Original Article

Vulnerability of aged persons in access to services provided in Primary Care

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ABSTRACT

This household survey, with a descriptive design, aimed to identify programmatic vulnerability among the aged persons connected to the Family Health Strategy. This study occurred with 368 aged persons from the municipality of João Pessoa/PB from February to April 2014 through a structured interview. We conducted a descriptive data analysis and the *Pearson's Chi-square test*. Among the investigated population, 76.6% did not have a private health insurance and used the services provided by the Unified Health System (96.2%) more frequently. In addition, the aged persons living in areas of average social vulnerability showed higher demand for care in the public health units (96.5%). Sociodemographic conditions and social vulnerability can directly influence the search and access to health services by the elderly population.

Descriptors: Geriatric Nursing; Health Vulnerability; Primary Health Care; Aged.

INTRODUCTION

Aging population is a worldwide phenomenon that promotes reflections in the social, economic and epidemiological fields, demanding public policies to improve the health condition and active insertion of the elderly in society.

Because of the increase in longevity and changes due to aging, such as chronic noncommunicable diseases and functional limitations, the demand for health services is higher among the aged population[(1)]. In addition, inequalities in the use of health services are evident among the aged persons, so that older and less educated people use less of these services, resulting in less preventive care for the aged persons with worse social conditions[(1)].

As demand for health services increases, there is a clear need to reorganize the care model in order to

expand access and universal coverage to these services, as understood as the capacity of the health system of meet the population's needs, including availability of infrastructure, human resources, health technologies and funding[2]. By expanding universal access, barriers to health services can be gradually eliminated by all persons, particularly the aged population, by reducing inequalities in access, provision of basic services and vulnerability among those assisted[2].

Therefore, the programmatic vulnerability concept is highlighted, which refers to the access and organization of health services, including programs for prevention, care and rehabilitation[3]. This dimension is the evaluation of programs to respond to disease control, as well as degree and quality of commitment of institutions, resources, management and monitoring of programs at different levels of care[4]. This theoretical contribution makes it possible to unite different knowledge for the construction of an adequate assistance to the aged persons, as well as to support the elaboration of strategies for health intervention in an integral and resolutive manner.

Based on the above, this study aimed to identify the programmatic vulnerability among the aged persons assigned to the Family Health Strategy, characterizing them according to the use of health services.

METHOD

This is a descriptive and cross-sectional household survey, developed among the aged persons assisted by the Family Health Strategy of the Municipality of João Pessoa, Paraíba.

The study population comprised all individuals over 60 years-old enrolled in the Primary Care Information System of the Municipality, corresponding to 24,328 aged persons from 56 Family Health Units and 5 health districts. For the sample, we considered the following formula: n = Z2 PQ/d2, where n = minimum sample size; Z = reduced variable; P = probability of finding the studied phenomenon; Q = 1-P; d = desired accuracy, calculated based on a margin of error of 5% and p = 50%. We used the stratified proportional sampling technique that considered health districts as strata.

The inclusion criteria were aged persons of both sexes, who exhibited preserved cognitive conditions so that they were able to answer the research questions, as well as those living in the surveyed health districts. We excluded those who had hearing deficits and speech problems that made communication difficult and made the evaluation impossible. Considering these aspects, the sample consisted of 368 aged persons.

Data collection took place from February to April 2014 by students with the logistic assistance of the Community Health Agents with work activity in the selected Family Health Units. The collection took place in a single moment in the respective aged persons' households, through a structured interview. Three instruments were used to operate the information collection: the first, a questionnaire covering sociodemographic variables (age, sex, civil status, years of schooling, family income). The second included the indicators related to the programmatic vulnerability concept. The third component was the Social Vulnerability Index[5], which allowed us the identification of the set of families and territories with greater

social vulnerability, as well as the components of the index that contributed most to this process.

Each component was assigned a weight based on the estimation of risk or socio-sanitary protection, being positive for the vulnerability factors or negative for the protective factors. Thus, social vulnerability is the absence or deficiency of positive conditions and/or the presence of negative conditions for the development of families, culminating in the following classifications: with no vulnerability, low, medium, high and very high social vulnerability[5].

Data analysis was carried out in a quantitative approach using descriptive statistics of a univariate nature for all variables, including measures of frequency, position and dispersion. To compare the main categorical variables, we used the *Pearson's Chi-square test* with a 95% level of significance. For this analysis, we used the Statistical Package for the Social Sciences (SPSS) version 20.0 for being adequate to reach the objectives of the study and for enabling the accuracy and generalization of its results.

Throughout the research process, the ethical aspects that normalize research involving human beings were observed. The Research Ethics Committee of the Health Sciences Center of the Federal University of Paraíba approved the project, under protocol N. 0658/13 and CAAE: 23958013.0.0000.5188, December 2013.

RESULTS

Regarding the sociodemographic characteristics, of the 368 aged persons who participated, 253 (68.8%) were female. The age ranged from 60 to 103 years, with a mean of 71.4 years and a predominance in the age group between 60 and 69 (45.9%). Regarding civil status, 147 (39.9%) were married, schooling between four and eight years (32.6%) and family income between 1.1 and three minimum wages (80.3%).

Regarding the variables indicative of programmatic vulnerability, 76.6% do not have private medical insurance, and only 6.8% have private dental insurance. Among them, 96.6% used the Unified Health System, classifying it as good (39.5%) and regular (33.3%), as shown in Table 1.

With regard to the demand for health services, 54.9% of them sought medical care three or more times in the last six months, with an average of 3.1 consultations. However, the demand for dental services was very low, since only 27.2% of the aged persons reported seeking the dentist in the last year. Of this percentage, there is a predominant search by public professionals (59%). Regarding access to the Family Health Units, 48.4% of the aged population attended the basic units, on average three or more times in the last six months, and 92.4% had health team support via home visit.

Considering the association between variables indicative of programmatic vulnerability and the Social Vulnerability Index, there was a statistically significant association between all variables, indicating that, in areas of medium social vulnerability, private medical insurance reduced (8.8%) as well as dental (1.8%), thus reflecting greater adherence to services connected to the Unified Health System (100%), such as the Family Health Units (96.5%). Concomitantly, aged persons living in regions with very low Social Vulnerability Index levels had greater adherence to private medical insurance (88.9%) and dental (38.2%).

Table 1: Distribution of aged persons according to the variables indicative of programmatic vulnerability. João Pessoa, PB, Brazil, 2015.

Variable	Categories	N	%
Private medical insurance	Yes	86	23.4
	No	282	76.6
Private dental insurance	Yes	25	6.8
	No	343	93.2
Unified Health System Use	Yes	354	96.2
	No	14	3.8
UHS Evaluation	Very good	30	8.5
	Good	139	39.5
	Regular	117	33.0
	Bad	24	6.8
	Very bad	45	12.7
		Mean ± SD	**3.1 ± 0.14**
Medical consultations in the last six months	None	45	12.2
	1 to 2	121	32.9
	3 or more	202	54.9
		Mean ± SD	**0.6 ± 0.82**
Dental consultations in the last year	None	268	72.8
	1 to 2	75	20.4
	3 or more	25	6.8
Type of dental service used in the last year	Public	59	59
	Private	28	28
	Dental insurance	13	13
Visits to FHU in the last six months	None	82	22.3
	1 to 2	108	29.3
	3 or more	178	48.4
Home visit in the last six months	Yes	340	92.4
	No	28	7.6

Table 2: Distribution of aged persons according to the variables indicative of programmatic vulnerability according to the IVS. João Pessoa, PB, Brazil, 2015.

Variable	IVS						p
	Too low		Low		Average		
	N	%	n	%	n	%	
Private medical insurance							**p < 0.001**
Yes	16	88.9	65	22.2	05	8.8	
No	02	11.1	228	77.8	52	91.2	
Private dental insurance							**p < 0.001**
Yes	07	38.2	17	5.0	01	1.8	
No	11	61.1	276	94.2	56	98.2	
UHS Use							**p < 0.001**
Yes	14	77.8	283	96.6	57	100	
No	04	22.2	10	3.4	-	-	
Visit the FHU							**p < 0.001**
Yes	12	66.7	271	92.5	55	96.5	
No	06	33.3	22	7.5	02	3.5	
Total	**18**	**100**	**293**	**100**	**57**	**100**	

DISCUSSION

Individuals, especially the aged persons, face different vulnerability situations, individually or collectively. Programmatic vulnerability deals with the influence that institutions have on life in society and how they expend their efforts to protect the population from illness and to promote health[6]. Thus, it

evaluates the integrality and equity of actions, as well as access to services, their quality and the existence of multidisciplinary teams, in harmony with the principles of the Unified Health System[6].

The Brazilian Federal Constitution establishes the provision of public services in an integral and universal way through the Unified Health System. However, in view of the countless obstacles that constitute health care, there is a growing search for supplemental medical coverage. Although the aged persons involved in this study had few economic resources, 23.4% had private health care insurance, in agreement with similar research, which demonstrates possible difficulties experienced by them in relation to access in public care units in a resolutive manner[1].

The disorganization of the public health system was perceived as fragile, especially in relation to the difficulties of access, shortage of medicines and supplies, as well as the insufficiency of specialized care. As a result of the inability of services provided by the Unified Health System, the aged population is increasingly adhering to private medical plans, mainly due to the safety of fast access to ambulatory and hospital care[7]. However, it is believed that the actions provided by the complementary structures are predominantly curative and individual. Health plans were designed to pay for acute and potentially devastating medical expenses in the short term. However, as aging population and chronic diseases became prevalent, insurers began to offer, in addition to vertically integrated medical care, horizontally health services, education and social services, providing the aged persons with independence and autonomy for as long as possible[8].

Despite the increasing adherence to private structures, the percentage of aged persons who use the services in the units related to the Unified Health System is quite high; 96.2% of the investigated aged population reported benefiting from this service. Care for the aged persons implies offering resources whose structure shows characteristics that allow access and adequate welcome, respecting their vulnerabilities and specificities, which is a great challenge for public managers[9].

Given the predominance of aged persons who use public services, their opinion regarding the quality of care should be considered. The free and critical participation of the users can contribute to the empowerment of this population, which is essential for the feasibility of policies for health promotion, disease prevention and disease control[10]. When evaluating the Unified Health System, 39.5% of the aged persons classified it as good and 33%, as regular, and these data agree with a similar study[10]. Such a finding may be associated with the fact that the interviewed aged persons were users of the Family Health Strategy who generally express a reasonable degree of satisfaction regarding the service and all its attributes: care at the first contact, continuous care and throughout the time, integrality, coordination focused on family and community[10-11].

The need for periodic maintenance of the aged persons health is evident, especially dental, since with the aging process there are physical changes such as retraction of the periodontal tissues, loss of collagen, making them more susceptible to inflammation over the years, besides of masticatory changes due to loss of dental elements[12]. It is noteworthy that 72.8% of the aged persons had not sought the dentist once in the last year, demonstrating a limitation in the use of dental services. Regular visits to the dentist allow them to

receive early diagnosis and restorative care. International studies recommend oral examinations with annual frequency; however, it is evident that the rate of use has steadily decreased in the last decade, increasing dental loss rates and increasing demand for prostheses[12-13]. Poor oral health has been associated with chronic health conditions, such as diabetes, respiratory and cardiovascular diseases. In addition, the aged persons reveal a lower level of psychosocial well-being and satisfaction with life.

National, state and municipal policies on health, with emphasis on prevention activities, are fundamental for the implementation of programs that meet the health of the aged. These programs do not depend only on governmental actions, making it necessary to change values and attitudes regarding health care. It is a question of separating from the aged population the stigma of naturally sick, an idea that the aged persons have of themselves, so that the health needs are perceived and become real[14].

The creation of the Family Health Strategy as the main structuring policy of the Unified Health System strengthens the expansion of access to health services, through the integrality of individual and collective actions, provoking a redesign of a care model that favors the link with the logic of care lines in which every citizen has the right to be assisted by a team, in a full and resolutive way, with therapeutic projects in solidarity with the users' demands[8].

In health care for the aged persons, within professional teams, the need to create situations close to the reality in which the aged person is inserted, so that these practices base on a critical and emancipatory view, leading them to a successful old age[15]. The experiences in the Family Health Strategy allow us to characterize this stage of life as dynamic, creative and democratic, by allowing the constant remodeling of practices and proposing the involvement of the user, the family and the community as co-responsible in health promotion actions[15].

Among the studied aged population, 48.4% reported having gone to the health unit three times or more in the last six months. The different services offered to aged users can influence in greater adherence, such as consultations with multidisciplinary team, orientation and education activities and the possibility of participating in coexistence groups. Comprehensive management of this population in a primary care setting can help to alleviate some of the burdensome of care in a hospital environment. Thus, it becomes a promising model in which health practices are delivered collaboratively in a primary care setting[16].

However, there is still a predominance of activities centered on the disease, contributing to strengthen the culture of failing to promote health to continue treating patients[17]. Home visit is one of the instruments to improve the orientation; it is a model for care reorganization, with activities to control the diseases, as well as health promotion and prevention actions. Through this tool, the health team can reduce the number of hospitalizations and the consumption of medicines, respecting the home care environment, which is considered as the social and physical space of human interactions and interdependencies[17]. One of the great potentialities of home care is the ability of the team to support and strengthen families to deal with critical situations, such as aging, in order to reduce users' overload and suffering[18].

Although the majority of the investigated aged persons received home visits in the last six months,

similar studies show that such actions were numerically insufficient, requiring more frequent and regular visits, especially for the aged population, since the complexity and multiplicity of their problems demand greater attention from the health services[17-19]. The follow-up of health-disease status and continued care in aging process should be stimulated through the adoption of interactive, proactive, dialogical and shared attitudes, seeking resources to solve health problems, improve well-being and their quality of life within the family and community[20].

Health social determinants have influence on access to services in which the aged persons living in areas of medium social vulnerability showed a profile different from those living in a region of very low social vulnerability, with regard to the programmatic dimension. Among the studied aged population, as the Social Vulnerability Index increased, the demand for care in the public health units was more prevalent, since social conditions such as socioeconomic status, support and social engagement have powerful influences on health[21].

Considering sociodemographic characteristics, studies show that the use of health units or health centers decreases as monthly family income increases, showing greater use of private health institutions among the aged persons with more privileged economic classes and a higher schooling level[19,22]. Even among those with private health insurance, there is a search for services provided by the Unified Health System, such as vaccines and complex high-cost procedures, such as hemodialysis and transplantation[20].

However, associations between the use of health services and economic conditions show that the probability of exclusive users of the Unified Health System living in areas classified in the highest strata of social vulnerability was five times higher when compared to the other areas[22]. In spite of the greater adhesion of the users to the public services, the specialized care and diagnostic exams are precarious due to the poor integration between the municipal and state levels, compromising access and quality in the care process[23]. Social exclusion in health is also related to the lack of structure and organization of health systems. As a result of the abrupt aging population, there is a shortage of support and contingency programs, raising concern about the capacity of social and health systems to meet the growing demand of this population[22].

Due to the habits throughout life, it is common for the aged persons to show higher rates of chronic diseases and disabilities over the years, resulting in greater demand for health services and hospital care, contributing to the increase of public and private health systems. Thus, the aged population becomes more susceptible to different contexts of programmatic vulnerability, such as the delay for appointments for consultation, referrals and follow-ups for services of different technological densities, as well as the shortage of routine care with a full approach to their health, reflecting less access to protection and care during their old age.

Important challenges involve the reorganization of the Brazilian health system, especially those related to Primary Health Care. Scientific evidence has shown that the best examples of health systems are those that have a qualified and strengthened Primary Health Care that can provide greater equity, greater

efficiency in the continuity of care and satisfaction to users[23]. From the perspective of community orientation in addressing social determinants, reducing social and regional inequalities, it is intended to strengthen Primary Health Care and enforce the right to health in Brazil[24].

Nurses are a key instrument for achieving these goals, as they are professionals who use an integrated and comprehensive approach, being prepared to deal with and manage health throughout life under the premise of health promotion, disease prevention, treatment and rehabilitation[25]. Within the context of Primary Health Care, they can contribute greatly to morbidity and mortality reduction, providing Primary Health Care with effective initial care, aiming at maintaining the quality of life in all life cycles, especially in those most vulnerable, such as aged population[25].

FINAL REMARKS

The increasing aging population requires adaptation of the health services through comprehensive and contextualized care, with the recognition of the individual and collective needs of this population segment. Therefore, this study allowed us to identify that the majority of the aged persons used the Unified Health System with a considerable adherence to medical services and a reduced demand for dental services.

Aged persons living in areas of medium social vulnerability had higher rates of dependence on public health services, showing the close relationship between the sociodemographic components and the profile of the services used by this population. The findings indicate the need to plan health actions according to different strata of social vulnerability, offering subsidies for the planning of therapeutic behaviors closer to the needs of the aged population.

The growing demand for public services that meets the real needs of the population, especially the aged, contributes to one of the great Unified Health System challenges. The articulation of the lines of full care through the coordination and organization of health services is increasingly necessary for assistance provision based on the resolution of users' needs.

The limitation of this study is due to its cross-sectional nature, in which temporary relationships are not allowed, as well as the adopted exclusion criteria that may have favored the participation of healthier and more active aged persons. However, it was possible to obtain data that resulted in useful information, which could later be used to subsidize the development of similar research in an attempt to elucidate preventive measures that promote healthy aging.

However, the results of this study may represent relevant subsidies as they contribute to the reflection by the health services, especially in primary care. The results can be used as a guide for planning and orientation actions that can recognize early the vulnerable older adult, the potentialities and weaknesses of care services. Further research on the object of study should be encouraged to map information on how vulnerability in the aged population influences demand for health services in different settings.

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