Contribution of the Subject of Pediatric Dentistry in academic training focused on Primary Care: experience report

Leila Chevitarese*; Flávia Cariús Tesch Ferreira Alves**; Diego de Andrade Teixeira***; José Massao Miasato*; Luciana Alves Herdy da Silva*

* PhD. Professor, Dentistry Program, University of Grande Rio
** Collaborating Professor, Dentistry Program, University of Grande Rio
*** Preceptor, Dentistry Program, University of Grande Rio

Received: 06/27/2021. Approved: 02/14/2022.

ABSTRACT
The present study aimed to report the contribution of the subject Pediatric Dentistry and Supervised Internship for Children and Adolescents to the training of UNIGRANRIO dentists to the exercise in Primary Care, through the presentation of experience reports prepared by undergraduates of the ninth-period, from the theoretical discussion of the work process in Primary Care with emphasis on the role of the general practitioner with pregnant women, babies, children, and adolescents. The activity was carried out by 3 groups (2 from Campus Duque de Caxias and 1 from Campus Barra da Tijuca). Students (n=103) were divided into 20 groups of 5 students each, who presented their work for 4 weeks, where 15 addressed a problem situation in localities (collective approach) and 5 handled a problem situation related to dental care (clinical case). After the presentation, there was a debate among professors of the subject, the group members and the other students to clarify doubts and deepen questions related to the activity’s objective. This experience report demonstrated that students were able to identify collective and individual health problems and propose contextualized coping measures of a preventive, curative, and health promotion character. Thus, the subject of Pediatric Dentistry contributed to the formation of the future dentist from UNIGRANRIO, enabling them to work in Primary Care and outline coping measures to meet the health needs of the Brazilian population, which is aimed by UNIGRANRIO and whose profile follows the National Curricular Guidelines for Dentistry Programs.


1 INTRODUCTION
In the National Curriculum Guidelines (NCG) of 2002 for undergraduate education in Dentistry, it is possible to find the principles, foundations, conditions, and procedures involved with dentist production, and these help in the organization, development, and evaluation of pedagogical projects of Dentistry Programs at Higher Education Institutions (HEIs). In the third article of the guidelines, the profile of the dental surgeon must contain “generalist, humanist, critical and reflective training, to work at all levels of health care”. For this, in line with the Unified Health System (SUS), it must be able to comprise the social, cultural, and economic reality of the territory in which it is inserted in order to promote
the transformation of reality for the benefit of society (citizen, family, and community)⁴. The NCG for undergraduate education in Dentistry, published in 2021², in article 2, paragraphs 1 and 2, expand this vision by describing the inclusion of students in scenarios of professional practice and learning in the SUS, as well as the inclusion of comprehensive health care and multiprofessional teamwork.

Providing conditions for the promotion, protection, and recovery of health, as well as for the organization and operation of the corresponding services, the Law 8080/1990, which deals with the production of human resources, describes in article 27, single paragraph, that the public services integrated to the SUS constitute a field of practice for teaching and research, through specific norms, elaborated jointly with the educational system.

Based on the rapporteur’s considerations, the Dentistry NCG “provides ample freedom for the HEIs to define, in the Pedagogical Projects of the programs, the detailed profile of the graduates, the corresponding training objectives, the competencies, skills, and knowledge necessary to achieve them, all properly articulated from perspectives and contemporary approaches to training that are relevant and compatible with national and international references”² (Page 59). In order to meet this perspective, and in line with the objectives of the profile of the dental surgeon, the Pediatric Dentistry Program at the University of Grande Rio Professor José de Souza Herdy (UNIGRANRIO) aims, in addition to exposing training content, to introduce students to a broader view of the various contexts surrounding them, whether at the municipal, state and national scope, focused on Primary Care.

Still in this focus, we emphasize that the presented proposal aims to meet the areas of general dentists’ general competencies, which are: I. Health Care; II. Decision Making; III. Communication; IV. Leadership; V. Health Management; and VI. Permanent Education.

The activity described in this article aims to meet the guidelines of the NCG in the proposed syllabus structure and syllabus content. Based on references to theoretical and practical content, they should include the human social sciences, where didactic activities should insert the student into the SUS service networks throughout the undergraduate program in Dentistry, allowing them to know and experience health policies in different life situations, in the organization of professional practice and in the work of the interprofessional team.

We also emphasize that section V of the NCG, which governs health management, quotes in item I of Art. 9 that in the dental surgeon training, the professional must be able to: know, understand and participate in actions aimed at improving the indicators of quality of life and morbidity in health, which can be carried out by a generalist, purposeful and problem-solving professional.

In the current Brazilian Federal Constitution³, in its article 200, item three, it is up to the SUS to organize the training of human resources in the health area, since “[...] health is everyone’s right and a duty of the State” (article 196). Therefore, it is essential that the production of undergraduate students in the health area develop, in this professional future, skills and competencies that follow the principles and guidelines of the SUS, and for this, it is necessary to an approximation between academic training and services.

Ceccin and Feuerwerker (2004)⁴ recognize the need to transform the production of health professionals, based on the NCG and SUS guidelines, in order to make them in contact with the local public health system, exploring innovative practices to “[...] overcome hegemonic concepts and practices, solidly installed inside and outside the educational institutions”. They also emphasize the need to transform health concepts and practices
by training professionals who produce comprehensive health practices.

The National Program for Re-orientation of Professional Training in Health (PRO-SAUDE) sought to encourage changes in undergraduate programs to adapt professional training to the needs and guidelines of the SUS. The UNIGRANRIO University Dentistry Program was awarded with PRO-SAUDE I, which boosted the deepening of the changes that took place in the program, aiming at professional training.

The curriculum matrix of the Dentistry Program, in progress since the first period of 2019, was built in 2013 in order to present itself as a care network, providing student training at different Health Care levels. During the processes of assimilation, articulation, and systematization of theoretical and practical knowledge, for the exercise of the profession by the undergraduate, they must be able to recognize the expanded concept of health-disease and its socio-historical-environmental process. This will reflect on each action taken, whether at the individual or collective level, as a way of rescuing human dignity, and allowing each patient to develop autonomy over their own body, home, and community.

Thus, Supervised Internships are present in the program matrix from the 5th phase to the final phase, and develop activities aimed at Primary Care, both in the collective and individual scope. These have always been present at UNIGRANRIO, but with the implementation of Pró-Saúde I, and in fulfillment of its general objective that included “transformations in the processes of knowledge generation, teaching, and learning”, there were changes in the offer of these in this institution. Currently, it is clear that all professors of the Dentistry Program recognize the importance of training a future dental surgeon capable of working in public service, as well as the relevance of this training in rescuing the Brazilian population. The Supervised Internship for Children and Adolescents is developed by the team of the subject Pediatric Dentistry, and works to produce students in health promotion and care, with an emphasis on pregnant women, children, and adolescents.

Thus, the curricular internships, which take place from the fifth period onwards, are no longer the isolated set of subjects approaching treatment with a view centered on each of the dental specialties. These came to be seen as spaces for discussion that aim to place the individual in their life context and that they are able to influence the health-disease process, as well as the measures for coping with problems and the individuals’ responses to these questions. From this experience, professors took this way of teaching to their subjects of origin.

The proposed changes reached all subjects of the curriculum matrix so that the supervised internships, where the practice is completely focused on the training of the dental surgeon within the context of SUS, became a foundation of academic training, while the others subjects began to reinforce the training intended in the NCG for the Dentistry Program.

Theoretical training for Primary Care begins in the first period, with the subject of Socio-Anthropological Contexts and continues in the subject of Collective Oral Health, in the third period, and in the Supervised Internships, the practice for assistance in Primary Care is offered in all the subjects of the curriculum matrix, as mentioned above. Thus, at UNIGRANRIO, it is possible to observe the integration of all subjects to prepare the student for the practice in its entirety, both private and public, concerning their different work processes.

Therefore, the present study aimed to report the contribution of Pediatric Dentistry in the production of dental surgeons at UNIGRANRIO for the practice of Primary Care through the presentation of reports of experiences prepared by...
undergraduates of the ninth (9th) period, from the theoretical discussion of the work process in Primary Care, with emphasis on the role of the general practitioner with pregnant women, babies, children, and adolescents.

2 EXPERIENCE REPORT

In order to rescue the work process of the general dentist graduated from UNIGRANRIO, and to reinforce their practice in an integral way, with emphasis on pregnant women, children and adolescents, the discussion of the theme “Attention to Oral Health - Production of Care in Pediatric Dentistry” was proposed to students in the 9th period, who were attending the Supervised Internship for Children and Adolescents. The class approach was based on the provision of care in Primary Care, through the work process of the general dentist, focusing on the competencies and skills taught in the Pediatric Dentistry subject.

Based on the presented theme, a work was requested to be presented as a lecture, where students would develop a problem situation and their coping measures (figure 1).

The 103 students who made up the class were divided into 20 groups of 5 students each, and each group should elaborate a problem situation, describe its scenario, specify the population with its different life cycles, describe health problems, the social and health determinants involved, as well as their prevalence, in order to exemplify the problem situations to be faced, emphasizing children, adolescents, and pregnant women.

To solve the problem situation, students should present effective coping measures, describe them step by step, and mention the different sectors involved in solving the problems, as well as the expected results. As for the development of any health education activity to be offered, they were asked to describe it, highlighting how, where and when it would be developed and applied, in addition to reporting the expected results to be achieved.

Presentations took place over four weeks and were held in 3 groups: 2 groups at Campus Duque de Caxias and 1 group at Campus Barra da Tijuca. These were carried out remotely (online), through the Blackboard platform, due to the need for social distancing to reduce the advance of the COVID-19 pandemic. Each group had 30 minutes to make their presentation developed in PowerPoint, followed by a debate between the professors of the subject, the components of the group and the other students. The debate aimed to clarify doubts raised by both presenters and spectators, as well as deepening issues related to the work process of the general dentist in Primary Care, with the reinforcement of competencies and skills to be achieved in the subject of Pediatric Dentistry, through the Supervised Internship for Children and Adolescents.

In total, 20 studies were presented: 15 addressed problem situations in localities (collective approach), and the remaining 5 were problem situations related to dental care (clinical case) (chart 1).

3 DISCUSSION

The experience reports of problem situations, prepared by the undergraduates, involved issues related to the community context and the inadequate work process on the part of the health teams, covering the collective and individual scope. As for the proposed solutions, there was a clear acquisition of a broader view to solve problems, which involved the identification of their determinants and the inclusion of different sectors, with community participation (chart 1).

The results showed that dentistry students were able to “overcome hegemonic concepts and practices” in dentistry training, as proposed by Ceccin and Feuerwerker4. According to Freixinho and Chevitarese7, for such a change to take place, undergraduate programs must provide the
theoretical basis and experience. In this way, it is possible for students to work and actively interfere with the most prevalent health problems in a territory, since this is part of the citizen’s life context, often involving school, work, residents’ associations, basic health units, their homes, and other sectors. The change in the curriculum matrix of the Dentistry Program at UNIGRANRIO was reflected in coping measures both in the collective scope and in assistance, seeking to rescue human dignity, giving back autonomy over their own bodies, to the enrolled population, as well as over their home and community. It is clear the importance of practices in Supervised Internships for training general dentists as intended in the NCG. When brought to a discussion space, students were able to place the individual in their life context, and they influenced the health-disease process, as well as the ways of coping with problems and their responses to these confrontations.

Another important question concerns understanding the problems and whether the responses generated as coping measures were adequate. The problem situations listed by the students were related to the lack of conditions and

![Image](image1.png)

Figure 1. Instruction sheet for executing the problem situation.
<table>
<thead>
<tr>
<th>Number of groups / nature of the approach</th>
<th>Problem situation</th>
<th>Proposed Coping Measures</th>
</tr>
</thead>
</table>
| 15 / Collective (Localities)              | Lack of territorialization to map the main problems and outline measures to deal with problems  
Lack of financial resources, with many low-income families; high unemployment rate, underemployment, with the presence of social programs as the only source of income  
Lack of basic sanitation and, consequently, lack of access to fluoridated water  
Lack of communication between local managers and the enrolled population  
Precarious housing  
Lack of family structure, generating the need for children to take care of another child  
Low education  
Inadequacy of the work process in Family Health, resulting in the lack of health education activities – emphasis on the lack of sexual orientation; early pregnancy, STD  
High rate of family and community violence, including sexual abuse  
Lack of life perspective as an inducer of problems related to anxiety and depression; drug, alcohol and cigarette use  
Inadequate food resulting in malnutrition; unbalanced and cariogenic diet  
Difficulty in accessing culture and leisure  
Poor financial management - lack of professionals, equipment for exams, supplies for adequate care  
Poor oral health care generating high pent-up demand and perpetuation of poor oral health  | Territorialization – Analyzing the community to identify their needs and expectations and thus, define priorities and organize services and resource allocation.  
Epidemiological study on health problems in areas assigned for effective planning by the FHT and other sectors  
Training of the Family Health and oral health team to develop an adequate work process  
Request support from the Expanded Family Health Center (EFHC) for the localities  
Carry out permanent training of local managers, Family Health Teams (FHT) and Oral Health Teams (OHT) for an adequate work process - Include home visits to learn about family dynamics, risk factors, the main health problems, and reach residents who do not reach the health unit.  
Promote professional training workshops with the support of the government, local companies and NGOs and local leaders and other sectors  
With the approximation of local managers and FHT / OHT, promote community participation in understanding and solving health problems and needs, and expectations to outline effective and contextualized, intersectoral coping measures for community problems – Encourage community unity to create actions aimed at improving the quality of life and encouraging good coexistence (community gardens, public squares, sports courts, etc.)  
Creation of leisure areas and cultural incentives and other expanded actions to improve the health and quality of life of the community, with community participation  
Improve the infrastructure of the UBS and structure the Health Care Networks to provide medical and dental care. |
| 5 / Dental care                           | Food rich in sugar and carbohydrates, provided on demand  
Poor oral hygiene and not contextualized to individual needs  
Low access to topical and systemic fluoride (supply water)  
High dmft and DMFT rate; periodontal diseases, tooth loss in adolescents, young adults, adults and the elderly  
Belief that the primary tooth does not need to be treated, as it does not hurt and is not important  
Inadequate work process of the OHT leading to the non-registration of families in order to follow up and facilitate communication, especially during the pandemic  
The inadequacy of the OHT work process also generated: lack of access to quality dental services; the lack of early preventive procedures, before the installation of the problem and dressings, access only in case of pain, absence of home visits as an intervention and screening tool, absence of collective procedures and health education activities  
Lack of resources to purchase toothbrushes, dental floss and fluoride toothpaste | Training to adjust the work process in family health  
Create preventive action lines in oral health, guiding populations on the importance of oral health through lectures, explanatory folders, community meetings, among others – encouraging self-care; guide, train and motivate the population on the importance of oral hygiene, adequate diet and seeking dental care as early as possible (before problems are set)  
Carry out a survey of oral health conditions of the enrolled populations in order to adopt measures (preventive or therapeutic) aimed at improving the population oral health and their quality of life, such as: oral hygiene instruction, moderate consumption of sugar, topical application of fluoride, Atraumatic Restorative Treatment in collective spaces and scheduling dental visits on an outpatient basis, in order to contribute to the reduction of dental caries, periodontal diseases and extractions.  
Acquisition of oral hygiene kits in partnership with companies, NGOs, local businesses and raffles from donated products or made by groups from the localities.  
Train people enrolled in the UBS with professional courses in order to improve their income.  
Guidance for the creation of community or family gardens  
Create groups on WhatsApp or social networks to post periodic guidelines on various topics of general and oral health, aiming to promote health even in pandemic times.  
Guidelines for pregnant women (dental prenatal care) so that harmful habits are not implemented, encourage breastfeeding and discourage non-nutritive sucking habits  
Demystify beliefs, providing guidance on the importance of deciduous teeth and how to take care to avoid problems that can negatively affect the quality of life of children and their families.  
From the epidemiological evidence, fight for the implementation of Health Care Networks that promote the integration of actions in Dentistry. |

essential resources for health, such as: financial conditions of the enrolled families; basic sanitation; adequate housing; food; access to culture and leisure; low level of education, as well as the inadequate work process in Family Health. Commonly in some cases, the provision of oral health care is so precarious that it generates a high pent-up demand and perpetuation of the precariousness of oral health, which results in a high rate of dmft and DMFT, periodontal diseases in young adults, adults and the elderly. These problems may be associated with the lack of educational activities addressing the importance of adopting contextualized non-invasive coping strategies and generating motivation to change attitudes and acquire new habits and healthy daily routines. As in the study by Castro and Araújo (2011)\(^9\), undergraduates were able to identify the inadequacy of the OHT work process as producing this situation, leading to the need for late curative and preventive procedures, in addition to the high pent-up demand and access only in case of pain, due to the lack of “adequacy of the developed practices” (Box 1). The coping proposals should involve health promotion actions and, with regard to oral health, curative and preventive actions, and at the end of the activity, it was found that it had occurred.

By bringing the definition of health promotion, present in the Ottawa Letter, it is clear that there was a concern on the part of dental students to carry out actions through training and community participation, making them active co-participants in improving their quality of life and health, aiming at understanding the entire process so that they could assume the leading role in coping actions\(^8\).

The provision of care in Primary Care represents the first level of contact of individuals, the family, and the community with the national health system, according to the National Policy for Primary Care (PNAB). This contact must be duly carried out within the ascribed territory, as well as considering the determinants and conditions of health to enable the access of the population of that territory, thus allowing its expansion and consolidation\(^8\). Dental students were attentive to the community context and to the recognition of their needs, in collective and care terms. They were able to recognize the origin and perpetuating factors of the problem, to propose solutions in an adequate way, in order to demonstrate their attention to the different realities, and seek to perceive the needs of the population under their care. This reinforces the importance of a holistic and humanized view of Dentistry, as corroborating Reis et al. (2009)\(^10\), one only takes proper care of what one knows.

In most of the proposed coping measures, there was a concern with the participation and involvement of the local population in their implementation. However, in order to implement these measures, both the collective and individual proposals that benefited curative/preventive care practices, care was taken to use health education instruments, adapting them, including to the reality of the COVID-19 pandemic (creation of groups on WhatsApp or other social networks to post periodic guidelines on various topics of general and oral health, aiming to promote health) (Box 1). In addition, it is worth emphasizing the importance of deconstructing local collective knowledge, demystifying the belief that deciduous teeth do not need to be treated, as they do not hurt and are not important. The population needs to know that problems in deciduous dentition have a negative impact on the quality of life of children and their guardians. Therefore, health education should occur as early as possible, especially with pregnant women, and have long-term continuity.

By proposing such instruments, dental students are in line with the concepts of health education. Understanding the educational processes that provide the construction of
knowledge in health, and from the absorption of the theme by the population allows it to contribute to the increase of the individual autonomy of the population in self-care, as well as in the construction with health professionals.11

If, on the one hand, using health education as a strategic intervention instrument of the constructed community reality is part of a critical and reflective thinking of the UNIGRANRIO Dental student, the result of its application also aims at the production of critical individuals in their own locality about their reality and health situation.12 In this way, the bond can be established and, through dialogue and affection, the understanding of what is to be achieved will be clear on the part of the enrolled population, which will be able to take the lead in coping actions and increase their quality of life.13

The prior acquisition of knowledge by undergraduates, through experience in Supervised Internships, significantly influences the health-disease process, the elaboration of ways of coping with problems together, as well as the responses achieved. The reinforcement of learning by professors in their original subjects made it possible to carry out this experience report by the Pediatric Dentistry team at UNIGRANRIO. The following are part of the syllabus of this subject: themes of a social, historical and cultural, economic, environmental, and human rights nature from a multi-, trans- and interdisciplinary perspective; multidisciplinary clinical care for children (including early childhood) and adolescents; the adequacy of knowledge acquired in clinical subjects prior to theoretical-practical activities; and the activities included are carried out in a holistic, humanized concept, allied to social responsibility.6 It is noteworthy that this view acquired by dental students extends to patients treated at the clinics of this institution, including those involving the care of children and adolescents, in which family partnership is necessary.

Thus, the results reported herein can and should be understood as a reflection of the training of the dental surgeon, who is able to respond to the health needs of the Brazilian population, which is desired by UNIGRANRIO and whose profile follows that of the NCG for Dentistry Programs.

4 CONCLUSION

This experience report, prepared by ninth-period students, showed that undergraduates are able to identify individual and collective health problems, and to propose contextualized coping measures with a preventive, curative and health promotion character.

Our findings from this experience report are the result of the assimilation, articulation and systematization of theoretical and practical knowledge about the expanded concept of health-disease, to be applied in the practice of Dentistry by the professional in training. These rooted concepts allow the professional to help the individual to situate themselves in their context, and with that to rescue the quality of life, through the development of autonomy over their own body, home and community.

Furthermore, the Pediatric Dentistry subject in the Supervised Internship for Children and Adolescents contributed as part of the training process of the dental surgeon at UNIGRANRIO, including to work in Primary Care.

RESUMO

Contribuição da disciplina de Odontopediatria na formação acadêmica voltada para a Atenção Básica: relato de experiência

O presente estudo teve por objetivo relatar a contribuição da Odontopediatria no Estágio Supervisionado da Criança e do Adolescente para a formação de cirurgiões-dentistas da UNIGRANRIO para a prática na Atenção Básica, por meio de apresentação de relatos de experiências elaboradas por acadêmicos do nono
período, a partir da discussão teórica do processo de trabalho na Atenção Básica com ênfase na atuação do generalista com gestantes, bebês, crianças e adolescentes. A atividade foi realizada por 3 turmas (2 do Campus Duque de Caxias e 1 do Campus Barra da Tijuca). Os alunos (n=103) foram divididos em 20 grupos de 5 alunos cada, que durante 4 semanas apresentaram os trabalhos, onde 15 abordaram situação problema em localidades (abordagem coletiva) e 5 abordaram situação problema ligada à assistência odontológica (caso clínico). Após a apresentação, houve um debate entre os professores da disciplina, os componentes do grupo e os demais alunos, a fim de esclarecer dúvidas e aprofundar questões relacionadas ao objetivo da atividade. Este relato de experiência, demonstrou que os acadêmicos foram capazes de identificar os problemas de saúde coletivo e individuais, e de propor medidas de enfrentamento contextualizadas de caráter preventivo, curativo e de promoção de saúde. Sendo assim, a disciplina de Odontopediatria contribuiu no processo de formação do futuro cirurgião-dentista da UNIGRANRIO, capacitando-o para atuar na Atenção Básica e de traçar medidas de enfrentamento para suprir as necessidades de saúde da população brasileira, o que é almejado pela UNIGRANRIO e cujo perfil segue o das Diretrizes Curriculares Nacionais para os cursos de Odontologia.


REFERENCES

Correspondence to:
Diego de Andrade Teixeira
e-mail: diegodeandradeodontologia@gmail.com
Rua Maria do Carmo, 180/403 - Penha Circular
21210-250 Rio de Janeiro/RJ Brazil