

Original articles

Characterization of the elderly health in a Speech and Language Therapy perspective

Caracterização da saúde de idosos numa perspectiva fonoaudiológica

Lívia Maria Santiago⁽¹⁾

Cláudia Maria de Lima Graça⁽¹⁾

Monique Coelho de Oliveira Rodrigues⁽²⁾

Gislene Barbosa dos Santos⁽³⁾

⁽¹⁾ Departamento de Fonoaudiologia da Faculdade de Medicina da Universidade Federal do Rio de Janeiro, Rio de Janeiro, RJ, Brasil.

⁽²⁾ Instituto Fernandes Figueira/Fiocruz, Rio de Janeiro, RJ, Brasil.

⁽³⁾ Unidade de Terapia, Educação e Comunicação (UNITEC) na área de linguagem em educação especial, Rio de Janeiro, RJ, Brasil.

Conflict of interest: non-existent

Received on: May 10, 2016

Accepted on: July 19, 2016

Mailing address:

Lívia Maria Santiago
Hospital Universitário Clementino
Fraga Filho / UFRJ
Rua: Rodolpho Paulo Rocco, 255,
sala 9E11, Coordenação de
Fonoaudiologia, Cidade Universitária,
Rio de Janeiro, RJ, Brasil
CEP: 21941-913
E-mail: liviamsantiago@gmail.com

ABSTRACT

Purpose: to estimate the prevalence of oral communication, memory, reading and writing, voice and oral motor skills problems in elderly people.

Methods: cross-sectional study with 75 older people registered in a Family Clinic of Rio de Janeiro. It was estimated the prevalence, in all cases and by sex. The presence of differences between the sexes was verified by statistical tests t and chi-square.

Results: the problems most frequently related to oral communication and memory were the avoidance to communicate (20.5%), difficulty in remembering recent and past events (34.7% and 26.4% respectively). There was a high prevalence of difficulty in reading and writing. According to hearing, 43.10% reported "watching television and listening to radio too loud." Related to voice perception, 71.2% referred "speak loudly or shouting" and 23.6% to "get hoarse frequently." As far as Myofunctional oral motor skill, 24.7% had "difficulties in chewing in general" and 54.8% "snoring while sleeping."

Conclusion: in this study, there was a large proportion of elderly people who referred difficulties related to language, hearing, speech and chewing skills, which are functions related to socialization, welfare and maintenance of functional autonomy and can directly interfere with their quality of life and health.

Keywords: Speech and Language Pathology; Health of Elderly; Prevalence

RESUMO

Objetivo: estimar a prevalência de problemas da comunicação oral, memória, leitura, escrita, voz, audição e motricidade orofacial em idosos.

Métodos: estudo transversal, com 75 idosos cadastrados em uma Clínica da Família carioca. Foram estimadas as prevalências por sexos e conjuntamente. Verificou-se a presença de diferenças entre os sexos por meio dos testes t e qui-quadrado.

Resultados: os principais problemas de comunicação oral e memória foram "evita se comunicar" (20,5%) e "dificuldades em lembrar fatos recentes e passados" (34,7% e 26,4%, respectivamente). Observou-se elevada prevalência de dificuldade na leitura e escrita. Em relação à audição, 43,1% relataram "ver televisão e ouvir rádio muito alto". Quanto à voz, 71,2% referiam "falar alto ou gritando" e 23,6% "ficar roucos com frequência". Na motricidade orofacial, 24,7% apresentavam "dificuldades na mastigação em geral" e 54,8% "roncavam ao dormir".

Conclusão: neste estudo, observou-se uma grande parcela de idosos que referia dificuldades relacionadas às habilidades de linguagem, audição, fonação e mastigação, que são funções relacionadas à socialização, bem-estar e manutenção da autonomia funcional, podendo interferir diretamente na sua qualidade de vida e saúde.

Descritores: Fonoaudiologia; Saúde do Idoso; Prevalência

INTRODUCTION

Population ageing – which means a senior population's increase higher than the other age groups¹ – is a prominent phenomenon. Such process has become stronger at full speed, especially in the so-called 'developing countries' like Brazil. It is believed that, in the year of 2025, our country will be the sixth in the world's senior population's figures². Ageing is a period of life that affects the individual's internal organic stability and reduces his/her ability to responding to environmental stressors; therefore, he/she becomes more vulnerable³. In a present perspective, one can conceive 'healthy ageing' as long as life quality is granted throughout an individual's age increases⁴.

It is widely acknowledged that the maintenance of the functional capacity is of paramount importance to seniors' life quality⁵⁻⁷. In order to guarantee that people have life quality⁸, a general physical health – through the control of chronic diseases and their symptoms – is also of great importance. Moreover, social participation (in activities that promote interaction with relatives, friends and other people) is capital for the seniors' emotional and cognitive health⁹⁻¹¹.

Language, phonation, hearing and myofunctional oral motor skills motor functions are intimately related to the way people communicate; thus, they can play their social roles, an extremely important factor as far as a population's better life quality is concerned.

Language (oral and/or written) is considered a device of the thought. One organizes, plans his/her actions, understands, learns, gives his/her opinion and constructs himself/herself as a subject through language. Ageing-related problems may limit senior's autonomy and their exchange of social experiences, worsening, then, their life quality^{3,12,13}.

Regarding phonation, the changes caused by ageing in one's body also affect his/her voice. As the vocal folds naturally age, it rises a gradual calcification and ossification of the laryngeal structures. Such processes, in their turn, damage one's vocal quality (presbyphonia). Nonetheless, concerning the seniors, dysphonia might be related to other factors, such as nodular lesions, congenital organic changes, tumors and laryngeal stenosis. These factors cause varied levels of disabilities and put one's life at risk; therefore, they should be investigated¹⁴. If we consider that the voice is an important instrument towards communication, thus, we can assume that any changes in its emission may cause trouble to people¹⁵.

Regarding hearing, it is noticed a gradual acuity loss throughout the passing of the years. Such loss is considered a consequence of ageing and it is called presbycusis. This condition means a lot in relation to a better integration of the elder in the community where he/she lives, since not only does it affect his/her capacity of noticing and distinguishing sounds, it interferes in the understanding of language as well, consequently affecting his/her capacity of socialization¹⁶.

The myofunctional oral motor skills are related to mastication, swallowing, respiration and speaking. If these functions are somewhat impaired, problems may rise in important aspects of a person's life for most of such functions are related to the maintenance of life¹⁷.

The present study aims at estimating problem prevalence in seniors' in oral communication, memory, reading and writing, voice, hearing and Myofunctional oral motor. The seniors studied are registered in one of the city of Rio de Janeiro's Family Clinic.

METHODS

Data source

The development of this cross-sectional study was developed based on the data gathered for the research project entitled: "Health communication situational assessment and 'Dona Zica' Family Clinic's staff and community workers' training". This research was conducted in *Mangueira* (a shantytown in the city of Rio de Janeiro) throughout the first semester of 2014. The inquiry involved a convenience sampling made of 223 families registered by Family Health Strategy in the 'Dona Zica' Family Clinic, a milestone in the *Mangueira* community (Rio de Janeiro, Brazil), encompassing 811 people. In order to gather data, an instrument was constructed and it was based on the scientific literature in the speech therapy area. The instrument was structured to include the following: sociodemographic variables, issues concerning the screening of communication characteristics and related functions (mastication, swallowing and respiration), behaviors and risk factors as well as protection against possible health problems (smoking, onychophagia, mouth breathing etc.). Therefore, the presented instrument encompasses pieces of information on family sociodemographic, health and development specific for each age group. This research was supported by The Educational Program for Health Work (*Programa de Educação pelo Trabalho para Saúde – PET-Saúde*) of the Speech and Language Therapy graduation course

at the root institution. The *PET-Saúde*'s scholarship students were in charge of the interviews, which were conducted at the clinic itself or the interviewees' homes. A member of the registered families – who should be 18 years old or over – was invited to take part in the research by one of the interviewers. Once this person accepted the invitation, he/she supplied information on himself/herself and on his/her relatives, besides signing the informed consent form.

The study was submitted to the Research Ethics Committee of Federal University of Rio de Janeiro's Clementino Fraga Filho University Hospital (*HUCFF*). It was deferred and it holds the Certificate of Presentation for Ethical Consideration (CAAE number 21897513.5.0000.5257).

Inclusion criteria

In this investigation, we followed the approach set by The Senior Citizen Statute¹¹, which considers an 'elder' whoever is 60 years old or over. Therefore, in order to comply with the objective of the present inquiry, we singled out 75 people whose ages were equal or superior to 60 years old. This figure represents 9.2% of the total number of participants in the Educational Program for Health Work (*PET-Saúde*) – Speech and Language Therapy.

Exclusion criteria

For the *PET-Saúde* (Educational Program for Health Work) research, community dwellers unregistered in the Family Health Strategy were ruled out. For the present study, interviewees under 60 years were excluded.

Study variables

The following variables were taken into consideration: sociodemographic (age, age group, sex, educational level, labor, retirement); health and life habits (pieces of information on hearing screening and the use of hearing aids; on vision screening and the use of glasses; on the use of dental prosthesis; on the use of prosthetic/orthotic device(s) for upper/lower limbs; on history of referral to a Speech and Language therapist; on health problems – kinds of problems, treatment, medication use –; on smoking and engagement in any kind of sports); besides those concerning oral communication and memory, writing and reading, voice, hearing and orofacial motor functions.

Statistical analysis

For the descriptive analysis of the population study, we used absolute and percentage frequencies towards the categorical variable, and measures of central tendency and dispersion towards the continuous variable 'age'.

The existence of statistically significant differences between the sexes was verified through statistical tests (t-test and chi-squared test), considering the significance level of 5%.

The prevalence ratio of the different phonological characteristics was estimated separately by sexes and all together.

The statistical analyses were conducted by using the SPSS (Statistical Package Social Science) 21.0.

RESULTS

The mean age of the 75 people who agreed to participate in the research was 68.7 years old (median = 68.0, standard deviation = 6.9).

Table 1 presents the characterization of the sociodemographic variables of the sample. It is noticeable the predominance of the female sex (53.3%), in the 60 to 69 year-old age group (59.7%), with average/below average education (79.6%) and not working (72.2%), although a small number of them were retired (29.6%).

Table 2 presents the characterization of the interviewees' health and life habits. It is noticeable that most of the study population had never undergone a hearing screening (68.9%); however, they had already undergone a vision screening (87.8%), and almost 60% wore glasses. Most of the elders wore dental prosthesis (70.3%) and did not have a history of referral to a Speech Therapist (88.9%). Although most of them presented health problems (87.7%), almost 90% were independent in their daily life activities. Systemic arterial hypertension and diabetes were high (64.9% and 31.1%, respectively). Most of the seniors stated that they have been under health treatment (78.4%) and use regular medication (82.2%). More than 50% had a smoking history (current or previous).

Table 3 presents the prevalence of some phonological characteristics of the surveyed seniors, separately (by sex) and all together. Statistical significant differences were not noticed, except for the variable "organized writing".

Table 1. Sociodemographic characterization of the elderly participating in the survey *PET-Saúde* Speech Therapy, Mangueira, Rio de Janeiro/RJ, 2014

| Variables | | N | % |
|-------------------|--------------------------|----|------|
| Sex | Male | 35 | 46.7 |
| | Female | 40 | 53.3 |
| Age group | 60-69 years | 43 | 59.7 |
| | 70-79 years | 23 | 31.9 |
| | 80 years or over | 6 | 8.3 |
| Attended school | Yes | 58 | 79.5 |
| | No | 15 | 20.5 |
| Educational level | Basic education | 39 | 79.6 |
| | High school/Trade school | 8 | 16.3 |
| | Higher education | 2 | 4.1 |
| Present job | Yes | 20 | 27.8 |
| | No | 52 | 72.2 |
| Retired | Yes | 21 | 29.6 |
| | No | 50 | 70.4 |

Table 2. Health and life habits' characterization of the elderly participating in the survey *PET-Saúde* Speech Therapy, Mangueira, Rio de Janeiro/RJ, 2014

| Variables | | N | % |
|--|---------------|----|------|
| Hearing screening | Yes | 23 | 31.1 |
| | No | 51 | 68.9 |
| Hearing aids | No | 72 | 97.3 |
| | Yes | 2 | 2.7 |
| Vision screening | Yes | 65 | 87.8 |
| | No | 9 | 12.2 |
| Glasses | No | 30 | 40.5 |
| | Yes | 44 | 59.5 |
| Dental prosthesis | No | 22 | 29.7 |
| | Yes | 52 | 70.3 |
| History of referral to a Speech Therapist | No | 64 | 88.9 |
| | Yes | 8 | 11.1 |
| Prosthetic/orthotic device(s) (upper or lower limbs) | No | 73 | 98.6 |
| | Yes | 1 | 1.4 |
| Wheelchair | No | 73 | 98.6 |
| | Yes | 1 | 1.4 |
| Independent in daily activities | Yes | 65 | 89.0 |
| | No | 8 | 11.0 |
| Health problem | No | 9 | 12.3 |
| | Yes | 65 | 87.7 |
| Arterial hypertension | No | 26 | 35.1 |
| | Yes | 48 | 64.9 |
| Diabetes | No | 51 | 68.9 |
| | Yes | 23 | 31.1 |
| Health treatment | No | 16 | 21.6 |
| | Yes | 58 | 78.4 |
| Regular medication | No | 13 | 17.8 |
| | Yes | 60 | 82.2 |
| Smoking | Never smoked | 32 | 44.4 |
| | Smoked | 27 | 37.5 |
| | Still smoking | 13 | 18.1 |
| Physical activities | Yes | 6 | 8.2 |
| | No | 67 | 91.8 |

Table 3. Distribution of the 'sex' variables of the elderly participating in the survey *PET-Saúde* Speech Therapy, Mangueira, Rio de Janeiro/RJ, 2014

| Variables | | Male | Female | Total | p-value of χ^2 between sexes |
|--|-----|-----------|-----------|-----------|--------------------------------------|
| | | N (%) | N (%) | N(%) | |
| ORAL COMMUNICATION AND MEMORY | | | | | |
| Correct and fluent speech | Yes | 27 (79.4) | 35 (89.7) | 62 (84.9) | 0.218 |
| | No | 7 (20.6) | 4 (10.3) | 11 (15.1) | |
| Able to talk to and argument with another person | Yes | 28 (82.4) | 36 (92.3) | 64 (87.7) | 0.197 |
| | No | 6 (17.6) | 3 (7.7) | 9 (12.3) | |
| Stories, events and situations are narrated in details | Yes | 30 (88.2) | 34 (87.2) | 64 (87.7) | 0.891 |
| | No | 4 (11.8) | 5 (12.8) | 9 (12.3) | |
| Difficulty in communicating | No | 28 (82.4) | 34 (87.2) | 62 (84.9) | 0.565 |
| | Yes | 6 (17.6) | 5 (12.8) | 11 (15.1) | |
| Avoid communicating | No | 27 (79.4) | 31 (79.5) | 58 (79.5) | 0.994 |
| | Yes | 7 (20.6) | 8 (20.5) | 15 (20.5) | |
| Difficulty in remembering recent events | No | 25 (75.8) | 22 (56.4) | 47 (65.3) | 0.086 |
| | Yes | 8 (24.2) | 17 (43.6) | 25 (34.7) | |
| Difficulty in remembering past events | No | 26 (78.8) | 27 (69.2) | 53 (73.6) | 0.359 |
| | Yes | 7 (21.2) | 12 (30.8) | 19 (26.4) | |
| READING AND WRITING | | | | | |
| Fluent reading | Yes | 19 (55.9) | 25 (64.1) | 44 (60.3) | 0.475 |
| | No | 15 (44.1) | 14 (35.9) | 29 (39.7) | |
| Read and understand words, sentences and texts | Yes | 22 (64.7) | 25 (64.1) | 47 (64.4) | 0.957 |
| | No | 12 (35.3) | 14 (35.9) | 26 (35.6) | |
| Fluent writing | Yes | 14 (42.4) | 24 (61.5) | 38 (52.8) | 0.106 |
| | No | 19 (57.6) | 15 (38.5) | 34 (47.2) | |
| Organized writing | Yes | 11 (33.3) | 23 (59.0) | 34 (47.2) | 0.030 |
| | No | 22 (66.7) | 16 (41.0) | 38 (52.8) | |
| HEARING | | | | | |
| Answer whenever addressed by their names | Yes | 33 (97.1) | 37 (94.9) | 70 (95.9) | 0.639 |
| | No | 1 (2.9) | 2 (5.1) | 3 (4.1) | |
| Watch TV and listen to the radio in a very high volume | No | 19 (55.9) | 22 (57.9) | 41 (56.9) | 0.863 |
| | Yes | 15 (44.1) | 16 (42.1) | 31 (43.1) | |
| VOICE | | | | | |
| Speak loudly or shouting | No | 24 (70.6) | 28 (71.8) | 52 (71.2) | 0,910 |
| | Yes | 10 (29.4) | 11 (28.2) | 21 (28.8) | |
| Frequently hoarsen | No | 29 (85.3) | 26 (68.4) | 55 (76.4) | 0,092 |
| | Yes | 5 (14.7) | 12 (31.6) | 17 (23.6) | |
| MYOFUNCTIONAL ORAL MOTOR FUNCTIONS | | | | | |
| Easily masticate solid foods | Yes | 30 (88.2) | 31 (79.5) | 61 (83.6) | 0.314 |
| | No | 4 (11.8) | 8 (20.5) | 12 (16.4) | |
| General difficulty in mastication | No | 26 (76.5) | 29 (74.4) | 55 (75.3) | 0.835 |
| | Yes | 8 (23.5) | 10 (25.6) | 18 (24.7) | |
| Difficulty in swallowing food | No | 30 (88.2) | 35 (89.7) | 65 (89.0) | 0.837 |
| | Yes | 4 (11.8) | 4 (10.3) | 8 (11.0) | |
| Choking or coughing when ingesting liquids | No | 27 (79.4) | 26 (66.7) | 53 (72.6) | 0.223 |
| | Yes | 7 (20.6) | 13 (33.3) | 20 (27.4) | |
| Snore when sleeping | No | 14 (41.2) | 19 (48.7) | 33 (45.2) | 0.518 |
| | Yes | 20 (58.8) | 20 (51.3) | 40 (54.8) | |

The presence of statistical differences was verified by chi-square test.

Regarding oral communication and memory, most of the study population displayed “correct and fluent speech” (84.9%); was “able to talk to and argument with another person” (87.7%); narrated “stories, events and situations in details” (87.7%), and did not present “difficulty in communicating” (84.9%). The problems most reported in this category of variables were: “avoid communicating” (20.5%), “difficulty in remembering recent events” (34.7%), and “difficulty in remembering past events” (26.4%).

It was also noted a high prevalence of difficulty in reading and writing. Around 40% of the study population did not present “fluent reading”, and 35.6% were not able to “read and understand words, sentences and texts” (64.4%). Almost 50% did not present “fluent writing” and “organized writing”.

In relation to hearing issues, most of the study population did not present difficulty in answering whenever they were addressed by their names (95.9%). Nevertheless, more than 40% stated that they “watch TV and listen to the radio in a very high volume”.

As to ‘voice’, the prevalence of “speak loudly or shouting” was of more than 70%, and almost 25% of the elders said that they “frequently hoarsen”.

Regarding the myofunctional oral motor skill aspects, most of the study population stated that they “easily masticate solid foods” (83.6%), though around 25% of the same study population stated that they had “general difficulty in mastication”. There was a low prevalence of problems related to swallowing, since only 11% of the seniors stated they had “difficulty in swallowing food”. Even so, the high prevalence of “snore when sleeping” (54.8%) might indicate respiratory problems.

DISCUSSION

Both the presence of chronic diseases and the taking of various medicines are considered ordinary conditions among seniors. Nevertheless, the concept of ‘health’ in such phase of life overcomes the notion of ‘absence of morbidity’: it reinforces the importance of the seniors’ autonomy, that is, their capacity of self-management, of maintenance towards socialization, and of engaging in leisure and labor (be it domestic or economic)⁷ activities. In 2006, Ordinance GM n° 2.528/2006 – which established the National Policy for the Aged – acknowledged that one of the main problems that a senior citizen might face is the impairment of his/her functional capacity. Any impairment represents the decrease of physical and mental abilities that are

indispensable for a good performance in daily activities, in an independent fashion¹⁸.

When people grow old, most of them modify their habits and their daily routine because of the communicative functions change. This causes a great impact in their lives. Such impact may be seen in their communication, for example, in the general difficulty in speaking, in correctly pronouncing the names of the objects, in recalling stories or names, and, in a general perspective, in expressing themselves and in making themselves clear. These abilities are related to memory, which is very often changed in senior citizens and, consequently, it makes their socialization difficult. These difficulties may cause social isolation, loneliness, sadness, depression and stress, and they modify the elders’ daily autonomy and quality of life¹⁹.

Among the oral communication abilities surveyed for this study, the central issue was “avoid communicating”, referred to by more than a fifth of the sample. Such issue may indicate difficulties in oral understanding and expression, as well as a decrease of hearing acuity or even emotional and/or humor problems, which should be better investigated for they limit the elders’ social participation. As for memory, it was observed a high prevalence of difficulties, both in recalling past events and in remembering recent ones, with a greater reference to the latter. Changes in memory might negatively interfere in the accomplishment of tasks related to the executive functions and to the working memory. This happens because they compromise the recording and the accessing of pieces of information previously stored, which are tasks that depend on the consolidation of recent pieces of information¹². For all practical purposes, the elder faces difficulties in locating objects, in giving messages, and in taking medicine at the right time and correct dosage. These are fundamental activities for the senior’s autonomy.

In this study, we noticed that the surveyed seniors presented high prevalence of difficulties in reading and writing, which might be due to the low educational level – identified in the sample and very common in such age group²⁰. We believe that a growing-old person’s both reading and writing are directly related to his/her socialization and interactions; therefore, those skills are related to the way an elder asserts himself/herself, organizes himself/herself and presents himself/herself to the world¹³. Moreover, low education makes it difficult the achieving of a good professional career, besides reducing salaries and the claim for one’s own

rights, thus, these constitute in one of the main factors of social exclusion²¹.

The reduction of hearing acuity is considered a frequent condition in a population of seniors. In population-based survey – conducted among 238 senior in Rio de Janeiro city – it was identified a prevalence of hearing loss (measured by audiometry) in 42.9% of the women and in 64.3% of the men²². Among the 343 seniors of a population survey in Londrina (Paraná, a southern Brazilian state), there was a prevalence of hearing loss or lowering frequencies at 87.7%²³. We consider hearing self-assessment a possibly useful hearing health indicator, and we do recommend its use in epidemiological studies in case audiometry – taken as a golden standard test²⁴ – is impracticable. In another survey conducted among 35 elders, who participated in cultural projects at a university in Juiz de Fora (Minas Gerais, a southeastern Brazilian state), there was a prevalence of hearing problems in the sample at 31.4%. The main problems reported were these: understanding speech throughout communicative acts; difficulty in understanding the speeches from TV and/or radio; low tolerance to intense sounds²⁵. For this present study, most of the seniors in the sample stated that they did not have any difficulties in “answering whenever addressed by their names”; however, almost half of them said that they “watch TV and listen to the radio in a very high volume”. Among the damages caused by hearing acuity loss in elders, we can point out these: they miss information in personal contacts; they find it hard to keep updated by the usual means of communication, and they find it hard to use them (radio, TV etc.) for leisure activities²⁶ as well.

Most of the participants in this survey reported that they “speak loudly or shouting” and that they “frequently hoarsen”. Such habits might cause serious vocal changes, for example: dysphonia²⁷, a voice disorder intimately related to the vocal production. In this case, phonation happens with great effort, no harmony and consequently limits the person whenever he/she conveys verbal and emotional messages.

Regarding seniors, researches show that dysphonia related to nodule formation, for example, may be caused by voice misusing, especially shouting, speaking with great effort, speaking with great intensity for long periods. For the same reason, one may notice that elders tend to present voice disorders especially those who belong to big families and live in a noisy family atmosphere. Speaking with effort and without

pausing, as well as speaking with high intensity, are vocal habits related to a family dynamic that tends to promote a noisy atmosphere. This means that the greater the voice disorder, the bigger the impact in the quality of life related to the voice²⁸. In another survey conducted among 50 women whose ages varied from 60 to 87, in the countryside of São Paulo (a south-eastern Brazilian state), there was a clear relationship between the quality of voice and the quality of life, considering parameters such as physical functioning, vitality, general health, mental health, body pain and physical role in life²⁹.

Regarding orofacial motor functions, some of the surveyed seniors reported “general difficulty in mastication” and “difficulty in swallowing food”. Among the factors that cause changes in seniors’ mastication, we may point out these two: the decrease of the elder’s neuromuscular quality and the loss of teeth, which derail good occlusion and damage an appropriate mastication, and/or the use of medicines that may change some of the senses, such as taste and smell; therefore, damaging salivation³⁰, for example. The quality of mastication, with balance control of the bolus, is of great importance, especially because it is the phase before swallowing. This is an important function for nourishment and for life maintenance. However, as one grows older, one might experience dysphagia, which means difficulty in swallowing food caused by slower or uncoordinated motor actions. Besides lowering the pleasure one gets out of eating, this health condition may become a serious risk for the senior for he/she becomes susceptible to accidentally aspirating the food to the lower airways, leading him/her to death. These problems might strongly interfere in a senior’s life quality for they may lead him/her to isolate himself/herself from socialization¹⁷.

Snoring is another important fact worth discussing since many seniors reported such problem in our survey. Snoring when sleeping may trigger changes in the quality of sleep, and they can bring about problems for general life quality. There are several consequences regarding snoring, such as one may wake up feeling tired and in a bad mood; one may experience drowsiness throughout the day; one may choke while sleeping; one may also experience a restless sleep and attention, memory and concentration deficit. Moreover, snoring might cause marital disorders³¹. According to Oliveira *et al* (2010), the low quality of sleep is one of the most frequent complaints among seniors, being sleep apnea (cessation of airflow for more than ten seconds)

the second most prevalent disorder³². Snoring is one of the main symptoms of apnea, and such disorder tends to increase with the turning of the ages, due to anatomical changes in the respiratory tract, which are ageing-related³³.

The sampling method utilized in this inquiry – namely, convenience sampling – may indicate a restriction regarding the extrapolation of results towards the whole community where data were gathered. Nevertheless, we should not ignore the significance of the high prevalence of some negative characteristics related to oral communication and writing, memory, hearing and respiration.

The present study has collaborated to the identification of possible problems in the aforementioned phonoaudiological functions, which in their turn might bring a negative impact in the seniors' physical and mental health, sociability and quality of life. We suggest that accurate researches be conducted in order to check such pieces of information, by using screening methods, for example.

It is of paramount importance that training processes be conducted for the Family Health Staff, especially for the Community Health Workers, so that they are able to provide quality hearing of the seniors' health complaints that are not restricted to those related to getting sick. Such feeling-ill-related complaints must be better investigated in order to change the seniors' adverse health situations. We do believe in the major role that Speech Therapists play in the training process for Community Health Workers, as long as the former guide their practices towards a wider and complete idea of 'health'.

CONCLUSION

In this study, we noticed that a great part of the surveyed seniors reported difficulties related to language abilities, hearing, phonation and mastication, which are functions associated to socialization, well-being and maintenance of functional autonomy. These functions may directly interfere both in the quality of life and in the quality of health. Our findings become even more important when identified in seniors who were interviewed at home and who, at least in theory, did not have any complaints. We suspect that the prevalence found in our research may be underestimated; thus, we do believe that the problem may even be more significant.

It is important an acknowledgement of the characterization of senior health in a Speech and Language

Therapy perspective because it may promote improvements towards health care practices regarding senior citizens. Therefore, the different professionals engaged in the Family Health Strategy may take several courses of action, such as passing on pieces of information and guidelines, creating workshops and even offering therapy services, so that the impact of the aforementioned problems is lessened.

REFERENCES

1. Camarano AA. Envelhecimento da população brasileira: uma contribuição demográfica. Texto para discussão número 858. Instituto de Pesquisa Econômica Aplicada (IPEA). Ministério do Planejamento, Orçamento e Gestão. Rio de Janeiro; 2002. Disponível em: http://www.ipea.gov.br/pub/td/2002/td_0858.pdf
2. World Health Organization (WHO). Men, ageing and health-achieving health across the life span. Genebra; Who, Noncommunicable Diseases Prevention and Health Promotion Department; 2001.
3. Gamburgo LJJ, Monteiro MIB, Chun RYS. Questões sobre a atenção à saúde no envelhecimento no âmbito da fononaudiologia. *Distúrb Comum*. 2006;18(1):111-7.
4. Veras R. Envelhecimento populacional contemporâneo: demandas, desafios e inovações. *Rev Saude Publica*. 2009;43(3):548-54.
5. Parahyba MI, Veras R, Melzer D. Incapacidade funcional entre as mulheres idosas no Brasil. *Rev Saude Publica*. 2005;39(3):383-91.
6. Jefferson AL, Paul RH, Ozonoff A, Cohen RA. Evaluating elements of executive functioning as predictors of instrumental activities of daily living (IADLs). *Arch Neuropsychol*. 2006;21(4):311-20.
7. Ramos LR. Fatores determinantes do envelhecimento saudável em idosos residentes em centro urbano: Projeto Epidoso, São Paulo. *Cad Saúde Pública*. 2003;19(3):793-8.
8. Alves LC, Leimann BCQ, Vasconcelos MEL, Carvalho MS, Vasconcelos AGG, Fonseca TCO, Lebrão ML et al. A influência das doenças crônicas na capacidade funcional dos idosos do Município de São Paulo, Brasil. *Cad Saúde Pública*. 2007;23(8):1924-30.
9. Alencar NA, Souza Júnior JV, Aragão JCB, Ferreira MA, Dantas E. Nível de atividade física, autonomia funcional e qualidade de vida em idosas ativas e sedentárias. *Fisioter Mov*. 2010;23(3):473-81.

10. Picollo GM. Os caminhos dialéticos do envelhecimento e sua relação com a educação física contemporânea. *Rev Bras Geriatr Gerontol.* 2011;14(1):169-77.
11. Pegorari MS, Dias FA, Santos NMF, Tavares DMS. Prática de atividade física no lazer entre idosos de área rural: condições de saúde e qualidade de vida. *Rev Educ Fis.* 2015;26(2):233-41.
12. Moraes EN, Moraes FL, Lima SPP. Características biológicas e psicológicas do envelhecimento. *Rev Med Minas Gerais.* 2010;20(1):67-73.
13. Massi G, Torquato R, Guarinello AC, Berberian AP, Santana AP, Lourenço RC. Práticas de letramento no processo de envelhecimento. *Rev Bras Geriatria e Gerontologia.* 2010;13(1):59-71.
14. Nicollas R, Giovanni A, Triglia JM. Dysphonia in children. *Arch Pediatr.* 2008;15(6):1133-8.
15. Soares EB, Borba DT, Barbosa TK, Medved DM, Montenegro ACA. Hábitos vocais em dois grupos de idosos. *Rev CEFAC.* 2007;9(2):221-7.
16. Ribas A, Kozłowski L, Almeida G, Marques JM, Silvestre RAA, Mottecy CM. Qualidade de vida: comparando resultados em idosos com e sem presbiacusia. *Rev Bras Geriatr Gerontol.* 2014;17(2):353-62.
17. Souza A, Oda AL. A importância do levantamento de queixas de idosos institucionalizados durante a entrevista para o planejamento da reabilitação fonoaudiológica. *O mundo da saúde.* 2008;32(2):157-69.
18. Brasil. Ministério da Saúde. Portaria no. 2.528/2006. Aprova a Política Nacional da Pessoa Idosa. *Diário Oficial República Federativa do Brasil.* 2006;237(20):4.
19. Monteiro I. Dificuldade de memorização e retenção na terceira idade. Disponível em: www.escreta.com.br/escreta/leitura.asp?Texto_ID=5242. Acesso em: 22/Out/2014.
20. Camarano AA, Beltrão KI, Pascom ARP, Medeiros M, Carneiro IG, Goldani, AM et al. Como vai o idoso brasileiro? Texto para discussão. 1999;10(2):1-63.
21. Oliveira M. Escolaridade dos idosos no Brasil é muito baixa. Disponível em: <http://www.cobap.org.br/capa/lenoticia.asp?ID=56306>. Acesso em: 04/Nov/2014
22. Mattos LC, Veras RP. A prevalência da perda auditiva em uma população de idosos da cidade do Rio de Janeiro: um estudo seccional *Rev Bras Otorrinolaringol.* 2007;73(5):654-9.
23. Meneses C, Peretti Mário MP, Marchori LLM, Melo JJ, Freitas ERFS. Prevalência de perda auditiva e fatores associados na população idosa de Londrina, Paraná: estudo preliminar. *Rev. CEFAC.* 2010;12(3):384-92.
24. Valete-Rosalino CM, Rozenfeld S. Triagem auditiva em idosos: comparação entre auto-relato e audiometria. *Rev Bras Otorrinolaringol.* 2005;71(2):193-200.
25. Santiago LM, Novaes CO. A auto-avaliação da audição em idosos. *Rev. CEFAC.* 2009;11(Supl1):98-105.
26. Mansur LL, Viúde A. Aspectos Fonoaudiológicos no envelhecimento. In: Papaléo Netto M. *Gerontologia.* São Paulo: Atheneu, 2002. p.284-95.
27. Teixeira MZM, Trezza EMC, Behlau M. Opinião dos pais sobre a voz de seus filhos de 5 a 12 anos. *Rev Paul Pediatría.* 2003;21(2):68-75.
28. Paixão CLB, Silvério KCA, Berberian AP, Mourão LF, Marques JM. Disfonia infantil: hábitos prejudiciais à voz dos pais interferem na saúde vocal de seus filhos?. *Rev. CEFAC.* 2012;14(4):705-13.
29. Costa HO, Matias C. O impacto da voz na qualidade de vida da mulher idosa. *Rev Bras Otorrinolaringol.* 2005;71(2):172-8.
30. Silva LG, Goldenberg M. A matisgação no processo de envelhecimento. *Rev. CEFAC.* 2001;3:27-35.
31. Soares EB, Pires JB, Menezes MA, Santana SKS, Fraga J. Fonoaudiologia x Ronco/Apneia do sono. *Rev. CEFAC.* 2010;12(2):317-25.
32. Oliveira BHD, Yassuda MS, Cupertino APFB, Neri AL. Relações entre padrão do sono, saúde percebida e variáveis socioeconômicas em uma amostra de idosos residentes na comunidade - Estudo PENSA. *Ciênc Saúde Coletiva.* 2010;15(3):851-60.
33. Ancoli-Israel S. Sleep disorders care guide to assessing 4 common sleep problems in geriatric patients. *Geriatrics.* 2004;59(1):37-40.