

# "We have everything to be successful, but we still have a long way": views about telehealth in Brazil

Lívia Gaspar Fernandes	MSc, Masters and Doctoral Program in Physical Therapy, Universidade Cidade de São Paulo (UNICID), São Paulo, Brazil; Centre for Pain, Health, and Lifestyle (CPHL) Brazil; ORCID: <a href="https://orcid.org/0000-0002-3417-8937">https://orcid.org/0000-0002-3417-8937</a> ; lfernandesft@gmail.com. Rua Cesário Galero, 448 - Tatuapé, São Paulo - SP, 03071-000, Brasil; +55 (19) 998007495.
Marina P. Baroni	PhD student, Masters and Doctoral Program in Physical Therapy, Universidade Cidade de São Paulo (UNICID), São Paulo, Brazil; Centre for Pain, Health, and Lifestyle (CPHL) Brazil; marinapegoraro@hotmail.com
Rafael F. F. Oliveira	MSc student, Masters and Doctoral Program in Physical Therapy, Universidade Cidade de São Paulo (UNICID), São Paulo, Brazil; Centre for Pain, Health, and Lifestyle (CPHL) Brazil.; rafael_flp@hotmail.com
Bruno T. Saragiotto	PhD, Masters and Doctoral Program in Physical Therapy, Universidade Cidade de São Paulo (UNICID), São Paulo, Brazil; Centre for Pain, Health, and Lifestyle (CPHL) Brazil; bruno.saragiotto@gmail.com

Submission date: October 01, 2022 | Approval date: April 24, 2023

## Abstract

**Introduction:** Telehealth has been regulated at the public, private, and supplementary health levels. Therefore, health professionals and health system users face different ways of interacting in an attempt to provide continuing care. **Objectives:** To identify the perception of telehealth by individuals diagnosed with COVID-19 at the onset of the pandemic. **Methods:** Qualitative descriptive study based on semi-structured interviews conducted by videoconferencing. An e-survey was used to retrieve demographic and digital health literacy data. Descriptive analysis was conducted using the SPSS software. Qualitative data was analyzed using a content analysis. **Results:** Twenty-three people were interviewed. Findings included themes related to a telehealth time continuum (present and future) and health information on the internet. Facilitators for telehealth encompassed continuous care and context flexibility, as well as saving time and money; barriers encompassed the lack of physical presence, low digital literacy, and limited access to telehealth. Participants reported ambiguous views about telehealth continuing to be an option beyond COVID-19. **Conclusion:** Telehealth is perceived as an ally to care. To continue as an alternative, implementation barriers should be overcome. **Keywords:** Telehealth; Brazilian Unified Health System; COVID-19.

## Resumen

**"Todo tiene que salir bien, pero aún nos queda camino por recorrer": visiones sobre la telesalud en Brasil**  
**Introducción:** La telesalud fue regulada en la salud pública, complementaria y privada en Brasil. Como consecuencia, se han explorado nuevos formatos de interacción entre profesionales de la salud y usuarios. **Objetivos:** Identificar las percepciones sobre el uso de la telesalud por parte de personas que fueron diagnosticadas con COVID-19 al inicio de la pandemia. **Métodos:** Estudio cualitativo descriptivo realizado a partir de entrevistas individuales semiestructuradas conducidas por videoconferencia. Los datos demográficos y de alfabetización digital en salud se obtuvieron de una encuesta electrónica de apoyo. Los análisis descriptivos se realizaron con el software SPSS y los datos cualitativos fueron analizados a partir de un análisis de contenido temático. **Resultados:** Veintitrés individuos fueron entrevistados. Los temas cubrieron el continuo temporal de la telesalud y la información de salud disponible en la internet. Los facilitadores de telesalud en el presente han incluido asistencia continua y flexibilidad de contexto, y ahorro de tiempo y dinero; mientras que las barreras abarcaron la falta de presencia física, la baja alfabetización digital y el acceso a la telesalud. Las visiones de los entrevistados fueron ambiguas en relación a la permanencia de la telesalud como alternativa en el futuro. **Conclusión:** La telesalud es vista como un aliado para la continuidad del cuidado a la salud. Para que perdure, se sugiere superar las barreras relacionadas con su implementación. **Palabras clave:** Telesalud; Sistema Único de Salud; COVID-19.

## Resumo

**"Tem tudo pra dar certo, mas a gente ainda tem um caminho a percorrer": visões sobre a telessaúde no Brasil**  
**Introdução:** A telessaúde foi regulamentada nas redes pública, suplementar e privada de saúde no Brasil. Com isso, novos formatos de interação entre profissionais de saúde e usuários tem sido explorado. **Objetivos:** Identificar percepções sobre a utilização da telessaúde de indivíduos que foram diagnosticados com COVID-19 no início da pandemia. **Métodos:** Estudo qualitativo descritivo conduzido a partir de entrevistas semiestructuradas individuais realizadas por videoconferência. Dados demográficos e de letramento digital em saúde foram obtidos a partir de uma e-survey de apoio. As análises descritivas foram conduzidas pelo software SPSS e uma análise de conteúdo temática foi utilizada para análise dos dados qualitativos. **Resultados:** Vinte e três indivíduos foram entrevistados. Os temas abrangeram o continuum temporal da telessaúde e informações sobre saúde na internet. Facilitadores para a telessaúde no presente incluíram assistência contínua e flexibilidade ao contexto, e economia de

*tempo e dinheiro; enquanto as barreiras englobaram a falta de presença física, o baixo letramento digital e o acesso à telessaúde. As visões dos entrevistados foram ambíguas em relação à permanência da telessaúde como alternativa de cuidado no futuro. Conclusão: A telessaúde é vista como aliada à continuidade do cuidado à saúde. Para que perdure, sugere-se superação de barreiras ligadas à implementação.*

**Palavras-chave:** Telessaúde; Sistema Único de Saúde; COVID-19.

## Introduction

The healthcare model is a product of the interaction among its actors (i.e., managers, health professionals, and users), the work conditions, the possibilities of institutional care, and health literacy. On the horizon of possibilities for new molds of education, management, and social participation, telehealth emerged as a promising modality. Even though the evidence supporting telehealth is robust and its practice promising,<sup>1,2</sup> - especially when coming from rich countries<sup>3,4</sup> - implementing it in populations that experience different contexts (ie, developing countries), telehealth can contribute to the instability of health care rather than to its improvement.<sup>5</sup>

Telehealth is an umbrella term used to refer to the use of information and communication technologies (ICTs, such as websites, apps, telephone) to offer health services, be they synchronic (i.e. videoconference) or asynchronous (e.g., the sending of messages and exams)<sup>6</sup>. The digital environment and their tools offer a means through which to bypass the dehumanized elements of health care, by expanding access, facilitating the exchange of health information (e.g. within the multidisciplinary team or for support and continued education), as well as reinforce the autonomy and independence of users in the management of their conditions<sup>7</sup>. Nevertheless, observing the ways to apply telehealth (existing and possible) can aid in future decision-making in the realm of healthcare policies. This observation seeks to prevent remote health technologies and services from endorsing or aggravating existing training, management and participation problems, and may actually contribute to the democratization of access to health initiatives<sup>7</sup>.

Telehealth exposes a series of challenges related to interactions between health professionals and users<sup>7</sup>. Although services using telehealth have been perceived as satisfactory or even “as good as” those provided in-person<sup>1,8</sup>, its implementation requires new competencies on the part of health professionals and users in the spheres of communication, digital literacy, therapeutic alliance, and shared decision-making<sup>1,9</sup>. With the growing use of telehealth in the context of the pandemic in Brazil<sup>10,11</sup>, it is pertinent to investigate how advances in technology in the area of health are being perceived by the entire community.

Therefore, the present study aimed to answer the following research question: How is telehealth perceived and experienced by its users? To achieve this, the sample consisted of individuals diagnosed

with COVID-19 at the onset of the pandemic. In addition, understanding telehealth as a tool that is potentially capable of contributing to the humanization of health care, the present study also discusses the obtained results in the light of public policies concerning telehealth in Brazil.

## Method

### Study design

This study presents a descriptive qualitative design conducted by means of semi-structured individual interviews carried out online (Whereby® platform). Data collection took place from June to August 2020. This study was approved by the Research Ethics Committee of Universidade Cidade de São Paulo (UNICID), CAAE: 20309919.5.0000.0064. This study has been reported according to the Consolidated Criteria for Reporting Qualitative Research (COREQ)<sup>12</sup>.

### Theoretical reference

The present study stems from the discussions proposed by Lupton<sup>7,13</sup> and aims to include the cultural, social, political, and ethical realms in the debate over digital technologies for health. This philosophical current is derived from critical theory, more specifically concerning one branch geared toward the critical analysis of digital health literature. In general, the chosen theoretical reference proposes to look to beliefs, suppositions, power relations, and dynamics of interactions that unfold, encompassing the studied phenomenon<sup>14</sup> - telehealth<sup>7</sup>. The core debate surrounding telehealth emphasizes its potential to democratize access to health services and overcome geographic, literacy, and resource-limited barriers. Such elements are often mentioned as barriers to the diffusion of health care and information, especially in developing countries<sup>10,15,16</sup>. When adopting the critical lens as a starting point, the main goal is to articulate a debate that can confront this discourse.

### Participants

The present study included patients diagnosed with COVID-19. We understand that this population had a greater chance of having had contact with telehealth within the period studied, since the public health policies gave priority to health for people affected by the disease from 2020-2021. The inclusion criteria were: be at least 18 years of age, be able to read and understand the Portuguese language, have a preserved cognitive state compatible with participation

in an interview, and have a prior diagnosis of COVID-19 (by PCR exam or serology). All information was acquired by self-reports. There were no classifications of patients as light, moderate, or severe, according to their symptomatology, but the flow chart for the handling of symptomatic cases indicated by the Ministry of Health<sup>17</sup> was used as a basis for the inclusion of individuals who: a) were diagnosed with COVID-19 and continued in home care observation; b) sought out hospital care and returned to home care observation, and c) sought out hospital care and continued to be hospitalized in the infirmary (less than or equal to 10 days). The exclusion criteria for this study were: individuals who required hospitalization in an ICU or hospitalization in an infirmary for more than 10 days. The extended period of hospitalization in an infirmary was used as an exclusion criterion, since the aim of this study was to observe one's perception of telehealth, which is limited within a hospital environment.

### Interviews

The invitation to participate in the interviews was conducted through an announcement published in the main social media. Participation was voluntary, with no incentives, and consisted of two moments: 1) interview via videoconference or call, carried out through the Whereby® platform; and 2) completion of an e-survey through the TypeForm® platform.

The inclusion criteria were first conferred through an initial exchange of messages. Next, an access link to the Whereby® platform was sent. The beginning of the interview began by the interviewer presenting him/herself (LF), followed by the explanation of the aims of the study. The Free and Informed Consent Form (FICF) was then presented in an online form, with the option to download the FICF. The participants declared their consent to participate in this study both orally and through the first item of the e-survey. The interviews lasted 10 to 38 minutes.

### e-Survey

After the end of the interviews, all of the participants received a new access link to the TypeForm® platform and were advised to complete the e-survey, which treated: age, gender, working status, level of education, use of health plan, and medical history (comorbidities and health habits). In addition, the eHealth Literacy Scale (eHEALS)<sup>18</sup> was applied to assess participants' digital literacy in health. e-HEALS consists of a self-reported scale of eight items that aim to evaluate how the individuals perceive their skills, their knowledge, and their comfort as regards the digital environment concerning health information.<sup>18,19</sup> The answer options followed the Likert scale of 5 points, varying from 1 (totally disagree) to 5 (totally agree), resulting in a score from 8 to 40 points. A

higher score in the e-HEALS is related to a high self-perception of digital literacy in health. However, there is no cutoff point described in the literature; therefore, it was not possible to discriminate the score that would illustrate the transition between inadequate and adequate levels of digital literacy in health.

### Procedures and Reflexivity

All of the interviews were conducted by the same researcher (LF, physical therapist, with prior experience in doing interviews and conducting qualitative studies). The interviewer had not had contact with the interviewed individuals prior to the study itself. The structure of the full interview is presented in Chart 1. All of the interviews were recorded, with authorization from the participants and were transcribed verbatim. The interviews took place in a flexible manner, in such a way that the interviewer tried to treat all of the themes set out in questionnaire, in an attempt to make the interaction flow, making use of specific techniques (probing) to delve deeper into the issues brought up by the participants. The same researcher who conducted the interviews (LF) was also responsible for the transcription of the recorded material. A second researcher (RFO) evaluated a sample of the transcribed material with their respective audios in an attempt to observe their accuracy and fidelity. The transcriptions were carried out in parallel with the interviews, and data collection was interrupted when the interviewer noted that new interviews began to reinforce references that had come up in previous interviews<sup>20</sup>.

## Data analysis

### Sociodemographic data

The e-survey data were transferred to a Microsoft Excel file and analyzed descriptively: the dichotomic variables were presented using frequency data (n) or percentage (%) and the numerical variables were presented using the average and standard deviation or median and interquartile range, depending on the distribution of data. All of the sociodemographic data were analyzed using SPSS software, version 20.0 (IBM Corp., Armonk, NY, USA).

### Thematic analysis

The method employed for qualitative data analysis consisted of an iterative approach to the analysis of thematic content (phronetic analysis) described by Tracy (2007)<sup>21</sup>. Data analysis took place in four stages: I) organization and preparation of data, with a consequent data exclusion (where content was cut); II) coding line by line, seeking to identify words or small phrases that could synthesize the obtained content in a descriptive manner; III) creation of a codebook, that is, a list of identified codes, bringing a small

Chart 1. Guide for Semi-structured Interview

Areas addressed/Main questions	Prompts
<b>Perceptions about COVID-19</b>	
How was your experience with COVID-19?	Tell about it: when you were diagnosed, your exams, your time of hospitalization, your symptoms.
At any moment did you use any form of telehealth (teleconsultation, telemonitoring)?	Were you contacted by TeleSUS? Health plan? Private doctor? Had you done this before?  Tell me about your experience with telehealth.
<b>Experience with services using information and telecommunications mediums</b>	
Was technology a part of your life before COVID-19?	Ex.: purchases, food delivery, commute apps, How did you use them?
In which situations do you find yourself using the digital/technological medium more?	Tell me more about the changes that happened during this period.
Do you believe that, after this period of recommended social isolation, you will continue to use some digital habits that you are using now?	Ex.: purchases, exercises, delivery, communication, work ➡ emphasis on the health area with telehealth.  Tell me more about:
Do you think we are prepared to use telehealth as an alternative medium to deliver health services?	- what facilitates and what limits the use of telehealth now and in the future? - what is needed to use telehealth?

explanation, definition, or example of illustration; and IV) second round of coding, where the codes in the codebook were revisited, organized, and categorized in a more interpretive and analytical manner, giving rise to the final themes. The constant comparison method was used in stages I to IV. Two authors (LF, RFO) conducted stages I, II, and III, independently, in the following manner: initially, 30% of the material transcribed (7 interviews) was analyzed and both authors entered into agreement in relation to the codebook; this codebook guided the thematic analysis of the rest of the interviews. For stage IV, both authors met once again in an attempt to reach a consensus in relation to the themes found in this study. In the case of disagreement, a third author (BS) was consulted. In the end, all of the researchers were consulted to confirm that the themes and subthemes reflected the primary data from the interviews.

## Results

Twenty-three individuals participated in the interviews. The participants' demographic data are presented in Table 1.

### *Digital Literacy in Health*

In general, the participants were classified as having a good digital literacy in health. The minimum score was 22 and the maximum was 39, with a median of 32 points and an interquartile range of 8. Items 4, 5, and 8 received the highest indexes for the answers

“completely disagree” and “disagree” (Figure 1), highlighting the difficulty of the participants in relation to the following questions, respectively: “know where to find reliable health information on the internet”, “have the necessary ability to evaluate the health resources found on the internet”, and “feel confident in using the information from the internet when making decisions about health”.

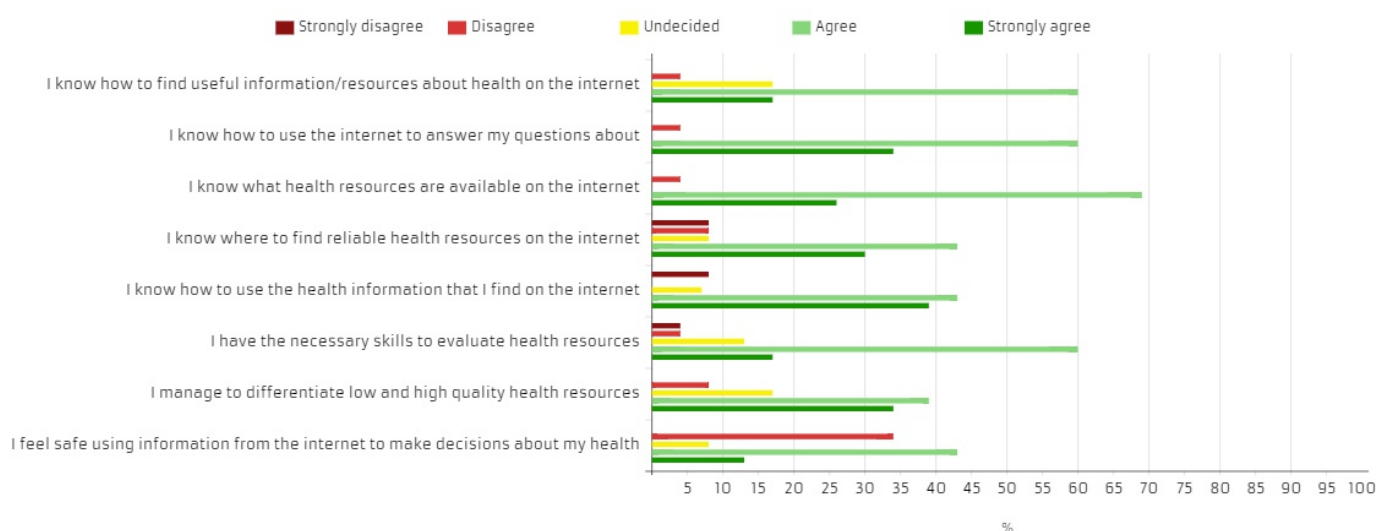
### *Thematic analysis*

The analysis of the interviews generated five main themes: telehealth now: positive points; telehealth now: negative points; telehealth tomorrow: optimistic outlooks; telehealth tomorrow: uncertain outlooks; the search for health information on the internet. The first four themes were understood as part of a time continuum (present and future). Some excerpts of interviews are presented in Chart 2. The themes and subthemes that make up the sphere of “telehealth now” bring experiences of users who used the telehealth services in the context of COVID-19 and who identified positive and negative points based on the experience of use. By contrast, the sphere of “telehealth tomorrow” brings hypotheses and narratives placed in the future (e.g. possibilities, perceptions, points of view) in relation to telehealth beyond the context of COVID-19. Due to the plurality of recorded opinions, only two major themes were explored within the “telehealth tomorrow”, encompassing optimistic perspectives and uncertain perspectives. The fifth theme alludes to the search for

**Table 1.** Sociodemographic characteristics of the participants – data in percentage (%) and standard deviation (SD) are represented in parentheses.

		Number
Sex, n (%)	Female	12 (52%)
	Male	11 (48%)
Average age in years, (SD)		39,6 (12)
Marital status, n (%)	Single	7 (30%)
	Married	15 (65%)
	Divorced/Separated	1 (4%)
Level of Education, n (%)	Complete high school	1 (4%)
	Complete undergraduate	10 (43%)
	Post-graduate	12 (52%)
Profession, n (%)	Health area Physical therapy, Education, Physics, Dentistry	11 (47%)
	Others Jornalism, Foreign Trade, Gastronomy, Financial analyst, Lawyer, Administration, Commercial Representative	12 (53%)
Health Plan, n (%)		20 (87%)

**Figure 1.** Item score from the eHEALS scale



health information using the information and telecommunications mediums (with emphasis on the internet).

#### *Telehealth now: positive points of telehealth*

The interviewed individuals presented positive experiences in relation to telehealth when this modality facilitated the continuity of health care. Continuous care occurred in the formats of teleconsultations, telemonitoring, or the recommendation to proceed with the treatment at another level of care (e.g., referral to a

reference center with in-person care or medical advice on home care through medical prescriptions). Another element perceived as positive, involved the possibility of telehealth to provide care compatible with the recommendations for physical distancing (due to the pandemic) or with context of large geographic distances (such as small cities in the countryside of large states, like the state of Amazonas). Individuals reported that flexibility also says about practicality, that is, performing telecare in the hours and location that were more convenient for the user, leading to a saving

of time and money. The idea of 'saving' appeared in opposition to the time usually spent in traffic and/or in the waiting room of a health center in face-to-face consultations, understood as more profitable if saved.

#### *Telehealth now: limitations to telehealth*

The remote aspect of telehealth was identified as an important barrier to its use. In a number of interview excerpts, a "grey area" was identified between what is a teleconsultation and what is communication between the patient and the healthcare professional to resolve patient questions and doubts. The participants suggest that telehealth cannot be used in all specialties, and that its use appears to be more plausible in the following situations: a) initial screening, b) recommendation and/or referral to undergo exams, and c) exam evaluation. Performing exams without the physical presence of the health professional was cited as a limiting factor to the use of telehealth. Touch, look, and presence were pointed out as essential elements in the interaction between the health professional and users during the evaluation and diagnosis.

The participants reported that telehealth also seems to be limited when the users present a low digital literacy, that is, they do not dominate the use of such devices as smartphones and/or computers. The difficulty to have a stable and high-quality internet connection or physical access to devices were also identified as limitations to telehealth. Low digital literacy and difficult access stood out in the more elderly populations, as well as in individuals with low levels of education and income. It was suggested that, in such scenarios, the participation in telehealth can lead to a poor interpretation of the medical advice received or a poor commitment to the proposed initiative, leading to potential user frustration.

#### *Telehealth tomorrow: optimistic perspectives*

Optimistic perspectives related to the future of telehealth endorse the idea that, once put into practice, it would be extremely difficult for this modality to cease to exist in the future. The use of telehealth was repeatedly referred to as a necessary consequence of global technological development. Thus, it was also reported that the use of telehealth would be an inevitable development that was accelerated by the context of the COVID-19 pandemic. The pandemic was pointed out as the prime moment to implement telehealth and was understood as the turning point in the realm of health care.

Telehealth was referred to as a modality that would be consolidated as "aid" and "optimization" of health care, but it would require a period of adaptation, leaning, training, reinvention, and (re)discovery by all actors involved (including health professionals, the general population, public and private health systems, pharmacies, among others). The participants cited

telehealth as a tendency with a great potential to be used as a tool within SUS, mainly to follow up on Primary Health Care (in Basic Health Units and through the Family Health Strategy) and who continued to go without health care during the initial period of the pandemic.

Telehealth was mentioned as an option to be chosen by health professionals. Therefore, for professionals who identify with the system, telehealth will continue to be an option, while those who do not identify with the system will likely return to in-person care as their primary choice. At the same time, as it is associated with global technological development, the participants seem to understand that those who adapt to telehealth will contribute to the fluidity of the health systems and to the expansion of community access to knowledge and health treatments. The hybrid model, interspersing in-person with distance care, was cited as a possibility that could be gradually added to telehealth. On the other hand, the participants point out that there are doubts in relation to the consultation time spent on telehealth and the care received by the health professional, returning to similar problems that already exist in the in-person care scenario.

#### *Telehealth tomorrow: uncertain perspectives*

The uncertainties related to telehealth reinforce the perception that this modality was implemented in an emergency situation due to the COVID-19 pandemic. The participants cite the "Brazilian culture" (i.e., "custom of going to the streets, of having contact") and the long period in social isolation as elements that motivated the return to the in-person modality, with a consequent drastic reduction in the use of telehealth. Teleconsultation does not seem to be conceived as a substitute for in-person consultations, which resumes the demand for in-person physical exams, with an adequate structure.

The participants refer to the idea that health care via telehealth requires acceptance by both health professionals and users, as well as proper preparation to be able to successfully convey the necessary prescriptions and medical advice in a remote manner. The construction of the therapeutic alliance when the first contact was done in a remote format seemed to be more difficult to consolidate.

#### *The search for health information*

The search for health information figured as a backdrop during the interviews. The participants made considerations that the internet is widely used to search for health information, both inside and outside of the COVID-19 context, but these results generally bring anxiety, concern, and fear, which would create an apprehensive experience in relation to the use of digital mediums as health information sources. If on the one hand the internet seems to be widely used, on the

other, it does not seem to be categorized as a reliable source of information. However, in the specific context of COVID-19, the participants mentioned that the onset of the pandemic was followed by confusing, fragile, and conflicting medical advice. In this scenario, the internet was cited as an important source of health information, especially through reports that provided apparent tranquility and self-knowledge.

## Discussion

The descriptive qualitative analysis conducted in the present study indicates that telehealth seems to be seen as positive, promising, and optimistic as regards its potential to overcome geographic barriers and facilitate access to health care. The participants consider the implementation of telehealth as a point of no return, but they point to the need for adaptation in the entire health system and for health professionals involved. Nevertheless, they suggest that the physical presence is appreciated during interactions with health professionals and observe that specific circumstances can call for in-person care.

The results of the present study should be interpreted with caution, since the chosen samples are not necessarily representative of the Brazilian population as a whole, and the findings cannot be overgeneralized. Since the participants of this study were recruited through the main social networks, it is likely that the participants already had a greater familiarity and facility in dealing with ICTs, even in the realm of health. The degree of familiarity with ICTs can influence one's perceptions in relation to telehealth<sup>2</sup>. Another point to be highlighted is that the process of launching the announcement for recruitment began within the authors' own contact networks, which influenced the selection of the socioeconomic profile of the group of interviewed individuals, of whom 87% reported that they had a health plan. Data from the Brazilian Institute of Geography and Statistics (IBGE) indicate that, in 2019, 28.5% of the Brazilian population had some type of medical or dental health insurance; in the state of São Paulo, this coverage reached nearly 38.4%<sup>22</sup>. Although private and supplementary health are part of the healthcare scenario in Brazil, and they have explored telehealth due to the pandemic, the follow-up format promoted by the primary, secondary, and tertiary levels within SUS is essentially distinct.

The themes developed by the present study are similar to the barriers and facilitators to telehealth reported in previous studies with individuals with lower back pain<sup>8,23</sup> and chronic conditions, such as diabetes and asthma<sup>24</sup>. The difficulty to do physical exams and diagnoses by teleconsultations, and care for certain specific pathologies (e.g. Alzheimer's disease) are also identified as limiting factors in the Brazilian medical literature published about the broad use of

telehealth<sup>10</sup>. Fisk and collaborators<sup>25</sup> discuss telehealth as a response to the COVID-19 pandemic and identify the "continuous care" and "context flexibility" as elements favorable to telehealth in countries such as Australia, the United Kingdom, and the United States. These subthemes were also presented in our study. Still in the context of COVID-19, Bennel and collaborators<sup>1</sup> observed that users reported positive experiences when using telehealth in the synchronous modality, both individually and in groups. However, one third of the evaluated population indicated that they would not use telehealth in the future and identified the lack of physical contact or the touch as an important barrier<sup>1</sup>.

In Brazil, telehealth was created in 2007 by Decree no. 35/2007, when it was implemented on a trial basis, and was later spread to the entire country in 2010<sup>26</sup>. In 2011, by means of Decree no. 2546/2011, the Telehealth Brazil Networks Program was once again expanded with the objective of improving care provided to the population, increasing the capacity to resolve problems from Primary Healthcare (strengthening it as an entrance into SUS), and including management and health surveillance activities<sup>15,26</sup>. At that time, in the absence of regulations authorizing synchronous and asynchronous interactions between health professionals directly with users<sup>27</sup>, the emphasis on the Telehealth Brazil Networks Program, since its creation, was geared toward the strengthening of the permanent education of the Family Health Team and the practical training of these health professionals, especially those located in regions of difficult access<sup>15</sup>. Thus, telehealth in SUS, up to 2020, worked in the formats of teleconsultation and telediagnosis, according to formative opinions and tele-education<sup>28</sup>. Due to the new demands imposed by the COVID-19 pandemic and composing the strategy to combat this public health emergency, Decree no. 467/2020, on March 23, 2020, and Law no. 13.989/2020, on April 15, 2020, were published, authorizing the conduction of telehealth between the health professional directly with the user in the realms of SUS, supplementary health care, and private health care<sup>27</sup>.

Even with the greater use of telehealth by SUS and even though this modality has figured within some state contingency plans to combat the pandemic<sup>10</sup>, its continued to focus on the sphere of telemonitoring: TeleSUS, the SUS coronavirus app, and the online chat seek, in the context of the COVID-19 pandemic, to monitor, inform, and screen individuals, respectively. While the Digital Health Strategy for Brazil (2020-2028)<sup>29</sup>, through the Conecte SUS Program and its initiatives, maintains the synchronous and asynchronous interactions between health professionals and users in the second plane and is resistant to expanding its horizons beyond COVID-19,

Chart 2. Excerpts of interviews illustrating the themes and subthemes

<i>Time Continuum of Telehealth</i>	
<b>Telehealth now (positive points)</b>	
Continuous care	<i>"What I felt was exactly this thing of embracement, of someone reaching out his hand at a time when you don't know exactly what to do. (...) which made me feel safe, calm, it's knowing that anytime I felt bad I could call them, you know? I'd call by cellphone." (E16)</i>
Context flexibility	<i>"(...) the people who were not such avid users of technology are having to migrate to technology because there is no other option. My mother, for example, she's going to do a teleconference today with a doctor because she can't go outside." (E9)</i>
Saving of time and money	<i>"(...) you can do it at home, during working hours, you can stop for 30 minutes without having to commute long distances, having to bother with paying for parking, facing risks in the street." (E19)</i>
<b>Telehealth now (negative points)</b>	
(Lack of) Presence	<i>"Today we need today a health care that is more humanized, more alternative, more holistic, anyway, and so technology might be a barrier to this if it is not used properly." (E3)</i> <i>"Can you imagine the responsibility it is to pass on information without you being able to see the patient?" (E3; from the point of view of a health professional)</i>
Low Digital Literacy	<i>"(...) the patient, for example, who (...) does not have so much information, who does not have much education, and who received [an automatic health message], he might feel that he is really safe. And the little robot says to you, all happy, you know, that you are really safe, and I'm here contaminated. So, I'm afraid, because I think that human contact is still very important." (E3)</i>
Limitations to access	<i>"(...) not everybody has this electronic education. Especially the older people, there are some people that don't have much access, there are people who don't have a computer at home, right, so what do you do?" (E8)</i>
<b>Telehealth tomorrow</b>	
Optimistic future	<i>"It's the best time [...] now, with COVID, is the best time to implement this." (E6)</i> <i>"So, I think it's a sure success, but we still have a long way to go before that, you know? Which is to give the tool to the people so that if this is the new, the new reality, everyone will have access. Because it works, And I think the pandemic and isolation proved that it works." (E8)</i> <i>"I think the tendency to use technology in the FHS (Family Health Strategy) and in the PHC (Primary Health Care) as a whole [...] will grow a lot. Because there won't be (...), I think, for some time, that full BHU (Basic Health Unit) like it was before." (E1 3; opinion as a health professional)</i> <i>"(...) SUS should have this type of care, right? It would avoid a bunch of lines, it would make things a lot easier for people, I think; it would make it easier now, I'm sure. So, I see this as a point of no return, right, I think it'll benefit a lot." (E16)</i> <i>"Because [the users] will perceive that sometimes the quality of distance care is almost the same as in-person care. So, by telephone, not much will change." (E4)</i>
Uncertain future	<i>"(...) the physical exam, I mean the physical consultation, I think it's very important. [...] In an emergency, I think that [telehealth] is very good, but normally I wouldn't use it. I'd use it in an emergency, but I wouldn't use it often, you know?" (E13)</i>
<b>The search for health information</b>	
<i>"(...) when I caught [COVID-19], I felt really insecure because every doctor said something different – [...] it made me feel really insecure and yes we did search for a lot of information on the internet." (E14)</i>	



telehealth in supplementary and private health care is becoming more well-structured and advanced<sup>10</sup>.

The possibilities of telehealth in making health services and information more democratic are conceivable through the implementation strategies that seek to expand user access<sup>30,31</sup>. Nonetheless, the barriers to digitalization and technological progress in health care seem to face more than mere limitations of access to technology (i.e., having adequate/modern devices or having an internet connection). According to Lupton's critical references<sup>13,32</sup>, debates on the continuity of telehealth public policies in Brazil must pass through the recognition of social determinants linked to the use of technology<sup>13,32</sup>. Beliefs, behaviors, culture, community norms, socioeconomic profiles, and the geographic locations of the users can influence the pattern of use of and the engagement with health technologies, as can gender, ethnicity, and age<sup>13,32</sup>. In this sense, even when access to the internet and to mobile device models are similar in two groups of different socioeconomic status, the group that is socioeconomically more well-off will tend to use the digital technologies in a way that reinforces their privileges<sup>32</sup>. If implemented without paying attention to the contextual complexities, the use of telehealth may also serve to consolidate already existing inequalities and iniquities in the health care provided to the Brazilian population<sup>4,7,33</sup>.

The pillar of the implementation of telehealth in Brazil should emphasize the quality and coverage of ICT networks<sup>2</sup>. Moreover, it is necessary to invest in the preparation of all of the actors involved in the realm of health care (i.e., governors and managers, public policies, health systems, health professionals, users, and the population in general). The potential to democratize access to health care<sup>6</sup>, full medical care to the user<sup>1</sup>, efficient communication<sup>34</sup>, an environment with less judgment for the exchange of health information between the health professional and the user<sup>34</sup>, and funding for health education for both health professionals and users<sup>15,28</sup>, are references that articulate telehealth characteristics<sup>4</sup> with other public health policies in Brazil, such as SUS's National Humanization Policy, thereby endorsing the pertinence of telehealth for this context. In an attempt to contribute with real world scenarios, it is important for future studies to continue investigating telehealth in both the public and private sectors through the perspectives of their possible future and diverse users.

## Conclusion

The telehealth facilitators identified in this study point to the continuity of care and context flexibility, especially with reference to the pandemic. The possible flexibility of teleconsultations and telemonitoring seems to contribute to users saving time

and resources. On the other hand, the lack of physical presence and the low digital literacy were identified as barriers to telehealth. In the context of COVID-19, the participants reported that the search for health information using the internet was connected to the search for reports of personal experiences. The qualitative survey carried out in the present study reinforces the perspective that the initiatives in telehealth can coordinate adaptations in the realms of infrastructure and management, as well as aid in the education of both health professionals and the population in general.

## References

1. Bennell KL, Lawford BJ, Metcalf B, Mackenzie D, Russell T, van den Berg M, et al. Physiotherapists and patients report positive experiences overall with telehealth during the COVID-19 pandemic: a mixed-methods study. *J Physiother*. 2021;67(3):201-9.
2. Eccleston C, Blyth FM, Dear BF, Fisher EA, Keefe FJ, Lynch ME, et al. Managing patients with chronic pain during the COVID-19 outbreak: considerations for the rapid introduction of remotely supported (eHealth) pain management services. *Pain*. 2020;161(5):889-93.
3. Cottrell MA, Galea OA, O'Leary SP, Hill AJ, Russell TG. Real-time telerehabilitation for the treatment of musculoskeletal conditions is effective and comparable to standard practice: a systematic review and meta-analysis. *Clinical rehabilitation*. 2017;31(5):625-38.
4. Fernandes LG, Devan H, Fioratti I, Kamper SJ, Williams CM, Saragiotto BT. At my own pace, space, and place: a systematic review of qualitative studies of enablers and barriers to telehealth interventions for people with chronic pain. *Pain*. 2022;163(2):e165-e81.
5. Miranda JJ, Zaman MJ. Exporting "failure": why research from rich countries may not benefit the developing world. *Revista de Saúde Pública*. 2010;44:185-9.
6. World Health Organization W. Telemedicine: opportunities and developments in Member States: report on the second global survey on eHealth 2009. World Health Organization, WHO; 2010.
7. Lupton D. Critical Perspectives on Digital Health Technologies. *Sociology Compass*. 2014;8(12):1344-59.
8. Isautier JM, Copp T, Ayre J, Cvejic E, Meyerowitz-Katz G, Batcup C, et al. People's

- Experiences and Satisfaction With Telehealth During the COVID-19 Pandemic in Australia: Cross-Sectional Survey Study. *Journal of medical Internet research*. 2020;22(12):e24531.
9. Wade VA, Elliott JA, Hiller JE. Clinician acceptance is the key factor for sustainable telehealth services. *Qualitative health research*. 2014;24(5):682-94.
  10. Caetano R, Silva AB, Guedes ACCM, Paiva CCNd, Ribeiro GdR, Santos DL, et al. Desafios e oportunidades para telessaúde em tempos da pandemia pela COVID-19: uma reflexão sobre os espaços e iniciativas no contexto brasileiro. *Cadernos de Saúde Pública*. 2020;36(5).
  11. Prvu Bettger J, Thoumi A, Markevich V, De Groote W, Rizzo Battistella L, Imamura M, et al. COVID-19: maintaining essential rehabilitation services across the care continuum. *BMJ global health*. 2020;5(5).
  12. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007;19(6):349-57.
  13. Lupton D. The digitally engaged patient: self-monitoring and self-care in the digital health era. *Social Theory and Health*. 2013;11(2):256-70.
  14. Marinopoulou A. Critical Theory: Epistemological Content and Method. In: Liamputtong P, editor. *Handbook of Research Methods in Health Social Sciences* Singapore: Springer Nature 2019.
  15. Campos FE, Haddad AE, Wen CL, Alkmin MBM, Cury PM. The National Telehealth Program in Brazil: an instrument of support for primary health care. *Latin American Journal of Telehealth*. 2009;1(1):39-66.
  16. DeMonte CM, DeMonte WD, Thorn BE. Future implications of eHealth interventions for chronic pain management in underserved populations. *Pain management*. 2015;5(3):207-14.
  17. Saúde Md. Orientações para o manejo de pacientes com COVID-19. 2020 [Available from: <https://portalarquivos.saude.gov.br/images/pdf/2020/June/18/Covid19-Orientac--o--esManejoPacientes.pdf>].
  18. Norman CD, Skinner HA. eHEALS: The eHealth Literacy Scale. *Journal of medical Internet research*. 2006;8(4):e27.
  19. Fernandes LG, Saragiotto BT. Clinimetrics: eHealth Literacy Scale. *Journal of Physiotherapy*. 2020.
  20. Fontanella BJB, Luchesi BM, Saidel MGB, Ricas J, Turato ER, Melo DG. Sampling in qualitative research: a proposal for procedures to detect theoretical saturation. *Cad Saúde Pública*. 2011;27(2):389-94.
  21. Tracy SJ. Taking the Plunge: A Contextual Approach to Problem-Based Research. *Communication Monographs*. 2007;74(1):106-11.
  22. IBGE IBdGeE-, Economia Md. Pesquisa Nacional de Saúde 2019: Informações sobre domicílios, acesso e utilização dos serviços de saúde. Brasil, Grandes Regiões e Unidades da Federação. 2019.
  23. Malliaras P, Merolli M, Williams CM, Caneiro JP, Haines T, Barton C. 'It's not hands-on therapy, so it's very limited': Telehealth use and views among allied health clinicians during the coronavirus pandemic. *Musculoskeletal Science and Practice*. 2021;52:102340.
  24. Hanlon P, Daines L. Telehealth Interventions to Support Self-Management of Long-Term Conditions: A Systematic Metareview of Diabetes, Heart Failure, Asthma, Chronic Obstructive Pulmonary Disease, and Cancer. 2017;19(5):e172.
  25. Fisk M, Livingstone A, Pit SW. Telehealth in the Context of COVID-19: Changing Perspectives in Australia, the United Kingdom, and the United States. *Journal of medical Internet research*. 2020;22(6):e19264.
  26. Haddad AE, Silva DGd, Monteiro A, Guedes T, Figueiredo AM. Follow up of the Legislation Advancement Along the Implementation of the Brazilian Telehealth Programme. *Journal of the International Society for Telemedicine and EHealth*. 2016;4(e11):1-7.
  27. Silva AB, da Silva RM, Ribeiro GdR, Guedes ACCM, Santos DL, Nepomuceno CC, et al. Three decades of telemedicine in Brazil: Mapping the regulatory framework from 1990 to 2018. *PLOS ONE*. 2020;15(11):e0242869.
  28. Haddad AE, Skelton-Macedo MC, Abdala V, Bavaresco C, Mengehel D, Abdala CG, et al. Formative second opinion: qualifying health professionals for the unified health system through the Brazilian Telehealth Program. *Telemedicine journal and*

e-health : the official journal of the American Telemedicine Association. 2015;21(2):138-42.

29. Saúde Md, Secretaria-Executiva, SUS Ddld. Estratégia de Saúde Digital para o Brasil 2020-2028 [recurso eletrônico]. 2020.

30. Jackson DN, Trivedi N, Baur C. Re-Prioritizing Digital Health and Health Literacy in Healthy People 2030 to Affect Health Equity. *Health Communication*. 2021;36(10):1155-62.

31. Nutbeam D. Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century. *Health Promotion International*. 2000;15(3):259-67.

32. Lupton D. Digital Health: Critical and Cross-Disciplinary Perspectives. Chamberlain K, Lyons A, editors: Routledge; 2018.

33. Reis FJJ, Fernandes LG, Saragiotto BT. Telehealth in low- and middle-income countries: Bridging the gap or exposing health disparities? *Health Policy Technol*. 2021;10(4):100577.

34. Lawford BJ, Delany C, Bennell KL, Hinman RS. "I was really sceptical...But it worked really well": a qualitative study of patient perceptions of telephone-delivered exercise therapy by physiotherapists for people with knee osteoarthritis. *Osteoarthritis and cartilage*. 2018;26(6):741-50.

**Declaration of conflict of interest:** The authors declare no conflicts of interest.

**Funding:** This study was funded by the São Paulo State Research Support Foundation (FAPESP; protocol number: 2020/06314-0). Dr Saragiotto is funded by FAPESP (young researcher grant, researcher number: 2016/24217-7) and Livia Fernandes receives a Master's grant from FAPESP (protocol number: 2019/14032-8).

**Statement of responsibility:**

Development of the research question and study design: Livia G. Fernandes; Bruno T. Saragiotto

Development of the interview and pilot interview grid: Livia G. Fernandes; Bruno T. Saragiotto

Data collection: Livia G. Fernandes

Data analysis and interpretation: Livia G. Fernandes; Rafael F. F. Oliveira; Marina P. Baroni

Development of the results section: Livia G. Fernandes; Marina P. Baroni; Rafael F. F. Oliveira

Initial write-up of the manuscript: Livia G. Fernandes

Text review and standardization according to journal guidelines: Livia G. Fernandes; Marina P. Baroni

Final review and authorization for submission to the journal: Livia G. Fernandes; Marina P. Baroni; Rafael F. F. Oliveira; Bruno T. Saragiotto

**How to cite this article:** Fernandes LG, Baroni MP, Oliveira RFF, Saragiotto BT. "Tem tudo pra dar certo, mas a gente ainda tem um caminho a percorrer até lá": visões sobre a telessaúde no Brasil. *Latin Am J telehealth*, Belo Horizonte, 2022; 9(2): 165-175. ISSN: 2175-2990.