

Quality of life of postgraduate students *stricto sensu* in dentistry and sociodemographic factors

Qualidade de vida dos alunos de pós-graduação stricto sensu em odontologia e fatores sociodemográficos

Cynthia Nara Gadelha TEIXEIRA^{a*}, Maria Imaculada de Queiroz RODRIGUES^b,
Paulo Goberlanio de Barros SILVA^b, Myrna Maria Arcanjo FROTA^b,
Maria Eneide Leitão de ALMEIDA^b

^aFaculdade de Odontologia, UFMA – Universidade Federal do Maranhão, São Luís, MA, Brasil

^bFaculdade de Farmácia, Odontologia e Enfermagem, UFC – Universidade Federal do Ceará, Fortaleza, CE, Brasil

Resumo

Introdução: A qualidade de vida (QV) é subjetiva e deve ser baseada num constructo multidimensional e em fatores positivos e negativos da vida do indivíduo. **Objetivo:** O objetivo desse estudo foi avaliar a QV dos estudantes do Programa de Pós-graduação em Odontologia (PPGO) da Universidade Federal do Ceará. **Material e método:** Estudo transversal, com abordagem quantitativa, realizado com 88 discentes regularmente matriculados no PPGO. A QV foi mensurada pelo World Health Organization Questionnaire for Quality of Life-bref (WHOQOL-bref). Para uma melhor análise dos escores de QV, eles foram categorizados em três níveis: insatisfação, indefinição e satisfação. Modelo de regressão logística multinomial foi utilizado. **Resultado:** A maioria dos entrevistados (55,7%) foi classificada na região de satisfação quanto a QV, sendo 14,05 a média total dos escores, correspondendo a 62,8% do total. Ao associar os dados sociodemográficos com as categorias de análise da QV, observou-se relevância nos estudantes solteiros ($p=0,005$), os que se consideraram religiosos ($p=0,041$) e aqueles que não possuíam bolsa na pós-graduação ($p=0,025$), sendo avaliados na região de insatisfação/indefinição quanto à QV. **Conclusão:** Concluiu-se que o estado civil, religiosidade e bolsa na pós-graduação foram relevantes na QV dos alunos da pós-graduação *stricto sensu* em Odontologia.

Descritores: Qualidade de vida; estudantes de odontologia; educação.

Abstract

Introduction: Quality of life (QL) is subjective and must be based on a multidimensional construct and on positive and negative factors in the individual's life. **Objective:** The objective of this study was to evaluate the QL of the students of the Postgraduate Program in Dentistry (PPGO) of the Federal University of Ceará. **Material and method:** Cross-sectional study with a quantitative approach, conducted with 88 students regularly enrolled in PPGO. The QL was measured by the World Health Organization Questionnaire for Quality of Life-bref (WHOQOL-bref). For a better analysis of the QL scores, they were categorized into three levels: dissatisfaction, uncertainty and satisfaction. A multinomial logistic regression model was used. **Result:** The majority of the respondents (55.7%) was classified in the area of satisfaction with QL, with 14.05 total average scores, corresponding to 62.8% of the total. By associating the socio-demographic data with the categories of analysis of QL, it was observed relevant in single students ($p=0.005$), those who considered themselves religious ($p=0.041$) and those who did not have a postgraduate scholarship ($p=0.025$), being evaluated in the area of dissatisfaction/uncertainty about the QL. **Conclusion:** It was concluded that marital status, religion and scholarship in postgraduate school were relevant in the QL of *stricto sensu* postgraduate students in Dentistry.

Descriptors: Quality of life; students, dental; education.

INTRODUCTION

Considering the history of Dentistry in the state of Ceará, on March 12, 1916, the Free Faculty of Pharmacy and Dentistry of the Federal University of Ceará was founded. This was regulated by

Law nº 1391, on October 2, 1916, with the denomination "Faculty of Pharmacy and Dentistry and Births of Ceará", being 2016 the centennial of its foundation and regulation¹.

However, only in 2005, the Postgraduate Program in Dentistry (PPGO) was founded, inserted in the Faculty of Pharmacy, Dentistry and Nursing (FFOE) of the Federal University of Ceará, having completed, in 2015, its ten years of existence. The PPGO offers to the community *stricto sensu* academic courses of master, doctoral and post-doctoral, inserted in the line of research "Dental Clinic"², contributing to the formation and qualification of professionals for the labor market and for the teaching in the state of Ceará.

According to the Coordination for the Improvement of Higher Education Personnel (CAPES)³, *stricto sensu* courses in the academic modality prepare a researcher, and the student, after the master's degree, should continue his or her career with the doctorate. These courses include students in various activities, such as participation in research groups, assistance with graduation activities and publication of articles, for example. The accumulation of these activities, allied to personal and professional life, can affect the quality of life (QL) of these students.

The reference for this study was the definition of the World Health Organization (WHO) that the QL is "[...] the individual's perception of their position in life, in the context of the culture and system of values in which they live and in relation to their goals, expectations, standards and concerns [...]"⁴ p. 1405. It was used the *World Health Organization Questionnaire for Quality of Life-bref* (WHOQOL-bref), a cross-cultural instrument, already translated and validated in our midst⁵.

The accomplishment of this work was justified by the importance of evaluating the QL of the students that make up the Graduate Program in Dentistry, given the need for hours of dedication required by the *stricto sensu* courses; for the possibility of verifying the influence of sociodemographic factors on the QL of these students and the lack of publications in the literature relating the quality of life (QL) with the students of the post-graduation *stricto sensu* in Dentistry.

The objective of this study was to evaluate the QL of the students of the Post-Graduation Program *stricto sensu* in Dentistry of the Federal University of Ceará using the WHOQOL-bref and to verify the association of sociodemographic factors with the obtained scores.

MATERIAL AND METHOD

88 students enrolled in the master's, doctorate and post-doctoral programs of the Postgraduate Program in Dentistry of the Federal University of Ceará, composed of 100% of the researched universe participated in this study. The data collection took place in the classrooms, laboratories and clinics of the program, between June and August 2015.

The research paper consisted of two parts: the first one was composed of socio-demographic information, such as gender, marital status, children, work, monthly income, three questions about religiosity, if he/she was a scholarship holder of the said program, course and year in which he/she was in post-graduation; the second was formed by the WHOQOL-bref questionnaire.

The WHOQOL-bref is an abbreviated version of the WHOQOL-100, consisting of 26 questions. The first two are general, for self-evaluation of QL, and the other two represent each of the facets of the original

instrument, being distributed in four domains: Physical, Psychological, Social Relations and Environment. All questions have five *Likert* type response options. The respondent should consider the previous fifteen days for self-filling of the instrument⁵. This instrument demonstrated good internal consistency, discriminant validity, concurrent validity, content validity and test-retest reliability⁵ and has already been used in different samples of undergraduate students in Brazil^{6,7} and abroad^{8,9}.

Three researchers applied the research paper, being discarded the training of these because the WHOQOL-bref is considered an instrument of easy understanding, allied to the high intellectual level of the researched ones. Reading and signing of the Free and Informed Consent Form were done by all the participants.

The study was approved by the Ethics and Research Committee of the Federal University of Ceará, under the Certificate of Presentation for Ethical Assessment (CAAE) 45227015.7.0000.5054 and Opinion nº 1.113.226, in June 2015.

Data analysis included the tabulation of these in *Microsoft Excel* and export to the *Statistical Package for the Social Sciences* (SPSS) software, in which the analyzes were performed considering a 95% confidence level and significance at $p < 0,05$. The obtained scores were transformed into a linear scale that ranged from 0-100, being these, respectively, the less and more favorable values of QL, according to the syntax proposed by the WHOQOL group¹⁰. For the analysis of the QL scores, an adapted scale was used⁶, being categorized as follows: values between 0 and 40 were considered a region of dissatisfaction; from 41 to 69, corresponded to the region of uncertainty; and above 70, as the region of satisfaction.

The values of the quality of life scores were submitted to the *Kolmogorov-Smirnov* test and analyzed using the ANOVA test, for repeated measures, followed by the *Bonferroni* post-test (parametric data) to evaluate the difference between the measured domains. The categorical data were expressed in absolute and percentage frequency and analyzed using the chi-square test, and the multinomial logistic regression model was also used. For the statistical analysis, the variables were grouped into dissatisfaction/uncertainty and satisfaction.

RESULT

More than half (55.7%) of the students of the Postgraduate Program in Dentistry of the Federal University of Ceará were classified in the region of satisfaction regarding QL. The majority were female (61.4%), half were married and 73.9% had no children. Thirty students (34.1%) reported dedicating themselves exclusively to postgraduate activities. The majority (59.1%) claimed to have a monthly income of more than four minimum wages. Religious practice was affirmed by 89.8%, however 36.4% reported that the frequency of this practice always occurred and 75.0% considered themselves religious. 68.2% had a postgraduate scholarship. 53.4% were in the doctorate or post-doctorate and 46.6% of the students were in the second year of the postgraduate course (Table 1).

The Social Relations domain presented the highest average (15.23 ± 2.72). The Physical domain had a lower average (12.82 ± 1.56), when compared to the other domains and to the questions of

self-evaluation of QL, in which they were called Domain 5, presenting a statistically significant relation ($p < 0.001$). The Domain 5, when compared to the Physical (95% CI = 1.7-2.9), Psychological (95% CI = 0.4-1.5) and Environment (95% CI = 0.2-1.3), presented statistical relevance ($p < 0.001$) (Table 2).

Table 1. Profile of quality of life and socio-demographic of the students of the PPGO/UFC. Fortaleza-CE, 2015

	n	%
Quality of life		
Dissatisfaction	1	1.1
Uncertainty	38	43.2
Satisfaction	49	55.7
Gender		
Male	34	38.6
Female	54	61.4
Marital Status		
Single	43	48.9
Married	44	50.0
Divorced	1	1.1
Children		
Yes	23	26.1
No	65	73.9
Work-Exclusive dedication		
Work- Dentist surgeon	47	53.4
Monthly Income		
Up to 2 MW	15	17.0
2 to 4 MW	21	23.9
> 4 MW	52	59.1
Practice of religion		
Frequency of religious practice		
Never	7	8.0
Rarely	10	11.4
Sometimes	39	44.3
Always	32	36.4
Are considered religious	66	75.0
Scholarship holder	60	68.2
Course in the Postgraduation		
Master	41	46.6
Doctorate/Post-doctorate	47	53.4
Year in the Post		
First	29	33.0
Second	41	46.6
Third	12	13.6
Fourth	6	6.8

Data expressed as absolute and percentage frequency.

The association between the sociodemographic profile and the analysis of the QL of the students was expressed in Table 3. There was statistical significance when single individuals were associated ($p = 0.005$) (95% CI = 2.0-62.5), the ones who considered themselves religious ($p = 0.041$) (95% CI = 1.1-142.8) and those who did not have scholarship in the PPGO ($p = 0.025$) (95% CI = 1.2-26.9) and QL categories, being classified in the region of dissatisfaction/indefiniteness.

DISCUSSION

The quality of life evaluation through the WHOQOL-bref has already been measured in undergraduate students in the health area, such as Dentistry⁶, Nursing^{11,12} and Medicine¹³⁻¹⁵. However, studies in which this instrument has been applied in *stricto sensu* postgraduate students were not found in the national and international literature, making this work significant and original, being limited, however, the comparison of the results.

Another aspect that makes this study relevant is the representation of 100% of the researched universe of students in all postgraduate years and the use of a cross-cultural instrument validated in our environment for the measurement of QL in its subjective and cross-cultural aspects.

The students of the Postgraduate Program in Dentistry of the Federal University of Ceará were classified in the region of satisfaction regarding QL, approaching a study carried out with undergraduate students in Dentistry in Ceará⁶, corroborating with that found in a study carried out with an adult population of the Federal District¹⁶.

The results of a study of 3121 master's and doctoral students in the United States indicated that 44.7% of the students felt stressed at some point, in relation to the year prior to the survey. In addition, 46.3% of the postgraduate students said they felt burdened and 39.6% said they felt exhausted "often" or "all the time". The consequences reported by students, such as perceptions of stress, burden and exhaustion, were caused by the pressure to research and teach, the need to publish and concern with financial conditions, as well as having to deal with the frequent ambiguity of the expectations of the advisor¹⁷.

The average of the scores of the four domains in this study was lower for the Physical, like the one found in a study carried out to synthesize the contributions of the WHOQOL-bref to instrumentalize health promotion actions in the Family Health Strategy¹⁸. Different scores were found in a study that examined the performance of the WHOQOL-bref as an integrated instrument, with the highest score being found in Brazil in the Physical domain and the lowest in the Environment¹⁹.

The result of the association between marital status and QL was similar to that found in the study where single men had a lower QL score when compared to married men²⁰. This may be justified because marriage may be a condition of financial and emotional stability, which allows the married graduate student greater peace of mind in pursuing postgraduate activities.

Research has shown that the religious, spiritual and personal belief dimensions are more related to QL in people with compromised health situations^{21,22}, a factor not measured in our study, although the

Table 2. Individual and general average of the 5 WHOQOL-bref domains. Fortaleza-CE, 2015

	Average	SD	Medium	Minimum	Maximum	p-Value
Physical Domain*	12.82	1.56	13.14	8.57	16.57	<0.001
Psychological Domain	14.12	1.48	14.00	11.33	18.00	
Social Relationships Domain	15.23	2.72	15.33	8.00	20.00	
Environment Domain	14.35	1.64	14.50	10.50	18.00	
Domain Five†	15.11	2.92	16.00	4.00	20.00	
General Domain	14.05	1.37	13.92	11.23	17.8	
Sum Domain	71.64	7.69	71.45	53.93	90.07	

*p<0,05 versus all groups; †p<0,05 versus all groups except group 3. ANOVA test/*Bonferroni* (Average ± SD).

Table 3. Influence of the sociodemographic profile in the analysis of the quality of life of the students of the Post-graduation in Dentistry/UFC. Fortaleza-CE, 2015

	Category of QL analysis		p-Value ^a	p-Value ^b	95% CI
	Dissatisfaction/ Uncertainty	Satisfaction			
Gender					
Male	13(33.3%)	21(42.9%)	0.362	-	
Female	26(66.7%)	28(57.1%)			
Marital Status					
Single	25*(64.1%)	18(36.7%)	0.011	0.005	2.0;62.5
Married/Divorced	14(35.9%)	31(63.3%)			
Children					
Yes	9(23.1%)	14(28.6%)	0.560	-	
No	30(76.9%)	35(71.4%)			
Work-Exclusive dedication					
No	25(64.1%)	33(67.3%)	0.750	-	
Yes	14(35.9%)	16(32.7%)			
Work-Dentist Surgeon					
No	20(51.3%)	21(42.9%)	0.431	-	
Yes	19(48.7%)	28(57.1%)			
Monthly Income					
Up to 2 MW	10(25.6%)	5(10.2%)	0.158	-	
2 to 4 MW	8(20.5%)	13(26.5%)			
> 4 MW	21(53.9%)	31(63.3%)			
Practice of religion					
Yes	36(92.3%)	43(87.8%)	0.484	-	
No	3(7.7%)	6(12.2%)			
Frequency of religious practice					
Never	2(5.1%)	5(10.2%)	0.587	-	
Rarely	6(15.4%)	4(8.1%)			
Sometimes	18(46.2%)	21(42.9%)			
Always	13(33.3%)	19(38.8%)			

^aChi-square test (*p<0,05); ^bMultinomial logistic regression; (†p<0,05). Blank boxes indicate non-significance. CI – Confidence Interval.

Table 3. Continued...

	Category of QL analysis		p-Value ^a	p-Value ^b	95% CI
	Dissatisfaction/ Uncertainty	Satisfaction			
Are considered religious					
Yes	32†(82.1%)	34(69.4%)	0.173	0.041	1.1;142.8
No	7(17.9%)	15(30.6%)			
Scholarship holder in the PPGO					
Yes	23(59%)	37(75.5%)	0.098	0.025	1.2;26.9
No	16†(41%)	12(24.5%)			
Course in the Post					
Master	18(46.2%)	23(46.9%)	0.942	-	
Doctorate/Post-doctorate	21(53.8%)	26(53.1%)			
Year in the Post					
First	15(38.4%)	14(28.5%)	0.283	-	
Second	17(43.6%)	24(49%)			
Third	3(7.7%)	9(18.4%)			
Fourth	4(10.3%)	2(4.1%)			

^aChi-square test (*p<0,05); ^bMultinomial logistic regression; (†p<0,05). Blank boxes indicate non-significance. CI – Confidence Interval.

item considered to be religious presents statistical relevance when compared to QL. The result found in this study can be explained by the fact that religious belief is a subjective item, in which it is often referred to it in a disease situation²².

The study found that scholarships seem to encourage undergraduate students in the pursuit of *stricto sensu* postgraduate programs²³ and that students who received scholarships for scientific initiation presented a prevalence twice as high in the pursuit of academic postgraduate studies²⁴. Autonomous professionals, such as dental surgeons, and with partial dedication in educational institutions represent an expressive category in some university courses. The university career, for many dentists, is more a source of status than of income. In these cases, the income sacrificed to the achievement of a master's or doctorate degree is significant, discouraging investment by the teacher, compromising the qualification plans of educational institutions²⁵. This factor may justify the relationship found in this study between the postgraduate scholarship and the QL.

Despite being a pioneering research, some limitations guided this study, since it was performed in a localized population, not establishing temporal precedence over the evaluated conclusions.

Future investigations involving other aspects relating to *stricto sensu* postgraduate students and quality of life, such as longitudinal study, so that investigations in different postgraduate periods, such as the beginning and the end of the course can be compared, are necessary, being important this constant investigation to know better these future teachers, researchers and scientists that are being formed.

CONCLUSION

The results obtained in this study suggest that aspects such as marital status, religiosity and the postgraduate scholarship were relevant in the QL of students of the *stricto sensu* postgraduate course in Dentistry.

ACKNOWLEDGEMENTS

The authors are grateful to the Pro-teaching in Health of CAPES for granting a master's degree scholarship to the authors CNGT and MMAF.

REFERENCES

1. UFC: Universidade Federal do Ceará. Farmácia. Missão e histórico [Internet]. 2015 [citado 2015 Dez 28]. Disponível em: http://www.ffoe.ufc.br/index.php?option=com_content&task=view&id=23&Itemid=29
2. UFC: Universidade Federal do Ceará. Histórico e descrição [Internet]. 2016 [citado 2015 Dez 15]. Disponível em: <http://www.ppgou.ufc.br/index.php/historico-e-descricao>
3. CAPES: Coordenação de Aperfeiçoamento de Pessoal de Nível Superior. Avaliação. Sobre a avaliação. Mestrado e doutorado: o que são? [Internet]. 2015 [citado 2015 Dez 17]. Disponível em: <http://www.capes.gov.br/avaliacao/sobre-a-avaliacao/mestrado-e-doutorado-o-que-sao>
4. The WHOQOL Group. The World Health Organization quality of life assessment (WHOQOL): position paper from the World Health Organization. Soc Sci Med. 1995 Nov;41(10):1403-9. PMID:8560308. [http://dx.doi.org/10.1016/0277-9536\(95\)00112-K](http://dx.doi.org/10.1016/0277-9536(95)00112-K).

5. Fleck MPA, Louzada S, Xavier M, Chachamovich E, Vieira G, Santos L, et al. Aplicação da versão em português do instrumento abreviado de avaliação da qualidade de vida "WHOQOL-Bref". *Rev Saude Publica*. 2000 Abr;34(2):178-83. PMID:10881154. <http://dx.doi.org/10.1590/S0034-8910200000200012>.
6. Brito DP, Oliveira LMR, Braga SR, Nuto SAS, Viana FAC. Avaliação da qualidade de vida de acadêmicos de Odontologia do estado do Ceará. *Coleç Pesqui Educ Fís*. 2012;11(3):41-50.
7. Eurich RB, Kluthcovsky ACGC. Avaliação da qualidade de vida de acadêmicos de graduação em Enfermagem do primeiro e quarto anos: influência das variáveis sociodemográficas. *Rev Psiquiatr*. 2008 Dez;30(3):211-20. <http://dx.doi.org/10.1590/S0101-81082008000400010>.
8. Zhang Y, Qu B, Lun S, Wang D, Guo Y, Liu J. Quality of life of medical students in china: a study using the WHOQOL-BREF. *PLoS One*. 2012;7(11):e49714. PMID:23209595. <http://dx.doi.org/10.1371/journal.pone.0049714>.
9. Henning MA, Krägeloh C, Moir F, Doherty I, Hawken SJ. Quality of life: international and domestic students studying medicine in New Zealand. *Perspect Med Educ*. 2012 Aug;1(3):129-42. PMID:23316469. <http://dx.doi.org/10.1007/s40037-012-0019-y>.
10. The WHOQOL Group. Sintaxe SPSS - WHOQOL - bref questionnaire [Internet]. 2015 [cited 2015 Dec 17]. Available from: <http://www.ufrgs.br/psiq/whoqol86.html>
11. Kawakame PMG, Miyadahira AMK. Qualidade de vida de estudantes de graduação em enfermagem. *Rev Esc Enferm USP*. 2005 Jun;39(2):164-72. PMID:16060303. <http://dx.doi.org/10.1590/S0080-62342005000200006>.
12. Saube R, Nietche EA, Cestari ME, Giorgi MDM, Krahl M. Qualidade de vida dos acadêmicos de Enfermagem. *Rev Lat Am Enfermagem*. 2004 Ago;12(4):636-42. PMID:15651648. <http://dx.doi.org/10.1590/S0104-11692004000400009>.
13. Chazan ACS, Campos MR, Portugal FB. Qualidade de vida de estudantes de Medicina da UERJ por meio do Whoqol-bref: uma abordagem multivariada. *Cien Saude Colet*. 2015 Feb;20(2):547-56. PMID:25715148. <http://dx.doi.org/10.1590/1413-81232015202.05182014>.
14. Alves JGB, Tenório M, Anjos AG, Figueroa JN. Qualidade de vida em estudantes de Medicina no início e final do curso: avaliação pelo Whoqol-bref. *Rev Bras Educ Med*. 2010;34(1):91-6. <http://dx.doi.org/10.1590/S0100-55022010000100011>.
15. Paro HB, Morales NM, Silva CH, Rezende CH, Pinto RM, Morales RR, et al. Health-related quality of life of medical students. *Med Educ*. 2010 Mar;44(3):227-35. PMID:20444053. <http://dx.doi.org/10.1111/j.1365-2923.2009.03587.x>.
16. Gomes JRAA, Hamann EM, Gutierrez MMU. Aplicação do WHOQOL-BREF em segmento da comunidade como subsídio para ações de promoção da saúde. *Rev Bras Epidemiol*. 2014 Jun;17(2):495-516. PMID:24918419. <http://dx.doi.org/10.1590/1809-4503201400020016ENG>.
17. Hyun JK, Quinn BC, Madon T, Lustig S. Graduate student mental health: needs assessment and utilization of counseling services. *J Coll Student Dev*. 2006 May-Jun;47(3):247-66. <http://dx.doi.org/10.1353/csd.2006.0030>.
18. Chiesa AM, Fracolli LA, Zoboli ELPC, Maeda ST, Castro DFA, Barros DG, et al. Possibilidades do WHOQOL-bref para a promoção da saúde na Estratégia Saúde da Família. *Rev Esc Enferm USP*. 2011 Dez;45(Esp 2):1743-7. <http://dx.doi.org/10.1590/S0080-62342011000800018>.
19. Skevington SM, Lotfy M, O'Connell KA. The World Health Organization's WHOQOL- BREF quality of life assessment: psychometric properties and results of the international field trial. A report from the WHOQOL group. *Qual Life Res*. 2004 Mar;13(2):299-310. PMID:15085902. <http://dx.doi.org/10.1023/B:QURE.0000018486.91360.00>.
20. Cardoso CS, Caiaffa WT, Bandeira M, Siqueira AL, Abreu MNS, Fonseca JOP. Qualidade de vida e dimensão ocupacional na esquizofrenia: uma comparação por sexo. *Cad Saude Publica*. 2006 Jun;22(6):1303-14. PMID:16751969. <http://dx.doi.org/10.1590/S0102-311X2006000600019>.
21. WHOQOL SRPB Group. A cross-cultural study of spirituality, religion, and personal beliefs as components of quality of life. *Soc Sci Med*. 2006 Mar;62(6):1486-97. PMID:16168541. <http://dx.doi.org/10.1016/j.socscimed.2005.08.001>.
22. Fleck MPA, Borges ZN, Bolognesi G, Rocha NS. Desenvolvimento do WHOQOL, módulo espiritualidade, religiosidade e crenças pessoais. *Rev Saude Publica*. 2003 Ago;37(4):446-55. PMID:12937705. <http://dx.doi.org/10.1590/S0034-89102003000400009>.
23. Pinto GS, Nascimento GG, Mendes MS, Ogliari FA, Demarco FF, Correa MB. Scholarships for Scientific Initiation Encourage Post-Graduation Degree. *Braz Dent J*. 2014 Jan-Feb;25(1):63-8. PMID:24789295. <http://dx.doi.org/10.1590/0103-6440201302363>.
24. Toassi RFC, Souza JM, Rösing CK, Baumgarten A. Perfil sociodemográfico e perspectivas em relação à profissão do estudante de Odontologia da Universidade Federal do Rio Grande do Sul, Brasil. *Rev Fac Odontol Univ Nac*. 2011 Jan-Dez;52(1/3):25-32.
25. Lordêlo JAC, Verhine RE. O retorno do investimento em mestrado e doutorado para professores universitários: uma avaliação econômica da educação pós-graduada. *Est Aval Educ*. 2001 Jul-Dez(24):165-89. <http://dx.doi.org/10.18222/ae02420012205>.

CONFLICTS OF INTERESTS

The authors declare no conflicts of interest.

*CORRESPONDING AUTHOR

Cynthia Nara Gadelha Teixeira, Faculdade de Odontologia, UFMA – Universidade Federal do Maranhão, Av. Dos Holandeses, s/n, Quadra A, Edifício Porto Ravena, ap. 1302, Ponta do Farol, 6507-7635 São Luís - MA, Brasil, e-mail: cynthia_n80@yahoo.com.br

Received: February 4, 2017

Accepted: August 17, 2017