# Job satisfaction in graduates of the career of dental surgeon: a cross sectional study

Satisfação no trabalho em graduados da carreira de cirurgião-dentista: um estudo transversal

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## **ABSTRACT**

This study aims to estimate job satisfaction levels in graduated of dental school of Autonomous University of Guerrero, México, and determine which factors influence such satisfaction levels. A cross-sectional study was carried out in 144 dentists graduated from the dental school of Autonomous University of Guerrero through a validated survey. Logistic regression analysis was performed to obtain OR, p-value and confidence intervals (95% CI) in the STATA13 statistical program. The overall percentage of job satisfaction was 92%, while the variables that explained the model were, the role of the dentist (Owner or employed) (OR = 2.2, p = 0.03 95% CI 1.1-4.4), and the level of satisfaction of the knowledge acquired within their academic dental school training (OR = 19.2, p = 0.00 95%CI 3.1-118). The professional satisfaction of a dentist is of great importance, because it impacts their performance at work, and is closely related to overall satisfaction of life, since both contribute reciprocally to the happiness of a person, as well as the general welfare in the community.

**Indexing terms**: Dentists. Job satisfaction. Work performance.

# **RESUMO**

Este estudo tem como objetivo estimar os níveis de satisfação no trabalho de graduados da Faculdade de Odontologia da Universidade Autônoma de Guerrero, México, e determinar quais fatores influenciam esses níveis de satisfação. Foi realizado um estudo transversal com 144 dentistas formados pela Faculdade de Odontologia da Universidade Autônoma de Guerrero por meio de um questionário validado. Uma análise de regressão logística foi realizada para obter OR, valor de p e intervalos de confiança (IC95%) no programa

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estatístico STATA13. O percentual geral de satisfação no trabalho foi de 92%, enquanto as variáveis que explicaram o modelo foram a função do dentista (proprietário ou funcionário) (OR = 2,2, p = 0,03 IC 95% 1,1-4, 4) e o nível de satisfação com o conhecimento adquirido na formação acadêmica em odontologia (OR = 19,2, p = 0,00 IC95% 3,1-118).. A satisfação profissional do dentista é de grande importância, pois impacta no seu desempenho no trabalho, e está intimamente relacionada à satisfação geral de vida, uma vez que ambas contribuem para a felicidade da pessoa, bem como para o bem-estar geral da comunidade.

Termos de Indexação: Odontólogos. Satisfação no trabalho. Desempenho profissional.

#### INTRODUCTION

Job satisfaction has been defined as the general perception that a person has about their work, and it's influenced by a variety of factors that can be classified as intrinsic factors (recognition, work tasks, or responsibility) and extrinsic factors (conditions of work, company policies, or salary) [1]. Others have described it as a positive emotional state resulting from the evaluation of work or work experience.

The professional satisfaction of a dentist impacts his performance at work and is closely related to the overall satisfaction of life, since both contribute reciprocally to a person's happiness, as well as the general well-being in the community [2].

A high level of job satisfaction of the dental surgeon can lead to a better professional performance, which translates into high levels of satisfaction of the users of that service [3]. The job satisfaction of health workers and the work atmosphere within their teams is important, and impacts on the quality of health care outcomes [1].

Several studies report adequate levels of global dental job satisfaction [2,4,5]. A variable that is frequently associated with the dental job satisfaction is the relationship between the dentist and his co-workers, as well as between the dentist and his patients [2,5-8]. A problem that frequently influences the levels of job satisfaction of dentists is low income (in some cases) [2,5,6,8,9]. Aspects related to lack of time and consultation hours are also considered as factors that determine job satisfaction [5,6,8]. It is considered that working hours of less than 40 hours a week can lead us to achieve high levels of job satisfaction from dentists [2].

Although gender has been mentioned as a factor influencing job satisfaction in dentists, recent studies on oral and maxillofacial surgeons of both genders, working in private and institutional practice do not differ in job satisfaction levels [10]. However, there are different opinions that indicate that being a woman gives greater chances of achieving high levels of job satisfaction in dentists [2].

The possibility of applying skills and abilities, as well as being a general practice dentist without being a specialist, generates higher levels of satisfaction [5,11]. Among the aspects that are reported as causes of greater satisfaction is respect, while stress has been detected as one of the factors that very frequently generates dissatisfaction [6].

Dentistry is considered by many to be a profession with a high level of stress [12], and some even think that it is the most stressful health profession [8]. This is due to the low incomes perceived (in some cases) as mentioned above, as well as the low cooperation of certain patients, which influences the dentist's job satisfaction [13]. The lack of a dental assistant is considered as a factor that elevates the stress of dentists [12].

Other sources of job stress in dental care are: extreme job demands, lack of job assignments, loss of control over tasks, working with very few challenges, long work hours, and insufficient support for resource management and work tools [11]. Even this stress generated at work can lead to burnout syndrome, a poor quality of life and the development of mental illness [6].

Emrani et al. [9] consider that the levels of quality of the service provided should influence the levels of job satisfaction of the dentist.

In a study carried out in dentists in southern Chile, a high level of global job satisfaction was found, obtaining 5.6 points on a scale of 7, finding a significant difference for those who work in their private practice and reporting as associated predictor variables in a significant way, the responsibility assigned, the financial compensation, the relationship with co-workers, the schedules, the physical working conditions, and the possibility of using skills, the latter only in private practice dentists [5].

Fahim in his research on job satisfaction in dentists in Egypt suggests that patient relationships, income perception, personal time and specialized training are important factors of the work environment and they are useful to increase job satisfaction of dentists [8].

For Muhić et al. [11] the work situation, the type of practice and the availability of dental assistants can be important predictors to increase job satisfaction.

The consequences of job dissatisfaction are reflected in absenteeism, errors at work, professional burnout, abandonment of work, decreased satisfaction of the people attended and the poor quality of the mental health of the dentist [11].

There are studies that show heterogeneous results on the levels of job satisfaction of professors of dental schools. Shigli et al. [14] reported high levels of job satisfaction among professors of prosthetics in India, while Seraj et al. [15] reported that professors of dentistry were dissatisfied, especially with regard to salaries, relationships with co-workers, and safety. Some universities have implemented part-time teacher training programs to increase their satisfaction levels and have found that these teachers have higher job satisfaction [16].

To encourage dentists to provide their patients with a high standard of dental care, it is important to assess their job satisfaction and understand what factors influence it. This is very important, as higher levels of job satisfaction will provide better healthcare. These findings could help decision makers develop plans to increase the level of job satisfaction among dentists in their workplaces [8].

The purpose of this work is to estimate the levels of job satisfaction in graduate of the career of dentist surgeon of the Autonomous University of Guerrero, and determine wich factors influence such satisfaction.

## **METHODS**

A cross-sectional study was carried out in a sample obtained by convenience of 144 graduates of the dentist surgeon class of the Superior School of Dentistry of the Autonomous University of Guerrero. The participants were chosen from graduates of our dental school who attended different academic events of the continuing education program of the same faculty, asking them if they were interested in participating in this research by filling out a survey. As a collection instrument, a self-administered questionnaire and validated by the coordination of follow-up of graduates of the same university was applied. This questionnaire included 70 questions including three dimensions. The first on socio-demographic aspects (age,

gender, marital status, etc.), the second on aspects that occurred during the course of the career until obtaining the degree (method of obtaining the degree, aspects referring to the training received within the university), and the third on aspects subsequent to obtaining the degree (labor aspects, postgraduate courses).

In order to obtain the outcome variable, the question "How satisfied are you with your job today?" was asked.

The database and the analysis therefore were carried out in the statistical program STATA13.0. Simple frequencies were obtained and logistic regression analysis was performed to obtain OR, p-value and confidence intervals (95% CI).

This research does not violate the principles of ethics because it was not carried out in patients nor were interventions used that could harm the participants.

However, each participant was asked to read and sign if they agreed to participate in the study, an informed consent letter.

This research did not receive financial support from any foundation and it was carried out with the researchers' own resources.

#### **RESULTS**

Out the total population under study (144/100), 61% (n=90) were women, and 39% (n=57) men, with a mean age of 33.6, (SD 5.3) and a range of 26 to 60.

For 90.5% of the graduates, the Autonomous University of Guerrero and the career of dental surgeon was their first options to study, and only 36.0% have completed postgraduate studies. 75.5% were titled and 79.0% achieved it in less than one year after graduation, and in terms of the degree modality, 42.8% did so by thesis, 30.0% by general exam and 27.0% by expedited qualification.

Regarding the labor aspects, 62.0% worked during the last years of the career, 41.3% work in public institutions, 66.0% reported having difficulties finding a job because they do not have a degree, and 31.8% due to lack of experience.

Regarding the type of work in which they are working, 93.4% work in the area corresponding to the career, 56.5% are employees, 43.5% are self-employed, and 54.4% work part-time.

Regarding the interest of practicing the profession in their place of origin, more than 85% responded being interested, which shows a high level of roots.

In terms of compliance with expectations and satisfaction with the training received during the course at

dental school, percentages greater than 85% satisfaction are shown.

The overall percentage of job satisfaction was 92%, while the variables that were associated in the bivariate analysis were included in the logistic regression adjusting for age and sex, keeping only two variables (table 1).

 Table 1. Logistic Regression Model showing the variables that resulted in association with statistical significance.

	OR	р	CI 95%
Role of the dentist in his work	2.2	0.03	1.1 - 4.4
Level of satisfaction of the knowledge acquired within his academic training within the university	19.2	0.00	3.1 - 118

Two variables were found to explain the model, the role of the dentist in his work (Owner or employee) OR = 2.2, p = 0.03 (95% CI 1.1-4.4), and the level of satisfaction of the knowledge acquired within his academic training within the university OR = 19.2, p = 0.00 (95%CI 3.1-118).

#### **DISCUSSION**

It is evident that the relationship between the factors that contribute to job satisfaction are more complex than just saying that job satisfaction exists, or does not exist. Therefore, the way in which job satisfaction helps shape happiness and a sense of success must be elucidated in qualitative studies [17].

In our research we found a high percentage of job satisfaction (92%), which coincides with results of multiple researchers who report similar results [2,5]. This is reversed in some research papers where low levels of job satisfaction are reported in dentists dedicated to dental teaching at universities [15], reason why some universities have implemented strategies to reduce this dissatisfaction [16].

Kyriaki et al. [10] report that gender is a factor associated with job satisfaction of dentists, and that satisfaction levels are higher in women. However, Cui et al. [2], affirm in the same way as the results of our research, that gender is not significantly associated with dental job satisfaction.

One of the two variables that achieved statistical significance in our study was the role of the dentists in

their work (owner or worker). Beeing a worker generates greater job satisfaction. This could be explained because the worker does not have so many responsibilities compared to the responsibilities of the owner of the establishment. This agrees with that reported by Sergio et al. [5[, who consider the level of responsibility as a predictor of job satisfaction. The owner must deal with problems with suppliers, employees, services, provision of the necessary elements to work, and every month should be ready to pay employees their financial compensation. The owner should also be aware of problems with paying taxes, social security, health permits, etc. Due to all this, it is understood that although the economic remuneration must be higher when you are an owner bought with the employee, all this generates more stress and therefore less job satisfaction. Fortunately, the percentage of unemployed within the respondents at the time of applying the survey was very low (6.5%)

In our study, specialized dental practice did not result in statistically significant differences compared with the practice of general dentistry regarding the levels of job satisfaction. However, and in contrast to our findings, Sergio et al. [5], Fahim [8], and Muhić et al. [11], report this variable as an important predictor of dental job satisfaction.

Although the time of dedication and the workload of the dentists as well as the working hours are important, in our investigation these variables did not achieve statistical significance. Our findings in this regard are different from those reported by Cui et al. [2] and Muhić et al. [11] who consider these factors to be associated with dental job satisfaction.

Many authors report economic income as an extremely important factor for the construction of job

satisfaction [5,8,15], however this variable was not associated with satisfaction in our study.

Another aspect that we evaluated in this study that was not associated with statistical significance was the possibility of developing dental skills and abilities. This differs from those reported by other authors who consider these variables as part of the construction of dental job satisfaction [5,11].

The satisfaction about the knowledge acquired in the UAGro obtained very high levels of satisfaction. This means that graduates who showed high levels of satisfaction with their professional training within the university are usually also satisfied with their work activities, and probably they are satisfied in other areas of life too. It is worth mentioning that this factor has not been studied or reported by any author of the literature review carried out.

Regarding the high levels of roots reported by our graduates, we have the feeling that this is not so true. We have observed that many of them are located in larger cities and not in their home towns. This may be partly due to the fact that it is in these large cities where they find better job opportunities and academic continuity. It would be necessary to generate research about roots to study this phenomenon. This phenomenon leads to an unequal distribution of the dental workforce in the national territory, where most of dentists are concentrated in large cities, leaving rural areas devoid of oral health workers. Attempts have been made very successfully to lessen this problem in Australia. Such is the case of the Rural Clinical School at Charles Sturt University, New South Wales, Australia, where more than half of its graduates remain working in rural areas [18].

Because this is a cross-sectional study, we have temporality limitations, that is, because the variables have been measured only once in time, we know how the participants are at that moment, however, we do not know if there will be changes through the time on satisfaction levels. For this, the authors recommend conducting a follow-up study to reduce this bias.

Another recommendation to improve subsequent studies is to obtain a larger sample size. It is often difficult to locate graduates, especially those who are not working in the area of dentistry. This constitutes a bias since if we consider that the respondents are graduate dentists who attend the academic meetings of the dental school, we

must assume that they are active in dental practice, and that those who do not attend these events are possibly dentists who are not active in dentistry. It is not difficult to assume that those who are practicing dentistry experience greater job satisfaction than those who work in areas other than dentistry.

### **CONCLUSION**

The professional satisfaction of a dentist is of great importance, because it impacts their performance at work, and is closely related to the overall satisfaction of life, since both contribute reciprocally to the happiness of a person, as well as the general well-being in the community.

Being an employee and not the owner of the establishment with all the problems that implies, and having been highly satisfied with the education received at the university are factors that contribute to the job satisfaction of dentists.

#### Collaborators

ROMERO-CASTRO NS and REYES-FERNÁNDEZ S, conception, study design, data analysis, interpretation of the data, article review, article writing. COBOS-CRUZ XT, GARCIA-VERÓNICA A, HERNÁNDEZ-TREVIÑO N, and SERNA-RADILLA VO, conception, study design, field work, interpretation of the data, article review.

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