

The teaching of management in Brazilian undergraduate Dentistry courses

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ABSTRACT

This study aims to outline the teaching profile of management in undergraduate courses in Dentistry in Brazil. It is a transversal research with a quantitative approach using secondary data. The sample consisted of 327 Higher Education Institutions (HEI) that have undergraduate Dentistry courses enrolled in the Ministry of Education. The collection took place after consultation to the websites of the HEIs, from which the curricular matrices of the courses of Dentistry and their summary were analyzed. We observed the existence of curricular components that addressed the teaching of management. When present, the following information was collected: HEI region, HEI administrative category, nature of the curricular component, offered semester, workload, the methodology used and nomenclature. Among the 327 undergraduate courses in Dentistry surveyed, only 27.83% offer management in their curricular matrices. Most curricular components are compulsory (74.72%), offered predominantly in eighth (25.28%) and ninth (24.17%) semesters, with a workload varying between 31 and 60 hours of classes (79.12%) and theoretical classes (60.31%). Thus, we concluded that management education is little explored by undergraduate courses in Dentistry in Brazil, making it necessary to include them in curricular matrices in order to prepare the dentist professional to work in the area of health management.

Descriptors: Education, Higher. Education, Dental. Health Management. Health Services Administration. Dental Staff.

1 INTRODUCTION

The major challenge for the consolidation process of the Brazilian Health System (Sistema Único de Saúde - SUS) has been to transpose the doctrinal principles of universality, equality, and integrality of health care from legal norms into the daily practice of health services¹. The thinking about professional competencies and abilities in the health field is consistent with the need to design strategies to overcome the challenges of future transformations in the area, and one of them concerns the management of the health sector. It is necessary to create a new space for management committed to increasing the efficiency of the system. Consequently, it becomes imperative to rethink the type of health manager who is appropriate to this new reality and how he or she should be trained².

Health management can be recognized as the direction or conduction of political-institutional processes related to the health system conducted at the technical-administrative and technical-operational levels³. Managing health organizations requires specific skills translated into knowledge, skills and attitudes, situational analysis capacity, decision-making, presentation of solutions, problem-solving and conflict management. That is why it is necessary for Higher Education Institutions (HEIs) to accompany such changes experienced in the health sector and to incorporate them into their teaching bases^{4,5}.

The National Curricular Guidelines (DCN) for Dentistry courses, instituted in 2002, guide the formation of a dental surgeon whose academic and professional profile presents skills and abilities related to

qualified and resolute action in the SUS. This new professional should reach the competencies and abilities of the health and administration areas by having an overview of the context into which he/she is inserted and a robust social commitment^{6,7}.

For the acquisition of skills and abilities in the management of health services, it is important to include content about planning and management in undergraduate courses in the Health Area. It is necessary, however, to raise awareness of the faculty on the subject, so that it becomes recognized as important as other technical-scientific contents and becomes stimulating for teachers and students⁸.

The academic training provided by HEIs has been a frequent target of scientific research, in particular, in order to contribute to reflections about its quality. In Dentistry, which is still specialized and distant from social reality, studies are needed to alert HEIs about their role as human resources trainers for health management. In this sense, this study aims to outline the management teaching profile in undergraduate courses in Dentistry in Brazil.

2 METHODS

This is a transversal research with a quantitative approach from secondary data.

The sample consisted of all HEIs offering undergraduate Dentistry courses enrolled in the Ministry of Education (MEC), i.e., 327.

Initially, the data collection was performed through consultations to the website of MEC, which has an official and unique database of information related to HEIs and undergraduate courses in the Federal System of Education (E-MEC listing

of Higher Education Institutions and Courses)⁹.

Using the registration and data of all HEIs offering undergraduate courses in dentistry, the researchers located in their websites the curricular matrix of the course and their summaries, verifying the presence of curricular components that address the teaching of management. Those that had as general objective the study and systematization of practices used to manage the health area were considered. The period of consultation to the websites occurred between February and March 2017. When the website did not include a curricular matrix and/or the summary, an e-mail was sent to the course coordination questioning the presence of curricular components that address the teaching of management. When present, it was requested from the HEIs to send the contents of the curricular components and a period of two months was established for e-mails to be answered.

The following information was collected from the HEIs and the curricular component: HEI regional category (North, Central-West, Northeast, Southeast and South), HEI administrative category (public or private), nature of the curricular component (compulsory or optional), semester offered, workload, methodology used (theoretical, practical or internship) and nomenclature.

The data were tabulated and analyzed using the Statistical Package for the Social Sciences (SPSS for Windows, version 20.0) using descriptive analyses, and presented through absolute and relative frequencies.

3 RESULTS

Currently, Brazil has 327 undergraduate

courses in dentistry, according to the information obtained from the website of MEC.

In consultation to the website of each HEI, the curricular matrices of 283 (86.5%) undergraduate courses in Dentistry were available. The HEIs (44, 13.5%) that did not provide the curriculum matrices in their websites were contacted by e-mail, and the curricular matrices were requested.

At the end of the collection period, the curricular matrices of all 327 undergraduate courses in Dentistry of Brazil were obtained and analyzed. Most courses are located in the Southeast region (126, 38.53%) and offered by private HEIs (270, 82.57%). We observed that the curricular components that address the teaching of management are offered in only 91 (27.83%) among the undergraduate courses in Dentistry (table 1).

Of the undergraduate courses that contemplate curricular components that approach the teaching of management in its curricular matrices, 68 (74.72%) undergraduate courses with management education in their curricular matrices are compulsory, predominantly offered in eighth (25.28%) and ninth (24.17%) semesters. Most (79.12%) had workloads ranging from 31 to 60 hours, with theoretical methodologies (60.31%) and a few internship programs (7.70%) (table 2).

We observed usual nomenclatures of the curricular components that addressed management education, being more frequent the following nomenclatures: Management and Planning in Dentistry (9.90%), Administration of Health Services (7.70%), Health Management and Administration (7.70%), and Quality Assurance Management (7.70%) (table 3).

Table 1. Distribution of undergraduate courses in Dentistry in Brazil according to the region, HEI administrative category and offering of management education

Region	Undergraduate Courses in Dentistry	HEI Administrative Category		The offering of Management Education	
		Public	Private	Yes	No
North	32 (9.78%)	3 (9.37%)	29 (90.63%)	10 (31.25%)	22 (68.75%)
Midwest	26 (7.95%)	3 (11.54%)	23 (88.46%)	12 (46.15)	14 (53.85)
Northeast	86 (26.29%)	20 (23.25%)	66 (76.75%)	28 (32.55%)	58 (67.45%)
Southeast	126 (38.53%)	21 (16.67%)	105 (83.33%)	18 (14.29%)	108 (85.71%)
South	57 (17.43%)	10 (17.55%)	47 (82.45%)	23 (40.35%)	34 (59.65%)
Total	327	57 (17.43%)	270 (82.57%)	91 (27.83%)	236 (72.17%)

Table 2. Distribution of the curricular components that address the teaching of management according to its nature, offered semester, workload and methodology employed

Nature of the Curricular Component	n (%)
Compulsory	68 (74.72%)
Optional	23 (25.28%)
Offered Semester	n (%)
Fifth Semester	12 (13.18%)
Sixth Semester	16 (17.59%)
Seventh Semester	10 (10.99%)
Eighth Semester	23 (25.28%)
Ninth Semester	22 (24.17%)
Tenth Semester	8 (8.79%)
Workload	n (%)
Up to 30 hours	11 (12.09%)
31 to 60 hours	72 (79.12%)
More than 60 hours	8 (8.79%)
Methodology Employed	n (%)
Theoretical methodologies	55 (60.43%)
Theoretical and practical methodologies	29 (31.87%)
Theoretical, practices and internships	7 (7.70%)

Table 3. Distribution of the main nomenclatures of curricular components that address management education

Main Nomenclatures of Curricular Components	n (%)
Management and Planning in Dentistry	9 (9.90%)
Administration of Health Services	7 (7.70%)
Health Management and Administration	7 (7.70%)
Quality Assurance Management	7 (7.70%)
Business Management in Dentistry	6 (6.60%)
Professional Guidance and Administrative Management	6 (6.60%)
Administration and Management of Oral Health	4 (4.40%)
Business Management	4 (4.40%)
Health Services Administration	4 (4.40%)
Public and Private Dentistry Management	3 (3.30%)
Entrepreneurial Management	3 (3.30%)
Planning and Management of Health Services	3 (3.30%)
Administration and Management of Oral Health	3 (3.30%)
Administration and Marketing in Dentistry	3 (3.30%)
Administration and Management of Health	3 (3.30%)
Management and Marketing Applied to Dentistry	3 (3.30%)
Management and Entrepreneurship	2 (2.20%)
Administration, Marketing, and Management of Offices	2 (2.20%)
Dental Administration	2 (2.20%)
Others	10 (10.99%)

4 DISCUSSION

It should be noted that there are few HEIs that offer management education in their curricular matrices. The Southeast region, which holds most of the Dentistry courses (38.53%), offers management education in only 14.29% of its courses. The majority of undergraduate

courses in Dentistry that includes management education in their curricular matrices are in the Northeast, although the region holds 26.29% of undergraduate courses in Brazil.

The Basic Operational Standard on Human Resources of SUS (NOB/RH-SUS, 2003) defines that the quality of healthcare is

directly related to the training of specific personnel, and that curricular matrices should include epidemiological reality and demographic characteristics of the various regions of the country, a policy of teacher training oriented to the SUS, formation of managers capable of breaking with current management paradigms, and the ensuring of necessary resources for teaching, research and extension¹⁰. Thus, it is the role of HEIs to subsidize training aiming the production of trained human resources prepared to take on competencies within health services, whether public or private.

In a survey carried out by the Ministry of Health on the perception of the mayors regarding the process of SUS management, the main problems related to the management and human resources function were mentioned¹¹. Suape et al.¹² (2007) considered human resource competencies required for health in terms of management and defined knowledge, skills and attitudes as the most significant requirements, and observed that the unpreparedness of managers is now one of the critical nodes of health services. In this sense, it is important that education be related to the demands of health services, and it is necessary for HEIs to construct or rethink their Pedagogical Politics Projects as a permanent process of discussing practices, concerns and presuppositions of education.

We observed that the curricular components that address management education are relatively concentrated in the last semesters of undergraduate courses. The perception that the caring/managing and managing processes almost do not interconnect seems to be reinforced, since the student first learns to care for the patient and only then how to manage health care. Thus, students perceive the

fragmentation of knowledge both in the different teaching processes and in the practice of activities related to management, since practice, problematization of contents and experience in health services happen at different times^{13,14}. In this sense, Dentistry courses should include in their curricular matrices a timely distribution of management education throughout the course, so that students are able to understand that practice and management are interconnected and complementary practices.

With regard to the methodologies used in the curricular components that address management education, most courses are exclusively theoretical classes (60.43%). Thematic areas in management education do not fit the profile of the subjects covered by the other curricular components of the course, which may generate a lack of interest by the student. Thus, it is up to the courses to add to the curricular components active teaching-learning methodologies that arouse interest in the area and facilitate the assimilation of contents. According to Moimaz et al.¹⁵ (2004) and Scavuzzi et al.¹⁶ (2015), the development of practical classes and supervised internships, in interaction with the community and services, is able to sensitize students to the reality in which they will act and, with that, to contribute to their professional formation. Curricular components that include periods of internship contribute to clinical learning, autonomy and understanding of the student in the forms of organization and management of the work in health^{17,18}.

The nomenclatures typically used in curricular components that address management usually portray the themes commonly dealt with, probably in order to demonstrate what will be addressed during the course, since such components, in general, approach essential knowledge for a theoretical basis of the

manager.

It is necessary to ensure research, training, and innovation in teaching in the Health Area if we intend to carry out a profound change in models of vocational training which the population and the SUS demand and need¹⁹. The management of health services requires from the manager a range of knowledge and experience that undergraduate courses in dentistry are not providing. Thus, there is still much to discuss teaching of management in undergraduate courses in dentistry, and studies such as this have the role of alerting HEIs to the real needs of the current scenario.

5 CONCLUSION

We conclude that management education is little explored by undergraduate courses in Dentistry in Brazil, making it necessary to include them in curricular matrices in order to prepare the dentist to work with health management.

RESUMO

O ensino de gestão nos cursos de graduação em Odontologia no Brasil

Este estudo teve como objetivo traçar o perfil do ensino de gestão nos cursos de graduação em Odontologia no Brasil. Caracteriza-se como pesquisa transversal com abordagem quantitativa a partir de dados secundários. A amostra foi composta por 327 Instituições de Ensino Superior (IES) que possuem cursos de graduação em Odontologia cadastrados no Ministério da Educação. A coleta ocorreu a partir de consultas aos sites *web* das IES, dos quais foram analisadas as matrizes curriculares dos cursos de Odontologia e ementas, e observada a existência de componentes curriculares que abordassem o ensino de gestão. Quando presentes, foram colhidas as seguintes informações: região da IES, categoria administrativa da IES, natureza do componente

curricular, semestre ofertado, carga horária, metodologia empregada e nomenclatura. Dos 327 cursos de graduação em Odontologia pesquisados, apenas 27,83% ofertam o ensino de gestão em suas matrizes curriculares. A maioria dos componentes curriculares é de natureza obrigatória (74,72%), ofertadas predominantemente no 8º (25,28%) e 9º (24,17%) semestres, com a carga horária variando entre 31 e 60 horas de aulas (79,12%) e natureza teóricas (60,31%). Assim, concluiu-se que o ensino de gestão é pouco explorado pelos cursos de graduação em Odontologia no Brasil, fazendo-se necessária a sua inclusão nas matrizes curriculares a fim de preparar o cirurgião-dentista para atuar na área da gestão em saúde.

Descritores: Educação Superior. Educação em Odontologia. Gestão em Saúde. Administração de Serviços de Saúde. Recursos Humanos em Odontologia.

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