Self-perceived Mental Health and Job Satisfaction among Lithuanian Dentists

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Abstract: The aim of this study was to document dentists’ self-perceived mental health complaints and job satisfaction, and to assess any correlations between the two. A postal questionnaire survey was mailed to all (N=2,449) licensed dentists registered with the Lithuanian Dental Association. The questionnaire investigated dentists’ mental health and job satisfaction during the previous year (overall response rate: 68.2%). The majority of respondents (80.7%) reported being satisfied with their job. Self-perceived lack of self-esteem (OR: 0.59, 95% CI: 0.43–0.82), loneliness (OR: 0.72, 95% CI: 0.53–0.98), and especially depression (OR: 0.52, 95% CI: 0.35–0.77) had a high negative impact on dentists’ job satisfaction. Nervousness (89.2%) and burnout (83.6%) were the most prevalent mental complaints and they also tended to be the most chronic of all reported mental disorders. Increasing age significantly reduced the possibility of nervousness or depression and increased the possibility of being satisfied with dental practice. Increasing working hours increased the risk of burnout, anxiety and loneliness. Overall, this study suggests that the majority of Lithuanian dentists are satisfied with their job and also enjoy their professional lives. However, a considerable proportion still reported impairment of mental health which influenced their levels of job satisfaction.

Key words: Dentists, Mental health, Job satisfaction, Occupational hazards, Burn-out, Nervousness, Depression

Introduction

Previous studies have shown that dental practitioners are subject to a wide variety of physical ailments that are induced or aggravated by the work environment1–4). It may well be that impaired mental health prevails over general diseases. Dental work is a unique social interaction influenced by specific demands of the clinical practice, exposure to an intimate and very sensitive area of the human body, personal characteristics and emotions of a health care provider and its recipient. There is insufficient knowledge, few traditions or structures and many barriers to the early recognition, successful diagnosis, treatment and prevention of mental problems in dentists5–13). It is likely that dentists undergo a powerful process of socialization into their professional role that makes it difficult for them to seek help. Moreover, stigma about addictive and mental illnesses continues to be an underestimated problem despite significant advances in scientific understanding of these disorders14). Previous studies have analyzed job satisfaction, job-related stress, tension, depression, emotional exhaustion and depersonalization15–18). The abuse of alcohol and illicit drugs among dental professionals has been reported19–21). Moreover, dentists, more often than other health professionals, are portrayed to be at a higher risk of committing suicide22, 23).

After Lithuania regained its independence in 1991, the
character of dental work substantially changed and dentists’ workload increased. Before independence, there had only been public dental institutions. After the collapse of the Soviet regime, the state decided to have a market economy, and tremendous changes took place. Organizations previously owned by the government and leased to citizens were privatized and therefore a concomitant increase of private dental practices occurred. Consequently, work requirements for Lithuanian dentists became stricter because many dentists began working for more than one institution and more than the usual six hours per day. Today, about half of all dental professionals work for private institutions, the minority work in public practices, and a substantial proportion of dentists combine work in both private and public institutions. Moreover, the philosophy inherent in the remuneration system raised issues of quantity and quality. Higher patient expectations, higher targets for providing dental care have made high demands of dentists. Similarly, laws on the rights of patients and compensation for damage to their health came into effect on January 1, 2005, leading to increased red-tape and psychological pressure. For these reasons, increased job constrains may affect not only the general health, but also the mental health of Lithuanian dentists, an issue which has not been previously studied. Mental impairments, if undetected, may be a serious threat to the dentists’ health and well-being as well as to their job satisfaction and the proper care of patients. Therefore, the aim of the present study was to evaluate Lithuanian dentists’ self perceived mental health complaints, their job satisfaction and to assess whether there is an association between the two.

Subjects and Methods

This study involved a postal questionnaire survey of all (N=2,449) licensed dentists registered with the Lithuanian Dental Association, which was approved by the Lithuanian Bioethical Committee (No. 59) in 2006 and carried out the same year. Questionnaires were mailed to the entire study population with an introduction letter and a postage-free return envelope. Follow-up questionnaires were sent two weeks later to the dentists, who had not replied to the initial mailing. The same was done after another two weeks, with three mailings overall. A total of 1,670 questionnaires were received, which resulted in a response rate of 68.2%.

The questionnaire included a number of questions about dentists’ self-perceived mental health complaints over the last 12 months, depression diagnosed and treated in the same period, and questions related to job satisfaction. The majority of questions were structured, and a few open questions were added where an additional deeper insight was necessary. Likert-type scales were used with answers from 1 to 5 allocated according to the level of agreement with the given statement or experienced state of a listed disorder. A chronic condition was defined if respondents experienced it on either a frequent or very frequent basis. The demographic characteristics of the responding dentists were also assessed.

Statistical analysis was undertaken using the MS Office Excel and SPSS version 15.0 software packages. Differences in proportions were tested by Pearson’s χ² test and Student’s t test. As the age of respondents influences the prevalence of mental disorders, to compare their prevalence between genders, general practitioners and specialists, it was standardized by Lithuanian dentists’ age (with data obtained from the Lithuanian Dental Association). A direct standardization method was used. Bivariate analyses were performed to determine the factors associated with mental complaints and with job satisfaction.

The possibility of mental complaints and being “satisfied” or “absolutely satisfied” with dental practice regarding age, working hours, institution type, the number of work places, specialization, and gender, and the possibility of being “satisfied” or “absolutely satisfied” with dental practice regarding age, gender and mental health complaints was assessed. The joint impact of the aforementioned risk factors on mental complaints and being “satisfied” with dental practice was studied by means of multiple logistic regression analysis using the Enter method. Two multiple logistic regression models were compiled. In the first, the dependent variables were the existence of referred different complaints and being “satisfied” or “absolutely satisfied” with dental practice. Age, gender, specialization, working hours, the number of work places and institution type were included into this model as independent variables. Age and working hours here were analyzed as continuous variables. The dependent variables, except job satisfaction, became independent ones and together with age and gender were included into the second multiple logistic model, in which being “satisfied” or “absolutely satisfied” with dental practice was a dependent factor. Only significant results are presented.

Results

Of all respondents, 17.4% were specialists and 82.6% worked as general dental practitioners, 15.1% of them were males and 84.9% females. One-third of dentists worked only in public institutions, while 50.0% worked only in private and 18.7% combined work in both public and private institutions.

The results showed that the overall majority of respondents (80.7%) were fully satisfied with their job and
17.7% were partially satisfied. Only the minority (1.6%) of dental practitioners were dissatisfied with their job. When standardized by Lithuanian dentists’ age, all mental conditions were significantly more prevalent among women than among men (Fig. 1), nevertheless, according to data of multiple logistic regression analysis gender had no impact on dentists’ job satisfaction. However, the increasing age had a significant positive impact on dentists’ job satisfaction. Each additional year of age increased by 2% the possibility of being satisfied or absolutely satisfied with dental practice. Dentists practicing in private institutions also had higher possibility of being job satisfied as compared with those working in both private and public institutions (Table 1). The self-perceived lack of self-esteem, loneliness, and especially depression had a high negative impact on dentists’ job satisfaction (Table 2).

The overall majority of respondents fully agreed with the statement that their work is difficult mentally (83.2%), while 14.8% of respondents partially agreed and about 2.0% disagreed with this statement. Also, the overall majority (74.6%) has partly (37.9%) or fully (36.7%) agreed that tension at work makes them to be nervous at home, while only 25.3% of them did not. Each potential mental health complaint was reported by more than half of respondents. Nervousness was the most prevalent among all impairments, and it also mostly tended to become chronic. Nervousness was as an attendant condition among dental practitioners as the vast majority (89.2%) complained of being nervous, 21.1% of them experiencing this disorder chronically. Burnout and ner-

![Fig. 1. Prevalence of self-perceived mental health issues by gender (standardized by age).](image)

Table 1. Correlations between mental health issues and demographic or occupational items

<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>Independent variables</th>
<th>p</th>
<th>OR (95% CI)</th>
<th>Proportion (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction</td>
<td>Age*</td>
<td>0.000</td>
<td>1.02 (1.01–1.03)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Working in private institution</td>
<td>0.021</td>
<td>1.46 (1.06–2.03)</td>
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<tr>
<td></td>
<td>Working in both private and public institutions</td>
<td>-</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Nervousness</td>
<td>Age*</td>
<td>0.000</td>
<td>0.97 (0.96–0.98)</td>
<td></td>
</tr>
<tr>
<td>Psychical burnout</td>
<td>Working hours*</td>
<td>0.042</td>
<td>1.01 (1.00–1.02)</td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td>Age*</td>
<td>0.030</td>
<td>1.01 (1.00–1.02)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Working hours*</td>
<td>0.038</td>
<td>1.01 (1.00–1.02)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General practitioner</td>
<td>0.190</td>
<td>1.44 (1.06–1.95)</td>
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<tr>
<td></td>
<td>Specialist</td>
<td>-</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>Age*</td>
<td>0.000</td>
<td>0.98 (0.97–0.99)</td>
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<tr>
<td>Sleeplessness</td>
<td>Age*</td>
<td>0.000</td>
<td>1.03 (1.02–1.04)</td>
<td></td>
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<tr>
<td>Lack of self-esteem</td>
<td>Working in private institution</td>
<td>0.028</td>
<td>0.73 (0.56–0.97)</td>
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</tr>
<tr>
<td></td>
<td>Working in both private and public institutions</td>
<td>-</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Loneliness</td>
<td>Age*</td>
<td>0.041</td>
<td>1.01 (1.00–1.02)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Working hours*</td>
<td>0.005</td>
<td>1.01 (1.00–1.02)</td>
<td></td>
</tr>
</tbody>
</table>

p = significance level, OR = odds ratio, CI = confidence interval. Independent variables include: age, gender, specialization, working hours, number of work places and institution type. Only significant results are presented.

*continuous variables.
nervousness were frequently experienced by many practitioners, and these two conditions tended to be most chronic among all complaints. A total of 83.6% of respondents experienced burnout and 20.0% of them experienced this impairment chronically. Anxiety was also a very frequent complaint manifested in 78.8% of respondents. Chronic anxiety was reported by 16.5%. Depression as a self-perceived complaint was reported by 75.50%, while chronic depressive mood was noted by more than every tenth respondent (13.7%). Dentists also reported on depression diagnosed and treated in the previous 12 months; it was diagnosed in 5.3% of respondents, while self-perceived chronic depressive mood was more prevalent.

Sleeplessness was reported by 74.0% of respondents, 18.4% of them suffering from a chronic lack of sleep. Lack of self-esteem was also a prevalent condition reported by 60.8% of respondents. Chronic lack of self-esteem was experienced by 12.5% of practitioners. According to our data, loneliness was a less rare but still rather prevalent complaint, more than a half of dentists (55.4%) having felt it. Chronic loneliness was felt by 16.6% of dentists.

According to the results of multiple logistic regression analysis, self-perceived mental complaints were significantly related to respondents’ age in regards to nervousness, anxiety, depression, sleeplessness and loneliness. Increasing age significantly reduced possibility of nervousness (OR: 0.97, 95% CI: 0.96–0.98) and depression (OR: 0.98, 95% CI: 0.97–0.99) but increased possibility of anxiety (OR: 1.01, 95% CI: 1.00–1.02), sleeplessness (OR: 1.03, 95% CI: 1.02–1.04) or loneliness (OR: 1.01, 95% CI: 1.00–1.02) occurrence. Each additional working hour increased by 1% the possibility of burnout, anxiety and loneliness experience. Dental institution type had no significant impact on the occurrence of various health complaints, except for the lack of self-esteem, i.e. dentists practicing in private institutions had a higher possibility of the lack of self-esteem experience as compared with those working in both private and public institutions (Table 1). When standardized by age, all complaints were significantly more prevalent among general practitioners than among specialists (Fig. 2). However, according to data from multiple logistic regression analysis, general dental practice as compared with working as a specialist had no significant impact on the occurrence of various health complaints except anxiety (OR: 1.44, 95% CI: 1.06–1.95) (Table 1).

Discussion

This is the first study to describe self-perceived mental conditions among Lithuanian dentists. Given that the response rate was 68.2% and no data are available about non-responders, generalizations from this study should be done with some reservation. In general, a high level of job satisfaction was found in dentists. Four out of five dental practitioners were satisfied with their job, while only 1.6% were not. An important finding is that the majority of dentists experienced at least some mental impairments during the previous year, which apparently significantly negatively related to their job satisfaction. A similar situation has been reported from other countries. In South Korea, the mean score of overall job satisfaction among dentists was 3.2 out of 5, and patient relations, perception of income, personal time, staff, and specialty training accounted for 35% of variation in overall job satisfaction16). A study in the USA revealed that less than half of dentists were satisfied with their profession; 7.4% had reached significant levels of burnout and 83.0% perceived dentistry as being a very stressful profession24).

The majority of Lithuanian dentists (83.2%) have agreed with the statement that their work is mentally exhausting. Unsurprisingly, a high prevalence of self-perceived burnout (83.6%) has been reported. Therefore, more attention should be given to this health hazard. During the previous 12 months, substantial numbers of Lithuanian dentists suffered from nervousness, burnout, anxiety, depression, sleeplessness, the lack of self-esteem and loneliness, i.e. any complaint as inquired was indicated by more than half of respondents. Nervousness and burnout were the most prevalent complaints of Lithuanian dentists. It is likely that these impairments, more than others, are hard to control and tend to become chronic. It is important to emphasize that these mental health problems are widespread and important factors that greatly influence dentists’ everyday well-being. Our findings confirm data from many other studies which have also shown a reduction of mental health among dental specialists25–29). The fact that the overall majority of dentists indicate tension at work as a factor that makes them

![Fig. 2. Prevalence of self-perceived mental health issues by job category (standardized by age).](image-url)
to be nervous at home show that job-related stress and all psychological impairments it has led to affect not only dentists personally but also their family life. The effect of the dentist’s office-related stress is directly felt in the family, and needs particular attention to practice-related psychological disorders and their prevention.

When standardized by age, all mental conditions were significantly more prevalent among women than among men. However, according to data of multiple logistic regression analysis gender had no impact on dentists’ job satisfaction. This fact contravenes the popular belief in a higher woman’s susceptibility, lower adaptation possibilities and lower resistance to mental stressors. According to data of multiple logistic regression analysis, specialization had no impact on the occurrence of various health complaints except anxiety. General dentists had a higher possibility than specialists to suffer from anxiety. One of the possible explanations for this finding may be that specialists, because of their higher qualifications, can control their workload better than general practitioners and can interact with their patients with more self-confidence and less anxiety.

According to other studies, psychical liability at work and occupation-related mental disorders are more prevalent among junior dentists. This may be explained by favorable adaptation and contradicts the generally held belief that getting older is automatically accompanied by degeneration of mental health and problems of adaptation to life changes. In our study, anxiety, sleeplessness and loneliness were more frequent among senior dentists, indicating that dentists’ age has a more deleterious effect than occupation on these impairments of mental health.

Mental impairments among Lithuanian dentists should not be overlooked and they could be regarded as occupational hazards. The predisposing factors for mental disorders in Lithuanian dentists might be bad work organization and the fast pace of work, which do not allow sufficient personal contact with patients, as well as work in solo practices, the combined practice in two or three institutions with too many working hours per day (in our study, long working hours predisposed to burnout, anxiety and loneliness experience) and the lack of knowledge about prevention of mental disorders. It is important to identify barriers to the early recognition, diagnosis and treatment of mental problems among dental professionals. Throughout the last decade of the twentieth century, Lithuania had the highest suicide rate in Europe among both men and women aged 25–64 yr.

The stressors related to the transitional period, seen in the general population, may be also reflected in Lithuanian dentists; a slight predilection of people as well as of dentists for unwillingness to deal with psychological problems increases the occurrence of mental disorders.

Conclusion

In conclusion, our findings indicate a potential deterioration in the mental health of Lithuanian dentists. Although the majority are satisfied with their job and enjoy their professional lives, there are substantial numbers of dentists experiencing different mental impairments. Therefore, there is a need for increased awareness regarding the problem of mental health impairments. Preventive programs should be initiated to help professionals to cope with their professional duties without hazardous effects on their mental health. It is also important to encourage dentists to be actively concerned about prevention, early diagnosis and treatment of mental disorders. Further research should aim at finding occupationally related causes which are deleterious to the mental health of Lithuanian dentists. This will be an important step for providing specific interventions to help reduce the prevalence of mental health problems among dentists in our country.

References