-up of a person and influences attitude to life. The researcher is of the opinion that one's attitude to life include one's ability to cope with stress. For this reason stress can be individualized. What is stressful for one person may not necessarily be stressful for another person. The researcher has personally experienced that what is stressful for him, in the dental profession, is not always stressful for some of his colleagues.

### **3.5.8 General health and stress**

The researcher is of the opinion that one's health determines how much stress one can tolerate. Rada and Johnson-Leong (2004: 788) stated in a practice management article that "How much stress a person can tolerate comfortably varies not only with the accumulative effect of the stressors, but also with such

factors as personal health, amount of energy or fatigue, family situation and age. Stress tolerance usually decreases when a person is ill or has not had adequate amount of rest". They are further of the opinion that major life events, such as death and divorce reduce one's ability to tolerate stress, but past experience enhances peoples' ability to manage stress and to develop coping skills.

### **3.6 Management of stress**

The researcher agrees with Lewis *et al.* (1994: 183) that stress management techniques are coping skills that include cognitive and behavioural components such as:

- Taking one thing at a time
- Physical exercise to work your tension off
- Don't try to be a perfectionist
- Be humoristic
- Seek help when needed
- Make time for yourself
- Have hobbies
- Strive for moderation
- Sleep correctly and eat healthy
- Balance the costs and rewards of life

Forrest (1978: 361-71) suggested that dentists need to identify factors that cause stress and strain, and must take measures to eliminate, or at least reduce, the harmful effects of stress and strain on their health and emotions. Linked to what Forrest said, Katz (1986: 29-36) found that the stress in the dental working environment is a topic of great importance, and the effective reduction of stress in the dental environment has emotional and health benefits for the dentist and everyone else involved.

The researcher is of the opinion that coping skills for stress management can be quite effective if they are acquired correctly. The dentist must identify what causes him/her stress to eliminate or at least reduce the harmful effects of such stress by developing healthy coping mechanisms. Once a dentist has identified the high risk situations he/she can learn to adapt to these situations in a forthright manner or simply avoid them.

A diversity of factors that cause occupational stress among dentists, has been described. The researcher believes that a dentists' stress can derive from many stressors but agrees, with other authors, that dentists stress can be as a result of patients' non-compliance, anxiety of patients, interpersonal relations with patients, the physical strain of the work, financial pressures, fear of litigation, and striving for job perfection in order to keep patients happy.

The researcher, being a dentist, believes that there is much uncertainty about what actually causes occupational stress among dentists. He strongly believes that even dentists themselves are uncertain of what causes them the most stress, and think that it is a combination of multiple factors such as treating patients on the one side and managing their practices on the other side, with their personal and family life in the middle. If a balance does not exist, and correct coping mechanisms are not in place, it results in consequences which are not always very pleasant.

### **3.7 Summary**

External stress comes from outside us and internal stress comes from inside us. Internal stress results from our body's ability to respond to external stress. The stressful nature of dentistry, resulting from external stressors, causes a lot of internal stress in dentists. The physical symptoms of stress are easily observed but emotional stress is difficult to recognize.

The researcher believes that burnout can easily occur in dentists because of the nature of their work. Hard driven, highly committed people who try to accomplish too much in a short time are the most likely candidates for burnout.

Although dentistry is recognized as being stressful, only limited studies on stress linked to dentists have been conducted. Not many studies compare the work stress of dentists with that of other health professionals, making it difficult to know whether the stresses of dentists are specific to dentistry. There are mild, moderate and severe types of stress. The mild or brief type of stress is perceived in situations, such as missing a bus, the moderate type of stress is found in situations, such as working late once in a while to meet a deadline, the severe, chronic, long term types of stress are found in situations, such as divorce or death. The researcher is of the opinion that a dentist also perceives these three types of stress.

Stressors are particular to the individual but there are potential stress factors in each dental office, such as economic conditions, difficult patients, inherent personality traits and physical constraints. A dentist's stress is derived from the following sources: patients' compliance, pain and anxiety, interpersonal relations, the physical strain of work, economic pressures, third party constraints, the strain of seeking ideal results, time management, rising costs, problems with medical aid schemes, patient related aspects, external interference by government and insurance companies, staff related problems, difficulties in keeping to appointment schedules, working under constant time pressure, repetitive nature of the work, feeling isolated, the possibility of contracting viral disease, system changes in running a practice, patient expectations that are rising, aggression exhibited by some patients, the risk of cross-infection, and litigation.

The most satisfied dentists are older, report higher income, attend more continuing education, and employs more dental auxiliaries than dentists who are the most dissatisfied. Every career has the potential for producing personal

satisfaction and dissatisfaction which is dependent on what an individual values in life. Most dentists are satisfied with their career, but some are dissatisfied with their level of stress, professional environment (threat of malpractice litigation), and amount of personal time. Apart from office organization and interpersonal relationships, stress is also related to dental procedures. Work stress forms an integral part of the overall stress that a dentist perceives in his lifetime. Age differences may affect the stress patterns of dentists where older dentists have reported lower levels of stress.

As seen above, a diversity of factors can cause occupational stress among dentists. The researcher believes that a dentist's stress can derive from many stressors but agrees, with other authors, that dentists' stress can be as a result of patients' non-compliance, anxiety of patients, interpersonal relations with patients, the physical strain of the work, financial pressures, fear of litigation, and striving for job perfection in order to keep patients happy.

## CHAPTER 4

### THE PHENOMENON OF ALCOHOL CONSUMPTION AND ALCOHOL RELATED PROBLEMS AMONG DENTISTS

#### 4.1 Introduction

Van der Merwe (2004: 21) states that the inability to cope with stress often leads to increased alcohol consumption, use of tranquillizers, use of recreational drugs and smoking in order to relieve exhaustion, anxiety and the pressures of life. Van der Merwe (2004: 21) is of the opinion that alcohol initially mimics the body's stress reaction but eventually causes depression. Alcohol may give a short term relief of tension (it may appear that it does), but in the long term it causes a change in behaviour and dependency that will in return weaken the ability to cope with stress considerably.

The researcher strongly believes that some dentists abuse alcohol as a coping mechanism, in order to cope with the stress of their profession. He also strongly believes that some dentists develop alcohol related problems that have a direct or indirect negative influence on their occupation, health and personal lives. Kenna and Wood (2004: 107) reported that substance related impairment among health care workers, including dentists, has been recognized by several professional organizations. They found that, when compared to the general population, health care professionals consume less alcohol. However, their findings suggested that dentists use significantly more alcohol than most other groups of health care professionals, and that a greater percentage of dentists reported lifetime minor dysfunctions, as a result of alcohol use, than any other health care group. The data that they obtained suggested that alcohol use by dentists may be independent of income and related more to the nature of the profession. Moller and Spangenberg (1996: 347) reported that drug use, in general, is low amongst dentists but they use alcohol in significant amounts. The

researcher believes that dentists, in general, appear to consume more alcohol than other health care professionals. The researcher socializes a lot with health professionals and has observed that some of his colleagues consume more alcohol than other health professionals.

## **4.2 Definition of key concepts**

### **4.2.1 Alcohol consumption**

The Concise Oxford Dictionary (1999: 306) defines the term *consumption* as “the action or process of consuming, an amount consumed”. Dorland’s Illustrated Medical Dictionary (2000: 397) defines consumption as “the act of consuming, or the process of being consumed”. The researcher is of the opinion that some dentists consume alcohol, to relieve the stress and strain due to their profession.

For the purpose of this study *alcohol consumption* is defined as the quantity and frequent use or abuse of alcohol for reasons, such as a way of socializing, relaxing, calming effect, relief of depression, relief of frustration, relief of exhaustion, relief of emotional pain and stress, relief of loneliness, relief of anxiety, giving self-confidence, relief of work stress, and relief of physical pain and problems.

### **4.2.2 Alcohol abuse**

The Dictionary of Psychology (2001: 21) defines *alcohol abuse* as a general label for any pathological syndrome associated with excessive alcohol use. A variety of characteristics is found in serious cases, including a daily need for alcohol, continuing consumption in the face of physical disorders, which are exacerbated by alcohol blackouts or periods of amnesia, extended alcoholic binges that last several days, repeated unsuccessful attempts to quit drinking, and overall mental and emotional deterioration. The researcher defines *alcohol abuse* as the

repeated intake of alcohol, despite the physical, emotional, social and psychological effects that may result, in order to cope with stress and anxiety. For the purpose of this study, *alcohol abuse* refers to the repeated intake of alcohol, to reduce the stress and anxiety of a dentist, in order to cope with his/her profession.

### **4.3 Alcohol consumption among dentists**

The researcher found that there is not much literature available on the actual quantity and frequency of alcohol consumption among dentists. Newbury-Birch, Lowry and Kamali (2002: 646) claimed that research on alcohol consumption among dentists, mostly included dental students, and Kenna and Wood (2004: 107), while conducting a study to determine alcohol consumption among health care professionals including dentists, found that most of the research on alcohol consumption among dentists has been based on review articles, retrospective analysis of treatment seeking dentists, retrospective analysis of professionally censured dentists, or qualitative studies. Underwood, Fox and Nixon (2003: 265) claimed that research on alcohol consumption among dentists mostly involved early career dental practitioners. The researcher agrees that, although dentistry is described as a stressful profession, research concerning alcohol consumption among health care workers, seldom involves dentists.

In the United Kingdom, in a survey among undergraduate dental students, it was found that 82% of male and 90% of female undergraduate dental students consumed alcohol. Of these, 63% of males and 42% of females consumed alcohol in excess of the sensible weekly amount which the authors considered to be 14 alcoholic drinks for females and 21 for males (Underwood and Fox, 2000: 314). Rankin and Harris (1990: 2) found that most dentists used alcohol and/or drugs in moderation, but male and female dentists were more likely to use alcohol than any other drugs. Leggat *et al.* (2001: 348) reported that most dentists consumed alcohol on a weekly basis. The researcher believes that the

habit of alcohol consumption among dentists, already begins at dental school. Therefore, he conducted a study among dental students at the School of Dentistry of the University of Limpopo in 2006, to investigate alcohol use among dental students to relieve stress caused by the dental curriculum. It was found that undergraduate dental students experience a great deal of stress linked to their dental studies and a significant number of dental students consume alcohol in sensible amounts or in excessive quantities in an attempt to relieve such stress. Dysfunction as a result of alcohol use was also significantly reported of where getting behind in studies was the most significant effect.

Thomas, Randall and Carrigan (2003: 1937) claimed that several hypotheses exist to account for the higher than normal rate of alcoholism in an individual with high trait anxiety because anxious people use alcohol to cope with their anxiety, and most of these hypotheses claim that the use of alcohol to reduce anxiety may increase the risk of alcohol dependency in vulnerable people. The researcher believes that dentistry is a high trait anxiety occupation and that some dentists consume alcohol to reduce their anxiety.

The researcher is of the opinion that alcohol is the drug of choice among dentists because alcohol is easily available. To obtain alcohol, a dentist does not need to abuse his authority to prescribe mood altering drugs, to obtain it. However, the researcher believes that some dentists prescribe tranquillizers for themselves, because tranquillizers have the same mood altering effect as alcohol, but is less noticeable. Hedge (1982) cited in Kenna and Wood (2004: 107) reported that, as for the population as a whole, alcohol is the drug of choice for dentists, and Kenna and Wood (2005: 1023) are of the opinion that as in the rest of society, alcohol abuse appears to be the most notable substance use among dentists but there is little evidence suggesting that dentists are at a greater risk of developing alcohol related problems than the general public. However, they found in a previous study (Kenna and Wood, 2004: 107) that although health professionals appear to drink less than the general population, dentists consume more alcohol

than other health professionals. They claimed that although twice as many physicians as dentists reported to be heavy alcohol users, a great number of dentists reported heavy episodic alcohol use. Heavy episodic alcohol use refers to drinking five or more drinks at least once during the month, and heavy alcohol use refers to drinking five or more alcohol drinks at least at five occasions per month (National Survey on Drug Use and Health, 2003).

The researcher, after being in conversation with an expert, the late Dr. S. de Miranda during the period 1994-1996 from SANCA, came to the conclusion that more physicians are admitted for treatment of chemical dependency than dentists. However, more dentists are admitted for alcoholism than for drug addiction.

In a study that was conducted among 312 South-Australian dentists in 2003, it was found that hazardous levels of alcohol consumption were significantly present among South-Australian dentists. Winwood, Winefield and Lushington, (2003: 102). found that hazardous alcohol consumption, among South-Australian dentists, was about 2-4 times higher than the normative South Australian population, particularly among males and rural dentists. These authors claimed that although work stress was reported as significant by dentists, existing personal vulnerability factors may also be predictors of hazardous alcohol consumption. The researcher is of the opinion that some dentists are addicted to alcohol, but are not sure if their profession alone contributed to it. Some dentists, who are alcohol dependant, may be exposed to other vulnerability factors to develop alcoholism, such as genetic, biographical, social and environmental factors. However, even in these cases the researcher believes that occupational stress plays a major role in the maladaptive use of alcohol among dentists.

Moller and Spangenberg (1996: 347) investigated stress and coping with stress among South African dentists and found that the number of dentists using psychoactive substances was relatively low, but a fairly high number of dentists

took analgesics on a regular basis. However, alcohol consumption was reported fairly high. Forty-eight percent of the private practitioners and 41, 86% of the non-private practitioners took more than two beers, or two glasses of wine or two tots of spirits on a regular basis ranging from at least once daily to once weekly. They found that the dentists who used anti-depressants and analgesics on a regular basis had much higher stress levels than the dentists who regularly used alcohol and benzodiazepines or beta-blockers. However, the stress levels of dentists who regularly used alcohol were above the 60<sup>th</sup> percentile. They also found that rising costs was the most prevalent stressor among the group of dentists who used substances, except for the group of dentists who used anti-depressants, where time pressure was the most stressful experience followed by rising costs. In their study, they also found that dentists using alcohol, analgesics, benzodiazepines or beta-blockers on a regular basis experienced financial stressors most intensely (Moller and Spangenberg, 1996: 347).

As dentists in private practice are also business owners, the drive to be a successful businessman calls for a substantial amount of social interactions that may involve alcohol use (Kenna and Wood, 2004: 107). Hughes *et al.* (1992: 2333) and Mc Auliffe *et al.* (1991: 177) claimed that dentists consume more alcohol because of their income and socio-economic status. Kessler *et al.* (1994) cited in Kenna and Wood (2004: 107) reported that there is a relationship between increased income and frequency of drinking.

The researcher believes that dentists consume alcohol for a variety of reasons and for the majority of dentists it means no harm. The researcher also believes that a number of dentists consume alcohol for social reasons, but in the process they get addicted to alcohol. However, the researcher strongly believes that a number of dentists consume alcohol as a measure of stress relief linked to their profession. At first this measure may be beneficial, but because of tolerance, more and more alcohol has to be consumed to obtain the same calming and

relaxing effect, that results from alcohol use. Unfortunately, for a number of dentists, this results in alcohol dependency with devastating consequences.

#### **4.4 Alcohol related problems among dentists**

When it comes to alcohol abuse, what is applicable to the general population is also applicable to the dentist. Lewis, Dana and Blevins (1994: 2) define substance abuse as follows, “If a client’s use of alcohol or another mood altering drug has undesired effects on his or her life or on the lives of others. The negative effects of the substance may involve impairment of physiological, psychological, social or occupational functioning”. They further claim that “Of all the substances likely to cause problems among clients, alcohol is the most common”. In the current study the “client” refers to the dentist.

It has been reported that there are many difficulties that dentists encounter when their alcohol or drug dependency causes them to violate prescriptions of dental governing authorities (Lyon, 1996: 69). As far back as 1978, Forrest claimed that dentistry is both a rewarding and demanding profession and dentists’ well-being depends on how successfully they keep the rewards and demands of their profession in proper perspective (Forrest 1978: 361). Clarno (1986: 45) focused on the consequences of alcoholism and drug addiction within the dental profession and found that dentists who suffer from these diseases can be identified through certain behaviours (pattern of behaviours) that have personal, vocational and social consequences. These consequences are progressive and potentially fatal. He is of the opinion that colleagues, family, friends, other professionals and office personnel, perpetuates the illness of such a dentist because of denial. When denial is overcome, these people will no longer, by means of enabling, perpetuate the illness and such a dentist will be forced to seek help, voluntarily or involuntarily.

The researcher personally believes that close relatives, especially spouses of dentists with hazardous alcohol-drinking habits that result in consequences, do not report such dentists to the Health Professions Council of South Africa (HPCSA). The spouse of a dentist with an alcohol drinking problem will not seek help from the HPCSA, because of fear that the dentist will be deregistered, with financial implications for that family. However, a national strategy for managing impairment in students and practitioners registered with the Council, was compiled by a work group on impairment in students and practitioners of medicine and dentistry in 1996. This work group resolved that the Medical, Dental and Supplementary Health Service Professions Act, 1974 (Act No. 56 of 1974) be appropriately amended to clearly distinguish between offences of an improper and disgraceful nature, and impairment on the part of registered persons. Procedures for dealing with impaired students and practitioners, registered with the Council, should differ from procedures dealing with practitioners and students, registered with the Council, who committed offences of improper and disgraceful nature (The Interim National Medical and Dental Council of SA, 1996: 3). The researcher acknowledges that the intention of HPCSA is not to harm a dentist who is reported for alcohol abuse impairment. They do a thorough investigation and on the grounds of their findings will impose certain practice conditions on such a dental practitioner. These practice conditions are permanent or temporary suspension from practising as a dentist, practicing under supervision with progress reporting to the Council, compulsory counselling with progress reporting to the Council and restrictions on prescription writing depending on the degree of impairment. The researcher is of the opinion that, in the past, some South African dentists have been reported to the Health Professions Council of South Africa (HPCSA) for alcohol use/abuse problems. He subsequently arranged a meeting with Mr. T.C. Molokomme, a member of the Health Committee of the HPCSA to confirm this. According to Molokomme (2007), for the past four years, seven dental practitioners per year have been reported to the Council for alcohol related problems, giving a total of 28 for the last four years.

Giannandria (1996: 73) reported that the most common impairments found among dentists were cognitive impairment, physical disability, chemical dependency, other addictions and mental illness. However, the most frequently cited cause for impairment among dentists was chemical dependence, and 70-90% of dentists that were reported to state rehabilitation committees, were reported for chemical dependency. Kenna and Wood (2004: 107) identified alcohol related problems which they described as minor and major alcohol related dysfunctions among health care workers and found that a greater percentage of dentists reported lifetime minor dysfunctions than any other health care group. The minor alcohol related dysfunctions among dentists that they identified, were getting behind in work, calling in sick or late, having trouble in getting along with people and worrying about their alcohol drinking habits. They also found that a significant number of dentists reported more than one of these minor dysfunctions. The major alcohol related dysfunctions they investigated were suicide ideation, accidents, providing less than best patient care and seeing a health professional because of their alcohol drinking habits. A significant number of dentists reported positive on these questions and some reported more than one of these major dysfunctions. What is very significant is the fact that they found that a greater number of dentists reported that they have been involved in some type of accident, or seen a counsellor as a result of their drinking, than any of the other health care groups.

The researcher is of the opinion that problems arising from alcohol use, relating to the dentist, can to a certain extent be generalized to the general population, e.g. motor car accidents, provide less than best working potential, absenteeism and suicide. However, the researcher strongly believes that because of the nature of dentistry i.e. close contact with patients, working in a small confined space (oral cavity), patient's fear of a dentist, and a dentist's fear of litigation, it is impossible for a dentist to work without damaging a patient in some way, or getting into trouble somehow, once he has reached the stage of alcohol dependency, which is defined by withdrawal symptoms.

Alexander (2001: 786) found that there is little valid evidence that dentists are more prone to suicide than the general population, however, female dentists may be more vulnerable. Bers (1980), cited in Alexander (2001: 786), said that the contemporary statistical origin of the belief that dentists commit suicide at a higher rate than the general population appeared to have occurred in the 1960s. The researcher, himself, is not sure if dentists are prone to suicide. However, the researcher personally knew two dentists that committed suicide. The one dentist experienced extreme stress due to his profession and eventually committed suicide. The other dentist used alcohol in excessive amounts over many years and eventually became so depressed that he committed suicide.

#### **4.5 Summary**

The researcher found that there is not much literature available on the actual quantity and frequency of alcohol consumption among dentists, and that research on alcohol consumption, among dentists, mostly included dental students and early career dental practitioners. Most of the research on alcohol consumption among dentists has been based on review articles, retrospective analysis of treatment seeking dentists, retrospective analysis of professionally censured dentists, or qualitative studies.

Research found that most dentists use alcohol and/or drugs in moderation, but male and female dentists were more likely to use alcohol than any other drugs. Dentistry is a high trait anxiety occupation and some dentists consume alcohol to reduce their anxiety, and alcohol is also the drug of choice among dentists because alcohol is easily available. However, some dentists take tranquillizers, because tranquillizers have the same mood altering effect as alcohol, but is less noticeable.

The literature indicated that health professionals appear to drink less than the general population, but dentists consume more alcohol than other health

professionals. Work stress is significantly reported by dentists, but existing personal vulnerability factors may also be predictors of hazardous alcohol consumption among dentists. Because dentists in private practice are also business owners, the drive to be a successful businessman calls for a substantial amount of social interactions that may involve alcohol use.

The negative effects of alcohol use may involve impairment of physiological, psychological, social or occupational functioning. It has been reported that alcoholism and drug addiction within the dental profession are progressive and potentially fatal. Procedures for dealing with impaired students and practitioners registered with the Council, differ from procedures dealing with practitioners and students registered with the Council, who have committed offences of improper and disgraceful nature.

A greater percentage of dentists have reported lifetime minor dysfunctions, such as getting behind in work, calling in sick or late, having trouble in getting along with people and worrying about their alcohol drinking habits than any other health care group. Major alcohol related dysfunctions that have been identified, among dentists, are suicide ideation, accidents, providing less than best patient care and seeing a health professional because of their alcohol drinking habits. It was found that there is little valid evidence that dentists are more prone to suicide than the general population. The contemporary statistical origin of the belief that dentists commit suicide, at a higher rate than the general population, appeared to have occurred in the 1960s.

The researcher is of the opinion that problems arising from alcohol use, relating to the dentist, can to a certain extent be generalized to the general population, e.g. motor car accidents, provide less than best working potential, absenteeism and suicide. However, the researcher strongly believes that because of the nature of dentistry, i.e. close contact with patients, working in a small confined space (oral cavity), patient's fear of a dentist, and a dentist's fear of litigation, it is

impossible for a dentist to work without damaging a patient in some way, or getting into trouble somehow, once he has reached the stage of alcohol dependency, which is defined by withdrawal symptoms.