

# Dentistry curricular internship program in public health services after the 2002's National Curricular Guidelines

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## ABSTRACT

Supervised curricular internship programs in the public health services, as recommended by the National Curricular Guidelines (DCN), enables dentistry students to be close to realities and professional procedures different from those that characterize their routine in intramural clinical practice. The aim of this study was to perform a literature review on dentistry curricular internship programs in Brazilian public health services after the DCN published on February 2002 and thus stimulate reflection on its importance for contemporary professional training. A narrative literature review based on data obtained from database survey (PubMed, SciELO, LILACS and Google Scholar) was carried out, selecting documents published between January 2010 and May 2017. The final sample consisted of 15 publications grouped into the following categories: professional experiences reported in the curricular internship program, students' perception regarding the curricular internship program and evaluation of pedagogical, technical and political processes in the implementation of the internship program. It was concluded that curricular internship program of Brazilian universities are areas of deepening in the field of work that seek to bring students closer to the reality of the public health system, with the intention of training humanitarian professionals, concerned with respect and care of society.

**Descriptors:** Curricular Internship Program. Education in Dentistry. Curriculum.

## 1 INTRODUCTION

The teaching of dentistry has historically been based on the transmission of knowledge focused on the development of technical skills,

oral diseases and specialized clinical practice. One of the current challenges is training contextualized with reality and quality, taking into account economic, social and cultural

development as a new process of health education in Brazil. In this context, the requirements of the National Curricular Guidelines (DCN) point to the challenge of a more qualified training in order to approach subjects, families and community in their socioeconomic and cultural context<sup>1</sup>.

Brazil has implemented some public policies of social inclusion with the aim of promoting the development of the country<sup>2</sup>. Especially in the health and education sectors, inductive policies have been implemented to adequate education and increase the population's access to the service network of the Unified Health System (SUS) in order to respond with quality to the population's needs<sup>3</sup>. In health, there are attempts to reorganize and extend basic actions as a strategy to change the model focused on disease and specialized and complex care. In education, debates focus on curricular changes almost exclusively focused on the efficiency and effectiveness of procedures, which do not respond to the demands of services. The relationship between these two sectors is related to the adequacy of professionals to the social needs of the population. Dentistry fits into this new modality of health care, and dentistry professionals must cultivate a new relationship with community based on attention, trust, respect and care<sup>4</sup>.

More recently, as a strategy to change the health care model, the model referenced in the principles of Primary Health Care through the adoption of the Family Health Strategy was implemented in the National Primary Care Policy<sup>5</sup>. In education, debates about curricular changes have been focused on promoting professional profile with a general, technical, scientific and humanistic background, with critical and reflexive capacity, prepared to act guided by ethical principles in health-disease

processes and in their different levels of attention in SUS<sup>6</sup>.

The DCN of Dentistry Undergraduate Courses of February 2002 explains the need for methodologies that favor the teaching-learning process and the integration of the university with health services in order to train professionals with emphasis on health promotion and disease prevention<sup>7</sup>. In this sense, the curricular internship program with teacher supervision, developed in an articulated way and with increasing complexity, provides students the contact with realities and professional practices distinct from their daily life in intramural clinical practices<sup>8</sup>.

In this perspective of pedagogical innovation, students should, during the educational process, be provided of moments of reflection about their role within the contextualization of their work process from self-perception in order to develop intellectual and affective potential to acquire abilities required for the attention of health service users and discover in their professional function the authentic social dimension as a responsible citizen<sup>9</sup>.

The complexities of the contemporary world coupled with technological and scientific advances require knowledge to be worked in educational institutions in a multidimensional way<sup>8</sup>. For professional training in health, especially in dentistry, this means the need to expand educational environments, educational techniques, experiences with real professional situations and with different degrees of complexity.

A literature review on the recent production of studies aimed at analyzing the curricular internship programs of Dentistry courses developed in the public health service network was carried out, according to the

National Curricular Guidelines published in 2002.

## 2 METHODOLOGY

This is a literature review in the narrative modality. The search for articles was carried out in the PubMed, SciELO, LILACS and Google Scholar databases. The search was performed using the following keywords: dental education, community outreach, community dentistry, dentistry curriculum, dental-based education.

The titles and abstracts of all articles identified in the electronic search were read and analyzed by two reviewers according to the following inclusion criteria: articles published between January 2010 and May 2017 written in Portuguese, English or Spanish, characterized such as research or case study.

The analysis of data was qualitative. A data record spreadsheet was used with the

following variables: authors, year of publication, database, year of study, objective, quantitative or qualitative methodological approach and main findings.

Subsequently, studies were classified into three groups according to theme and methodology used: Group A: Report of experiences; Group B: Perception of students and Group C: Evaluation of pedagogical, technical and political processes.

## 3 RESULTS

Of the 15 selected articles<sup>10-24</sup>, 3 were found in SciELO, 9 in Google Scholar, 2 in LILACS and 1 in PubMed databases, published between 2010 and 2016 (chart 1).

Chart 2 shows information about authors / year and the conclusions found in each group. In this format, the sample selected in this review was presented in a synthetic way.

Chart 1. Distribution of articles by year of publication, authors and database found

| Year of publication | Authors                  | Database       |
|---------------------|--------------------------|----------------|
| 2010                | Batista <i>et al.</i>    | SciELO         |
| 2011                | Warmling <i>et al.</i>   | SciELO         |
| 2012                | Daher <i>et al.</i>      | PubMed         |
| 2012                | Alves <i>et al.</i>      | Google Scholar |
| 2012                | Toassi <i>et al.</i>     | Google Scholar |
| 2013                | Lôbo <i>et al.</i>       | Google Scholar |
| 2013                | Cawahisa <i>et al.</i>   | LILACS         |
| 2014                | Bulgarelli <i>et al.</i> | LILACS         |
| 2015                | Silva <i>et al.</i>      | Google Scholar |
| 2015                | De Melo <i>et al.</i>    | Google Scholar |
| 2015                | Leme <i>et al.</i>       | Google Scholar |
| 2015                | Gallo; Roloff            | Google Scholar |
| 2015                | Reichert <i>et al.</i>   | Google Scholar |
| 2015                | Junior <i>et al.</i>     | SciELO         |
| 2016                | Nobrega <i>et al.</i>    | Google Scholar |

Chart 2. Distribution of articles according to groups, authors, year of publication and conclusions

| Group | Author/Year                     | Conclusion   |
|-------|---------------------------------|--|
| A     | Nobrega <i>et al.</i> , 2016    | Enhances the knowledge of the territory and problems of the community and the health service itself  |
|       | Junior <i>et al.</i> , 2015     | Improvement professional training  |
|       | Silva <i>et al.</i> , 2015      | In addition to the occurrence of pedagogical practices in the scenarios of SUS practices, also allows the learning of skills and abilities described by the DCN  |
|       | Gallo; Roloff, 2015             | Improves the knowledge of the functioning of networks of specialized oral health care and improves skills for the resolution of obstacles  |
|       | Cawahisa <i>et al.</i> , 2013   | Provides activities that are validated in the creation of new health practices, with a work relationship based on multiprofessional work aiming at the promotion of community health                                     |
|       | Alves <i>et al.</i> , 2012      | Develops the curriculum, favors the approximation of higher education institutions with the community and provides a space for critical reflection to find solutions to the real health problems                         |
|       | Daher <i>et al.</i> , 2012      | First positive impression after a short stay in a community service program, but there was a decrease in the positive experiences of students over time  |
| B     | Batista <i>et al.</i> , 2010    | Provides students' understanding of the SUS functioning  |
|       | Reichert <i>et al.</i> , 2015   | Understand the importance of supervised internship programs for their academic training, since they allow greater approximation with the population, the knowledge and experience of SUS                                 |
|       | Leme <i>et al.</i> , 2015       | They valued the extramural experience, however, it was observed that there is still a hegemony of the focus on intramural clinical training  |
|       | De Melo <i>et al.</i> , 2015    | The new internship model proposed for the development of teaching-service integration activities with a focus on collective health satisfies students  |
|       | Bulgarelli <i>et al.</i> , 2014 | Perceive different health work processes, point out the importance of teachers' engagement in supervising internship programs and perceive the SUS as a rich learning space  |
|       | Lôbo <i>et al.</i> , 2013       | Understand that despite the reported deficiencies in the infrastructure of internships programs, they contribute to the formation of students, by providing an approximation with the social reality and health services |
| C     | Warmling <i>et al.</i> , 2011   | The integration of teaching in service is a fundamental axis of the processes of changes that have been occurring both in higher education and in public models and practices  |

Group A: Report of experiences; Group B: Students' perceptions; Group C: Evaluation of pedagogical, technical and political processes

#### 4 DISCUSSION

Most articles selected were published between 2012 and 2015. It was found that the articles started to be available only almost a decade after the DCN promulgation, although higher education institutions (IES) have inserted practices of supervised curricular internships soon after or even before DCN was instituted<sup>25</sup>. This fact can be justified by the need for accumulation of experiences, which demanded wait for the conclusion of classes that started the course after the curricular change.

In general, curricular internship programs reveal positive variants that contribute to the consolidation of objectives proposed by DCN. However, in these experiences, there are difficulties and problems to be overcome, such as the lack of commitment and the lack of understanding of teachers in relation to the functioning of SUS<sup>11,17</sup>, as well as the lack of definition of the role of the preceptor and the scarce expansion of Basic Attention<sup>11</sup>.

As shown in chart 1, most of the articles reported successful experiences with an increase in students' knowledge and practices, as well as greater understanding of the reality experienced in SUS. These results are observed in a study in which the proposed objectives were reached by the teaching-service integration in the USF, as a process that potentiates professional training focused on SUS and with a profile adequate to the real needs of the Brazilian population<sup>13</sup>.

The curative and educational activities carried out by trainees enabled the development of the six general skills and abilities required for the training of dentists proposed by DCN: health care, decision making, communication, leadership, management and permanent education<sup>15</sup>.

Graduates, through participation in

lectures, home visits, activities carried out in day care centers, in schools and in the USF itself, were able to experience the reality of the work of a professional in the public health area<sup>10</sup>.

Once inserted into the service, the student begins to work with SUS dentists in a multiprofessional and interdisciplinary team. The professional who plays the role of preceptor does not belong to the IES faculty, being responsible for the insertion and socialization of the student in the work environment, thus narrowing the distance between theory and practice. This was a positive aspect observed in research on student satisfaction with this curricular component<sup>26</sup>.

The relationship of students and preceptors introduces interest in the public health service, and, in a sense, the experience at the internship program was able to change the paradigms of the profession technical perception<sup>17,24</sup>.

However, difficulties were identified regarding the planning of internships, with suggestion of previous meetings so that the assignments of students and internship supervisors are clarified and agreed at the beginning of activities. This perception was more evident for students in the middle and end of the course, since they have greater individual contact with network professionals<sup>22</sup>.

Among other difficulties presented, the resistance of some students to insert themselves in a compulsory (curricular) way in SUS units stands out, due to the lack of interest to act in the public service as a future professional, lack of safety and difficulty in commuting. However, the experience reported by trainees of first classes has demonstrated to the students in the subsequent classes the importance of the internship in academic and

professional formation. Unfortunately, this quality gain is not understood by some teachers, who believe that students would be better prepared in integrated intramural clinical activities<sup>23</sup>.

Problems related to the lack of material, infrastructure and structure so that the workload can be fulfilled in the correct way were also observed by other authors<sup>21,24</sup>, a fact highlighted in a study that supposes a great deficiency in the organization of public health services, brought about by difficulty in financing or managing their resources. Nevertheless, the lack of material and equipment did not cause greater losses in the accomplishment of the schedule, but generated need to adapt the techniques and materials used, resulting in less satisfactory results<sup>15</sup>.

According to the guidelines of the Brazilian Association of Dentistry Teaching (ABENO), curricular supervised internship programs should enable students to recognize the social reality, the functioning of health services, articulate theory with practice in a real and everyday situation, to know the reality of the labor market and use the logic of the health system, in all its dimensions<sup>27</sup>.

As can be seen in chart 2, the experience in the internship gave students the unveiling of social reality and seemed to collaborate with the construction of a humanistic and comprehensive view of health problems<sup>20</sup>. Indeed, the teaching-service-community interaction has allowed students to grow, allowing them to experience the real needs of the community in which they are inserted<sup>13</sup>.

Regarding the contribution of internship programs in SUS to the formation of a new professional profile, this experience builds perceptions of students' interest in a collective health action. In a way, the awakening of this interest reflects the future performance of dentists well prepared to work in the public

health service. There is the recognition of students that, without the participation of SUS in their training, it would not have built a solid understanding of the functioning and concepts of the public health system for the possibility of future work in the public system<sup>17</sup>.

The expectation of experiencing new and unexplored situations, understanding the dynamics of work in a health unit and the feelings of initial insecurity as well as surprise at the reality they did not know are marked in the students' reports, as well as the feeling of overcoming preliminary expectations<sup>14</sup>.

From this perspective, chart 2 shows that the students' perception of the curricular internship program revealed that extramural practices offer the opportunity to experience the functioning of SUS, preparing more humanistic and socially aware professionals.

The real fulfillment of DCN implies a real academic change<sup>28</sup>. It is necessary to permanently evaluate the experience and direction of each institution<sup>29</sup>. These opinions are in line with statements from a study reproduced in chart 2, which argues that in order to enable the processes of changes in higher education institutions and public models and practices, it becomes necessary to analyze and disseminate how these experiences have been developed, their clashes and their conquests<sup>11</sup>.

## 5 CONCLUSION

There are reports of several successful experiences of curricular internship programs in Dentistry in SUS. However, challenges in relation to their organization, planning and deployment remain. Supervised internships in the Brazilian public health system are in a construction process, but they constitute a significant advance in students' contact with society and their real needs, favoring the formation of professionals as tools for health

promotion and disease prevention.

## RESUMO

### Estágios curriculares de Odontologia nos serviços públicos de saúde após as Diretrizes Curriculares Nacionais de 2002

O estágio curricular supervisionado nos serviços públicos de saúde, tal qual recomendado pelas Diretrizes Curriculares Nacionais (DCN), possibilita aos estudantes de Odontologia a proximidade com realidades e condutas profissionais diferentes daquelas que caracterizam sua rotina na prática clínica intramuros. O objetivo deste estudo foi realizar uma revisão da literatura sobre os estágios curriculares dos cursos de Odontologia nos serviços públicos de saúde brasileiros após as DCN publicadas em fevereiro de 2002 e assim estimular a reflexão sobre sua importância para a formação profissional contemporânea. Foi realizada uma revisão de literatura narrativa, baseada nos dados obtidos a partir da consulta em bases de dados (PubMed, SciELO, LILACS e Google Acadêmico), selecionando documentos publicados entre janeiro de 2010 e maio de 2017. A amostra final foi constituída por 15 publicações agrupadas nas seguintes categorias: relatos de experiência vivenciada no estágio curricular, percepção dos estudantes quanto ao estágio curricular e avaliação dos processos pedagógicos, técnicos e políticos na implantação do estágio. Conclui-se que os estágios curriculares das universidades brasileiras são espaços de aprofundamento no campo de trabalho que buscam aproximar os estudantes da realidade do sistema público de saúde, com intenção de formar profissionais humanitários, preocupados com o respeito e o cuidado da sociedade.

**Descritores:** Estágios. Educação em Odontologia. Currículo.

## REFERENCES

1. Forte FDS, Pessoa TRRF, Freitas CHSM, Pereira CAL, Junior PMC. Reorientação na formação de cirurgiões-dentistas. *Interface Comum Saúde Educação*. 2015;19(1):831-43.
2. Paim JS. A constituição cidadã e os 25 anos do sistema único de saúde (SUS). *Cad Saúde Pública*. 2013;29(10):1927-53.
3. Feuerwerker L, Almeida M. Diretrizes curriculares e projetos pedagógicos: é tempo de ação. *Rev ABENO*. 2004;4(1):14-6.
4. Villalba JP. Perfil profissional dos cirurgiões-dentistas e o sistema único de saúde: uma reflexão sobre a capacitação para a prática na atenção básica [tese]. Campinas: Universidade Estadual de Campinas; 2007.
5. Macinko J, Harris MJ. Brazil's family health strategy - delivering community-based primary care in a universal health system. *N Engl J Med*. 2015;372:2177-81.
6. Lopes Neto D, Teixeira E, Vale EG, Cunha FS, Xavier IM, Fernandes JD, et al. Aderência dos cursos de graduação em enfermagem às diretrizes curriculares nacionais. *Rev Bras Enferm*. 2007; 60(6): 627-34.
7. Moura ELDS, de Oliveira EEG, Saffh F, do Nascimento IS, Brandão GAM. Práticas de odontologia em saúde coletiva na estratégia de saúde da família. *Rev ABENO*. 2016;15(3):52-9.
8. Fonseca EP. As diretrizes curriculares nacionais e a formação do cirurgião-dentista brasileiro. *J Manag Prim Health Care*. 2013;3(2):158-78.
9. Gonçalves PE, Gabin CAS. A promoção de saúde no ensino odontológico. *Rev Ciênc Méd*. 2016;24(2):55-61.
10. Batista MJ, Gibilini C, Kobayashi HM, Ferreira LL, Gonçalo CDS, Sousa MDLRD. Relato de experiência da interação entre universidade, comunidade e unidade de saúde da família em Piracicaba, SP, Brasil. *Arq Odontol*. 2010;46(3):144-51.
11. Warmling CM, Rossoni E, Hugo FN, Toassi RFC, Lemos VAD, Slavutzki SMBD, Rosa ARD. Estágios curriculares no SUS: experiências da Faculdade de Odontologia da UFRGS. *Rev ABENO*. 2011;11(2):63-70.
12. Daher MAS, Luciane R, Costa PHD,

- Geovanna CM, Machado DDS. Dental students' perceptions of community-based education: A retrospective study at a dental school in Brazil. *J Dent Educ.* 2012;76(9):1218-25.
13. Alves LA, De Almeida Freires I, Braga CC, De Castro RD. Integração ensino-serviço: experiência exitosa na atenção odontológica à comunidade. *Rev Bras Ci Saúde.* 2012;16(2):235-8.
  14. Toassi RFC, Davoglio RS, Lemos VMA. Integração ensino-serviço-comunidade: o estágio na atenção básica da graduação em Odontologia. *Educ Rev.* 2012;28(4):223-42.
  15. Lôbo AEDA. Estágios curriculares: óptica do egresso do curso de odontologia da Universidade Federal do Ceará [dissertação]. Fortaleza: Universidade Federal do Ceará; 2013.
  16. Cawahisa PT, Terada RSS, Hayacibara MF. Atividades realizadas durante o estágio supervisionado do curso de odontologia da UEM em um centro de educação infantil. *Ciênc Cuid Saúde.* 2013;12(2):375-81.
  17. Bulgarelli AF, Souza KR, Baumgarten A, Souza JM, Rosing CK, Toassi RFC. Formação em saúde com vivência no Sistema Único de Saúde (SUS): percepções de estudantes do curso de Odontologia da Universidade Federal do Rio Grande do Sul (UFRGS). 2014;18(49):351-62.
  18. Da Silva MA, Mendes AAJ, Ferreira EF. La importancia de las etapas curriculares supervisadas en el sistema único de salud (SUS) para la formación académica brasileña y la enseñanza odontológica. *Educ Méd Sup.* 2015;29(3):617-33.
  19. Melo MMDC, Jamelli SR, Carvalho EJA, SILVA CHV, Góes PSA, Souza FB, Figueiredo N. Os estágios curriculares em Odontologia na atenção primária à saúde do Recife, Pernambuco, Brasil. In: *Convención Internacional de Salud, Cuba Salud 2015.* Abril de 2015. Palacio de las Convenciones. Havana – Cuba: eCIMED; 2015.
  20. Leme PAT, Pereira AC, Meneghim MC, Mialhe FL. Perspectivas de graduandos em odontologia acerca das experiências na atenção básica para sua formação em saúde. *Ciênc Saúde Coletiva.* 2015;20(4):1255-65.
  21. Gallo DB, Roloff JR. Estágio curricular supervisionado em serviços de gestão e de atenção especializada em saúde bucal do Sistema Único de Saúde, 2013 a 2015 [trabalho de conclusão de curso]. Porto Alegre: Universidade Federal do Rio Grande do Sul; 2015.
  22. Reicher A, Pessoa T, Forte F. Significado dos estágios supervisionados para estudantes de odontologia. *Atas CIAIQ.* 2015;1:251-4.
  23. Junior S, Ferreira M, Pacheco KTDS, de Carvalho RB. Multiplicidade de atuações do acadêmico de Odontologia no estágio curricular: relato de experiência. *Arq Odontol.* 2015;51(4)194-204.
  24. Nobrega DR. O estágio na atenção primária à saúde como ferramenta potencializadora na formação do cirurgião-dentista: Um relato de experiência [trabalho de conclusão de curso]. Araruna: Universidade Estadual da Paraíba; 2016.
  25. Fonsêca GS, Junqueira SR, de Araújo ME, Botazzo C. Modelo lógico-ideal para o estágio curricular supervisionado: a educação pelo trabalho na formação Odontológica. *Rev ABENO.* 2015;15(2):2-11.
  26. da Luz GW, Toassi RFC. Percepções sobre o preceptor cirurgião-dentista da Atenção Primária à Saúde no ensino da Odontologia. *Rev ABENO.* 2016;16(1):2-12.
  27. Scavuzzi AIF, de Gouveia CVD, Carcereri

- DL, Veeck EB, Ranali J, da Costa LJ, de Araújo ME. Revisão das Diretrizes da ABENO para a definição do Estágio Supervisionado Curricular nos cursos de Odontologia. Rev ABENO. 2016;15(3):109-13.
28. Moreira COF, de Araújo Dias MS. Diretrizes curriculares na saúde e as mudanças nos modelos de saúde e de educação. ABCS Health Sciences. 2015;40(3):300-5.
29. Toassi RFC, Souza JMD, Baumgarten A, Rösing CK. Avaliação curricular na educação superior em odontologia: discutindo as mudanças curriculares na formação em saúde no Brasil. Rev ABENO. 2012;12(2):170-7.

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