From face-to-face education to emergency remote education: the impact of COVID-19 on the teaching-learning strategy of a supervised curricular internship

Alidianne Fábia Cabral Cavalcanti*; Maria Carolina Valdivino Soares**; Renata Cardoso Rocha Madruga*; Rilva Suely de Castro Cardoso Lucas*; Cassandra Lima Gomes***; Sêrgio D’ávila Lins Bezerra Cavalcanti****; Alessandro Leite Cavalcanti****

* Adjunct Professor, School of Dentistry, Universidade Estadual da Paraíba
** Undergraduate student, School of Dentistry, Universidade Estadual da Paraíba
*** Municipal Coordinator of Oral Health, Municipal Health Department of Campina Grande
**** Associate Professor, School of Dentistry, Universidade Estadual da Paraíba

Received: 08/05/2021. Approved: 11/16/2021.

ABSTRACT
The aim of the present study is to present an experience report related to changes imposed by COVID-19 on the dynamics of a supervised internship in a public institution in the state of Paraíba, Brazil. In the period before the pandemic, the determinations proposed in the Pedagogical Project established in 2016 were still being implemented, which established a new paradigm for defining curricular activities, especially those related to supervised internship. Of the 480 hours allocated to activities carried out in extramural environments, 37.5% should take place within the scope of Primary Health Care (PHC). Thus, for the “Internship in the Family Health Strategy II” curricular component, the resumption of the remote form was established for the 2021.1 semester. The "Ambulatório Virtual Conexão Odonto" was created, which is a virtual space for the sharing of clinical cases, representing fictitious situations, but elaborated from the clinical experience of the faculty and consistent with real situations experienced in the scope of PHC. Twelve clinical situations, which involved different levels of complexity and presented conditions that affected users of different ages and living conditions, were addressed. It was found that the experience, although challenging, was successful, as emergency remote education was able to awaken in each of those involved the need to overcome this new teaching model. The flow of changes promoted the inclusion of digital tools that contributed to the expansion and/or reconstruction of knowledge, all this, without distancing from the practice of encouraging critical thinking and student autonomy.

1 INTRODUCTION

The term “Primary Health Care”, highlighted in the declaration by Alma-Ata, is used to indicate care at the first level of care, which can be defined as one that is characterized by four essential attributes: first contact access, longitudinality, care coordination and comprehensiveness. Family and community orientation and cultural competence, considered derived attributes, may also compose the process of assistance to users.

On the world scenario, Brazil stands out for offering one of the most comprehensive public systems of universal coverage, which is largely based on Primary Health Care (PHC). In the country, the offer of actions, services and procedures is developed by a network of units of responsibility, mostly at municipal level. In this type of service provision, according to data from the Ministry of Health (MH), in 2019, there were 45,796 Family Health teams and 28,980 Oral Health teams (OHT).

PHC should be considered an important pillar in emergency situations, such as the epidemics of Dengue, Zika, Yellow Fever, Chikungunya and now the COVID-19 pandemic. This very serious health emergency condition highlighted the privileged position of PHC to guarantee access to health care and act on health determinants in the face of a rising challenge.

The performance of the Dental Surgeon (DS) in PHC, according to the Family Health Strategy (FHS), is guided by the National Primary Care Policy – PNAB and by the National Oral Health Policy – PNSB (Política Nacional de Saúde Bucal). However, since March 2020, with the advent of the new coronavirus pandemic, Oral Health Teams (OHT) are playing a new role, carried out through municipal recommendations, the MS, the National Health Surveillance Agency (ANVISA), the Federal Council of Dentistry (CFO) and other institutions.

ANVISA has published technical notes that have been regularly updated throughout the pandemic. One of these documents restricted dental procedures to urgent and emergency care, a guideline ratified by the MH, which outlined the cancellation of elective care and maintenance of clinical care only in the aforementioned situations.

Therefore, the scope of action of family DCs and the model of providing dental care was profoundly modified, with significant repercussions on the dynamics of the teaching-service-community integration. In this sense, Higher Education Institutions (HEIs) have faced great challenges, especially those related to the implementation of extramural activities within the scope of PHC, which are of considerable importance in student training and in the accumulation of experiences that aim to improve competence for clinical dental practice focused on the real needs of the population.

Thus, the aim of the present study is to present an experience report related to changes imposed by COVID-19 on the dynamics of a supervised internship in a public institution of the state of Paraíba, Brazil.

2 EXPERIENCE REPORT

Characterization of the Higher Education Institution

The State University of Paraíba (UEPB), called in its beginnings “Fundação Universidade Regional do Nordeste” (FURNE), was created by Municipal Law No. 23 of March 15, 1996. Over its 55 years of existence, it has accumulated a broad and gradual process of expansion, so that, nowadays, it comprises a total of 53 undergraduate courses, distributed across eight campuses, located in municipalities belonging to different regions of the state of Paraíba.
The State University of Paraíba has didactic-scientific, administrative, financial and patrimonial autonomy. Its organization and functioning are governed by its statute and general regiment, submitted for approval by the State Board of Education, by the State Government and complemented by the resolutions of its higher decision-making bodies, in accordance with the legislation in force\textsuperscript{15}.

The Dentistry course, offered on campus I, located in the municipality of Campina Grande, “Agreste Paraibano” geographic region, has been in operation since the institution was created. On the other hand, more recently, the second Dentistry course was created, located in the municipality of Araruna, which, although geographically belonging to the same region, its headquarters are located at an approximate distance of 100 km from each other. In addition, there are different pedagogical plans guiding the execution of curricular activities. The present experience report, therefore, placed the reader on the institutional organization, but highlights that the experiences reported below refer to the Dentistry course located in the city of Campina Grande/PB.

Changes arising from the implementation of the new curriculum in the Dentistry course / Campus I

In 2016, with the celebration of the 50\textsuperscript{th} UEPB anniversary, through RESOLUÇÃO/UEPB/CONSEPE/0140/2016, the new Pedagogical Project of the Dentistry Course (PPDC) was approved, whose implementation took place in the same year and the term established for compliance with the determinations was the 2016-2021 interstice\textsuperscript{15}.

In these new terms, the current total course workload corresponds to 4,505 hours, having been established that 900 hours would be destined to carrying out internships, which corresponds to 19.98\% of the total academic training time, which is in line with recommendations of the National Curriculum Guidelines (DCN)\textsuperscript{16}. Of the total time designated for the execution of the supervised internship, 480 hours are reserved for activities in extramural environments. Among these, 37.5\% take place within the scope of PHC, since it is known that the dental practice in PHC, in addition to bringing university students closer to social reality, expands and diversifies the teaching-learning integration\textsuperscript{17}.

However, with this new curriculum design, important challenges were imposed on the faculty in the Collective Health area, such as the need for a biannual agreement with the local health service so that the internship is performed to carry out the planned activities, initially at the PHC level and then at points of the network with higher technological density; the sensitization of preceptors working in services, as they are fundamental actors so that the planning proposed in the university can be satisfactorily carried out; the displacement of professors for field supervision, since they accumulate several other activities that involve teaching, research and university extension.

The logistics of organizing supervised internships within the scope of Primary Health Care

“Internship is a supervised school educational act carried out in the work environment aimed at the preparation for productive work of students who are attending regular education at higher education, professional education, high school, special education institutions and end years of elementary school, in the professional modality for youth and adult education”\textsuperscript{18}.

At UEPB, according to the PPDC in force, extramural internships are planned from the 4\textsuperscript{th}
semester onwards, and then the 6th, 8th, 9th and 10th semesters. Specifically, to be fulfilled in the scope of PHC, there are the “Internship in the Family Health Strategy I” and the “Internship in the Family Health Strategy II” disciplines, offered to students of the 4th and 6th semesters, respectively.

The "Internship in the Family Health Strategy I" discipline is part of the group of specific basic internship subjects and aims to develop activities with an educational, preventive and health promotion focus with application of knowledge in environments covered by a Basic Health Unit (BHU), thus promoting the integration of the student with the community and with the health service. The "Internship in the Family Health Strategy II" curricular component, in turn, offered for the first time in the second half of 2019, with an innovative proposal, aims to provide an understanding of the work process of the DC working in the PHC, providing the student with the opportunity to experience real work situations, in line with the social, economic, cultural and demographic reality of their place of work. Students are provided with an immersion in the clinical care routine, stimulating their autonomy in decision-making, in a continuous action-reflection-action process, in addition to the integration of theoretical-practical knowledge and the possibility of improving basic skills to the exercise of the profession in public health services, at this level of care.

For this, students are divided into groups of three or four, always with the consent of the Municipal Oral Health Coordination (MOHC) and in common agreement with service preceptors. The partnership established with MOHC is the basis for the development and organization of activities, mainly due to the fact that there are in Campina Grande, in addition to UEPB, five other HEIs offering undergraduate dentistry courses. Therefore, there is an increasing search for health establishments that can host the activities of trainee students. Thus, MOHC has the important task of presenting the internship locations to the different institutions and, in this sense, it is important to highlight that, currently, according to information from the municipal health department, Campina Grande has 117 family health teams and 55 of these have OHT.

The group of students is presented to their respective preceptor in a meeting held every six months at the UEPB facilities. On this occasion, the activity plan, built by teachers, is presented, discussed and adapted to each situation. As it is a discipline that accumulates workload of 120 hours, visits to BHUs take place during two weekly shifts. The clinical procedures performed by students always have the direct supervision of the preceptor and the follow-up by the teacher takes place in accordance with institutional prerogatives.

During the internship, the student must, mandatorily, perform tasks compatible with his/her level of education, as well as with the scope of actions foreseen to be carried out by the OHT. The student faces a clinical care routine that is very far from that experienced in the teaching-clinic and which is certainly of great relevance for the training of a generalist professional. According to the Primary Health Care Service Portfolio (CaSAPS), there is an immense range of procedures that can be performed, which include situations of scheduled appointments and spontaneous demand, with eventual cases of urgency and emergency. In addition to the possibility of performing individual clinical procedures of different dental specialties, such as dentistry, minor oral surgery and periodontics, the student participates in collective actions and experiences the referral of users to other levels of care, understanding the
role of comprehensive care within the scope of dentistry.

Evaluation strategies include the elaboration of a Singular Therapeutic Project (STP), as well as the preparation of a report with the description of all experiences lived during the "Internship in the Family Health Strategy II" period, with the necessary mention of the main potentialities and challenges of the practice scenario.

**The impact of COVID-19 on Supervised Internship activities within the scope of PHC and the implementation of a new teaching strategy**

From the moment the World Health Organization established in March 2020 that COVID-19 reached the state of a pandemic, dental education was strongly impacted and had to readapt to the new reality. Face-to-face education was completely interrupted and the impact on the training of new professionals was devastating, since activities of the teaching-service-community nucleus were discontinued, given the current health situation and the impossibility of performing these activities remotely.

ANVISA established throughout the national territory, in March 2020, through technical note GVIMS/GGTES/ANVISA No. 04/2020, several rules for dental care and the suspension of elective treatments and the management only of dental care configured as urgency and emergency. These recommendations were later updated by the CFO, and elective care was made more flexible for cases of patients without suspected SARS-CoV-2 infection.

According to Carletto and Santos, several changes were imposed on Brazilian society, including the need to rethink the dental care model at all levels of care.

PHC represents the gateway to the Brazilian model of oral health care, being characterized by the combination of actions and services for health promotion, protection and recovery. The approximation of professionals with the territory and effective health education actions constitute one of the essential factors for the development of strategies that promote the integrality and resolution of the dentist's activities.

Therefore, there is a challenging scenario regarding training in dentistry, both in Brazil and in other countries. Numerous emotional factors began to concern the student body, among which stress, at its most different levels, giving students the feeling that clinical practice was strongly impaired.

Within the scope of UEPB, the activities of the 2020.1 academic semester were interrupted on March 17, 2020 and through RESOLUÇÃO/UEPB/CONSEPE/0229/202028, they were resumed, remotely, only in the second half of the same year, but the essentially clinical curricular components and those that involved extramural activities were not offered. As a result, the “Internship in the Family Health Strategy II” curricular component did not take place in that year, nor in the 2020.2 academic semester, which took place in the first half of 2021.

For the 2021.1 academic semester, which started in July, whose local epidemiological scenario, at the time, reported that Campina Grande had 37,788 confirmed cases, 929 deaths, 74% of ICU beds and 54% of ward beds occupied, with 28% of the population having received only one dose of the COVID-19 vaccine, including the faculty and students who were enrolled in the “Internship in the Family Health Strategy II” curricular component. An exceptional resumption in the remote format was foreseen, in compliance with institutional
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prerogatives, which established that only graduating students could carry out face-to-face academic activities. Thus, it was defined that the actions of the “Internship in the Family Health Strategy II” curricular component would be carried out remotely and would contemplate asynchronous and synchronous moments.

In this context, the "Ambulatório Virtual Conexão Odonto" was created, a group on the WhatsApp application, with the participation of the 50 students and the four teachers working in the discipline. In this virtual space, there was the sharing of clinical cases, which represented fictitious situations, but elaborated from the clinical experience of the faculty and consistent with real situations experienced in the scope of PHC.

Students were divided into eight groups, with two groups under the responsibility of each teacher. On Mondays, problem situations were asynchronously sent and the time allocated to the discipline was used by student teams, who met separately to prepare a video-response, to be presented on Thursday of the same week. On that day, the synchronous meeting was divided into two learning moments; in the first, a meeting was held between the "supervisor teacher" and their "trainee students", with the purpose of jointly discussing the course of construction of the answers elaborated by students. In the second moment, all teachers and students discussed the protocols of proposed treatment and the consequent outcome of the clinical case.

Virtual meetings took place through the Google Meet tool, the G Suite for Education platform, always on the same day and time, with the support of Google Classroom resources. This teaching-learning dynamic took place weekly throughout the semester, totaling the discussion of 12 clinical situations, involving different levels of complexity and presenting conditions that affected users of different ages and living conditions.

At the end of the semester, it was found that the experience, although challenging, was successful, as emergency remote education was able to awaken in each of those involved the need to overcome this new teaching model through the joint construction of learning. In view of the above, it is clear that the teacher cannot be oblivious to the dynamism and constant transformations that have taken place in society, especially in times of pandemic. Reinventing oneself is not and was not simply an option, but a necessary premise in the mission of educating. The educational process in the current format required a constant exercise of teamwork from everyone, especially during interaction processes. Therefore, it was up to HEIs and teachers to promote a flow of changes in order to incorporate new methodologies that promote the inclusion of digital tools that contribute to the expansion and/or reconstruction of knowledge, all of this, without distancing from the practice of encouraging critical thinking and autonomy of the student body.

3 FINAL CONSIDERATIONS

At the State University of Paraiba, in the Dentistry course, located on campus I, Primary Health Care plays a prominent role in the development of supervised internship extramural activities. The “Internship in the Family Health Strategy II” component, although still under consolidation, but with a scope of activities completely defined in common agreement with the local health service, had its continuity compromised by the COVID-19 pandemic. However, the experience described here proved to be successful, constituting a challenge overcome by the student-teacher binomial, until activities can gradually return to their elementary locus, Primary Health Care, of inestimable value in the process of training a generalist
professional, whose main purpose is to act in the maintenance and restoration of the population's oral health, considering the individual in all his/her biopsychosocial dimension.

RESUMO
Do ensino presencial ao ensino remoto emergencial: o impacto da COVID-19 na estratégia de ensino-aprendizagem de um estágio curricular supervisionado

O objetivo do presente estudo é apresentar um relato de experiência relacionado às mudanças impostas pela COVID-19 na dinâmica de funcionamento de um estágio supervisionado em uma instituição pública do estado da Paraíba. No período que antecedeu a pandemia, ainda estavam sendo implementadas as determinações propostas no Projeto Pedagógico instituído em 2016, o qual estabeleceu um novo paradigma para definição das atividades curriculares, sobretudo daquelas relacionadas ao estágio supervisionado. Das 480h destinadas às atividades em ambientes extramuros, 37,5% deveriam ocorrer no âmbito da Atenção Primária à Saúde. Desse modo, para o Estágio na Estratégia Saúde da Família II, ficou estabelecido para o semestre 2021.1, a retomada de forma remota. Criou-se o "Ambulatório Virtual Conexão Odonto", um espaço virtual para o compartilhamento de casos clínicos, representando situações fictícias, mas elaborados a partir da experiência clínica do corpo docente e condizentes com situações reais vivenciadas no âmbito da APS. Doze situações clínicas, que envolveram distintos níveis de complexidade e retrataram condições que acometeram usuários de diferentes idades e condições de vida foram trabalhadas. Constatou-se que a experiência, apesar de desafiadora, foi exitosa, pois o ensino remoto emergencial foi capaz de despertar em cada um dos envolvidos a necessidade de superar esse novo modelo de ensino. O fluxo de mudanças promoveu a inclusão de ferramentas digitais que contribuíram com a ampliação e/reconstrução do saber, tudo isso, sem distanciamento da prática de incentivo ao raciocínio crítico e autonomia do corpo discente.


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Correspondência para:
Alidianne Fábia Cabral Cavalcanti
e-mail: alidianne.fabia@gmail.com
 Universidade Estadual da Paraíba
Departamento de Odontologia
Rua das Baraúnas, S/N – Bodocongó
58429-500 Campina Grande/PB Brazil