

## Risk communication by community health agents in the prevention of COVID-19



<https://doi.org/10.56238/emerrelcovid19-014>

### Rilva Lopes de Sousa Muñoz

Highest degree of education: Doctorate

Academic institution: Professional Master's Program in Family Health (PROFSAUDE), Federal University of Paraíba (UFPB), João Pessoa, Paraíba

### Lilyanne Barboza de Oliveira Valério

Highest degree of training: Specialization; Master's student at PROFSAUDE/UFPB

Academic institution: Professional Master's Program in Family Health (PROFSAUDE), Federal University of Paraíba (UFPB), João Pessoa, Paraíba

### ABSTRACT

Unsuccessful prevention of the disease caused by the new coronavirus (COVID-19) can only be possible if everyone is willing to do their part, which has become a critical issue in facing the pandemic caused by this emerging virus. With the permanence of its circulation in the population after three years of the pandemic, prevention must also be permanent. This prevention must be centered on risk communication and community participation through popular health education. The object of the theoretical review and appreciation of this chapter focuses on the link between the concept of popular

health education for communities, risk communication during health crises, such as the COVID-19 pandemic, and the role of the Community Health Agent (CHA) in this process. The CHA is the character of primary health care with greater capillarity, going from house to house, being able to disseminate information and develop knowledge in health, advising on preventive measures through a language of the community, based on scientific knowledge, but not laden with useless complexities for that target audience. Therefore, it is necessary to periodically train these very potential workers and, although the Health with Agent Program is in progress, it will bring future results with a generation of CHAs that are more prepared to carry out their attributions in critical moments of other epidemics that may arise. They need up-to-date specific actions of permanent education, being carried out promptly so that the communication practice is effective and quick in promoting equity in health in the Brazilian population.

**Keywords:** COVID-19 pandemic, Health Communication, Community Health Workers, Health education, Public health.

## 1 INTRODUCTION

The object of the review and theoretical appreciation of this chapter focuses on the connection between the conception of popular health education, which takes social reality as pedagogical content at the service of the emancipation of users of the Unified Health System (SUS) at the community level, the communication of risk during health crises, such as the pandemic of the new coronavirus disease (COVID-1), and the role of the Community Health Agent (CHA) as an educator and communicator in strengthening popular health education (DAVID, 2017). Their function goes beyond providing basic health care, as they are responsible for promoting health, preventing disease, and improving people's quality of life.

As an educator, the CHA has the task of disseminating information about health and promoting awareness in the community, although the participation of the CHA in educational actions, in practice, has been little explored by the teams and the local community, which has diminished their role in social change for better health conditions of the population (ARAÚJO et al., 2018). For these reasons, the

fundamental premise for this process of community health education interceded by health risk communication in times of pandemic could have, in the CHAs, important mediators of the Family Health Strategy (ESF). These professionals can transmit information about the risks associated with the disease, as well as the preventive measures that must be adopted to reduce the spread of the virus, considering that trust, engagement, and personalized communication are among the key concepts in health risk communication, and the lack of these components can hinder effective communication (WHO, 2017).

Epidemic prevention must be centered on effective risk communication and community participation, which can only be achieved through popular health education. In this sense, community involvement in preventing the COVID-19 pandemic has not yet been fully explored, and for this reason, this chapter highlights the role of community education in the prevention and control of infectious diseases in health crises of the magnitude of the pandemic that was declared in March 2020 and ceased to be declared a health emergency of international concern more than three years later.

The present work constitutes a narrative review to contextualize the results of a previous empirical study to provide a broader interpretation of its findings. From the dissertation of the Professional Master's Degree in Family Health in a national network (PROFSAUDE), the authors sought, stimulated by theoretical challenges experienced during the construction of the preferred course conclusion work, to answer questions related to facilitating the population's adherence to the guidelines non-pharmacological prevention measures recommended during the COVID-19 pandemic.

There are several possible approaches to consider questions related to this topic, and the focus was placed on health risk communication, in the context of the specific challenges faced by the population, such as unequal access to information, limited resources, distrust of health authorities, and governments, among others. By basing this analysis on scientific evidence, we sought to maintain a critical stance in its interpretation, to contribute to highlighting the role of key actors in the non-pharmacological prevention of contagion during health emergencies such as the COVID-19 pandemic: the FHS CHAs.

The previously mentioned empirical study was one of the arms of multicenter research that had the general objective of “analyzing how the population of the territories covered by the PHC perceives and translates prevention and control measures into everyday practices at the individual, family and collective levels. of COVID-19” (SCHWEICKARDT et al. 2020, p. 4), under the coordination of researchers from the Oswaldo Cruz Foundation (Fiocruz) and the Brazilian Association of Collective Health (Abrasco), teachers and managers of PROFSAUDE nationwide.

In this context, the centrality of communication in health emerged, which can be carried out by the CHA within the scope of the Unified Health System (SUS). In public health emergencies, “health

communication” is an integral part of risk communication, which is emphasized by the literature using the term “health risk communication” (BERG et al., 2021). Health communication and risk communication in public health emergencies, including pandemics, aim to improve outcomes by influencing, involving, and reaching different socially minorized audiences with health-related information.

Within a social context, in which part of the subjects' interpretation of reality is not achieved in a "pure" way, but only from the perspective of individuals within their communities, in the social construction of meanings about risk, as well as in the perception of these risks, the involvement of actors who are aware of this context is essential (PEDOTH et al., 2022). Thus, considering that community involvement is fundamental during epidemics to ensure contextually appropriate educational interventions and, therefore, with a greater possibility of achieving population adherence and engagement, communication processes constitute the cornerstone of this process.

Thus, communication with people, while providing information sharing, must be transparent and focused on the community's problem, with solutions that are likely to be accepted and put into practice. To achieve satisfactory results in risk communication, especially in situations of public health emergencies, technical information must be shared with careful attention to the ability of different target audiences to understand (PAULIK et al., 2020). In this regard, CHA also requires adequate training to perform these functions effectively, so that they have the knowledge, skills, and attitudes necessary to meet the health needs of the community in which they work.

## **2 PREVENTION IS PERMANENT: THE END OF THE COVID-19 PANDEMIC IN 2023 IS NOT THE END OF THE CIRCULATION OF THE 2019 CORONAVIRUS IN THE POPULATION**

On May 5, 2023, more than three years after the start of the COVID-19 pandemic, the World Health Organization (WHO) Emergency Committee on COVID-19 recommended to the organization's Director-General, Dr. Tedros Adhanom Ghebreyesus, who accepted the recommendation, that as the disease no longer fit the definition of a Public Health Emergency of International Concern (PHEIC). That doesn't mean the epidemic itself is over, but the global emergency it caused is, for now. A WHO Health Regulation Review Committee, yet to be established, will develop long-term standing recommendations for countries on how to manage COVID-19 on an ongoing basis (WHO, 2023). Therefore, the COVID-19 pandemic, the global epidemic by the new coronavirus, the severe acute respiratory syndrome virus 2 (SARS-CoV-2), was considered a critical epidemiological fact that has evolved into a state of control at this time. However, with the continued circulation of the 2019

Coronavirus in the population after three years of the emergence of COVID-19, prevention must also be permanent.

The WHO has recorded nearly seven million deaths from COVID-19, although the actual death toll from the pandemic could be three times higher. According to Dr. Tedros Adhanom, a few thousand deaths are still being reported to WHO every week, and it is estimated that excess mortality is still around 10,000 deaths per day worldwide. In his virtual press conference (transcript of the virtual press conference on COVID-19 and other global health issues on May 5, 2023), he also urged all countries to do more to prepare for future pandemics:

One of the greatest tragedies of COVID-19 is that it didn't have to be this way. Tools to better detect and respond to pandemics are available, but globally, lack of coordination, lack of equity, and lack of solidarity have meant that these tools are not used as effectively as they could have been. Lives were lost that should not have happened. (WHO, 2023, p. 4)

The WHO director-general also highlighted the ongoing impact of COVID-19: “Over the past week, COVID-19 claimed one life every three minutes and these are just the deaths we know of”, emphasizing that thousands of people across the world around the world are still being treated for the disease in intensive care units, and millions more are dealing with the lingering aftereffects of COVID-19 infections. “This virus is here to stay”, added the WHO director, [...] “It is still killing and it is still changing. There remains a risk of new variants emerging that cause new outbreaks of cases.”

Therefore, the need to learn lessons from this pandemic before a possible “next time” is essential. History has shown that infectious diseases can evolve and emerge unpredictably. Well-implemented community engagement strategies can be used to support planning interventions, building trust and community input, social and behavioral communication, risk communication, surveillance and contact tracing, and logistical and administrative support during HIV prevention and prevention. COVID-19.

Community-based healthcare, including outreach and campaigns, in the context of the COVID-19 pandemic, has challenged healthcare systems around the world. The growing demand for care for people with COVID-19 has been compounded by fear, misinformation, and limitations on the movement of people and supplies that disrupt the delivery of frontline health care for all people.

Brazil and 193 other countries have recently reaffirmed their commitment to the Sustainable Development Goals (SDGs) that guide the 2030 Development Agenda of the United Nations (UN). Thus, signing the 2018 Astana Declaration, which redefines the functions of Primary Health Care (PHC) in three platforms: service delivery, multisectoral actions, and citizen empowerment. Therefore, the SDGs cannot be achieved by providing health services alone. The community level is an integral platform for PHC, fundamental for essential public health functions, and for the engagement and empowerment of communities about their health (LOPES-SOUSA, 2021).

This community-based platform, with its distinctive capabilities for healthcare delivery and social engagement, has a critical role to play in the COVID-19 response and is essential to meeting the ongoing health needs of people, especially those most vulnerable. The community health workforce of these agents can be leveraged to strengthen the COVID-19 response, particularly for poorer citizens, because they are trusted members of the community and serve as important ESF links to community facilities, leaders, and organizations. community, contributing to a more effective response to the health crisis (MACIEL et al., 2020). This engagement and communication of individuals and communities with the health unit are essential to maintain their confidence in the health system's ability to provide safe and quality services, as well as to ensure adequate behavior in adherence to official public health recommendations.

### **3 RISK COMMUNICATION AND COMMUNITY PARTICIPATION IN THE PREVENTION OF COVID-19**

The use of communication in its strategic dimension is fundamental for disease prevention and control actions and health promotion in the context of public health. Engaging and mobilizing affected and at-risk communities is essential for implementing context-appropriate public health measures to delay transmission in preparing the health system to reduce the incidence of COVID-19.

Health risk communication provides instruments that enable social mobilization, dissemination of information, and motivation for the adoption of healthy behaviors aimed at promoting the social and universal right to health. Communication for social change is a proposal based on the concept of mobilizing individuals to generate new meanings that circulate in a given society. This social mobilization requires communication strategies to promote the circulation of these senses toward effective prevention. Change is at the heart of social mobilization, which is guided by an ethical project for society, aiming at a new way of living together among social actors and new meanings for the future.

It is worth highlighting the role of social mobilization. Any step towards health can only be successful if all participants are willing to do their part, in an engaged way, which has become a critical node for facing the COVID-19 pandemic (PEDOTH et al., 2022).

Local transmission of COVID-19, which emerged in China at the end of 2019, has been reported in many countries on all continents. A poor understanding of the disease by the population could result in the rapid spread of the infection, which happened. The World Health Organization (WHO) declared the 2019 coronavirus outbreak as a Public Health Emergency of International Concern (PHEIC) on January 30, 2020, and as a pandemic on March 11, 2020. The evolution of a pandemic is one of the most complex problems for society, and its management and mitigation process

by governments are, therefore, a great challenge. Each national strategy plays a crucial role in meeting global goals and laying the groundwork for coordination at the national level and responses from the states of the federation (HOOKER; LEASK, 2020).

Sjölander-Lindqvist et al. (2020) describe how communication can make people change their behavior in correspondence with scientific knowledge and that trust in the actors who provide information is crucial for successful communication, although procedures and standards for communication are also fundamental. to increase audience understanding and acceptance of the message itself. Kurz-Milcke et al. (2008) emphasize that the role of communication is to educate and inform a target group about the real risks and benefits of certain actions, strategies, and policies. In the case of COVID-19, there are no specific target groups, as virtually the entire population is vulnerable to illness from the new coronavirus, although there are groups that more frequently develop the severe form of the disease. In this sense, risk communication strategies are strongly associated with the sense of threat, attitudes, and behavior change of a given population (BASCH et al., 2020).

Individual and collective perceptions of health risks drive decisions about populations' protective behaviors, but COVID-19 was an unknown risk until late 2019. The COVID-19 pandemic has affected the world in many ways. The lack of information, the need for accurate communications with the population, and the speed with which the virus spreads are important factors in this health scenario that took shape two years ago. On the other hand, the understanding and corresponding practice of preventive measures by the population requires the informed cooperation of entire populations.

A poor understanding of the disease among people, in general, could lead to delays in the institution of non-pharmacological preventive measures and increase the spread of infection. When there is an epidemic of an infectious disease that spreads rapidly, such as COVID-19, knowledge of population perceptions on the subject is essential for the public health response to be targeted and effective. Among these factors, communication in health to ensure the cooperation of the population represents one of the critical nodes in controlling the pandemic based on the principles of Universality, Integrality, and Equity of the Unified Health System (SUS).

A heated debate has emerged in Brazil on how to manage and mitigate the COVID-19 pandemic, which has resulted from a dissonant societal perception of the real meaning of the pandemic. In this sense, the Brazilian population was divided into two contrasting philosophical approaches: universalism - the understanding of life as a good of infinite value and, therefore, more important than the economic preservation of the country - and utilitarianism - in which the focus is on the mitigation of the economic crisis exacerbated by the COVID-19 pandemic, due to its potentially devastating effect on people's lives, thus leaving risk problems in the background (LIM; NAKAZATO, 2020).

Governments in many countries generally base decisions regarding tightening or easing restrictions on some combination of the epidemiology of infections and the social and economic consequences of the measures. Whichever combination is chosen, governments must be explicit about their objectives and transparent in decision-making, and the measures taken must form part of a clear overall strategy; however, this is not always the case (HAN et al., 2020).

According to the Pan American Health Organization (OPAS, 2021), in risk communication, community involvement and management of the so-called infodemic are fundamental, with participatory development in the implementation of plans and dissemination of risk information for all populations. Infodemic, according to PAHO (2020, p. 2), is “the excess of information, some accurate and some not, which makes it difficult to find reputable sources and reliable guidance when needed”. In this sense, in 2020, the rapid spread of COVID-19 generated an impressive increase in the demand for information on prevention and care, aggravated by fear, misinformation and limitations in the provision of usual health care in primary health care.

In Brazil, there was a kind of federalization of decisions related to facing the pandemic supported by the Federal Supreme Court, since the management was under greater responsibility of the state governments to the detriment of the federal government, and those determined their actions based on epidemiological, political criteria and local assistance (PEREIRA et. al., 2020). Some municipalities differed in their guidelines from those of the state with more restrictive measures. In this context, the work of the ESF and the ACS varied beyond territorial differences, encompassing differences in official recommendations to combat COVID-19.

The current pandemic has demonstrated that preventive guidelines must reach personal beliefs, the worldview of each population, which is influenced by historical factors, and cultural and social experiences, so that it is possible for this communication to generate changes in behavior. In this context, the Family Health Strategy (ESF), through its teams and, considering the bond they have with the communities under their health responsibility, as well as with the families under their care, gains an important role in the communication of risks and of possible and viable protection measures to be adopted in those specific spaces, the territories.

De acordo com as teorias de decisões sobre comportamento de saúde, as pessoas que percebem maiores riscos são mais motivadas a implementar comportamentos protetivos (BRUIN; BENNET, 2020). Strict adherence to public health infection prevention and control protocols is required to contain the spread of the virus, and national, state and municipal governments in Brazil have directed efforts and resources towards implementing non-pharmacological (NFM) control measures and prevention in public places and institutions.

The success of prevention MNF and policies aimed at reducing the impact of COVID-19 depends on how well individuals are informed about the consequences of the infection and the measures that must be taken to reduce the impact of the disease. People's knowledge, attitudes and practices with COVID-19 are fundamental for understanding the epidemiological dynamics of the disease and the effectiveness, compliance and success of the MNF adopted in a territory.

Evidence-based policies and practices should incorporate accumulated knowledge about SARS-CoV-2 transmission to help educate the population. To educate society, communicating the practical use of technical-scientific solutions and their impact on everyday life, obtaining public support, effective, accessible and safe communication is necessary. Communicating science to people in the general population requires gaining their trust by sharing health risk information, and work procedures, so that they understand how science and technology can be beneficial. Researchers are generally concerned with goals and objectives, eliminating prejudice, but, in reality, the value of knowledge based on scientific evidence for society varies from region to geographic region, and from community to community, especially when it comes to solving problems complex and emerging (MATTA, 2020).

Adherence to NFM and its sustainability over time can be influenced by a variety of factors, such as context (life, work, community conditions), financial and social circumstances, and cultural and spiritual factors. This is particularly relevant for people of color who may be disproportionately impacted by the implementation of NFM, especially through unemployment and lack of social support (O'MARA-EVES et al., 2015).

Therefore, the social determinants of health need to be considered to promote adherence to preventive measures, messages must be adapted according to age, sex, gender, education, care responsibilities, as well as other socioeconomic or identity factors of individuals ( BONELL et al., 2020). For example, men are more likely than women to report low levels of concern about the COVID-19 pandemic, including those in higher-risk age groups (CHAROENWONG et al., 2020). Women are more likely than men to report high levels of stress in their lives, in part because the pandemic may have exacerbated the gender divide in unpaid family work, and women are more likely to have childcare responsibilities or elderly relatives (ALON et al., 2020). Popular health education and communication strategies that consider these factors, and are adapted to other relevant factors, are essential to promote adherence to preventive NFM.

Information needs to be properly framed to be understood by a lay audience, which requires conveying contextual information rather than fragments of evidence. In this sense, the pandemic situation has suddenly taken the vocabulary of epidemiologists to the public and political spheres of the world. Its vocabulary, for example, entered the public lexicon, including words and concepts such

as “pandemic”, “quarantine”, “flattening the curve”, “social distancing”, “personal protective equipment, PPE”, “coronavirus” among others. (WEIBLE et al., 2020).

The PHC health teams play a fundamental role, as they comprise cultural and social elements present in the communities under their responsibility, capable of establishing educational, social, and assistance actions that can reach them both in terms of capillarity and adequacy of technical-scientific information for the diversity of the territory.

It is important to point out that, as in health education in general, when it comes to technical-scientific information on the prevention of COVID-19 for the Brazilian population, the core and primary source of knowledge on prevention is generated by technical areas of the Ministry of Health (MS) and its related entities, arising from the “[...] convergence of knowledge from different domains that merge with the practice of managing the Unified Health System [...] (BRASIL, 2012, p. 5). In this sense, the MS Executive Secretariat recommends that it is necessary to “ensure internal and external communication, contributing to the improvement of decision-making processes in the field of public health and strengthening social participation” (BRASIL, 2012, p. 5 ).

#### **4 POPULAR EDUCATION IN HEALTH AND RISK COMMUNICATION**

Community-based health care includes services provided by a range of health workers, laypeople and professionals, who support outreach campaigns at the population level, among which are the CHAs. These mediating agents adapt well to popular health education strategies in the community, an approach that seeks to empower people so that they can take better care of their health and prevent disease. This approach is based on community-based education itself, which values the knowledge and experience of people living in the territory as resources for health promotion.

Communication is a fundamental aspect of popular health education in the community. Educator Paulo Freire, one of the main theorists of popular education, emphasized the importance of communication as a process of dialogue between people. He argued that education should be a process of mutual exchange of knowledge and experience rather than a one-way transmission of information. Education as a dialogical process, in which the educator and the student are active subjects in the construction of knowledge, allows the community to also actively participate in health promotion actions, contributing with their experiences and knowledge.

In the community, communication is used to involve people in identifying health problems that affect the community and finding solutions to these problems. This involves creating spaces for dialogue and participation where people can share their experiences and knowledge and work together to improve community health. In addition, communication is used to provide clear and accessible health information. This involves adapting the language and content of health information so that it is

understandable to people in the community. It also involves using media and technologies that are accessible to the community, such as community radio, text messaging and social media.

It is for this and other reasons that popular health education in the community has proven to be a fundamental tool for health promotion and disease prevention. This community-based approach empowers people to be active agents in promoting their health, as well as that of their families and community, based on values such as participation, dialogue, respect and equality. These values are fundamental for building a relationship of trust between health professionals and the community, which is essential for the success of health promotion actions.

Therefore, communication is a key element in popular health education, just as popular health education is essential for health risk communication. It is necessary that health professionals can listen to the needs and demands of the community, and that the community feels heard and respected. In addition, health education actions must be integrated into public health policies, so that they can be continued and sustainable. Popular health education can contribute to improving the quality of life of the population, reducing the incidence of diseases and promoting healthy habits.

The EPS seeks, in addition to building a health awareness capable of reversing the population's health situation, the intensification of popular participation, contributing to the promotion of health knowledge. Education is constituted as a process of search and invention or reinvention that starts from man's action and reflection on the world, to transform it (AMARAL et al., 2014).

According to Câmara et al. (2012), health education emerged as a strategy to promote health and should be a social practice focused on questioning everyday life, valuing the experience of individuals and groups, concerning the reality in which they are inserted. It is the sum of all experiences that modify or influence an individual's attitudes or conduct with health and the processes that need to be modified. Ideally, educators need to understand the reality of the situation faced by people in a community (HAN et al., 2020).

Therefore, health education is conceptualized as a two-way dialogue between professionals and users, and, in this relationship, knowledge is built to increase the autonomy and empowerment of people in their care. EPS also enables debate between the population, managers and workers to enhance popular control, becoming a mechanism to encourage social health management (BRASIL, 2009). Education, also understood as a social practice, takes place amid expectations, desires, and frustrations, and implies the use of processes and techniques aimed at learning, which has a political ideology, even if veiled (FREIRE, 1979).

EPS starts from the assumption that the student has prior knowledge, built on his life history, and his social and cultural practice, which serves as a starting point for the acquisition of new knowledge. EPS can be understood as a particular way of recognizing and facing health problems

through dialogue with the popular classes, respect for their cultures, recognition of their knowledge as valid and having as a substrate the theoretical body of Popular Education, formulated by Paulo Freire in Brazil (VASCONCELOS, 2007).

The definition of Popular Education as technical and scientific training, mobilization and organization of popular classes is based on the relationship between popular groups and educators, as it is necessary to know the reality, the world and the way of life of a given community so that they can be directed education programs and content (FREIRE; NOGUEIRA, 2014). In the 2000s, when EPS was adopted by the State within the scope of the National Health Policy, which subsequently promoted the elaboration of a National Policy on Popular Education in Health, in 2012, by the National Health Council. This policy made it possible to increase popular participation in health and social control, with the production of a body of knowledge (AMARAL et al., 2014).

## **5 THE ROLE OF THE COMMUNITY AGENT IN RISK COMMUNICATION DURING THE COVID-19 PANDEMIC**

The Community Health Agent (ACS) is a

A worker who develops disease prevention, health promotion and citizenship incentive activities, working, under supervision, with families, social groups and collectivities by population assignment. (BRASIL, 2012, p. 15)

The emergence of the Community Health Agent (CHA) in Brazil took place in the 1970s, intending to reduce maternal and child mortality, through guidance on the prevention of health problems. The institutionalization of the ACS occurred in the 1990s, with the creation of the Community Health Agents Program (PACS) by the Ministry of Health. With the creation of the Family Health Program (PSF), replacing the traditional model of health care, the CHA established itself as an essential category to link the community to health service (BARROS et al., 2010; CORREA et al. ., 2010).

As sole members of the PHC health care teams, these agents promote confidence and understanding in SUS users by sharing similar life experiences, participating in home visits and providing constant support and advocacy for users, and assignments that cover all particularities and specificities of the territory. By partnering with ACS, other ESF members also gain a better understanding of their patients, enabling them to provide culturally competent, patient/family-centered care. However, CHAs still do not reach their full potential (MARTINEZ et al., 2021).

CHWs may seem elementary in resource-intensive settings, but they have a valuable role to play in developing countries. Some basic steps are necessary to facilitate the improvement of its efficiency and effectiveness. A continuous process must be ensured by primary health care programs,

through which CHAs are offered opportunities to update their knowledge, improve communication skills and bring credibility to their personality as health educators (HAQ; HAFEEZ, 2009). In this context, it is essential to train the CHA to act in the face of public health policies together with the other members of the ESF team (BARROS et al., 2010). In 2002, the profession was created by law which, after several modifications, is currently governed by Law 13.595/2018.

With the publication of the first PNAB (National Primary Care Policy) in 2006 and the recognition of family health as a strategy, the CHA remains present as a strategic worker for the main operational model of this policy in Brazil, the Family Health Units (USF). They have been prepared to work in different roles, such as population registration, community diagnosis, identification of risk areas and promotion of priority actions to protect the health of children and women, given the vulnerability of these groups. These professionals “build a process of mutual responsibility in the community in which they work, seeking to link the assisted population to the ESF team as a whole” (NEPOMUCENO, 2021, p. 1641), to enable families' access to social policies and health services. They can contribute to local management actions to confront it, providing elements related to the dynamics of territories.

Despite the role of the ACS in PHC, the National Primary Care Policy (PNAB) published in 2017 (BRASIL, 2017), known as the “new PNAB”, brought significant changes that can distort and harm the performance of these professionals. The new PNAB resulted from the “reorganization of conservative political forces in Brazil” (MOROSINI et al., 2018), facilitating the mischaracterization of the role of the CHA in the communities, impacting the work of the agents, hindering the carrying out of education, prevention and health promotion, in addition to compromising actions in areas of greater social vulnerability (FREIRE et al., 2021).

In 2022, to meet the needs generated by the changes in the PNAB, the Ministry of Health, through the Secretariat for Management of Work and Education in Health (SGTES), in partnership with the National Council of Municipal Health Secretariats (CONASEMS) and the Federal University of Rio Grande do Sul (UFRGS), instituted the “Program Health with Agent”, aimed at the technical training of Community Health Agents and Agents to Combat Endemic Diseases, within the scope of the National Policy of Permanent Education in Health (PNEPS). Encouraging the technical training of health agents is of great importance for the Union, states, Federal Districts and municipalities, through the transformation of health practices and work organization itself, qualifying skills and competencies.

According to the pedagogical project of the Technical Course in Community Health Agents, the following specific objectives are included:

- a) Promoting reflection, skills and competencies of students to adopt integrated work processes between health surveillance and primary care in the territory, in addition to intersectoral articulation;
- b) Train the ACS to work with the multidisciplinary teams that work in the territory, through the development of promotion and prevention actions to protect the health of individuals and families, in the structure of epidemiological and environmental surveillance in the logic of primary care; It is
- c) Develop skills in adopting strategies to mobilize the community and encourage participation in public policies aimed at health and socio-educational areas.

Local SUS managers hire CHAs through a simplified public selection process, lay individuals with deep knowledge of the culture of the communities they come from, with the expectation that they will require only a minimum of education and in-service training, although this depends on your scope of work. They are considered community health mobilizers, as their work also includes a public health surveillance component, monitoring non-adherence and researching prevailing health conditions in the community (MALLARI et al., 2020).

Recently, a law was enacted that recognizes community agents as health professionals. President Lula da Silva ratified, without veto, the law that regulates the professions of CHAs and endemic combat agents (ACE) as health professionals (Law 14,536, of 2023) (BRASIL, 2023).

As recognized health professionals and health educators by trade, adequate knowledge and communication skills of CHWs are critical to their confidence and critical to the success of the system. In this sense, knowledge about emerging health issues may be insufficient, and they must participate in continuing education. The CHA can empower the community to identify their needs and can assist in planning a strategy to achieve the desired results. To successfully achieve this, CHWs must be culturally sensitive, with the ability to build a strong relationship with the community (HAQ; HAFEEZ, 2009). This makes CHAs important agents in risk communication in health crises such as epidemics.

As CHWs are professionals who work closely with local communities, they are also well-positioned to effectively disseminate health information. They can communicate with people on a personal level and help dispel fears and concerns about the pandemic. In a health crisis of the magnitude of a pandemic, health risk communication is crucial to ensure that people understand the gravity of the situation and the steps they must take to protect themselves and others. CHWs are therefore essential in this process, as they can communicate with people on a personal level and help dispel fears and concerns about the pandemic.

Health risk communication by community health workers must be based on scientific evidence and accurate information about the pandemic. They should be able to explain the risks associated with the disease and how it is transmitted, as well as the preventive measures that can be taken to reduce the risk of infection. In addition, community health workers must be able to communicate with people on a personal level and adapt their message to suit each individual's needs. They must be able to provide information in clear, simple language and be available to answer any questions or concerns people may have.

The need for qualification of health workers, when it comes to EPS, falls, in a special way, on the ACS, due to the specificity of their work, which puts them in a permanent exercise of dialogue and Health Education with the population (AMARAL et al., 2014). As a publication by the Oswaldo Cruz Foundation (2020) shows, this exercise is not homogeneous from the sectoral and regional points of view. Thus, it was realized that, when fighting a global crisis, it is important to focus on the local impacts on a given population. In this local context, the population of each territory needs to have, in addition to understanding, also engagement with safety policies for physical distancing, personal and environmental hygiene, as well as the use of face masks and precautionary measures in schools and workplaces, based on communication to ensure trust and cooperation within the territories, in addition to protecting vulnerable populations with low socioeconomic support (GILMORE et al., 2020).

Currently, the ACS work within the family health teams, playing, in addition to the mediating role of the relationship between the team and the community, also between technical knowledge and popular knowledge (MACIAZEKI-GOMES et al., 2016). The CHA is, therefore, fundamental in the ESF, where he is, at the same time, a health professional and a member of his community, articulating technical knowledge and popular knowledge, which makes this agent a trusted community reference for the people in his space of work. coexistence. Therefore, CHAs can act as multipliers of information and guidance on prevention behaviors (MACIEL et al., 2020).

COVID-19 prevention behaviors in PHC are essential to ensure the safety of both health professionals and the general population. The CHA plays an important role in this process, as it is the professional responsible for carrying out permanent work on prevention and health education in the community where it operates (SANTOS et al., 2021). It is important to realize that the CHAs have played the important role of bringing data and epidemiological information from the territory to their health teams, due to their direct proximity to the population, which helps the strategic planning of the entire team (DUARTE et. al., 2020). From this point of view, the role of the CHA in risk communication is structured in a two-way street where he takes communication to his territory and returns data from it to the team, allowing the improvement of the information that must be disseminated.

CHAs can provide clear, accessible and culturally appropriate information about the epidemic, its symptoms, modes of transmission, prevention measures and seeking healthcare. They can help combat misinformation and myths circulating in the community by providing evidence-based information. With this intermediation, they can promote community mobilization, organize meetings in the territory, and carry out workshops and home visits to raise awareness about the importance of preventive measures, such as the use of masks, hand hygiene and social distancing. On the other hand, the CHAs know the community in which they work well and can identify vulnerable groups, such as the elderly, people with chronic diseases, or difficulties in accessing health services. They can direct specific efforts to ensure that these groups receive adequate information and have access to necessary health services during the epidemic.

CHWs are also in a privileged position to identify suspected cases or symptoms related to the epidemic. They can be aware of signs and symptoms, perform basic screening, refer suspected cases to appropriate medical care, and report this information to health authorities. Feedback and communication in this situation are two-way. They can gather information about community concerns, questions and perceptions and pass this on to health authorities, assisting in adapting communication and prevention strategies as needed.

It is important to emphasize that community health workers must receive adequate training, regular updates and access to quality educational materials to effectively play their role in risk communication. In addition, they must receive the necessary support from health authorities to effectively carry out their roles during epidemics.

In this sense, the Ministry of Health (MS) published a document for the CHAs entitled “Recommendations for Adjusting the Actions of Community Health Agents in the Face of the Current Epidemiological Situation Regarding COVID-19” (BRASIL, 2020b), to guide them to regarding the new coronavirus and help them reorganize their work process in the face of the pandemic. In this publication made in 2020, the MS highlighted the role of the CHA as a professional member of the ESF teams concerning the prevention and control of public health problems, emphasizing their fundamental role in “reinforcing the attribute derived from the PHC called community orientation” (BRASIL, 2020b, s. p).

In its Guidance on Risk Communication and Community Participation for COVID-19, WHO (2020) highlights that proactively communicating with the community is one of the most important interventions in response to major public health events. In addition to fighting the excess of unnecessary and false information, the quality of information helps the population to perceive the risks to which it is exposed, contributing to more effective community participation in disease control. Good

risk communication also makes it possible to discover how populations are interpreting the information received and guarantees them the exercise of their right to information.

As guided by the document of recommendations for CHWs regarding COVID-19 prevention behaviors, among the activities that CHWs can perform (BRASIL, 2020), the following stand out:

- a) Correct use of masks: The CHA can guide the population on the importance of wearing masks and how to use them correctly, in addition to making distribution feasible for those who do not have access.
- b) Hand hygiene: The CHA can advise on the importance of hand hygiene with soap and water or alcohol gel and distribute, if possible, hygiene materials for those who do not have access.
- c) Social distancing: The CHA can advise on the importance of maintaining social distancing and avoiding crowds.
- d) Identification of suspected cases: The CHA can identify people with symptoms of COVID-19 and guide them to seek medical attention.
- e) Monitoring of confirmed cases: The CHA can monitor confirmed cases of COVID-19 and advise on home isolation.
- f) Combating false news in the community.
- g) Provide information to special risk groups, such as pregnant and postpartum women, the elderly and people with chronic diseases, such as hypertensive and diabetic patients.
- h) Vaccination: The CHA can advise on the importance of vaccination against COVID-19 and help organize vaccination campaigns.

In the pandemic context, therefore, it is possible to perceive that in addition to the usual pre-existing health needs in the territories, the CHA needs to add new challenges to their daily lives, such as the acquisition of new knowledge, use of tools and technologies, such as those for distance communication (MACIEL et al., 2020). In addition, studies show that CHAs are the primary care professional category most susceptible to contamination by the coronavirus due to their proximity to the population (NOBREGA et. al., 2022).

In this way, considering the cruciality of their participation in the risk communication process, with the maintenance of cultural competence and community orientation attributes and their capillarity in reaching all points of the territory, it is necessary that the CHAs have access to PPE and the training of how to use them correctly, as well as being well trained as to the information they need to know to exercise good communication with the population, within their level of understanding (MACIEL et. al., 2020).

According to WHO, when trained and properly supported, CHWs can uncover and understand individual and community perceptions, beliefs and barriers and address them with evidence-based and contextually appropriate solutions, hence competency-based education and learning programs, adapted to the environment, will be needed to prepare CHWs in these activities, including highlighting the importance of preventing the spread of COVID-19; use and disposal of PPE; COVID-19 vaccines; develop interpersonal and communication skills, and community engagement skills (WHO, 2021). However, in the context of the pandemic, Mélló et. al. (2021) found that, until the time of the publication of their study, institutional support regarding training and permanent health education actions in Brazil was insufficient.

Another way to safely continue the work of the ACS is the use of remote technologies with internet access such as digital social networks, or even the telephone, as directed by ABRASCO in the document “Strengthening the Family Health Strategy in the Fight against COVID-19 – Positioning of the APS Network” published in May 2020. The PNAB already raised the possibility for municipalities to acquire and use individual portable equipment (tablets, smartphones) and specialized software to facilitate the routine of FHS professionals. In addition, with the advancement of the implementation of the e-SUS AB strategy (CIELO et. al., 2022), it is expected that such professionals have a connection with these instruments. In any case, bringing these new instruments to the CHA's work process demands investments from the public authorities in training, acquisition and permanent educational improvement, noting that the objective is to improve the efficiency and effectiveness of health care (MACIEL et. al. , 2020).

It is noteworthy that, although narrative reviews such as the present manuscript provide valuable information and a descriptive synthesis of available studies, they do not have the same methodological rigor as formal systematic reviews. Therefore, it is important to interpret the results of this narrative review with caution and consider that conclusions based on the best evidence may require further evaluation through systematic review studies. However, this review aimed to provide a qualitative and descriptive overview of a specific field of research and the exploration of emerging topics. Narrative reviews can be useful to explore areas of research in which there are few studies, or where the available studies have heterogeneous methods or contradictory results, as in the present review.

## **6 FINAL CONSIDERATIONS**

The 2019 coronavirus disease pandemic highlighted how important health risk communication is, with emphasis on the need for information to be comprehensible and bilaterally constructed by each group of people involved, professionals and users of the SUS, in an education process popular in health.

The FHS teams, the main health care strategy in Brazil, are fundamental in generating quality information capable of being assimilated by its population, taking into account the locoregional characteristics of each one of them. The CHA, in this scenario, emerges as a key player in the process, as it is the FHS professional closest to individuals and family groups, knowing the social characteristics, vulnerabilities and needs of each one of them, being the main source of support. information regarding the functional mapping of the territory and allowing teams to assertively plan communication strategies.

In addition, the CHA is the character of primary health care with greater capillarity, going from house to house, being able to disseminate health information, and building knowledge, through a language of the community, based on scientific knowledge, but not laden with useless complexities to that target audience. Therefore, it is necessary to periodically train these very potential workers and, although the Health with Agent Program is in progress, which will bring future results with a generation of CHAs that are more prepared to carry out their duties in critical moments, such as in other epidemics that may arise, however, they require specific up-to-date actions of permanent education, as well as the entire team, being carried out promptly, so that the communication practice is effective and quick to promote equity in health in the Brazilian population.

## REFERENCES

Alon, t. Et al. The impact of covid-19 on gender equality. 2020. Disponível em: [https://www.nber.org/system/files/working\\_papers/w26947/w26947.pdf](https://www.nber.org/system/files/working_papers/w26947/w26947.pdf). Acesso em: 6 abr. 2023.

Amaral, m. C. S.; pontes, a. G. V.; silva, e. P. O ensino de educação popular em saúde para o sus: experiência de articulação entre graduandos de enfermagem e agentes comunitários de saúde. Interface: comunicação saúde educação, 18 supl 2:1547-1558, 2014.

Araújo, e. F. S. Et al. Os agentes comunitários de saúde nas práticas educativas: potencialidades e fragilidades. Rev enferm uerj, rio de janeiro, 2018; 26:e18425. Disponível em: <https://docs.bvsalud.org/biblioref/2019/01/969611/os-agentes-comunitarios.pdf>. Acesso em: 9 mai. 2023.

Basch, c. H. Et al. Public health communication in time of crisis: readability of online covid-19 information. Disaster medicine and public health preparedness14(5): 635-637, 2020. Disponível em: <https://www.cambridge.org/core/journals/disaster-medicine-and-public-health-preparedness/article/public-health-communication-in-time-of-crisis-readability-of-online-covid19-information/e1b32cf9e602f287902ad91f1d10da7d>. Acesso em: 02 mar 2023.

Berg, s.h. et al. Health authorities' health risk communication with the public during pandemics: a rapid scoping review. BMC public health 21 (1401): 1-23, 2021. Disponível em: <https://bmcpublikealth.biomedcentral.com/articles/10.1186/s12889-021-11468-3>. Acesso em: 07 mai. 2023.

Bonell, c. Et al. Harnessing behavioural science in public health campaigns to maintain 'social distancing' in response to the covid-19 pandemic: key principles. Journal of epidemiology and community of health, 74 (8): 617-619, 2020.

Brasil. Ministério da saúde. Biblioteca virtual de saúde. Governo federal sanciona lei que considera agentes comunitários de saúde e de combate às endemias como profissionais de saúde. 2023. Disponível em: <https://bvsms.saude.gov.br/governo-federal-sanciona-lei-que-considera-agentes-comunitarios-de-saude-e-de-combate-as-endemias-como-profissionais-de-saude/>. Acesso em: 06 mai 2023.

Brasil. Ministério da saúde. Recomendações para adequação das ações dos agentes comunitários de saúde frente à atual situação epidemiológica referente à covid-19. Versão 1. Brasília: secretaria de atenção primária à saúde (saps), 2020.

Brasil. Ministério da saúde . Portaria nº. 2.436 de 21 de setembro de 2017. Brasília: diário oficial da república federativa do brasil, 2017.

Brasil. Ministério da saúde. Secretaria-executiva. Secretaria de gestão do trabalho e da educação na saúde. Glossário temático: gestão do trabalho e da educação na saúde / ministério da saúde. Secretaria-executiva. Secretaria de gestão do trabalho e da educação na saúde. 2. Ed. Brasília: ministério da saúde, 2012. Disponível em: [https://bvsms.saude.gov.br/bvs/publicacoes/glossario\\_gestao\\_trabalho\\_2ed.pdf](https://bvsms.saude.gov.br/bvs/publicacoes/glossario_gestao_trabalho_2ed.pdf). Acesso em: 03 jan. 2022.

Brasil. Ministério da saúde. Secretaria de gestão do trabalho e da educação na saúde. Departamento de gestão da educação em saúde. Política nacional de educação permanente em saúde para o controle social no sistema único de saúde – sus. 1. Ed. Brasília-df: ministério da saúde, 2009. Disponível em:

[https://bvsmms.saude.gov.br/bvs/publicacoes/politica\\_nacional\\_educacao\\_permanente\\_sus.pdf](https://bvsmms.saude.gov.br/bvs/publicacoes/politica_nacional_educacao_permanente_sus.pdf). Acesso em: 28 abr. 2023.

Bruin, d.; bennet, d. Relationships between initial covid-19 risk perceptions and protective health behaviors: a national survey. *Am j prev med*, [s. l.], v. 59, n. 2, p.157-167, 2020.

Câmara, amc et al. Percepção do processo saúde-doença: significados e valores da educação em saúde. *Revista brasileira de educação médica*, v. 36, n. Supl.1, p. 40-50, 2012. Disponível em: <https://www.scielo.br/j/rbem/a/kr5x5x4qznwyckmdfxdbqfn/?format=pdf&lang=p>. Acesso em: 05 mai 2023.

Charoenwong, b.; kwan, a.; pursiainen, v. Social connections with covid-19-affected areas increase compliance with mobility restrictions. *Science advances*, v. 6, n. 47, 2020. Disponível em: <https://www.science.org/doi/epdf/10.1126/sciadv.abc3054>. Acesso em: 20 dez. 2021.

Cielo, a. C. .; raiol, t. .; silva, e. N. Da .; barreto, j. O. M. . Implementation of the e-sus primary care strategy: an analysis based on official data. *Revista de saúde pública*, [s. l.], v. 56, p. 5, 2022. Doi: 10.11606/s1518-8787.2022056003405. Disponível em: <https://www.revistas.usp.br/rsp/article/view/195523>. Acesso em: 25 apr. 2023.

Côrrea, c.; pfeiffer, c. C.; lora, a. P. O agente comunitário de saúde: uma história analisada. *Rua, campinas, sp*, v. 16, n. 1, p. 173–192, 2010. Doi: 10.20396/rua.v16i1.8638854. Disponível em: <https://periodicos.sbu.unicamp.br/ojs/index.php/rua/article/view/8638854>. Acesso em: 25 abr. 2023.

Barros, d. F. De et al.. O contexto da formação dos agentes comunitários de saúde no brasil. *Texto & contexto - enfermagem*, v. 19, n. 1, p. 78–84, jan. 2010.

David, h. M. S. L. O papel do agente comunitário de saúde no fortalecimento da educação popular em saúde. *Revista de pesquisa cuidado é fundamental online*, [s. l.], v. 9, n. 2, p. 371–378, 2017. Disponível em: <http://seer.unirio.br/cuidadofundamental/article/view/4936>. Acesso em: 10 maio. 2023.

Duarte, r. B. Et al. Agentes comunitários de saúde frente à covid-19: vivências junto aos profissionais de enfermagem. *Revista oficial do conselho federal de enfermagem, Brasília (df)*, v. 11, n. 1, 2020.

Freire p.; nogueira, a. *Que fazer: teoria e prática da educação popular*. 4 ed. Petrópolis: vozes, 2014.

Freire, d. E. W. G. Et al. Pnab 2017 and the number of community health agents in primary care in brazil. *Revista de saúde pública* 55 (85): 1-8, 2021. Disponível em: <https://www.scielo.org/pdf/rsp/2021.v55/85/pt>. Acesso em: 07 mai 2023.

Freire, d. E. W. G.; freire, a. R.; lucena, e. H. G. De; cavalcanti, y. W. Pnab 2017 and the number of community health agents in primary care in brazil. *Revista de saúde pública*, [s. l.], v. 55, p. 85, 2021. Doi: 10.11606/s1518-8787.2021055003005. Disponível em: <https://www.revistas.usp.br/rsp/article/view/193712>. Acesso em: 9 mar. 2023.

Freire, p. *Conscientização: teoria e prática da libertação: uma introdução ao pensamento de paulo freire*. Tradução de kátia de mello e silva. Revisão técnica de benedito eliseu leite, são paulo: cortez & moraes, 1979. Disponível em: [https://www.fpce.up.pt/ciie/sites/default/files/paulo%20freire%20-%20conscientiza%20a7%20c3%a3o\\_pp.5-19.pdf](https://www.fpce.up.pt/ciie/sites/default/files/paulo%20freire%20-%20conscientiza%20a7%20c3%a3o_pp.5-19.pdf). Acesso em: 28 abr 2023.

Fundação osvaldo cruz. A gestão de riscos e governança na pandemia por covid-19 no brasil. Centro de estudos e pesquisas em emergências e desastres em saúde. Rio de janeiro. Cepedes/ ensp, 2020.

Gilmore, b. Et al. Community engagement for covid-19 prevention and control: a rapid evidence synthesis. *Bmj global health* 5:e003188, 2020. Disponível em: <https://gh.bmj.com/content/5/10/e003188>. Acesso em 06 mai 2023.

Han, e. Et al. Lessons learnt from easing covid-19 restrictions: an analysis of countries and regions in asia pacific and europe. *The lancet*, v. 396, n. 10261, p. 1525-1534, 2020.

Haq, z.; hafeez, a. Knowledge and communication needs assessment of community health workers in a developing country: a qualitative study. *Hum resour health* 7, 59, 2009. Disponível em: <https://human-resources-health.biomedcentral.com/articles/10.1186/1478-4491-7-59>. Acesso em: 07 mai 2023.

Hooker, c.; leask, j. Risk communication should be explicit about values. A Perspective on early communication during covid-19. *Bioethical inquiry* 17, 581–589 (2020). <https://link.springer.com/article/10.1007/s11673-020-10057-0#citeas>

Kupferschmid d, wadman m. T'it's still killing and it's still changing.' ending covid-19 states of emergency sparks debate. *Science*. 2023. Disponível em: <https://www.science.org/content/article/who-ends-pandemic-emergency-covid-19-deaths-fall>

Kurz-milcke, e.; gigerenzer, g. Martignon, l. Transparency in risk communication: graphical and analog tools. *Ann. N. Y. Acad. Sci.* 1128, 18–28, 2008.

Lim, s. Nakazato, h. The emergence of risk communication networks and the Development of citizen health-related behaviors during the covid-19 pandemic: Social selection and contagion processes. *International journal of environmental Research and public health* 2020; 17(11), 4148. Disponível on-line em: <https://www.ncbi.nlm.nih.gov/pmc/articles/pmc7312553/>

Lopes-sousa, a. Contribution of primary health care to achieve the sustainable development goals. *The open nursing journal*, 15, (suppl-1, m1) 304-304, 2021. Disponível em: <https://opennursingjournal.com/volume/15/page/304/fulltext/>. Acesso em: 10 mai 2023.

Maciazeki-gomes, r. De c. Et al.. O trabalho do agente comunitário de saúde na perspectiva da educação popular em saúde: possibilidades e desafios. *Ciência & saúde coletiva*, v. 21, n. 5, p. 1637–1646, maio 2016.

Maciel, f. B. M. Et al. Agente comunitário de saúde: reflexões sobre o processo de trabalho em saúde em tempos de pandemia de covid-19. *Ciência e saúde coletiva*, v. 25, n. 2, p. 4185-4195, 2020.

Mallari, e. Et al. Connecting communities to primary care: a qualitative study on the roles, motivations and lived experiences of community health workers in the philippines. *Bmc health serv res* 20, 860, 2020. Disponível em: <https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-020-05699-0>. Acesso em: 07 mai. 2023.

Martinez, l. S. Et al. Part of getting to where we are is because we have been open to change: integrating community health workers on care teams at ten ryan white hiv/aids program recipient sites. *Bmc public health* 21 (922): 2-11, 2021. Disponível em:

<https://bmcpublihealth.biomedcentral.com/articles/10.1186/s12889-021-10943-1>. Acesso em: 07 mai 2023.

Matta, g. Science communication as a preventative tool in the covid19 pandemic. *Humanit soc sci commun*, v. 7, n. 159, p. 1-14, 2020.

Méllo, I. M. B. De d. E . Et al. Agentes comunitárias de saúde: práticas, legitimidade e formação profissional em tempos de pandemia de covid-19 no brasil. *Interface - comunicação, saúde, educação*, v. 25, p. E210306, 2021.

Morosini, m. V. G. C.; fonseca, a. F.; lima, I. D. Política nacional de atenção básica 2017: retrocessos e riscos para o sistema único de saúde. *Saúde em debate*, 42 (116): 11–24, 2018.

Nepomuceno, r. A. A. Et al. O trabalho dos agentes comunitários de saúde à luz da teoria comunidades de prática. *Ciência & saúde coletiva*, v. 26, n. 5 p. 1637-1646, 2021. Disponível em: <https://www.scielo.br/j/csc/a/wsgvdvg3gbmzz5lyr6gnhcc/?format=pdf&lang=pt>. Acesso em: 05 mar. 2023.

Nóbrega, w. F. S et al.. As mudanças no processo de trabalho dos agentes comunitários de saúde no brasil durante a pandemia da covid-19. *Revista de ciências médicas e biológicas*, [s. L.], v. 21, n. 1, p. 79–84, 2022. Doi: 10.9771/cmbio.v21i1.45140. Disponível em: <https://periodicos.ufba.br/index.php/cmbio/article/view/45140>. Acesso em: 25 abr. 2023.

O'mara-eves, a.; brunton, g.; oliver, s. Et. Al. The effectiveness of community engagement in public health interventions for disadvantaged groups: a meta-analysis. *Bmc public health*, v. 15, n. 129, 2015. Disponível em: <https://bmcpublihealth.biomedcentral.com/track/pdf/10.1186/s12889-015-1352-y.pdf>. Acesso em: 20 dez. 2021.

Opas. Organização panamericana de saúde. Entenda a infodemia e a desinformação na luta contra a covid-19. 2020. Disponível em: [https://iris.paho.org/bitstream/handle/10665.2/52054/factsheet-infodemic\\_por.pdf?sequence=16](https://iris.paho.org/bitstream/handle/10665.2/52054/factsheet-infodemic_por.pdf?sequence=16). Acesso em: 05 jan. 2022.

Opas. Organização panamericana de saúde. Resposta à pandemia da covid-19 nas américas: estratégia de resposta e apelo a doadores janeiro-dezembro de 2021. Washington, d.c., 2021. Disponível em: [https://iris.paho.org/bitstream/handle/10665.2/54425/opaspheheocovid19210008\\_por.pdf?sequence=1&isallowed=y](https://iris.paho.org/bitstream/handle/10665.2/54425/opaspheheocovid19210008_por.pdf?sequence=1&isallowed=y). Acesso em: 05 jan. 2022.

Paulik, I.b., keenan, r.e., durda, j.l.. The case for effective risk communication: lessons from a global pandemic. *Integr environ assess manag*.16(5):552-554, 2020.

Pedoth, I. Et al. Improving risk communication strategies through public awareness and engagement: insights from south tyrol and carinthia. In: protective forests as ecosystem-based solution for disaster risk reduction (eco-drr). Intechopen; 2022. Disponível em: <http://dx.doi.org/10.5772/intechopen.99517>

Pereira, a. K.; oliveira, m. S.; sampaio, t. Da s.. Heterogeneidades das políticas estaduais de distanciamento social diante da covid-19: aspectos políticos e técnico-administrativos. *Revista de administração pública*, v. 54, n. 4, p. 678–696, jul. 2020.

Fundação osvaldo cruz. Programa saúde com a agente divide opiniões e expectativas. Escola politécnica de saúde joaquim venâncio – fiocruz, 2021. Disponível em:

<https://www.epsjv.fiocruz.br/noticias/reportagem/programa-saude-com-agente-divide-opinioes-e-expectativas>. Acesso em 25 abr. 2023.

Santos, j. C. Et al. O trabalho do agente comunitário de saúde na atenção primária à saúde: a experiência do módulo médico de família cantagalo na pandemia de covid-19. In: anais do 4º congresso brasileiro de política, planejamento e gestão da saúde, 2021, rio de janeiro. Anais eletrônicos... Campinas, galoá, 2021. Disponível em: <<https://proceedings.science/cbppgs-2021/trabalhos/o-trabalho-do-agente-comunitario-de-saude-na-atencao-primaria-a-saude-aps-a-expe?lang=pt-br>>.

Sjölander-lindqvist a. Et al. Communicating about covid-19 in four european countries: similarities and differences in national discourses in germany, italy, spain, and sweden. *Front. Commun.* 2020; 5:593325. Disponível em:

<https://www.frontiersin.org/articles/10.3389/fcomm.2020.593325/full>. Acesso em: 28 abr. 2023

Vasconcelos, e. M. Educação popular: instrumento de gestão participativa dos serviços de saúde. In: ministério da saúde. Secretaria de gestão estratégica e participativa. Departamento de apoio à gestão participativa. Caderno de educação popular e saúde. Brasília (df): ministério da saúde; 2007. P. 18-30.

Weible, c. M. Et al. Covid-19 and the policy sciences: initial reactions and perspectives. *Policy sci*, v. 53, p. 225–241, 2020.

Who. World health organization. Risk communication and community engagement readiness and response to coronavirus disease (covid-19). Geneve: who [internet]. 2020. Disponível em: <https://apps.who.int/iris/rest/bitstreams/1272597/retrieve05>

Who. World health organization. Statement on the second meeting of the international health regulations (2005) emergency committee regarding the outbreak of novel coronavirus (2019-ncov). Geneva: world health organization; 2020. Disponível em: [https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-\(2005\)](https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)) acesso em: 5 dez. 2021.

Who. World health organization. Communicating risk in public health emergencies: a who guideline for emergency risk communication (erc) policy and practice. Switzerland: world health organization; 2017.

Who. World health organization. Community-based health care, including outreach and campaigns, in the context of the covid-19 pandemic. World health organization and the unitednations children’s fund (unicef), 2020. Disponível em: <http://apps.who.int/iris>. Acesso em: 6 mai 2023.

Who. World health organization. Covid-19 & global health issues. Virtual press conference. 2023. Disponível em: <https://www.who.int/publications/m/item/virtual-press-conference-on-covid-19-and-other-global-health-issues-transcript---5-may-2023>. Acesso em: 6 mai 2023.