

# Job satisfaction among dentists of eastern Nepal – a pilot study

Bhagat TK<sup>1</sup>, Shrestha A<sup>2</sup>, Choudhary A<sup>3</sup>, Sherchan S<sup>4</sup>, Dahal S<sup>5</sup>, Yadav M<sup>6</sup>

<sup>1,3</sup>Assistant Professor, Department of Public Health Dentistry

<sup>2</sup>Associate Professor and Head, Department of Public Health Dentistry

<sup>4,5,6</sup>Dental interns

B. P. Koirala Institute of Health Sciences, Dharan, Nepal

## ABSTRACT

**Objective:** To find out the overall job satisfaction among the dentists of eastern Nepal using the short form of Minnesota Satisfaction Questionnaire.

**Method:** The study population consisted of 59 practicing dentists in eastern Nepal. Data were collected using two questionnaires.

**Results:** The difference between the intrinsic, extrinsic and general satisfaction scores with regard to years in practice was found to be insignificant. The intrinsic, extrinsic and general satisfaction score with regard to dental auxiliaries was found to be significant for every satisfaction category. The mean satisfaction score of dentist who didn't employ dental auxiliaries were significantly higher than those who employed dental auxiliaries.

**Conclusion:** The present study suggests that younger eastern Nepalese dentists seem to experience less job satisfaction than their elder counterparts of this region.

**Key words:** job satisfaction, dentists, eastern Nepal

## INTRODUCTION

Job satisfaction has been defined as "the positive emotional state resulting from the appraisal of one's job or job experiences" (Locke 1976).<sup>1</sup> Satisfaction at work affects the productivity of a working person and quality of life as well as the services received by the patients. Dentistry is a prestigious profession with high income opportunity as well as it might be laborious and stressful for some dentists. Job satisfaction in dentistry is related with many work environmental factors like clinic location, years in practice, patient relations etc. as well as the income they generate and their quality of life. Many studies have been conducted regarding job satisfaction among dentists across different parts of world,<sup>2-5</sup> but none of such study has been carried out in Nepal till date (as could be seen on electronic search). This study was carried out to find out the overall job satisfaction among the Nepal Medical Council (NMC) registered dentists of eastern Nepal using the short form of Minnesota Satisfaction Questionnaire (MSQ).<sup>6</sup>

Correspondence: **Srikant N.** ; e-mail: [srikant.n@manipal.edu](mailto:srikant.n@manipal.edu)

## MATERIALS AND METHOD

The study population consisted of all NMC registered practicing dentists in eastern Nepal. A list of licensed dentists was obtained from Nepal Dental Association, eastern region branch.

### Subjects

A total of 59 subjects were randomly selected from 490 registered practicing dentists. A set of two questionnaires were e-mailed to all the 59 practicing dentists. Each questionnaire was number coded to identify non respondents. Confidentiality and anonymity were maintained. The entire 59 e-mailed questionnaire were e-mailed back by the participants there by nullifying the attrition factor.

### Survey instrument

Data were collected using two questionnaires. The first questionnaire (Annexure 1) included question regarding the socio-demographic characteristics and economic condition of dentist. The second questionnaire was the short form of Minnesota Satisfaction Questionnaire (Annexure 2). The MSQ was developed by Weiss, Dawiss, England and Lofquist (1967) and is a well-

regarded measure of job satisfaction that had been used in numerous studies. The short form of the MSQ consisted 20 items that were relevant to a number of job facets and with which respondents indicate their degrees of relative satisfaction using a 5-point Likert scale ranging from 1 (very dissatisfied) to 5 (very satisfied).

### Reliability and validity

In actual study, the validity and reliability (internal consistency) of Minnesota Satisfaction Questionnaire (MSQ) was assessed by an explanatory factor analysis. Kaiser's measure of sampling adequacy was 0.88, indicating suitability of the data for factor analysis. Cronbach's alpha was used to assess the internal consistency of Minnesota Satisfaction Questionnaire.

### Statistical analysis

Survey data were manually entered using Microsoft Excel 2003 (Microsoft, Redmond. WA. USA) and then entry errors and outlier values were reviewed. All statistical analysis was performed using SPSS 20. Unpaired t-test, ANOVA and Fisher's exact test were used to verify the association between various factors and job satisfaction.

## RESULTS

**Table 1: Mean satisfaction score of the study group according to its socio-demographic characteristics**

| Characteristic           | Frequency (%) | Intrinsic            | Extrinsic           | General            |
|--------------------------|---------------|----------------------|---------------------|--------------------|
| <b>Gender</b>            |               |                      |                     |                    |
| Male                     | 36 (61.0)     | 3.76 ± 0.08          | 3.41 ± 0.09         | 3.63 ± 0.07        |
| Female                   | 23 (39.0)     | 3.78 ± 0.08          | 3.38 ± 0.16         | 3.64 ± 0.10        |
|                          |               | t = 0.15, p = 0.88   | t = 0.16, p = 0.87  | t = 0.12, p = 0.90 |
| <b>Age group</b>         |               |                      |                     |                    |
| 20 – 29 years            | 36 (61.0)     | 3.77 ± 0.08          | 3.43 ± 0.10         | 3.64 ± 0.07        |
| 30 – 39 years            | 18 (30.5)     | 3.67 ± 0.11          | 3.24 ± 0.14         | 3.50 ± 0.11        |
| 40 – 49 years            | 03 (5.10)     | 4.19 ± 0.19          | 3.89 ± 0.45         | 4.15 ± 0.22        |
| > 49 years               | 02 (3.40)     | 4.12 ± 0.12          | 3.67 ± 0.50         | 3.97 ± 0.07        |
|                          |               | F = 1.53, p = 0.21   | F = 1.14, p = 0.34  | F = 2.4, p = 0.07  |
| <b>Years in practice</b> |               |                      |                     |                    |
| 0 – 4                    | 43 (72.9)     | 3.74 ± 0.07          | 3.44 ± 0.09         | 3.62 ± 0.06        |
| 5 – 9                    | 08 (13.6)     | 3.53 ± 0.18          | 2.49 ± 0.22         | 3.30 ± 0.19        |
| 10 – 14                  | 05 (8.50)     | 4.08 ± 0.15          | 3.57 ± 0.37         | 3.94 ± 0.17        |
| >14                      | 03 (5.10)     | 4.28 ± 0.17          | 3.83 ± 0.33         | 4.15 ± 0.18        |
|                          |               | F = 2.98, p = 0.039* | F = 2.22, p = 0.096 | F = 4.19, p = 1.01 |

\*Statistically significant

**Table 2: Satisfaction score according to socioeconomic characteristics of dentists**

| Characteristic                         | Frequency % | Intrinsic           | Extrinsic           | General             |
|--|-------------|---------------------|---------------------|---------------------|
| <b>Monthly income</b>                  |             |                     |                     |                     |
| 10,000 – 50,000                        | 39 (67.2)   | 3.71 ± 0.07         | 3.42 ± 0.09         | 3.61 ± 0.07         |
| 50,000 – 1,00,000                      | 10 (17.2)   | 4.20 ± 0.10         | 3.55 ± 0.23         | 3.96 ± 0.10         |
| No answer                              | 09 (15.5)   | 3.59 ± 0.13         | 3.17 ± 0.24         | 3.43 ± 0.16         |
|  |             | F=4.45, p = 0.007*  | F = 0.65, p = 0.58  | F= 3.15, p= 0.032*  |
| <b>Income other than dentistry</b>     |             |                     |                     |                     |
| Yes                                    | 02 (03.39)  | 4.12 ± 0.12         | 3.58 ± 0.42         | 3.95 ± 0.05         |
| No                                     | 57 (96.61)  | 3.76 ± 0.06         | 3.39 ± 0.08         | 3.62 ± 0.06         |
|  |             | t = 1.098, p = 0.27 | t = 0.41, p = 0.68  | t = 1.02, p = 0.31  |
| <b>Dental auxiliaries</b>              |             |                     |                     |                     |
| Yes                                    | 21 (35.6)   | 3.60 ± 0.11         | 3.17 ± 0.13         | 3.43 ± 0.10         |
| No                                     | 38 (64.4)   | 3.87 ± 0.07         | 3.53 ± 0.10         | 3.74 ± 0.44         |
|  |             | t= 2.18, p = 0.033* | t= 2.12, p = 0.038* | t= 2.73, p = 0.008* |
| <b>No of patients examined per day</b> |             |                     |                     |                     |
| < 10                                   | 13 (22.0)   | 3.87 ± 0.10         | 3.91 ± 0.12         | 3.09 ± 0.11         |
| 10 – 14                                | 33 (55.9)   | 3.74 ± 0.09         | 3.25 ± 0.11         | 3.55 ± 0.08         |
| 15 – 19                                | 08 (13.6)   | 3.77 ± 0.16         | 3.42 ± 0.19         | 3.61 ± 0.16         |
| >19                                    | 05 (08.5)   | 3.68 ± 0.15         | 3.07 ± 0.22         | 3.49 ± 0.10         |
|  |             | F = 0.287, p = 0.83 | F=4.75, p = 0.005*  | F = 2.12, p = 0.108 |
| <b>Hours worked per day</b>            |             |                     |                     |                     |
| 5 - 10                                 | 54 (91.5)   | 3.79 ± 0.06         | 3.41 ± 0.09         | 3.65 ± 0.06         |
| > 10                                   | 05 (08.5)   | 3.60 ± 0.28         | 3.30 ± 0.14         | 3.49 ± 0.22         |
|  |             | t = 0.86, p = 0.39  | t = 0.37, p = 0.71  | t = 0.74, p = 0.46  |

\*Statistically significant

The total sample size of this study was 59 among which 61% of the study group was male and 39% of the study group was female. The majority of the sample (61%) was between the ages of 20-29 and 3.4% was 50 years of age or above. Most of them (72.9%) had a practice 0 to 4 years, 8.5% had their practice for 10 to 14 years and 5.1% had practiced for more than 15 years. The difference between the satisfaction scores with regard to gender and age group was found to be insignificant. The difference between the satisfaction scores with regard to years in practice was found to be insignificant in regards to extrinsic and general satisfaction but the intrinsic satisfaction score was found to be significant. (Table 1)

Majority (67.2%) of the dentists had monthly income of 10,000 to 50,000 whereas 15.5% didn't respond to any answer. Most (96.61%) of the dentists did not have income other than dentistry. More than half (64.4%)

didn't employ dental auxiliaries, 55.9% examined 10 to 14 patients per day, 91.5% of dentist worked 5 to 10 hours per day. The intrinsic and general satisfaction score with regard to monthly income was significant while extrinsic satisfaction was found to be insignificant. Dentists with monthly income between 50,000 to 1,00,000 had significantly higher satisfaction score than dentists with lower income. The intrinsic, extrinsic and general satisfaction score with regard to income other than dentistry was found to be insignificant for every satisfaction category. The mean satisfaction score of dentist who didn't employ dental auxiliaries were significantly higher than those who employed dental auxiliaries. The intrinsic, extrinsic and general satisfaction score with regard to number of patient examined per day was found to be significant in case of extrinsic satisfaction score. The intrinsic, extrinsic and general satisfaction score with regard to hours worked

per day was found to be insignificant for every satisfaction category. All types of satisfaction scores were highest among dentists who examined 5 to 10 patients per day. (Table 2)

### DISCUSSION

This study was carried out to find out the intrinsic, extrinsic and general job satisfaction among the Nepal Medical Council (NMC) registered dentists of eastern Nepal using the short form of Minnesota Satisfaction Questionnaire (MSQ). It was observed that all types of satisfaction score were significantly higher among dentists who examined 10-14 patients per day. This was similar to the study conducted in Turkey.<sup>7</sup> In the present study, 64.4% of the dentists did not employ dental auxiliaries and were found to be satisfied with their job. This is in contrast to the study conducted in California<sup>1</sup> and Kentucky<sup>5</sup> where presence of dental auxiliaries was necessary for job satisfaction. This can be attributed to the fact that there is scarcity of dental auxiliaries in this region and the dentists have trained themselves accordingly. The present study suggests that younger eastern Nepalese dentists seem to experience less job satisfaction than their elder counterparts of this region. Patient relations, perception of income, personal time, staff, and specialty training were important work environment factors for job satisfaction among these dentists. Of these factors, the patient relation was the strongest predictor of overall job satisfaction. Findings of this study will be helpful to policy makers to design plans to increase the level of job satisfaction among Nepalese dentists.

### LIMITATIONS OF THE STUDY

Several limitations must be considered when interpreting the findings of the study. First, this survey was based on a cross-sectional design that did not allow the determination of causality for any identified association. Thus prospective and longitudinal studies are strongly needed to examine the change of work environment factors on job satisfaction in a future research. Efforts to develop better measures of job satisfaction and more objective measures of work environment factors are needed. There is a need to confirm and replicate the findings of this study through other research methods and in other settings.

### REFERENCES

1. Locke. E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunette (Ed), Handbook of industrial and organizational psychology, Chicago: Rand McNally, 1297-1349.
2. Yablon P, Rosner JF. The career satisfaction of dentists in relation to their age and income. J Am Coll Dent, 1982; 49(3-4):45-52.
3. Shugars DA, DiMatteo MR, Hays RD, Cretin S, Johnson JD. Professional satisfaction among California general dentists. J Dent Educ, 1990; 54(11):661-9.
4. Logan HL, Muller PJ, Berst MR, Yeane DW. Contributors to dentist's job satisfaction and quality of life. J Am Coll Dent. 1997; 64(4):39-43.
5. Wells A, Winter PA. Influence of practice and personal characteristics of dental job satisfaction. J Dent Educ. 1999 Nov; 63(11):805-12.
6. Weiss DJ, Dawis RV, England GW, Lofquist LH. Minnesota studies in vocational rehabilitation. Manual for the Minnesota Satisfaction Questionnaire. Industrial Relations Center, Minneapolis, University of Minnesota, 1967.
7. Sur H, Hayran O, Mumcu G, Soylemez D, Atli H, Yildirim C. Factors affecting dental job satisfaction: a cross-sectional survey in Turkey. Eval Health Prof. 2004 Jun;27(2):152-64.