

# Situational overview of Hospital Dentistry Qualification courses: an integrative review

Tânia Christina Simões\*; Marcelo Lupion Poleti\*; Luiz Alberto Valente Soares Júnior\*\*, Gabriela Moura Chicrala\*\*\*, Paulo Sérgio da Silva Santos\*\*\*\*

- \* Ph.D. Professor at the Technical Course in Oral Health; Federal Institute of Paraná, IFPR.
- \*\* M.Sc. Supervisor of the Dentistry Department at Clinics Hospital, Medical School, USP.
- \*\*\* Ph.D. Student in Applied Dental Sciences, Bauru School of Dentistry, USP.
- \*\*\*\* Ph.D. Associate Professor at the Surgery, Stomatology, Imaging and Radiology Department, Bauru School of Dentistry, USP.

Received April 11, 2019. Approved December 22, 2019.

## ABSTRACT

Dentists qualified on evidence-based practices and on the application of successful oral health care models are beneficial to individual and collective health. The current study presents an overview of Hospital Dentistry Qualification courses available in Brazil after the regulation of Resolution 162/2015 by the Conselho Federal de Odontologia (CFO - Brazil), which focuses on assisting the selection by professionals who intend to qualify in this field. Integrative literature review, with quantitative, exploratory and descriptive data analyses, was the research method adopted in the present study. The mesh "hospital dentistry qualification" was used in the single search conducted on Google database, in March 2019. Seventeen (17) proposals were found. Thirteen (13) proposals that included information about vacancies available for students, course periodicity, weekdays when the course took place, total workload, program content (theoretical and practical) and place of practice were selected for analysis. Lack of program content (n=2) and outdated information (n=1) were immediate exclusion criteria. The descriptive analysis applied to the proposals (n=10) has shown that courses were excluded due to lack of definition of the workload of theoretical and practical activities (n=4); as well as of information about the practical content of the course (n=5), the hospital where the practice would take place and the minimum workload required for the practice. One (01) qualification proposal was included in the research based on qualitative synthesis. The current study has shown that one proposal was in compliance with the legislation and regulations required by FCD, as well as that the presentation of the information available in the website about the proposal makes it hard for the target audience to make the option for the course that would best meet their needs.

**Descriptors:** Health Human Resource Training. Courses. Dental Staff, Hospital. Schools. Hospitals.

## 1 INTRODUCTION

The care provided to hospitalized patients depends on the interaction of multiprofessional work resulting from the sum of partial care procedures complementary to each other<sup>1</sup>. However, it is not easy establishing roles and delegating responsibilities to the multiprofessional team. Thus, effectively coordinating such a diverse and specialized team of health professionals is a challenging task that overloads hospital management processes<sup>2</sup>. Despite the essential role played by dental interventions in hospital environments, and the fact that governmental action programs advocate for the participation of dentists in all three healthcare levels provided to the population, the participation of such professionals in hospital teams remains very limited<sup>1</sup>.

Dentists qualified in Hospital Dentistry can contribute to the quality of life of hospitalized individuals by providing them special and constant care - not only to treat illnesses leading to hospitalization, but also to take care of other organs and systems that may face adverse events that can be detrimental to patients' recovery and result in unfavorable prognosis. Such care should include dental treatments aimed at providing oral health due to the interrelationship between oral and systemic diseases. Lack of dental biofilm control in hospital environments can lead to several infectious diseases capable of compromising individuals' health<sup>3</sup>.

Hospital Dentistry aims at taking care of oral changes in order to minimize the risk of infections, improve individuals' quality of life and reduce hospitalization time, based on a set of preventive, therapeutic and palliative actions focused on assuring patients' oral health<sup>4</sup>. Although poorly documented, the concern about oral infections being the primary focus of systemic infections in totally care-dependent patients hospitalized in intensive care units

(ICUs) has been addressed by interdisciplinary teams<sup>5</sup>. Measures taken to reduce oral infection outbreaks comprise local care application and hygiene techniques, as well as the selection of medications to balance the oral environment and reduce bacterial flora<sup>6,7</sup>.

Nowadays, hospitals count on a small number of qualified dental professionals to develop comprehensive patient care, which calls the attention of the general community to the importance of enabling these professionals to work in different hospital sectors<sup>7</sup>. Thus, the training curriculum of Dentists should include fundamentals about comprehensive patient care in order to help improving their clinical expertise in dental interventions carried out in hospital environments<sup>6</sup>. The education of Dentists through good practices based on scientific evidence, as well as the application of oral healthcare models focused on managing clinically compromised patients, can be beneficial to individual and collective health<sup>5</sup>.

Dentists' participation in interdisciplinary teams should be seen as a positive factor to help preventing and controlling nosocomial infections based on the implementation, supervision and orientation of preventive and curative measures applied to critically ill patients<sup>5-7</sup>. The performance of such professionals in hospital environments was acknowledged by the Federal Council of Dentistry (FCD) in 2015. FCD Resolution N. 162/2015 acknowledges the practice of Hospital Dentistry by Dentists as a qualification and it determines that the qualification course should comprise at least three hundred and fifty (350) hours - 30% of practical activities and 70% of theoretical classes -, as well as that the maximum number of students per class should comprise thirty (30) individuals and at least one MSc. or PhD. professor. In addition, the qualification course should encompass basic subjects, such as: a)

Hospital Routine (management, bioethics, biosafety, medical records, prescriptions, rounds, clinical practice, patients' safety, urgency and emergency); b) Clinical Propedeutics (exam interpretation, main complications, systemically compromised patients and drug interactions); and c) Basic Life Support (BLS)<sup>8</sup>.

However, it is still hard to find dental professionals working in the clinical staff of multiprofessional teams in hospital environments. In addition, few studies available in the literature focus on assessing the positive impact of having Dentists working in multiprofessional teams in tertiary healthcare services<sup>9</sup>. Actually, studies focused on demonstrating the quality of the training provided to these professionals could highlight the essential role played by Hospital Dentistry, the positive financial impact of having Dentists in multiprofessional teams and the consequent improvement in patients' quality of life<sup>9-11</sup>.

Integrative review is a methodological resource capable of synthesizing knowledge deriving from research available on a given topic and of guiding professionals' practice based on results found in relevant studies<sup>12</sup>. In light of the foregoing, the aim of the current study was to present a situational overview of qualification courses in Hospital Dentistry available in Brazil - after Resolution N. 162/2015, which was issued by the Federal Council of Dentistry - based on an integrative review.

## 2 METHODOLOGY

Integrative literature review, combined with quantitative, exploratory and descriptive analyses, was the research method adopted in the current research. Mesh "habilitação em odontologia hospitalar" (hospital dentistry qualification) was used in a single search conducted at [www.google.com.br](http://www.google.com.br) in March 2019.

The analysis of websites showed that several

Brazilian educational institutions have the aforementioned course in their matrix of disciplines.

This present study included the analysis of websites of Hospital Dentistry Qualification courses that make the following data available: a) number of vacancies available for students, b) course periodicity, c) weekdays when the course takes place, d) total workload of the course; e) program content. Courses that did not provide such minimum information were disregarded.

Courses found during the search were saved as bookmarks in Google toolbar, based on their order of appearance. Next, they were organized in order of identification based on their respective email addresses. Subsequently, they were organized in alphabetical order based on the names of the host institutions and further categorized by ordinal numbers. Collected data were tabulated in Microsoft Excel<sup>®</sup> spreadsheet and subjected to descriptive statistics.

## 3 RESULTS

Seventeen (17) educational institutions offering Hospital Dentistry courses were initially found. Four institutions were discarded after their websites were analyzed because they offered distance learning (DL) courses, or improvement and/or training courses with reduced workload.

Thirteen qualification proposals were found and analyzed; one of them only provided outdated information and two other proposals were discarded because they did not present the program content of the course. Ten qualification proposals that have provided the data shown in Table 1 were included in the current study and subjected to descriptive analysis. Only five institutions provided information about the number of vacancies offered by the course. With respect to periodicity, only one proposal offered biweekly courses; the remaining nine ones offered monthly courses that were mostly held on weekends.

Table 1. Data collected at the websites of institutions presenting Hospital Dentistry Qualification proposals (n = 10).

Course identification	Number of vacancies	Availability	Workload	Duration	Theoretical Programming	Practical Programming	Hospital Identification
1	NI	Monthly Friday and Saturday	420 hours Theoretical (255h) / Practical activities (105h)	11 months	Yes	NI	Yes
2	12	Monthly Thursday to Saturday	350 hours Theoretical (260h) / Practical activities (90h)	9 months	Yes	NI	NI
3	NI	Monthly Monday to Wednesday	480 hours	18 months	Yes	Yes	Yes
4	24	Monthly. Thursday to Saturday	362 hours Theoretical (246h) / Practical activities (116h)	11 months	Yes	NI	Yes
5	NI	Monthly Friday to Sunday	360 hours Theoretical (70%) / Practical activities (30%)	NI	Yes	NI	NI
6	15 to 25	Monthly Saturday and Sunday	520 hours Theoretical (70%) / Practical activities (30%)	15 months	Yes	NI	Yes
7	NI	Monthly Wednesday to Friday	384 hours	12 months	Yes	NI	NI
8	NI	Monthly Friday to Sunday	360 hours	18 months	Yes	Yes	Yes
9	16	Monthly Monday to Wednesday	384 hours Theoretical (70%) / Practical activities (30%)	10 months	Yes	Yes	Yes
10	20	Biweekly Thursdays	350 hours	NI	Yes	NI	NI

NI – Non-informed criterion.

All proposals had minimum workload of 350 hours; however, four of them did not provide information about the workload of theoretical and practical activities. Two qualification proposals did not provide information about course duration. All proposals presented their theoretical program content, but only four of them identified the hospital where the practical activities should be performed; of these four, only three presented their practical program content.

The qualitative synthesis showed that only one course presented all inclusion criteria at its website, in an objective manner. It provided

information about the exact number of vacancies available for students; the periodicity of the course comprising the days and periods of classes; as well as about the total workload and distribution of hours between theoretical and practical activities (although they were expressed as percentage), in compliance with Resolution 162/2015<sup>8</sup>. The program content of the course was presented along with the menus of theoretical and practical activities; the name of the hospital where professional practices should be carried out was also informed. Figure 1 summarizes the course exclusion stages, as shown in the flowchart below.

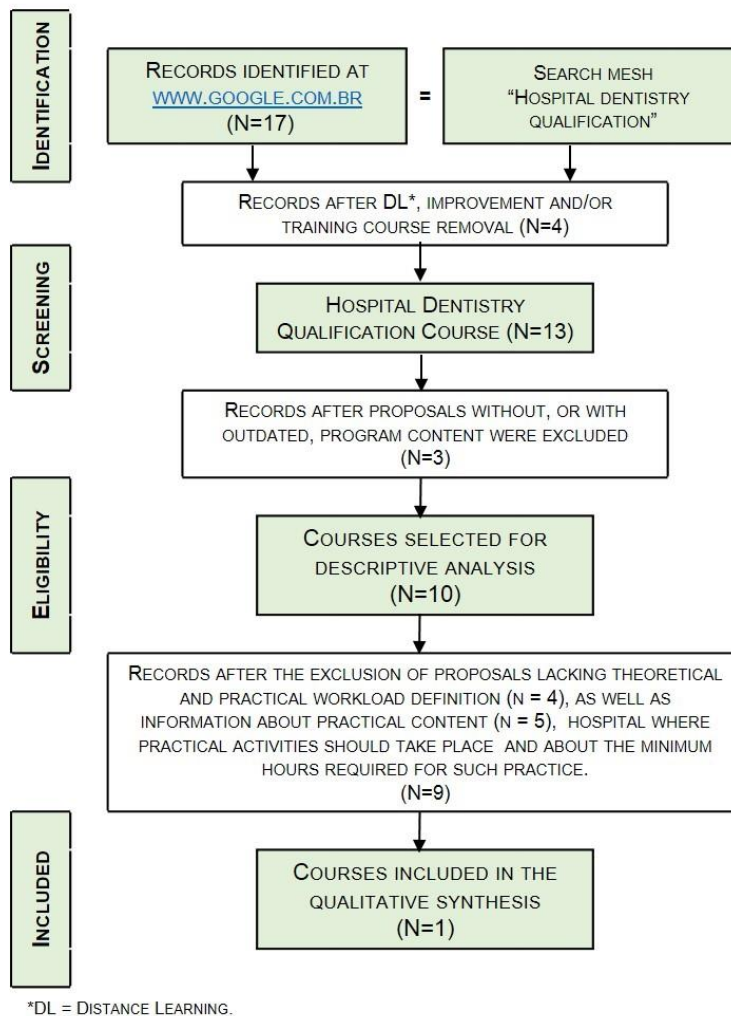


Figure 1. Flowchart presenting the stages of the search for Hospital Dentistry Qualification courses

#### 4 DISCUSSION

Integrative reviews enable synthesizing the content of several published studies, as well as developing overall conclusions about a given research field and pointing out knowledge gaps to be overcome by new studies<sup>9,12</sup>.

The Qualification course modality specifies contents associated with a particular field in undergraduate courses. Resolution 162/2015 regulates such qualification in hospital dentistry<sup>8</sup>, whereas Resolution 163/2015 defines Dentists' practice and the way they work in hospitals<sup>13</sup>. Several proposals analyzed in the present study were not fully in compliance with these resolutions. In addition, there were flaws in the presentation of this modality to the target audience, a fact that makes it difficult for Dentists to choose the course that best fits their life contexts and professional profiles.

Proposal N. 9 was the only one meeting all inclusion criteria set in the current study, which were also the ones recommended by FCD. However, it did not present a class content schedule to enable confirming the disclosed information. Only proposals 6, 8 and 9 presented a school day schedule, although they did not list the content to be taught at the referred dates. This information could help the target audience to get organized for course activities. In addition, it could make information about the distribution of theoretical and practical workloads to be implemented in the course more transparent.

Program content presentation was crucial for the analyses carried out in the current study, since it evidenced an interesting fact: although all qualification courses have presented program contents, the analyzed proposals were restricted to the theoretical content, which has significantly changed from course to course. Proposals 1, 4, 5, 6, 7 and 10 have only indicated their theoretical content on their respective websites, although proposals 1, 4, 5 and 6 have indicated a specific

workload for practical activities. In addition, proposals 5, 7 and 10 did not mention the name of the hospital where practical activities would be carried out. This omission leads to uncertainties about the implementation of these mandatory activities in hospitals, which are crucial environments for professionals' certification in Hospital Dentistry Qualification. The presentation of a practical program in proposals 3, 8 and 9 could favor students' choice for the qualification course, since they made it clear that practical training in hospital environments was part of their program content.

It is worth emphasizing that proposals offering technical or monitored visits should not be considered as having practical activity, since this learning modality does not enable bedside care to patients. Therefore, changes implemented by FCD resolutions 203 and 204 from 2019<sup>14,15</sup> came at good time, since they clarify the skills to be developed by professionals who wish to qualify to work in tertiary care services. This information is recent and was not covered by the herein conducted search due to the period when it was performed. Even institutions that have suggested this teaching modality are still adapting to the new rules in order to get organized and present their proposals in a more objective manner. However, it is worth making it clear that they help professionals developing the necessary skills and competences to enable the proper management of hospitalized patients, as well as a universal, resolute, humanized and quality care<sup>2,5,16</sup>.

Qualification in dental specialties remains under discussion; experts have pointed out that the participation of well-trained Dentists in multidisciplinary teams can help improving patients' quality of life<sup>17</sup>. Thus, these professionals must be prepared to work in several tertiary care sectors, based on solid knowledge about physiology, pharmacology and stomatology, as well as on knowledge associated with the mission

advocated by the hospital they work in, in order to help reducing costs and patients' mean hospitalization time<sup>18</sup>.

The Collegiate Board Resolution (RDC - Resolução da Diretoria Colegiada) N. 07, issued by the Brazilian Health Surveillance Agency (ANVISA - Agência Nacional de Vigilância Sanitária) in 2010, requires hospitals to have Dentists on duty in Intensive Care Units in order to monitor patients and coordinate oral adequacy procedures<sup>19</sup>. These professionals must present broad vision about, and act in compliance with, the level of responsibility attributed to, and work performed by, multidisciplinary teams. Thus, Dentists must invest in qualification courses that adopt evidence-based practices and apply successful oral health care models<sup>5</sup> to improve their skills and expertise<sup>17,18</sup>.

## 5 CONCLUSION

The current study has shown that only one proposal met the legislation and regulations required by FCD. The lack of information at websites chosen for the evaluated proposals makes it hard for the target audience to make the option for the course that would best fit their life contexts and professional profiles.

## RESUMO

### **Panorama situacional dos cursos de Habilitação em Odontologia Hospitalar: revisão integrativa**

Cirurgiões-dentistas habilitados em práticas baseadas em evidências científicas e na aplicação de modelos de cuidados em saúde bucal bem-sucedidos trazem benefícios tanto à saúde individual quanto à coletiva. Este estudo traçou um panorama sobre cursos de Habilitação em Odontologia Hospitalar ofertados no Brasil após a regulamentação da Resolução 162/2015 pelo Conselho Federal de Odontologia (CFO), para auxiliar a escolha dos profissionais que pretendem se habilitar na área. O método de pesquisa foi a revisão integrativa da literatura,

com análise quantitativa, exploratória e descritiva dos dados. O modelo de busca aplicado foi “habilitação em odontologia hospitalar”, na base de dados Google, com uma única consulta em março de 2019. Dezesete (17) propostas foram encontradas. Seguiram para análise treze (13) propostas que informavam número de vagas ofertadas, periodicidade do curso, dias da semana em que ocorriam as atividades, carga horária total, conteúdo programático (teórico e prático) e local da prática. Falta de conteúdo programático (n=2) e de atualização (n=1) foram critérios de exclusão imediata. Na análise descritiva das propostas (n=10) houve exclusões por falta de definição da carga horária teórica e prática (n=4); informação sobre o conteúdo prático (n=5) e de identificação do local de desenvolvimento e carga horária mínima exigida para a prática. O estudo evidenciou que, à época da coleta de dados, apenas uma proposta atendia à legislação e à normativa exigidas pelo CFO.

**Descritores:** Capacitação de Recursos Humanos em Saúde. Cursos. Equipe Hospitalar de Odontologia. Instituições Acadêmicas. Hospitais.

## REFERENCES

1. Rocha AL, Ferreira EF. Odontologia hospitalar: a atuação do cirurgião dentista em equipe multiprofissional na atenção terciária. *Arq Centro Estud Curso Odontol.* 2014; 50(4):154-60.
2. Shinkai RSA, Del Bel Cury, AA. O papel da odontologia na equipe interdisciplinar: contribuindo para a atenção integral ao idoso. *Cad Saúde Pública.* 2000; 16:1099-109.
3. Rodrigues ALS, Malachias RC, Da Fonseca Pacheco CM. A importância da saúde bucal em pacientes hospitalizados: uma revisão. *Rev Odontol UNICID.* 2018; 29(3):243-8.
4. Duarte F, Custodio MM, Ozelin AA, Rossato PH, Simões TC, Poleti ML, Sangiorgio JPM. A importância do técnico em saúde bucal na odontologia hospitalar: relato de experiência. *Rev Eletr Acervo Saúde [Internet].* 2018 [Cited

- March 25, 2019];17(e57). Available at: <https://acervomais.com.br/index.php/saude/article/view/57>.
5. Costa JRS, Santos PSS, Torriani MA, Koth VS, Hosni ES, Alves EGR, Arriera ICO, Miguens Jr SAQ. A odontologia hospitalar em conceitos. *Rev AcBO*. 2016; 25(2):211-8.
  6. Marin C, Bottan ER, Maçaneiro CAR. Visão de profissionais da saúde sobre a inserção do cirurgião-dentista no ambiente hospitalar. *Rev Pesq Saúde*. 2015;16(1):24-5.
  7. Santos TB, Amaral MA, Peralta NG, Almeida RS. A inserção da Odontologia em Unidades de Terapia Intensiva. *J Health Sci*. 2017; 19(2):83-8.
  8. Conselho Federal de Odontologia (Brasil). Resolução nº. 162, de 03 de novembro de 2015. Reconhece o exercício da Odontologia Hospitalar pelo cirurgião dentista. *Diário Oficial da União* 16 nov 2015; Seção 1.
  9. Godoi APT, Francesco AR, Duarte A, Kemp APT, Silva-Lovato CH. Odontologia hospitalar no Brasil. Uma visão geral. *Rev Odontol. UNESP*. 2009; 38(2), 105-9.
  10. Afonso AC, Silva I. Qualidade de vida relacionada com saúde oral e variáveis associadas: revisão integrativa *Psic Saúde & Doenças*. 2015; 16(3), 311-30.
  11. Mattevi GS, Figueiredo DR, Patrício M, Silva Rath IB. A participação do cirurgião-dentista em equipe de saúde multidisciplinar na atenção à saúde da criança no contexto hospitalar. *Ciênc Saúde Colet*. 2011;16:4229-36.
  12. De Souza MT, Da Silva MD, De Carvalho R. Revisão integrativa: o que é e como fazer. *Einstein*. 2010; 8(1):102-6.
  13. Conselho Federal de Odontologia (Brasil). Resolução nº. 163, de 09 de novembro de 2015. Conceitua a Odontologia Hospitalar e define a atuação do cirurgião-dentista habilitado a exercê-la. *Diário Oficial da União, Brasília*, 25 nov. 2015, seção 1, p. 120.
  14. Conselho Federal de Odontologia (Brasil). Resolução nº 203, de 23 de maio de 2019. Altera a Resolução CFO – 162/2015. *Diário Oficial da União, Brasília*, 23 maio 2019, seção 1, p. 77.
  15. Conselho Federal de Odontologia (Brasil). Resolução nº 204, de 23 de maio de 2019. Altera as alíneas do art. 2º da Resolução CFO – 163/2015. *Diário Oficial da União, Brasília*, 23 maio 2019, seção 1, p. 77.
  16. Lucas BB, Rodrigues Vieira Júnior JL, Besegato JF, Caldarelli PG. Ensino da Odontologia Hospitalar no Sul do Brasil. *Rev ABENO*. 2017; 17(2):68-75.
  17. Os desafios da habilitação em Odontologia Hospitalar: tratamento odontológico melhora comprovadamente o quadro clínico dos pacientes. *Jornal da ABO* 2015; 22(151): 12-3.
  18. Dos Passos Rodrigues G, Durigon GS, Lisboa ML, Bodanezi, Barros BAC, Duque TM, Munhoz EA, Rath IBS, Camargo AR. Impacto de um projeto de extensão sobre a formação discente para atuação em ambiente hospitalar. *Rev Eletr Extensão*. 2018; 15(31):67-78.
  19. Resolução nº 7, de 24 de fevereiro de 2010. Dispõe sobre os requisitos mínimos para funcionamento de Unidades de Terapia Intensiva e dá outras providências. *Diário Oficial da União (Seção 1)* 2010; 37:48-51.

**Correspondence to:**

Tânia Christina Simões

e-mail: [tania.simoes@ifpr.edu.br](mailto:tania.simoes@ifpr.edu.br)

Rua João XXXIII, 600 Jardim Dom Bosco  
86060-370 Londrina/PR Brazil