

Health promotion in digital media: the experience of an undergraduate course of Dentistry in pandemic times

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Health promotion in digital media: The experience of an undergraduate course of Dentistry in pandemic times

Abstract The goal of this article is to report on the experience of a Dentistry course at a private higher education institution in Fortaleza/CE that, in the face of the COVID-19 pandemic, adopted a virtual approach on Instagram to continue promoting health. Descriptive analyses were conducted from September 2020 to January 2024 of a profile created on a social network, which revealed a total of 165 publications addressing various topics such as arboviruses, breast and prostate cancer prevention, oral cancer, the importance of vaccination, leisure and culture, racism, sexually transmitted infections, integrative and complementary practices, hypertension, diabetes, physical exercises, healthy eating, among others. Comments from the users themselves highlighted the importance of health promotion moments. The course, which already employed the Health Promotion Space (EPS), adapted to the need for social distancing, maintaining the integrity of care by creating a virtual environment for the exchange of knowledge about oral and general health. This experience reveals the effectiveness of the strategic use of social networks, especially in times of crisis, to maintain health promotion and connection with the academic community, contributing to the dissemination of relevant information and the building of virtual bonds, as well as contributing to the educational process in the academic environment.

Descriptors: Social Media. Health Promotion. Education, Dental.

Promoción de la salud en medios digitales: la experiencia de una licenciatura en Odontología en tiempos de pandemia

Resumen El objetivo de este artículo es relatar la experiencia de un curso de Odontología de una institución de enseñanza superior privada de Fortaleza/CE que, ante la pandemia de COVID-19, adoptó un enfoque virtual en Instagram para seguir promoviendo la salud. Se realizaron análisis descriptivos del período comprendido entre septiembre de 2020 y enero de 2024 de un perfil creado en una red social, donde se reveló un total de 165 publicaciones que abordaban diversos temas, como arbovirosis, prevención del cáncer de mama y próstata, cáncer de boca, la importancia de la vacunación, el ocio y la cultura, el racismo, las infecciones de transmisión sexual, las prácticas integradoras y complementarias, la hipertensión, la diabetes, el ejercicio físico y la alimentación saludable, entre otros. Los comentarios de los propios usuarios señalaron la importancia de los momentos de promoción de la salud. El curso, que ya utilizaba el Espacio de Promoción de la Salud (EPS), se adaptó a la necesidad de distanciamiento social, manteniendo la integridad de la atención al crear un entorno virtual para el intercambio de conocimientos sobre salud bucodental y general. Esta experiencia revela la eficacia del uso estratégico de las redes sociales, especialmente en tiempos de crisis, para mantener la promoción de la salud y la conexión con la comunidad académica, contribuyendo a la difusión de información relevante y a la construcción de vínculos virtuales, además de contribuir al proceso formativo en el entorno académico.

Descriptores: Medios de Comunicación Sociales. Promoción de la Salud. Educación en Odontología.

Promoção da saúde nas mídias digitais: a experiência de um curso de graduação em Odontologia em tempos pandêmicos

Resumo O objetivo deste artigo é relatar a experiência de um curso de Odontologia de uma instituição de ensino superior privada de Fortaleza/CE que, diante da pandemia de COVID-19, adotou uma abordagem virtual no Instagram para seguir promovendo saúde. Foram realizadas análises descritivas do período de setembro de 2020 a janeiro de 2024 de um perfil criado em uma rede social, onde revelou um total de 165 publicações abordando diversas temáticas como arboviroses, prevenção



do câncer de mama e próstata, câncer de boca, importância da vacinação, lazer e cultura, racismo, infecções sexualmente transmissíveis, práticas integrativas e complementares, hipertensão, diabetes, exercícios físicos, alimentação saudável, dentre outras. Comentários dos próprios usuários apontaram a importância dos momentos de promoção de saúde. O curso, que já empregava o Espaço de Promoção a Saúde (EPS), adaptou-se à necessidade de distanciamento social, mantendo a integridade do cuidado ao criar um ambiente virtual para a troca de conhecimentos sobre saúde bucal e geral. Essa experiência revela a eficácia do uso estratégico das redes sociais, especialmente em tempos de crise, para manter a promoção de saúde e a conexão com a comunidade acadêmica, contribuindo para a disseminação de informações relevantes e construção de vínculos virtuais, além de contribuir no processo formativo no ambiente acadêmico.

Descritores: Mídias Sociais. Promoção da Saúde. Educação em Odontologia.

INTRODUCTION

Social media has currently become an important tool in the dissemination of information, when produced by serious and reliable sources, contributing to the process of health promotion. Melo et al. (2023)¹ emphasize that there should be a careful look at the use of technologies and virtual social networks for health promotion due to the excess of fake news. However, other studies indicate that the use of virtual spaces can contribute positively to health promotion^{2,3}.

A study conducted in the United States of America (USA) found that adult social media users with an average age range of 35 to 44 years showed a positive attitude towards the COVID-19 vaccine to protect themselves and their families, as well as considering it a civic responsibility⁴. The authors also found that targeted online communication campaigns can increase adherence to influenza vaccination⁵.

Other studies highlighted the importance of social media in health promotion, where digital intervention strategies such as videos, games, and text messages managed to reduce the gingival plaque index, increase knowledge about oral health, and improve self-care among diabetic patients^{6,7}.

With the COVID-19 pandemic, there was a paradigm shift regarding the search for health information on social media. Focus groups conducted with users of different social apps and influencers in the health field stated that they began to access information, either voluntarily or involuntarily, about health more frequently. The same study also pointed out that distrust of false information promoted the search for safe virtual spaces and highlights the need for health professionals to increasingly engage in virtual pages to strengthen the exchange of scientifically validated knowledge⁸.

On March 19, 2020, the Government of the State of Ceará, through decree No. 33,519, established the temporary closure of various services, including higher education institutions⁹. Rethinking the form of teaching became necessary, and in this context, professors and students of public health at Centro Universitário Christus (UNICHRISTUS) saw social media as an opportunity to promote health. With this action, professors could work with students on new perspectives and ways to conduct health education, while students would develop competencies and skills, developing new ways of communication, as well as exercising the search for new knowledge in safe virtual environments.

Therefore, the goal of this article is to present the data and impacts of the experience of an undergraduate course of Dentistry that used a social network as an additional strategy for health promotion during the COVID-19 pandemic period.

EXPERIENCE REPORT

The Experience of the Health Promotion Space

The undergraduate course of Dentistry at UNICHRISTUS, since its implementation in 2014, has been devising strategies to train professionals with an expanded view of the health-disease process. Among the various methodologies employed is the implementation of the Health Promotion Space (EPS), characterized as an environment that facilitates the exchange of knowledge during health education moments on different topics aimed at quality of life.

The EPS is conducted by four faculty members of the course and students from the 4th semester onwards, who begin clinical services in the subject Clinic I of the course. In previous semesters, students already start contact with theoretical-practical aspects of health promotion. The activities of the EPS are part of the clinical activities, aiming at the student's comprehensive view of care.

With the COVID-19 pandemic, the activities of the school clinic were interrupted. The health promotion actions of the EPS were also deactivated. In this context, professors and students created an Instagram social media account (@epodontounichristus) on September 1, 2020, to resume health promotion activities, but in a virtual format, as measures to control the spread of the SARS-Cov-2 virus were still necessary.

Each professor divided their group of students into pairs or trios, who were responsible for a specific health-related topic. Since the posts were weekly, each subgroup had to submit virtual communication material on their assigned topic 5 days in advance, when a virtual meeting was scheduled for the presentation of the product, discussion, search for new relevant scientific references on the topic, and finalization of the artwork to be posted. One day before the posting, the finalized material was sent to the tutors of the subject, who were responsible for the social media posts.

Paula et al. (2023)³ emphasize that the use of virtual social networks is now fundamental in the process of communication and dissemination of health information, strengthening access to information as a principle, in addition to contributing to health promotion. Another study that utilized social media during the COVID-19 pandemic highlighted the importance of reinventing oneself to promote health and applied popular health education in virtual environments. According to the authors, the strategy enabled the creation of bonds between the professional and the daily life of the population².

Numbers and Statements

From September 1, 2020, to January 2024, there were 165 posts on the Instagram account of the EPS of the school clinic of Dentistry at UNICHRISTUS on various topics such as arboviruses, breast and prostate cancer prevention, oral cancer, the importance of vaccination, leisure and culture, racism, sexually transmitted infections, integrative and complementary practices, hypertension, diabetes, physical exercises, healthy eating, among others.

One of the posts with the highest number of views on social media was a short video published on September 21, 2022, which reached 1,245 accounts and had 114 interactions. The video consists of a patient's account of the importance of the Unified Health System in providing healthcare to the population.

On March 31, 2021, the posts on the EPS channel on Instagram were enhanced, improving people's reach and increasing the number of posts to twice a week. It was possible to observe an increase in follower engagement through social media (Table 1) compared to the 5 months before and after the date. There was an increase of almost 79% in likes, approximately 279% in comments, 416% in saved posts, and 25% in account reach.

Table 1. Comparison of the average interactions with the @epodontounichristus profile account in two distinct periods.

Averages	10/31/2020 to 03/30/2021	03/31/2021 to 08/31/2021
Likes	41.3	73.9
Comments	9.0	34.1
Saved Posts	1.9	9.8
Scope	22.5	28.1

Beyond numbers, the EPS social media also received valuable testimonials from people who are served at the school clinic of Dentistry of the institution. The exchange of experiences was present in various moments of health promotion, and thus, it was possible to record accounts.

From the comments on the posts, some participants were invited for an online session via Google Meet, so that more could be heard about the impacts of the posts on their daily lives. The invitation was made via individual message on Instagram and, upon agreeing to participate, a day and time were scheduled for an interview with questions directed

towards the theme of the post on which the participant commented, such as "What did you think of the post about the theme?" and "What motivated you to make that comment on the post?"

The statements were recorded with the participants' authorization, who, as they were patients served at the school clinic of Dentistry, had signed the Informed Consent Form of the Institution. The publication of this article was approved by the Research Ethics Committee, under protocol No. 6.796.861.

After recording the statements, the researchers transcribed them and selected excerpts that showed a relationship between the theme of the Instagram post and the participant's life story.

When discussing the theme of racism, one of our patients, whom we will call Girassol, brought up the following statement:

[...] Because I have experienced so many moments like this [racism], I also decided to share some experiences where, in fact, we need to deconstruct everything that is said about us as a form of racism. We need to know our true identity, regardless of our color. Regardless of whether we have something more or something less, because it is not related to any of that. So, with the testimony of these girls, I was able to gain more clarity about who I am and that I cannot accept any discrimination [...] (GIRASSOL)

Another important account appeared when the topic discussed was "Hypertension and Diabetes," where the patient Hibisco (fictitious name) made the following statement:

[...] I was downtown and took the test [for diabetes] and it came back positive, but I don't like medications, I refused five years ago and left it at that. But now, I went back and my diabetes got worse. And I got scared and my vision became a little blurry and I'm very afraid of losing it, right? I'm undergoing my treatment and we need to take care of ourselves. Diabetes is a very serious thing [...] (HIBISCO)

The patient Aroeira (fictitious name) also told us that after seeing the material discussing prostate cancer and the importance of prevention, he decided to seek a doctor to undergo tests. During this period, he was diagnosed with prostate cancer, but in its early stage. Later, he approached us to share his story and thank us for inspiring him to have the courage to see a doctor and thus receive an early diagnosis.

Carnaúba e Ferreira (2023)¹⁰, in a study on competencies in health promotion within the work reality of a multiprofessional residency in family health, found that it is not enough to merely promote healthy lifestyle habits, but it is necessary to develop autonomy and empowerment in people so that they seek to improve the quality of their living conditions.

The isolated actions of the EPS at the school clinic of Dentistry are unlikely to change the reality of the people there; however, they can serve as a catalyst in the life experiences of these individuals, developing a more critical capacity to view life and fight for improvements. The accounts show us this when Girassol talks about not accepting any form of discrimination, or when Aroeira decides to take action and seek a medical professional for routine exams.

However, Cardoso et al. (2021)¹¹, when producing an article on best practices on social networks in the context of health promotion, emphasize that it is extremely important to raise awareness among institutions and health professionals that the construction of materials should be appropriate to the culture of the populations they are intended for, as we often live in multicultural contexts.

The strategy of the social media page to work on health education brought a different perspective to participating students and teachers, as it initiated a new way of communicating with the community, to which the students claimed that the experience managed to transform the perspective on discussing health topics with scientific evidence and responsibility, making it more effective.

Currently, after the pandemic period and the return of activities, the students have resumed health education in the waiting room of the school clinic of Dentistry, but they must also produce educational material to post on the Instagram page, expanding the reach of the topics.

FINAL CONSIDERATIONS

In the context of the COVID-19 pandemic, new ways to promote health had to be developed. The experience of the course of Dentistry at UNICHRISTUS showed how social media can impact the provision of care, improving the quality

of life of people. Furthermore, it was possible to develop other skills and competencies in students and professors by encouraging new forms of communication that seem to occupy an important space in society and, therefore, should be conducted responsibly and based on reliable scientific evidence.

REFERENCES

1. Melo LCN, Silva BM, Nitschke RG, Viegas SMF. Redes sociais virtuais e tecnologias em saúde no cotidiano de usuários e famílias: cuidado e promoção de saúde. *Ciênc Saúde Coletiva* [Internet]. 2023;28(8):2193-2202. doi: <https://doi.org/10.1590/1413-81232023288.05252023>
2. Dias AJ, Leite LP, Oliveira RS, Silveira TF, Dias ML, Salgad JVV. Uso da rede social como meio de promoção da saúde durante a pandemia da Covid-19. *Interfaces Rev Ext UFMG* [Internet]. 2023 [cited 2024 Oct 30];11(1):308-320. doi: <https://doi.org/10.28998/cirev.2021v8n1c>
3. Paula PAB, Barbosa SP, Amorim MMA, Campos ALF, Queirós CR, Fregulia AM, et al. Uso do instagram na promoção da saúde da população. *Revista FT* [Internet]. 2023;27(123). doi: <https://doi.org/10.5281/zenodo.8176381>
4. Benis A, Seidmann A, Ashkenazi S. Reasons for Taking the COVID-19 Vaccine by US Social Media Users. *Vaccines* [Internet]. 2021;9(4):315. doi: <https://doi.org/10.3390/vaccines9040315>
5. Benis A, Khodos A, Ran S, Levner E, Ashkenazi S. Social Media Engagement and Influenza Vaccination During the COVID-19 Pandemic: Cross-sectional Survey Study. *J Med Internet Res* [Internet]. 2021;23(3):e25977. doi: <https://doi.org/10.2196/25977>
6. Oliveira Júnior AJ, Oliveira JM, Bretz YP, Mialhe FL. Online social networks for prevention and promotion of oral health: a systematic review. *Can J Dent Hyg* [Internet]. 2023 [cited 2024 Oct 30];57(2):83-97. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC10351493/>
7. Chen Z, Zhang C, Fan G. Interrelationship between Interpersonal Interaction Intensity and Health Self-Efficacy in People with Diabetes or Prediabetes on Online Diabetes Social Platforms: An In-Depth Survey in China. *Int J Environ Res Public Health* [Internet]. 2020;17(15):5375. doi: <https://doi.org/10.3390/ijerph17155375>
8. Carton-Erlandsson L, Sanz-Guijo M, Quintana-Alonso R. I Found It on Instagram: Exploring the Impact of Social Media on Public Health Communication. *Public Health Nurs* [Internet]. 2025;42(4):1534-1543. doi: <https://doi.org/10.1111/phn.13554>
9. Ceará. Decreto nº 33.519 de 19 de março de 2020. Intensifica as medidas para enfrentamento da infecção humano pelo novo coronavírus. *Diário Oficial do Estado do Ceará*. Editoração Casa Civil. Série 3, ano XII Nº056, Caderno Único; 2020. doi: <https://doi.org/10.35701/rcgs.v22n2.692>
10. Caruaíba JP, Ferreira MJM. Competências em promoção da saúde na residência multiprofissional: capacidade de mudanças e advocacia em saúde. *Ciênc Saúde Colet* [Internet]. 2023;28(8):2227-2236. doi: <https://doi.org/10.1590/1413-81232023288.05802023>
11. Cardoso PR, Jolluskin G, Silva I. A promoção da saúde através das redes sociais: uma análise de boas práticas. *Comunicação Pública* [Internet]. Dossiê Temático: Publicidade em tempos de pandemia: novos desafios e abordagens. 2021;16(30): doi: <https://doi.org/10.4000/cp.12268>

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