

Factors Related to Job Satisfaction amongst Endodontists in Saudi Arabia: A Cross-sectional Study

NAWAF LABBAN¹, NOUF AL-SHIBANI², HANAN AL-OTAIBI³, REEM AL-KATTAN⁴, SARA ALFADDA⁵, EMAD ALSHWAIMI⁶, SAHAR FAISAL ALBARAKATI⁷



ABSTRACT

Introduction: High incidence of job dissatisfaction among practising endodontist raises serious concerns on the health care system.

Aim: To evaluate overall job satisfaction among endodontist highlighting the significance of intrinsic and extrinsic factors and their satisfaction level with patients, facilities and workplace when working in Kingdom of Saudi Arabia (KSA).

Materials and Methods: A questionnaire was sent to endodontist using survey monkey instrument consisting of total 38 questions in seven domains. Socio-demographic characteristics, academic, professional qualifications, motivation behind choice of endodontist as a speciality, satisfaction as an endodontist, satisfaction with the workplace, environment facilities and staff and their satisfaction with their relationship with patients were assessed. The responses were measured using a five-point Likert's Scale coded as: 1 strongly disagree; 2 disagree; 3 fair; 4 agree; 5 strongly agree. A descriptive analysis of all responses was done using Statistical Package for the Social

Sciences. Standard Deviation (SD), percentages and means were calculated.

Results: Demographic factors exhibited that 93.6% (103) were Saudi national. Gender analysis indicated 25 respondents (22.7%) were male, whereas 85 (77.3%) were females. Regarding qualification, 58 (52.7%) of the dentists had their qualification from Saudi commission of health sciences, by completing the Endodontic Saudi board specialist training and examination. Majority of the respondents, 78 (69.6%), reported "challenging profession" as the main reason for choosing endodontics. Regarding satisfaction at job 77.2% of the respondents stated that their responsibilities were well defined. An 80.9% of the endodontist was of the view that they have good relations with their patients. The results of 110 respondents revealed highly significant differences among responses to different questions ($p < 0.05$).

Conclusion: Job satisfaction of endodontist working in KSA was satisfying. More studies should be performed to validate the results of present study.

Keywords: Cross-sectional analysis, Occupational factors, Saudi dentists, Work satisfaction

INTRODUCTION

Amongst healthcare specialities dentistry is considered to be one of the most rewarding and prestigious profession. Success in dental profession is dependent on multiple social factors that directly influences dentist's wellbeing and contribute towards productive dental practice [1]. Dentist knowledge and attitude toward patients, availability of equipments, patient satisfaction towards dentists, continuous professional development opportunities and dentist work experience are some factors influencing the success of a dental practice and job satisfaction amongst dentists [2,3].

Measuring job satisfaction is important as it may influence physical and mental health and may affect job related behaviour and performance [4]. Job satisfaction in dentistry motivates a dentist, provides improvement, satisfaction and pleasure at work. This indirectly improves patient care and satisfaction, benefiting dental auxiliaries, patient and dentists. Henceforth, enhancing the success and progress of oral health care and practice [5].

Multiple studies have evaluated job satisfaction among working dentists and have reported low job satisfaction for dentist [6-8]. These studies suggested that due to low job satisfaction they might quit their jobs early in career, experience high stress levels and increase suicidal incidents classifying dentistry as hazardous profession [6-8]. However, other studies reported that better clinic location, increase years in practice, better income packages and positive attitude of senior and work staff has an encouraging effect on job satisfaction [9,10]. Multiple studies have investigated dental practitioner job satisfaction and among different dental specialities i.e., Orthodontist, Oral

surgeons and Restorative dentists indicating restorative dentists to be less satisfied compared to their counterparts [2,5,11]. As per the search from indexed literature, evidence related to job satisfaction and motivation factors among endodontist working in the Kingdom of Saudi Arabia (KSA) is not available.

Therefore, the aim of the present study was to evaluate overall job satisfaction among endodontist highlighting the significance of intrinsic and extrinsic factors and their satisfaction level with patients, facilities and workplace when working in KSA. The data gathered can give a glimpse of Quality of Life (QoL) of an endodontist working in KSA and it may help in refining the performance of an endodontist.

MATERIALS AND METHODS

The study was approved by the Ethical Committee of King Saud University Riyadh Saudi Arabia under ethical number (E18-3360). The study was in accordance to STROBE statement of reporting cross-sectional surveys. The duration of the study was three months (from April 2019 to July 2019).

A literature review was performed to validate the present cross-sectional survey, which revealed that there was no available data on assessment of job satisfaction amongst endodontists. Contact details of registered endodontists were requested from the office of Saudi Dental Society. A questionnaire was formulated consisting of total 38 questions in seven domains. Research team of statistician along with authors reviewed the content of each question to make sure that the survey reflected appropriate phrasing and understanding and validation (Cronbach's $\alpha = 0.070$). A total sample size of 100 endodontists was well thought out but since dropouts,

invalid responses were anticipated so a sample size of 125 endodontists was considered appropriate. Using power calculation sample size was assessed from a study by Al-Kattan R and Al-Shibani N [12]. A link containing details of the questionnaire using survey monkey instrument was sent to endodontist from the office of Saudi Dental Society. Reminder e-mail was sent periodically to improve response rate.

The seven domains of the cross-sectional survey consisted of questions related to socio-demographic characteristics, academic, professional qualifications, and motivation behind choice of endodontist as a speciality, satisfaction as an endodontist, satisfaction with the workplace environment facilities and staff and their satisfaction with their relationship with patients. The questions of the survey were sourced from a study by Alqahtani N et al., and were included in the study with some modification [1]. The validity of modified questions was evaluated using Cronbach's $\alpha=0.080$) The responses were measured using a five-point Likert's Scale coded as, 1 strongly disagree; 2 disagree; 3 fair; 4 agree; 5 strongly agree.

STATISTICAL ANALYSIS

A single investigator to minimise bias evaluated all the responses. SPSS software version 21.0 (Chicago, IL, USA) was used for tabulation of descriptive analysis. Standard Deviation (SD), percentages and means were calculated. Comparison between the demographic, academic, professional qualification variables and other domains were explored by applying chi-square test.

RESULTS

Out of the total 125 emails sent to the endodontists, 110 (88%) responses were attained. The results of 110 respondents with mean age 45.54 ± 5.24 , revealed highly significant difference among responses to different included questions ($p < 0.05$).

Socio-demographic Characteristics, Academic and Professional Qualifications

Demographic factors exhibited that 93.6% (103) were Saudi national whereas, 6.4% (7) were non-Saudis. Gender analysis indicated that 25 respondents (22.7%) were male, whereas 85 (77.3%) were females. Sixty-seven (60.9%) of the participants had age between 31-40 years [Table/Fig-1].

Characteristics	Frequency	Percent (%)	Significance*
Age of the respondents			
<30 years	13	11.8	
31-40 years	67	60.9	≤ 0.001
41- 50 years	24	21.8	
51-60 years	2	1.8	
>60 years	4	3.6	
Gender of the respondents			
Male	25	22.7	≤ 0.001
Female	85	77.3	
Nationality of the respondents			
Non-Saudi	7	6.4	≤ 0.001
Saudi	103	93.6	

[Table/Fig-1]: Socio-demographic characteristics of respondents.

*Chi-square test

The [Table/Fig-2] presents the academic qualifications of the respondents. Around, 58 (52.7%) of the dentists had their qualification from Saudi Commission of Health Specialities, by completing the Endodontic Saudi board specialist training and examination. While 27 (24.5%) of the responders completed a master's degree and certificate in endodontics; and only 11 (10.0%) had a doctorate degree. The results further revealed that amongst

the total respondents, 61 (55.5%) completed their residency program within Kingdom of Saudi Arabia (KSA) while approximately 44 (40%) completed their residency program in a foreign country.

Education and training	Frequency	Percent (%)
Qualifications of the respondents		
Certificate in endodontics	14	12.7
M.Sc. & Certificate endodontics	27	24.5
Ph.D.	11	10.0
Board	58	52.7
Where did you attend a residency program?		
Saudi Arabia	61	55.5
Europe	10	9.0
North America (USA & Canada)	34	30.9
Other	5	4.5

[Table/Fig-2]: Academic qualifications and training of respondents.

Majority (42-38.2%) of the participants fall within professional experience of 3-8 years, followed by 19 respondents who possessed 9-15 years of work experience and only 9 participants had professional experience between 16-25 years. Moreover, amongst 110 subjects, (44-40.0%) participants were engaged in academics-based practice, followed by 24 respondents (21.8%) employed by the Ministry of Health (MoH) and 23 (20.9%) were working in a private dental practice [Table/Fig-3].

Work experience	Frequency	Percent (%)
Total experience		
<3 years	32	29.1
3-8 years	42	38.2
9-15 years	19	17.3
16-25 years	9	8.1
>25 years	8	7.2
Where do you work?		
Academic (university based)	44	40.0
Private practice	23	20.9
Ministry of health	24	21.8
University clinics	5	4.54
National guard	9	8.1
Armed forces	5	4.54

[Table/Fig-3]: Respondents work experience and related information.

Motivation for Choosing Endodontics as a Speciality

Majority of the respondents, 78 (69.6%), reported "challenging profession" as the main reason for choosing endodontics. This was followed by "professional growth," "financial gains," "prestigious speciality," and "family influence" [Table/Fig-4].

Reason for choosing endodontics	Frequency	Percent (%)
Motivation for opting endodontics		
Professional growth	18	16.0
Prestigious speciality	6	5.35
Challenging profession	78	69.6
Family influence	2	1.78
Financial gains	6	5.45

[Table/Fig-4]: Respondents motivation for choosing endodontics.

Respondents' Satisfaction with the Endodontics Profession

Majority of the participants, 77.3% stated that endodontics was their primary choice among all dental specialities, followed by 48.1% claiming to be satisfied with working quality of auxiliary staff. Furthermore, 63.7% of the subjects were pleased with overall,

quality of life as an Endodontist. Moreover, 65.5% of the participants were gratified with facilities and resources in the clinics for adequate delivery of good quality oral health care. However, 27.3% of the respondents were not satisfied with the income from their endodontic practice. In addition, nearly 40% of the dentists were unhappy with medical facilities provided to them as job benefits [Table/Fig-5].

Satisfaction factor	Strongly agree+agree	Fair	Strongly disagree+disagree	Significance*
Endodontics speciality being first choice	77.3	5.5	8.1	
My job description and responsibilities where I work are well- defined and clear	77.2	6.4	7.2	
My current practice situation is what I envisioned when I chose to be Endodontist	58.2	15.5	17.2	
Satisfied with the salary/ wages and other financial benefits	40	23.6	27.3	
Satisfied with the medical and dental treatment services provided to me as job benefits	20.9	12.7	39.1	
Overall, I am satisfied with quality of life as an Endodontist	63.7	18.2	9.1	≤0.001
I have adequate time for my professional development activities	43.6	23.6	23.6	
I have adequate time for my personal and family life	50	20	20.9	
I am satisfied with the practice management and care delivery system	49.1	23.6	18.1	
I have adequate time for my professional development activities	43.6	23.6	23.6	
I can freely utilize my potentials and capabilities	48.2	26.4	16.3	

[Table/Fig-5]: Satisfaction factors related to the Endodontic profession.
*Chi-square test

Respondents' Satisfaction of the Workplace Environment

Regarding satisfaction of the dentists about their practice and workplace environment, 53.6% of the respondents stated that their responsibilities were well defined. Eighty-four percent of the participants affirmed that they are content with working environment within the practice team because it was conducive. Likewise, 81.8% of the participating subjects agreed that their professional senior colleagues were kind and they enjoyed working as team. Moreover, 51.8% of the participants stated that their organisation was supportive for professional development and quality of work [Table/Fig-6]. The results presented in [Table/Fig-7] show that 48.1% of the dentists were satisfied with practice management and care delivery system.

Respondents' Satisfaction with their Relationship with their Patients

Analysis of the results presented in [Table/Fig-8] showed that 80.9% of the endodontist were of the view that they have good relations with their patients. Although, 27.3% of the respondents stated that amount of workload was too much on endodontist. Moreover, 31.8% of the participants agreed that their patients were not punctual and did not adhere to the appointment schedule. Likewise, 76.4% of the respondents agreed that overall they were satisfied with their job as an endodontist. In contrast, a significant percentage (24.5%) of their patients had unrealistic expectations regarding the outcome of their endodontic treatment [Table/Fig-8].

DISCUSSION

The present cross-sectional survey displayed a unique assessment of endodontist job satisfaction in the region of KSA. To the best

Satisfaction factor	Strongly agree+agree	Fair	Strongly disagree+disagree	Significance*
I am treated respectfully by the head of my department	79.1	7.3	4.5	
Support from administrative offices, secretaries and clerical staff is adequate	53.6	22.7	14.5	
In general, I am treated respectfully by my senior colleagues	81.8	7.3	1.8	
My organisation supports professional development for improvement of their efficiency and quality of work	51.8	20	19.1	≤0.001
I am satisfied with working environment within the practice team because it is conducive and professional	84.0	12.7	14.5	
The load of paperwork and administrative duties affect my professional capabilities	45.5	17.3	28.2	
Amount of workload is too much and killing	27.3	30	33.6	
I face too much pressure from my seniors	12.7	13.6	64.5	
I have a liberty to choose appropriate working methods and materials	64.5	17.3	9.1	

[Table/Fig-6]: Respondents satisfaction with the workplace environment.
*Chi-square test

Satisfaction factor	Strongly agree+agree	Fair	Strongly disagree+disagree	Significance*
My colleagues are courteous, and we enjoy working in a team	68.2	12.7	10.0	
My work is recognised and appreciated by my colleagues and seniors	74.5	10	6.3	
I feel no problem while communicating with staff	74.5	10.9	5.4	≤0.001
Satisfied with working quality of my auxiliary staff	48.1	23.6	19.1	
Satisfied with working quality of my technicians	28.2	51.8	11	
Facilities and resources in the clinics are adequate for delivery of quality care to patients	65.5	10	15.4	

[Table/Fig-7]: Respondents satisfaction with staff and facilities.
*Chi-square test

Satisfaction factor	Strongly agree+agree	Fair	Strongly disagree+disagree	Significance*
I have good relations with my patients	80.9	6.4	3.6	
Patients are always on time and adhere to the appointment schedule	31.8	32.7	26.3	
I feel no problem while communicating with my patients	70	10.9	10.0	≤0.001
Patients' unrealistic expectations burn me out	24.5	30.9	35.5	
Overall, I am satisfied with my job as a Endodontics	76.4	7.3	7.3	

[Table/Fig-8]: Respondents satisfaction about their relationship with patients.
*Chi-square test

of authors' understanding this is one of the distinctive surveys done in KSA on endodontists job satisfaction. The response rate in the present study was 89%. A similar study type based on job satisfaction of orthodontics working in KSA was performed by Alqahtani N et al., which yielded a lower response rate [1]. A possible explanation to this low response rate was busy clinical

settings and personal commitment. However, in the present study follow-up reminder emails exhibited a better response rate [13]. The reminder emails were sent periodically after every three weeks. The survey consisted of seven domains and 38 item questions. A cross-sectional type study design was used as it is easy, simple and cost-effective to perform, it may help in generating a hypothesis for a more complex investigation and possibilities of loss to follow-up are minimum [14]. Moreover, a survey monkey instrument was used making the results more accurate, less bias and convenient, compared to a manual survey [15]. When asked about qualifications, majority of the respondents did residency program in endodontics from KSA and qualification was Saudi Endodontic Board. This finding was in concurrence with the results of Al-Dlaigan YH et al., indicating that students were motivated, eager and enthusiastic in obtaining lifelong education [16].

When respondents were asked about motivation for choosing endodontics, 78 (69.6%) took endodontic as a challenging profession. These findings were in line with studies by Alqahtani N et al., and Noble J et al., signifying mature mental abilities and disciplined determination [1,17]. Overall, effect of QoL as an endodontist was 63.7%. Moreover, 77.3% of respondents proclaimed that choosing an endodontic speciality was their primary choice. Choosing profession and speciality of first choice helps a lot in balancing QoL and also may reduce occupational stress levels [18].

Moreover, when inquired about satisfaction with the workplace environment and staff, 84% were satisfied with working environment within the practice team because it was conducive and professional. These factors contribute to job gratification and organisational commitment. Henceforth, enhancing the success and progress of organisation and dental practice [19]. Furthermore, >50% of the endodontists were of view that ample time is available for family and personal life. A study by Rada RE and Johnson-Leong C, proclaims having no family or personal time have serious complication in a life of a dentist and risk of anxiety, stress, depression and burnout increases. Moreover, there is gradual erosion professionally resulting in serious implication both mentally and physically [20].

Most of the respondents were not satisfied and were unhappy with patients coming late to the dental practice i.e., being not punctual. These results are parallel to a study by Rada RE and Johnson-Leong C, indicating that such act by the patients causes high level of stress and anxiety among dentists [20]. In the present study, overall job satisfaction among endodontist was 76.3%. This satisfaction percentage is found to be worrying, as a study by Roth SF et al., shows that high satisfaction in job upsurgers risk of occupational stress [21]. From the results of this study, it can be inferred, that job satisfaction among endodontist working in KSA was satisfying.

Limitation(s)

More studies with better study designs should be executed with comparison between different dental specialities. The study has limitation based on its small sample size. More studies with increased sample size and endodontist from other parts of KSA should be taken into account to get a better representation of the population. For future studies, a comparison between Saudis and Non-Saudis job satisfaction as an endodontist should be also performed.

CONCLUSION(S)

Endodontists working in Kingdom of Saudi Arabia were found to be content and satisfied with their job. Moreover, policy should be directed in improving administrative responsibilities of endodontists for a better oral health care delivery. More studies should be performed to validate the findings of the present study.

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PARTICULARS OF CONTRIBUTORS:

1. Associate Professor, Department of Prosthetic Dental Science, College of Dentistry, King Saud University, Riyadh, Saudi Arabia.
2. Associate Professor, Department of Periodontics and Community Dentistry, College of Dentistry, King Saud University, Riyadh, Saudi Arabia.
3. Assistant Professor, Department of Prosthetic Dental Science, College of Dentistry, King Saud University, Riyadh, Saudi Arabia.
4. Assistant Professor, Department of Periodontics and Community Dentistry, College of Dentistry, King Saud University, Riyadh, Saudi Arabia.
5. Professor, Department of Prosthetic Dental Science, College of Dentistry, King Saud University, Riyadh, Saudi Arabia.
6. Professor, Endodontics Division, Department of Restorative Dental Science, College of Dentistry, Imam Abdulrahman Bin Faisal University, Riyadh, Saudi Arabia.
7. Professor, Division of Orthodontics, Department of Paediatric Dentistry and Orthodontics, College of Dentistry, King Saud University, Riyadh, Saudi Arabia.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Nawaf Labban,
Associate Professor, Department of Prosthetic Dental Science, College of Dentistry,
King Saud University, Riyadh, Saudi Arabia.
E-mail: labbanny@yahoo.com; nalabban@ksu.edu.sa

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