Original Article

Artigo Original

Gabriela Maciel Mafra[1]
Karina Mary de Paiva Vianna[1]

Speech-language therapy to elderly patients in a health care network in Florianópolis: a health surveillance initiative

O cuidado ao idoso do ponto de vista fonoaudiológico na rede assistencial em saúde de Florianópolis: uma ação de vigilância em saúde

Keywords

Elderly
Primary Healht Care
Health Surveillance
Speech-Language Therapy

ABSTRACT

Purpose: To investigate aspects of health care provided to the elderly, as a way to undertake health surveillance initiatives. **Methods:** Cross-sectional quantitative study with elderly people who participate in health promotion groups in health centers at Florianópolis, Santa Catarina, Brazil. Surveys were conducted on aspects relative to comprehensive health care provision, namely, records of the Family Health Strategy, diagnosis, awareness of initiatives to treat non-communicable diseases, as well as awareness of related risks and complications. A descriptive statistical analysis was performed of the profile and perception of elderly patients about comprehensive health care. **Results:** Were interviewed 58 elderly patients; 94.83% of them reported having Arterial Hypertension (AH); 44.83%, Diabetes Mellitus (DM) and 39.66% reported having both comorbidities. Only a small part of the participants was aware of initiatives promoted by health centers for treatment of AH and DM; thus, there is little participation of the elderly in such initiatives. It was found that these patients still have limited awareness of the risks of not treating chronic Non-Communicable Diseases (NCDs). **Conclusion:** The population's lack of awareness of primary health care initiatives and low adherence must be addressed by primary health care policies. Importantly, awareness-raising proposals that seek to integrate health promotion and disease prevention may bring comprehensive health care provision to the elderly, thus strengthening health surveillance initiatives.

Descritores

Idosos
Cuidados Primários à Saúde
Vigilância em saúde
Fonoaudiologia

RESUMO

Objetivo: Verificar aspectos relacionados ao cuidado na atenção à saúde do idoso, como forma de efetivar ações de vigilância em saúde. **Método:** Estudo quantitativo transversal com idosos participantes de grupos de promoção da saúde em Centros de Saúde de Florianópolis, SC, que apresentam Hipertensão Arterial (HA) e/ou Diabetes Mellitus (DM). Foram conduzidos inquéritos que permitiram verificar aspectos relacionados ao cuidado integral à saúde, desde cadastro na Estratégia de Saúde Família, diagnóstico, conhecimento de ações voltadas a estes agravos, assim como conhecimento quanto aos riscos e complicações. Foi realizada uma análise estatística descritiva quanto ao perfil e percepção dos idosos no que se refere à integralidade do cuidado. **Resultados:** Foram entrevistados 58 idosos, destes, 94,83% referiram HA, 44,83%, DM e 39,66% relataram ambas as comorbidades. Pequena parcela dos participantes conhece ações promovidas pelos centros de saúde relacionadas à HA e ao DM, configurando pouca participação de idosos nessas atividades. Com relação ao conhecimento quanto aos riscos da falta de controle destas Doenças Crônicas Não Transmissíveis (DCNT), observa-se conhecimento, ainda que limitado. **Conclusão:** O desconhecimento da população quanto às ações na atenção primária, assim como a baixa adesão, deve compor a agenda de planejamento em saúde da atenção primária. Da mesma forma, propostas educativas incorporando ações de promoção e prevenção da saúde representam efetivação do cuidado integral ao idoso, contribuindo para as ações de vigilância em saúde.

Correspondence address:
Karina Mary de Paiva Vianna
Centro de Ciências da Saúde,
Universidade Federal de Santa Catarina – UFSC
Rua Delfino Conti, S/N, Trindade,
Florianópolis (SC), Brazil,
CEP: 88040-900.
E-mail: kmvianna@gmail.com

Received: February 11, 2016

Accepted: February 26, 2017

Study carried out at the Health Centers in the city of Florianópolis (SC), Brazil.

[1] Universidade Federal de Santa Catarina – UFSC - Florianópolis (SC), Brazil.

Financial support: nothing to declare.

Conflict of interest: nothing to declare.

INTRODUCTION

Population aging is a reality in Brazil and all over the world as a result of demographic transition in line with the reduction of fertility rates and mortality as well as increased life expectancy[1,2]. In addition to this transition, there have been changes in the health-disease relationship, with an increase in the prevalence of chronic non-communicable diseases (NCDs), such as cardiovascular diseases, Diabetes Mellitus, chronic respiratory diseases and neoplasms.

These changes have an impact on the planning of health initiatives, since chronic NCDs require control and follow-up as a way of preventing complications that can produce an impact on the health status and functional capacity of the elderly, thus compromising their autonomy and quality of life. Moreover, they pose a challenge to Brazil's health system, because of increased health expenditures on the treatment and rehabilitation of these diseases[3].

The health care model that underpins primary health care initiatives in Florianópolis is the Family Health Strategy (FHS), implemented in 2005. In 2011, Sisson and colleagues[4] reported a 77.6% population coverage of families registered in the FHS (87 FHS deployed). Currently, there are approximately 140 Family Health teams and 100% of FHS coverage. Nevertheless, there are still difficulties in the operational technology whereby the Health Center is the preferred source of heath care, because health emergency services are used as a source of regular health care provision. As a way to organize the model of primary health care, priority measures were defined for the elderly, e.g., the deployment of *Programa Saúde do Idoso* ("Health of the Elderly Program"), referred to as *Capital Idoso* "(Elderly Capital"), and the attempt to establish and/or maintain health-promoting group activities, e.g., physical activity (*Floripa Ativa*), anti-smoking campaigns and groups of patients with specific diseases such as arterial hypertension and diabetes.

The aim of health care provision is to offer comprehensive care in order to promote healthy aging and ensure a bond between patient and health professionals. Health care practices should be performed so as to continuously incorporate the experiences and the social fragility of the population in their territory. Health care provision to the elderly is supposed to include health promotion initiatives that allow self-care and self-monitoring, in addition to the active research on this population in order to minimize indicators that result in health expenditures[5].

Operational groups in primary health care are planned on the basis of the health markers of each territory, because living with chronic NCDs poses risks of health complications. The actions developed in these groups are aimed at raising awareness of the importance of having control and applying drug treatments, and pursuing a healthy life style. Moreover, it is worth mentioning that natural aging of the human body can affect organs and functions, thus limiting the functionality of the elderly and making them more vulnerable[6]. The presence of functional decline can be singled out as the main determinant of fragility in this population, which can be understood as a predictor of the risk of incapacity, hospital admission, institutionalization and death. Thus, the recognition of frail elderly is an important indicator for health policy planning purposes.

The aim of this study, therefore, was to investigate aspects of health care provision to the elderly, as a way of implementing health surveillance initiatives.

METHODS

This is a descriptive cross-sectional observational study with elderly patients (individuals aged 60 years and older) who have Arterial Hypertension (AH) and/or Diabetes Mellitus (DM), who participate in health promotion groups proposed at the following Health Centers: João Paulo, Lagoa da Conceição, Córrego Grande and Ponta das Canas, between June and September, 2015.

The health care network in the city of Florianópolis is divided into five health districts (HDs): Center, Continent, North, East and South. These districts have health centers (HCs), and some of them have Psychosocial Care Centers (PCCs) and Emergency Care Units (ECUs). We conducted a survey with health center coordinators to check the groups operating in the municipality and we identified groups that encourage physical activity as well as socialization among the elderly. We contacted staff in charge of the groups, told them about the objectives of the research and scheduled data collection. Convenience sampling was selected so to include the elderly who participated in the groups on the days of collection. Two days of collection were determined for each group visited.

For data collection, we used a questionnaire with information about participation in an elderly group in Florianópolis, registration in the FHS, appointments in the HCs, diagnosis, control and perception about the risks and complications of living with arterial hypertension and/or diabetes mellitus. The questionnaires were administered by the researcher before the groups began or after they finished. All participants signed an Informed Consent Form (ICF).

The data collected were input into Microsoft Excel®spreadsheet files. We performed a descriptive statistical analysis of sociodemographic characteristics and knowledge and perception of issues relative to AH and DM. Analyses were made of the association between participation in groups in the municipality and sociodemographic aspects and issues relative to health care provision to patients with arterial hypertension and diabetes mellitus. The Chi-Square test of association was applied, and the significance level was set at 5%. The analyses were made through the software Stata 11.0.

This study was part of a research project entitled *Speech-Language Therapy and SUS: Contributions of Speech-Language Therapy to Surveillance of Non-Communicable Diseases*, approved by the Human Research Ethics Committee (CEPSH) at the State University of Santa Catarina (UDESC), according to technical opinion no. 1.018.426.

RESULTS

Interviews were held with 58 elderly participants from health promotion groups of four health centers in the city of Florianópolis. There was a higher percentage of female participants (91.38%), and mean age was 73.03 (SD=7.53) years, with age

Table 1. Sociodemographic profile of the elderly as participants or non-participants in the socialization group. Florianópolis, SC, 2015

Sociodemographic characteristics	Participates in the groups of the program *Floripa Ativa*				Total Population		P
	No		Yes				
	n	%	n	%	n	%	
Age							0,056*
<73 years	16	53.3	6	28.6	30	51.7	
74 years and over	14	46.7	20	71.4	28	48.3	
Sex							0,948
Female	22	91.38	31	91.2	5	8.6	
Male	2	8.62	3	8.8	53	91.4	
Education							0,034*
Illiterate	-	-	3	8.8	3	5.2	
Elementary School	10	41.7	23	67.6	33	56.9	
High School	5	20.8	4	11.8	9	15.5	
Bachelor's degree or higher	9	37.5	4	11.8	13	22.4	
Marital status							0,268
Single	1	4.2	4	11.8	5	8.7	
Married	10	41.6	8	23.5	18	31.0	
Separated	1	4.2	5	14.7	6	10.3	
Widow(er)	12	50.0	17	50.0	29	50.0	
Race							0,771
White	23	95.8	32	94.1	55	94.8	
Other	1	4.2	2	5.9	3	5.2	
Religion							0,016*
Catholic	17	70.8	32	94.1	49	84.5	
Other	7	29.2	2	5.9	9	15.5	
Occupation							0,317
Retired	6	25.0	12	35.3	18	31.0	
Housewife	5	20.8	11	32.3	16	27.6	
Educator	7	29.2	4	11.8	11	18.9	
Other	6	25.0	7	20.6	13	22.5	

ranging between 61 and 87 years. In terms of marital status, 29 (50%) of the elderly reported to be widowed and 18 (31%) were married. The majority self-reported as white (94.83%), with a basic level of education (56.90%); Catholicism was the most frequently reported religion (84.48%) (Table 1).

Most participants (84.48%) reported to be registered in the Family Health Strategy (FHS) and 41.38% (24) participated in the *Floripa Ativa* program. As for NCDs, 55 (94.83%) elderly patients reported having arterial hypertension (AH); 26 (44.83%), Diabetes Mellitus (DM), and 23 (39.66%) have a diagnosis of both comorbidities (Table 2).

With respect to the characteristics inherent to AH, 93.10% of the elderly reported that the diagnosis was performed by a physician, with an average time of 5.12 years. As regards frequency of visits to the Health Center (HC) as a form of control of HA, most respondents (60%) reported having routine follow-up, followed by 34.55%, who answered that they only visited the HC if they had health problems.

Only 36.36% of the elderly reported having previous knowledge of activities promoted by HCs to raise awareness of AH. When asked about their participation in these activities, the majority (64.45%) reported having never participated in them, followed by 35.55% of patients who participated at least once.

With regard to complications, 30.91% had been hospitalized previously because of AH and 76.36% reported having knowledge of the risks of lack of control of the disease; cerebral vascular accident (CVA) was the most frequently reported complication (66.67%) (Table 3).

Table 2. Distribution of participants as for target health centers, participation in the *Floripa Ativa* program and comorbidities reported by the elderly. Florianópolis, SC, 2015

Variables	N	%
Health Center		
João Paulo	10	17.24
Lagoa da Conceição	24	41.38
Córrego Grande	14	24.14
Ponta das Canas	10	17.24
Floripa Ativa		
Participants	24	41.39
Non-participants	34	58.62
Comorbidity		
High Blood Pressure	55	94.83
Diabetes Mellitus	26	44.83
High Blood Pressure and Diabetes Mellitus	23	38.65

With respect to characteristics inherent in DM, all the elderly reported that the diagnosis had been performed by a physician, with average time of diagnosis of 4.88 years.

Table 3. Distribution of characteristics reported for Arterial Hypertension (AH). Florianópolis, SC, 2015. (n=55)

Characteristics of HBP	n	%
Time of diagnosis (average)	5.12 years	-
Diagnosis		
Physician	54	98.18
Nurse	1	1.82
Visits to the HCs		
Routine tests	33	60.00
Health problems	19	34.55
Never	3	5.45
Awareness of AH-related activities		
Yes	20	36.36
No	35	63.64
Participation in AH-related activities		
At least once	19	35.55
Never	36	64.45
Hospital admission		
Yes	17	30.91
No	38	69.09
Awareness of risks		
Yes	42	76.36
No	13	23.64

Table 4. Distribution of characteristics reported for Diabetes Mellitus (DM). Florianópolis, SC, 2015. (n=26)

Characteristics of DM	n	%
Time of diagnosis (average)	4.84 years	-
Diagnosis		
Physician	26	100
Visits to the HCs		
Routine tests	15	57.69
Health problems	8	30.77
Never	3	11.54
Awareness of DM-related activities		
Yes	11	42.31
No	15	57.69
Participation in DM-related activities		
At least once	8	30.77
Never	18	69.23
Hospital admission		
Yes	6	23.08
No	20	76.92
Awareness of risks		
Yes	15	57.69
No	11	42.31

As for visits to HCs for control of DM, just over half (57.69%) of the patients reported having routine follow-up, followed by 30.77% who only visited a HC in case of health problems.

Only 42.31% of the elderly reported having previous knowledge of DM-oriented activities promoted by HCs. Most of them (69.23%) have never participated in these activities, followed by 30.77% who have already participated at least once.

As for complications, 23.08% had been previously hospitalized because of DM and 57.69% of respondents have knowledge of the risks of lack of control of the disease. Risks reported by the elderly include blindness (26.67%), kidney problems (13.33%) and loss of limbs (13.33%) (Table 4).

There were associations between being a participant in the *Floripa Ativa* program and being older, i.e., belonging to the age group: greater than 76 years (p=0,056); have a higher education level (p=0,026) and participating more often in DM-related activities (p=0,059).

DISCUSSION

The results showed that the elderly were aware of the risks of lack of control of the target NCDs (arterial hypertension and diabetes mellitus); however, they have no awareness of speech-language disorders that stem from complications and/or treatment of these chronic diseases. In addition, a little more than half of the elderly reported visiting the HC for routine tests while less than half of the participants were aware of initiatives promoted by the HC and oriented towards these NCDS. As a consequence, there was a low level of participation in these initiatives.

The Family Health Strategy in the municipality of Florianópolis has as a routine practice of conducting activities in different groups, e.g., groups of patients with specific health problems, as well as health education groups and groups with activities for the elderly[4]. The FHS is determinant for the operationalization of health surveillance, since the aim of the latter is to plan health actions with a basis on two basic principles of the FHS: co-responsibility for health and social participation[7].

Aging is an important factor in increased prevalence of chronic non-communicable diseases (NCDs), especially when they are associated with unhealthy habits and limited information about health care. According to the World Health Organization (WHO), Hypertension and Diabetes Mellitus are considered as chronic diseases that are characterized as long-term diseases. For this reason, they are among those that are most in need of health initiatives and strategies[6,8,9]. Therefore, one should prioritize health promotion, prevention of complications, and accessibility to long-term, primary health care[3].

Participants were predominantly widowed females with an elementary level of schooling and monthly income between one and three minimum wages. This finding corroborates the results of a study previously conducted in the municipality of Florianópolis, whose objective was to investigate the association between health conditions and level of physical activity in elderly participants and non-participants in local socialization groups. Such research has identified a greater participation of widowed females with low education and low income in these groups[10]. This finding indicates that elderly widowed males tend to refute physical activity after retirement. Furthermore, adherence of females to self-care practice has been reported in other studies, since there is greater concern with health promotion and disease prevention[10,11].

In recent years, there has been an increase of government and non-governmental incentives in strategies that promote

health care of the elderly in Brazil, e.g., socialization groups for the elderly, whose benefits involve social interaction, increased self-esteem, social support and a healthier and more active lifestyle. The practice of physical exercise helps to prevent and control various chronic diseases[10,12,13]. The city of Florianópolis has a physical activity program, referred to as *Floripa Ativa*, which has been taking place in health centers in the city since 2006. Its main objectives are rehabilitation, health promotion and disease prevention of the elderly population[14]. In the present study, the vast majority of the elderly reported to be registered in the Family Health Strategy and they had at least one NCD. Although this number is significant, the percentage of participants in the *Floripa Ativa* program accounts for less than half of the population.

A study conducted in 2009[15] analyzed the factors and motivational indexes for adherence of elderly participants to the Floripa Ativa program. The study concluded that the main factors of adherence to the program were health, pleasure and sociability. Thus, it would appear that there are great possibilities for the elderly to continue doing the activities proposed, since there are significant motivational factors. However, the study argues that the insertion of the program arises out of an opportunity, i.e., for effective adherence, it is necessary and vital that these opportunities should be offered and oriented to the elderly. The results of low participation of elderly patients in this program suggest that motivational actions and dissemination of information about the group are necessary in order to encourage the elderly to participate in socialization groups of the *Floripa Ativa* program.

Health surveillance covers the prevention and control of risk factors both in communicable diseases and in non-communicable diseases. Therefore, it is essential that such measures occur seamlessly across all fields and at all levels of the Unified Health System (SUS)[6,16]. AH and DM are chronic NCDs that require control and monitoring for the purpose of disease prevention. From the perspective of speech-language therapy, one of the main complications of hypertension is CVA, and the latter can lead to language disorders that may compromise the social life of the elderly. Hence, health education initiatives with elderly groups can address these specific diseases to foster comprehensive health care provision and they represent a health surveillance measure. One of the possible consequences of DM is hearing loss, which becomes an enhancing factor, as natural aging can already be considered a risk factor for hearing loss.

The long-term nature of health care, as a long-term relationship between the health team, a patient and their family, has benefits for everyone. As a consequence, the needs of individuals are better understood, diagnosis is more concise, there are more refined promotion and prevention initiatives and there is greater patient satisfaction[17]. Speech-language disorders such as hearing loss and even aphasia tend to be seen as a natural event, as a part of aging or the result of a clinical picture after a CVA. Thus, the elderly may present behaviors of social isolation and depression, which often are not associated with these conditions. Clearly, groups for health promotion and prevention of specific diseases, and socialization groups for the elderly, are very important. Also, knowledge of the FHS is required to detect situations of vulnerability triggered by the aging process, as a way to increase the adherence of this population to these initiatives.

Most participants were diagnosed with AH, and they reported visiting the health center for routine follow-up and having some knowledge about the risk of lack of control of AH. The main consequence of lack of control of HA cited by elderly respondents was cerebral vascular accident (CVA). A study conducted in El Salvador in 2012 sought to identify the conceptions of AH patients about risk factors for the disease. The consequences most frequently reported by participants were CVA and myocardial infarction[18].

Most of the elderly participants of this research who have a diagnosis of DM pointed out different risks for the lack of disease control. The most commonly cited were blindness, kidney problems and loss of limbs. Although they reported being aware of the need to control this comorbidity, many were unsure about reporting a risk for lack of control.

A significant percentage of the elderly participants is diagnosed with Hypertension and Diabetes Mellitus. A study conducted in 2013[19] attempted to clarify the relationship between tinnitus and the comorbidities referenced above. According to the study, DM can cause high blood pressure; thus, people with this diagnosis are more likely to develop hypertension. In the same way, AH is associated with a greater degree of insulin resistance, and drugs for the control of AH may worsen this resistance, which contributes to the appearance of DM. Also, the study concluded that the comorbidities associated in an individual characterize an independent risk factor for the emergence of tinnitus.

The present study involved elderly people with AH, DM or both. In this context, the participation of a speech therapist is essential and their knowledge must be incorporated in the FHS, with health education initiatives as a way of achieving comprehensive health care provision.

The Decree No. 665[20], concerning health care and approach to patients with cerebral vascular accident (CVA), provides for integration between language-speech therapy and other health-related fields, in order to provide CVA-focused health care. However, this decree does not provide for aphasia, although it is the most common sequela of stroke. Aphasia is a change in the process of production and/or understanding of language, caused by cerebral injury triggered by cerebral vascular accidents, cranial trauma or tumors, and speech-language therapy can contribute directly to the health care provided to patients affected by these injuries[20,21].

Speech-language therapists are also expected to ensure comprehensive health care to users as far as hearing health is concerned, as established by Decree No. 2.073/GM of 28 September, 2004[22]. This decree establishes the national policy of auditory health care. Studies indicate associations between DM and hearing loss, because metabolic disorders

may reach nerve and vascular tissues, which affect auditory organs. In this way, the hearing health of the population affected by this comorbidity must be monitored by speech-language pathologists[22-25].

The participants of the present research reported CVA as one of the risks for lack of control of AH among elderly patients diagnosed with DM. Only one respondent reported hearing loss as a result of lack of control of this condition.

These data reinforce the importance of including speech-language disorders as part of health surveillance initiatives, mainly in educational, disease prevention and health promotion propositions. Access to information enables individuals with these or other comorbidities to seek specialized follow-up and/or rehabilitation.

One of the main limitations of this study is the difficulty in having the elderly adhere to the research, because they were involved in the activities proposed in socialization groups, and they did not bother to stop their activities to answer the questionnaire.

CONCLUSION

The data collected in this study suggest that the elderly reported initiatives to monitor chronic diseases. They reported awareness of the risks of failure to control them, but they do not have knowledge of initiatives undertaken in primary health care that are focused on these diseases. As a consequence, there was low adherence to these initiatives.

Comprehensive health care is essential in health surveillance initiatives as a way of ensuring quality of life to the elderly population. These health promotion groups integrate elderly patients with chronic diseases that require long-term health care, as a way to avoid complications that may compromise the autonomy and functional capacity of the elderly population.

The inclusion of speech-language therapists in the staff of the health care network of Florianópolis, with educational proposals that include disease prevention and health promotion initiatives, represents a step forward for the accomplishment of comprehensive health care to the elderly, thus contributing to health surveillance initiatives.

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Author contributions

GMM participated in the conception and design of the study and in the collection, analysis and tabulation of data, and also wrote the manuscript; KMPV advised and monitored the whole research project, made the statistical analyses and wrote the manuscript.