# Videos as tools for the education in oral health in the teaching-service integration at the University Center of Patos de Minas during the pandemic

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#### ABSTRACT

In the graduate course in Dentistry at the University Center of Patos de Minas, several in-person activities of the Teaching, Service, and Community Integration (INESC) internship had to be suspended due to the COVID-19 pandemic, as recommended by health authorities. This article aims to report the experience of applying the concepts of health education in remote education through the production of videos shared by eighth-period students enrolled in this internship. The steps for preparing a script, with language adaptation, and the use of the conative function were completed, as well as the use of playful resources. In general, teachers and students have perceived the power and reach of digital tools, which, in addition to transforming and enriching the academic training and preparing students for a new post-pandemic reality, are also perennial tools of social transformation, that can be used in different contexts and places, expanding the access of the population to educational measures in oral health.

Descriptors: Health Education. Public Health. Digital Health Strategies. Oral health.

#### **1 INTRODUCTION**

Declared as a pandemic in March 2020, the disease caused by the new coronavirus (COVID-19) ended up drastically changing health services, which, as a safety measure, prevented the work of interns in the health network aiming to reduce the agglomeration of people. This forced the discussion regarding the adaptation of innovative work methods and tools to continue educational activities, reducing the likelihood of infection by the SARS-COV-2 virus<sup>1-3</sup>. Higher education institutions, including those within the scope of Dentistry courses, especially due to the presence of aerosols in their daily practice and the close contact between students/teachers and patients. Theoretical and practical activities had to be suspended due to ordinance 343 of March 17, 2020, and at the University Center of Patos de Minas (UNIPAM) it was no different. Among the various suspended activities, there was the Integration, Teaching, Service, and Community Internship course component (INESC).

Currently considered one of the greatest digital tools, the *internet* allows the use of interactivity in a playful environment for teaching, formation of personal identity, and even synchronized communication, facilitating communication and activities, especially in the period of crisis in health, human relations, and education, triggered by the pandemic and its consequences, such as social isolation<sup>4-6</sup>.

Health education is defined as a process of knowledge construction, which increases the autonomy of people in their care<sup>7</sup>. In this process, the use of digital tools as adjuvants to traditional teaching, and educational techniques, allows for numerous advantages aimed at the ease and convenience of learning processes and acquisition of information in health, enabling greater flexibility in timetables and granting access to this information at any place<sup>6,8</sup>.

Tools that gained great repercussion were the digital information and communication technologies (ICTs), which allow for numerous innovations, in addition to developing new ways of learning<sup>6,9</sup>. Audiovisual resources, such as educational videos, signify sophistication in the teaching-learning relationship, since, through them, it is possible to capture the attention of the public, as well as arouse their curiosity regarding the topics addressed, exploring the visual ability and the ability to process information<sup>10</sup>.

Given this panorama, collaborative learning, conducting group projects, as well as establishing social work networks are valued. The current student identifies their peers as an important source of learning. In this way, virtual social networks make interaction tools important inside and outside the classroom, in addition to facilitated and comprehensive communication, which is the ability to observe and identify real needs and act to achieve the goal established for that specific communication with the patient  $^{11,12}$ .

In this context, this article aims to report the experience of applying the concepts of health education in remote education through the production of videos shared by eighth-period students enrolled in the INESC internship of the Dentistry Course at UNIPAM.

# **2 EXPERIENCE REPORT**

The World Health Organization (WHO) declared, on January 30, 2020, that the COVID-19 outbreak constitutes a Public Health emergency of international importance<sup>13</sup>. In March 2020, it was raised to the pandemic status, due to the high transmission potential of the SARS-CoV-2 virus, making governments and institutions around the world adopt control and prevention measures to contain its spread, limiting the functioning of establishments and services<sup>14-18</sup>.

To allow the continuous teaching process, the Minister of State for Education, through Ordinance No. 343, of March 17, 2020, authorized the replacement of in-person classes by classes in digital media for the duration of the pandemic<sup>2,19</sup>. The *Brazilian Association of Dental Education* (ABENO), aligned with the *Association for Dental Education in Europe* (AADEE) and the *American Dental Education Association* (ADEA), supported emergency remote education<sup>20</sup>.

In this context, debates were started on alternatives that would allow the continuity of the teaching-learning process in the academic environment. From this discussion, the remote teaching regime (RLR)<sup>21</sup> emerged, which uses digital technologies to promote the transmission of information between students and teachers synchronously and asynchronously<sup>22</sup>.

Integrating the curricular matrix of the Dentistry Course at the University Center of Patos de Minas, the INESC internship provides students, from the first to the eighth period, with the experience of working in Family Health Units (USF). Among the attributions are, mainly, health education activities and clinical care for the local population. However, most activities had to be suspended in person, as recommended by the health authorities to contain the spread of the new coronavirus<sup>23</sup>.

As an alternative, so that the teachinglearning process was not interrupted and the population did not have access to educational activities, it was proposed to students in the eighth period to prepare videos for the production of educational material in oral health, for different audiences, life cycles, and themes.

Such videos with educational-explanatory content covered different topics relevant to oral health, established by the Technical Manual for Education in Oral Health (2007)<sup>24</sup>: brushing/sanitizing techniques; prevention of dental caries; diabetes and periodontal disease; prevention of smoking and mouth cancer.

Through the Google Meet platform, synchronously, in the eighth-period class, 5 groups were formed, comprising 11 to 12 students, and, for each group, an advisor professor was assigned to guide the research and programming of the activity. The themes were distributed through a draw.

For the elaboration of educational videos, five steps are recommended: analysis and planning; modeling; implementation; evaluation and maintenance; and distribution. Following this sequence, in the analysis and planning stage, during the group meeting, it was proposed to plan a script with an adequate selection of images for the video, production of an accessible text, and a technical-scientific language adapted and aimed at the public<sup>25,26</sup>.

After the preparation of the script by the students, in the text modeling stage, the guiding professors suggested changes that were based on

scientific evidence. The main one was very technical concerning the language, frequently inaccessible to the target audience, in addition to advising on the need for summarizing, highlighting only the relevant points of the theme.

In the implementation process, alternatives for making the videos were presented: Powtoon<sup>®</sup>, Canva<sup>®</sup>, Videoscribe<sup>®</sup>, and Powerpoint<sup>®</sup>. Furthermore, during the preparation of the activity, other platforms were sought, that would allow the video to be developed more dynamically and easily: Animaker<sup>®</sup>, Rawshorts<sup>®</sup>, and Moviemaker<sup>®</sup>. As one of the rules for making the video, a time limit of 5 minutes was recommended, in which the video was presented in its entirety addressing the defined theme.

In the process of choosing the platform, some prerequisites were considered to define which member of the group would be responsible for making the video: greater familiarity with the technology, interest in learning and participating in the creation process, a user-friendly platform, and accessible applications. Each member was assigned to help prepare the video, whether in the planning, modeling, or implementation process. Thus, two students needed to record the text of the script so that they were placed as voices in the background of the video, simulating dialogues, phrases, and messages.

To proceed with the video elaboration process, research was needed on the use of the platform chosen by the group, as well as its features and applicability. Members of different groups reported difficulties, in synchronous monitoring and evaluation meetings with the tutor, regarding the better distribution of the speeches in the videos, synchronization of the speeches in the text with the voices of the students, audio conversion to the format that the platform required, and difficulty in selecting images and fonts that would be attractive to the audience. In this way, after the debate of ideas, the doubts could be resolved and the activity continued.

On the day of delivery, the final content was presented to the whole class, through Google Meet, under the supervision of the guiding professors. It was necessary to send the videos by e-mail, for the evaluation and dissemination on digital platforms, Instagram® and Youtube®, in which a page named "INESC Odonto" UNIPAM and a channel named "INESC Odonto" were created respectively, for the dissemination on a large scale. In this same synchronous meeting, using the group debate, albeit virtually, the students were asked about their perception about the use of videos for educational actions in health, and they verbally demonstrated that they believed in the potential of using such tools to maintain health education actions, and in their reach; as differently from face-to-face actions, in which everyone needs to be in the same space, at the same time; the use of digital tools allows people to use the information at any time continuously, given its publication on social media.

Copies of the videos were provided to the Municipal Health Department of Patos de Minas, open for use by professionals from the oral health teams in educational activities, in spaces such as the waiting room, operational groups, or even house calls. This strategy is based on the premise that some patients may not have the equipment to view the video on their own or even internet service, and thus they may have access to the information when visiting the Primary Health Care Unit, or even during the house calls.

The last step of the activity was the distribution/dissemination of the video on the course platforms. Such digital tools are seen as facilitators for learning, in addition to being popular and easily accessed, which ended up generating the dissemination of the theme and

sharing of knowledge among several students <sup>11</sup>. They were able to have the experience of the shared creation of teaching materials, through tools that are known to them, since most are familiar with digital technologies and are used to the internet and all its resourcefulness.

### **3 FINAL CONSIDERATIONS**

In general, both teachers and students perceived the power and reach of the material using digital tools, especially audiovisual ones such as videos to be disseminated via Instagram® and Youtube®, which transform and enrich academic training, preparing students for the post-pandemic reality, and for the labor market. In addition, videos are still possible perennial tools for social transformation, as they can be used in different contexts and places, amplifying the access of the population to educational measures. Video distribution strategies were adopted so that the dissemination of information was as democratic as possible, even for patients without access to electronic equipment, such as smartphones or even the internet.

#### **RESUMO**

#### Vídeos como ferramentas de educação em saúde bucal em tempos de pandemia na integração ensino e serviço do Centro Universitário de Patos de Minas

No curso de graduação em Odontologia do Centro Universitário de Patos de Minas, diversas atividades do estágio Integração Ensino, Serviço e Comunidade (INESC) tiveram que ser suspensas em sua forma presencial, conforme recomendações das autoridades sanitárias, devido à pandemia da COVID-19. O objetivo deste artigo é relatar a experiência da aplicação dos conceitos de educação em saúde no ensino remoto por meio da confecção de vídeos de criação compartilhada por estudantes do oitavo período, matriculados no estágio INESC. As etapas de elaboração de roteiro textual, com adequação de linguagem e uso da função conativa foram cumpridas, bem como o uso dos recursos lúdicos. De maneira geral, foi percebido, tanto pelos docentes quanto pelos próprios alunos, a potência e o alcance do material utilizando as ferramentas digitais, que além de transformarem e enriquecerem a formação acadêmica, preparando os estudantes para uma nova realidade pós-pandemia, também são ferramentas perenes de transformação social, podendo ser utilizadas em diversos contextos e locais, ampliando o acesso da população às medidas educativas em saúde bucal

**Descritores:** Educação em Saúde. Saúde Pública. Estratégias de Saúde Digital. Saúde Bucal.

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