ORIGINAL ARTICLES

Communication and health: reflections on the Unified Health System in Palmas – TO and digital health during the covid-19 pandemic

Comunicação e saúde: reflexões sobre o Sistema Único de Saúde em Palmas – TO e a saúde digital durante a pandemia de covid-19

Comunicación y salud: reflexiones sobre el Sistema Único de Salud en Palmas – TO y la salud digital durante la pandemia de covid-19

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ABSTRACT

This article aims to reflect on the role of digital health in access to public health in the context of the Brazilian Unified Health System during the covid-19 pandemic in Palmas, Tocantins, Brazil. The Communication & Health assumptions were adopted as a theoretical framework, and the method called Collective Subject Discourse was employed for the analysis. This method aims to understand a social group's thoughts on a topic. In the case examined here, the group comprises the Palmas Residencial Parque da Praia condominium residents. We also aimed to understand to what extent these people are included in or excluded from the technological world and their perception of digital health, the Unified Health System, and the right to health and communication. The group considers itself relatively informed about these topics, and most residents use Information and Communication Technologies and the Internet daily. However, we observed that digital health is still a distant reality for this community.

Keywords: Digital health; Communication and health; Covid-19 pandemic; Unified Health System.

RESUMO

O objetivo deste artigo é refletir sobre o papel da saúde digital no acesso à saúde pública no contexto do Sistema Único de Saúde durante a pandemia de covid-19 em Palmas – TO. Para tanto, adotou-se como referencial teórico os pressupostos do campo Comunicação & Saúde e, como forma de análise, o método denominado Discurso do Sujeito Coletivo, que busca compreender os modos de pensar de um grupo social sobre dado tema. Neste caso, trata-se de moradores do condomínio Residencial Parque da Praia, situado em Palmas. Também se procurou entender em que medida essas pessoas estão inseridas no mundo tecnológico ou são excluídas dele, e qual a percepção delas sobre saúde digital, Sistema Único de Saúde, direito à saúde e à comunicação. O grupo se considera relativamente informado sobre esses temas e a maioria faz uso, no cotidiano, das Tecnologias da Informação e Comunicação e da internet. Entretanto, observou-se que a saúde digital é uma realidade ainda distante para essa comunidade.

Palavras-chave: Saúde digital; Comunicação e saúde; Pandemia de covid-19; Sistema Único de Saúde.

RESUMEN

El objetivo de este artículo es reflexionar sobre el papel de la salud digital en el acceso a la salud pública en el contexto del Sistema Único de Salud durante la pandemia de covid-19 en Palmas – TO. Para hacer eso, se adoptó como marco teórico los presupuestos del campo de Comunicación y Salud y, como forma de análisis, el método denominado Discurso del Sujeto Colectivo, que busca comprender las formas de pensar de un grupo social acerca de un tema determinado. En el caso abordado en este artículo, el grupo es constituido por residentes del condominio Residencial Parque da Praia, situado en Palmas. También buscamos comprender en qué medida estas personas están incluidas en el mundo tecnológico o son excluidas de él, y su percepción sobre la salud digital, el SUS, el derecho a la salud y a la comunicación. El grupo se considera relativamente informado sobre esos temas y su mayoría utiliza las Tecnologías de la Información y las Comunicaciones y la internet en su vida diaria. Sin embargo, se observó que la salud digital es aún una realidad lejana para esta comunidad.

Palabras clave: Salud digital; Comunicación y salud; Pandemia de covid-19; Sistema Único de Salud;

INTRODUCTION

Faced with the most significant health and humanitarian crisis in recent decades due to the spread of the covid-19 virus, it has become clear how reliable and timely information can contribute to preventing, confronting, and controlling a pandemic. In this sense, digital health, understood here as the use of Information and Communication Technology (ICT) resources to produce and provide services and secure information about the health status of patients, has become an essential strategy for healthcare units, health professionals, and citizens to share these tools that have been promoting prevention and care with more safety, efficiency, and speed. Therefore, at a time of great uncertainty in global health, it was clear how using correct information can be a fundamental strategy for raising social awareness to control and combat a health crisis of this proportion.

In Brazil, the ConecteSUS Program is the leading digital health initiative promoted by the Ministry of Health (MS) to expedite actions to strengthen and combat the covid-19 pandemic at a national level. Many municipalities also started investing in digital health as one of the ways to combat the pandemic. Palmas, the capital of Tocantins, joined the strategy in early 2020 when the Municipal Health Secretariat (SEMUS) and the Health Technology Center (NUT/SEMUS) started developing the Plantão Coronavirus portal[1], gathering information related to the pandemic at the local level in daily bulletins, and providing means to facilitate the scheduling of tests and vaccines, test results, and other activities.

Given this setting, we started to reflect on the role of digital health in access to public health in Palmas, Tocantins, which unfolded in research developed within a master's thesis defended in the Postgraduate Program in Communication and Society of the Federal University of Tocantins, whose results we summarize in this article.

From the beginning of the covid-19 pandemic, we began to observe with more significant interest the new uses of ICT in light of the pandemic setting and how these technologies influence clients' relationships with public health. Digital tools were presented as part of an emergency action to combat the hitherto unknown virus and disease. However, at that time, questions arose about the potential of digital technologies and the Internet to alleviate the impacts of the pandemic, especially when considering the socioeconomic and educational inequality in Brazil and Palmas, which also digitally excludes a significant segment of the population.

In order to answer the research problem, a group of residents of the Residencial Parque da Praia (RPP), a popular condominium located in a peripheral region in Palmas, Tocantins, was considered as the basis of analysis.

The starting point of the research theoretical foundation's idea is that society is organized into fields, following the concept of Bourdieu (1996). In these fields, struggles and negotiations occur between agents and social groups that seek to legitimize their ideas and make them accepted. These symbolic clashes involve the achievement or realization of social rights and citizenship. The right to health and communication are intrinsically linked, and this is one of the central assumptions of the Communication & Health (C&H) field of study, which was adopted in this article to reflect on digital health, observed here as an unfolding of the referred field of study, in which one understands that individuals and the community can only fully achieve the right to health if the right to communication is also assured to them.

Besides the simple act of expressing oneself or transmitting information, communicating refers to sharing, making common, or creating a community (Gomes, 2007); therefore, communication is seen here from a dialogical perspective. This is communication from all to all, which also involves the right of citizens and their community organizations to communicate through social media as content emitters (producers and disseminators) (Urupá, 2016). Information is a fundamental element in this process, and according to Capurro and Hjorland (2007), it is understood as a thing, data, object, idea, or sign that depends on the individual's interpretative needs and skills; in short, it is knowledge transmitted to someone.

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1   Access on January 3, 2023.

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Based on the research problem, the general objective aimed to show and analyze digital health impacts on the daily lives of Residencial Parque da Praia residents (Palmas, Tocantins) within the context of the Unified Health System (SUS) during the covid-19 pandemic. We also aimed to investigate, among the RPP residents, whether some people are not included in the technological world and how they were reached by pandemic control strategies at the local level, also observing and describing these people's perception of the SUS and rights to health and communication.

The covid-19 pandemic has shown how interconnected information, communication, and health are. They are social rights, but also elements that need to interact with each other so that prevention, health promotion, and the several SUS services are offered efficiently and when clients need them. In this context, digital health and ICT have become facilitating mechanisms for people to gain access to information and services, such as receiving results of covid-19 laboratory tests, scheduling tests to detect the SARS-CoV-2 virus (and variants), scheduling vaccination, and issuing the National Vaccination Certificate against covid-19.

The pandemic indeed caused significant changes in people's lives. This generated new demands and led health agencies to adopt new strategies to combat the virus, which required expanding the use of technology. As a result, the research on which this article is based aimed to understand how these social transformations resulting from the pandemic affected clients or influenced their interaction with the SUS through digital health.

Given the scarcity of studies on the topic in the local setting of Palmas, we sought to understand how such transformations impacted the lives of Residencial Parque da Praia residents during the pandemic. Furthermore, it is relevant to understand to what extent digital health is accessible to this population, considering that the Internet is far from democratized in the country and how info-excluded individuals or groups are seen in strategies to combat the pandemic. Furthermore, the research notes and reflections can be helpful for managers' decision-making and improving strategies and public policies related to digital health at the local level.

Regarding the method, this article adopts the methodological contribution from the Collective Subject Discourse (CSD) (Lefèvre, 2017; Lefèvre; Lefèvre, 2006) and is intended to describe and analyze digital health (DH) in the covid-19 pandemic, considering a given social group and the meanings and senses that the environment and subjects manifest. This type of study is concerned with obtaining data through the researcher's direct and interactive contact with the observed situation, the empirical object (Zanella, 2011). Therefore, the researcher seeks to understand the events from the perspective of the study participants, interpreting what was observed (Neves, 1996). Thus, we adopted the CSD method, which reproduces the opinion of a social group on a given topic.

Studies of this nature employ several techniques to retrieve data and information, such as interviews, narratives, documents, and questionnaires. In the case discussed here, we opted for a semi-structured questionnaire survey for application through individual and face-to-face interviews with members of the mentioned social group.

The responses were examined through qualitative-quantitative data tabulation, and an organization technique called CSD based on the social representation theory (Jodelet, 1989; Lefèvre, 2017). This instrument and research method was developed in the late 1990s by researchers linked to the Faculty of Public Health of the University of São Paulo (USP). According to Lefèvre and Lefèvre (2006), the method lists and articulates some operations on the content of information collected in empirical opinion surveys through open-ended questions. These operations embody community statements comprising parts of individual statements, and each group statement represents a different position or opinion. Individual statements are transformed into a collective discourse written in the first person singular to produce the effect or sensation of a single or collective opinion in the recipient.

We selected the social group that composed the research due to its history of social mobilization in search of the right to housing, thus, because these people have established some sense of community over the years

of coexistence and struggle for a common good. Furthermore, we considered that most group members are SUS clients, a relevant characteristic for the research. The five questions applied in the interviews are listed in the table below:

Table 1 – Interview Questions

Question 01	Nowadays, there is much information about health, SUS, vaccines, tests, and diseases. Are you an informed person about health? Comment your answer.
Question 02	Do you often use the Internet in your daily life? Talk a little about that.
Question 03	Do you go online to obtain health information or request services? Comment your answer.
Question 04	Do you know the websites named Plantão Coronavirus, from Palmas Municipality, and ConecteSUS, from the Ministry of Health? If so, what do you think of them?
Question 05	Providing health information is an obligation of governments and Municipality. Do you think this is happening here in Palmas?

Source: Prepared by the authors.

Below, we expose some assumptions and concepts that underlie the Communication & Health (C&H) field, its relationship with the Unified Health System (SUS), and how this relates to the covid-19 pandemic. Next, we address the interconnections between C&H and digital health. Finally, we describe and analyze how all these themes are perceived and understood by a group of residents of Palmas, Tocantins.

COMMUNICATION & HEALTH AND DIGITAL TRANSFORMATIONS

Communication and Health (C&H) is an emerging field whose joint approach explores the specificities and potentials of each of these sciences. Both "interrelate, interact, and converge into a broad interdisciplinary field" (Emerich *et al.*, 2016, p. 4), considering the concept of interdisciplinarity as cooperation and dialogue between fields, without overlapping one another, with reciprocity and mutual contributions (Japiassu, 1994).

Digital technologies and the Internet manifest themselves in contemporary society not only as a media communication mode provided by technological supports. Furthermore, it involves information, education, and entertainment (Briggs; Burke, 2006 *apud* Sobreira, 2013). It is an expression and social interaction arena – cyberspace – that distinguishes it from other means of communication.

> Cyberspace (which I will also call "network") is the new means of communication arising from computers' global interconnection. The term specifies not only the material infrastructure of digital communication but also the oceanic universe of information that it houses and the human beings who navigate and feed this universe (Lévy, 1999, p. 7).

However, Castells (2003) reminds us that the Internet is an instrument that develops but does not change human behavior. Conversely, behaviors change the Internet. Humans take ownership of technologies and amplify and enhance their behaviors.

In the contemporary world, people are increasingly connected to digital networks and adept at processes in which technology acts as a facilitator to provide access to services and social rights, such as health and communication. The interaction between humans and technology is generating a human-machine interface, which leads artists and art and culture theorists to use the term post-human to refer to the intense transformations of technology and communication in humanity and the social, psychic, and anthropological aspects (Santaella, 2003).

> Technology penetrates events and has become an event that leaves nothing untouched. It is an ingredient without which contemporary culture – work, art, science, and education – in fact, the entire range of social interactions, is indispensable (Aronowitz, 1995, p. 22 *apud* Santaella, 2003, p. 30).

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Health does not escape this contemporary event; on the contrary, it is perhaps one of the scientific fields that has invested the most in technology to improve tests and surgical procedures, speed up care, bring health services closer to clients, improve information systems, and discover new vaccines and medicines. In this context, political organizations, institutions, governments, public managers, professionals, private companies, and civil society began to pay more attention to what is conventionally called digital health, which became possible with the advancement of Information and Communication Technologies (ICT).

The relationship between communication and health is ancient; however, the establishment of the C&H field as a set of articulated, named, and recognized elements is relatively recent, say Araújo and Cardoso (2007). The effort of those involved in its creation was to establish a field that would face the changes triggered by the decentralized and universalized Brazilian public health services following the establishment of the Unified Health System (SUS) by the 1988 Federal Constitution (Brazil, 2020a).

"A field was only established as such by its formulations and clashes" (Torres, 2012, p. 31). C&H is a very diverse set of social practices subject to many theoretical perspectives and discursive exchanges, including scientific and popular knowledge through their interaction. The field was born with this nature because the several stakeholders involved in its formulation faced challenges arising from the changes proposed by the SUS, such as decentralized management and societal participation. This new model of health organization, expressed in the principles of the SUS, has become an equally challenging issue: how can we articulate the different forms of participation and cultural and political expression in society and adapt health intervention methods to this new perspective?

The challenge posed by the change in the health model materialized in the SUS brought the need to establish new communication means that would align with the transformations, also requiring an inversion in the positivist view of effects and the informational paradigm, in which health tends to be seen only as data and the public as mere receiver.

Araújo and Cardoso (2007) affirm that the informational model in the context of public health causes many issues, as it inhibits listening and dialogue, attributing the right to speak only to transmitters who, in this case, are health institutions/professionals and the media. Eliminating the "noise" here means expelling diversity, differences, and the several social voices found in any situation. Furthermore, linearity compromises the vision of the network communication process.

One of the views adopted in C&H is the concept of leveling participants in communicative action as knowledge holders and producers, which is equivalent to saying that, regardless of the position (or pole) they are in, the individual or group has knowledge that should not be disregarded in the communicative process.

The "two-step flows" communication model is another reference incorporated into the field of C&H, especially as it considers the relevant figure of the "opinion leader" (or mediator) in the communication process. The work published by Paul Lazarfeld, Bernard Berelson, and Hazel Gaudet in the book The People's Choice (1948) became important in the field of communication studies because it brought to the fore of debate the media's influence and persuasion in the dimension of interpersonal relationships, a perception hitherto ignored by previous studies. The "two-step flow" model emphasizes that there are intermediate instances between the source and destination of messages and that these mediators exert influence on how receivers interpret these messages, also recognizing that people belong to social groups and have their dynamics.

The field of C&H focuses on health as a social right, which occurs through mobilizing the field and society to consolidate public health under the SUS principles of universalization, equity, comprehensiveness, decentralization, and popular participation. In C&H, communicative practice has the following assumptions:

> The right to communication is inseparable from the right to health; communication can only be called this in its fullness when conceived and applied as a redistribution of people's power to express themselves and be considered; to this end, the SUS principles should be the basis of its reconfiguration (Araújo; Cardoso, 2007, p. 61).

The 1988 Brazilian Federal Constitution (BFC) (Article 196) highlights that "health is the right of all and the duty of the State, guaranteed through social and economic policies that aim to reduce the risk of disease and other health issues and provide universal and equal access to actions and services for its promotion, protection, and recovery" (Brazil, 2020). In Article 198, the BFC also formalizes the creation of the SUS and describes its doctrinal and organizational principles. Law N° 8.080 of September 1990 regulates the SUS functioning and provides other measures (Brazil, 1990).

In this sense, health as a right results from transformations in the concept of citizenship and the conception of law over at least two centuries. Arnaud and Capeller (2009) state that the right to health is closely associated with "state solidarity" (shared responsibility) and the change in the meaning of citizenship. Just like the right to vote and be voted for, the right to health was demanded by civil society and, little by little, implemented through laws and public policies to meet social demands. Progressively, humans' subjective and abstract rights as individuals gave way to social rights. In the current conception, being a citizen means being recognized by the State, which must guarantee the rights to participate in political life (voting, being elected, and others) and fundamental rights, including the right to health (Buzanello, 2008).

The right to communication is expressed in Article 19 of the United Nations (UN) Universal Declaration of Human Rights: "Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers" (WHO, 1948).

This excerpt from the document denotes a sense of communication much closer to transmitting information through interpersonal relationships, which approaches the informational communication model. Chapter V of the Brazilian Federal Constitution (2020) is specifically dedicated to the media, emphasizing the media's freedom, structure, and content.

As Urupá (2016) observes, the conception of the right to communication aligned with the simple transmission of information is being transformed into a vision of a right that can promote the democratization of the power to communicate. It is no longer just a matter of offering subjects freedom of information and expression as receivers or to express themselves by any means. It is now 'the citizens' (and their collective organizations) right to access the media as content emitters – producers and diffusers" (Urupá, 2016, p. 103).

Araújo and Cardoso (2007) affirm that, in C&H, communication does not separate from the notion of right, aiming to serve citizens to improve the public health system in all its dimensions and social participation in constructing this possibility.

Once some C&H foundations have been demonstrated, it becomes possible to relate the theoretical aspect to digital health, which is located in this article as an empirical object and central theme. Digital Health (DH) is permeated by several areas of knowledge – such as health and informatics – and, therefore, is interdisciplinary. However, DH is studied in the light of the concepts and assumptions of the Communication & Health field, whose main aspects are the dialogical model and the inseparability of health and communication rights.

DIGITAL HEALTH AND COVID-19 PANDEMIC FOR RESIDENTS OF THE RESIDENCIAL PARQUE DA PRAIA (PALMAS-TO)

It is hard to imagine something in today's society that has not suffered the direct or indirect impacts of the covid-19 pandemic or has remained unscathed by a health and humanitarian crisis of such proportions. If, on the one hand, some medical and pharmaceutical industry branches have experienced dizzying growth due to the increase in demand for equipment, products, and medicines, on the other, several economic and social areas had to reinvent themselves or accelerate work processes to generate quick responses to the crisis. A priori, a pandemic is a health problem. However, the imbalance caused by the spread of the virus on a global

scale has affected virtually every dimension of life in society to the point of having the feeling that the world had stopped at the most critical times. Simply put, DH can be understood as using ICT resources to offer safe services and information about the state of health of citizens, health professionals, and public managers.

On May 5, 2023, the World Health Organization (WHO) announced that covid-19 was no longer a public health emergency of international concern (PHEIC), which had been the highest degree of alert declared by that organization for the outbreak of the new coronavirus in January 2020. However, the pandemic is still underway, as this status considers other criteria, such as the disease remaining in global dissemination, affecting several continents, and having sustained transmission outbreaks (G1, 2023).

The pandemic is enhanced by "shortened" distances due to agile transport and characterized by the reduced (or sensed decrease) of time from the speed at which telecommunications operate and circulate the information in all world corners. At the same time, this global event also increases inequality and social abysses, as technologies are not widely offered to economically vulnerable populations that live in peripheral locations.

Regarding the health field, Hira (2012) points out that technological advances and expanded internet access enable information integration and the collaboration of professionals with several health institutions far from urban or remotely localized centers. This creates national patient registration systems, transforming them into an "essential instrument for health quality management, epidemiological surveillance, medical research, preventive medicine, and definition of public policies" (HIRA, 2012, p. 7).

In this environment where rapid technological advances and the covid-19 pandemic coexist, digital health has been used as a strategy for healthcare units, area professionals, and citizens to share information and resort to services to seek prevention and health care more efficiently and quickly.

E-health and digital health are related terms that concern the "emerging field in the intersection of medical informatics, public health, and business, referring to health services and information delivered or enhanced through the Internet and related technologies." (Eysenbach, 2001).

In 2005, long before considering that the world would experience the covid-19 pandemic, the WHO began to recommend that Member States begin the elaboration of a long-term strategic plan to conceive and implement digital health services to develop infrastructures to apply ICT in health and promote universal and equitable access to the benefits generated by this application.

The ConecteSUS[2] was established by the Ministry of Health in May 2020 and is coordinated by the Informatics Department of the Unified Health System (Datasus/SE/MS). It is the main initiative of the 2020-2028 Digital Health Strategy and was driven to accelerate covid-19 pandemic strengthening and fighting actions (Brazil, 2020b). The platform has three different channels, with specific features for each audience: citizens, health professionals, and managers.

As elsewhere in Brazil and the world, the crisis triggered by the pandemic forced the health services of Palmas, Tocantins, to respond immediately to the health and social issues caused by the dissemination of the SARS-CoV-2 virus, which causes covid-19. In mid-2020, early in the pandemic, one of the first measures adopted by the Palmas Municipality was establishing the Health Emergency Operations Center (COE), an intersectoral committee responsible for developing action plans to cope with the pandemic.

In April 2020, Palmas Municipality implanted the Coronavirus Plantão Portal to strengthen the pandemic's local monitoring and control and provide updated information and health services to the population. The platform was designed and developed by professionals linked to the Municipal Health Secretariat of Palmas (SEMUS), the Health Technology Center (NUT/SEMUS), and the Palmas Municipality Information Technology Agency (AGTEC), with information from the Health Emergency Operations Center (COE). The portal includes a georeferencing tool with the location of all confirmed covid-19 cases in

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2   Access on January 4, 2023.

Palmas to identify the virus transmission development and help those responsible for elaborating disease prevention and control strategies. The system also provides the documents produced by Palmas Municipality and SEMUS related to the pandemic, such as the Palmas Contingency Plan for covid-19 human infection, the Primary Care Restructuring Plan, protocols, legislation, technical notes, and others. The platform was improved over time, and other information and services were offered to clients, such as scheduling tests and vaccines against covid-19 (SEMUS, 2020).

The Coronavirus Plantão provides general information about the pandemic, the number of covid-19 cases, hospital occupation rate, and data on the evolution of cases in tables, graphs, and referencing maps on the distribution of deaths in Palmas. Moreover, the scheduling services mentioned in the previous paragraph were used from the moment the tests and vaccines began to be available in mid-2021 until a later time when immunization and pandemic control advanced in the Municipality. However, it is not necessary to schedule tests or vaccines. Clients should only visit a health unit and show their Individual Tax Code (CPF) number, SUS card, and vaccine card.

In May 2021, Palmas Municipality, through the Municipal Health Secretariat (SEMUS), launched the Internet scheduling system for covid-19 vaccination and integrated this tool with the Plantão Coronavirus portal, which facilitated access to clients who had digital devices and mastered them. However, people less familiar with these technologies may have struggled to access the scheduling system. These obstacles go through issues such as access to digital technologies (by smartphones or other devices), internet connection, and knowledge to operate these equipment and applications or other navigation systems.

The efforts of health bodies and institutions to expand and accelerate pandemic actions were noticeable. However, the research we referred proposed to investigate what SUS clients think about digital health and how it has reached people.

As mentioned earlier, the social group that participated in the research was selected due to its history of social mobilization and struggle for the right to housing. The Residencial Parque da Praia condominium residents benefited from the Federal Government program "Minha Casa, Minha Vida" (My Home, My Life), so called until 2020. The housing complex comprises 160 apartments, divided into 10 blocks, with 16 units each (Figure 1). The condominium has an estimated capacity to house approximately 640 people, considering an average of four residents per unit. The residential area is located in a suburban territory of the municipality, although it is endowed with infrastructure and is less than six kilometers from the city center.

Figure 1 – Pictures of the Residencial Parque da Praia (Palmas – TO)
Source: Archive of RPP residents.

Fifty (50) people were interviewed in the field research. Thirty were female, and 20 were male. We sought to balance the number of people, considering gender diversification, but women were more receptive and willing to participate in the research. Furthermore, non-binary, transgender and other genders were not

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identified. Those interviewed were 20 to 74 years old. We highlight that 48% have secondary education, 20% have primary education, 12% have higher education, and 10% are partially or wholly illiterate.

The pandemic indeed forced governments and Palmas to adopt strategies that included the use of digital health to respond immediately to the challenges posed by the health crisis, which could be seen in the implementation and improvement of portals and applications, mainly to provide information and schedule tests and vaccines against covid-19, besides making proof of vaccination available in digital format.

However, the research showed that these efforts needed to be improved to broadly reach the social group of RPP residents. Sixty-four percent (64%) do not know and have never used the websites or applications ConecteSUS and Plantão Coronavirus from the Ministry of Health and Palmas Municipality, respectively. The lack of investment in infrastructure and human resources hinders the offering of other digital health services, such as telemedicine, telehealth, and others that replace or complement in-person care.

The lack of knowledge, lack of interest, and distrust in digital health services on the part of the social group analyzed can be observed in the following data: 14% of respondents are aware of and have used the Plantão Coronavirus service, with a strong presence of people with secondary and higher education levels and greater familiarity with digital devices; only 2% know and have already used ConecteSUS, also with a high incidence of people with a higher level of education and digital insertion; and another 6% of individuals know and have already used both digital health systems.

Regarding access to health information, television and digital media, especially the social networks WhatsApp, Instagram, Facebook, and the Google search engine, occupy a significant space in the group's daily life. When asked whether the governments and Palmas Municipality are fulfilling their duty to inform the population about health, 30% of respondents answered no. Twenty-two percent (22%) responded "yes" through television and the Internet.

The media are essential resources for governments, Municipalities, and public bodies to promote dissemination of official health information. These institutions use communication and marketing consultancy techniques to reach audiences through the media with press releases and advertisements. In a health crisis, as with the covid-19 pandemic, health is usually emphasized. Therefore, people generally associate governments' obligation to inform about health with television and digital media, as they frequently notice the presence of official information from health bodies and government representatives in the media.

When analyzing the group of Residencial Parque da Praia residents, we noticed that most can access digital devices and the Internet, including individuals over 60 and with low education. Sixty-two percent say that they use the Internet daily and that the network is essential. Although a significant portion of the group reported having access to digital devices and being connected, the prevailing group opinion affirmed that digital health services are still a distant reality, as they do not work and do not meet clients' demands when needed.

The most significant problem that emerged as the Collective Subject Discourse (CSD) for this community was the distrust and inefficiency of these online services and services offered by the Ministry of Health and Palmas Municipality. For this reason, the CSD stated that, in that group, through interviews, people indicated their preference for face-to-face care in health units due to more resolution, reception, attention, and dialogue with the professionals who work in these places and that, for people with little or no command of digital devices and the Internet, health information continues to be obtained mainly through television, conversations with members of the community, and professionals in public health units.

In general, the community's CSD indicated that it had access to information and knowledge about the range of services available in the SUS and the right to free public healthcare. The group recognized the importance of the benefits offered by the public health system, especially during the pandemic. However, they were also dissatisfied with needing access to care in units close to their homes and within the required time frame.

One of the most critical assumptions in communication and health is that the right to communication cannot be dissociated from the right to health. Therefore, citizens' full access to public health requires an opportunity to express themselves, and their ideas must be considered by institutions, managers, and health professionals, that is, by the social stakeholders that underlie the field. We can observe that members of the social group investigated in the research in question feel, to a certain extent, heard when they go to SUS units and are attended to in person, where there is a greater propensity for dialogue, empathy, and clarity in verbal and non-verbal communication. However, when analyzing digital health and the virtual environment where it occurs, the incipient services available in the ConecteSUS and Plantão Coronavirus systems make it clear that clients do not find the same opportunity for interaction and listening in the online environment as that occurring in person in health units, which leads to the conclusion that this is the main reason why the community does not recognize digital health as an extension of their right to health and communication and, therefore, prefers in-person care.

FINAL CONSIDERATIONS

Communication is inherent to human beings. It is part of their social development process and are articulating and fundamental elements of their relationships. As highlighted in the present study, the population must access health rights. The idea of field elaborated by Bourdieu (1996) helps us understand how this society and its social groups are structured and organized even to access the right to health.

Health is a fundamental right, just as communication is expressed in the Universal Declaration of Human Rights. Both rights are guaranteed by the 1988 Brazilian Federal Constitution, embodied by the Brazilian legal framework, which extends to Palmas (TO) as a federative entity.

As highlighted, digital health uses Information and Communication Technologies (ICT) to disseminate information or offer health care and services. Digital technology combined with the Internet has generated innovations and transformations in the relationship between patients and health professionals and services. However, this has yet to be evident among RPP residents. Therefore, digital health has improved the information supply and facilitated access to several health-related services and procedures for a few respondents. Thus, the lack of access to digital devices and the Internet and digital exclusion, that is, the lack of reach and mastery of these resources by a portion of society, can mean an even more significant increase in the existing social inequalities in Brazil due to educational and socioeconomic factors.

The principle of popular participation in the SUS is still an ideal far from being fully realized in face-to-face mode and even further away when considering the virtual environment due to the limitations and poor development of digital health in Brazil and Palmas. Information about vaccines, medicines, tests, appointments, organ transplants, blood donations, and nutrition is offered to clients via ConecteSUS and Plantão Coronavirus, providing proof of virtual vaccination. Although the federal government authorized the use of telemedicine during the pandemic, this practice was not significantly incorporated as part of the digital health strategy in the SUS, just as telehealth was not structured nor had any impact on daily life and care routines. The few clients who said they knew and used both SUS digital health systems did so to access information about the pandemic, schedule tests or a vaccine against covid-19, and request a SUS card and proof of vaccination.

The general perception is that health information is widely available, especially after the pandemic's start, as health has gained greater resonance and prominence. However, the word health is generally associated with consumption. Marx (1989 *apud* Lefèvre, 1995) argues that this understanding leads to alienation insofar that health is no longer understood as a human and natural condition and as a right, giving way to the understanding that it is only possible to access or acquire it through the consumption of goods, medicines, devices or even health plans. In short, in this sense, the term 'health" is reduced to medicalization.

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From the analysis of the Collective Subject Discourses and the reconstruction of social representations, that is, the collective opinion of the investigated group, we identified that the informational communication model and the instrumental use of communication through data transmission techniques are predominant. In other words, we observed that information and communication are associated with television and digital media and that Residencial Parque da Praia residents find little or almost no opportunity to be heard, that is, to have their suggestions and demands considered by governments, Palmas Municipality, and health professionals, although health units are seemingly environments more conducive to dialogue.

The covid-19 pandemic brought significant challenges and some opportunities for this construction to occur more effectively and expeditiously through Information and Communication Technologies and digital health. However, it is necessary to overcome obstacles so that these resources reach SUS users, with investment in infrastructure, connectivity, human resources, technological tools, and efficient virtual services. Suppose its challenges are overcome at national and local levels. In that case, digital health can become a feasible and highly relevant alternative in implementing the SUS principles of universality, equity, and popular participation in health.

Finally, we intend to refrain from presenting conclusions about the discussions raised in the research debated here. We aim to present some considerations that can serve as paths for those accessing this information to formulate their interpretations and, if interested, continue to uncover digital health from new angles and perspectives.

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