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Original articles

The inclusion of deaf in the traffic

A inclusão de surdos no trânsito

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ABSTRACT

Purpose: to investigate how the process of including deaf people happen in traffic scenario.

Methods: the study involved 20 subjects, divided into three groups: G1, composed by 10 deaf; G2 composed by five professionals from a reference institution in assistance to individuals with special educational needs and G3 composed by five professionals from a State Traffic Department. Interviews were applied recorded in audio and video, whose answers were analyzed using the software Qualiquantisoft and those with similar meaning were gathered for the construction of collective subject discourse, based on the method proposed by Lefèvre and Lefèvre.

Results: the collective subject discourses point to difficulties in accessibility of deaf in traffic and in the process of obtaining and renewing of the national driver's license. In general, all groups pointed suggestions as: the need of the interpreter to mediate the process, the training of professionals to serving deaf and the realization of the theoretical test in Libras, using video.

Conclusion: although there are progresses, there are numerous flaws in that it is the accessibility of deaf people both in the process of obtaining / renewing of national driver's license as in traffic. Therefore, it is urgent to be discussed the reality faced by this population, seeking solutions that can provide the deaf not only to access to traffic, but also the construction and proper execution of public policies that will provide them with accessibility and safety.

Keywords: Hearing Impaired Persons; Deafness; Accidents, Traffic

RESUMO

Objetivo: investigar como se dá o processo de inclusão de surdos no cenário do trânsito.

Métodos: participaram do estudo 20 sujeitos, divididos em três grupos: G1, composto por 10 surdos; G2 composto por cinco profissionais de uma instituição de referência em assistência a sujeitos com necessidades educacionais específicas e G3 composto por cinco profissionais de um Departamento Estadual de Trânsito. Foram aplicadas entrevistas gravadas em áudio e vídeo, cujas respostas foram analisadas por meio do software Qualiquantisoft e aquelas com sentido semelhante foram reunidas para a construção de discursos do sujeito coletivo, tendo como base o método proposto por Lefèvre e Lefèvre.

Resultados: os discursos do sujeito coletivo apontam para dificuldades na acessibilidade de surdos no trânsito e no processo de obtenção e renovação da carteira nacional de habilitação. De uma forma geral, todos os grupos apontaram sugestões como: a necessidade de intérprete para mediar o processo, a capacitação de profissionais para atenderem surdos e a realização da prova teórica em Libras, utilizando recursos de vídeo.

Conclusão: embora haja avanços, há inúmeras falhas no que se trata da acessibilidade de pessoas surdas tanto no processo de obtenção/renovação da carteira nacional de habilitação quanto no trânsito. Portanto, é urgente que seja discutida a realidade enfrentada por essa população, visando soluções que possam garantir aos surdos não apenas o acesso ao trânsito, mas também a construção e adequada execução de políticas públicas que venham a lhes fornecer acessibilidade e segurança.

Descritores: Pessoas com Deficiência Auditiva; Surdez; Acidentes de Trânsito.

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INTRODUCTION

The number of road accidents in Brazil has drawn attention recently, with enormous losses from an economic and physical point of view, as well as in terms of mortality. The road is composed of various individuals, including deaf people, who also have their right to drive guaranteed under current road legislation. However, the laws that grant them this right are not effective, since deaf people exist as "invisible" beings on the road. Thus, it is unclear as to how to incorporate these individuals onto the road, taking into account the coexistence of auditory and visual stimulants in this environment.

The road is not only a technical issue involving traffic engineering or monitoring¹. It is also a social, political, educational, and psychological issue, since, among other factors (such as the perceptive and motivational ones), it can become an external stressor. On the road there is no possibility for individual choices without collective consequences: actions will always interfere with others. It is important to reflect on the interactions necessary for avoiding conflict and disputes for space. Only when others are recognized as people with equal rights and when their viewpoints are incorporated into decisions is a collective sense born².

Due to an increase in violence on the road, the decade from 2011 to 2020 has been proclaimed by the United Nations Organization as the Decade of Action for Road Safety, first looking to stabilize and subsequently reduce the number of fatalities, aiming to formulate and implement national, regional, and international plans³,

This study covers the inclusion of deaf people onto the road, and just as in Hersh, Ohene-Djan, and Naqvi4, it differentiates between deaf people and those with impaired hearing, with deaf people being considered those who do not use oral language and writing in an effective way and the hearing impaired as those who

It is supposed that deaf drivers create compensating mechanisms⁵ to adapt to the demands of the road, however the hearing impaired may not use the same strategies, especially depending on the time when hearing loss began, the type, and the degree of hearing loss. In this context, a worker who has developed presbycusis or hearing loss induced by high sound pressure levels (HLIHSPL) cannot be compared with a subject who was born deaf or became deaf very early on, since the hearing loss will affect these individuals at different biopsychosocial levels and in different day to day contexts, including on the road.

In one study on deafness and sign languages, the following observations were made: (1) deaf people and those with normal hearing have different ways of dealing with social situations and this must be related to the use of different languages and (2) Brazilian Sign Language (Libras) is considered a normal and legitimate language and provides the intellectual, educational and emotional development of deaf individuals, as well as forming their own identity and making social interactions feasible, especially in a specific community⁶. Brazilian Sign Language (Libras) is an official language of Brazil and a legal means of communication and expression of ideas and facts, recognized by Act n. 10,436, of April 24, 2002. This law defines Libras as a linguistic system that is motor-visual in nature, with its own grammatical structure, originating from communities of deaf people in Brazil.

Thorslund and cols.7, from a clinical viewpoint, investigated the influence of hearing loss on transport, safety, and mobility, and looked into the results from four groups, divided by degree of hearing loss (light, moderate, severe, and profound), reaching the conclusion that: (1) individuals with hearing loss are less likely to acquire a driving license; (2) on the road, hearing loss mainly affects attention while driving a vehicle; and (3) those with a greater degree of hearing loss (severe/profound) showed less concern about the effects of hearing loss on driving a vehicle, which indicates the use of coping strategies. The authors also emphasize the need for a study involving strategies/ compensatory actions adopted by these individuals and resources that could resolve the difficulties faced by them on the road.

Considering the above, it is important to reinforce that despite the constitutional right of all citizens to come and go being guaranteed, this "guarantee" is not clearly presented to the deaf population, therefore there is a need for greater awareness so that their accessibility can be guaranteed and improved. Thus, the aim of this study was to investigate the inclusion of deaf people onto the road, especially with regards to the process of obtaining and renewing Brazilian Driving Licenses (CNHs).

METHODS

The study has an observational, exploratory, qualiquantitative, descriptive, and cross-sectional design, and was carried out between 2014 and 2015 at a State Road Department and at an institution of reference in assisting individuals with specific learning needs.

This study was approved by the Committee on Ethics in Research with Human Beings from the Center for Health Sciences at the Federal University of Paraíba, under number 34133614.3.0000.5188.

20 subjects participated in the study, divided into three groups:

- G1: composed of ten deaf people, considered as those who communicate using Libras;
- G2: composed of five professionals from the institution that offers assistance to individuals with specific learning needs;
- · G3: composed of five professionals from the State Road Department.

Three interviews were applied, one directed at each group. The interviews with the two groups of professionals were adapted from Fiel⁸ and had different questions, considering the specifics of the institutions they belonged to. The interviews lasted for four minutes on average and were recorded on video and in audio.

For the three groups, it was asked whether there is accessibility in the process of obtaining and renewing CNHs and whether there were any suggestions for optimizing this accessibility.

For G1, questions were also asked which focused on the existence of deaf people's accessibility onto the road, situations in which they experienced difficulties on the road, the use of personal hearing aids (PHA), and care taken while driving a vehicle.

In relation to G2 and G3, since two groups of professionals were involved, the population profile in relation to age, sex, and time in training was outlined. Moreover, for G2, the following aspects were focused on: time working with deaf people, assistance offered by the institution to deaf people in the process of obtaining and renewing CNHs, and deaf people's main complaints and demands in the process of obtaining and renewing CNHs. In G3, as well as the questions previously mentioned, it was also asked how long they had worked at the institution.

The application of the interview with deaf people (G1) was mediated using an interpreter who interpreted the questions from Portuguese into Libras. The interview covered the following questions: the existence of deaf people's accessibility onto the road, difficulties experienced on the road, the use of hearing aids, care taken on the road, accessibility in the process of obtaining and renewing CNHs, and suggestions for improving deaf people's accessibility onto the road.

The interview applied to the road department professionals was composed of questions regarding: time in training, time working at the institution, training to attend to deaf people at the institution, accessibility for deaf people in the process of obtaining and renewing CNHs, and suggestions for improvements in this process.

The interview with professionals working at the institution that provides assistance to individuals with specific learning needs covered questions such as: time in training, time working at the institution, training to attend to deaf people, assistance offered to deaf people who need to acquire a CNH, deaf people's main complaints and demands in the process of obtaining and renewing CNHs, and suggestions for improvements in this process.

The interviews were recorded on video and the replies from G1 were interpreted from Libras into Portuguese by two interpreters certified by Prolibras; the material was recorded in audio, and subsequently transcribed and compared. As there was no divergence in the interpretations carried out by the two interpreters, the participation of a third interpreter was not necessary. The analysis of the replies from G2 and G3 was carried out based on the video transcriptions, since the replies were given in Portuguese.

The construction of a Collective Subject Discourse (CSD), as proposed by Lefèvre and Lefèvre^{9,10}, was used as a methodological strategy in qualitative research. According to the authors9 (p. 11),

[...] CSD is a research proposal that looks for a suitable method for retrieving and describing opinions, beliefs, and social representations of communities in a way that preserves the narrative and at the same time social nature of such opinions or social representations. In order to achieve this preservation, CSD presents the opinions that describe empirical entities in a collective nature in the form of discourse spoken in the first person singular, i.e., in the form of collective statements.

CSD is a technique for organizing and analyzing qualitative data of a verbal nature, obtained by means of statements. This method consists of selecting, from each individual reply to a question, the key expressions and most significant parts from these replies. With the material from the key expressions from the central ideas, summarized discourses are constructed in first person singular, which is CSD, in which a group's or collective's thoughts appear represented by an individual discourse. The challenge which CSD aims to respond to is that of self-expression of collective thought or opinion, respecting the qualitative and quantitative double condition of these 11,12.

This technique has been systematically used in research of a qualitative nature in health 13-16, thus perceiving its scope, which provides the researcher with greater possibilities in a qualitative approach.

For tabulation and organization of the statements, the Qualiquantisoft® software was used, specifically developed for the use of this method. The replies from the interviews were analyzed and those with similar meaning were compiled together for the construction of the Collective Subject Discourses.

RESULTS AND DISCUSSION Group 1

G1 was composed of 10 deaf people, seven males and three females, ranging in age from 27 to 48 (an average age of 37.8). All had completed higher education and had carried out or were carrying out the process of obtaining a CNH. Eight have licenses and had been driving for an average of 12.6 years. The other two failed the theory test for obtaining a CNH, and thus did not have a license, and at the time the data were collected, they were waiting for interpreters who could mediate in the process. These two deaf people had stories that indicate a lack of accessibility during the process of obtaining and renewing CNHs. It was also observed that four of the deaf people had corrected visual limitations.

With regards to linguistic modality, seven used Libras to communicate and three are bilingual (they use Libras and Portuguese), but their preferred modality is Libras.

When questioned about the presence of accessibility onto the road environment for deaf people, nine of the interviewees initially stated that accessibility does exist (CSD 01).

CSD 01 – G1 in relation to the existence of accessibility onto the road for deaf people

For me, deaf people and those with normal hearing are equal. I feel normal, both as a driver and as a pedestrian. Just as people with normal hearing hear horns and sirens, I have good vision and am able to drive well using visual information. I am responsible and know the rules. The language that the road uses is very good for deaf people. I have a car and have accessibility, since I have a license, just like a person with normal hearing. The only thing

that is different in the process is that I am deaf and when there are horns I do not have access to these sounds.

The deaf person, in CSD 01, understands accessibility as the fact of having a CNH, which allows him/ her access to the road, just like people with normal hearing. Thus, for him/her, there would be no difference between them on the road, only in the adoption of different strategies, considering his/her visual attention, which facilitates his/her performance while driving.

In a study into deaf people's safety in the United Kingdom, it was verified that the interviewees had considerable safety problems, even in the case of more intense sounds, such as a bus approaching, trucks, and heavy vehicles. These hearing difficulties on the road were reflected in feelings of reduced safety4. Despite the authors reaching this conclusion, in this study the subjects from G1 stated that they felt safe on the road.

One study¹⁷ presents, among the suggestions for improving deaf people's accessibility onto the road, the use of sensors that capture sound waves and convert them into light signals, warning of horns and ambulance and police car sirens.

Asked about difficult situations experienced on the road, seven had stories that indicate flaws regarding accessibility (CSD 02).

CSD 02 – G1 in relation to difficult situations experienced on the road

Sometimes, when I show my license to people with normal hearing and say that I am deaf, they do not believe me, and then I explain that by using our vision we are able to see all of the information necessary for driving. When some problem occurs such as a crash or a problem with the car engine, it is complicated to obtain help from others. People with normal hearing do not understand my communication, including the police, and I need the help of an interpreter.

The road is understood as a shared public space where displacements are carried out in lanes and sidewalks, in the form of general movement of pedestrians and vehicles. These displacements occur in a complex environment and can result in various conflicts¹. Among such conflicts, problems of accessibility can be identified due to the difficulties of communication of deaf people with other drivers/pedestrians and road professionals. The deaf people also mentioned

various difficult situations such as verbal offenses and gestures on the part of these people, which can constitute an external stressor in this environment.

One study from the United Kingdom¹⁸ investigated the police procedures used, policies, and practices in the area of road safety involving deaf people and those with impaired hearing and observed that there is a greater need for training courses for the police regarding knowledge of British Sign Language (BSL) and deaf culture, as well as their accessibility onto the road.

Only two deaf people referred to using PHAs, and of these, one refers to using it only for driving a vehicle because they are obligated by law, since their hearing loss can be corrected. The other uses the resource in their daily life (CSD 03).

CSD 03 – G1 in relation to the use of a PHA

I use a hearing aid, I like it, it helps me. Sometimes, I can hear the sound of a horn, but I do not understand speech. When there is the noise of an ambulance. of the police, or when they sound a siren, I can hear it with a hearing aid. Sometimes, when I don't have my hearing aid, I also use the rear view mirrors for help. Then I can, as a result of this accessibility and using vision as well. Another factor that facilitates are the headlights, when someone wants to sound their horn and instead uses their headlights.

In this discourse, it is perceived that the deaf person understands the PHA as a resource that, together with visual perception, can guarantee good driving performance. CSD 03 makes it clear, however, that the hearing aid is only able to capture intense sounds such as horns and ambulance and police sirens.

In relation to the care adopted by deaf people while driving a vehicle, in general, deaf people consider themselves as prudent, and because they do not hear, they use their visual attention as a strategy when driving a vehicle (CSD 04).

CSD 04 – G1 in relation to the care taken while driving a vehicle

I am very careful and responsible when driving. I don't drink, I obey the rules of the road, I aim to respect them. I pay attention to signals, traffic lights, traffic wardens, ambulances, signs, rear view mirrors, I look ahead and to the side, at "stop" signs, pedestrian crossings, among other visual

information. I am always attentive to this information; that way traffic flows normally in tranquility.

Vygotsky⁵ defended the importance of understanding the impaired as social individuals who depend on mediations received in their physical and social environment and who can enable compensating mechanisms which interact with the external surroundings to promote the maximization of their learning. Studies on this theory state that when an impairment inhibits an individual in the adaptation process for establishing a more direct relationship with the world, impairment compensating mechanisms may occur.

The human brain has a notable capacity for adapting to changes in its environment, benefitting from the properties of the "neural plasticity"19 phenomenon. The same authors claim that compensation occurs in loss of sensory information with improved abilities in the remaining senses. These behavioral modifications are often linked to alterations in the cerebral process, generally in the form of recruiting primary and secondary sensory zones¹⁹. It is believed that these alterations are predominant for deaf people to adapt to the road, considering that this presents numerous sound stimuli that are not perceived.

Regarding the process of obtaining and renewing CNHs, four referred to there being accessibility during this process and six claimed that the process involved flaws with regards to accessibility. In relation with the presence of an interpreter during the process of obtaining and renewing a CNH, six did not depend on an interpreter during the process (CSD 05).

It is observed that the replies from the subjects regarding accessibility in the process of obtaining and renewing CNHs were directly related to the presence of an interpreter or not at the time of the test (CSD 05 and 06). Those who considered that there was accessibility mentioned the presence of an interpreter during the process, since those that considered that there was not accessibility did not have the support of an interpreter.

CSD 05 – G1 in relation to the existence of accessibility in the process of obtaining and renewing CNHs

I managed to obtain the license, but there was an interpreter. If there hadn't been an interpreter, I wouldn't have managed. I did the course and there was interpretation. Then, I went to the State Road Department. I carried out the whole process. The

interpreter explained all of the information, signs, and rules to me. I studied and did the test, the interpreter was present at the time, but they did not give me the answers, they only interpreted the test.

For these subjects, their good performance in obtaining the CNH was directly related to the presence of an interpreter during the whole process and minimized possible difficulties. They also add that the interpreter acted ethically during the process, in accordance with the requirement of Item II of Article 140 of the Brazilian Highway Code²⁰, which states that the test cannot be interpreted in its totality, since there is no way for examiners unfamiliar with Libras to guarantee the individuality of the deaf candidates' answers if interpreters are interpreting the questions in the test.

CSD 06 – G1 in relation to the lack of accessibility in the process of obtaining and renewing CNHs

When I went to enroll, there was no interpreter at the road department and I did it alone, communication was quite difficult. I did the course and they said that there would be an interpreter, but there wasn't and we couldn't get one. The road department didn't accept the presence of an interpreter and I suffered quite a lot because of this. I got nervous because there was no interpreter for the test and when I read it I didn't remember the words, but I remembered similar things from the context that I had studied previously. I did the test three times. In the interior (of the state), the difficulty was even greater, there are some friends who drive well, write, sign, but they can't get the license because there are strong preconceptions at the road department. In the eye exam I also had difficulties, since the device used by the professional made communication even more difficult, since it was right in front of me and the doctor, impeding me from seeing what they were saying. I even used dactylology, it was very complicated.

The considerable interference of communication difficulties in the whole process can be perceived from this discourse, starting from the driving training course, including enrollment, tests and, evaluations. Moreover, it is perceived that the deaf person uses strategies based on training and memory to study and carry out the test, but has difficulties regarding Portuguese language writing comprehension.

In relation to the suggestions for improving accessibility for deaf people in the process of obtaining and renewing CNHs, G1 referred to the need for a Libras interpreter at the road department to mediate in the process, as well as adaptations involving applying the written test on video (CSD 07).

CSD 07 – G1 in relation to the suggestions for improving accessibility for deaf people in the process of obtaining and renewing CNHs

I think that there needs to be greater support for some deaf people, especially those who cannot communicate as well. It is important to have an interpreter working there, participating in the whole process of obtaining a CNH. It would also be good for other employees to know Libras so that we have direct contact with them. So, for the first license, a project needs to exist so that there is a video with interpretation, because the Portuguese is very contrived. If the legislative test was on video, suspicion would not exist, since there would be no interference from interpreters, as there would be no personal contact with them during the test.

Aiming to reduce communication difficulties, the deaf people suggest contracting interpreters and training employees in Libras. With the aim of smoothing out comprehension difficulties in the test, given that this is not carried out in their native language, the use of a test recorded on video in Libras was suggested. This measure, as well as guaranteeing that the deaf person participates in this process in an effective way, also eliminates suspicion regarding the intervention and unsuitable conduct of interpreters.

It is important, however, to pay attention to the fact that Libras is not standardized on a national level, and just like oral-auditory languages, is strongly influenced by regionalization, with variations in its linguistic levels (phonological, morphological, syntactic, semantic, and pragmatic)21. Thus, the test cannot be recorded in a single location in the country and distributed to the states, but rather needs to be interpreted locally, in order to guarantee that the deaf people of that region can adequately understand the content presented on the video.

CSD 08 presents suggestions for improvements made by the subjects of G1 for deaf people's accessibility onto the road. Generally, it is perceived that they feel invisible on the road, since the whole process is already prepared and they have to adapt to what is

in place. However, they make suggestions in order to minimize their difficulties.

CSD 08 – G1 in relation to the suggestions for improvements in deaf people's accessibility onto the road

It would be good for some people who work on the road to know Libras, such as, for example, some police officers. The visual information needs to be clearer, since there are deaf people who deal more easily with images and others with words. So if there were both it would be better. In reality, I feel that it is already all prepared. The rules have been made for people with normal hearing and we adapt. For blind people and those in wheelchairs, we see that some improvements are being carried out, but deaf people have ended up adapting to the reality for people with normal hearing and we just adapt to visual information.

It is observed that the language used on the road, which had previously been referred to as good by/for the deaf person, ends up being questioned, as well as the inclusion of deaf people onto the road, with preconceptions being mentioned, and the adaption of deaf people to traffic prepared for people with normal hearing. As Vygotsky⁵ suggests, individuals with some sensory limitations in their interactions with the environment end up using compensating strategies to adapt.

Group 2

G2 was composed of five professionals from an institution of reference at state level in assisting individuals with sensory and motor limitations. All the subjects were female, with 9 to 30 years of training (an average of 18.5 years) and have worked with deaf people for between 04 and 24 years an (average of 12.5 years). There are, at this institution, between 45 and 50 employees qualified to attend deaf people, including speech therapists, psychologists, teachers, and Libras interpreters.

In relation to the assistance offered to deaf people by the institution, it is perceived that this refers to providing interpreters for the process of obtaining and renewing CNHs (CSD 09).

CSD 09 – G2 in relation to the assistance offered to deaf people by the institution in the process of obtaining and renewing CNHs

Lately, many deaf people have been questioning and asking about their right to accessibility at the road department. Many seek out this institution to complain of the lack of a Libras interpreter, both on the driving school training course and in the road legislation test. There are deaf people who already have a CNH and others that are fighting to obtain it, since the process is currently at a standstill. The help that we offer occurs when they come requesting an interpreter to help them in the process, and so when a deaf person goes to take the test they send a letter here with the test date that was scheduled and the institution is then responsible for providing an interpreter to mediate in the process, however at the driving school the responsibility for contracting an interpreter is the same.

G2 agrees with G1, when it mentions the difficulties faced by deaf people in the entire process of obtaining and renewing CNHs. The institution's role, according to these professionals, is that of making it feasible for interpreters to help deaf people at the road department, however the mention of a lack of interpreters is also observed in the discourses of both groups (CSD 10).

CSD 10 – G2 in relation to the main complaints and demands from deaf people in the process of obtaining and renewing CNHs

Many are received, especially from those that use only Libras and they complain both about the driving school and the road department. The biggest complaint is in relation to the tests and evaluations carried out in the process, given the difficulty of comprehension, since the test is in the Portuguese language, which is different from their own, which is Libras, the deaf people's first language. This is an enormous difficulty, since it is not a question of being able to read and write, since they are able to do so. It is a question of understanding Portuguese and since they do not currently have an interpreter to mediate in the process, they experience great difficulties.

This discourse reinforces the fact mentioned by G1 that the lack of a Libras interpreter to mediate in the process of obtaining and renewing CNHs is aggravating for deaf people, making their performance even more difficult, taking into consideration that the mother language of deaf people that is officially recognized in Brazil ends up being ignored, even though it is protected by law.

The existence of Act no. 4,090, of January 30, 2008, should be highlighted, which specifies as an obligation the presence of Libras interpreters in theory and practical classes given at Driver Training Centers (DTC) and in vehicle driving exams.

The two groups (G1 and G2) also mentioned the importance of training professionals who work at driving schools and at the road department in attending to Libras users. Decree no. 5,626 of December 22, 2005, in chapter VIII, article 26 and subsection 1, orders that companies providing public services and federal public administration agencies should directly and indirectly guarantee special treatment to deaf people, by means of the use and promotion of Libras and Libras-Portuguese language translation and interpretation, carried out by servants and employees trained for this role, as well as access to information technologies, as provided for in Decree no. 5,296, of December 02, 2004. Institutions should have at least 5% of servants, workers and employees trained in using and interpreting Libras.

Considering that not all deaf people have good command of Portuguese, G2, just like G1, suggested that the (written) theory test for obtaining CNHs be carried out based on a video translated from Portuguese into Libras. San-Segundo and cols.22 evaluated a system implemented by the Spanish government, used in the city of Toledo (Spain), which aims to raise the value of Spanish Sign Language (LSE), recognized as an official language in the country since 2007, and to favor deaf people's accessibility in renewing driving licenses, by making use of an avatar.

The authors found that this system performs well and is well approved by users, however they stressed the need for improvements in the visual interface and in the standardization of LSE, with some discrepancies between words and corresponding signs. It is noted that in Brazil there is similarly no standardization of Libras¹⁹, reinforcing the already mentioned need for regionalization of the test on video.

Currently in the Distrito Federal²³ and in Santa Catarina²⁴, the State Road Department (DETRAN) theory test has been made available on video for deaf people, and as a result of this, videos have been produced in Libras with the questions and answer options. With this resource, the Road Departments claim that there is a reduction in the time for carrying out the test, since it lessens deaf people's communication and comprehension difficulties, the awkward situations experienced, and it eliminates suspicion due to the interference of interpreters in the answers given by the candidates.

When asked about suggestions for improving the process of obtaining and renewing CNHs, the subjects reiterated training and contracting interpreters for deaf people (CSD 11)

CSD 11 – G2 in relation to the suggestions for improvements in the process of obtaining and renewing CNHs

Firstly, there should be a strengthening of the link between the road department and the institution (to which they belong). Contracting qualified interpreters at the road department would also be highly important, as well as some professionals knowing Libras, and who knows, even the possibility of courses being offered so that there is basic knowledge of the language among them. A test drawn up in sign language, then they would have this ease, considering that their first language is Libras. Raising awareness at driving schools, as an extra fee cannot be charged because the student is deaf and needs an interpreter and this happens. And regarding the question of an auditory exam that would allow better classification, differentiating between deaf people and those with impaired hearing, which would better guarantee their rights and safety, since their right to drive is guaranteed by law, just needing suitable conditions for this.

The suggestions given by this group support those of G1, reiterating the importance of training professionals in attending to deaf people, as well as extending the link between institutions involved in this process and reformulating the test applied, also considering technological devices that would make applying a comprehendible test possible with reliable results, since interpretation on video guarantees the individuality of a candidate's replies.

Group 3

The sample from this group was composed of five professionals from a state road department, with three women and two men, with between 20 and 33 years training (an average of 31.2 years). The interviewees referred to not knowing of professionals at the institution who are trained in attending to deaf people.

According to these subjects, there is no differentiation in the attendance offered to deaf people and people with normal hearing in the process of obtaining and renewing CNHs (CSD 12).

CSD 12 – G3 in relation to accessibility in the process of obtaining and renewing CNHs for deaf people

The process is the same, because the law does not require any difference in this process. So deaf people are referred from the driving school when the road department needs to request an interpreter from the foundation that supports people with impairments, to accompany them in the process. Then, due to bureaucracy, sometimes there is slip up and the interpreter is not available on the day scheduled. As a result of this, they get annoyed, since they have to come back on another day. It sometimes happens.

In relation to CSD 12, it should be highlighted that the presence of an interpreter is required by art. 6 of act 12,319, of September 1, 2010, "in support of accessibility to the services and activities of teaching institutions and public agencies"25, i.e., the law requires special treatment from public agencies when attending to deaf people.

This discourse indicates flaws regarding accessibility at the road department, which does not have professionals specialized in attending to deaf people, who end up having to request one from other institutions, and are not always attended to. The inconvenience suffered by deaf people is thus perceived, with them not having access to employees suited to attending to them, as required in decree no. 5,626, of December 22, 2005. Bureaucracy is indicated as one of the factors that can interfere in this process.

G3 reiterates the suggestions presented by G1 and G2 that there should be employees qualified to attend to deaf individuals at the state road department and that the test be applied on video (CSD 12).

CSD 13 – G3 in relation to the suggestions for improving the process of obtaining and renewing **CNHs**

Firstly, qualifying servants so that they can attend in this area. Because it is advantageous for the agency to have qualified people to attend to these people, not only with this, but with other impairments as well, in the exams, in the practical test, or even in assessing them when they arrive here, since they end up having no one able to help them. The law exists; all public agencies should have between 4 and 5 professionals prepared in Sign Language, including this department, since they are incorporated onto the road. I also suggest that a video is made, interpreting the test in Libras, which offers them better conditions to do it and also eradicates the suspicion that interpreters are giving them the answers to the test.

This discourse agrees with all the suggestions mentioned by G1 and G2, proving the importance of changes in the process of obtaining/renewing CNHs and on the road to guarantee better accessibility for deaf people and individuals with impaired hearing.

It should also be considered that as well as deaf people, many individuals, voluntarily or not, are subject to auditory distraction as a result of hearing high intensity sounds, which can cause the pedestrian/driver to lose focus²⁶⁻²⁹.

CONCLUSION

Although there have been advances, it is perceived that there are still a number of flaws with regards to deaf people, both on the road and in the process of obtaining and renewing CNHs. Therefore, it is urgent that the reality faced by the deaf population be discussed, aiming to find solutions that can guarantee them not only access onto the road, but also for the construction and suitable execution of public policies that can provide accessibility and safety.

Among the suggestions mentioned by all of the groups, the importance of the presence of professionals trained to mediate in the entire process of obtaining and renewing CNHs stands out. Moreover, a test interpreted on video was suggested, something that will probably increase accessibility considerably.

Therefore, the difficulty in accessibility for deaf people in the process of obtaining and renewing CNHs is observed, and the fact that professionals do not have knowledge of Libras makes various moments in the process difficult, such as classes during the Driver Training Course, enrollment, and exams.

It is also observed that deaf people have no notion of the extent of the concept of accessibility, since they consider the road as an accessible space, but refer to various day to day situations that show a lack of accessibility. Actions raising awareness in society are necessary, providing greater understanding of the deaf culture and community, as well as Libras, so that advances occur in the inclusion of these individuals. However, deaf people need to remain engaged in the fight for their rights, directly intervening and conversing with leaders so that this reality can be optimized.

REFERENCES

- 1. Sparti SCM. Paz no trânsito. Rev. Fac. Ciênc. Méd. Sorocaba. 2010;12(2):III-IV.
- 2. Soares DP, Miolla JCS, Mazuroski Junior A, Thielen IP. Trânsito coletivo e comportamento individual: metáfora de Antígona. Psicol. ciênc. prof. 2013;33(4):808-23.
- 3. Waiselfisz JJ. Mapa da violência 2013 Acidentes de trânsito e motocicletas. FLACSO BRASIL, Rio de Janeiro; 2013.
- 4. Hersh M, Ohene-Djan J, Naqvi S Investigating road safety issues and deaf people in the United Kingdom: an empirical study and recommendations for good practice. J Prev Interv Community. 2010;38(4):290-305.
- 5. Vygotsky LS. Obras Escogidas. vol. 2. São Paulo: Alfa-Omega; 1997.
- 6. Menezes DC, Aguiar MAM, Silva PG. Surdez, língua de sinais e cultura. Letras Rev. 2011;2(1):106-17.
- 7. Thorslund B, Peters B, Lyxell B, Lidestam B. The influence of hearing loss on transport safety and mobility. Eur. Transp. Res. Rev. 2013;5(3):117-27.
- 8. Fiel GPS. O surdo e a retirada da carteira nacional de habilitação em Aracaju-SE: realidades e desafios [monografia na internet]. Maceió (AL): UNIP; 2013.
- 9. Lefèvre F, Lefèvre AMC. Curso teórico prático de introdução ao de introdução ao Discurso do Sujeito Coletivo e ao software Qualiquantisoft. Instituto de Pesquisa do Discurso do Sujeito Coletivo (IpDsc), 2012.
- 10. Lefèvre F, Lefèvre AMC. Discurso do sujeito coletivo: representações sociais e intervenções comunicativas. Texto Contexto Enferm. 2014;23(2):502-7.
- 11. Figueiredo MZA, Chiari BM, Goulart BNG. Discurso do Sujeito Coletivo: uma breve introdução à ferramenta de pesquisa qualiquantitativa. Disturb. Comun. 2013;25(1):129-36.
- 12. Alencar CAB, Oliveira MA, Belém JM, Parente JS, Albuquerque GA. Conhecimento de Agentes Comunitários de Saúde acerca do Sistema Único

- de Saúde e sua operacionalização Araripina, Pernambuco. SANARE. 2014;13(2):50-6.
- 13. Valeriano KF, Barreiros TPG, Silva JV, Narcy JL, Pereira MTJ. O discurso do sujeito coletivo emergente de médicos em relação a cuidados paliativos. Rev Cienc Saude. 2013;3(3):25-34.
- 14. Oliveira AMC. Dallari SG. Representações sociais dos conselheiros municipais de saúde sobre a vigilância sanitária. Cienc. saúde coletiva. 2015;20(8):2559-68.
- 15. Mendes J, Soares VMN, Massi GAA. Percepções dos acadêmicos de fonoaudiologia e enfermagem sobre processos de envelhecimento e a formação para o cuidado aos idosos. Rev. CEFAC. 2015;17(2):576-85.
- 16. Reis MW, Silva P, Silva JV, Narcy JL, Silva MCP. Significados e sentimentos de cuidados paliativos: o discurso do sujeito coletivo de acadêmicos de Enfermagem e Medicina. Rev Cienc Saude. 2013;3(3):35-45.
- 17. França ACCV, Ono MM. Interação de pessoas surdas mediada por sistemas de produtos e serviços de comunicação. CGP&C. 2011;16(59):260-76.
- 18. Ohene-Djan J, Hersh M, Nagvi S. Road safety and deaf people: the role of the police. J Prev Interv Community. 2010;38(4):316-31.
- 19. Voss P, Collignon O, Lassonde M, Lepore F. Adaptation to sensory loss. WIREs Cogn Sci. 2010;1(3):308-28.
- 20. Brasil. Lei nº 9.503, de 23 de setembro de 1997. [cited 2013 Jul 18]. Available from: http://www. planalto.gov.br/ccivil 03/leis/l9503.htm
- 21. Andrade WTL, Hora D, Aguiar MAM. O papel da variável sexo na variação fonológica da Libras. Rev ABRALIN. 2015;14(1):315-35.
- 22. San-Segundo R, López V, Martín R, Lufti S, Ferreiros J, Córdoba JM et al. Advanced Speech communication system for deaf people. Proceedings of Interspeech; 2010 Sept 26-30; Makuhari, Japan; 2010.
- 23. Distrito Federal. Detran cria prova eletrônica para candidatos surdos. [cited 2015 Feb 09]. Available http://www.df.gov.br/noticias/item/14973from: detran-lan%C3%A7 a-prova-eletr%C3%B4nicapara-candidatos-surdos.html#
- 24. Veiga C. Detran-SC disponibiliza prova em Libras para retirada da carteira de habilitação. [cited 2015 Feb 09]. Available from: http://ocponline.com.br/ detran-sc-disponibiliza-prova-em-librasnoticias/ para-retirada-da-carteira-de-habilitacao/

- 25. Brasil. Casa Civil. Lei nº 12.319, de 1º de setembro de 2010. [cited 2016 May 03]. Available from: http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2010/Lei/L12319. htm
- 26. Basch CH, Ethan D, Zybert P, Basch CE. Pedestrian behavior at five dangerous and busy Manhattan intersections. J Community Health. 2015;40(4):789-92.
- 27. Cheng C. Do cell phone bans change driver behavior? Econ Inquiry. 2015;53(3):1420-36.
- 28. Gauld C, Lewis I, Haque M, Washington S. Effect of mobile phone use and aggression on speed selection by young drivers: a driving simulator study. J Australas Coll of Road Saf. 2015;26(1):40-6.
- 29. Mwakalonge J, Siuhi S, White J. Distracted walking: examining the extent to pedestrian safety problems. JTTE. 2015;2(5):327-37.