Digital media and platforms in the Permanent Health Education field: debates and proposals

As mídias e as plataformas digitais no campo da Educação Permanente em Saúde: debates e propostas

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ABSTRACT This article sought to discuss the relevance of digital media and platforms as tools for the development and management of Permanent Health Education actions. It is argued that social media and digital platforms are a key to the management of education and of health work if (and only if) the uses of those already existing and utilized by the community of users, managers, and workers are considered and respected. Initially, the already established recognition of information and communication technologies as an important element for permanent education is discussed, despite the difficulties of its critical use in the scenarios. Then, from the perspective of digital studies, some prevailing notions about social networks, cyber and digital, phenomena that go beyond the adoption of certain devices and technologies as mediators are introduced, recognizing them as a central element of various groups and human activities in contemporary culture. Finally, it is proposed the amplification of the proposal of adoption of those technologies to that of a recognition of digital platforms and media and their prevailing use as strategic tools for the management of the education and of health work

KEYWORDS Education, continuing. Social media. Information technology. Internet. Health.

RESUMO *Este ensaio buscou debater a relevância das mídias e das plataformas digitais como ferramentas para o desenvolvimento e gestão de ações de Educação Permanente em Saúde. Defende-se que as mídias sociais e as plataformas digitais são uma chave para a gestão da educação e do trabalho em saúde se (e somente se) considerados e respeitados os usos tácitos daquelas já existentes e utilizadas pela comunidade de usuários, gestores e trabalhadores. Inicialmente, discute-se o já estabelecido reconhecimento das tecnologias de informação e comunicação como elemento importante para a educação na saúde, a despeito das dificuldades de sua utilização crítica nos cenários. Em seguida, a partir da perspectiva dos estudos digitais, introduzem-se algumas noções correntes sobre redes sociais, cyber e digital, fenômenos que vão além da adoção de certos dispositivos e tecnologias como mediadores, reconhecendo-os como elemento central de diversos grupos e atividades humanas na cultura contemporânea. Por fim, sugere-se a ampliação da proposta de adoção dessas tecnologias para uma de reconhecimento das plataformas e das mídias digitais e seu uso corrente como ferramentas estratégicas para a gestão da educação e do trabalho na saúde.*

PALAVRAS-CHAVE *Educação continuada. Mídias sociais. Tecnologia da informação. Internet. Saúde.*

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Introduction

The Internet and the various platforms and social media have been presented as a challenge for research methods, a context that has increased the interest of researchers in many areas of knowledge in investigating and understanding interactions mediated by technologies[1]. For the health education area, this movement meets the valorization of Information and Communication Technologies (ICT) in the development of creative, innovative and daring pedagogical health initiatives, which have strengthened the interface between communication, science and society[2].

In this context, the actions of Permanent Health Education (PHE) are inserted, which aim to qualify the work process in health for the improvement of access, quality and humanization of health care. Therefore, its educational process is built from the analysis of the worker's daily life, integrating education, service, teaching and health[3].

Institutionalized as a policy in 2004[4], PHE has been mobilized throughout the national territory with a view to reaching different audiences. For this reason, different actions have been implemented, including those implemented through ICT[5], such as the Brazilian National Telehealth Networks Program, which integrates PHE and health care support, and the Open University of the Unified Health System (UNA-SUS), which offers courses in the form of Distance Education (EaD)[6].

In the relationship between teaching and health system, the architecture of the collegiate interfederative management emerges to produce and execute the educational and assistance activities. Thus, the implementation, monitoring and evaluation of the National Permanent Health Education Policy (PNEPS) implies a coordinated work between the health system, training institutions, managers and social control[4].

The training of human resources is linked not only to health policies, but also to education and work policies, which reach far beyond the governability of the health sector. Although professional training in health is subordinated to the rules of education, it is the health sector that defines the directions and its connection with society. In this context, evaluative practices have been introduced in various ways and in different environments, sometimes to analyze a particular intervention or problem as external action, or as a stage of institutional management planning, health and teaching programs and projects[7]. It is worth emphasizing, however, the still incipient stage of evaluation and monitoring processes in Brazil and, consequently, the small production of evaluation studies of public policies, including PNEPS[8].

According to Minayo[9], any useful, ethical and technically adequate evaluation accompanies the development of a proposal and subsidizes the correction of directions and the orientation of action strategies. Its ethical sense combines with its technical value and social responsibility. Through the health's eye, Hartz[10] assumes that the way in which monitoring and evaluation are organized at the various levels of the system has a significant impact on the types of studies that are conducted and used.

In the areas of education and health, the monitoring and evaluation dimensions that involve the formation of health workers have not been built at the same time or in a combined way, but currently they coexist in a complex and, sometimes, contradictory way in the SUS. In this complex conjuncture, not only the monitoring and evaluation of PHE actions, but mainly the recognition and monitoring of innovative actions become a challenge for workers, managers, teachers and social control. It is in this sense that we propose to include, in this process, information and actions in unusual arenas, such as applications, digital platforms and social media.

The literature already presents evidence on the development and use of ICT specific for teaching, but there are gaps in

knowledge regarding the appropriation of already existing digital media and platforms in the PHE field; it is about this aspect that this essay is focused on.

It is worthwhile noting that, both in the sense of disseminating information in a systematic and continuous way for the monitoring and evaluation of health education actions, or recognizing and giving visibility to innovative practices already operating in the different Brazilian territories, it is expected that issues listed here point to the potential impacts of the various digital platforms on health actions, in the way of managing actions, people, groups and institutions aligned with an innovative public policy.

Therefore, this essay aims to explore the potential of digital resources not only in social research in health and education, but also in the dynamization of development and management of health education actions.

Information and communication technologies in the health education field

Considering that the increasing use of web platforms to interact, generate, access and disseminate information is an increasingly used practice among health professionals[11,12], it is reasonable to assume that a closer look at the potential of digital media in processes of PHE can produce evidence that enables policies more consonant with contemporary culture in the field of health education.

The importance of virtual tools and environments in learning is already recognized in the literature. Nowadays, a growing volume of mobile technologies that access the internet, such as mobile phones and tablets, is used by students and educators worldwide to access information, streamline and simplify time management, and facilitate learning in an innovative way[13,14].

Studies such as Paulino[15] and Ladaga[16] exemplify the different uses of WhatsApp Messenger in learning and health work scenarios, with a view to complying with curricular guidelines in the area, as well as meeting institutional communication needs and, mainly, facilitating the formation of networks and rapid communication among its members.

At the international scene, research studies already recognize the usefulness of social media as tools for promoting research projects, providing and disseminating health information and facilitating the education of students and professionals, such as Facebook, Twitter, Instagram and YouTube[2,17-19].

In this wake, several international organizations and research centers for the promotion of educational programs have stimulated the adoption of virtual space and mobile devices as pedagogical resources. Three important guidelines can be pointed out in this regard.

The first one, the 'Policy Guidelines for Mobile Learning', published by the United Nations Educational, Scientific and Cultural Organization (Unesco)[20] in 2014, sets out the reasons for encouraging the use of mobile technologies in isolation or in combination with other ICT, in order to enable learning at anytime and anywhere. In this process, Unesco aims to assist public policy managers in understanding the idea of mobile technology learning and its benefits towards the goal of education for all.

A second document points out the concern of the Pan American Health Organization (Paho) and the World Health Organization (WHO)[21] with the development of qualified human resources to meet the health needs of the population. In this sense, they advocate the use of ICT to support online learning (by virtual means) as a form of promoting the development of technical, programmatic, managerial and administrative skills in health workers.

The third guideline refers to the implementation of the 2018 Digital Agenda for the Community of Portuguese Speaking Countries

(CPLP)[22]. The document presents principles, goals, strategies and measures consensually identified to promote and support these countries to respond to the challenges of digital transformation and for its construction in digital economies, aligned to the achievement of the Sustainable Development Goals (SDG) contained in 2030 Agenda of the United Nations.

In the face of the noted examples of the agenda, it is necessary to critically reflect on the use and daily appropriation of the tools connected to the internet and on how they can point to, make feasible and/or impact health education and training practices. According to Moran[23], actively learning means developing cognitive and social-emotional skills through individual and shared group teaching strategies. Something similar is proposed by the documents already mentioned, as it is present in most of the legal devices related to PHE, understanding ICT as important in this process.

However, we propose to go beyond the adoption of ICT from a new clothing that, despite redesignating them as digital educational technologies, are still based on an old paradigm that understands them only as mediators. The discussion on mobile devices, virtual learning environment and similar shows that, strictly speaking, ICT are still considered in order to access the virtual (which differs from the real) and the online world (which differs from offline). Our proposal is to adopt the perspective of digital studies, for which technology not only facilitates social changes – of work and education, for example, it constructs them. The 'digital', in this case, plays an active role in the actions of a person, a group, an institution. However, what, in this essay, are we understanding as digital? And what is its relationship with the PHE field?

Social networks and the digitization of life

In the perspective that we propose, media and platforms are no longer just mediators or spaces separated from the daily life; they are part of life and are important social actors who participate actively in everyday actions. In this sense, the focus is on the culture, use, and performance of such tools, devices and platforms. Just as PHE does not separate learning from acting, this fragmentation is also not considered from the perspective of digital studies. Similarly, it does not make much sense, in most urban centers, to separate online social network from offline social network, since the virtual does not reflect the opposite of the real, but, rather, integrates it. Where does this notion come from and why is it expensive to PHE actions?

Communication through contact networks is no novelty, nor is it a trend brought about by the advancement of technology. The term 'social network' is old, and its systematized study dates back to the beginning of the XX century since the advent of works based on sociometry, which sought to describe and analyze the interpersonal structure present in small groups, such as schools, churches and clubs[24]. Throughout the century, matrix models of social roles were developed to map the homogeneous patterns of relations; and, in political science studies in Europe, networks are given a broader meaning by linking it to an alternative form of governance. Social networks basically mean a grouping of people who maintain a relation, sharing common goals and values.

There is no unanimity among scholars about the concept of networks, yet they share the idea that they are a set of independent and relatively stable relationships, that connects multiple actors with common interests and who share resources to pursue them, understanding that it is through cooperation that goals are achieved[25].

One of the fundamental characteristics of this definition of networks is its openness, allowing horizontal and non-hierarchical relationships among the participants, and it is not necessary, in this sense, to be connected to the Internet to be part of a network[26]. In

the view of Social Psychology, networks are made up of people, since only they are able to connect and create ties between them; the networks would, then, be the language of ties, which can be classified in ascending way in relation to the level, actions and values involved: recognition and acceptance that the other exists; knowledge about the other; sporadic reciprocal collaboration; cooperation and solidarity sharing of activities and resources; and trusting association through agreement of sharing goals and projects[25].

From psychology, Stanley Milgram[27], who is taken as a point of reference, through a research published in 1967, has shown that we are, on average, at six degrees of separation from any other person in the world. In subsequent decades, the sociologist Mark Granovetter[28,29], in turn, discussed the degree of social cohesion between groups. For him, so-called 'weak ties' are crucial for the circulation of information and innovation, because they allow to broaden the connection with groups that are beyond the same social circle.

For this small overview of authors and studies, we see that the theme 'social networks' greatly precedes the theme of the internet and social media. However, if we dwell on the role of the latter in the academic and scientific setting and in the relations with the media studies, a good reference has been the historiography proposed by Scolari[30]. The author defines four important moments in which studies on mass communication, the internet and the virtual/digital universe are included. First, in the period of the founding fathers (1960-1984), the first studies on network communication, idealization of prototypes and speculations on virtual reality appear. Theory of Information, Systems Theory and Communication were the basic sciences in this period. In a second moment (1984-1993), defined as origins, the studies are dedicated to thinking interfaces for users, human-computer interaction, Computer Mediated Communication (CMC), hypertexts and the experience of virtual reality. In a third moment,

period of cybercultures (1993-2000), the vision turns to the issue of popular cyberculture (cyberspaces, ingo highways, cyborgs etc.), academic cyberculture (virtual communities, exploration of identities, hypermedia) and critical cyberculture (collective intelligence, networked societies). Finally, we go through the Internet Studies phase (2000-2008), in which the themes of the so-called Web 2.0, Opensource and content generated by user gain space, and studies turn to blogs, wikis, sites of social networks and seekers.

In the wake of field mapping, in the late 2000s, the focus, before aimed at knowing how much the society or who is online, is now about how to use the Internet to diagnose social and cultural changes. Rogers[31] calls this moment of dataclism and proposes to understand not the society that is on the internet, but society through the internet. This is the perspective of the digital methods that we believe is interesting for the purposes of PHE: the one that understands networks, the internet, platforms and digital media as key to understanding and engaging in collective actions and projects at this moment in social history.

Another author who adds to this vision, even though he is specifically dedicated to the cyber perspective, is Pierre Lévy[32]. Considered one of the leaderships on the term 'cyberspace' and the neologism 'cyberculture', he understands them, respectively, as a means of communication arising from the global interconnection of computers and includes the infrastructure, the universe and the people who navigate on it; and the set of practices, attitudes, ways of thinking and values that develop with cyberspace.

Lévy[32] emphasizes the relationship between cyberculture and learning, arguing that education systems are now subject to new restrictions regarding quantity, diversity and speed of knowledge evolution. In this sense, the demand for training not only requires enormous quantitative growth, but also a qualitative change in order to find solutions that use techniques capable of increasing the

pedagogical effort of teachers and educators.

At the opportunity, the author argues in favor of technologies as opportunities of optimization of education, from the virtual learning model and EaD[32]. However, this defense, although valid, is restricted to the vision of the digital as a tool, mediator or arena. For the thesis that we defend in this essay, we are assuming that the many digital platforms are part (and not via) of communication between people, are actors of social networks. Therefore, we defend an idea of digital, in the PHE, that goes beyond the simple adoption of ICT; one that gives new meaning to their potential in the development, monitoring and evaluation of PHE actions.

Proposals for the adoption of digital methods in the health education field

Considering the perspective presented, it proposes to move away from the paradigm that determines the reduction of ICT to distance learning tools, requiring, therefore, contemporary conflicts between the proposal of banking learning, which presupposes the transmission of contents, and its defense as a right and practice of emancipation of individuals[33].

As already mentioned, our thesis is that understanding the appropriation and the contextual use that has been done of platforms and digital media helps to enhance PHE. From the perspective of digital methods, this means not only monitoring which platforms are used, formally and informally by professionals, but also thinking about them as network actors, thinking about how they engender and even enable PHE actions in Brazilian territories.

Thus, a new social role is attributed to ICT: they are no longer mere tools of PHE and become something broader: resource for the management of education and health work. For this purpose, we need to learn about the current uses of platforms and digital media.

This means investigating and exploring what is already being used, better understanding how the various actors interact with them and in what scenarios their uses can be optimized, according to the resources of each media and platform and their culture of use, which is always local and contextual.

Research on the WhatsApp has identified that healthcare professionals use it to disseminate health information, exchange information and clinical decision making among professionals, social support to patients during treatment, dissemination of health guidelines, and learning[16]. Similar uses have been found for other media such as blogs, Twitter and Facebook[2,34,35].

Each of these uses implies portions of strategies designed to take advantage of the resources of these technologies for professional purposes, but, certainly, the effectiveness of this use in the described scenarios involves, above all, the general appropriation of them by the population as part of their daily communicational life. If everyone already uses the applications and social networks to talk to their family and friends, it is natural to extend their use for professional communication.

The union of perspectives of studies and digital methods to rethink the role of ICT in PHE has the potential to give visibility, encourage and optimize teaching-service-community integration dynamics and the consequent improvement of health work processes, starting from the discussion about to what extent these platforms and media are already part of the routine of actions in PHE, or in what innovative and responsible ways they can be integrated.

We underline that it is not necessary to reinvent the wheel; it is not necessary to launch new applications, new virtual learning environments, new platforms designed specifically for this or that. It is fair, as much as the rhetoric of the new, to recognize and take advantage of what circulates, what is already in use. Facebook, WhatsApp, Google, Instagram and Youtube, for example, are applications and

platforms that are part of the daily life of a good part of the population of health professionals. In view of these elements, the improvement, by the management, of strategies for implementing, monitoring and evaluating actions, programs and policies means recognizing, assessing and, above all, increasing the overall guidelines for PHE management.

Another aspect to be explored is health surveillance, in the sense of identifying the main population demands and, thus, undertaking strategies of professional education and political decision making aimed at improving health indicators. A review of the literature has identified that a little more than 60% of the scientific papers on social media and public health have found a positive relationship between the results of the monitoring processes and the data obtained by the traditional surveillance system[36]. By this logic, the monitoring of social media can be a complementary tool in the mapping of health problems, as well as PHE actions.

In general, within public health, there is evidence that social networks are used to inform and empower, increase the effectiveness and speed of the communication process, collect quantitative and qualitative data and mobilize intersectoral partnerships[37]. However, further research is needed to evaluate the effects of this use on patients' health outcomes, the main object of PHE. Thus, the domain of analytical techniques of data produced in social networks can contribute to the advent of social and health research and to the implementation and management of PNEPS[38].

In light of this, we leave here unfoldings suggestions and research agendas on platforms and digital media in the field of health education, from the perspective of digital methods. A first line of potential studies would be to map the circulation of facts, ideas, and knowledge through the analysis of media items, such as postings and images transmitted in groups and pages maintained by health education institutions. Another relevant strategy would be to identify key actors and estimate their

influence on digital networks, using statistical and network analysis tools and engagement metrics for dominant voices.

The digital methods bring, furthermore, the potential for identifying the social representations of health underlying the contents of the posts and the digital objects, combining analysis of visual and textual content. In addition, some lexical analysis can be done to track speeches and disseminate information, insights, news and erroneous information. A look at the platforms allows, furthermore, to evaluate the possible results and social impact on health behavior and political demands, gathering previously collected quantitative data for a qualitative understanding of the general results from reports, panels and interviews.

The proposal presented, which is based on the perspective of studies developed through digital research methods, far from situating a conflict with traditional research and monitoring designs, adds to the list of available resources more adequate possibilities to explain the specificities of the objects and data constituted in contemporaneity.

The connection between these methodologies, the democratization of knowledge and active education potentially allow the inductive study of the impacts of new ICT, digital media and social perceptions on health practices and technologies. Ultimately, this union can produce evidence and subsidize the advancement of work management and health education policies.

In the light of the above, we resume the question of research: what are the potentialities of digital media and platforms for PHE? In our perspective, we have identified that they can: give greater visibility, recognition and diffusion of PHE actions operated in the different Brazilian territories, which can be replicated and/or adapted according to local needs; to act as tools for the operationalization, monitoring and evaluation of PHE actions, with lower cost to the health system, since they are tools already existing and used by

users, professionals and health managers; and to operate as an object of study and analysis, understanding them as an 'actor' that has an impact on health (either by the consumption of information and the social bonds established in it, or by the use of equipment for different purposes) and which potentially reflects the behavior, habits and health conditions of the population that uses them. In this way, media and platforms can provide valuable data for the implementation of new PHE actions and correction and/or implementation of new policies that allow better health outcomes.

Collaborators

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