Factors related to job satisfaction among Lithuanian dentists

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SUMMARY

The objective of this study was to evaluate the level of overall job satisfaction among Lithuanian dentists, to explore the satisfaction with different work environmental factors and relate it to overall job satisfaction.

Material and methods. All (N=2449) Lithuanian Dental Chamber members were sent a questionnaire. It comprised a 5-point Likert scale structured questions that were developed according to the Dentist Satisfaction Survey.

Results. The level of overall job satisfaction among Lithuanian dentists was 4.06 (95% CI 4.03-4.10) out of 5 of Lickert scale. The least satisfying work areas was social security (2.64, 95% CI 2.59-2.69) and income (2.79, 95% CI 2.74-2.84); the most satisfying area was patient (3.75, 95% CI 3.71-3.78) and professional relations (3.83, CI 3.79-3.87). Reasonable working hours (OR 6.71; 95% CI 1.19-37.75), satisfaction with professional evaluation and appreciation (OR 2.31; 95% CI 1.62-3.30) and income (OR 1.88; 95% CI 1.22-2.89) had the most significant positive impact on dentists' overall job satisfaction.

Conclusions. In general, Lithuanian dentists experience great job satisfaction. Postgraduate studies, not limited possibility for professional development has most positive impact for dentists' overall job satisfaction and work environmental factors are less important for it. Findings of this study show the issues that need special attention to increase the level of job satisfaction among Lithuanian dentists and thus improve all dental care system.

Key words: job satisfaction, Lithuanian dentists, work environment factors.

INTRODUCTION

Today dentistry is an attractive, very interesting, but not an easy profession. Dentists are subject to wide variety of occupational factors, that greatly affects their wellbeing [1-6]. A very limited job setting, unique social interaction between helper and recipient, exposure to intimate and a very sensitive area of the human body, personal characteristics and emotions of dentists and patients are only some of them. Many studies have shown high prevalence of physical and psychological disorders in dental practice also [7-11]. Therefore it is hardly surprising that dentistry has been classified even

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as hazardous profession [12]. However as any other profession dentistry is a rewarding job as well. Various elements at dental work - dentists' social recognition, position in society, self realization and many other factors everyday - give and increase job satisfaction. And job satisfaction is the most important factor for successful practice. The factor that makes dentistry not only the source of income, but something more: it enriches the dentist, it gives pleasure, joy and motivation to work, to improve and develop your skills. This job motivation helps to improve the patient care. As a result both doctor and patient and the entire dental care system enjoy benefit. Therefore it is important to understand dentists' job satisfaction and how work environmental factors impact it. Many studies in foreign countries have been carried out to explore this topic [13-17]. There was no similar study among Lithuanian dentists and this is the first study about dental job motivation and satisfaction in Lithuania.

The aim of this study was to investigate the level of overall job satisfaction among Lithuanian dentists, explore the satisfaction with different work environmental factors and their affect to overall job satisfaction.

MATERIALS AND METHODS

It was a postal questionnaire survey of all (N=2449) 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. The questionnaires were mailed 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 mailing times all in all.

The questionnaire was developed according to the Dentist Satisfaction Survey to disclose and measure the areas that are essential for dentist satisfaction. Income, professional development, professional participation, staff, delivery of care, patient relations, practice management, professional satisfaction were assessed. The questionnaire comprised mainly structured questions and only a few open questions were added where an additional deeper insight was necessary. Structured questions were measured by a 5-point Likert scale allocated according to the level of satisfaction with the given environmental factor: 1 - absolutely dissatisfied, 2 - dissatisfied, 3 - partly satisfied, 4 - satisfied and 5 -

absolutely satisfied. The questionnaire also obtained information about the personal and professional characteristics of the subjects including gender, age, job category (general practitioner or specialist), working hours per week.

Statistical analysis was undertaken using the SPSS version 15.0 software package. The scores of respondents' satisfaction for each work environmental factor were averaged to determine the degree of satisfaction with it The 95% confidence intervals of means were assessed. The respondents also were classified into tree groups according to the satisfaction with the specific factor: dissatisfied (they included absolutely dissatisfied and dissatisfied), partly satisfied and satisfied (satisfied together with absolutely satisfied ones). The univariate analyses were performed to determine associations between personal, professional characteristics, work environmental factors and job satisfaction using χ^2 criterion. The impact of those characteristics and work environmental factors on job satisfaction was studied by means of multiple logistic regression analysis using the Enter method. Only significant results are presented. We tried to apply stepwise multiple regression analysis to our data, but the coefficient of determination was too low.

RESULTS

A total of 1670 questionnaires were returned, which comprised the response rate of 68.2%. Fifteen percent of the respondents were males and 85% females. Of all respondents, 17.4% were specialists and 82.6% worked as general dental practitioners. The mean work experience was 22.41 years and the mean working time was 38.23 hours per week.

The level of overall job satisfaction of Lithuanian dentists was 4.06 out of 5 (Table 1). The majority of dentists (80.7%) showed satisfaction with their job, whereas only 1.6% showed dissatisfaction. Of all respondents, 17.7% noted being partly satisfied with their practice.

According to our study, dentists showed the least satisfaction with social security among all work related

Table 1. The level of satisfaction and distribution of work-environmental factors and overall job satisfaction

Work	Level of	Distribution, %			χ2**	p**
environmental factors	satisfaction*	Dissatisfied	Partly satisfied	Satisfied	-	
Overall job satisfaction	4.06 (4.03-4.10)	1,6	17,7	80,7	-	-
Professional evaluation and appreciation	3,22 (3.18-3.27)	16,9	44,6	38,4	90.42	0.000
Possibility to improve and qualify	3,43 (3.39-3.47)	11,8	40,6	47,6	79.74	0.000
Possibility to realize one's cap-abilities and talents	3,62 (3.58-3.65)	4,9	37,4	57,7	96.47	0.000
Work environment	3,58 (3.54-3.63)	9,3	34,7	56,0	89.07	0.000
Social security	2,64 (2.59-2.69)	45,1	35,7	19,3	15.24	0.000
Management	3,28 (3.24-3.33)	17,6	37,8	44,6	54.42	0.000
Professional relations	3,83 (3.79-3.87)	4,3	22,9	72,8	31.49	0.000
Work load	3,18 (3.13-3.23)	24,5	34,3	41,1	40.09	0.000
Income	2,79 (2.74-2.84)	36,4	38,9	24,7	50.25	0.000
Work organization	3,49 (3.44-3.53)	12,1	34,2	53,7	48.52	0.000
Patient relations	3,75 (3.71-3.78)	3,4	27,0	69,5	42.27	0.000
Personal time	2,95 (2.90-3.00)	32,2	36,5	31,3	11.37	0.001
Time for family	3,00 (2.95-2.90)	29,4	36,2	34,5	15.94	0.000

*Mean (95% CI) of 5-point Likert scales.

**Relation between overall job satisfaction and work-environmental factors.





Fig. The distribution of dentists' overall job satisfaction according to age ($\chi^2 = 11.69$, df = 4, p = 0.02)

factors. It had the lowest mean score -2.64 out of 5. Of all, even 45.1% of respondents showed dissatisfaction in this area.

As for perception of income, it was the second of the worst valuated practice areas. Its satisfaction score was 2.79 out of 5. Of all, 36.4% of respondents were not satisfied with it, while one out of four dentists (24.7%) was satisfied.

Dentists also were quite dissatisfied with personal time they have. The level of satisfaction was 2.95 out of 5. Very similar satisfaction (3.00) respondents

 Table 2. Possibilities of overall job satisfaction regarding workenvironmental factors. Multiple logistic regression analysis

Independent variables		OR (95% CI)	р
Age	≤35	0.32 (0.14-0.71)	0.006
	35-44	0.32 (0.14-0.71)	0.005
	45-54	0.41 (0.18-0.90)	0.027
	55-64	0.41 (0.18-0.92)	0.030
	65≤	1.00	
Working	1-33	6.09 (1.07-34.58)	0.042
hours	34-50	6.71 (1.19-37.75)	0.031
		5.65 (0.95-33.48)	0.057
	67≤	1.00	
Professional evaluation and		2.31 (1.62-3.30)	0.000
appreciation	on	· · · · · ·	
Possibility to improve and qualify		1.54 (1.10-2.14)	0.011
Possibility to realize one's		1.58 (1.14-2.17)	0.006
capabilities and talents		. ,	
Work environment		1.80 (1.34-2.42)	0.000
Income		1.88 (1.22-2.89)	0.004
Patient relations		1.48 (1.13-1.94)	0.004

p - significance level, OR - odds ratio, CI - confidence interval.Independent variables entered: age, gender, working hours per week, job category, professional evaluation and appreciation, possibility to improve and qualify, possibility to realize one's capabilities and talents, work environment, social security, management, professional relations, work load, income, work organization, patient relations, personal time, time for family. Only significant results are presented. showed about the time that they are able to spend together with family after their work day. About thirty percent of respondents showed dissatisfaction with these time-related factors (32.2% and 29.4% accordingly).

Dentists' work load was also the sphere to be improved. The mean score of dentists' satisfaction with their work load was 3.18 out of 5. One out of four dentists (24.5%) was not satisfied with it.

According to our data, Lithuanian dentists also feel lack of professional evaluation and appreciation. The level of satisfaction in this area was 3.22 out of 5. Even 16.9% of all respondents showed dissatisfaction with their professional evaluation and appreciation.

Dentists also were quite dissatisfied with their work organization as far as working hours and work distribution are concerned. Unsurprisingly, they were also dissatisfied with overall job management. Mean work organization score reached 3.49 and overall job management score was a bit lower -3.28 out of 5.

The level of satisfaction with work environment among Lithuanian dentists was 3.25 out of 5.

Dentists showed some dissatisfaction with possibility to improve and qualify and to realize their capabilities and talents in the work place. The level of satisfaction with these work related factors was 3.43 and 3.62 out of 5 accordingly.

By contrast, as for perception of communication, respondents' satisfaction with patient and professional relations was relatively high -3.75 and 3.83 out of 5 accordingly. Satisfaction with these areas was highest among all work related factors.

In univariate analysis there were significant differences between all inquired work-environmental factors and job satisfaction (Table 1). Significant relations between age ($\chi^2=11.69$, p=0.02), working hours ($\chi^2=8.21$, p=0.04), job category ($\chi^2=4.70$, p=0.03) and job satisfaction was also found. 91.20% of dentists 65 years or senior reported being satisfied with their job, whereas only 77.70 % 34 years and younger stated this (Fig.). However, there were no significant differences regarding gender and job satisfaction ($\chi^2=0.19$, p=0.66).

The multiple logistic regression analysis of workenvironmental factors to overall job satisfaction was performed. The dependent variable was being "satisfied" or "absolutely satisfied" with dental practice. Age, gender, working hours per week, job category, satisfaction with professional evaluation and appreciation, possibility to improve and qualify, possibility to realize one's capabilities and talents, work environment, social security, management, professional relations, work load, income, work organization, patient relations, personal time, time for family were included into the multiple logistic regression model as independent variables. Only significant results are presented in Table 2.

According to the data of multiple logistic regression analysis increasing age had significant positive impact on dentists' overall job satisfaction. Decreasing working hours significantly mostly increased the possibility to be satisfied with dental practice from all analyzed items. Satisfaction with income and professional evaluation and appreciation had a very significant positive impact on dentists' job satisfaction; dentists who were satisfied with their work environment, possibility to realize one's capabilities and talents, improve and qualify had much higher possibility of being satisfied with their job also. Satisfaction concerning relations with patients had the lowest but still rather significant positive impact on respondents' job satisfaction.

DISCUSSION

This is the first study inquiring about job satisfaction in Lithuanian dentists. Taking into account that the response rate was 68.2% and no data is available about non-responders generalizations from this study should be done with some caution.

The present study showed the mean overall job satisfaction score of Lithuanian dentists to be 4.06 out of 5. It means that overall job satisfaction exceeds "being satisfied" limit (score 4) and approaches to "being very satisfied" with dental practice state (score 5). These facts are very surprising and joyful as previous study in Lithuania showed occupational hazards to have high negative affect to dentists' health and psychological wellbeing [9]. Overall job satisfaction score among Lithuanian dentists is very high as compared with data in foreign countries. An earlier survey from California general practitioners found mean score of overall job satisfaction to be 63 out of 100 [18], from South Korean dentists – 3.2 out of 5 [15]. Only investigation of Canadian orthodontists revealed a similar but still lower level of job satisfaction also (mean – 4.0 of 5) [13]. Job satisfaction level among Lithuanian dentists is very high as compared with other medical specialties also: doctors' working at primary health care establishments in Lithuania job satisfaction score was 4.74 (on a 7 point scale) [19], level of job satisfaction among all staff members at an Estonian hospital was 3.86 out of 5 [20].

High mean overall job satisfaction among Lithuanian dentists show dentistry to be perceived as a rewarding job, regardless its hazards. Obviously, this is the result that dentistry in Lithuania is one of the few medical professions with highly developed private sector, where income is depends on employees' efforts and that most of Lithuanian dentists' income is higher than those who have other professions.

Foreign studies show that substantial numbers of dentists don't cope with profession demands and leave it [21,22]. As according to the data of multiple logistic regression analysis increasing age has a significant positive impact on dentists' overall job satisfaction, there is possibility that those dentists who treat profession negatively will adapt and begin to evaluate it in the course of time. More studies report a relationship between an increasing age and higher job satisfaction [23-25]. By contrast, age was not significantly related to job satisfaction in South Korean study [15].

High positive impact on dentists' job satisfaction had the reduction of working hours, satisfaction with income, professional evaluation and appreciation, possibility to realize one's capabilities and talents, to improve and qualify them. All these factors together show that the most important thing for dentists to be satisfied with their job is to have permanent, not limited possibility for professional development. The increase of income, professional evaluation and appreciation and the possibility to decrease working hours will be a result. Satisfaction concerning relations with patients had the lowest significant impact on respondents' job satisfaction. The significant differences found in univariate analysis between social security, management, professional relations, work load, work organization, personal time, and time for family and job satisfaction became not significant when multiple logistic analysis with personal and professional characteristics and all work environmental factors was performed. Many foreign studies [15,16,25,26] showed personal time, patient and professional relations, work organization, work load to be critical and often hazardous areas of dental practitioners, that greatly affects job satisfaction. However, when talking about job satisfaction among Lithuanian dentists these daily problems become a secondary matter as compared with professional development possibilities.

Although over eighty percent of Lithuanian dentists surveyed are satisfied with their overall job, substantial numbers of them are discontent with social security, income, personal time, time for family, work load.

The lowest satisfaction score with social security is the result of low received pension even after many years of difficult, hazardous dental work. Despite the occurrence of private sector in 1991, many dentists are not able to earn for senility.

The related triplet of the lowest level of satisfaction among Lithuanian dentists was income, time after work and work load. Despite the developed private sector in dentistry, the income of hired workers, that make the majority of dental population, is not high for the hard work they perform. After private dental practices occurred, there is limited possibility for public institutions to control dentists' work load (a lot of small, private dental surgeries, working alone or with few people, practicing in several institutions), dentists are able to work in several institutions and for more than usual six or legal nine hours per day. Therefore many dentists, being not satisfied with income, increase their work load, leaving relatively too little time for personal matters and feel dissatisfied because of all these factors. Income, the same as social security, is the sphere to be obligatory improved among Lithuanian dentists; higher income and pensions of dentists in USA and other European countries also represents the fact. However, low Lithuanian dentists' income is related to general low living standard in Lithuania.

Lithuanian dentists are quite satisfied with their professional evaluation and appreciation, work organization, overall job management, work environment, possibility to improve and qualify, realize their capabilities and talents. The highest level of satisfaction among Lithuanian dentists was with patient

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and professional relations; however it had not reached overall job satisfaction score – their job satisfaction is not very affected by daily troubles and they are most satisfied with dental practice in general.

How a dentist feels about himself as a dentist, as a professional, how he perceives dental job is critical and fundamental how the practice performs. If the dentist is dissatisfied it inevitably affects his practice. Findings of this study show the issues in the dental profession needing attention to increase the level of job satisfaction among Lithuanian dentists and thus improve all dental care system.

CONCLUSIONS

1. Lithuanian dentists experience high level of overall job satisfaction.

2. Postgraduate studies, not limited possibility for professional development has most positive impact for dentists' overall job satisfaction and work environmental factors are less important for it.

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