

Telehealth as a tool for organizing services in the health care network

Telessaúde como ferramenta organizacional da rede de atenção à saúde La telesalud como herramienta para la organización de servicios em la red de atención sanitaria

RESUMO

Objetivos: analisar as evidências científicas sobre a telessaúde como uma ferramenta para expansão e melhoria da Rede de Atenção à Saúde (RAS). Método: revisão integrativa da literatura, realizada, entre maio e junho de 2020, nas bases de dados National Library of Medicine (Pubmed), Centro Latino-Americano e do Caribe de Informações em Ciências da Saúde (BVS) e pelo Portal Periódicos CAPES/MEC. Utilizou-se os descritores: Telemedicina; telessaúde; remote consultation. Das 98 publicações identificadas, a amostragem foi de 10 artigos. Resultados: Os principais desafios foram: econômicos, sociais e institucionais. As potencialidades foram a reorganização dos serviços de saúde para garantir o acesso à população facilitando a teleconsulta no cenário da pandemia e a redução de custos. Conclusão: A articulação com as Políticas Públicas é ferramenta para expansão e reorganização da telessaúde na RAS para garantir acesso e continuidade do cuidado em tempos de pandemia, porém a implementação nos serviços é o maior desafio.

DESCRITORES: Telemedicina; Telemonitoramento; Consulta remota; Política Pública; Atenção Primária à Saúde.

ABSTRACT

Objectives: analysis as scientific evidence on telehealth as a tool for expansion and improvement of the Health Care Network (RAS). Method: an integrative literature review, carried out between May and June 2020, in the National Library of Medicine (Pubmed), Latin American and Caribbean Center for Health Sciences Information (VHL) databases and by the CAPES Journal Portal / MEC. The descriptors used were: Telemedicine; telehealth; remote query. Of the 98 publications identified, the sample consisted of 10 articles. Results: The main challenges were: social, social and institutional. The potential was the reorganization of health services to ensure access to the population, facilitating teleconsultation in the pandemic scenario and reducing costs. Conclusion: The articulation with Public Policies is a tool for the expansion and reorganization of telehealth in the RAS to ensure access and continuity of care in times of pandemic, but the implementation of services is the biggest challenge.

DESCRIPTORS: Telemedicine; Telemonitoring; Remote Consultation; Health Policy; Primary Health Care.

RESUMEN

Objetivos: análisis como evidencia científica sobre telesalud como herramienta para la expansión y mejora de la Red de Atención a la Salud (RAS). Método: revisión integradora de la literatura, realizada entre mayo y junio de 2020, en las bases de datos de la Biblioteca Nacional de Medicina (Pubmed), Centro Latinoamericano y del Caribe de Información en Ciencias de la Salud (BVS) y por el Portal de Revistas CAPES / MEC. Los descriptores utilizados fueron: Telemedicina; telesalud; consulta remota. De las 98 publicaciones identificadas, la muestra estuvo formada por 10 artículos. Resultados: Los principales desafíos fueron: social, social e institucional. El potencial era la reorganización de los servicios de salud para asegurar el acceso a la población, facilitando la teleconsulta en el escenario pandémico y reduciendo costos. Conclusión: La articulación con Políticas Públicas es una herramienta para la expansión y reorganización de la telesalud en la RAS para asegurar el acceso y la continuidad de la atención en tiempos de pandemia, pero la implementación de los servicios es el mayor desafío.

DESCRIPTORES: Telemedicina; Telemonitorización; Consulta remota; Política de Salud; Atención Primaria de Salud

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INTRODUCTION

evere Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), responsible for COVID-2019, announced as a pandemic by the WHO in March 2020 1, it has provoked new configurations of care in the health context. The health systems underwent a process of reorganization in the care provided to people with COVID-19, prioritizing access to health services, as well as to maintain the continuity of care for the population. Recent investments in the organization of Health Care Networks (HCN) aim to provide broad health coverage and provide a fundamental basis for adapting to the context of the pandemic. A well-organized and prepared health system has the capacity to maintain equitable access to the provision of essential services. 2

In light of the above, the COVID-19 pandemic boosted scientific and technological development in the world, and fostered the use of information and communication technologies in health (ICTH). A study carried out sought to analyze and reflect on nursing practices during the CO-VID-19 pandemic in public and private services in two states. The authors identified through their practical experiences the organization of the flow of care and assistance provided to patients in each institution according to the demands and characteristics of the services. Among the main organizational demands made is the healthcare teleservice as a tool to ensure continuous care. 3

For this exponential strengthening of ICTH, telehealth stands out, which aims to offer tools to organize the articulation of health systems and ensure the continuity of health care. 2

The health systems underwent a process of reorganization in the care provided to people with COVID-19, prioritizing access to health services, as well as to maintain the continuity of care for the population

Ordinance No. 35 GM/MS, of 2007, instituted the National Telehealth Program to support Primary Health Care (PHC), through the offer of tele-education actions, training second opinions and telediagnosis. 4 Subsequently, it redefines and expands the Program, which is now called the National Telehealth Brasil Redes Program (Telessaúde Brasil Redes). 4

This Program contributes to and integrates the requalification of Basic Health Units, the Informatization and Telehealth Brazil Networks Component in Primary Health Care (PHC). In PHC, telehealth comes to articulate health services, providing opportunities for accessibility improvements to the population, offering means of support to health care and permanent education of the teams, aiming at education for work, with a view to improving the quality of care, expanding access, changing care practices and organizing the work process. 4,5,6,7 In addition, it provides for the development of actions.

Such potentialities of telehealth in Brazil are highlighted in Decree No. 9795, of May 17th, 2019 of the Ministry of Health, which made telehealth a tool for the expansion and improvement of health services, especially PHC, and its interaction with others levels of care strengthening the Health Care Networks (HCN) of the SUS. 8 The main articulation of telehealth with public policies is security in the principles and guidelines of the Unified Health System (SUS), as it provides for quality, resoluteness and individuality with the use of information and communication technologies.

Telehealth, especially in the area of medicine, has been encouraged in several countries, claiming its potential to overcome distances, offer health care in less time, with a reduction in costs and workload. 8 There is evidence that supports adaptations in the aspects that cover the HCN, such as population, PHC, specialized services, health, logistics and governance systems. In addition, they demand structuring of access logistics to telephone, light and internet services and can be permanent for users who are in regions with difficult accessibility, 6,9

Considering the scarcity of productions on the subject and the awakening about the theme in times of pandemic caused by CO-VID-19, this study is justified by the importance of identifying the potentials and challenges in order to relate current health policies to Brazilian health with telehealth. Furthermore, telehealth has been seen as a driving strategy as a new way of thinking and building care for people served by HCN in view of the current scenario caused by the COVID 19 pandemic. Another relevant aspect is that telehealth is a transversal axis that permeates health services, in their administrative, care and management

Due to knowledge gaps, this study aims to address the guiding question: "What is the scientific evidence on telehealth as a tool for expansion and improvement of the Health Care Network?". Thus, the objective of this study is to analyze the scientific evidence on telehealth as a tool for the expansion and improvement of the Health Care Network. Furthermore, it seeks to identify the potential and challenges of telehealth in the care of the population and in the management of services in HCN.

METHODS

This is an integrative review-type study that followed the guidelines of Prisma. 10 For the operationalization of this review, the following steps were carried out: 11 identification of the theme and elaboration of the review question, establishment of criteria for inclusion and exclusion of studies; definition of the information to be extracted from the selected studies; evaluation of the studies included in the review; interpretation of results; presentation of knowledge.

The review question elaborated in this study was: "What is the scientific evidence on telehealth as a tool for the expansion and improvement of the Health Care Network?"

As for the eligibility criteria, literature review, systematic review, experience report, reflection and clinical research articles published in Portuguese, Spanish or English published between 2016 and 2020 that correspond to the research question were included.

The search was carried out from May to June 2020. The search strategy was carried out in the National Library of Medicine (Pubmed) databases, in the Platform called Latin American and Caribbean Center for Health Sciences Information (VHL) and on the CAPES/MEC Periodical Portal. The cross-overs were extracted from the Health Science Descriptors (DeCS) and the Medical Subject Heading (MeSH). Descriptors in Portuguese: identified as telemedicina; telessaúde; remote consultation. The crossing between the aforementioned descriptors was performed using the Boolean operator "AND".

For this research, 4 crossings were performed with the DeCS and MeSH descriptors: (1) telemedicina AND telessaúde;(2). telemedicina AND remote consultation; (3) telessaúde AND remote consultation; (4) telemedicina AND telessaúde AND remote consultation.

A total of 98 publications were identified, 49 studies in Pubmed, 31 in VHL 31 and 18 in CAPES/MECs. After identifying the articles identified in the databases, the first selection of works was carried out based on the reading of the titles, followed by the abstracts. At this stage, articles that did not meet the inclusion criteria and the research question were excluded. In cases where the titles and abstracts were not comprehensible to define the initial selection, the articles were read in full. Subsequently, there was a search and reading of the studies in full. After reviewing the inclusion, exclusion and discard criteria for repeated publications, the sample resulted in 10 articles.

When rereading the selected articles,

the following information was extracted: title, objectives, methods and main results on the potential and challenges of telehealth. The analysis and interpretation of data were carried out in an organized and synthesized way through the elaboration of a synoptic table. The selected articles were analyzed in full and grouped according to the concepts mentioned about the telehealth tool, the potential and challenges of implementing telehealth in HCN. The results are presented using a concept map. The elaboration of the map allowed to organize the knowledge acquired in this review through a hierarchy of concepts, potentials and challenges for the implementation of telehealth in HCN.

The evaluation of the studies included in the review was performed by two researchers independently and later reviewed by two other researchers. The interpretation of the results was tabulated in a synoptic table that highlighted the main conclusions of the studies and led to inferences about the theme in the Health Care Network

Based on the analysis and interpretation of the main results, the potential and advances in the health sector were supported. Such aspects also demonstrated the challenges in the totality of its implementation in HCN. The analysis of the scientific evidence selected in the sample was confronted with public health policies, which led to the presentation of knowledge in a mental map.

RESULTS

Table 1 shows a summary of the information found in the selected articles.

To compile the evidenced data, a conceptual map was developed (FIGURE 1).

The data from the review address some concepts that underlie and support telehealth as a technological tool in the health work process. 6,8,9,12,13 The results demonstrate advances in telehealth in terms of organizational policies and potential. 6,8,14,15,16,17 On the other hand, despite the advances, there were still some challenges and limitations for its full implementation in the Health Care Network.

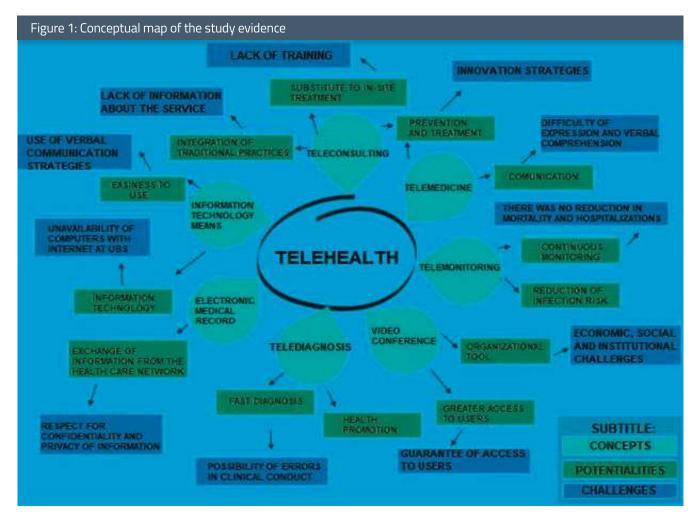
Table 1 - Distribution of references included in the integrative review, according to the databases PubMed, VHL, Portal Periódicos CAPES/MEC, 2021

Authors, Year	Title	Journal	Objective	Main findings
Catapan e Calvo, 2020	Teleconsultation: An Integrative Review of Technology-Media- ted Doctor-Patient Interaction	Rev Bras Educ Med.	Analyze the international experiences of medical teleconsultation, including the means of communication and technologies used, their use, benefits and limitations.	Medical teleconsultation uses the means of communication and information technologies such as telephone, e-mail, electronic consultation systems and videos. Teleconsultation should be used as an additive, alternative or partially substitutive to face-to-face treatment, for diagnosis, counseling, prescription, treatment and monitoring of conditions. Challenges: guaranteeing access to all users, especially the most vulnerable and those who have difficulty using the technology.
Maldonado, Marques, Cruz, 2016	Telemedicine: chal- lenges to its diffusion in Brazil	Cad Saude Publica.	Discuss the main challenges for the dissemination of Telemedicine in Brazil	Telemedicine presents economic, social and institutional challenges. Social challenges: integrating remote regions for prevention, diagnosis and treatment. Economic challenges: they reduce the cost, however, they demand investments in services. Institutional challenge: there is a close correlation between the potential of telemedicine and the configuration of health services.
Damasceno, Renata Fiúza e Caldeira, Antônio Prates 2020	Factors associated with the non-use of teleconsulting by doctors from the Fa- mily Health Strategy	Cien Saude Colet.	Evaluate the frequency and factors associated with the non-use of the teleconsulting service by physicians working in the Family Health Strategy in Northern Minas Gerais.	A total of 385 physicians participated, of which 55.8% do not use the teleconsulting service in the FHS. Challenges: not using teleconsulting was associated with unavailability of a computer with internet in the service for the medical professional to use (p = 0.001); lack of information about the service (p < 0.001) and lack of training in the use of teleconsulting (p < 0.001).
Schmitz et al., 2017	Teleconsultation: a new frontier in the interaction between doctors and patients		Explore the situation of teleconsultation in North America, Europe and other countries, making a parallel with the national situation within medicine and other health professions.	Teleconsultation, in international contexts, is part of the daily practice of health services from three perspectives: teleconsultation and teleeducation (integrates traditional practices); telediagnosis and teleconsultation (substitutive and additive); teleconsultation (permeates and supports health actions and the flow of people in other services in the care network). Challenges: in Brazil, teleconsultation is used for some of the medical specialties.

Song et al., 2020	The role of telemedicine during the COVID-19 epidemic in China—experience from Shandong province	Crit Care.	Structuring telemedicine with the purpose of providing guidance on prevention, treatment, training, communication and remote consultation to the community, cost reduction, reduction of infection risks, online consultancy.	Potential: Telemedicine was considered a tool in prevention, treatment, communication and consultancy. Potential: savings in time and cost, in addition to reducing the risk of spreading infections, avoiding close contacts with patients with COVID-19.
Harzheim et al., 2019	Telehealth as an organizational axis of the universal health systems of the 21st century	Rev Bras Med Fam Comunidade	To present a model in which telehealth acts as a service goal, strengthening Primary Health Care by offering greater technological density, extending its reach to all points of the system and enabling PHC to act as an effective coordinator of the health system.	Potential: Telehealth was identified as an organizational tool in health services insofar as its benefits. Benefits: ease of use, time savings, access to other professionals, new information and greater access to patients.
Barbosa e Silva, 2017	Telehealth Nursing Care: What Influence Distance on Commu- nication?	Rev Bras Enferm.	Evaluate the per- ception of nurses regarding interperso- nal communication in telehealth care.	From the 7 nurses interviewed, four categories emerged: Understanding the importance of communication; Interpersonal relationships interfering with communication; Communicating through technology; and Learning the communication process. Telehealth in Brazil has facilitated professional practice; however, it is more difficult to communicate, mainly due to the difficulty in perceiving non-verbal signals. This difficulty will be resolved by the competence acquired in their professional training with regard to interpersonal communication.
Márquez Velás- quez, 2020	Teleconsultation in the Coronavirus pandemic: challenges for post-COVID-19 telemedicine		Describe the experience of implementing a teleconsultation service in a medical-surgical service institution.	Potential: Information and communication technology provided the user with information, training, counseling on the components of health promotion, disease prevention, diagnosis, treatment, rehabilitation, palliation and telesupport, mainly through the exchange of information in the Health Care Network.



Pisa et al., 2019	Effectiveness of telemedicine-based interventions on health outcomes in patients with multi- morbidity in primary care: systematic review	Aten primaria.	To assess the effectiveness of telemedicine interventions to improve health outcomes in patients with multiple morbidities in Primary Health Care.	There was no decrease in mortality, number of urgent consultations and discharge from hospital institutions. Interventions based on telemedicine in the studies found are fundamentally focused on monitoring and communication with health professionals.
Jiayao Zhang et al, 2020 Source: LANA, et al. 2021	Remote consulta- tion based on mixed reality technology	J Glob Health Rep.	Evaluate the teleme- dicine consultation, using a mixed tech- nology model.	The results were revolutionary in traditional preoperative case discussions, doctor-patient communication, and intraoperative consultation guidelines. Challenge: wide coverage in remote areas. Benefits: reduce expenses, time and energy for patients and physicians; increase the efficiency of medical work, alleviate the imbalance of medical resources and improve the level of development of the entire industry.



Source: Lana et al., 2021

8,12,14,18,19,20

Telehealth is the set of actions that are developed through information and communication technology to provide the user with information, training, counseling on the components of health promotion, disease prevention, diagnosis, treatment, rehabilitation and palliation. 13

The work processes presented in the conceptual map (FIGURE 1) encompass teleconsulting, telediagnosis, second opinion provision, telesurgery, telemonitoring (telesurveillance), permanent education, tele-education, videoconferences, clinical simulations, electronic medical records, training and analysis of databases and virtual library of images. 12

Initially, teleconsultation integrates traditional practices as in the case of teleconsultation and tele-education; in addition, it has a substitutive and additive nature, as in the case of telediagnosis and teleconsultation. Finally, as a service that permeates and supports both health actions and the flow of people in the other elements of the HCN. 15

Among the potential of teleheal-th,13,16,17 highlights include the organization of services, wide remote coverage, prevention, treatment, rehabilitation, palliation, training, communication and remote consulting for the community, in addition to cost reduction, reduction of infection risks, online consulting and telesupport. The possibility of reorganizing the systems in the HCN is capable of overcoming distance barriers, in a flexible and convenient way for patients, with the possibility of contributing to the continuity of care, patient autonomy and saving resources. 14,16,17

The benefits from telehealth still permeate ease of use, time savings, access to other professionals, new information and greater access for patients to universal health systems. 6 Thus, telehealth integrated to the services available on the network, strengthens the role of the PHC as an organizer of care, in addition to allowing the exchange of information between all services that make up the HCN.

Telehealth still has the role of fostering

Public Health Policies in HCN because it seeks to promote the continuity of care, especially in times of social isolation. The challenge of including the physical examination of users and the acceptance of pa-

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tients and professionals in a remote service, 8 it can be minimized by the possibility of providing comprehensive, periodic and multidisciplinary care to health users in a single service. The potential of telehealth to incorporate technological discoveries from other areas of knowledge will offer interdisciplinary and interrelated actions proposing a comprehensive, systematic and multidisciplinary care to health users. 14

In the meantime, one can hope that te-

lehealth will be able to articulate the actions of telemedicine, tele-nursing and others, multiplying the offer of services in PHC and access to health services in remote regions, as it has the potential to expand the actions of health professionals, integrating them to the health services in the HCN. 14 Health users with chronic diseases in continuous care in the HCN used telehealth in times of social isolation, caused by the pandemic, as an essential tool in the continuity of health. Thus, the disruption of health care was minimized by telehealth, preventing consequences to users' health.

On the other hand, the interdisciplinarity of care through remote care may break through ethical issues such as secrecy, confidentiality and privacy of information that are related to health users. 8,12,21 According to the 1988 Brazilian Federal Constitution, in its article 5, item x, its main goal is to ensure the inviolability of intimacy, private life, image and honor of all individuals. 22

From a sensitive and attentive look to the guidelines of the National Policy on Health Information and Informatics (PNIIS - Política Nacional de Informação e Informática em Saúde), which aims to support management, surveillance and health care processes, 23 it can be said that telehealth becomes a weakened alternative with regard to aspects of confidentiality, secrecy and privacy of personal health information. It is also worth noting that electronic devices can suffer hacker attacks, be easily accessed by family members, making it susceptible to the dissemination of this information, without the user's desire and consent.

On the other hand, making investments in specific and adequate equipment allows the dissemination of some information to promote the health of individuals, training and improvement of different knowledge, both for professionals and users. The experience in distance education provides an appropriate reception and qualified listening to its actors: users, managers and employees, in addition, the transversality, the inseparability between care and management, as well as protagonism, co-respon-

sibility, in addition to collective and individual autonomy. 24 Therefore, telehealth can be seen as an important tool so that the guidelines of the National Humanization Policy (PNH - Política Nacional de Humanização) can, in fact, guide the production and management of care and work processes at the primary, secondary and tertiary levels of care the health. 25

Telehealth will foster the purposes of the PNH and the National Policy for Continuing Health Education (PNEPS - Política Nacional de Educação Permanente em Saúde), as it provides opportunities for communication between SUS actors, managers, workers and users, causing changes in the daily practices of health services based on in light technologies of the health work process. 25,26 Thus, the Telehealth Policy articulated and integrated with the PNH and PNEPS strengthened the recognition of subjects, through qualified listening based on their needs, aiming at emancipation and professional development.

However, offering care emancipation actions remotely to the community, as well as professional enhancement through permanent education activities, may exclude some users with structural, organizational and functional limitations. Thus, telehealth will not guarantee equity of access to health professionals and users, as recommended by the guidelines and principles of the SUS. In the current context, the implementation of telehealth services will still be challenging because it demands inputs and materials in services, as well as communication inputs and services for all users, which guarantee the ethical and confidential aspects of the data.

It is observed that one of the legacies of telehealth in times of pandemic was the emancipation of health users from preventive health measures that include correct hand hygiene techniques, good health habits and the construction of homemade masks. Furthermore, it promoted actions such as educational and family meetings in a remote way that can perpetuate the post-pandemic, in users who are better adapted to this tool.

According to some authors, equity will

not be considered in its entirety because it will only include people who have prior knowledge of technological means or have access to them 8,18,20 and without hearing and/or visual impairment, in contrast to public health guidelines. The bold cha-

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racteristics proposed by the SUS aim to direct a health system in an equal way to all Brazilians, 27 having as a principle the equity in health which aims to reduce differences considered unnecessary, avoidable and unfair. However, when analyzing this principle from the perspective of the results referring to the applicability of telehealth in

hcn, it is observed that it is extremely important to pay attention to the technological inequality that still persists today.

Another challenge of telehealth is to include users with hearing and/or visual difficulties that hinder the expression and apprehension of non-verbal communication, requiring health professionals to develop the capacity for paraverbal perception. 18 Such communication challenges between professionals and users can generate clinical behavior errors and consequences for the population's health. Furthermore, equity, which seeks justice and equality in the context of public health, may not be fully prioritized in telehealth care, since the most vulnerable population, elderly population and children, have problems with communication via technological means. 13 Thus, further exacerbating inequalities in public engagement, it can be inserted as a complement to other strategies. 28

In the management aspect, telehealth plays an important role in providing means of articulation between the three spheres of government. 14 Telessaúde Brasil Redes works as a network of services that, from different nuclei, structure state, regional or inter-municipal projects, through the shared work of state and municipal health secretariats, educational institutions and health services, offering permanent support to professionals in different services and different locations. 7 The articulation of these policies will lead to robust organizations in the HCN focused on the specificities of each region, providing opportunities for effectiveness and efficiency in the services offered to the population.

However, health services must present resources for the operationalization of Policies in an articulated manner. The unavailability of a computer with internet access at the Basic Health Unit (UBS) for the professional to use, the lack of information about the service and the lack of training in the use of teleconsultation were the items most reported by professionals, which impede the implementation of the telehealth. 20 The results reinforce that the information technology infrastructure of the Basic Health Units, the dissemination

of the service and the provision of training should guide the strategies for implementing, disseminating and improving the quality of the teleconsulting service in PHC. As recommended by the National Policy for Primary Care (PNAB), an adequate infrastructure with good conditions for the operation of Basic Health Units (UBS) is necessary, guaranteeing space, furniture and equipment, as well as accessibility for people with disabilities, according to the current regulations. 29

Since there was a great demand for activities within the UBS, linked to a lack of resources to hire these professionals, telehealth comes to significantly help in activities that aim at monitoring in a unique way and impacting the reduction of waiting times, costs and risks to users, and thus help in the health care network. It is also suggested that audits be carried out, compiling the actions carried out at the UBS and the telehealth service so that the need for gains in scale, horizontal integration and strengthening is raised, centralizing resources within these sectors in a weighted manner. 15

It can be seen that telehealth, in advance, may seem to be an unfavorable strategy for the health system as it has an innovative character which will demand a high cost to the system, since it needs to be thought of from the infrastructure to the availability of resources, in an equal way to users as a comparison to the studies found in the literature of this study. However, the benefits arising from its implementation in care, management and public management are notorious.

Telehealth has been seen as an economic strategy for Brazil, as it offers unique opportunities for the development of its practical applications. Since Brazil has a large territorial extension, thousands of isolated and difficult to access places, extremely unequal distribution of good quality medical resources, among other aspects that have been challenging the realization of the right to health - universal, comprehensive and equitable - allow us to predict the existence of a great potential for the expansion of telehealth in the country. 14 If there is an impact on the efforts of state and fede-

ral governments in the implementation of telehealth, it could generate an innovative impact on economic development and its determinants of the country.

Scientific evidence reveals that the use of Telehealth resides in extremely measurable facts, such as the proof of the drop in communication costs, the increasing current availability of health institutions and

The study limitation is due to the method, which may restrict the inclusion of scientific evidence

teams with development and applications in the area, and the results already obtained nationally and internationally from its applicability and efficiency. 30,31

Simultaneously with all these aspects found between the correlation of public health policies and telehealth, it can be seen that this tool has gained prominence in the current scenario in which the world finds itself, according to the findings of this review, it was possible to note that it is stood out in this period. Telehealth has become a strong ally in the care of the population, as it was able to offer, through the tool, instructions for health intervention processes in a quick and effective way.

The study limitation is due to the method, which may restrict the inclusion of scientific evidence. However, studies demonstrate the relevance of this study given the current context where health users need to adopt preventive measures for COVID-19, such as social isolation and maintaining continuity in the health-disease process in the HCN. Telehealth has become a tool that guarantees access to health for users and promotes public policies with different approaches.

CONCLUSION

The findings of this review demonstrate that the potential of telehealth lies in the articulation with public policies based on SUS principles, in addition to contributing to access to the population in the SUS. However, the lack of equality to this resource was evidenced due to the fact that a large proportion of professionals and users do not have the skills to handle the tool or do not have digital access. Another challenging aspect is the secrecy, confidentiality of information and privacy that still demand attention, since digital media become more vulnerable spaces to suffer attacks. Therefore, there is an urgent need to implement telehealth in all components of the HCN in a safe way and with quality care.

Finally, the results of this study can support and encourage discussions between managers and health professionals for the process of managing and organizing telehealth.

REFERENCES

- 1- Samir D. Oxidative Stress Associated with SARS-Cov-2 (COVID-19) Increases the Severity of the Lung Disease A Systematic Review. J Infect Dis Epidemiol [Internet]. 2020 [acesso em 2021 mar 6];6(121):1-6. Disponível em: https://www.clinmedjournals.org/articles/jide/journal-of-infectious-diseases-and-epidemiology-jide-6-121.php?jid=jide.
- 2- Organização Pan-Americana de Saúde (OPAS). As redes de atenção à saúde [Internet]. Brasília (DF): OPAS/OMS; 2011 [acesso em 2020 julho 21]. Disponível em: https://www.paho.org/bra/index. php?option=com_docman&view=download&category_slug=servicos-saude-095&alias=1402-as-redes-atencao-a-saude-2a-edicao-2<emid=965.
- 3- Oliveira APD, Campagnoli M, Meneguetti C, Ramos MJ, Silva EM. Práticas de enfermagem durante a pandemia de COVID-19: relato de experiências. Saúde Coletiva (Barueri). 2021 [acesso em 30 agosto 2021];11(66): 6349–6358. Disponível em: https://doi.org/10.36489/saudecoletiva.2021v11i66p6349-6358
- 4- BRASIL. Ministério da Saúde. Manual de Telessaúde para Atenção Básica/Atenção Primária à Saúde. Brasília-DF [acesso em 2020 julho 22]. Disponível em: http://189.28.128.100/dab/docs/portaldab/publicacoes/manual_telessaude.pdf.
- 5- BRASIL. Ministério da Saúde. Planejamento e financiamento do SUS. Brasil. Conselho Nacional de Secretários de Saúde. O Financiamento da Saúde / Conselho Nacional de Secretários de Saúde. Brasília: CONASS, 2011; [acesso em 2020 junho 20]. Disponível em: https://www.conass.org.br/bibliotecav3/pdfs/colecao2011/livro_1.pdf.
- 6- Harzheim E, Chueiri PS, Umpierre RN, Gonçalves MR, Siqueira AC da S, D'Avila OP, et al. Telessaúde como eixo organizacional dos sistemas universais de saúde do século XXI. Rev Bras Med Fam Comunidade. 2019;14(41):18-81. Disponível em: https://doi.org/10.5712/rbmfc14(41)1881.
- 7- BRASIL. Ministério da Saúde. Programa Nacional de Melhoria do Acesso e da Qualidade da Atenção Básica. Brasília-DF. 2011 [acesso em 2020 junho 21]. Disponível em: http://aps.saude.gov.br/ape/pmaq.
- 8- Catapan SCA, Calvo MCM.Teleconsultation: an Integrative Review of the Doctor-Patient Interaction Mediated by Technology. Rev Bras Educ Med. 2020 [acesso em 2020 junho 21];44(1),e002:1-13. Disponível em: https://doi.org/10.1590/1981-5271v44.1-20190224. ing.
- 9- PERU. EsSalud. Instituto de Evaluación de Tecnologías en Salud e Investigación. REPORTE BREVE N° 04: Uso de la Telemedicina en COVID: Seguimento y Manejo de casos Positivos. 2020 [acesso em 2020 junho 22]. Disponible en: http://docs.bvsalud.org/biblioref/2020/05/1096292/rb-04-telemedicina-covid_21marzo.pdf.
- 10- Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ. 2021 [acesso em 2021 agosto 30];372:(71). Disponívl em: doi: 10.1136/bmj.n71.
- 11- Sousa LMM, Vieira CMAM, Severino SSP, Antunes AV. A metodologia de revisão integrativa da literatura em enfermagem. Invest. educ. enferm. 2017 [acesso em 2020 junho 22];21(2):1-48. Disponível em: http://www.sinaisvitais.pt/images/stories/Rie/RIE21. pdf#page=17.

- 12- Rezende EJC, Melo MCB, Tavares EC, Santos AF, Souza C. Ética e telessaúde: reflexões para uma prática segura. Rev Panam Salud Publica [Internet]. 2010 [acesso em 2020 junho 23];28(1):58–65. Disponível em: https://scielosp.org/pdf/rpsp/2010.v28n1/58-65/pt.
- 13- Velásquez JRM. Teleconsulta en la pandemia por Coronavirus: desafíos para la telemedicina pos-COVID-19. Rev Colomb Gastroenterol. 2020 [acesso em 2020 junho 23];35(Supl 1):5-16. Disponível em: https://doi.org/10.22516/25007440.543.
- 14- Maldonado JMV, Marques AB, Cruz A. Telemedicina: desafios à sua difusão no Brasil. Cad Saude Publica. 2016 [acesso em 2020 junho 23];32(Supl 2):e00155615. Disponível em: https://doi.org/10.1590/0102-311X00155615.
- 15- Schmitz CAA, Rodrigues GM, Nunes UR, da Silva SAC, Pereira DO, Goulart MBC, Dal MRG, et al. Teleconsulta: nova fronteira da interação entre médicos e pacientes. Rev Bras Med Fam Comunidade. 2017 [acesso em 2020 junho 23];12(39):1-7. Disponível em: https://doi.org/10.5712/rbmfc12(39)1540.
- 16- Song X, Liu X, Wang C. The role of telemedicine during the COVID-19 epidemic in China -experience from Shandong province. Crit Care. 2020 [acesso em 2020 junho 23];24(178):11-23. Disponível em: https://doi.org/10.1186/s13054-020-02884-9.
- 17- Jiayao Z, Fei G, Zhewei Y. Remote consultation based on mixed reality technology. J Glob Health Rep. 2020 [acesso em 2020 junho 23];4(1):31-32. Disponível em: https://doi.org/10.1016/j.glohj.2020.01.001.
- 18- Barbosa IA, Silva MJP. Cuidado de enfermagem por telessaúde: qual a influência da distância na comunicação?. Rev Bras Enferm. 2017[acesso em 2020 junho 23];70(5):928-934. Disponível em: https://doi.org/10.1590/0034-7167-2016-0142.
- 19- Pisa BP, Lobato MP, Calzada CM, Lozano MJG. Efectividad de las intervenciones basadas en telemedicina sobre resultados en salud en pacientes con multimorbilidad en atención primaria: revisión sistemática. Aten primaria. 2019 [acesso em 2020 junho 20; 52(10):759-769. Disponível em: https://doi.org/10.1016/j.aprim.2019.08.004.
- 20- Damasceno RF, Caldeira AP. Fatores associados à não utilização da teleconsultoria por médicos da Estratégia Saúde da Família. Cien Saude Colet. 2019; [acesso em 2020 junho 20];24(8):3089-3098. Disponível em: https://doi.org/10.1590/1413-81232018248.28752017.
- 21- Araujo CN, Mota FRL. Prontuário de paciente. Inf Pauta. 2020 [acesso em 2020 junho 20];5(Especial 1):52-7. Disponível em: https://doi.org/10.36517/2525-3468.ip.v5iespecial1.2020.43512.52-67.
- 22- BRASIL. Constituição da República Federativa do Brasil 1988. Art 5, inciso x. Texto compilado da Emenda Constitucional n° 95 de 15/12/2016 [Internet]. Brasília (DF). 2004 [acesso em 2020 junho 21]. Disponível em: https://www.senado.leg.br/atividade/const/con1988/con1988_15.12.2016/art_5_.asp.
- 23- BRASIL. Ministério da Saúde. Política Nacional de Informação e Informática em Saúde. Brasília (DF). 2016 [acesso em 2020 junho 19]. Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/politica_nacional_infor_informatica_saude_2016.pdf.
- 24- Santos A. Escuta qualificada como ferramenta de humanização do cuidado em saúde mental na Atenção Básica. APS [Internet]. 2019 [acesso em 2020 junho 21]; 1(2): 170-179. Disponível em:

REFERENCES

https://apsemrevista.org/aps/article/view/23.

25- BRASIL. Política Nacional de Humanização PNH [Internet]. Brasília-DF. 2013 [acesso em 2020 junho 20]. Disponível em: http:// bvsms.saude.gov.br/bvs/publicacoes/politica_nacional_humanizacao_pnh_folheto.pdf.

26- Dolny LL, Lacerda JT, Natal S, Calvo MCM. Serviços de Telessaúde como apoio à Educação Permanente na Atenção Básica à Saúde: uma proposta de modelo avaliativo. Interface (Botucatu) [Internet]. 2019 [acesso em 2020 junho 20];23:e180184. Disponível em: https://doi. org/10.1590/interface.180184.

27- BRASIL, Lei n° 8.080, de 19 de Setembro de 1990 [Internet]. Brasília (DF). 1990 [acesso em 2020 junho 19]. Disponível em: http:// www.planalto.gov.br/ccivil_03/leis/l8080.htm.

28- Carvalho V, Souza M, Barreto J, Silva E. Engajamento público na avaliação de tecnologias em saúde no Brasil: o caso da consulta pública sobre o Trastuzumabe. BMC Health Serv Res. 2019 [acesso em 2020 junho 19];19(762):1-11. Disponível em: https://doi. org/10.1186/s12913-019-4555-6.

29- BRASIL, Ministério da Educação. REGIMENTO INTERNO NÚCLEO INTERNO DE REGULAÇÃO - NIR HU-UFGD. Publicado no Boletim de Serviço Nº 97 de 29/05/2017. Brasília (DF). 2017 [acesso em 2020 junho 19]. Disponível em: http://www2.ebserh.gov.br/documents/16692/2104628/Regimento+interno/7a314c9a-900a-4e3 c-a9c2-d43d98e26153.

30- Nilson LG, Maeyama MA, Dolny LL, Boing AF, Calvo MCM. Telessaúde: da implementação ao entendimento como tecnologia social. RBTS - Itajaí. 2018 [acesso em 2020 junho 19];5(1):33-47. Disponível em: https://doi.org/10.14210/rbts.v5n1.p33-47.

31- Celes RS, Rossi TRA, Barros SG, Santos CML, Cardoso C. A telessaúde como estratégia de resposta do Estado: revisão sistemática. Rev Panam Salud Publica. 2018 [acesso em 2020 junho 19];42(e84):1680-5348. Disponível em: https://doi.org/10.26633/ RPSP.2018.84.