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Chronic non-communicable diseases and their implications in the life of dependente eldery people

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Abstract *This study aims to investigate the implications of chronic noncommunicable diseases in dependent older adults. This is a multicenter, qualitative study in which semi-structured interviews were conducted with 59 dependent older adults diagnosed with chronic disease. The Thematic Analysis technique was used for analyzing the information. Most older adults were female, white, with low schooling level and lived with their daughters. All were undergoing drug treatment, and cardiocirculatory diseases were the most prevalent conditions. The implications of chronic diseases are manifested in the use of medications, which are also a risk factor; in the condition of dependence and in the experience with chronic diseases, which show more significant use of health services; the high economic impact of chronic diseases on families and the state; and the insufficient household income, which condition older adults to have few social and community support devices.*

Key words *Chronic noncommunicable diseases, Dependent older adults, Qualitative research*

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Introduction

Chronic noncommunicable diseases (NCDs) are characterized by pathologies of multiple causes and risk factors, long latency periods, and prolonged course. Furthermore, they have a non-infectious origin and can result in functional disabilities[1].

In the early 20th century, infectious diseases were the leading causes of death in the world population. Currently, NCDs are the leading causes of mortality, resulting from the best socioeconomic and health conditions in recent decades. In 2008, 36 million deaths were recorded globally, 63% of which due to NCDs, especially circulatory diseases, diabetes, cancer, and chronic respiratory disease. Older adults and people with low education and income were the most affected[2].

In Brazil, NCDs are the main burden of disease and death in the population and a significant public health problem. In 2009, the Disability Adjusted Life Years (DALY), which simultaneously measures the effect of disease mortality and morbidity on the population, accounted for 72% of the years of life lost[2,3]. In 2012, chronic diseases accounted for almost 70% of years of life lost due to disability in Brazil. This proportion increases with age, reaching almost 90% of all DALY among older adults aged 70 and over[4]. Older adults over 80 years old have a higher mortality rate (74%) than those aged 60-79 (25%)[5].

NCDs in dependent older adults are associated with loss of functionality and are the leading cause of dysfunctionality in most South American countries, including Brazil. Dysfunctionality refers to deficiencies, activity limitations, or restricted community and social participation[6-8].

NCDs have a high economic cost for both the health system and society, negatively impacting countries' development. Also, health professionals are poorly prepared to meet this group's needs, as less than 15% of undergraduate health sciences programs in the Americas and less than 10% of primary medical specialties include Aging and Geriatric Health in their teaching plans[9,10].

To produce subsidies for the elaboration of a Public Policy that considers specificities related to the effects of NCDs in the lives of dependent older adults[11], this study aims to investigate the implications of NCDs in dependent older adults in municipalities in different Brazilian regions.

Methodological design

This is a qualitative study whose theoretical framework is included in the perspective of hermeneutics-dialectics, which valued the critical and comprehensive exercise of language, relationships, and social practices of people involved with dependent older adults in Brazil. It is nested in a multicenter research that aims to formulate subsidies to construct public policies on dependence.

Claves/ENSP/Fiocruz investigated in conjunction with eight educational institutions: University of Fortaleza (UNIFOR), Federal University of Pernambuco (UFPE), Federal University of Rio Grande do Sul (UFRGS), Federal University of Amazonas (UFAM), Federal University of Piauí (UFPI), Federal University of Santa Catarina (UFSC), and the Brazilian Ministry of Social Security.

The investigation covered eight Brazilian municipalities: Araranguá (SC), Brasília (DF), Fortaleza (CE), Manaus (AM), Porto Alegre (RS), Recife (PE), Rio de Janeiro (RJ) and Teresina (PI) in 2019.

Fifty-nine of the 64 older adults interviewed in the survey participated in this study (Table 1). The inclusion criteria were age ≥ 60 years; both genders; some physical, mental or cognitive dependence; diagnosed with NCD and able to respond to the interview. Older adults linked to Long Term Care Institutions or living alone were excluded. Older adults were identified by professionals from the Family Health Strategy, Hospitals, and other health services in the cities investigated.

The information was collected through semi-structured interviews, guided by a standardized instrument built by researchers from Brazilian universities, and carried out by adequately trained researchers. The topics covered in the interviews comprised information related to sociodemographic data; NCDs; family structure, functional, cognitive, mental/emotional, and social dependence.

Software Statistical Package quantified the sociodemographic aspects for the Social Sciences, version 20.0. The measure of the frequency of the characteristics of the participants was presented, which included aspects related to gender, race, marital status, age group, number of children and grandchildren, religion, and education; the number of diseases per older adult, medication, and a

group of NCDs (neoplasms, diabetes, respiratory diseases, and cardiocirculatory diseases).

The interviews were audio-recorded and transcribed. It is noteworthy that the qualitative statements and data for quantifying the sociodemographic aspects selected for this study were collected from the textual corpus generated by the transcripts carried out by the researchers.

Qualitative statements were analyzed from the Thematic Analysis (TA) perspective. The thematic analysis described by Braun and Clarke[12] is an analytical method used in qualitative research, which aims to analyze phenomena based on the data worked, thematizing meanings, and enabling thematic codification. The analysis was carried out in six phases: 1. Familiarization with the data; 2. Production of initial codes; 3. Search for themes; 4. Review of topics; 5. Definition and naming of themes; 6. Selection of examples experienced by the respondents that were converted into themes, subthemes, and final analysis. Figure 1 shows the themes and sub-themes that emerged from the respondents' reports.

The Research Ethics Committee of the National School of Public Health (ENSP/Fiocruz) approved the research project.

Table 1. Absolute and relative frequency of Chronic Noncommunicable Diseases among dependent older adults in municipalities in different Brazilian regions, 2019.

Municipality/State	Dependent older adults	Older adults with NCDs	%
Araranguá (SC)	12	11	91.7
Belo Horizonte (BH)	7	7	100
Brasília (DF)	10	9	90
Fortaleza (CE)	10	9	90
Manaus (AM)	5	3	80
Porto Alegre (RS)	11	11	100
Rio de Janeiro (RJ)	3	3	100
Teresina (PI)	6	6	100
Total	64	59	93.7

Results and discussion

Sociodemographic characteristics

In this study, information from 59 dependent older adults who reported having NCDs was used. Most dependent older adults were female (62.7%), white (56.3%), with low schooling, and Catholic; 54.7% were long-lived, over the age of 80, lived without a partner, had children and grandchildren. Of the total, 37.5% lived with a daughter, and 31.3% with a partner, in their own home adapted to their needs (Table 2).

The data corroborate Brazil's demographic projection, which indicates a higher proportion of white women among older adults due to the different mortality by gender and race, something that affects the black male population early[13]. Low schooling and worse socioeconomic conditions are associated with the loss of physical and functional capacity among older adults. They possibly accumulated a more significant disease burden throughout their lives, performed harmful work activities, have harmful lifestyle habits, and less access to health services. Also, the population aged 80 and over is increasing in Brazil and is the most vulnerable to several types of dependence[14].

Older adults have a high number of children and grandchildren and count on the presence of their spouse or the person who cares for them, although many of them feel alone. This paradox may be the result of changes and family dynamics marked by the coexistence of great-grandchildren, grandchildren, and children in the same residence, while at the same time losing bond and solidarity[14]. Most suffered from two diseases (50.3%), and all underwent drug treatment. Cardiocirculatory diseases had a higher prevalence (88.1%), followed by diabetes (23.1%), neoplasms (8.5%), and respiratory problems (3.4%) (Table 3).

Alves et al.[15] point out that chronic diseases have a strong influence on older adults' functional capacity. Arterial hypertension increases by 39% the likelihood of becoming dependent in IADL (heart disease by 82% and lung disease by 50%). Cancer and diabetes have a moderate impact on the functionality of older adults[15]. For dependence in IADLs and BADLs, the likelihood more than doubled in the presence of each of these chronic diseases, increasing when older adults have more than one NCD[14].

The maintenance of functional capacity can contribute to older adults' quality of life as it is

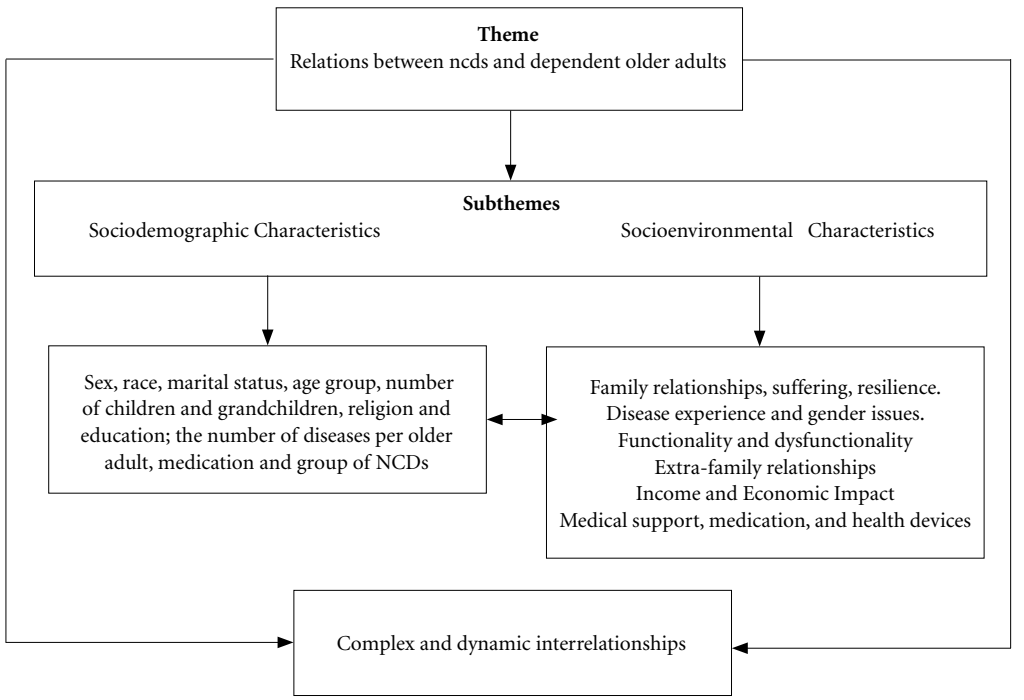

Figure 1. Themes and Sub-themes.

related to the conditions of individuals to remain active, enjoying their independence until the most advanced ages. Thus, the prevention and control of NCDs can improve activities and, consequently, promote the well-being of this population[16].

Socioenvironmental characteristics

Family relationships, suffering, and resilience

The group of older adults interviewed had multiple NCDs, and they depended on third parties – at varying severity levels –for the performance of their BADLs and IADLs. Most reported living with daughter, husband, partner, sister, and grandson (only three lived alone: *I live alone* (Rio de Janeiro, Male, 80 years); *I live very alone, what I really wanted was a person who spent the day here to talk to me* (Piauí, Female, 86 years), which is compatible with Finucane's[17] statements on this topic, by pointing out that dependent older adults are more fragile and vulnerable and more likely to die early if they do not receive care. The fact that older adults should be in the care of relatives was seen by 26 of them with a feeling of *sadness*, *disgust*, and *feeling cornered*:

I am feeling sad (crying). *I don't feel good because I like to work. I like to do my things. I feel disgusted* (Fortaleza, Female, 89 years).

I feel cornered because I can't do anything (Fortaleza, Female, 96 years).

The sadness perceived in the statements results from uselessness and the impossibility of carrying out pleasurable activities before NCDs. This sadness can lead older adults to social isolation and loneliness and become a vicious circle that must be broken because the more significant the sadness, the greater the isolation and loneliness, and the more the isolation and loneliness grows, the greater the feeling of sadness. Sadness is an understandable feeling in older adults with

Table 2. Sociodemographic characteristics of dependent older adults living with NCDs. Municipalities in different Brazilian regions, 2019.

Variables	n (59)	%
Gender		
Female	37	62.7
Male	22	37.3
Ethnicity*		
White	34	57.6
Black (Brown and black)	17	28.9
Marital status		
With partner	22	37.3
Without partner	37	62.7
Age group (years)		
60 – 69	6	10.2
70 – 79	20	33.9
80-89	27	45.8
> 90	6	10.2
Children **		
None	2	3.4
1 – 3	26	44.1
≥ 4	25	42.4
Grandchildren ***		
None	5	8.5
1 – 3	22	37.3
≥ 4	22	37.3
Religion ****		
Catholic	42	71.2
Evangelical	6	10.2
Other	6	10.2
Schooling *****		
Illiterate	9	15.2
Elementary school	34	57.6
High school	8	36,6
Higher education	5	8,5
Living with		
Partner	18	30.5
Daughter	22	37.3
Alone	4	6.8
Other relatives	15	25.4
Daughter	22	37.3
Alone	4	6.8
Other relatives	15	25.4

Source: Field research data. Did not respond: *8(13.6%); **6(10.2%); ***10(16.9%); ****5 (8.5%); *****3(5.1%).

Table 3. Characteristics of NCDs in dependent older adults. Municipalities from different Brazilian regions, 2019.

Variables	n (59)	%
Number of NCDs per dependent older adult		
One	17	28.8
Two	30	50.9
Three or more	12	20.3
Medication for NCDs		
No	0	0
Yes	59	100.0
Group of diseases		
Neoplasms		
No	54	91.5
Yes	5	8.5
Respiratory diseases		
No	57	96.6
Yes	2	3.4
Diabetes		
No	45	76.3
Yes	14	23.7
Cardiovascular diseases		
No	7	11.9
Yes	52	88.1

chronic disease because the uncertainties regarding their response to treatment, survival time, and cure cause anxiety and are stressful factors.

Thirty-three older adults are already satisfied because they have developed strategies to continue living:

*Joy, of being able to still act with something (*referring to combing her hair*). I feel good. I feel like I'm still active for some things.* (Manaus, Female, 79 years).

In the statement above, we observe a new meaning of pain and suffering in feelings of acceptance and pleasure by the older woman, valuing her ability to cope with adverse situations. This is compatible with the concept of resilience in old age since its "affective and cognitive reserves are manifested through the resources of coping and affective regulation, motivation, goals, and capacity self-beliefs"[18].

Living in the home environment and the protection provided by relatives who show understanding, empathy, and encouragement to positive experiences are factors that dignify the lives of older adults in the final stage of their existential cycle, especially those with NCDs. No-

tably, family support is referred to emotionally favorable interpersonal exchanges, together with the necessary and appropriate care that provides them with security[19].

I have this boy helping me (son). I also receive help from the girls, who are sleeping now (granddaughters). They all help me. Thank God that there is no such thing as disunity here. Everything is at peace here (Piauí, Female, 87).

Some elderly respondents reported that they are cared for by only one relative.

Now I'm on my own (referring to her daughter) (Rio de Janeiro, Female, 97 years).

Observing the statements of these older adults, it appears that relatives provide care due to a need driven by their physical or mental incapacity to take care of themselves, which raises the issue of the distress of relatives providing care to older adults alone, without shared responsibilities. As seen in this study, this overload can lead relatives to lose their previous social relationships and dissatisfaction for not carrying out personal and professional projects[20]. Besides the difficulties of children and other relatives sharing their time and responsibilities with caregivers, in Brazil, health and social policies provide insufficient resources to relieve the burden falling solely on the family.

Disease experience and gender issues

In the reports of dependent older adults, we aimed to observe how the disease experience[21] affects their lives and how they seek to level off this experience. We agree with Ricoeur[22] when he says that language is how private experience becomes public and is externalized. In this case, the experience of illness of dependent older adults studied here was expressed by the report of their experiences. We sought to understand their realities through their accounts. At least three attitudes are observed in these statements' excerpts: distress and discontent, acceptance and positive attitude, and extreme thoughts about death.

When reflecting on the health status of older adults, marked by limitations and physical discomfort, the weight of the loss of physical autonomy, functional dependence, and the fact that they need a third person to support them is evident. This is how some older adults expressed their sadness and discontent:

I am feeling useless, giving work to the people there. It's because I depend on everything, then I feel useless because I want to be productive. I want to work. I don't want to be in this situation. (Piauí, Male, 60 years)

This respondent's vivid account points to the importance of work and production in men's lives at any age since work is an identity pillar of masculinity and has a strong link with inclusion in the family that he establishes[23]. The experience of a disease that creates dependence thoroughly challenges older adults, exposing their weaknesses and afflictions. The inability to perform daily tasks and the disillusionment caused by uncertainty about the future triggers a reaction of great suffering:

It is sad to live this way. (Santa Catarina, Female, 87 years)

On the contrary, some older adults feel good and report their experience resiliently and positively. Giving positive meaning to the contingencies of dependence is emphasized by Dias[24] when he states that: "When life does not smile exactly as one would like, for example, in the face of an episode of illness, some shortcuts are taken to solve practical problems and existential afflictions".

I feel well, thank God. (Piauí, Female, 86 years)

My life is happy because I have my children around me. (Piauí, Female, 87 years)

The two cases cited are supported by the words of Laplantine[25], who argues that normal and pathological are no longer thought of in terms of being (something somewhere) but harmony and disharmony, and balance and imbalance. Therefore, the disease is no longer considered an enemy and strange entity, but a breakdown due to excess or lack. Thus, the existential consequences generated from a situation of dependence are mostly subject to how older adults are exposed to the world and their receptivity regarding the circumstances of their condition, but mainly, the support network they own and built throughout life. In this sense, the last stage of the existential cycle reflects human history and trajectory.

Some other older adults showed that it is unbearable for them to be living in a situation of suffering because of their comorbidities and dependence situation. Therefore, they present extreme thoughts such as the desire to end life, as a way to silence the experiences of distress, as in the following statement:

My current life is to think about dying once and for all so that I can rest in peace. (Santa Catarina, Female, 80 years).

This last statement refers to what was highlighted by Shneidman[26] showing that suicidal behavior is the result of a feeling of intolerable pain related to frustrations due to basic unmet psychological needs; attitudes of self-depreciation;

a self-image that cannot stand the intense psychological pain of the inability to perform daily tasks; the feeling of isolation and hopelessness to solve the causes of intolerable pain.

Gender inequalities are relevant in this study since the percentage of women (62.7%) living with NCDs is higher than among men (37.3%). While this issue has not been further explored in the interviews, they deserve some considerations.

Females' predominance may be because women have a higher life expectancy in Brazilian society, although they are also the primary victims of domestic violence and discrimination in the access to education, income, food, work, and health care. This aspect contributes to the propensity to show more dysfunctionality than men at older ages, which was also observed in the studies by Botev[27].

Gender is undeniably a fundamentally social category useful to the history of relationships between men and women and is a promising field for studies on inequalities and social hierarchies[28].

Culturally, women are seen as more careful and more patient. They get faster care in health services and enjoy greater availability, which may be related to an alleged feminine fragility, and also because they are encouraged, from a young age, to seek the doctor, or to take care of the family, which requires more excellent care for oneself.

It is crucial to consider the words of Freud[29] when he states: *all human individuals, as a result of their bisexual constitution and their crossed heritage, have both male and female traits, so that the content of the theoretical constructions of pure masculinity and pure femininity remains uncertain*.

Male and female older adults experiencing chronic illness implies considering and intensifying gender-related studies and research as a fundamental strategy for implementing and implanting public policies to respond to this diversity positively.

Functionality and dysfunctionality

The most significant cause of dependence among older adults is the loss of functionality caused mainly by NCDs, which can be observed in the statements of older adults:

I lost my sight after I turned 92. I used to enjoy working, tidying up the house, cooking, washing, and ironing. (Minas Gerais, Female, 97 years).

The importance of carrying out domestic activities for older adults is felt as the abortion of their possibilities to appear productive. This was the reality with which this 97-year-old woman lived. Her importance as a social being within her family is closely related to her gender destiny.

The loss of my functionality. I feel very sad and discouraged. I'm taking antidepressants (Piauí, Male, 60 years)

As we saw in the two respondents' accounts, the importance of dysfunctionality in the study of NCDs transcends health/disease because its understanding offers the possibility of being worked on for health promotion, prevention, and improved community and social participation. Thus, it expands the perception of the disease of the health-disease binomial by introducing social difficulties in this perception and encouraging the adoption of support networks and facilitators[7]. More than dependence itself, the lack of this stimulus causes feelings of discouragement, isolation, and despair in older adults, as seen in the following statement:

I'm done now. Look now. I'm desperate. I cry alone. Then I start to think, everything that happened! Yes, I can't resist, 89 years... (Santa Catarina, Male, 89 years)

In caring for the older adults with NCDs, it is essential to highlight the difference between performance, which assesses what is done daily, and functional capacity, which assesses the remaining potential in their condition. It is not acceptable to suppose that a limited capacity is due to one or more deficiencies or that the restricted performance occurs only because of one or more limitations. It is crucial to obtain as much information as possible about older adults' disease experience and investigate the interrelationships between that experience and the socioenvironmental (exogenous) and personal (endogenous) aspects independently.

Today, many fields of knowledge in health, such as physiotherapy, physical education, nutrition, and dentistry, can contribute to older adults recovering their autonomy or reducing their suffering. For example, several authors[27,28,30] emphasize that many people in this social group become malnourished due to lack of knowledge or care, which worsens their physical and mental health, aggravating their dependence level. Alternatively, it is now known that older adults with a functional mobility disability can benefit from the help of technologies or worsen their performance in the family and social environment due to the lack of this opportunity[30].

In summary, all aspects are essential in investigating the possibilities of improving dependent older adults' performance. A dysfunctionality in one aspect of their life does not mean that they

are dysfunctional in all others. However, discrimination on account of a chronic illness or social problems can limit their chances of performance.

Extra-family relationships

Thirty-three older adults reported social relationships with people in the community and others. This openness to remain present and participate, as far as possible, in the world they live in is a vital sign of resilience and healthy aging, which can be seen, for example, in the following report:

Children, brothers, and neighbors visit me. The neighbors participate a lot in my life (Santa Catarina, Female, 80 years)

However, this openness to others is not an end-of-life construction. It is the result of an existence in which interaction was and continues to be a social value. Regardless of the family's social integration, community support must be nurtured, since society is part (along with the family and the State) of the responsibility for the emotional, instrumental, and material support offered to older adults, particularly in the case of people in adverse social conditions[19].

Community support devices must be accessible to all relatives and not just those who can afford to pay. In the case of the State's role, public agencies responsible for providing care to dependent older adults should promote actions that improve their performance and rehabilitation. At the same time, they should support families through guidance and collaborate to have adequate conditions to perform the care function. In this sense, and as an example of a concrete support policy for dependent older adults and their families, the Ministry of Labor and Social Assistance recommendations to public and contracted services in Spain are mentioned[31]. This quote considers the cultural proximity between the two countries: 1) prevention of situations of dependence and promotion of personal autonomy; 2) help at home (support for domestic activities and personal care); 3) day/night care centers; 4) institutionalized care, through geriatric homes and care centers for people with mental or physical disabilities; and 5) home tele-assistance, providing security and a better quality of life to people in their own homes.

Income and economic impact of NCDs

Most older adults studied here have a household income of between 1,000 and 2,000 reais per month. Only one receives 4,000 reais per month. This is one of the exogenous aspects that aggravate the consequences of the disease since the functionality and performance of older adults in a specific domain of their life result from the complex and dynamic interrelationship between their health condition and socio-environmental (exogenous) and personal (endogenous) aspects. A direct or indirect intervention in an element of this relational process can modify one or several aspects[32].

I am not working now. Moreover, with much stress, because a doctor earns according to what he produces, and I'm not producing. We haven't started to make adaptations at home. (Piauí, Male, 60 years)

The burden of chronic diseases can invariably interfere with the income and savings of individuals or households. Two possible approaches to explore the economic impact of chronic diseases are the cost perspective of not intervening and the prospect of benefiting from specific interventions. In general, the various means by which diseases can impact the economy are discussed in health and economic growth literature[33].

The approaches to estimating the economic impact of chronic diseases in the literature fall into three main categories: (1) methods for estimating the cost of disease (COI – cost-of-illness); (2) economic growth models that assess the cost of chronic diseases with a focus on their impact on human capital or labor supply; and (3) full income method, which adds the value of health gains to national income[33].

Indeed, prevention costs are lower than for hospitalizations. Therefore, investigations about morbidity and associated expenses become essential for the development of indicators that guide health promotion and the prevention of chronic diseases, aiming at improving the management of the health system[34]. Regardless of how sensitive the indicators are, it is known that the use of health and long-term care devices should not be considered expenditure but, instead, State investment, as they allow societies to enjoy their fundamental rights, and that includes dependent older adults[15].

An investigation and analysis of the expenditure of these older adults and the families who care for them, especially low-income people such as those interviewed, would provide an important parameter to measure their ability to have healthy longevity.

Medical, drugs, and health device support

Medication is the most widely used among the therapeutic resources available to care for dependent older adults and is an essential compo-

nent since the presence of NCDs in older adults is frequent and sometimes requires different prescriptions.

I only have this doctor that I go to [...]. *Diabetes, blood pressure, and thyroid medicines. I now have the thyroid too. Now I don't know where. Regarding the thyroid, there is another doctor around where I live.* (Fortaleza, Female, 89 years)

Most older adults interviewed used several medications, which were necessary due to their condition. However, the use of many at the same time, without adequate and permanent control, is a risk factor as it causes adverse effects or drug interactions"[35]. Shrank et al.[36] affirm that the side effects related to drug use, including tranquilizers for insomnia, induce avoidable older adults' suffering and hospitalizations. Willcox et al.[37] indicate that a relevant aspect found in studies on older adults is the high frequency of "drug interactions", particularly in the group aged 80 and over. Therefore, and according to Rouchon and Gurwitz[38], the observation of medication use by older adults should be performed continuously and in frequent consultations. The appearance of new symptoms without an apparent cause must have as a hypothesis the adverse reaction of a drug and iatrogenesis, that is, complications from the overuse and concomitant use of various drugs that can end up in death[39].

Often side effects are confused with new diseases or attributed to aging itself, hindering diagnosis[40].

Most older adults voiced medical monitoring and the use of health devices on a larger scale:

They come here (referring to the ESF) *every week. They come, and they visit. Care is good. The fact that they come to the house is already a good thing. Their coming in every week is excellent. I cannot complain about doctors.* (Minas Gerais, Female, 78 years)

This is explained by the functional limitations caused by chronic diseases and comorbidities and the risk of complications related to them, leading to greater use of medications.

Other authors also observed this aspect. Oliveira-Figueiredo et al.[41] report that people over 60 with impaired functionality use health devices more often than older adults without dysfunction. This data applies to both public and private services.

Gadamer[42], concerning health, informs that "the increasing cost imposes, with extreme urgency, that health care be once again recognized and perceived as a general task of the population."

Final considerations

This study showed vulnerabilities resulting from the aging process, illness, and dependence in elderly dependents living with NCDs, which indicates that this group of diseases is a significant public health problem. Aspects that contribute to the understanding of the dynamics of NCDs and the need for intervention by relatives, health services, and society were observed:

1. Differences between the three age scales, since the age group of 60-69 years represented 10.2% of the total older adults interviewed; 70-79 years, 33.9%; and > 90 years, 56.0%, and the age group of 80-89 years and < 90 years were the most compromised. This finding corroborates data from the study by Camarano[14] when he states that older adults over the age of 80 are more fragile and vulnerable to various types of dependence;

2. Greater family and social support, both from a structural, emotional and affective viewpoint, having fewer comorbidities, a level of functionality that allows carrying out some tasks and internally established resilience, that is, coping strategies working as protective factors for adverse effects, having an individual and social component. We observed that 50.8% of older adults interviewed managed to maintain a satisfactory life, despite being aware of their limitations and restricted habits and lifestyles resulting from NCDs;

3. Most older adults have a household income between 1,000 and 2,000 reais was seen as a reason for stress for relatives and older adults. In general, NCDs deserve public policy attention. We agree with Suhrcke et al.[43] when he points out that there are still gaps that point to the need for more research on the burden and cost of these diseases and the effectiveness of interventions, especially for developing countries.

4. Although cultural differences may be present because the research was carried out in several Brazilian regions, this aspect did not appear as relevant in the interviews. We realize that the system of prevention, care, and assistance for the dependent older adults is still substandard throughout Brazil.

All the vulnerabilities explored in this paper are essential issues from a scientific viewpoint, for a more continent approach to older adults' dependence, whose predominant factor is NCDs.

Thus, we suggest carrying out further investigations, specifically aimed at the knowledge and prevention of NCDs and their weight in older adults' dependence.

Collaborations

AEB Figueiredo and RF Ceccon participated in data collection and text elaboration: introduction, methodological design, results, discussion, and final considerations. JHC Figueiredo participated in elaborating the text: introduction, methodological design, results, discussion, and final considerations.

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