IMPACT OF THE INCLUSION OF GERIATRIC DENTISTRY IN THE CURRICULUM OF A BRAZILIAN DENTAL FACULTY

IMPACTO DA INCLUSÃO DA DISCIPLINA ODONTOGERIATRIA EM UMA FACULDADE DE ODONTOLOGIA DE ALAGOAS, BRASIL

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ABSTRACT: The objective of this study was to analyze the contribution, of the inclusion of the subject of Geriatric Dentistry in the academic curriculum of a dentistry graduation course, to the understanding and attitudes of undergraduates in the care of the elderly. A total of 59 final-year students enrolled in two dental faculties took part in the study: GD Group - where Geriatric Dentistry was included in the curriculum (n=21; 75% of the total) and the NGD Group - where it was not (n=38; 77.5% of the total). The data were obtained by means of a questionnaire completed anonymously by the students, taking into account the following aspects: content and knowledge of geriatric dentistry and professional expectations. The principal source of knowledge of Geriatric Dentistry for both groups was the graduation course, with oral healthcare for the elderly being covered in other areas of study for 79% of the respondents in the NGD Group and 61.9% in the GD Group. Amongst the NGD Group, 5.3% looked for information on the topic outside the faculty, as opposed to the GD Group where no such actions were reported. When questioned as to whether they felt sufficiently prepared to provide elderly clinical care, the frequency of responses related to insecurity was greater in the GD Group. The inclusion of Geriatric Dentistry as a subject in the university curriculum had some positive aspects on students' knowledge, and made them more aware of the importance of adequate professional preparation for caring for elderly patients, reflected in the lack of security identified with regard to the complexities of caring for people in this age group.

KEYWORDS: Aged. Elderly. Geriatric Dentistry. Teaching.

INTRODUCTION

Despite the recent drop in the country's birth rate, the Brazilian population is still relatively young (KILSZTAJN et al., 2013). At the same time, technological and scientific advances, not just in the area of health but also in everyday life, have created conditions for a better quality of life (ALMEIDA et al., 2004), which has resulted in a demographic increase in the elderly population across the world and the consequent introduction of new concepts and challenges (MOREIRA et al., 2005).

Recent data has shown that one in ten people in the world is aged 60 or over and that by 2050 this ratio will rise to one in five in developing countries and one in three in developed countries (IBGE, 2002).

In Brazil, life expectancy of the elderly has increased, the proportion of elderly experiencing some form of disability has diminished and there are more elderly who remain the heads of their families and fewer living with their relatives (CAMARANO, 2002). The growth of the relative proportion of the population over 65 years of age, rise from 4.8% in 1991 to 7.4% by 2010 (IBGE, 2010).

The current generation of the elderly have inherited a care model centered on the practices of mutilation that have resulted in a precarious oral health situation, with high levels of extractions, an accumulated need for treatment and a high demand for prosthetic services MATOS et al., 2004). The prevalence of edentulism is still high and significant in this age group (BRAZIL, 2011, PERES et al., 2013). The loss of teeth is looked upon by society as somewhat normal and natural with advancing age and not the consequence of a lack of preventive health policies (COLUSSI; FREITAS, 2002). However, taking into account the fact that a significant decrease in tooth loss among adolescents and adults was noted, when compared to the first decade of the 2000s (PERES et al., 2013), the epidemiological pattern of the elderly may be different in the future.

In this context, the dentists of the future will face, in daily practice, the demands of elderly patients and dental students have to be prepared during their pre-doctoral course to satisfy these demands (NITSCHKE et al, 2013)

In Brazil, the introduction of geriatrics and gerontology into the sphere of dentistry has been taking place slowly and unsystematically

(SHINKAI; CURY, 2000). Brazil was one of the first countries to recognize the specialty of Geriatric Dentistry, a specialty that focuses on the specific treatment of this population group. The constant growth in the elderly population will certainly absorb more of the working capacity of the dental profession than we are currently willing to believe. With increased life expectancy and the consequent longevity of the world population, people will live longer and have more teeth in the oral cavity (HEBLING et al., 2014).

Studies have shown that only a minority of graduation courses in Brazil include this subject in their curriculum (DE LIMA SAINTRAIN et al, 2006; FRANCISCO et al., 2014). It is the university's decision whether or not to include the subject of Geriatric Dentistry in their courses (PROTA. 1999; VERAS: CALDAS, 2004: FREITAS, 2008; SAINTRAIN et al., 2006) which is in agreement with article 22 of chapter V of Brazil's Statute for the Elderly (BRAZIL, 2003), a legal apparatus designed to guarantee the rights of this population group, and with the National Health Policy for the Elderly (BRAZIL, 1999) which points to the importance of creating this discipline in graduate courses and professional training centers at the postgraduate level.

Given Brazil's demographic and epidemiological characteristics and the importance of training students in Dentistry in the care of the elderly. The goal of the present study was to evaluate the contribution, of the inclusion of the subject of Geriatric Dentistry in the academic curriculum of a dentistry graduation course, to the understanding and attitudes of undergraduates in the care of the elderly.

MATERIAL AND METHODS

The study was approved by the Ethics in Research Committee, under opinion no. 2012/0487.

Individuals and Configuration

The present study took place in the municipality of Maceió, in the Brazilian state of Alagoas. The base population comprised 77 university students enrolled in the final year of the Dentistry course in two faculties located in the city, namely 28 at the federal institute of higher education, incorporated into the curriculum in 2010 (Geriatric Dentistry Group, or GD) and 49 from another, private institute of higher education, whose information concerning the handling of the elderly was dealt with in diffuse form, as part of the other course subjects (Group without Geriatric Dentistry,

or NGD). Given the previously established criteria, 7 students were excluded from the GD as they were absent on the day the data were collected. As for the NGD, two students chose not to take part, 1 had failed to pass in one of the subjects and 8 were absent. Thus, a total of 59 students took part in the study, divided into 21 in the GD group (75% of the total of Geriatric Dentistry Group) and 38 in the NGD group (78% of the group total without Geriatric Dentistry).

The Geriatric Dentistry subject, lasting one semester, is offered in the eighth period of the course at the federal institution, comprising a total of 80 course hours. It is theoretical/practical in nature, the practical part taking place in the day clinic four hours per week, plus one hour of theory. The main subjects covered are elderly patient care, encompassing aspects of drug therapy, surgical and anesthetic considerations, anxiety control, clinical procedures for patients with heart disease, diabetes and other conditions requiring special care. The subject lecturer is a specialist in Geriatric Dentistry and Periodontology.

Data acquisition

The data were obtained by means of a pretested questionnaire, submitted to a pilot test (LAKATOS; MARCONI, 2003) containing 22 closed and mixed questions, produced based on earlier studies (ALVES-REZENDE; BISPO, 2001; ALMEIDA et al, 2004; SAINTRAIN et al., 2006; MOREIRA et al, 2012). The questionnaire was organized into the following sections:

a) Geriatric Dentistry content (9 questions): form of approach to the content in the graduation course; the subject with the highest percentage of content in respect of care of the elderly and the principal source of knowledge in Geriatric Dentistry. The questions in this section sought to point out the subjects that helped the most to train the student in caring for the elderly and to detect if the students are looking for other sources to obtain information on the subject;

b) Geriatric Dentistry knowledge (7 questions): questions were raised as to the age at which an individual should be considered elderly and how the oral needs of the elderly may vary. These are topics which address more specific characteristics of care for the elderly;

c) Professional expectations (6 questions): prospects of the future professional, the perception of safety with the care of elderly patients and intention to undertake postgraduate studies in Geriatric Dentistry. In this way it is possible to observe the degree to which the education of these students afforded the conditions for them to feel prepared and incentivized to work with elderly patients.

The instrument was completed by the students anonymously. The questions covered content related to the source of knowledge in the care of the elderly, specific knowledge of care of the elderly and the professional expectations in terms of the clinical routine directed towards this age group.

Analysis of the results

The data were analyzed by means of frequency distribution tables, the chi-squared test or Fisher's Exact test, assuming a level of significance of 5%. The frequencies were computed in the columns in order to assess the data distribution within each group. Those volunteers who did not respond to the question were excluded from the statistical analysis for this question. For those questions where the volunteer was able to tick more than one answer, the test was applied to each response in order to maintain a fixed sample size in terms of the number of volunteers.

RESULTS

Approach to oral health care in the elderly

Table 1 shows the results of questions evaluating the approach to oral health care in the elderly. The students in the GD Group stated that the subject is taught over one academic semester, with both clinical and theoretical content. Oral health care for the elderly was covered in other disciplines for 79% of the students in the NGD Group and 61.9% of students in the GD Group (p=0.4147). For 26.3% of the NGD Group, the content was mainly covered in the Prosthetics course and only a few of the students in this group sought knowledge or information outside of the faculty. As for the GD Group, the students mentioned the discipline of Integrated Clinical Practice (57.1%; p < 0.001) as the one which most dealt with this age group, with the exception of the Geriatric Dentistry discipline itself.

Variable	Category	NGD Group ^{\$}	GD Group ^{\$\$}	p - value
Subject which provides most information about elderly healthcare	Prosthetics	10 (26.3%)	0 (0.0%)	0.0459
	Special patients	1 (2.6%)	0 (0.0%)	1.0000
	SPD/Public health	3 (7.9%)	0 (0.0%)	0.5547
	Internship	0 (0.0%)	0 (0.0%)	-
	Propaedeutic/Stomatology	2 (5.3%)	0 (0.0%)	1.0000
	Integrated clinical practice	0 (0.0%)	12 (57.1%)	< 0.0001
	Periodontics	7 (18.4%)	4 (36.4%)	1.0000
Principal source of knowledge in	Graduation	16 (42.1%)	16 (76.2%)	0.0190
	Journals/books	5 (13.2%)	3 (14.3%)	
	Courses/Conferences	6 (15.8%)	0 (0.0%)	
Geriatric Dentistry.	Unaware of the topic	4 (10.5%)	0 (0.0%)	
	Did not seek knowledge	2 (5.3%)	0 (0.0%)	
	No answers checked	5 (13.2%)	2 (9.5%)	
Required knowledge and skills	Periodontology	34 (89.5%)	20 (95.2%)	0.6461
	Cosmetic Dentistry	20 (52.6%)	14 (66.7%)	0.2962
	Rehabilitation	35 (92.1%)	18 (85.7%)	0.6560
	Public Health	27 (65.8%)	14 (34.2%)	0.7261
	No knowledge of subject	1 (100.0%)	0 (0.0%)	1.0000

Table 1. Frequency distribution of responses on the approach to oral healthcare in the elderly.

	Prosthetics	10 (26.3%)	3 (14.3%)	0.3439
Procedures that the students most perform on the elderly	Prevention	2 (5.3%)	0 (0.0%)	0.5336
	Dental Extraction	12 (31.6%)	4 (19.0%)	0.3702
	Endodontics	0 (0.0%)	0 (0.0%)	-
	Cosmetic Dentistry	2 (2.3%)	0 (0.0%)	0.5336
	Propaedeutic	0 (0.0%)	0 (0.0%)	-
	Periodontics	6 (15.8%)	7 (33.3%)	0.1195
	Others	0 (0.0%)	0 (0.0%)	-

^{\$} NGD Group - Geriatric Dentistry was not included in the curriculum / ^{\$\$} GD Group - Geriatric Dentistry was included in the curriculum

When questioned about the main source of knowledge in Geriatric Dentistry, 76.2% of the GD Group and 42.1% of the NGD Group answered that the graduate course accounted for the biggest part (p=0.0190), followed by the reading of journals and/or books, for both faculties.

As for the knowledge and skills needed to care for the geriatric patient, the responses most checked amongst the students in the GD Group were Periodontics (92.5%), Oral Rehabilitation (85.7%), Cosmetic Dentistry (66.7%) and Public Health (34.2%). Amongst the NGD Group, 92.1% considered it necessary to have Oral Rehabilitation knowledge and skills as well as in Periodontics (89.5%), Cosmetic Dentistry (52.6%) and Public Health (65.8%). Taking into consideration each of the subjects mentioned, there was no difference between the study groups.

Amongst the clinical procedures most performed on elderly patients in the graduate clinics,

Periodontal procedures (33.3%) were those most frequently mentioned by the GD Group while the NGD Group cited Dental Extraction (31.6%), though there were no differences between the groups.

Knowledge in Geriatric Dentistry

Table 2 displays the results of the questions about knowledge in the area of Geriatric Dentistry. The majority of the respondents consider the patient to be elderly at between 60 and 65 years of age (p=0,1989), but it is important to highlight that there was a response error rate of 21% in the NGD Group. The frequencies of responses of students from both groups concurred with regard to the varying oral health needs according to functional capacity and the systemic condition of the elderly patient (p=0.1817).

Variable	Category	NGD Group ^{\$}	GD Group ^{\$\$}	p-value
At what age is an individual considered to be elderly?	40 years	0 (0.0%)	0 (0.0%)	0.1989
	50 years	3 (7.9%)	0 (0.0%)	
	60-65 years	30 (79.0%)	20 (95.2%)	
	70 years	3 (7.9%)	0 (0.0%)	
	80 years	0 (0.0%)	0 (0.0%)	
	Over 90	1 (2.6%)	0 (0.0%)	
	No response	1 (2.6%)	1 (4.8%)	
Variation in oral needs	Functional capacity (S)	28 (73.7%)	19 (90.5%)	0.1817

Table 2. Frequency distribution of responses concerning knowledge related to the area of Geriatric Dentistry.

	Similar to adults (N) or age	12 (31.6%)	6 (28.6%)	0.4032
	Do not know	2 (5.3%)	0 (0.0%)	0.5336
	Absence	0 (0.0%)	0 (0.0%)	
	Communication	0 (0.0%)	0 (0.0%)	
	Systemic problems	27 (71.0%)	17 (81.0%)	
Complicating Factor	Cognitive problems	0 (0.0%)	0 (0.0%)	0.8967
	Absence of companion	1 (2.6%)	0 (0.0%)	
	Drawn out consultations	1 (2.6%)	0 (0.0%)	
	Complexity	0 (0.0%)	0 (0.0%)	
	No response	9 (23.7%)	4 (19.0%)	
Costs	Similar	28 (73.7%)	7 (33.3%)	0.0027
	Greater	8 (21.0%)	12 (57.1%)	
	Lower	0 (0.0%)	0 (0.0%)	
	No response	2 (5.3%)	2 (9.5%)	
Administering drugs	Special	24 (63.2%)	16 (76.2%)	
	Similar	10 (26.3%)	1 (4.8%)	0.0910
	Does not know	2 (5.3%)	2 (9.5%)	
Should the physician be consulted?	Always	9 (23.7%)	1 (4.8%)	0.0801
	Never	0 (0.0%)	0 (0.0%)	-
	When on medication	14 (36.8%)	7 (33.3%)	0.7875
	Systemic changes	28 (73.7%)	17 (80.9%)	0.7506
	Cognitive problem	9 (23.7%)	2 (9.5%)	0.2970

^{\$} NGD Group - Geriatric Dentistry was not included in the curriculum / ^{\$\$} GD Group - Geriatric Dentistry was included in the curriculum

A total of 81% of students in the GD Group listed the existence of systemic problems common to this age group as complicating factors in the clinical care of the elderly patient, a frequency that falls to 71% for students in the NGD Group (p= 0.8967).

With regard to the cost of elderly patient care, the majority of students in the NGD Group (73.7%) consider that it is similar to the cost of caring for any other patient, as the infrastructure and materials required would be the same. For the GD

Group, the majority (57.1%) felt that the costs would be higher given the need to adapt the infrastructure and for different types of materials (p = 0.0027).

As far as the administration of drugs to elderly patents is concerned, the majority in both groups considers that this is special: 76.2% (GD Group) and 63.2% (NGD Group) and also report that the patient's physician should be consulted before planning dental treatment in cases of systemic changes.

Professional Future

When asked to give a score between zero and ten in respect of the importance of knowledge of Geriatric Dentistry for the student to be inserted into the job market, a value of 9.0 (\pm 1.5) was obtained for the NGD Group with a minimum score of 3.0. For the GD Group, the average was similar at 9.0 (\pm 0.97), although the minimum score was 8.0.

The students were also questioned about if they felt sufficiently prepared to care for elderly patients, whether institutionalized or not. To both questions, 52.4% of students in the GD Group said they did "not" feel prepared. For those students in the NGD Group, 60.5% felt they were prepared for caring for elderly patients, regardless of whether or not they were institutionalized.

As for their clinical intentions upon graduating, the majority, in both groups, was found to be indifferent about the age group of the patients to be cared for, while 33.3% of students in the GD Group and 39.5% in the NGD Group intend to attend Geriatric Dentistry courses after graduation.

DISCUSSION

Geriatric Dentistry is more sophisticated in the USA, Canada, the UK and other countries of the European Union, when compared to developing countries (SHAH, 2010). In Brazil, the development of Gerontology is situated in an intermediate phase, as it is still not exercised by many professionals (NERI, 2006). Recent data indicate that, of the 261,604 dentists in Brazil, only 282 have a specialization in Geriatric Dentistry registered with the Federal Dental Council (FDC, 2014). De Lima Saintrain et al. (2006) showed that Geriatric Dentistry does not figure in the curriculum of twothirds of the Dentistry courses surveyed in Brazil's southern and midwest regions. Even where the students have demonstrated an interest in interacting with more elderly patients, a situation regarded as critical in the debate over specific training for the care of the elderly (NITSCHKE et al, 2013). One of the barriers encountered is the lack of teachers who have graduated in the area, even though in 2005 the World Health Organization proposed as a matter of priority education for those providing oral health care for the elderly (BULLOCK, 2010).

The content covered in graduation subjects is the principal source of knowledge for the majority of the undergraduates, according to the findings of an earlier study conducted in the southeast region of Brazil (ALVES-REZENDE; BISPO, 2001). In the universities of Switzerland and Germany, the Geriatric Dentistry course content was mainly dealt with in the subjects of Prosthetics and Dental Materials (NITSCHKE et al, 2013), in agreement with the present study, in which teaching about ageing was addressed by vocational disciplines such as Prosthetics, Integrated Clinical Practice and Periodontics, however subjects that focused on social aspects, such as Prevention and Public Health, were rarely mentioned. This shows that, regardless of the presence or otherwise of Geriatric Dentistry in the curriculum, the clinical and rehabilitation focus with regard to the elderly is still keen. However, the mention of Periodontics by students in the GD Group should be acknowledged, which could signify preventive and conservation aspects of the dental elements when caring for the elderly. In Brazil, edentulism is still the main oral health risk amongst the elderly, with 63.1% of them using full dentures (COLUSSI; FREITAS, 2002).

The difference between the proportion of students seeking or not seeking knowledge and information on the topic was influenced by the absence of the subject in the curriculum, since only the students in the NGD Group sought knowledge or information on the topic away from the faculty. The study by Saintrain et al. (2006) noted that almost one half of Dentistry students in Brazil's South and Midwest regions, where Geriatric Dentistry was not available in the curricula of their universities, looked for any knowledge in this area, preferring instead to take part in conferences.

Access to knowledge and information on the topic has a big impact on the student's relationship with elderly individuals faced with the possibility of barriers being created that have a negative impact on oral health care and on the understanding of the social, psychological, physiological, economic and political aspects of ageing (MOREIRA et al, 2012).

One question which demonstrated the impact of the presence of the subject was the relative understanding of the cost of caring for elderly patients. As seen in earlier studies the absence of this discipline led to the students in the GD Group not understanding that the cost of caring for elderly patients is higher due to the need to adjust the infrastructure and use different kinds of materials. It is known that, besides the specific infrastructure, the cost of caring for the elderly is greater due to the more protracted treatment (ALVES-REZENDE; BISPO, 2001; ALMEIDA, 2004).

As for the correct definition of the age group into which the elderly are compartmentalized, the majority of respondents in both groups considered an individual to be elderly from the age of between 60 and 65, which agrees to earlier findings (ALVES-REZENDE; BISPO, 2001; MOREIRA et al., 2012); and also with that established in 1982 in the World Health Assembly on ageing, promoted by the United Nations Organization (FREITAS, 2008; SILVA, 2008). It should be stressed that the higher number of incorrect responses came from students in the NGD Group.

With regard to the oral health needs of elderly patients, both groups agreed that these needs vary according to an individual's functional capacity and systemic condition, however there was a larger number of errors among those students belonging to the NGD Group, as the number of students considering the oral needs of the elderly to be similar to those of adult patients was significant. The same finding was noted in the study by Alves-Rezende & Bispo (2001), justifying the attention to the gaps in the professional's education in institutions that do not include formal teaching in this area of study. On the other hand, while health professionals have an understanding of the health needs of the elderly, the elderly themselves are more optimistic with regard to their state of health, seeking to maintain physical and social coherency and continually reassessing their expectations with regard to quality of life (MACENTEE; PROSTH, 2010)

In both study groups, the factor most frequently quoted as being a complication in the clinical care of elderly individuals was the presence of systemic problems, a factor which was also considered in a statewide study conducted with dentists in Minas Gerais (Brazil) (MOREIRA et al., 2012). Attention should be paid to the high number of students that were unable to answer this question. The explanation may derive from the fact that the elderly individual has a series of peculiarities arising from the ageing process, which result in nonspecific symptoms that make it difficult to define the principal complaint (MARTINS, 2010).

As well as systemic problems, the fundamental ability to communicate presents challenges for students of Dentistry, ranging from the patient's ability to hear and to understand the terminology employed to problems caused by generational conflicts (KITAGAWA et al., 2011).

As for the administration of drugs, the majority of students in both groups correctly considered this to be special, seeing that the routine use of medication, besides the age-related physiological changes, could result in complications arising from drug interactions or a decrease in the margins of safety of the prescribed drugs (VERAS; CALDAS, 2004). It should be stressed that the lack

of knowledge of these circumstances was greater amongst the respondents of the NGD Group.

The understanding of the need for closer cooperation between medical and dental care in cases where the elderly patient presents with systemic changes, was not influenced by the presence of the subject in the curriculum, seeing that the respondents in both groups deemed this to be necessary. It should be emphasized, however, that a significant number of students in the NGD Group (23.7%) responded that medical consultation should always take place, which evidences a failing in the training and insecurity in respect of caring for healthy, elderly individuals.

Among the results obtained, those which attracted most attention were those relating to questions about the student's readiness to care for elderly patients. Amongst those in the NGD Group, the majority answered that they were prepared, while for the students in the GD Group, more than half felt they were unprepared. It may seem paradoxical but it demonstrates that, at the very least, the presence of the subject instilled in the student an acknowledgment of the complexity of caring for this type of patient, making them more aware of the need for better preparation to work with this group of individuals. Self-confidence is related to the development of decision-making skills, permitting a complete approach to the (GABRIEL: TANAKA. situation 2011). demonstrating the importance of initiating a rethink of the way this discipline is presented. The same response was obtained when questioned about preparedness for the care of the elderly in institutions. Although this merits the same explanation as previously given, it is suggested that the confidence exhibited by the NGD Group students may indicate a lack of awareness of the more precarious health conditions of people living in sheltered accommodation (MOREIRA et al., 2012).

When questioned if, upon graduating, they intended to perform clinical work with adult patients, children or the elderly, in both faculties the majority said they were indifferent. The interest in working in a private clinic with elderly patients could be greater if the graduating students had more knowledge of the economic might of these professionals in Brazil who, by 2020, will account for an annual increase of 2.4 basis points in the per capita GDP (SEGALLA; PEREZ, 2013)

One of the most important constraints of the present study was the low response rate obtained for some of the questions, as well as the fact that the population studied includes volunteers. How these

relates to wider groups is not known and is a limitation on the generalizability of these results. Conducting similar studies in other settings would be helpful in addressing this issue. Nevertheless, we believe that the findings will help administrators in the institutions to recognize the importance of formalizing the provision of Geriatric Dentistry in graduation courses, such that its formal incorporation into a course subject would ensure that the minimum content required for the generalist can effectively be included in the graduation course.

CONCLUSION

The inclusion of Geriatric Dentistry as a subject in the university curriculum had some positive aspects on students' knowledge, and made them more aware of the importance of adequate professional preparation for caring for elderly patients.

RESUMO: Este estudo teve como objetivo avaliar a contribuição da inclusão da disciplina de Odontogeriatria no currículo acadêmico de um curso de graduação em odontologia, no conhecimento e na postura dos graduandos no atendimento aos idosos. O universo foi constituído por 59 estudantes universitários matriculados no último ano do curso, em duas das faculdades de Odontologia de Maceió/Alagoas: Grupo Og - a disciplina Odontogeriatria foi incluida no curriculo do curso (n=21; 75,0% do total) e grupo SOg – sem a disciplina no curriculo (n=38; 77.5% do total). Os dados foram obtidos por intermédio de um questionário preenchido anonimamente pelos estudantes considerando aspectos relacionados ao conhecimento e conteúdo oferecido sobre odontogeriatria e expectivas de futuro profissional. Constatou-se que a principal origem dos conhecimentos em Odontogeriatria para ambos os grupos foi o próprio curso de graduação, sendo que a atenção em saúde bucal ao idoso foi abordada em outras disciplinas para 79% dos respondentes do Grupo SOg e para 61,9% do Grupo Og. Dentre os alunos do Grupo SOg, 5,3% procuraram conhecimento ou informação sobre o assunto fora da faculdade, em contraponto com o Grupo Og, em que não foi relatada essa procura. Quando questionados quanto a sentir-se adequadamente preparados para o atendimento clinico ao idoso, institucionalizado ou não, a frequência de respostas relacionadas à insegurança no atendimento foi maior no Grupo Og. Concluiu-se que a inclusão da Disciplina de Odontogeriatria no currículo universitário teve aspectos positivos no conhecimento dos alunos sobre o tema e tornou-os cientes da importância do preparo profissional adequado para atendimento de pacientes idosos refletida na insegurança identificada quanto à complexidade no atendimento ao grupo etário.

PALAVRAS-CHAVE: Odontogeriatria. Ensino. Idosos.

REFERENCES

KILSZTAJN, S.; ROSSBACH, A., DA CÂMARA, M. B.; DO CARMO, M. S. N. Serviços de saúde, gastos e envelhecimento da população brasileira. **Revista Brasileira de Estudos de População**, Rio de Janeiro, v. 20, n. 1, p. 93-108, 2013.

CAMARANO, A. A. Envelhecimento da população brasileira: uma contribuição demográfica. **IPEA. Texto para Discussão nº 858,** Rio de Janeiro, 2002. Disponivel em: http://repositorio.ipea.gov.br/bitstream/11058/2091/1/TD_858.pdf

ALMEIDA, M. E. L.; MOIMAZ, S. A. S.; GARBIN, C. A. S.; SALIBA, N. A. Um olhar sobre o idoso: estamos preparados? **Revista da Faculdade de Odontologia de Porto Alegre**, Porto Alegre, v. 45, n. 1, p. 64-68, 2004.

ALVES-REZENDE, M. C. R.; BISPO, A. C. O. Saúde bucal na terceira idade: egressos do curso de odontologia frente às mudanças nos modelos de atuação pública e privada. **Revista Regional de Araçatuba Associação Paulista de Cirurgiões Dentistas**, Araçatuba, v. 22, n. 2, p. 1-6, 2001

BRASIL. Lei n°10.741, de 1°de outubro de 2003. **Dispõe sobre o Estatuto do Idoso e dá outras providências**. Diário oficial da União; Brasilia, 03 out 2003

BRASIL. Ministério da Saúde. **Pesquisa Nacional de Saúde Bucal 2010**. Resultados principais [texto na internet]. 2011 [citado 2013 out 16]. Brasilia, Disponível em: http://189.28.128.100/dab/docs/geral/projeto_sb2010_relatorio_final.pdf

PERES, M. A.; BARBATO, P. R. O.; REIS, S. C. G. B.; FREITAS, C. H. S. M.; ANTUNES, J. L. F. Tooth loss in Brazil: analysis of the 2010 Brazilian Oral Health Survey. **Revista de Saúde Pública**, Universidade de São Paulo. Faculdade de Higiene e Saude Publica, São Paulo, v. 47, supl. 3, p. 78-89, Dec. 2013.

BRASIL. Portaria nº 1395/GM de 9 de dezembro de 1999: **Aprova a Política Nacional de Saúde do Idoso e dá outras providências**. Diário Oficial da União, Brasilia, 13 dez 1999.

BULLOCK, A. D. International Education Research Issues in Meeting the Oral Health Needs of Geriatric Populations: An Introduction. **Journal of Dental Education**, American Assn. of Dental Schools, Washington, etc, v. 74, n. 1, p. 5-6, 2010.

COLUSSI, C. F.; FREITAS, S. F. T. Epidemiological aspects of oral health among the elderly in Brazil. **Cadernos de Saúde Pública**, Escola Nacional De Saúde Pública, Fundação Oswaldo Cruz, Rio De Janeiro, v. 18, n. 5, p. 1313-1320, 2002.

CONSELHO FEDERAL DE ODONTOLOGIA. **Dados estatísticos**. Brasilia, Disponivel em http://cfo.org.br/servicos-e-consultas/dados-estatisticos/

DE LIMA SAINTRAIN, M. V.; DE SOUZA, E. H. A.; JÚNIOR, A. D. F. C. Ensino da odontogeriatria nas faculdades de odontologia do sul e centro-oeste do brasil: situação atual e perspectivas. **Revista Odonto Ciência**, Pontifícia Universidade Católica do Rio Grande do Sul, Rio Grande do Sul, v. 21, n. 53, p. 270-277, 2006.

FRANCISCO, K. M. S.; DIAS, P. N.; CASOTTI, C. A.; UEMURA, T. F.; GOMES FILHO, D. L. Ensino da odontogeriatria nos cursos de graduação no estado da Bahia. **Clínica e Pesquisa em Odontologia-UNITAU**, Universidade de Taubaté- UNITAU, Taubaté, v. 6, n. 1, p. 28-35, 2014

FREITAS, A. C. P. PUC mais idade: o idoso na Universidade. In: IV Seminário de extensão universitária; 2008; **Arcos**. Minas Gerais; 2008.

GABRIEL, M.; TANAKA, E. E. Formação profissional em odontologia: percepção discente da interação curricular. **Revista da ABENO**, Associação Brasileira de Ensino Odontológico, São Paulo, v. 11, n. 1, p. 19-22, 2011

HEBLING, E.; COUTINHO, L. A.; FERRAZ, C. C. R.; CUNHA, F. L.; QUELUZ, D. D. P. Periapical Status and Prevalence of Endodontic Treatment in Institutionalized Elderly. **Brazilian Dental Journal**, Fundação Odontológica de Ribeirão Preto, Ribeirão Preto, v. 25, n. 2, p. 123-128, 2014. http://dx.doi.org/10.1590/0103-6440201302348

IBGE. Instituto Brasileiro de Geografia e Estatística. **Atlas do censo demográfico 2010** / IBGE. – Rio de Janeiro : IBGE, 2013. 160 p

IBGE. Instituto Brasileiro de Geografia e Estatística. **Perfil dos Idosos Responsáveis pelos Domicílios** [texto na Internet]. 2002; [citado em 29 de junho de 2013]. Brasília, Disponível em: http://www.ibge.gov.br/home/presidencia/noticias/25072002pidoso.shtm

KITAGAWA, N.; SATO, Y.; KOMABAYASHI, T. Graduate and Undergraduate Geriatric Dentistry Education in a Selected Dental School in Japan. **European Journal of Dental Education**, Association for Dental Education in Europe, Munksgaard, v. 15, n. 4, p. 231-235, 2011. http://dx.doi.org/10.1111/j.1600-0579.2010.00664.x

LAKATOS, E. V.; MARCONI, M. A. Fundamentals of Scientific Methodology. 5.ed. São Paulo: Atlas, 2003.

MACENTEE, M. I.; PROSTH, F. R. C. D. The Educational Challenge of Dental Geriatrics. **Journal of Dental Education**, American Assn. of Dental Schools, Washington, etc, v. 74, n. 1, p. 13-19, 2010.

MARTINS, A. M. E. D. B.; BARRETO, S. M.; SILVEIRA, M. F. D.; SANTA-ROSA, T. T. D. A.; PEREIRA, R. D. Self-perceived oral health among Brazilian elderly individuals. **Revista de Saúde Pública**, Universidade de São Paulo. Faculdade de Higiene e Saude Publica, São Paulo, v. 44, n. 5, p. 912-922, 2010.

MATOS, D. L.; GIATTI, L.; LIMA-COSTA, M. F. Socio-demographic factors associated with dental services among Brazilian older adults: a study based on the National Household Sample Survey. **Cadernos de Saúde Pública**, Escola Nacional De Saúde Pública, Fundação Oswaldo Cruz, Rio de Janeiro, v. 20, n. 5, p. 1290-1297, 2004

MOREIRA, A. N.; ROCHA, E. S.; POPOFF, D. A.; VILAÇA, E. L.; CASTILHO, L. S; DE MAGALHÃES, C.S. Knowledge and attitudes of dentists regarding ageing and the elderly. **Gerodontology**, Gerodontology Association, Oxford, v. 29, n. 2, p. e624-e631, 2012.

MOREIRA, R. S.; NICO, L. S.; TOMITA, N. E.; RUIZ, T. Oral health of Brazilian elderly: a systematic review of epidemiologic status and dental care access. **Cadernos de Saúde Pública**, Escola Nacional De Saúde Pública, Fundação Oswaldo Cruz, Rio de Janeiro, v. 21, n. 6, p. 1665-1675, 2005.

NERI, A. L. A Formação Gerontológica no Brasil. **Revista a Terceira Idade–SESC**, São Paulo, v. 17, n. 35, 2006.

NITSCHKE, I.; KUNZE, J.; REIBER, T.; SOBOTTA, B. A. Development of undergraduate gerodontology courses in Austria, Switzerland, and Germany from 2004 to 2009. **Journal of Dental Education**, American Assn. of Dental Schools, Washington, etc, v. 77, n. 5, p. 630-639, 2013.

PROTA, L. O papel da universidade na construção do saber sobre idosos. **Serviço Social em Revista**, Departamento de Serviço Social, Centro de Estudos Sociais Aplicados, Universidade Estadual de Londrina, Londrina, v. 4, n. 16. p. 7, 1999.

SAINTRAIN, M. V. L.; SOUZA, E. H. A; CALDAS JÚNIOR, A. F. Ensino da odontogeriatria nas faculdades de odontologia do sul e centro-oeste do brasil: situação atual e perspectivas. **Revista Odonto Ciência**, Pontifícia Universidade Católica do Rio Grande do Sul, Rio Grande do Sul, v. 21, n. 53, p. 270-277, 2006.

SEGALLA, A.; PEREZ, F. **Envelhecer faz bem ao Brasil**. [texto na internet]. 2013[citado 2013 dez12]. Disponível em: http://istoe.com.br/241607_ENVELHECER+FAZ+BEM+AO+BRASIL/

SHAH, N. Teaching, Learning, and Assessment in Geriatric Dentistry: Researching Models of Practice. **Journal of Dental Education**, American Assn. of Dental Schools, Washington, v. 74, n. 1, p. 20-28, 2010.

SHINKAI, R. S. A; CURY, A. A. D. B. The role of dentistry in the interdisciplinary team: contributing to comprehensive health care for the elderly. **Cadernos de Saúde Pública**, Escola Nacional De Saúde Pública, Fundação Oswaldo Cruz, Rio de Janeiro, v. 16, n. 4, p. 1099-1109, 2000.

SILVA, R. C. O idoso, a educação popular e a política social. Uma leitura a partir de Paulo Freire. **Revista a Terceira Idade–SESC**, São Paulo, v. 19, n. 42, p. 52-62, 2008.

VERAS, R. P.; CALDAS, C. P. Promoting elderly health and citizenship: the u3a (university of third age) movement. **Ciência & Saúde Coletiva**, ABRASCO - Associação Brasileira de Saúde Coletiva, Rio de Janeiro, v. 9, n. 2, p. 423-432, 2004.