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ARTIGO ORIGINAL DE TEMA LIVRE

HEALTH-RELATED QUALITY OF LIFE OF ORAL HEALTH WORKERS IN PRIMARY HEALTH CARE IN SALVADOR, BRAZIL

Juliane Kely Fagundes Silva[a]
https://orcid.org/0000-0002-8709-9036
Fernando Martins Carvalho[b]
https://orcid.org/0000-0002-0969-0170
Carolina Franco de Azevedo[c]
https://orcid.org/0000-0001-6695-215X
Maria Isabel Pereira Vianna[d]
https://orcid.org/0000-0003-4478-6941
Maria Cristina Teixeira Cangussu[e]
https://orcid.org/0000-0001-9295-9486
Liliane Lins-Kusterer[f]
https://orcid.org/0000-0003-3736-0002

Abstract

This study aimed to identify and determine the level of factors associated with the health-related quality of life (HRQoL) of oral health professionals working in Primary Health Care (PHC) in Brazil. A cross-sectional survey was carried out among 96 dentists and 65 dental assistants working in the Family Health Strategy (FHS) in six municipalities in the metropolitan area of Salvador (BA), Brazil. The HRQoL was evaluated using the 36-item Short Form

[a] *Dental Surgeon. Master's in Health, Environment and Labor. Grant by Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (Capes). PhD candidate in Collective Health at Instituto de Saúde Coletiva da Universidade Federal da Bahia (UFBA). Salvador, Bahia, Brasil. E-mail: fagundesjuliane@yahoo.com.br*

[b] *Physician. PhD. Research Productivity Grant by Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq). Retired Full Professor at UFBA. Salvador, Bahia, Brasil. E-mail: fmc.ufba@gmail.com*

[c] *Dental Surgeon. Master's in Health, Environment and Labor Capes Grant. PhD candidate in Collective Health at Instituto de Saúde Coletiva da UFBA. Salvador, Bahia, Brasil. E-mail: cfakaroll@hotmail.com*

[d] *Dental Surgeon. PhD in Public Health. Retired Full Professor at UFBA. Salvador, Bahia, Brasil. E-mail: vianna.mariaisabel@gmail.com*

[e] *Dental Surgeon. PhD in Public Health. Full Professor at UFBA. Salvador, Bahia, Brasil. E-mail: cangussu@ufba.br*

[f] *Dental Surgeon. PhD in Human Pathology. Productivity Grant by CNPq. Professor at UFBA. Salvador, Bahia, Brasil. E-mail: lkusterer@gmail.com*

Endereço para correspondência: Faculdade de Medicina da Bahia. Praça XV de Novembro, s/n, Largo do Terreiro de Jesus, Centro Histórico. Salvador, Bahia, Brasil. CEP: 40026-010. Email: liliane.lins@ufba.br

Health Survey Questionnaire (SF-36). Higher mean scores in the SF-36 physical component summary were associated with younger age, post-graduate education in public health, and frequent leisure time. The mental component summary was associated with frequent leisure time, > 40 weekly working hours, suitable dental offices, satisfaction with colleagues, and satisfaction with working in PHC. The HRQoL level of oral health professionals working in primary health care in PHC in Brazil was comparable to those found in the available literature and associated with several modifiable factors. Incidentally, a literature search found few studies using the SF-36 to assess the HRQoL of oral health workers, and those found were produced outside the main scientific centers.

Keywords: Quality of life. Oral health. Primary Health Care. Occupational health. Dental health services.

QUALIDADE DE VIDA RELACIONADA À SAÚDE DE TRABALHADORES DE SAÚDE BUCAL DA ATENÇÃO PRIMÁRIA À SAÚDE EM SALVADOR, BRASIL

Resumo

O objetivo deste estudo foi identificar e determinar o nível de fatores associados à qualidade de vida relacionada à saúde (QVRS) de profissionais de saúde bucal que atuam na Atenção Primária à Saúde (APS) no Brasil. Foi realizado um estudo de corte transversal com 96 cirurgiões-dentistas e 65 auxiliares em saúde bucal que atuam na Estratégia Saúde da Família (ESF) em seis municípios da região metropolitana de Salvador (BA), Brasil. A QVRS foi avaliada usando o 36-item Short Form Health Survey Questionnaire (SF-36). Escores médios mais altos no resumo do componente físico do SF-36 foram associadas a idade mais jovem, pós-graduação em saúde pública e tempo de lazer frequente. O resumo do componente mental foi associado a tempo de lazer frequente, > 40 horas semanais de trabalho, consultórios odontológicos adequados, satisfação com os colegas e satisfação em trabalhar na APS. O nível de QVRS dos profissionais de saúde bucal que atuam na APS no Brasil foi comparável aos encontrados na literatura disponível e associado a vários fatores modificáveis. Incidentalmente, uma pesquisa bibliográfica encontrou poucos estudos que utilizam o SF-36 para avaliar a QVRS de trabalhadores da saúde bucal; e os encontrados foram produzidos fora dos principais centros científicos.

Palavras-chave: Qualidade de vida. Saúde bucal. Atenção Primária à Saúde. Saúde ocupacional. Serviços de saúde bucal.

Resumen

El objetivo de este estudio fue identificar y determinar el nivel de los factores asociados a la calidad de vida relacionada con la salud (CVRS) de los profesionales de salud bucal que actúan en la Atención Primaria de Salud en Brasil. Se realizó un estudio transversal con 96 cirujano dentista y 65 auxiliares de salud bucal que actúan en la Estrategia Salud de la Familia en seis municipios de la región metropolitana de Salvador, Brasil. La CVRS se evaluó mediante el 36-item Short Form Health Survey Questionnaire (SF-36). Las puntuaciones medias más altas en el resumen del componente físico del SF-36 se asociaron con una edad más joven, títulos de posgrado en salud pública y tiempo libre frecuente. El resumen del componente mental se asoció con tiempo libre frecuente, > 40 horas de trabajo por semana, consultorios dentales adecuados, satisfacción con los colegas y satisfacción con el trabajo en la Atención Primaria de Salud. El nivel de CVRS de los profesionales de la salud bucal que actúan en la Atención Primaria de Salud en Brasil fue comparable a los encontrados en la literatura disponible y se asoció a varios factores modificables. Una búsqueda bibliográfica encontró pocos estudios que utilizan el SF-36 para evaluar la CVRS de los trabajadores de la salud bucal; y los encontrados estaban fuera de los principales centros científicos.

Palabras clave: Calidad de vida. Salud bucal. Atención Primaria de Salud. Salud laboral. Servicios de salud dental.

INTRODUCTION

In 2001, the Brazilian Ministry of Health established a plan to reorganize oral health services in Primary Health Care (PHC), including oral health teams (OHTs), which comprise dentists, oral health assistants, and oral health technicians, in the Family Health Strategy. Since then, these professionals have had to adapt their practices to follow Unified Health System (SUS) principles and directives, focusing on health surveillance and comprehensive patient care. The OHTs faced new demands at primary health care level, and their practices had to be extended from individual care, exclusively limited to the dental office. The new policy modified the OHTs working processes, requiring ongoing education, participation in service management,

health surveillance activities, the promotion of collective health and disease prevention activities, as well as commitment to the territory in which the family, the central object of care, resides[1].

In 2012, the Brazilian Ministry of Health set out new workers' health policies[2]. Unlike the limited Occupational Health Model, the ideology that inspired the Worker Health Model considered the individual from a holistic perspective, beyond the work environment. This approach was intended to enable a comprehensive approach to worker health conditions, either individually or as a collective[3]. In this new context, oral health care workers were exposed to physical, chemical, ergonomic, mechanical, and biological risks[4,5]; and they faced stressful situations on a daily basis, such as patient suffering, various types of losses, demands for greater productivity, work overload, longer working hours, overtime hours, and job instability, which can lead to illness and poor health-related quality of life (HRQoL)[5,6].

The 36-Item Short Form Health Survey Questionnaire (SF-36) is widely used to evaluate health-related quality of life[7]. Using "SF-36 health survey" as a search term, we retrieved 14,863 articles from PubMed, although no articles were found for "SF-36 health survey AND Dentists"[8]. A preliminary search in the Web of Science (including Web of Science Core Collection, Derwent Innovation Index, KCI – Korean Journal Database, and Scielo Citation index), SCOPUS, and EMBASE databases using the terms "Quality of life AND SF-36 AND Dentists" and "Quality of life AND SF-36 AND Dental assistants" identified four articles: one from Russia[9], one from Iran[10], and two from Brazil[11,12]. Using the same terms, a Google search identified one article from Iran[13], and another from Brazil[14]. All these articles included dentists, although none focused on dental assistants. In summary, using the term "SF-36 questionnaire" in three popular scientific databases, we found few studies about the health-related quality of life of dentists or dental assistants, and those we found came from countries outside Europe/North America, confirming and updating a previous review published in 2008[15].

This study aims to determine and identify factors associated with the health-related quality of life of oral health professionals working in PHC in Brazilian municipalities.

MATERIAL AND METHODS

STUDY DESIGN, SETTING, AND PARTICIPANTS

A cross-sectional study including dentists and oral health assistants from oral health teams in the Family Health Strategy at six (Camaçari, Dias D'Ávila, Itaparica, Simões Filho, São Sebastião do Passé, and Vera Cruz) of the 13 municipalities that comprise the Salvador metropolitan area, in the state of Bahia, Brazil. These conveniently selected municipalities

account for 622,789 inhabitants[16], with modality I oral health teams composed of dentists and oral health assistants[1].

Inclusion criteria were: working in oral health teams in units of the Family Health Strategy and/or the Primary Health Care (*Unidades Básicas de Saúde*), independently of job contract type and duty time. Exclusion criteria applied to professionals who did not express interest to share the study, who did not attend to the training workshops on Workers' Health provided by the research team, or could not be found by phone and/or email.

The municipal health managers reported 83 oral health teams at the time of the study, comprising 185 oral health professionals working in the primary health care system. A total of 24 of the 185 professionals could not be located at their workplace, formally refused to participate in the study, or provided incomplete answers to the questionnaire and were therefore excluded from the final study population. In total, 161 (87%) professionals participated.

DATA COLLECTION

Structured, self-administered questionnaires were completed by the oral health professionals while they attended training workshops on Workers' Health conducted by the research team. The leading researcher was available at all times to clarify any issues. Data collection proceeded in each municipality. To minimize bias, questionnaires were applied at the beginning of each workshop conducted by the research team. Professionals who did not attend the workshops were subsequently contacted and appointments were made for them to complete the questionnaire in their workplace or online. Data collection lasted from April to August 2018.

INSTRUMENTS

A self-administered questionnaire was applied to collect information about sociodemographic data and lifestyle: age, sex, race, relationship status (in a long-term relationship, yes or no), mean monthly family income (using the median of BRL 3,970 as the cut-off point, equivalent to ≤ US$ 1,024 and > US$ 1,024), occupation (dentist or dental assistant), weekly working hours, smoking, alcohol consumption, practice of physical exercise, frequency of leisure time activities, nature of undergraduate institution (public or private), time since graduation, time in Primary Health Care, graduate education in public health, and factors related to working conditions: safety at work, autonomy at work, suitability of dental office, availability of personal protective equipment at the workplace, satisfaction in relationships

with colleagues, satisfaction with working in primary health care, and participation in primary health care team meetings; and health-related quality of life.

The study's main dependent variable was health-related quality of life, evaluated with the Medical Outcomes Study 36-item Short Form-Health Survey questionnaire (SF-36 v2). This generic instrument measures a number of individual or population issues from the previous four weeks. Its 36 questions can be categorized into eight domains: Physical Functioning, Role-Physical, Bodily Pain, General Health, Vitality, Social Functioning, Role-Emotional, and Mental Health[7]. The eight domains were also aggregated into a physical component summary (PCS) and a mental component summary (MCS). The SF-36 questionnaire has transcultural equivalence[17] and psychometric validation[18] for Brazilian Portuguese.

STATISTICAL ANALYSES

The SF-36 data were processed assigning a mark from 0 to 100 for each domain, where 0 (zero) represents the worst and 100 the best quality of life. The PROCoRE v 1.3 program (OptumInsight Life Sciences Inc License Number QM025905) processed the data for norm-based scores. Normalized scores enabled comparisons between domains, adjusting scores to a mean of 50 and a standard deviation of 10, compared with normative data from the population in the United States of America (USA)[19,20].

Bivariate analyses were performed with t-tests for the independent samples. Thereafter, variables that reached $P < 0.20$ for the (PCS or MCS) outcomes were selected to compose two multiple linear regression models whose dependent variables were PCS and MCS, respectively. Prediction variables were inserted as a block, using the "Enter" method. Individuals presenting studentized residual ± 3.000 standard deviations were considered outliers. Linear multiple regression analyses were performed using the Statistical Package for the Social Sciences™ – SPSS, version 25 (IBM Corp, Armonk, NY, USA).

ETHICAL ASPECTS

The study protocol was prepared in accordance with Brazilian National Health Council Resolution No. 466/2012 and the Declaration of Helsinki, 2013. All participants signed written informed consent forms. The study was approved by an Institutional Review Board.

RESULTS

The raw mean score for Vitality was the lowest score of the eight SF-36 domains for the 161 oral health workers. The normalized mean scores of the eight SF-36 domains and

the two component summaries were around 50.0. The social functioning domain presented the lowest score: 46.6. Cronbach's alpha coefficients varied from 0.81 to 0.86. The physical component summary mean was 51.6 ± 6.3, whereas the mental component summary mean was 48.1 ± 11.2 **(Table 1)**.

Table 1 – SF-36 raw and normalized mean scores (mean ± standard deviation, in %) of 161 oral health workers, Salvador, Brazil – 2018

SF-36	Raw score		Normalized score		
	Mean	SD	Mean	SD	Cronbach's alpha
Physical Functioning	87.1	16.0	52.6	6.1	0.86
Role Physical	80.1	21.5	50.0	7.7	0.83
Bodily Pain	66.1	24.1	48.3	9.7	0.83
General Health	71.5	19.5	52.9	9.3	0.82
Vitality	57.5	24.0	50.2	11.4	0.86
Social Functioning	72.7	24.9	46.4	10.0	0.81
Emotional Role	80.4	23.2	48.0	9.7	0.84
Mental Health	74.8	19.7	50.8	10.3	0.84
Physical Component Summary (PCS)	–	–	51.6	6.3	–
Mental Component Summary (MCS)	–	–	48.1	11.2	–

Source: Authors.

The workers were predominantly female (83.2%), Black/Mixed/Indigenous (78.9%), worked ≤ 40 hours a week (81.4%), did not participate in frequent leisure activities (62.3%), were non-smokers (96.3%), consumed alcohol (59.6%), did not practice physical exercise (80.1%), were undergraduates from public institutions (64.0%), and graduates in public health (72.7%). Other characteristics varied less than 10% between strata: monthly family income, stable relationship, and occupation (dentist or dental assistant). Bivariate analyses showed that the physical component summary was statistically associated at P ≤ 0.20 with sex, monthly family income, occupation, frequent leisure activities, drinking, graduate education in public health, and satisfaction with primary health care. The mental component summary was statistically associated at P ≤ 0.20 with age, race, monthly family income, occupation, weekly working hours, frequent leisure activities, feeling safe in the workplace, suitable dental office, availability of personal protective equipment, and satisfaction with primary health care **(Table 2)**.

Table 2 – SF-36 normalized scores (mean ± standard deviation, in %) of the physical component summary and the mental component summary according to characteristics of oral health personnel. Salvador, Brazil – 2018

(continua)

Characteristic	N	%	PCS			MCS		
			mean	SD	P[a]	mean	SD	P[†]
Sex					0.056			0.740
Female	134	83.2	51.1	6.4		48.0	11.3	
Male	27	16.8	53.7	5.3		48.7	10.9	
Race					0.714			0.067
Black/Mixed/Indigenous	127	78.9	51.5	6.2		48.9	11.0	
White/Yellow	34	21.1	51.9	6.8		45.0	11.8	
Stable relationship					0.738			0.824
No	88	54.7	51.7	6.4		47.9	12.0	
Yes	73	45.3	51.4	6.1		48.3	10.3	
Mean monthly family income					0.183			0.046
≤ US$ 1,024	81	50.3	50.9	6.0		49.8	10.5	
> US$ 1,024	80	49.7	52.2	6.5		46.3	11.7	
Occupation					0.195			0.001
Dentist	96	59.7	52.1	6.2		45.6	11.7	
Dental assistant	65	40.3	50.8	6.3		51.7	9.5	
Weekly working hours					0.860			0.002
≤ 40	131	81.4	51.6	6.4		49.4	10.8	
> 40	30	18.6	51.4	6.0		42.5	11.6	
Smoking								0.251
No	155	96.3	51.7	6.3	0.403	48.4	10.8	
Yes	6	3.7	49.5	7.1		39.0	17.8	
Drinking					0.027			0.595
No	65	40.4	50.2	6.6		48.7	10.8	
Yes	96	59.6	52.2	5.9		47.7	11.6	
Physical exercise					0.537			0.662
No	32	19.9	51.0	6.2		47.3	12.0	
Yes	129	80.1	51.7	6.3		48.3	11.1	
Frequent leisure activities					0.002			< 0.001
No	102	62.3	50.4	6.1		45.5	11.8	
Yes	59	36.7	53.5	6.2		52.6	8.5	
Institution of graduation					0.385			0.712
Private	103	64.0	51.2	6.4		48.3	11.4	
Public	58	36.0	52.1	6.0		47.7	11.1	
Graduation in Public Health					0.106			0.880
No	117	72.7	51.1	6.4		48.0	11.3	
Yes	44	27.3	52.9	5.9		48.3	11.1	
Feels safe at workplace					0.620			< 0.001
No	29	18.1	51.1	5.5		39.8	12.5	
Yes	131	81.9	51.8	6.4		49.8	10.1	

Table 2 – SF-36 normalized scores (mean ± standard deviation, in %) of the physical component summary and the mental component summary according to characteristics of oral health personnel. Salvador, Brazil – 2018

(conclusão)

Characteristic	N	%	PCS			MCS		
			mean	SD	P[a]	mean	SD	P[†]
Autonomy at work					0.977			0.305
No	16	10.3	51.7	5.2		45.3	9.7	
Yes	140	89.7	51.6	6.5		48.4	11.4	
Adequate dental office					0.211			< 0.001
No	54	34.4	50.7	5.7		42.1	12.3	
Yes	103	65.6	52.1	6.6		51.3	9.0	
Availability of PPE[†]					0.391			0.148
No	13	8.2	50.2	6.9		43.9	10.1	
Yes	146	91.8	51.8	6.2		48.5	11.1	
Satisfied with colleagues					0.667			0.001
No	8	5.0	50.6	5.4		35.9	12.8	
Yes	153	95.0	51.6	6.3		48.7	10.8	
Satisfied with work at PHC[‡]					0.185			0.001
No	8	5.0	48.7	7.1		35.2	12.1	
Yes	152	95.0	51.7	6.2		48.8	10.9	
Participates in PHC[b] team meetings					0.432			0.935
No	25	15.7	52.5	5.9		48.3	11.2	
Yes	136	84.3	51.4	6.3		48.1	11.3	

Source: Authors.
[†] Protective personal equipment; [‡] Primary Health Care.

Pearson correlations showed that PCS and MCS were significantly associated with age (r = -0.189; P = 0.016, and r = 0.269; P = 0.001, respectively), but not with time since graduation or time working in Primary Health Care (P < 0.20 or less).

Multiple linear regression analyses revealed that the physical component summary mean score significantly (P = 0.010) decreased, by 0.160 units (%), for each year of age. This was also 3.179 units higher (P = 0.002) among oral health workers who reported frequent leisure activities and 2.935 units higher (P = 0.010) among those with graduate degrees in public health. Beta regression coefficients were standardized, enabling adequate comparisons of the relative effect of each independent variable on the dependent variable. Age, frequent leisure activities, and public health graduate degree had the highest beta coefficients. The mental component summary was 10.542 units higher (P = 0.002) among those who were satisfied with working in Primary Health Care, 9.807 units higher (P = 0.0040) among those who were satisfied with their colleagues, 5.508 units higher (P = 0.003) among those who said

they worked in suitable dental offices, 4.815 higher (P = 0.003) among those who referred to frequent leisure activities, and 4.459 units lower (P = 0.047) among those who referred to working > 40 hours per week. These variables had a powerful effect on the Mental Component Summary, with beta coefficients varying from −0.157 to 0.237 **(Table 3)**.

The residuals analysis of the equation with PCS as the dependent variable revealed one outlier (studentized residue = −3.009; PCS = 28.89), although its exclusion did not substantially change the regression model results. Collinearity among predictors was irrelevant since the tolerance collinearity statistics were high for Equations 1 (0.394 to 0.949) and 2 (0.312 to 0.915). A tolerance statistic close to zero indicates that a variable is almost a linear combination of the other predictors in the regression model. Adjusted R^2 was 0.129 in Equation 1 and 0.368 in Equation 2. The Durbin-Watson statistics fell within the acceptable range (1,5-2,5) in both Equation 1 (1.911) and Equation 2 (1.923) **(Table 3)**.

Table 3 – Results of multiple linear regression equations having Physical Component Summary (%) and Mental Component Summary (%) as dependent variables (in %) in oral health workers. Salvador, Brasil – 2018

Predictor (referent)	Equation 1 (n = 160) Dependent variable = PCS				Equation 2 (n = 154) Dependent variable = MCS			
	b	$b_{(SE)}$[a]	P	Beta[b]	b	$b_{(SE)}$	P	Beta
Age, in years	−0.160	0.049	0.001	−0.259	0.141	0.077	0.068	0.128
Sex (Female)	−2.136	1.302	0.103	−0.128				
Race (Black/Mixed/Indigenous)					−1.609	1.883	0.394	−0.060
Mean monthly family income (≤ 1,024 US$)	−1.048	1.479	0.480	−0.084	−1.266	2.411	0.600	−0.057
Occupation (Dental assistant)	0.282	1.494	0.851	0.022	−2.215	2.628	0.401	−0.097
Weekly working hours (≤ 40)					−4.459	2.225	0.047	−0.157
Frequent leisure activities (No)	3.179	1.019	0.002	0.245	4.815	1.605	0.003	0.208
Drinking (No)	−1.203	0.997	0.230	−0.094				
Graduate Degree in Public Health (No)	2.935	1.128	0.010	0.209				
Availability of PPE[c] (No)					0.604	2.725	0.825	0.015
Feels safe at workplace (No)					4.095	2.112	0.054	0.142
Adequate dental office (No)					5.508	1.808	0.003	0.237
Satisfied with colleagues (No)					9.807	3.360	0.004	0.196
Satisfied with work at PHC[d] (No)	2.622	2.186	0.232	0.091	10.542	3.365	0.002	0.211
Constant	55.451	3.236		< 0.001	17.651	5.747	0.003	–

Source: Authors.
[a]b(SE) – Standard error of b; [b] Standardized coefficient Beta; [c] Personal protective equipment; [d] Primary Health Care.

DISCUSSION

The 161 oral health workers presented normalized mean scores varying from 46.4 ± 10.0 for Social Functioning and from 52.9 ± 9.3 for General Health, which is comparable to those of 50.0 ± 10.0 for the general reference population in the USA[20]. The raw mean scores for the Vitality and Social Functioning of these oral health workers were lower than those from two large studies with random samples conducted in the municipality of Porto Alegre (66.8 and 78.3, respectively)[21], and from urban and rural areas in the five Brazilian regions (71.9 and 83.9, respectively)[22]. The physical (PCS) and mental component summary (MCS) scores found in this study population were similar to those found among people in the five Brazilian regions (49.3 and 51.1, respectively)[22].

The scores for the study population were 15% higher than those of other dentist populations for the domains: General Health[10,11,14], Vitality[11], Role-Emotional[10,11], and Mental Health[10]. Also, no mean scores were lower than 15% in any domain for this population, compared with the other four dentist populations.

Comparing mean scores for different domains in the same study requires standardization, which, according to the SF-36 developers[20], can be performed using normalized-based scores. Except for one study[14], no study that used the SF-36 with dentists had normalized scores, only "raw" (non-normalized) ones[10-13].

The physical (PCS) and mental component summary (MCS) mean scores in our study were very similar to those reported in 230 dentists working in the public health system in the municipality of Salvador: 48.9 and 48.5, respectively[14]. The PCS and MCS mean scores found in this study could not be compared with those reported in other studies of Brazilian and Iranian dentists, since their summaries were either not reported[11,12], did not include calculations, or were poorly defined[10,13].

The physical component summary was inversely and strongly associated with age, as in other normative studies using the SF-36[19,22]. Of the several factors that showed an association with HRQoL, age is the only one that cannot be modified by health interventions.

The PCS was associated with post-graduate education in public health. A study of dentists from Salvador using a similar method found an association between having a graduate degree in public health and the MCS, but not the PCS[14].

Dentists who said they participated in frequent leisure activities presented better summaries for physical and mental health-related quality of life. In the capitalist context, dentists' time is increasingly occupied with professional demands that require greater physical and psychological efforts[23], and generate anxiety[24], factors that can become barriers to leisure

activities. A study of Brazilian dentists working in Primary Health Care reported better quality of life, as measured by the WHOQoL questionnaire, among those who reported having more leisure time[25].

In this study, the variables: working in a suitable dental office, satisfaction with colleagues, and satisfaction with working in Primary Health Care were strongly and independently associated with the mental component of health-related quality of life. These three variables are closely interconnected, reflecting working environment conditions and professional commitment to the Family Health Strategy. Elsewhere, Brazilian dentists working in the public sector also reported satisfaction with colleagues and satisfaction with working in Primary Health Care[23,25].

The association between working > 40 hours per week and a lower mental component of health-related quality of life deserves particular attention. Historically, dentists work in isolation. Lone work can cause illness, depression, and exposure to excessive stress, which can impair HRQoL[23]. Engagement in the Family Health Strategy ensures teamwork with other professionals, both inside and outside the dental office[6].

This cross-sectional study has certain limitations, and its results must be generalized with caution. Information bias may have occurred during data collection. In some municipalities, the questionnaire was completed by professionals in the presence of their oral health coordinator, who represents the figure of employer and manager. In this context, the oral health workers may have felt intimidated or fearful about the possibility of being identified, despite reassurance that only the researchers could access their responses. Finally, the COVID-19 pandemic, which started after this study ended, certainly contributed to changing working conditions and professional practices related to the health-related quality of life of these oral health workers.

In conclusion, we identified very few studies on the health-related quality of life of oral health workers that use the SF-36, and those we found were produced outside the main scientific centers in Europe and the USA. The HRQoL of the dentists and dental assistants we investigated was comparable to that found in the literature. Higher levels of health-related quality of life were associated with younger age, frequent leisure time, graduate degree in public health, lower number of weekly working hours, a suitable dental office, satisfaction with colleagues, and satisfaction with working in primary health care. Future studies with oral health professionals are recommended to follow the guidelines of the SF-36 users' manual to produce normalized, comparable scores. A higher level of health-related quality of life can be achieved by implementing public health policies that improve work environment conditions, like suitable

dental offices and lower number of working hours, and promote a healthy working environment in Primary Health Care.

PARTICIPATION

1. Project design, analysis, and interpretation of data: Juliane Kely Fagundes Silva, Fernando Martins Carvalho, Carolina Franco de Azevedo, Maria Isabel Pereira Vianna, and Liliane Lins-Kusterer.

2. Writing of the article and critical review of its intellectual content: Juliane Kely Fagundes Silva, Fernando Martins Carvalho, and Liliane Lins-Kusterer.

3. Review and/or approval of the final version to be published: Juliane Kely Fagundes Silva, Fernando Martins Carvalho, Carolina Franco de Azevedo, Maria Isabel Pereira Vianna, and Liliane Lins-Kusterer.

4. Responsible for all aspects of the study, ensuring accuracy and integrity in any of its sections: Juliane Kely Fagundes Silva, Fernando Martins Carvalho, Carolina Franco de Azevedo, Maria Isabel Pereira Vianna, and Liliane Lins-Kusterer.

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