Communication difficulties between individuals with hearing disability and health professionals: a public health matter

Dificuldades na comunicação entre pessoas com deficiência auditiva e profissionais de saúde: uma questão de saúde pública

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ABSTRACT

Purpose: To describe the occurrence of reports from people with hearing and/or multiple disabilities (hearing and visual and/or mobility) regarding hearing and understanding health professionals. **Methods:** Cross-sectional study through health survey, conducted with selected subjects from two population-based studies. Data collection took place at subjects' homes, through interviews conducted by trained interviewers in the area of São Paulo. Information regarding difficulties to hear and understand what health professionals said in the last health service used were collected, besides demographic information (age, gender and race), economic data (head of household income), type of health service sought, use of private health insurance, and need of help when accessing the health service. **Results:** From the interviewees, 35% reported problems to hear and understand the health professionals in the last service visited; 30.6% (95%CI: 23.4-37.8) to understand the physicians; 18.1% (95%CI: 12.0-24.1) to understand the nurses; and 21.2% (95%CI: 14.8-27.6) to understand the other employees. There were no differences for the demographic variables, the need of help with bathing and dressing, eating, standing and/or walking, having or not private health insurance, and type of health service visited. **Conclusion:** From the total of individuals interviewed, 35% reported problems to hear and understand what was said by health professionals. Among these, 34.74% had hearing disability and 35.38% had multiple disabilities.

Keywords: Health services; Hearing loss; Individuals with disability; Health communication; Equity in health; Health administration

INTRODUCTION

The population group consisting of people with some type of disability amounts to about 600 million in the world, according to data from the UN⁽¹⁾. In Brazil, about 14.5% of the population mentioned some type of disability in the demographic census of 2000⁽²⁾. Among these, more than five million reported hearing disabilities, including hearing impairment and difficulty in hearing. A percentage of 11.1% of people suffering from some type of disability and 4.4% of people suffering from hearing disability in areas in the state of São Paulo⁽³⁾ was observed.

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Hearing disability is characterized by partial or complete loss of hearing capacity and can manifest in different degrees (mild, moderate, severe and profound), due to reduction of sensitivity or auditory discrimination. The most important consequences of hearing disability established by the World Health Organization (WHO) are related to auditory incapacity and hearing handicap. The former is related to the performance impairment and the ability of using hearing in daily activities, such as the perception of speech and ambient sounds. The latter affects the performance of the subject in activities and his or her role in society, concerning his or her educational, social and occupational aspirations on account of the disability and the auditory incapacity⁽⁴⁾.

Hearing disability negatively affects speech comprehension and therefore people who suffer from it must employ strategies to improve communication. Such strategies constitute a group of attitudes that facilitate message comprehension, thus guaranteeing communication effectiveness. The use of lip reading is one of the most important strategies when this disability exists, used in an unconscious manner when communicating through facial expression observation, gestures, posture modifications and other clues that assist in information decoding.

Therefore, individuals suffering from hearing disability tend to present a different profile in regard to health and to the use of health services, demanding more attention and care during health service procedures⁽⁵⁾.

Success in communication requires an effective and competent interaction between the participants of this process. The inadequacy in health system structures may contribute to the existence of flaws that become more complicated when language barriers are present, compromising the quality of the service⁽⁶⁾.

People with any type of disability need special health care, since they constitute a heterogeneous group which combines individuals with peculiarities that are inherent to their disability⁽⁵⁾. Knowledge about these matters by health professionals is essential when trying to succeed in communication, preventing the disability from affecting the exchange of information between the individual and the health professional^(7,8).

Governmental initiatives have been implemented, seeking equity for people with hearing disability. An example is the Hearing Health Attention Policy (Ordinance n° 2.073/04), instituted with the goal of assisting the population suffering from hearing disability, guaranteeing an improvement in auditory function and communicative performance in this population group.

Studies about the communication problems between people with hearing disability and health professionals may constitute an important aid for planning actions aimed at training and qualifying human resources with the intention of assisting people with this type of disability. Thus, the rights to use and integral access to health services, instituted by the Federal Constitution and the Brazilian Unified Health System (SUS) could be assured to this population group.

The goal of this survey was to describe the prevalence, in people with self-reported hearing loss or multiple disabilities (auditory and others), of reported difficulties to hear and understand professionals working in health-related services (physicians, nurses, receptionists, attendants and other professionals).

METHODS

The data in the present survey derive from the study of Accessibility to Health Services by People with Disabilities (AceSS) 2007, a cross-sectional study conducted in the city of São Paulo in 2007. Data collection took place at home, using a semi-structured questionnaire as instrument. The questionnaire was composed of different blocks, with specific questions for each type of disability studied (visual and/or auditory, mobility) as well as blocks answered by all participants, regardless of the presence of disability. In the present survey, the information used was regarding communication with health service professionals during the last health service procedure or consultation the individuals who suffered from hearing disability went through. Therefore, reports concerning problems to hear and

understand what physicians, nurses, attendants, receptionists and other professionals said during the consultations were evaluated. The team of field interviewers, consisting of graduates in social sciences and health-related areas, received specific training to apply the questionnaire and 10% of the interviews were randomly checked by field supervisors.

The AceSS study subjects were selected in two health inquiries conducted in the years of 2001 (ISA-SP) and 2003 (ISA-Capital)*. The people who reported a disability in this inquiry were selected, listed, located and re-interviewed in the 2007 AceSS study. Initially, 669 individuals were selected. A prior field study, to locate the subjects who would be interviewed noted that 116 people were deceased, 27 had moved to locations outside the area considered for the study and 28 had corrected their disabilities**. These individuals were excluded from the research for not having the necessary characteristics for the sample. One hundred and one other people were not located, 15 refused to participate, 29 were not found home after three visits in different days and moments of the day, three were not able to answer and 17 did not participate for other reasons. Such cases were considered sample losses in the survey. Thus, starting from an initial sample of 498 people, 333 were interviewed in 2007, resulting in an answer rate of 66.9% six years after the first contact. Of the total amount of 333 interviewed subjects, 160 had some type of hearing disability and composed therefore the sample of the present study. The individuals with bilateral hearing loss were not included in the sample.

The data concerning the problems to hear and understand what professionals from health establishments said were collected through three specific questions referring to the last health service used, such as: "As a result of your hearing problems, have you had any problem to hearing and understanding what the doctor said?" having as alternative answers: "1) no; 2) yes; 3) partially; 4) did not consult with a doctor; 5) does not know/did not answer". The interviewee was asked the same question regarding the nurses and other professionals***. Subsequently, the dependent variable was defined as problems to hear and understand what the professionals said, aggregating the answers of the three questions. Furthermore, gender, age (in quartiles), head of household income in monthly minimum wage (1 mmw, 1 mmw, 2-4.99 mmw, 5-7.99 mmw, 8 mmw), race or ethnicity (caucasian, black/mulatto, others), need of help with bathing and dressing, eating, standing and/ or walking, having or not private health insurance and type of health service last used (UBS/AMA/ESF/PSF; physician's office; outpatient facilities; emergency care; hospital; others) were also studied as independent variables.

For statistical analyses, the adopted level of significance was of 5% and the Chi-square test was used. The softwares used were EpiData for inserting data and Stata 9.2 for the analysis. The present survey was approved by the Ethics Committee of Faculdade de Saúde Pública da Universidade de São Paulo (FSP-USP) under identification number 1653.

^{*} www.fsp.usp.br/isa-sp

^{**} Corrections made through surgeries, such as cataract and/or other medical procedures

^{***} Receptionists, attendants and other employees having secondary education.

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The interview was conducted only after signing the Free and Informed Consent Term (TCLE).

RESULTS

Starting with the sample from the AceSS study in 2007, 160 (48%) people who reported having hearing disabilities were studied, including 138 (86.3%) who reported difficulties in hearing and 22 (13.7%) who reported unilateral hearing loss. Besides hearing disabilities, 40.6% of people reported having other associated disabilities (of mobility or visual nature).

The results show the sociodemographic characteristics of the studied population according to problems to hear and understand health service professionals and also characteristics related to the service such as health insurance plan, service sought and the need of help (Table 1).

Among individuals suffering from disabilities, 35% reported problems when hearing and understanding health professionals in the last service used. Within this group, 30.6% (CI95%: 23.4-37.8) had problems hearing and understanding what the physicians said; 18.1% (CI95%: 12.0-24.1) had problems hearing and understanding what the nurses said and 21.2% (CI95%:14.8-27.6) had problems hearing and understanding what receptionists, attendants and other professionals said. The same interviewee could report difficulties in hearing and understanding more than one professional.

The prevalence distribution of problems to hearing and understanding what health professionals said in the last service used, according to sociodemographic variables and concerning the type of service and the need of help, was observed (Table 2).

Among the individuals who reported only hearing disability, 34.7% had problems to hearing and understanding what health professionals said. As for the group of individuals suffering from hearing disability and other associated disabilities, this percentage increased to 35.4%, despite having no statistical difference. It is worth emphasizing that men reported more problems hearing and understanding what health professionals said (35.3%) when compared to women (34.7%) though also having no difference.

Regarding the sociodemographic characteristics, the prevalence of communication problems was reported by 37.2% of the subjects with ages ranging from 70 to 77 years and 36.7% ranging from 78 to 97; 50% of the interviewees belonged to families who reported incomes of minimum wage for the head of household and 35% reported incomes of two to five times the minimum wage for the head of household. Among the individuals who identified themselves as caucasian, 35.4% had some problem hearing and understanding what health professionals said, while within those who identified themselves as black or mulatto the percentage was of 35.7%. Such result was of 28.6% among those who identified themselves as belonging to other races or ethnicities.

Regarding the need of help with bathing and dressing, eating, standing and/or walking, 27.8% of individuals who did not need help reported having problems hearing and understanding what health professionals said. For those who reported needing help for the aforementioned activities, this percentage was higher (37.1%), despite having no difference.

Table 1. Distribution of sociodemographic and service characteristics according to problems in hearing and understanding health professionals

Variables studied	n	%
Problems hearing and understanding what	160	100.00
professionals said*		
No	104	65.00
Yes	56	35.00
Disability	160	100.00
Hearing	95	59.38
Multiple	65	40.62
Gender	160	100.00
Male	85	53.13
Female	75	46.87
Age in years	160	100.00
14-54	28	17.50
55-69	40	25.00
70-77	43	26.88
78-97	49	30.62
Head of household income**	160	100.00
<1	101	63.13
1	20	12.50
2-4.99	20	12.50
5-7.99	8	5.00
>8	11	6.87
Race***	159	100.00
Caucasian	96	60.38
Black/mulatto	56	35.22
Other	7	4.40
Need of help****	160	100.00
No	142	88.75
Yes	18	11.28
Private health insurance	160	100.00
No	99	61.88
Yes	61	38.12
Service sought***	159	100.00
UBS/AMA/ESF/PSF	59	37.11
Doctor's office	34	21.38
Outpatient facility	14	8.81
Emergency service	10	6.29
Hospital	37	23.27
Other	5	3.14

 $^{^{\}star}$ Physicians, nurses, receptionists, attendants and other professionals

Note: UBS = primary healthcare unit; AMA = ambulatory medical assistance; ESF = family health strategy; PSF = family health program

The interviewees who had private health insurance presented a higher percentage (38.9%) of reports concerning the difficulties in hearing and understanding what health professionals said when compared to those who did not have private health insurance (34.5%).

The data coming from the interviewees who went to local health centers and related services (UBS/AMA/ESF/PSF) in

^{**} Monthly minimum wage

^{*** 1} loss

^{****} Help bathing and dressing, eating, standing and/or walking

Table 2. Problem occurrence distribution regarding understanding what was said by health service professionals, according to studied variables

Variables	Problems hea	Problems hearing and understanding what professionals said*					
	No				Total		
	n	%	n	%	n	%	
Disability							
Hearing	62	65.26	33	34.74	95	100.00	
Multiple	42	64.62	23	35.38	65	100.00	
Gender							
Male	55	64.71	30	35.29	85	100.00	
Female	49	65.33	26	34.67	75	100.00	
Age in years							
14-54	20	71.43	8	28.57	28	100.00	
55-69	26	65.00	14	35.00	40	100.00	
70-77	27	62.79	16	37.21	43	100.00	
78-97	31	63.27	18	36.73	49	100.00	
Head of household income**							
<1	67	66.34	34	33.66	101	100.00	
1	10	50.00	10	50.00	20	100.00	
2-4.99	13	65.00	7	35.00	20	100.00	
5-7.99	6	75.00	2	25.00	8	100.00	
>8	8	72.73	3	27.27	11	100.00	
Race***							
Caucasian	62	64.58	34	35.42	96	100.00	
Black/mulatto	36	64.29	20	35.71	56	100.00	
Other	5	71.43	2	28.57	7	100.00	
Need of help****							
No	26	72.22	10	27.78	36	100.00	
Yes	78	62.90	46	37.10	124	100.00	
Private health insurance							
No	93	65.49	49	34.51	142	100.00	
Yes	11	61.11	7	38.89	18	100.00	
Service sought***							
UBS/AMA/ESF/PSF	41	69.49	18	30.51	59	100.00	
Doctor's office	26	76.47	8	23.53	34	100.00	
Outpatient facility	7	50.00	7	50.00	14	100.00	
Emergency service	5	50.00	5	50.00	10	100.00	
Hospital	21	56.76	16	43.24	37	100.00	
Other	4	80.00	1	20.00	5	100.00	
Total	104	65.00	56	35.00	160	100.00	

 $^{^{\}star}$ Physicians, nurses, receptionists, attendants and other professionals

Note: UBS = primary healthcare unit; AMA = ambulatory medical assistance; ESF = family health strategy; PSF = family health program

the last health service used showed that 30.5% of them could not hear and understand what was said by the professionals. This percentage amounts to 23.5% among interviewees who went to the physician's office in the last use of a health service; 50% for those going to an outpatient facility; 50% for those who sought emergency care; 43.2% for those who went

directly to the hospital and 20% for those who used other services. A significant association between the problems to hear and understand what was said by health professionals in the last service used and the sociodemographic variables and variables concerning type of service sought and need of help was not observed.

^{**} Monthly minimum wage

^{*** 1} loss

^{****} Help bathing and dressing, eating, standing and/or walking

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DISCUSSION

Among people who reported hearing difficulties and unilateral hearing loss, 35% confirmed difficulties in hearing and understanding what health professionals said in the last health service used. These reports suggest the unpreparedness of health professionals and the service itself when meeting the population demands concerning alternative resources and more time availability to attempt communicating effectively, which is essential for the success of patient care. This is aggravated as it is ascertained that individuals who reported bilateral hearing loss, generating a situation in which communication would represent a real challenge due to the language barrier, were not included.

The largest percentage reported about not understanding health professionals was regarding physicians (30.6%), which can be pointed out as a consequence of several factors. The brief duration of consultations in health services, deriving from the huge service demands, and the unpreparedness of professionals regarding the care of patients with special needs must be considered^(9,10).

Differences between difficulties to hear what was said by the health professional and variables related to type of disability, gender, age, head of household income, race or ethnicity, need of help with bathing and dressing, eating, standing and/ or walking, having or not private health insurance and type of health service sought were not verified. However, it is worth emphasizing that, because it is a health inquiry, this study did not evaluate the type and degree of hearing disability and the presence of company during consultation. The use of population surveys represents an important tool for primary screening, since it allows the generation of new indicators that prove essential to the monitoring of health dimensions within the population⁽¹¹⁾.

The difficulties reported concerning the understanding of what was said by physicians, nurses and other health professionals is a relevant factor in regard to how and with what level of quality the service in health care is performed. The effective communication is an indispensable item in this context⁽¹²⁾ because it not only represents a point of interaction between the health professional and the client⁽¹³⁾, but it is also an important foundation for the bond between doctor and patient⁽¹⁴⁾ and for treatment adherence⁽¹⁵⁾. Some studies point out that communication is seen as an important tool in the medical field, receiving even special emphasis during the academic education of physicians^(16,17).

In the process of communication, from the moment when the receiver of the message transmitted by the sender becomes vulnerable and cannot effectively understand what is said to him or her, this process is compromised, and as a consequence, the answer can be inadequate or not what was expected⁽¹⁸⁾. When this is applied to the communication between the health professional and the patient, factors such as satisfaction regarding the service, treatment adherence, trust in the health professional, symptom resolution, quality of life, health situation and even mortality can be affected⁽¹³⁾.

The lack of complete understanding of instructions conveyed by physicians, nurses and other employees having secondary education in health service establishments cannot be purely translated as a difficulty in interpreting the health professional's discourse, but also as erroneous interpretations that may carry damages to the well-being and health of the individual, compromising thus the accessibility to health services. By accessibility, the degree of adjustment between the health services characteristics and the population's in the process of seeking and obtaining health attention, is to be understood⁽¹⁸⁾. This way, the group of individuals suffering from hearing disability must be the subject of directed and specific interventions. Because it is a group with different characteristics, it also needs different interventions, so that it can secure equitable access to health services, guaranteed by law to all Brazilians(19).

Another relevant factor is the prevalence of hearing disability due to aging⁽²⁰⁾. The number of elders is increasing rapidly in developing countries⁽²¹⁾. Projections from IBGE (Brazilian Institute of Geography and Statistics) indicate that in the period between 2045-2050 life expectancy at birth in the country will be of 80,97 years against 72,78 years registered in 2008****, as an evidence to population aging. Investments aimed at this population group, as well as the evaluation of existing public policies could improve the quality of life and health of this portion of the population, thus securing accessibility to health services and reducing the obstacles for obtaining health care.

According to the Hearing Health Attention Policy, the results of actions deriving from this policy in regard to primary health care attention and medium and high-complexity health care attention should promote broad coverage in the service provided to individuals with hearing disability in Brazil, with refinements in management, information dissemination and a dynamic perception of the health status of individuals with hearing disabilities. Furthermore, capacitation and continued education of health teams in all scopes of attention involving professionals in different levels should be founded on Brazilian Unified Health System (SUS) directives and on permanent health education poles⁽²²⁾.

The National Health Policy on Disabled Persons (Ordinance n°1.060/02) establishes as one of its directives the "Integral Health Attention", attributing direct responsibility in health care for individuals with disability to the Brazilain Unified Health System network. For such, it guarantees access to basic and more complex actions, to rehabilitation and also to orthoses, prostheses and auxiliary locomotion devices⁽²²⁾.

The prevalence of barriers in the care for people with some type of hearing disability has already been reported in literature⁽²³⁻²⁵⁾, being depicted not as an organic problem but as a social and cultural problem⁽²⁶⁾. To reduce the impacts of this problem, the implementation of education and training actions with the health professionals⁽²⁷⁾, as well as the presence of a Brazilian Sign Language (LIBRAS) interpreter at the time of the service or consultation⁽²⁸⁾ was suggested. These could represent alternatives to guarantee a health system that would

^{****}IBGE – Projeção da população do Brasil por gênero e idade – 1980-2050. Acessado em 2009 set 04. Disponível em: http://www.ibge.gov.br/home/estatistica/populacao/projecao_da_populacao/2008/projecao.pdf?bcsi_scan_D2AD62A071FDB58E=0bcsi_scan_filename=projecao.pdf

truly be universally accessible. The implementation, evaluation and control of current public policies can represent a management and regulation tool, reducing inequities in health care for people with disabilities.

The difficulties in communication between patients and health professionals reported in this study may implicate in a reduced use of health services. This may compromise the quality of life and health of people with hearing disability, as well as generate complications in the doctor-patient relationship, trust in the health professional and treatment adherence.

The accessibility to health services may be negatively affected by the presence of hearing disability. Specific and directed interventions for the population group suffering from this disability, as well as the evaluation of current public policies, making everything that is guaranteed by law effective, would represent a way of minimizing the difficulties deriving from this disability and also would promote integral health attention. The preparedness of health teams can also be an essential factor for submitting individuals with hearing disability to services of medium and high-complexity health care for diagnosis, access to hearing aids and rehabilitation, thus guaranteeing the principals of universality, equity and integrality of the Brazilian Unified Health System (SUS).

In this survey, tests for disability diagnosing were not conducted and the analyzed data were self-reported by the interviewees. The relevance of the information as an aid for planning public policies is stressed in literature⁽²⁹⁻³⁰⁾. Carrying out surveys with different designs may represent a way of obtaining data related to questions that were not supported in this study due to limitations inherent to methodology. Therefore, surveys seeking factors that influence the understanding or comprehension on the part of the patients in regard to what is

said by health professionals, and that consider the interaction between variables such as gender, education and presence of more than one disability must be encouraged, in an attempt to generate data specific to the area, and so they can make effective policies directed to the population suffering from some type of disability.

CONCLUSION

Of all individuals interviewed, 35% reported problems when hearing and understanding what health professionals said. Among these who reported hearing difficulties, 34.74% suffered from hearing disability and 35.38% suffered from multiples disabilities. The prevalence of communication difficulties was approximately the same regarding gender and of 38.89% among individuals who had private health insurance.

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RESUMO

Objetivo: Descrever a ocorrência de relatos de pessoas com deficiência auditiva e múltipla (auditiva e visual e/ou mobilidade) quanto às dificuldades para ouvir e entender profissionais de saúde. **Métodos:** Estudo transversal, do tipo inquérito de saúde, realizado com sujeitos selecionados a partir de outros dois estudos de base populacional. A coleta dos dados ocorreu de forma domiciliar, por meio de entrevistas realizadas por entrevistadores treinados, em São Paulo e região. Foram coletadas informações sobre a dificuldade de ouvir e entender o que os profissionais de saúde disseram no último serviço de saúde usado, além de dados demográficos (idade, gênero e raça), econômicos (renda do chefe da família), tipo de serviço de saúde procurado, uso de plano privado de saúde e necessidade de auxílio para ir ao serviço de saúde. **Resultados:** Dos entrevistados, 35% relataram problemas para ouvir e entender os profissionais de saúde no último serviço visitado; 30,6% (IC95%: 23,4-37,8) para entender os médicos; 18,1% (IC95%: 12,0-24,1) para entender as enfermeiras; e 21,2% (IC95%: 14,8-27,6) para entender os outros funcionários. Não houve diferenças quando se considerou as variáveis demográficas, a necessidade de auxílio para tomar banho e se vestir, comer, levantar-se e/ou andar, possuir ou não plano privado de saúde e tipo de serviço de saúde visitado. **Conclusão:** Do total de pessoas entrevistadas, 35% relataram problemas para ouvir e entender o que foi dito por profissionais de saúde. Do total que relatou alguma dificuldade, 34,74% tinham deficiência auditiva e 35,38% deficiência múltipla.

Descritores: Serviços de saúde; Perda auditiva; Pessoas com deficiência; Comunicação em saúde; Equidade em saúde; Administração em saúde

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