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In times of pandemic by COVID-19: the challenge for health education

Em tempos de pandemia pela COVID-19: o desafio para a educação em saúde

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ABSTRACT

This is an essay that seeks to reflect on the challenges and perspectives of health education in the face of the pandemic caused by the new coronavirus, COVID-19. Based on the reflection on the current scenario, some difficulties are pointed out by authorities and health professionals who are at the forefront on the education of the population to follow the recommendations of official health agencies. The classic forms of prevention, of great importance for public health, such as isolation and the adoption of hygiene habits by the population, still face barriers to be implemented.

KEYWORDS: COVID-19; Pandemic; Health Education

RESUMO

Trata-se de um ensaio que busca refletir sobre os desafios e as perspectivas de educar em saúde frente a pandemia da doença causada pelo novo coronavírus, COVID-19. Com base na reflexão sobre o atual cenário, são apontadas algumas dificuldades encontradas por autoridades e profissionais de saúde que estão na linha de frente da educação da população para seguir as recomendações dos órgãos oficiais de saúde. As clássicas formas de prevenção, de grande importância para a saúde pública, como o isolamento social e a adoção de bons hábitos de higiene da população, ainda encontram barreiras para serem implementadas.

PALAVRAS-CHAVE: COVID-19; Pandemia; Educação em Saúde

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INTRODUCTION

Faced with the pandemic caused by the new coronavirus, COVID-19, concerns arise from those who research and work in the fields of health and education about one of the biggest challenges in the practice of health professionals - health education. The scenario is of concern not only due to the advance of the virus but also due to the adoption of simple health care measures, especially those related to preventing and fighting the disease. These measures considered classic in public health, such as isolation and quarantine, were widely used since the 14th century and until the mid-19th century. The scope and impact of those measures significantly influenced the course of epidemics such as: smallpox, bubonic plague, and Spanish flu[1].

At that time, there was no technological and scientific framework that are available today. Public health policies sought only at interfering in the environment and in controlling the transmission of diseases. Health teams consisted mostly of health workers and few doctors[2]. Only in the 1920s, social factors that interfere in the health conditions of the community began to be addressed in public health services, with health surveillance actions, as well as the dissemination of the importance of individual hygiene and the incorporation of the doctor as health service professional[2,3].

Until the end of the 19th century, the biological agents that caused epidemics were unknown. Interestingly, when the Spanish flu pandemic ended, it took another 13 years for the researchers to find the cause, a virus known as Influenza A[4]. On the other hand, scientific and technological advances have enabled the world to discover within a few weeks the etiological agent of COVID-19, the coronavirus of severe acute respiratory syndrome 2 (SARS-CoV-2)[5]. Even with these advances, there are great difficulties in properly transposing classic public health measures to a globalized world.

Widely disseminated, the recommendations of health agencies to contain the spread of the epidemic in Brazil have faced resistance and revealed many limits and challenges for health professionals, especially concerning health education practices. These are still strongly marked by traditional and verticalized conceptions and have been revealed in a punctual and fragmented way in health care and surveillance actions. Furthermore, the massive transmission of fake or divergent information from those which are official has compromised the population's adherence to the prevention recommendations to COVID-19.

Many people receive information and guidance, follow the rapid expansion of the disease around the world, but are less receptive to the recommendations that reach them. Is educating so difficult? Or are the media not effective? How to explain the need for more radical measures to be imposed so that people understand that caution, prevention, and surveillance are needed? Where is the error? Or what needs to be done to change this situation? In the face of voluntary non-compliance by interests compatible with the well-being of the population, many municipal bodies were forced to impose fiscal and administrative actions in their territories to protect the population from health risk. Thus, in recent weeks, the disclosure of municipal decrees throughout the national territory, determining the temporary closure of non-essential establishments, the mandatory use of personal protective equipment such as masks, gloves, hygiene of the environment in essential services, and the implementation of sanitary control barriers at the entrances and exits of the cities were some of the implemented measures so that the population remains socially distant, an essential measure to contain SARS-CoV-2

The understanding of health education woven here arises from the understanding proposed by Schall and Struchiner[6], by defining it as a multifaceted field, formed by different conceptions from both the health and education areas[6]. Health, especially in the context of its promotion, is not done without education, without the theoretical and methodological principles that guide this field. Maybe this is the biggest challenge, promoting this dialogue, also understanding that all this process demands the participation of the individual and a greater comprehension of their life context.

Added to this concept is the reflection proposed by Parreira[7], when discussing the paths and routes necessary for health education. For the author, the health professional has received the challenge of mediating processes, acting in the mobilization of groups, and in dialogue with population segments from different cultures who have different expectations concerning themselves - their health and health services. In turn, health professionals demands, abilities, and attitudes for educational action in their work process[7], which is not always possible due to the high assistance pressure.

Educational practices must encompass knowledge from both sides - health and education - so that care actions are successful - here prevention, protection, promotion, rehabilitation, palliative care, and not just the cure of diseases are included. However, this success will only be reached when it is assumed that the understanding of health education demands dialogical, innovative practices that defend the "search for democratization not only of information but knowledge, and of different cultures"[7]. What are the challenges faced against the COVID-19 pandemic in the context of health education practices? Although health education practices are part of the work process health professionals in Primary Health Care (PHC), specialized care, and health surveillance, they tend to be relegated to a second place, why?

A new virus and "old" public health challenges

The new variation of the coronavirus, SARS-CoV-2, was identified for the first time in December 2019, in Wuhan, Hubei province, China. The virus spread to other regions of China and quickly spread to different countries and territories. Data released on April 4, 2020, by *Johns Hopkins University* show that there are already 1,196,553 infected, 64,549 deaths, and 181 affected countries[8]. In Brazil, on the same date, 10,278 cases and 431

deaths were confirmed. There are reports of confirmed cases of SARS-CoV-2 infection in all states and the Federal District[8].

The transmission of the virus occurs mainly through droplets, respiratory secretions, or direct contact with the infected individual[9]. The incubation period can vary from four to 14 days. After this period, the first signs and symptoms related to severe acute respiratory syndrome appear, such as: fever, dry cough, sore throat, and in some cases respiratory failure. The diagnosis of SARS-CoV-2 infection is based on the detection of viral nucleic acid through a polymerase chain reaction with reverse transcription and real-time amplification (RT-qPCR)[10,11]. Most recently, aiming to accelerate the detection of infected individuals and breaking the disease transmission cycle, the Brazilian government has announced the purchase of rapid tests (immunochromatography). Treatment is basically clinical support through hydration, rest, use of antipyretics, and eventually oxygen supplementation or mechanical ventilation[11]. Thus, early diagnosis and the imposition of health barriers are important strategies to contain the advances of COVID-19, since there are no specific drugs for the treatment of the disease.

The spread of the virus worldwide has encouraged governments to resort to traditional public health measures, such as: hygiene, quarantine, social distancing, restriction of air traffic and land transport, with the closure of borders in many countries[9,12,13]. These actions are directed towards preventing the infection and mitigating the spread of the virus, in a race against time in the search for answers regarding the treatment of infected people, the development of a vaccine, and the prevention of breakdown in health systems.

Unlike past centuries, public health currently has important allies in combating COVID-19. Digital information and communication technologies (DICT) can contribute to minimizing the spreading impact, allowing a greater reach of the health education practices. Technologies from the digital era have played a fundamental role in disseminating information related to the disease, such as: guiding the population on epidemiologic data, science advances and perspectives, prevention and control measures, psychological and specialized assistance. All this information is widely disseminated on social media through videos, scientific studies, animations, simulations, monitoring apps, and information shared on message apps groups. COVID-19 is the first major pandemic of the social media era, which has provided opportunities for rapid distribution of information in real-time, and this strengthens human cooperation in combating the disease[14].

Although DICT are available right now and contribute to innovative practices in health education, especially in times of isolation, quarantine, and social distancing, they can also be a powerful tool in the dissemination of dubious and unreliable information. Thus, in parallel with the COVID-19 pandemic, the World Health Organization (WHO) has faced another epidemic that has changed the way individuals relate to health, discrediting science's efforts to fight COVID-19. This movement of spreading fake news, also known as the "anti-science" movement, only harms the work of health professionals, researchers, and managers. Social media are indeed great allies in spreading information about preventive measures and data on the distribution of cases. However, they have the power to spread fake news, at the same rate[15,16]. In this pandemic moment, panic and fear have spread globally and on social media, much faster than the virus[15].

According to Mian and Khan[16], basic information on forms of transmission and prevention can be discredited by some unofficial sources[16]. Some information that promises the cure of the virus with home remedies, such as eating garlic and taking vitamin C, are among the most popular measures, even without any scientific evidence. Such information can confuse the population and a discredit concerning the guidelines of health agencies, leading to a greater spread of the virus[16]. This scenario contributes even more to the inefficiency of health education practices.

The COVID-19 pandemic has revealed another dimension in which health education demands different strategies to reach its objective, among them, personal beliefs, the worldview largely influenced by historical, cultural, and social factors, which will determine the choices of individuals.

A study carried out by Lima et al.[17] on behavioral aspects, values, and beliefs of the population of Ceará in the face of the COVID-19 pandemic showed that some groups are more vulnerable to infection, among them: men, individuals with low education, elderly people over 80 years old, and those living in cities located in the interior of the state. This result reflects, in large part, the minimization of the virus spread and the failure to comply with the measures recommended by health authorities. The interviewed elderlies are partially complying with the quarantine, believe that the pandemic is not a "real" threat and that the Ceará climate will favor the decrease in COVID-19 cases. Interestingly, individuals living in the interior of the state and/or have completed elementary school also share the same thought. Furthermore, it appears that the male gender is associated with voluntary non-compliance with quarantine[17].

Based on the that, it is observed that many factors influence the response of individuals to health education and that these can cause conflicts and divergences in knowledge and health practices. Thus, understanding the individual's worldview, beliefs, social, family, and cultural aspects can represent a great challenge for professionals who are directly involved in facing the SARS-CoV-2 pandemic, whether in care practices, surveillance, health planning and management.

Health education - the challenge of transponing the theory

Discussions about the concept of health education invite reflection on how to achieve a "theoretical ideal" that can materialize in "concrete practices" in the most varied contexts of health professionals' performance, from PHC, a unique space to deepen health education actions and daily work the relationships of affection and care necessary to the educational process, up to

the levels of attention that offer a greater technological density. There is no single space for health education to be carried out, as it requires meetings between the subjects and these can happen everywhere.

According to Schall and Struchiner[6], health education, in Brazil, comprises learning about diseases and how to prevent them, as well as their effects on health. On the other hand, it is strongly tied to the concept of health promotion, proposed by WHO. This concept reflects the empowerment of the population. "It is the training of the community to act to improve their quality of life and health"[18], it is to offer the means (necessary information and resources) so that they can prevent themselves, take care of their families, the environment, their community, and achieve health, in its positive sense, and quality of life.

Beyond this understanding, health education is understood as a

> pedagogical political process which requires critical and reflective thinking that awakens in the individual their autonomy and emancipation while historical and social subject capable of proposing and giving opinion in health decisions to take care of themself, their family, and the community[19].

However, in a scenario of so many misunderstandings, how to teach others to think critically and reflexively? How to awaken their autonomy and emancipation? How can they transform this knowledge into the right decisions to take care of themselves and the collective?

Another point of this reflection is reached. The involvement of the collective and not just the individual in health care practices. This is the scenario that the COVID-19 pandemic has revealed: the difficulty of involving the collective or a part of it in the adoption of measures, such as quarantine and social distancing, which, despite being validated by health agencies, have not found so much adherence, providing a greater spread of the virus.

Within the scope of these challenges to health education, a history of specific educational interventions, restrict to health programs within PHC, is recovered, with little articulation to other programs and sectors, such as health surveillance, as highlighted by Lucena: "The health surveillance has inherited a normative and notary tradition in its work process that sometimes makes it difficult to adopt open and innovative educational approaches"[20]. As a way out, the author stresses that, although the health surveillance needs to incorporate popular knowledge to overcome the vertical report on risks, the adoption of innovative practices, guided by active learning, dialogical, and promoting autonomy has demonstrated advances in health education approaches in health surveillance[20].

The same recommendations, repeatedly worked on in health education practices in health units, schools, food production and marketing units - guidance on hands and food hygiene, use of personal protective equipment, such as masks and gloves -, should already be recurrent practices, granting better health conditions and individual and collective well-being. In the case of health, in practice, what has been evaluated is that the maintenance of inappropriate habits and behaviors turns health care environments into unsafe places, both for workers and their respective companions[21,22].

Another challenge that should be considered is the reach that social media provides in relation to the rapid and easy access to information. Since these media have become one of the ways, perhaps the prevalent, of access to information, it is up to public health to find better strategies to communicate about COVID-19's mitigation plans through them[14]. Individuals started to participate actively and have greater autonomy in the search for knowledge. On the other hand, in a country with a diverse demographic and cultural profile, access to the internet and social media for the entire population is not yet a reality.

In this sense, questions emerge in this discussion: how to promote health education to populational groups that do not have access to the internet? How to get scientifically validated information to the entire population? Is it possible to combine technologies with health education practices to get to know the other, their reality? Identify, in the community, individuals who may assist in this education process, based on the construction of collaboration networks? It is worth reflecting on some solutions to this problem in the fight against COVID-19.

In this pandemic scenario, other educational strategies have been used, such as the role of health surveillance in health barriers, trying to guide to a greater number of individuals, and those already mentioned, carried by different DICT. However, it should be remembered that "one does not learn by accumulation or utilitarian reasons but by gaining meaning and sense"[7]. One learns, above all, by sharing experiences and practices mediated by the construction of critical and reflective thinking.

Health education strategies must be anchored in liberating pedagogical proposals[6], which are built from greater knowledge of the geographic, social, political, cultural outline of the individual, family, and community[19]. This thought appeals to Freire's ideals, of the need to know the reality of the other - subject of health practices, and of authors who also defend learning from experiences, such as John Dewey (1859–1952) and Celèstin Freinet (1896–1966). Thus, one must know the other and value their knowledge, seeking ways that are not only a reflection of reductionists, imposing, and punctual practices.

Education is not built overnight. It is a process and, as such, requires the search for the best paths. The sharing of innovative experiences born in classrooms and practice fields in the health area, in extension projects, and scientific research represents an important strategy to add knowledge and expand the look at the possibilities of working health education with others. It is understood that this moment is conducive to rethinking the health education practices and valuing them, daily, in health services, at different levels of care, as a transversal strategy to the practice of all professionals involved in health care.

CONCLUSIONS

To not conclude...

The COVID-19 pandemic has ignited a warning on several situations for which the world was not prepared. A new virus, without proven treatment, nor a vaccine for its prevention. It also brought a warning about the low investments in health, as even developed countries have faced the lack of basic inputs, such as personal protective equipment for health professionals. In addition to the social and economic impacts that measures such as social distancing, closing borders, and prohibiting the operation of non-essential services, businesses, and some sectors of industry, for example, have caused. And permeating this whole scenario, the difficulty encountered by health authorities and professionals who are at the frontline of educating the population to follow recommendations of official health agencies. The "classic forms" of prevention, of great importance to public health, related to the hygiene habits of the population, still face barriers to be implemented. Added to that, the disseminating of fake news, especially on social media, and the discredit concerning what the world is experiencing. Faced with so many problems and uncertainties, it is believed that this has been one of the biggest current challenges: *health education*.

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Authors' Contributions

Palácio MAV, Takenami I - Conception, planning (study design), acquisition, analysis, data interpretation, and writing of the work. The authors approved the final version of the work.

Conflict of Interest

Authors have no potential conflict of interest to declare, related to this study's political or financial peers and institutions.