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(Re) inventing educational practices for the prevention of cardiovascular disease and diabetes: experience report

(Re)inventar las prácticas educativas para la prevención de las enfermedades cardiovasculares y la diabetes: un informe de experiencia

(Re) inventando práticas educativas para prevenção de doença cardiovascular e diabetes: relato de experiência

ABSTRACT

The socioeconomic and lifestyle changes of the population contributed to the Brazilian epidemiological scenario, with a high prevalence of cardiovascular diseases and diabetes. The present study aims to present the report of experience of extension action developed by medical students, aiming to promote health and prevent cardiovascular diseases and diabetes during the period of public health emergency caused by the pandemic of COVID-19. This is an experience report of a critical-reflexive approach describing the stages of the educational activity. The students actively developed the educational content and disseminated it through social media. The proposal promoted new paths for innovative and active learning by professionals focused on a comprehensive health model, which prioritizes health promotion and disease prevention, in addition, it enabled students to recognize their social role as health professionals.

DESCRIPTORS: Cardiovascular Diseases; Diabetes Mellitus; Health Promotion; Education.

RESUMEN

Los cambios socioeconómicos y de estilo de vida de la población contribuyeron al escenario epidemiológico brasileño, con una alta prevalencia de enfermedades cardiovasculares y diabetes. El presente estudio tiene como objetivo presentar el informe de experiencia de acción de extensión desarrollada por estudiantes de medicina, con el objetivo de promover la salud y prevenir las enfermedades cardiovasculares y la diabetes durante el período de emergencia de salud pública provocado por la pandemia de COVID-19. Se trata de un relato de experiencia de un enfoque crítico-reflexivo que describe las etapas de la actividad educativa. Los estudiantes desarrollaron activamente el contenido educativo y lo difundieron a través de las redes sociales. La propuesta promovió nuevos caminos para el aprendizaje innovador y activo de los profesionales enfocados en un modelo de salud integral, que prioriza la promoción de la salud y la prevención de enfermedades, además, permitió a los estudiantes reconocer su rol social como profesionales de la salud.

DESCRIPTORES: Enfermedades Cardiovasculares; Diabetes Mellitus; Promoción de la Salud, Educación

RESUMO

As modificações socioeconômicas e no estilo de vida da população, contribuíram para o cenário epidemiológico brasileiro apresentar alta prevalência de doenças cardiovasculares e diabetes. O presente estudo tem como objetivo apresentar o relato de experiência de ação de extensão desenvolvida por acadêmicos do curso de medicina, visando promover à saúde e prevenir doenças cardiovasculares e diabetes durante período de emergência de saúde pública provocado pela pandemia da COVID-19. Trata-se de um relato de experiência de abordagem crítico-reflexiva descrevendo as etapas da atividade educativa. Os discentes de forma ativa elaboraram o conteúdo educativo e disseminaram por meio de mídias sociais. A proposta promoveu novos caminhos para o aprendizado inovador e ativo de profissionais voltados para um modelo integral de saúde, que prioriza a promoção da saúde e a prevenção de agravos, além disso, possibilitou aos discentes reconhecer seu papel social enquanto profissionais de saúde.

DESCRIPTORES: Doenças Cardiovasculares; Diabetes Mellitus; Promoção da Saúde; Educação.

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INTRODUCTION

In recent years, with the increase in population life expectancy, socioeconomic and lifestyle changes, the Brazilian epidemiological scenario has shown a high prevalence of cardiovascular diseases, including systemic arterial hypertension (SAH) and diabetes mellitus (DM). More specifically, 21,4% of Brazilians report having SAH and 6,1% DM. These diseases represent one of the greatest public health challenges in the country, causing a high number of deaths, disabilities, loss of quality of life and economic costs to the health system.^(1,2)

In order to face the most prevalent morbidities in the country, the fragmented model of health, centered on the disease, with only curative, reactive and episodic objective, does not fully contemplate the real imperative health needs of the chronic disease carrier, being necessary to strengthen the model proactive, continuous care, through qualified and engaged health professionals.^(2,3)

Considering the epidemiological scenario presented by the country, in 2014 the new national curricular guidelines (diretrizes curriculares nacionais - DCN) for the medical course were published, emphasizing the concern for the training of general practitioners, effective in approaching patients in primary care, resolving in the promotion and reduction health risks.⁽⁴⁾

In this scenario, with a view to addressing training needs, higher education

institutions (HEIs) have sought teaching-learning methods to promote the training of humanist, critical and reflective doctors, with the capacity to act at all levels of health care, at the individual and collective level, with skills for health promotion and disease prevention.⁽⁴⁾

When experiencing this training process, the future medical professional develops competences and skills in the ethical, aesthetic and political dimensions, being able to analyze society's problems and develop solutions.⁽⁵⁾

Considering this context, it is necessary to discuss experiences in the use of innovative methodologies used in different learning scenarios, as provided by university extension, which aim to strengthen processes of transformation in medical education.

Therefore, the present study aims to present the experience report of an extension action developed by medical students, to promote health and prevent cardiovascular diseases and diabetes during the period of public health emergency caused by the pandemic of COVID-19.

METHOD

This is an experience report of a critical-reflexive approach about the teaching-community integration made possible by a virtual extension activity, which took place between May and June 2020, carried out by thirty-five students from the second period of the medical course of a higher education institution located in the central-west region of Brazil.

In the second period of graduation, in the discipline of Health Interaction in the Community (Interação em Saúde na Comunidade - IESC) the student develops skills and competences to carry out actions aimed at modifying the population's lifestyle habits, based on scientific evidence, respecting the socio-historical-cultural diversity of each individual or community, in order to avoid health problems.

In this sense, an extension activity was carried out in order to contribute to the promotion and prevention of cardiovascular diseases in the community and to expand academic experiences on the subject. Therefore, the extension activity initially designed to happen in person in the community, needed to be reformulated due to the restrictions caused by the COVID-19 pandemic, using social media to reach the target audience.

The extension activity was entitled "Healthy lifestyle: hypertension and diabetes", and was developed by students enrolled in the second period of the medical course, who volunteered to participate. For execution, four main stages were articulated: planning, content elaboration, group review, social media exposure, activity evaluation.

EXPERIENCE REPORT

In the planning stage, students were made aware of the importance of maintaining extension activities even in the context of a pandemic and, then, an extensive discussion was held on how it

would be reformulated for modality of dissemination on social media.

It should be noted that the content related to the promotion and prevention of cardiovascular diseases has been comprehensively addressed throughout the academic semester, using as reference literature the official materials on arterial hypertension and diabetes mellitus provided by the Brazilian Society of Cardiology and the Brazilian Diabetes Society.

The students participants were divided into pairs and given topics on diabetes mellitus or hypertension to formulate material in infographic format, which was later released on social media. The subjects covered, the date of publication of digital content and social media used by the extension activity are described in table 1.

Infographics are visual representations of information that seek to faci-

litate interpretation by the reader of complex explanations. The students personalized their infographics through easily understandable texts, use of images, graphics, among others, according to the theme. The tool used to build the infographic was Canva®, which made it possible to customize each infographic with a specific layout and design that aroused interest for users of social media.

Prior to disclosure on social media, students presented their infographics to teachers and other colleagues. The objective of this group review phase was to analyze possible non-conformities, and suggest readjustments to provide an adequate understanding of the users who would view the content produced.

It is worth emphasizing that the transformation of scientific content into a clear and accessible language for

users of social media was considered one of the main challenges experienced by students.

After due corrections and adjustments, the material produced was published on the students and teachers' own social networks, such as Instagram®, WhatsApp®. In addition, they were shared by the official social pages of the IES, aiming to reach the largest number of users.

The posts made on social networks were widely viewed, with positive repercussions by the academic community and the external community affected by the dissemination of the content.

At the end, there was an evaluation of the activity, through a dialogical feedback, in which the students exposed how was the experience of developing the university extension activity, mentioning the perception of responsibility in deve-

CHART 1. Subjects covered, dates for the dissemination of digital content and social media used for dissemination in the virtual extension activity "Healthy lifestyle: hypertension and diabetes", Trindade, Goiás, Brazil, 2020.

TEMÁTICA	DATA DIVULGAÇÃO	MÍDIAS SOCIAIS
Rastreamento hipertensão arterial sistêmica	10 e 11/06/2020	Instagram®, Páginas sociais oficiais da IES.
Rastreamento para diabetes	10 e 11/06/2020	Instagram®, Páginas sociais oficiais da IES.
Fatores de risco cardiovascular	10 e 11/06/2020	Instagram®, Páginas sociais oficiais da IES.
Tratamento não medicamentoso: alimentação para hipertensos	10 e 11/06/2020	Instagram®, Páginas sociais oficiais da IES.
Tratamento não medicamentoso: alimentação para diabéticos	10 e 11/06/2020	Instagram®, Páginas sociais oficiais da IES.
Tratamento não medicamentoso: atividade física para hipertensos	10 e 11/06/2020	Instagram®, WhatsApp® Páginas sociais oficiais da IES.
Tratamento não medicamentoso: atividade física para diabéticos	10 e 11/06/2020	Instagram®, Páginas sociais oficiais da IES.
Recomendações sobre o consumo de álcool para hipertensos e diabéticos	10 e 11/06/2020	Instagram®, Páginas sociais oficiais da IES.
Fatores de risco para o pé diabético	10 e 11/06/2020	Instagram®, Páginas sociais oficiais da IES.
Cuidados com o pé diabético	10 e 11/06/2020	Instagram®, Páginas sociais oficiais da IES.

loping content that was disseminated to the whole community, the importance of scientific basis to achieve the objective and the difficulties in transforming scientific content into popular content, capable of impacting the lives of the most different users of social networks.

In the view of the professors, the proposal to provide a different learning scenario on the theme of diabetes mellitus and arterial hypertension was achieved, being unprecedented to be carried out in the virtual modality, in which, university students had enormous ease of dealing with communication tools, something that should be explored in other extension opportunities.

DISCUSSION

Cardiovascular diseases are highly prevalent in the Brazilian population. In the context of the new coronavirus pandemic, they may be exacerbated due to discontinuity in medical and health care. In addition, cardiovascular diseases are frequently found in patients with COVID-19, with a high rate of morbidity and mortality in these patients.⁽⁶⁾

In this context, extension activities aimed at preventing cardiovascular diseases should be encouraged, considering that the cardiovascular health levels of the Brazilian population are low, with a high prevalence of inadequate diet and physical inactivity, requiring different approaches to favor healthy choices.^(7,8)

For this, the use of social media becomes an important ally by providing new forms of communication and content sharing in the health field, being a channel that has a great potential to motivate, assist and improve the development of healthy behaviors, increasing adherence of chronic patients to treatment.⁽⁹⁾

In addition, the extension activity reported in the present study is in line with the 2014 DCNs, which reinforce the articulation between knowledge, skills and attitudes required for future professional medical practice and the social responsibility that students have with the community to overcome challenges of health.⁽⁴⁾

It is essential to diversify the offer of educational activities, even in the current panorama of remote education, so that medical students are able to overco-

me the educational barriers imposed by the pandemic. To this end, educational institutions must guarantee a learning scenario with active and innovative methodologies.⁽¹⁰⁾

These active and innovative methodologies provide training for professionals focused on an integral model, which prioritizes health promotion and disease prevention, and which uses health education in a participatory and dialogical way, opposing the disease-centered action, which values specialization and prioritizes the hospital context.⁽¹¹⁾

CONCLUSION

In order to achieve the principles and purposes of medical training, the undergraduate must be co-responsible for the teaching-learning process and commit to the current health challenges.

Despite the challenges in planning and developing activities remotely in a pandemic context, the extension activity was able to produce new paths for learning and contribute with quality digital content in the prevention of cardiovascular diseases and diabetes. ■

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