

Overview of Geriatric Dentistry in Dentistry Courses in the Brazilian Northeast


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Abstract The objective of this study was to present an overview of the teaching of Geriatric Dentistry in undergraduate Dentistry courses in the Brazilian Northeast. The research was cross-sectional, descriptive, and with a quantitative approach. Data were collected from a search of Brazilian higher education institutions registered with the Ministry of Education that offered the undergraduate Dentistry course on the e-MEC platform. The websites of the institutions found were consulted and the curriculum matrix of the Dentistry course was searched. Variables such as nature of the institutions, course status, presence or absence of Geriatric Dentistry or corresponding curricular component, mandatory nature, and assigned workload were analyzed. The data collected was subjected to descriptive analysis. A total of 130 active Higher Education Institutions offering Dentistry courses were found in the Northeast region. Of these, 18 were public and 112 were private. The states with the largest number of Dentistry courses were Bahia, followed by Pernambuco and Ceará, and those with the smallest number were Sergipe and Alagoas. The Geriatric Dentistry curricular component is present in 53% of Dentistry courses in the Northeast region, with a predominance of the mandatory modality.

Descriptors: Geriatric Dentistry. Education, Dental. Curriculum.

Panorama de la Odontología Geriátrica en las carreras de Odontología del Nordeste brasileño

Resumen El objetivo de este estudio fue presentar el panorama de la enseñanza de la Odontología Geriátrica en la graduación en Odontología en la región Nordeste de Brasil. La investigación fue transversal, descriptiva, con enfoque cuantitativo. Los datos fueron recolectados a partir de una búsqueda de instituciones brasileñas de educación superior registradas en el Ministerio de Educación que ofrecieran cursos de pregrado en Odontología en la plataforma e-MEC. Se consultaron los sitios web de las instituciones encontradas y se buscó en la matriz curricular de la carrera de Odontología. Se analizaron variables como la naturaleza de las instituciones, estado de la carrera, presencia o ausencia del componente curricular de Odontología Geriátrica o componente correspondiente, obligación y carga de trabajo asignada. Los datos recolectados fueron sometidos a análisis descriptivo. Se encontraron 130 Instituciones de Educación Superior activas que ofrecen cursos de Odontología en la región Nordeste. De ellos, 18 eran públicos y 112 privados. Los estados con mayor número de carreras de Odontología fueron Bahía, seguido de Pernambuco y Ceará y los de menor número fueron Sergipe y Alagoas. El componente curricular de Odontología Geriátrica está presente en el 53% de las carreras de Odontología de la región Nordeste, con predominio de la modalidad obligatoria.

Descriptores: Odontología Geriátrica. Educación en Odontología. Curriculum.

Panorama da Odontogeriatría nos cursos de Odontologia do Nordeste brasileiro

Resumo O objetivo desse estudo foi apresentar o panorama do ensino da Odontogeriatría nos cursos de graduação em Odontologia da região Nordeste do Brasil. A pesquisa foi do tipo transversal, descritiva, com abordagem quantitativa. Os dados foram coletados a partir de uma busca das instituições de ensino superior brasileiras cadastradas no Ministério da Educação que ofertavam o curso de graduação em Odontologia na plataforma e-MEC. Os *sites* das instituições encontradas foram consultados e buscou-se a matriz curricular do curso de Odontologia. Foram analisadas variáveis como natureza das instituições, *status* do curso, presença ou não

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do componente curricular de Odontogeriatría ou correspondente, obrigatoriedade e carga horária atribuída. Os dados coletados foram submetidos a análise descritiva. Foram encontradas 130 Instituições de Ensino Superior ativas ofertando o curso de Odontologia na região Nordeste. Destas, 18 eram públicas e 112 particulares. Os estados com a maior quantidade de cursos de Odontologia foram Bahia, seguida de Pernambuco e Ceará e os com a menor quantidade foram Sergipe e Alagoas. O componente curricular Odontogeriatría está presente em 53% dos cursos de Odontologia da região Nordeste, com predomínio da modalidade obrigatória.

Descritores: Odontologia Geriátrica. Educação em Odontologia. Currículo.

INTRODUCTION

The phenomenon of population aging is present throughout the world, a consequence of the decrease in mortality rates combined with the reduction in the birth rate resulting from scientific and technological advances in health in the XX and XXI centuries¹⁻³. In Brazil, in 2021, the population over 65 years of age corresponded to 10.15% of the general population and it is estimated that in 2050 this population will reach 21.87% of the population, the equivalent of one elderly person for every five Brazilians⁴.

This is a significant proportion, considering that this group requires greater and more specialized care. It can be said that being prepared to meet this demand in an adequate and satisfactory manner is a challenge. Regarding the training of health professionals, this challenge is even greater, since they will work with a population with physiological changes characteristic of aging and also more prone to pathological changes. In addition, the quality of health services, as well as health professionals, directly impacts the quality of life of the elderly and, therefore, geriatric support needs to be the best possible^{5,6}.

When it comes to Dentistry, it is no different; the elderly present oral manifestations that are different from those generally presented in the rest of the population. Xerostomia, loss of taste, periodontal diseases and mucosal lesions are very common in this population^{5,7}. Severe tooth loss and prosthetic needs are also present and are often the result of past multilateral practices, characteristics of an obsolete care model³.

Ensuring that professionals have contact with geriatric/gerontological knowledge during their training and are able to provide differentiated and appropriate treatment to elderly patients is extremely important. The presence of the Geriatric Dentistry curricular component seeks to alert and raise awareness among future dentists about the need for specific treatment of this population and also to adequately prepare them to offer the best treatment, avoiding the repetition of iatrogenic practices such as the multilateral practices of the past and contributing to the comprehensive care of the elderly^{1,7}.

However, the inclusion of geriatric knowledge in the curricula of Dentistry courses is not yet a reality and often this knowledge is offered in a diluted form in other disciplines, taught partially or even completely ignored in professional training⁷. Therefore, the aim of this study was to present the panorama of Geriatric Dentistry teaching in the curricular matrices of undergraduate Dentistry courses in the Northeast region of Brazil.

METHODS

The research was cross-sectional, descriptive, with a quantitative approach, carried out in October 2021. Data were collected, using a specific form, from a search of Brazilian Higher Education Institutions (HEIs) that offered the undergraduate course in Dentistry registered with the Ministry of Education (MEC).

On the e-MEC platform⁸, the name of the HEI, the year in which it began offering the course, the last Enade score and the course status were observed. Then, the websites of the institutions found on e-MEC were consulted and the curriculum matrix of the Dentistry course was searched.

Variables such as the nature of the institutions (public or private), presence or absence of the Geriatric Dentistry curricular component or corresponding component, its mandatory nature and assigned workload were analyzed. Institutions that had the course status as extinct, inactive or that did not provide information on the Dentistry course curriculum were excluded from the bivariate analysis.

Since these are secondary data and publicly accessible, analysis by a research ethics committee was not necessary.

The data was analyzed using the Statistical Package for Social Sciences, version 28.0. Descriptive analyses were performed with cross-tabulation to verify the relationships between the presence of the Geriatric Dentistry curricular component and states in the Northeast, the mandatory nature of the discipline and the nature of the institution.

RESULTS

A total of 165 HEIs authorized to offer the Dentistry course in the Northeast Region were found. Of these, 35 were excluded because they had an inactive course status (20) or did not provide the curriculum matrix (15). Of the 130 institutions included in the study, 18 were public and 112 were private.

The presence of the Geriatric Dentistry curricular component was found in 69 courses (53.08%), being mandatory in 54 of them (78.26%), with a workload ranging from 30 to 360 hours. Only 52 institutions had already been evaluated by Enade and grade 4 was the most frequent. The year in which the course began to be offered varied between 1879 and 2021.

The states with the largest number of Dentistry courses were Bahia, followed by Pernambuco and Ceará, and those with the smallest number were Sergipe and Alagoas (Table 1).

Regarding the offering of the curricular component in relation to the number of active Dentistry courses per state, Rio Grande do Norte and Paraíba stood out, 80% and 78% of the courses, respectively. At the other extreme are Alagoas, Maranhão and Pernambuco, with 28.57%, 38.46% and 39.13%, respectively.

The offer as a mandatory curricular component prevailed among the courses analyzed, corresponding to 78.26% of the total of HEIs that offer the discipline. Private institutions, in addition to being in greater number, are those that presented in absolute numbers and also proportionally the discipline of Geriatric Dentistry in greater quantity, 64 HEIs offering the discipline, corresponding to 49.23% of the institutions analyzed, while public institutions totaled 5 HEIs offering the discipline, corresponding to 3.84%.

Table 1. Distribution of Dentistry courses in the Northeast according to the nature of the institution, provision and mandatory nature of the Geriatric Dentistry curricular component

State	Number of courses	Public institution	Private institution	Presence of the curricular component n (%)	Mandatory curricular component n (%)
Alagoas	7	1	6	2 (28,57)	1 (50,00)
Bahia	32	3	29	16 (50,00)	9 (56,25)
Ceará	18	2	16	11 (61,11)	8 (72,73)
Maranhão	13	1	12	5 (38,46)	3 (60,00)
Paraíba	14	3	11	11 (78,57)	11 (100,00)
Pernambuco	23	3	20	9 (39,13)	8 (88,89)
Piauí	8	1	7	5 (62,50)	5 (100,00)
Rio Grande do Norte	10	2	8	8 (80,00)	7 (87,50)
Sergipe	5	2	3	2 (40,00)	2 (100,00)
Total	130	18	112	69 (53,08)	54 (78,26)

DISCUSSION

This research found that there were 130 active Dentistry courses in the Northeast Region, an increase of approximately 202% compared to a similar study conducted in 2016, when the number of active Dentistry courses was only 43. The considerable increase in new courses was followed by an increase in the supply of the Geriatric Dentistry component, rising from 37.20% of active courses in 2016 to 53.07% in 2019.

The mandatory nature was higher than the optional nature compared to the study conducted in 2016, corresponding to 62.5% of the courses⁹. Currently, this trend continues, with 78.26%, representing an increase of 15.76% in this modality.

The scenario in the South region in 2015 was similar to that found in 2016 in the Northeast, with only 38.8% of active Dentistry courses in the South region offering the Geriatric Dentistry curricular component¹⁰. This study compared this with a survey from 2006¹¹, when Geriatric Dentistry was in the implementation phase, and found that in 2015 it was already on the rise in the South region¹⁰.

The progressive increase in the supply of the mandatory curricular component indicates that Gerodontology is on the rise in the curricula of Dentistry courses in the Northeast and may be an indication of a change in perception regarding its importance in the training of dentists.

A hypothesis raised regarding the year in which Dentistry courses began would be that the more recent the course, the greater the chances of Gerodontology being included in the curricular matrix. This hypothesis is supported by the fact that Gerodontology as a curricular component in Brazil is relatively recent¹².

However, this hypothesis was not confirmed and even though a considerable increase in new Dentistry courses was observed from 2015 onwards, these new courses were not accompanied by a pattern of Gerodontology being included in the curricular matrix. The new courses followed the trend of older curricular structures and varied greatly in terms of whether or not the component was included, and it was not possible to establish a relationship between the time the course began and the presence of the Gerodontology discipline.

Since this was a secondary data collection, the courses were not asked about the presentation of content in alternative ways, which constitutes a limitation of the study. Furthermore, the scenario portrayed is restricted to the period analyzed and should be repeated later.

It is important to emphasize that the presence of a component in the curricular structure alone does not guarantee that the knowledge is being developed appropriately, fulfilling the objective of training future professionals¹². Likewise, it is also not possible to state that its absence means that the courses do not address this topic⁹.

A study evaluating the teaching of geriatric dentistry from the perspective of the National Curricular Guidelines (NCG) for undergraduate courses in Dentistry in South American countries⁷ found that simply including the discipline of geriatric dentistry in the curricular matrices of undergraduate courses is not enough to guarantee that the student develops skills that allow him/her to act to provide better oral health care for the elderly. In this study, undergraduate students in Dentistry proposed that knowledge about the social reality of their country should also be part of the teaching-learning process in Geriatric Dentistry. Students should be aware that their population is aging and should have knowledge about the reality of the living and health conditions of this population group so that they can, therefore, have a better professional performance in the care of the elderly⁷.

CONCLUSION

The Geriatric Dentistry curricular component in Dentistry courses in the Northeast region is undergoing a period of growth. The predominance of the mandatory content modality is a positive factor in terms of recognizing the importance of geriatric knowledge in the training of future dentists.

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