SAÚDE E PESQUISA
e-ISSN 2176-9206

ORIGINAL ARTICLE

https://doi.org/10.17765/2176-9206.2025v18e13291

LANGUAGE ACCESSIBILITY ON TELEVISION FOR DEAF PEOPLE: RIGHT TO CULTURE AND HEALTH

ACESSIBILIDADE LINGUÍSTICA NA TELEVISÃO PARA PESSOAS SURDAS: DIREITO À CULTURA E SAÚDE

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Received: 07 Nov. 2024
Accepted: 19 Jan. 2025

ABSTRACT: Purpose: To analyze the accessibility in television environments for deaf people and their access to health information through television. Methodology: A qualitative study was conducted via a virtual platform with semi-structured interviews with 10 participants (deaf individuals and journalists from local broadcasters), and later transcribed for analysis using Content Analysis techniques. Results: Most of the deaf participants reported complaints regarding linguistic accessibility on television. The analysis of the participating journalists showed insufficient accessibility in programming. As there are no criticisms about this, journalists and broadcasters do not believe it to be a social problem. Conclusion: Accessibility for deaf individuals in the television environment is scarce, representing an informational gap in the lives of these individuals who are marginalized from society, especially when considering access to television as a cultural medium, with an emphasis on health information, which is particularly relevant during periods such as the COVID-19 pandemic.
KEYWORDS: Communicational accessibility. Cultural rights. Deafness. Right to health.

RESUMO: Objetivo: Analisar a acessibilidade para as pessoas surdas em ambiente televisivo e o acesso às informações de saúde por meio da televisão. Metodologia: Foi realizada pesquisa qualitativa, com entrevistas semiestruturadas com 10 participantes (pessoas surdas e jornalistas de emissoras locais), por meio de plataforma virtual, posteriormente transcritas para análise, utilizando técnicas da Análise de Conteúdo. Resultados: A maioria dos entrevistados surdos apresentou queixas em relação à acessibilidade linguística na televisão. A análise dos jornalistas entrevistados demonstrou insuficiência de acessibilidade na programação. Como não há críticas acerca disto, os jornalistas e emissoras não acreditam que seja um problema social. Conclusão: a acessibilidade para as pessoas surdas em ambiente televisivo é escassa, o que destaca uma lacuna informacional na vida destas pessoas que estão postas à margem da sociedade, principalmente, quando colocado em pauta o acesso à televisão como meio cultural, com ênfase para as informações de saúde, tão relevantes em períodos como a pandemia de COVID-19.
PALAVRAS-CHAVE: Acessibilidade comunicacional. Direito à saúde. Direitos culturais. Surdez.

INTRODUCTION

The National Continuous Household Sample Survey (Continuous PNAD)[1], carried out in 2022, indicated that in Brazil there were about 18.6 million persons with disabilities, aged two years or older, of whom 1.2% had difficulty hearing. Worldwide, the World Health Organization indicates that more than 1.5 billion people have some hearing loss[2].

After four decades of numerous denunciations of human rights violations by social movements of people with disabilities around the world, in the most varied spheres of social life, the United Nations (UN) decided to develop an international treaty covering this segment of the population[3].

The document known as the Convention on the Rights of Persons with Disabilities and its Optional Protocol[4] was presented at the 61st UN General Assembly on December 13, 2006, and was subsequently signed and ratified by several countries around the world.

In Brazil, the Convention was ratified before the UN on August 1, 2008[5], by decision of the National Congress and the President of the Republic at the time, who in turn promulgated Decree 6,949/09[6], determining compliance with the terms of the Convention throughout the national territory.

Thereafter, the definition of person with disabilities adopted in the country was the same as that presented by the UN, namely:

> Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others[6].

One of the possible sensory impediments refers to hearing decrease or loss, which affects about 1.2% of the 18.6 million Brazilians with some disability[1]. This segment of people with hearing disability includes a portion of individuals whose main form of interaction in the world is through a visuogestual language – sign language, called Brazilian Sign Language (Libras) in Brazil and recognized, after many decades of struggle, as a form of expression and communication of the deaf by Law 10,436/2002 – the Law of Libras[7].

The main barriers faced by deaf people are those related to communication and information barriers, which are defined by the Brazilian Inclusion Law[8] as "any hindrance, obstacle, attitude or behavior that hinders or prevents the expression or reception of messages and information through information and communication technology systems." Some authors, when considering these barriers associated with the deaf that use Libras, employ the term "language barrier"[9] or "communication barriers"[10], since the obstacle lies in not considering that information needs to be conveyed through another language. It is through language that subjects participate in social relations[11]; therefore, language is not situated outside society and, when faced with barriers, subjects are faced with the feeling of social exclusion and disrespect for their culture and language[10,12].

By ratifying the Convention, Brazil committed to promoting linguistic accessibility for deaf people through the provision, for example, of professional interpreters[5]; however, the situation that is still current is one of incipient accessibility in all areas of life, which consequently limits or prevents the exercise with dignity, autonomy and independence of fundamental human rights of deaf people, such as the right to culture, health, education, and work, among others.

As for culture, in Brazil, since 2003, it has been conceived from a three-dimensional perspective, serving as the basis for the construction of policies of the Ministry of Culture. This concept considers culture in its *symbolic, citizen and economic* dimensions and was fundamental for the onset of a

profound change in the focus of cultural policies, which until then had focused primarily on culture's *economic* dimension. As for the *symbolic* perspective, it is considered that it:

> It is based on the idea that the ability to symbolize is characteristic of human beings and is expressed through languages, beliefs, rituals, practices, kinship relations, work, and power, among others. All human action is socially built through symbols that, intertwined, form networks of meanings that vary according to social and historical contexts "[13].

If until then we had cultural policies focused on artistic languages, this conception significantly expands the understanding of the activities encompassed by the field of culture, considering this field as transversal to all areas (health, education, environment and others), since social relations are always mediated by language.

The *citizen* dimension provides the understanding of culture as a right, introducing a series of affirmative policies that aim to enable and expand access to culture by minority groups. Thus, these three dimensions, which incorporate distinct and complementary views on the State's operation in the cultural field, are inspired by cultural rights and seek to respond to the new challenges of culture in the contemporary world[13].

When language and communication barriers are observed in the health area, we can say that this fundamental human right is threatened, as any health care practice becomes difficult when: 1) professionals and users have different languages[14]; and 2) much important health information for self-care, health promotion and disease prevention — which is transmitted by the most diverse media, such as that conveyed in vaccination campaigns, HIV/AIDS and Dengue prevention, and the COVID-19 pandemic period — does not reach deaf people because such information has not been translated and interpreted into sign language.

In periods of crisis, such as that arising from the SARS-CoV-2 pandemic, the media play an essential role, serving both as transmitters of alerts and recommendations and as producers of versions in which inconsistencies are found[15].

An important cultural audiovisual communication medium where this information and other content aimed at entertainment are conveyed is the television environment. Television, considered as one of the most democratized mass media, with easy and fast access, serves not only to afford delight and entertainment, but also to provide knowledge through information that is shared[15]. Television is so influential that it is characterized as one of the main media, having a miscellaneous character, as it absorbs all forms of culture, from the artisanal to the most erudite, including cinema, newspapers, documentaries, and drama, among others[16]. However, despite that, not all people are able to access its contents, especially the population segment whose communication occurs through Sign Language — in the case of Brazil, the Brazilian Sign Language (Libras).

There are rare cases of broadcasters whose programming is accessible to deaf people. This is an actual breach of the Convention on the Rights of Persons with Disabilities and its Optional Protocol[4] and the Brazilian Inclusion Law – Law 13,146/2015[8], with both documents stating, in Art. 42 of chapter IX, on the right to culture, sport, tourism and leisure, that

> Persons with disabilities have the right to culture, sport, tourism and leisure on an equal basis with others, with guaranteed access to (...)
>
> II - television programs (emphasis added), cinema, theater and other cultural and sports activities in an accessible format.

A master's dissertation[17], whose objective was to observe the experience of deaf people with the media, in the work entitled “Mídia Televisiva Sem Som”[Television Media With No Sound], showed a deaf person's perspective on the television environment, stating that:

> The understanding of those who watch television programs occurs — in the case of deaf people, compared with hearing people — in a limited manner, making it difficult not only to understand what is said, but also providing other ways of reading what is presented[17].

This means that the lack of accessibility can result in both a nonunderstanding and a misunderstanding of the content conveyed, and, when this misunderstanding is related to health, there can be serious consequences.

In the international context, studies[18,19,20] have also analyzed communicational accessibility in television environment for persons with disabilities.

In a study[18], the accessibility provided — captioning — required the use of the resource in 90% of public channel programming, but had no defined rules for compliance with this requirement. Thus, programs such as advertising, cultural promotions, and sponsorships were not accessible to deaf people.

Another study[19] showed that 60% of the participants interviewed reported that the television environment is not suitable for persons with hearing disability. According to them, although the digital environment has major potential for inclusion of these people, media providers still need to meet the needs of deaf users, providing more interpreting and captioning services, since they are essential for such population.

A third study[20] analyzed the accessibility of the captioning resource as to the synchrony between captions, audio and video. It found that this also represents a problem for viewers, since the lack of synchrony between these elements results in a difficulty in associating the captions with other expressive resources, such as body language and orofacial reading.

Considering the above, the objective is to analyze accessibility for deaf persons in television environment and access to health information through television.

METHODOLOGY

This is a qualitative research, considering that it works with human beings, including their history, values, beliefs, representations, habits, attitudes, aspirations and opinions, which are the result of how humans interpret their experiences[21]. Qualitative research enables greater proximity between the researcher and the researched object, in addition to a more in-depth focus on the complexity of the phenomenon under study[22].

This type of methodological approach seeks to trace and problematize the experiences of individuals in the world and how they are understood by them and the meanings attributed to them. Qualitative research seeks to interpret social phenomena — behaviors and interactions — and what meanings people attribute to them, and researchers should question common sense or apparently established ideas[23].

Accordingly, when analyzing accessibility for deaf people in television environment and access to health information through television, the issue addressed is the behavior of deaf people participating in the research in relation to television according to the presence or absence of accessibility, as well as the effectiveness of this media in guaranteeing the right to information. Although the work allows the

analysis focusing only on the interviewed subjects, highlighting a certain local reality, the findings allow certain considerations that can be extrapolated to a national context.

Among the various data collection methods, the semi-structured interview was chosen. This enables the researcher to ask questions that are pertinent and necessary to their research; however, at the same time, it provides opportunity for these questions to be relativized. Thus, the collection may find information that is not expected by the researcher, but which helps understand the object in a more detailed and complete manner, aiming at interpreting the real world with all the characteristics of the object to be studied[22,24].

The researchers approached possible research participants, initially, through personal contact with one of the participants. Through this first contact, the other respondents were invited using the "snowball" technique. This technique, widely used in qualitative research, uses reference and indication networks to find people who belong to the group of interest. This technique requires an initial first contact — called a seed —, which will be the intermediary and will indicate people who fit the sought profile[25].

Semi-structured interviews were conducted with ten participants, divided into two groups: 1) six professionals who had worked for at least one year in local broadcasters, with headquarters and concession in Campinas, namely Broadcaster A, Broadcaster B, Broadcaster C and Broadcaster D. The broadcasters have open channel transmission and are affiliated with a national broadcaster, thus enabling a greater diversity of audience, except for Broadcaster D, which was the only one that is not affiliated with the national broadcaster, but was included in the research due to its social relevance in the city where the research was carried out. None of the Broadcaster E professionals contacted agreed to participate in the research; 2) four deaf people, aged over 18 years, with severe and/or profound bilateral hearing loss, who use Libras as their main form of expression, who had a television set at home and who resided in Campinas or region. The profiles of the respondents, identified with fictitious names, are shown in Table 1 and Table 2. All participants who accepted to participate in the research signed an Informed Consent Form (ICF). They had access to this document written in Portuguese and the deaf participants were also able to access its content through Libras, since all interviews were mediated by a professional Sign Language Translator Interpreter. The research was carried out after their acceptance was formalized, either by signing the ICF or by expressing consent in a recorded video of the interview.

Participant, age, type and degree of hearing loss	**Occupation/work**	**Age they started using Libras**	**Use of ISAD* and/or CI**?**
Emily, 28 years old, bilateral profound sensorineural hearing loss	Works as a pedagogue	7 years	Yes, ISAD
Tomas, 57 years old, bilateral profound sensorineural hearing loss	Machine operator technician	20 years	No
Clarissa, 24 years old, bilateral profound sensorineural hearing loss	Student and teacher of Letters-Libras	2 years	No
Roberta, 32 years old, bilateral profound sensorineural hearing loss	Complete secondary education, works in the production of frames in an optical retailer	14 years	No

Chart 1: Profile of deaf participants
Caption: *ISAD – Individual Sound Amplification Device; ** CI - Cochlear Implant

Participants	Broadcaster - Role at broadcaster	Time working at the broadcaster	Have you ever worked at another broadcaster?
André	A - Journalist/Journalism Editor	4 years	Yes
Bruna	B - Production coordinator, host and reporter	6 years	Yes
Breno	B - Director of Journalism	7 years	Yes
Cristina	C - Editor-in-chief	6 years	Yes
Diego	D - Director of programming and digital lines	4 years	No
Douglas	D - Operational broadcasting coordinator	32 years	No

Chart 2: Profile of professional participants from television broadcasters

The Metropolitan Area of Campinas has 124,070 persons with hearing disability, specifically: 7,374 persons with total hearing loss; 22,158 persons with major hearing difficulty; and 94,538 persons with some hearing difficulty —according to the latest census[26]. However, there is no precise census data on the number of deaf persons who use Libras. They are estimated to be concentrated in the first two groups, which together total 29,158 people.

The interviews were conducted using two questionnaires with guiding questions: one for the professionals and the other for the deaf persons. The first questionnaire addressed how journalists observed the role of broadcasters in accessibility and information on health and then asked about the functioning of accessibility within their broadcaster. Deaf respondents were asked about the health information that reached them and how the television environment fit into this information precursor.

The interviews lasted approximately 30 to 40 minutes and were conducted via a Google Meet virtual platform, recorded and transcribed for later analysis. The interviews with deaf persons had Libras interpreters to mediate the communication between interviewer and interviewee.

A field diary was used throughout the research, having, in this work, through annotations, the function of assisting researchers in producing data and transforming field observations into knowledge and methods[27].

Data analysis employed content analysis28 technique, which is defined as:

> A set of communication analysis techniques aiming at obtaining, through systematic and objective procedures for describing the content of messages, indicators (quantitative or not) that enable infering knowledge related to the conditions of production/reception of these messages[27].

There are several types of content analysis, with thematic analysis being the most suitable for qualitative research in the field of health[21]. Thematic Analysis is carried out through the discovery of the cores of meaning present in a communication, which must be observed as to the presence or frequency of their appearances[21].

Among the possibilities of qualitative analysis, this research is based on a thematic analysis of the discourse of the respondents. The concept of theme is based on a conception of being the core of a certain idea, which in the case of an empirical research is present in the corpus of the recorded, transcribed and analyzed interviews. Therefore, this thematic focus is not disconnected from a certain

unit of context, which is based on the perspective and repertoire of ideas present among the respondents about the object of this research.

RESULTS AND DISCUSSION

In order to analyze accessibility for deaf people in a television environment and access to health information through television, deaf people and TV broadcaster professionals were interviewed. The analysis of all the material obtained resulted in the following thematic categories: A) Deaf persons and (lack of) accessibility in television; B) Television as a medium for access to general health information and information about COVID-19; and C) Television as a barrier to health information for deaf persons . These will be presented and discussed below.

A) DEAF PERSONS AND (LACK OF) ACCESSIBILITY IN TELEVISION

According to the deaf respondents, there is practically no accessibility in television for deaf persons and the lack of access to reported information and entertainment content is a situation experienced daily. They say that accessibility for deaf persons is synonymous with the *Libras Window*, that is, when television content is translated and interpreted into Libras and displayed in a window in the lower corner of the screen. Some authors[9] argue for the need for the Libras window, stating that "the Libras window is the most accessible resource for deaf persons, as it provides them with simultaneous translation from Portuguese into sign language," as we can see in this work in the following excerpts:

> "[...] if there were a Libras window, then there would be 100% (access to information). The only resource that I would get 100% information and accessibility is the (Libras) window" (Tomas, deaf person 1).

> "Oh, for example, when they talk about the "vaccine," "bus information," I don't understand anything they're saying [..] (because) there is no accessibility, no Libras, there should be Libras. I look like a clown (watching television)" (Roberta, deaf person 2).

> "[...] There is no Libras window, most programs [...] the Libras window should be mandatory in news programs, soap operas, it should be mandatory in everything" (Emily, deaf person 5).

The TV content to which hearing persons have timely access, deaf persons reportedly only learn about it later, through other means or people, as noted below:

> "[...] there is a lack of the Libras window accessibility, especially in news programs, important announcements, then you always have to tell the deaf person the news, they always learn about it later [...] something happened and the deaf person only learns about it the next day [...] they end up going to the place and then, they lost the news. So it is important (that everyone has access to information)" (Emily, deaf person 4).

TV Cultura was mentioned as one of the few broadcasters, nationwide, that has a Libras window, which attracts the deaf public, allowing access to the contents, as reported in the following excerpt:

> "Of course, when it's on (TV) Cultura with an interpreter I watch it. On the others (TV channels) I watch anyway, I see that it's related to health, it's hard (to understand), but it's that (I watch the broadcast) anyway. Then, when it's on Cultura, I pay attention and get this information" (Tomas, deaf person 1).

The interviewed local broadcaster journalists recognize the lack of the *Libras Window* in the programming where they work and justify that this occurs because it would represent a high cost for the company or due to *"technical limitation,"* as reported by *André, a journalist from Broadcaster A*, and *Cristina, from Broadcaster C,* in the excerpts below:

> "I think it is hard on the pocket of the businessman (the implementation of the Libras window), because the businessman will have more employees, right, that's why I think the technology (in general within the broadcasters) favors the user who is the viewer, you know, because also, in a programming, that in a television has twenty-four hours, there would have to be a Libras employee 24/7, it is a very high cost for a company [...]" (André, journalist 1 from Broadcaster A).

> "No (no program produced and broadcast in the last twelve months has a Libras window, none. I believe that this (occurs), that it is (due to) technical limitation, but, for now, we have no plan (to introduce Libras window)" (Cristina, journalist 4 from Broadcaster C).

A study[29] had the same finding and observed that, in general, the lack of investment in the introduction of the Libras window, according to the rules for its implementation, would imply major costs with professionals, technologies, in addition to the requirement to rethink the visual forms and formats on Brazilian television, due to the window being permanently displayed on the screen.

André, journalist 1 from Broadcaster A, also adds that:

> "In the newspaper, there is no way (to have a Libras window), and in our news program, in the "live" broadcast, in the recorded program, we can't do that because of the dynamics, you know, of the "live" broadcast [..]" (André, journalist 1 from Broadcaster A).

In this last excerpt, the journalist mistakenly justifies that in "live" broadcast situations, such as television news programs, it would not be possible to insert the Libras Window, demonstrating ignorance of one of the possible methods for working of professional Libras interpreters. To provide the Libras Window with simultaneous translation, the broadcaster must have the professional in the studio, with real-time access to the live program, through a television, filmed by a camera equipped with a transmission system that redirects the interpreter's feed directly to a window in the lower corner of the screen during the news broadcast. This resource is used by news programs such as those of TV Cultura, Canal TV Brasil and Broadcaster D — the latter being one of the local broadcasters included in this study. This Broadcaster, among those researched, was the only one that presented Libras Window in its programming, as evidenced in the following excerpt:

> "I think the first point is to have Libras (so that deaf people, who are users of Libras, be viewers of a broadcaster) [...] when I started back then (inserting the Libras window) it is obvious that I focused on other programs, so I focused on health programs [...] But, then, in that first period, we sought... even listening to the deaf community, what they wanted to have there, in a second period, when we managed to expand, I put Libras in everything. It's up to the deaf people to define what they want to watch, I have cartoon with Libras, cartoons in partnership with independent producers [...] I don't know if this (is) the cartoon they

> (deaf children) want to watch, but it's cool to give them the option, having the option. And what I see is that there is a very large demand [...])" (Breno, journalist 2 from Broadcaster D).

> "[...] the biggest success we had in broadcasting to the deaf was the elections, our coverage of elections, especially the presidential and such, was the only coverage with 100% Libras [...] it was impressive the feedback (from the deaf community), people from outside the state watching. Because then it's not local coverage for the president, so you can see how this public is lacking information [...])" (Bruna, journalist 2 from Broadcaster D).

The interviewed journalists also justify that the broadcasters comply with what is demanded in the legislation, as noted in the excerpt:

> "We are always based on the ordinances, it is not so much about accessibility resources, audio description. It is based on the Statute of Persons with Disabilities, so today our programming, it is 100% complying with the rules and guidelines of these ordinances and this law (Statute of Persons with Disabilities) [...]". (Diego, journalist 5 from Broadcaster B).

However, the Statute of Persons with Disabilities itself, mentioned by the respondent, provides for the Libras window, as observed in chapter II of access to information and communication. The feeling is that the Statute of Persons with Disabilities does not make clear the obligation of the Libras window and that broadcasters leverage this interpretation loophole. The same does not occur in relation to Law No. 12,034/200930, which establishes rules for elections, providing that "free electoral advertising on television must use the Brazilian Sign Language (sic) – LIBRAS (sic) or the caption feature, which must mandatorily be included in the material submitted to broadcasters."

This law, despite having existed since 2009, has been progressively complied with in electoral advertisements. A study[9], whose objective was to understand the discursive view of deaf persons on the accessibility resources used in electoral advertisements in Mato Grosso, found that in the 2014 elections none of the deaf voters interviewed believed they had, in fact, had linguistic accessibility in government campaigns. This finding is due to the fact that only written captions were used as a resource, which fails to comply with the linguistic demands, considering that not all deaf persons have extensive knowledge of the Portuguese language.

> "[...] we work with it (Libras window) only [...] in elections, debates, political debates, interviews, commercials, which already come from the producers too, it already comes with Libras, they are mandatory, that is mandatory" (Douglas, journalist 6 from Broadcaster B).

The journalists realize that the lack of the Libras Window represents a linguistic and communicational barrier for deaf people, as they consider that closed captions — that is, the system of transmitting subtitles via television signal, with content that is being conveyed orally appearing written in a window in the lower portion of the screen — is a feature that guarantees accessibility to this population.

> "[...] if you analyze [...] these matters (of captions and accessibility) there are always [...] in recorded programs and some TVs, the Smart ones. You already have the system showing the letters or the audio too" (André, journalist 1 from Broadcaster A).

> "It was one of the first broadcasters, even before I was admitted here, Douglas participated in this process, it was one of the first broadcasters to produce closed captioning, 100% of its local production, right? So. This has always been a concern of the broadcaster [...] What is within our reach? What can we do and with quality? So, the quality has always been very questioned. [...] We have an operation work, it is not a checklist, what we call here to see if in fact we are delivering with quality what the viewer, (what) the community, (what) the deaf need to understand our information. So this is a, it's a serious concern, right?" (Diego, journalist 5 from Broadcaster B).

However, for deaf persons, closed captioning does not represent true accessibility. That is partly because the quality of the captions, when they exist, is not good. Another study31 notes that most broadcasters surveyed only allow the use of closed captioning to remedy accessibility for deaf persons and that the quality of this feature is not satisfactory in most cases, as it does not have an adequate vocabulary of the Portuguese language, so the transcribed information is not always clear. Additionally, it is argued that the ideal scenario for the complete understanding of deaf persons would be the presence of the Libras window[31].

> "But a very wrong caption (in written Portuguese), some disconnected mismatched words, I say "Mom, what's going on with this caption?" Then my mother talks, you know? She explains the topic to me and the caption has nothing to do with it". (Emily, deaf person 4).

Some journalists recognize that closed captioning has limitations and that it is necessary to invest in technology so there is quality.

> "[...] this closed caption crap that only serves for the guy to turn on in the restaurant when everyone is talking to see if people follow and you can't follow it properly" (Breno, journalist 3 from Broadcaster D).

> "[...] The information is very fast, you can't do it (insert the closed caption) [...] there is no way to do it (the caption with quality) [...]" (André, journalist 1 from Broadcaster A).

> "Today, we have a platform[...] all (a) structure, all the equipment part, it is here in the TV. So we made this investment so the response time [...] is practically immediate, [...] so the voice recognition, of the transcription, is faithful, isn't it? [...]" (Diego, journalist 5 from Broadcaster B).

In addition to the technical limitations of closed captioning, another reason for this feature not ensuring accessibility is because many deaf people do not have a command of Portuguese and others have not yet been taught how to read, as is the case of children, as can be seen below:

> "We lose a lot of information, I can't get it completely, so, for example, I know that Netflix has subtitles and I also lose some things because of some vocabularies [..] I can only (have access to all the information) when there is an interpreter" (Tomas, deaf person 1).

> "I lose a lot of information, accessibility needed to improve [..] (the) deaf children, they love the cartoons in the case of Disney streaming they can't read yet, so it would be important to have Libras. I pay much attention because sometimes there is no subtitle (written in Portuguese) so I ask my mother "What are they talking about?" Because, sometimes, my father feels uncomfortable even turning subtitles on because it's very confusing [...]" (Emily, deaf person 4).

Therefore, the need to create a specific law – Brazilian Inclusion Law – shows that both the fact that the 1988 Constitution addresses the inclusion of persons with disabilities and the 2003 cultural rights perspective have not yet been sufficient for significant transformations in the availability of basic access instruments, such as the Libras window in television network programming, as evidenced in the research.

It would be necessary to create financing mechanisms that enable the necessary investments in accessibility and strategies for governmental inspection and enforcement so these rights are in fact ensured and existing legislation can be effectively implemented in broad and continuous access practices, truly democratizing the access to information and the enjoyment and production of culture by Persons with Disabilities and the Deaf Community.

Beyond the television environment, slowly, in the last two decades, the presence of resources such as translation into Libras has become more common and the word "accessibility" has been definitively incorporated into the field of cultural production, often becoming a criterion for scoring and/or selecting projects that seek to obtain public resources, either through tools such as open selection processes or tax incentive laws.

Thus, we can say that the contribution of the cultural rights perspective as the foundation for the structuring of public policies has promoted, above all, the legitimation and strengthening of discourses and movements that began to pressure for affirmative mechanisms aimed at specific needs of inclusion of certain groups in cultural practices.

B) TELEVISION AS A MEDIUM FOR ACCESS TO GENERAL INFORMATION ON HEALTH AND COVID-19

Several authors[32,33] have sought to delve into the role of television because of the social demand that appeared due to the more intense process of globalization in recent decades. These authors note that the audiovisual culture has an indisputable power in our society, including health information.

The interviewed journalists recognize how important television is as a medium for safe information, of the most varied types, about health, whether by addressing the topics as part of the programming content or by dedicating entire programs to talk about health, as evidenced in the following excerpts:

> "Yes (the broadcaster has some role in promoting people's health), because as it has two exclusive programs on health and, also, reports health issues in its news on a daily basis, it is fulfilling its role of making all the dissemination with regard to prevention, information in relation to health. [...]" (Breno, journalist 3 from Broadcaster D).

> "Yes (the broadcaster has some role in promoting people's health) [...] we have a considerable part of the programming geared toward people's health, [...]. There is hardly ever a news program that does not address a health issue [...]" (Cristina, journalist 4 from Broadcaster C).

> "Normally we have [...] radio news information (information broadcast on television), how is the occupation of beds, now that there is Covid we follow very closely the hospital capacity; the viewers themselves usually send videos to us [...] specific information, Covid, hospital capacity, now also we are following the vaccination campaigns closely [...] (Bruna, journalist 2 from Broadcaster D)."

> "Specifically here in our region we have an older audience [...] Broadcaster B actually has this characteristic of working with health tips, healthy recipes [...]" (Diego, journalist 5 from Broadcaster B).

> "We (have) as a role, [...] (having) a fundamental connection with the population, we use our social networks and our zap (WhatsApp of Broadcaster A) through which we receive people's complaints [...] Yeah, Yeah (I consider that television plays an essential role in transmitting information)" (André, journalist 1 from Broadcaster A).

In the COVID-19 pandemic, this role became even more evident, with television, especially television news, being important sources of information about the pandemic, transmission mechanisms, prevention measures, adoption of public actions and policies by municipal, state and federal governments; on vaccines, among many other pieces information that are useful and pertinent for the population during the pandemic context.

Television is, therefore, an important medium through which health promotion and disease prevention strategies can be adopted, since its contents influence opinions, with potential to lead viewers to change habits and lifestyle and adopt self-care practices based on the information accessed. Therefore, it is extremely important that certain contents reach many people, including those who communicate using Libras, especially in a country whose public health care system faces serious difficulties in being universal, comprehensive and equitable.

A survey carried out by professionals at Hospital Israelita Albert Einstein — called "Exposure to COVID-19 information in digital media and its implications for health care providers: results of an online survey"[34], which aimed to estimate the consumption of COVID-19-related information and its effects on health care providers during the pandemic — found that about 90.1% of the respondents accessed information about COVID-19 on media channels (television and radio)[35].

Simultaneously, with the advent of broadband internet connection and Web 2.0, the processes of interaction between media and consumers were radically transformed, with social media such as *WhatsApp, Facebook, Twitter, Instagram,* and *Pinterest* gaining more and more space in people's lives.

The pandemic context, in conjunction with the protagonism and dissemination of the media, gave rise to that which the World Health Organization (WHO) defined as an infodemic, that is, an excess of poor, unsafe and literally false information (fake news) about the same issue, associated with reactive searches permeated by fear, hindering the adoption of solutions[36].

As for Fake News, a research conducted by the Reuters Institute[37], which focused on 225 false claims about the coronavirus, found that 88% of them came from social media platforms, 9% from television and 8% from news outlets. These data indicate that television, although not free of error, is an important and reliable medium when compared to other media and has an important role in combating fake news, as argued by a respondent from Broadcaster D:

> "Yeah (the broadcaster has some role in promoting people's health), especially now in the pandemic, I think it is a fundamental factor, we also have this role of combating fake news, right, talking openly about COVID, about vaccination [...]" (Bruna, journalist 2 from Broadcaster D)."

> "Health promotion [...] at the beginning of the pandemic, [...] and we worked with a concept demystifying (COVID-19) [...] When you get into the issue of fake news, yeah... we work on this demystification[...] (Our role) It is to promote, in our region, inform our region [...]" (Diego, journalist 5 from Broadcaster B).

If the population is generally subject to the damage that fake news can cause, deaf persons are even more subject and vulnerable, since they have restricted access to safer media, such as television, given the lack of accessibility in sign language.

Another strategy used to combat fake news was to increase the duration of television news programming to transmit health information35 and also the amount of content, specifically about COVID-19, broadcast during this programming.

> "We have (a specific segment about health in general in the TV news program). Before the pandemic, we already had segments during the week, on health tips [...] (they were) segments that are created, with topics of interest to our public [...], of course, with the start of this pandemic, the health issue intensified, you know? The issue is at the national, state and regional levels and we, to date, cover the arrival of, mainly, [...] vaccines [...]" (André, journalist 1 from Broadcaster A).

C) TELEVISION AS A BARRIER TO HEALTH INFORMATION FOR DEAF PERSONS

The analysis of findings on television as a barrier to health information for deaf persons showed that there are not many examples of deaf persons declaring about their understanding of information on COVID-19 transmitted on television due to lack of accessibility, since all deaf respondents reported that in any case of difficulty they asked for help from family members and friends.

Deaf persons are more likely to receive information within the deaf community than by means of social media and health care providers due to language barriers[38]. The deaf respondents show this situation, as can be observed in the reports:

> "Oh, some doubts, yeah, but more in relation to people's opinions. Then I went directly to the people I trust and asked (about COVID-19)" (Tomas, deaf person 1).

> "Always on Google, I always search on Google "What is it? How is it? How's the best way to protect myself?" [...] for (seeing) prevention measures [...] I search for information on Google. The internet does help a lot, yeah, if it depended only on the TV[...]. There, I can read, imagine if I didn't have internet? And, then, how would it work? The impediment would be worse for development" (Emily, deaf person 4).

> "[...] my mother had given me a summary (about COVID-19), but I wasn't understanding (what was being broadcast on television). Then a friend explained it to me and I understood the severity (of the coronavirus pandemic)" (Roberta, deaf person 2).

Faced with the difficulty of accessing information through television, deaf persons end up resorting to asking family members for clarification on what is reported. The research entitled "Deaf persons' knowledge and source of information about health and disease"[10] shows the family as a major provider of health information. The present research observed the same, as in the following excerpts:

> "I'm curious and then I ask my daughter or someone, I keep or memorize a word there and ask: what's going on (on television)?" (Tomas, deaf person 1).

> "Sometimes (I watch television), because I can't understand it, you know? I don't understand it, I just see the movement, I ask "Mom, what are they talking about? Translate." Then my mother makes that face, in fact when there are captions I can follow, because [...] of the Portuguese and the good vocabulary" (Emily, deaf person 4).

> "It was through my mother, my mother explained it to me, I said "what is that? Coronavirus, I don't understand, I had just started in a new work." I worked with hearing people who knew a little of Libras. I said "What's going on?" (Roberta, deaf person 2).

It was observed in the reports that the family often becomes the source of information, as it is questioned and demanded by the deaf member, who asks for clarification and access to television content devoid of linguistic accessibility.

However, despite this role played by families, it is important to note that this function also extends to health care providers, through the clarification of information conveyed on television and other demands, in an attempt to mitigate barriers in access to information[10].

Professionals, when granting interviews, participating in debates, among several types of programs, should instruct that the content needs to be conveyed in an accessible manner. Broadcasters, in turn, have not only the role, but the duty to transmit information accessible in Libras, ensuring deaf persons the right to access the same information as the hearing population, with the family no longer being responsible, but rather assisting when necessary.

This study contributes to the discussion on accessibility in the television environment since it gives visibility to an issue that is scarcely addressed, experienced exclusively by deaf persons, who feel on the sidelines of the information circulating in society and powerless in the face of the *status quo*.

CONCLUSION

After extensive research and interviews, it is concluded that accessibility for deaf persons in the television environment is scarce, which highlights an informational gap in the lives of these people who are placed on the sidelines of society, especially when considering access to television as a cultural medium, with emphasis on health information — so relevant in periods such as that experienced during the COVID-19 pandemic.

The almost inexistence of linguistic accessibility in television is a reflection of a society that excludes deaf persons and makes them invisible in the various spheres of society. It is in television, cinema, theater, medical consultation and many other places that accessibility does not exist or is incipient.

Changing this situation requires: supervision for compliance with legislation providing for deaf persons being citizens with the same rights as any hearing person; increased number of specific public policies, in the various spheres of society, with budget forecast and mandatory accessibility in Libras; increased number of undergraduate Letters-Libras programs, graduate Libras programs, and Libras Proficiency Exam, so more people become able to exercise the profession and deaf persons are less subject to poor quality interpretation; and Libras education in the various undergraduate programs so professionals from various areas are sensitive to the needs and rights of deaf persons.

Specifically in the television environment, it is necessary that TV broadcasters — both generators and affiliates — plan and allocate budget for the hiring of sign language interpreter translators (TILS) and that this be required by the government.

With the advancement of technology and the popularization of digital media, there is an urgent need for more studies on accessibility for deaf persons in the television environment, especially regarding the quality of accessibility features and how they are offered. Thus, paths are opened for future research on the impacts of the lack of accessibility to information on the autonomy of individuals

in the different domains of their lives. Furthermore, it is valid to delve into the factors that lead broadcasters to non-compliance with rules and laws already established, as well as to think about possibilities for reorganizing the dynamics currently established by these broadcasters.

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