

ORIGINAL

## Disabilities and quality of life in older adults

### Discapacidades y calidad de vida en adultos mayores

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#### ABSTRACT

**Introduction:** every day more and more individuals are reaching old age and disabilities are increasing in this population segment.

**Objective:** determine the behavior of disabilities and the quality of life of the elderly of the Ceferino Fernández Popular Council, of the Pedro Borras Astorga health area of Pinar del Rio during the year 2024.

**Method:** observational, descriptive, cross-sectional with a population of 3338 elderly and a sample of 876 elderly according to inclusion and exclusion criteria. Empirical, theoretical and statistical methods were used.

**Results:** elderly people aged between 60 and 69 years (53,9 %) and female (69,9 %) prevailed. The predominant disability risk factors were the presence of chronic illness (56,2 %), loss of social roles (50,3 %), and losses (44,2 %). The disabilities that prevailed in the elderly are related to the mode of transportation (7,0 %), washing clothes (67,8 %) and the ability to manage finances (64,6 %). The majority of elderly people with disabilities have an average quality of life (42,4 %).

**Conclusions:** disabilities have a high incidence in the elderly studied, with a greater predominance in the sixth decade of life and the female sex, resulting in Chronic diseases are the main risk factor for disabilities, with those related to the mode of transportation being the most common, with the majority having an average quality of life.

**Keywords:** Quality of Life; Adult; Primary Health Care; Intellectual Disability.

#### RESUMEN

**Introducción:** cada día son más los individuos que alcanzan la tercera edad y se incrementan las discapacidades en este segmento poblacional.

**Objetivo:** determinar el comportamiento de las discapacidades y la calidad de vida de los adultos mayores del Consejo Popular Ceferino Fernández, del área de salud Pedro Borras Astorga de Pinar del Rio durante el año 2024.

**Método:** observacional, descriptivo, de corte transversal, con una población de 3338 ancianos y la muestra por 876 ancianos según criterios de inclusión y exclusión. Se utilizaron métodos empíricos, teóricos y estadísticos.

**Resultados:** prevalecieron los ancianos con edades entre 60 y 69 años (53,9 %) y del sexo femenino (69,9 %). Los factores de riesgo de discapacidad que imperaron fueron, la presencia de enfermedad crónica (56,2

%), la pérdida de roles sociales (50,3 %), y las pérdidas (44,2 %). Las discapacidades que prevalecieron en los ancianos están relacionadas con el modo de transporte (7,0 %), el lavado de la ropa (67,8 %) y con la capacidad para manejar finanzas (64,6 %). La mayoría de los ancianos con discapacidad tienen una calidad de vida media (42,4 %).

**Conclusiones:** las discapacidades tienen una alta incidencia en los ancianos estudiados, con predominio en la sexta década de la vida y el sexo femenino, las enfermedades crónicas resultaron el principal factor de riesgo de discapacidades, siendo las relacionadas con el modo de transporte las más frecuentes la mayoría con una calidad de vida media.

**Palabras clave:** Calidad de Vida; Adulto; Atención Primaria de Salud; Discapacidad Intelectual.

## INTRODUCTION

Individual aging has been conceptualized as the morphological, psychological, functional, and biochemical modifications that the passage of time causes in living beings. It is characterized by the progressive loss of the organism's reserve capacity in the face of changes.<sup>(1)</sup>

Population aging is increasing due to a reduction in the birth rate and a significant increase in the average life expectancy. It is estimated that, in Latin American and Caribbean countries, the number of dependent older adults is expected to increase almost threefold in the same period, from 8 million in 2020 to 23 million in 2050.<sup>(2)</sup>

Over the next 15 years, growth is expected to accelerate in Latin America and the Caribbean, with a rate of 71 %, followed by Asia (66 %) and Africa (64 %). For North America and Europe, increases of 41 % and 23 %, respectively, are expected. At the end of 2023, the number of older adults in our country constituted 24,4 %, which shows a significant increase in this age group.<sup>(3)</sup>

Individual aging is not synonymous with disease, but it can be associated with an increase in chronic diseases that favor the detriment of functionality and the production of disability due to disease and affect the quality of life of the elderly.<sup>(4)</sup>

Disability encompasses impairment (with impairment of a structure or function in the body), activity restrictions (problems in performing actions or tasks), and participation limitations (complications in participating in activities of daily living). Therefore, disability is considered a complicated phenomenon that shows an interaction between the particularities of the human organism and the characteristics of the context in which it develops.<sup>(5)</sup>

The definition of quality of life as an area of knowledge presents diverse contents due to its complexity and multidimensionality. A more recent and generic definition considers it the "perceived level of well-being derived from each person's evaluation of objective and subjective elements in different dimensions of his or her life".<sup>(6)</sup>

The objective of this research is to determine the behavior of disabled people and the quality of life of older adults in the Ceferino Fernandez Popular Council of the Pedro Borras Astorga health area of Pinar del Rio in 2024.

## METHOD

An observational, descriptive, cross-sectional study was carried out to determine the behavior of disabled people and the quality of life of the older adults of the Ceferino Fernandez Popular Council of the Pedro Borras Astorga health area of Pinar del Rio during the months of January - December 2024.

The study population consisted of 3338 elderly people belonging to Basic Work Group 2 of the Pedro Borras Astorga Polyclinic of Pinar del Rio, and the sample consisted of 876 elderly people according to inclusion and exclusion criteria.

Inclusion criteria: older adults who offered consent to participate in the research based on voluntariness and informed consent and who had some disability.

Exclusion criteria: elderly who, although residing where the research was carried out, were not present at the time of its execution and those elderly who died or moved during the study period.

The information was obtained through the following instruments: the Lawton Index<sup>(7)</sup> for the entire study sample and family members or caregivers in case of presenting some disability to assess the physical sphere and the Disability Risk Factors Survey (EFRD)<sup>(8)</sup> to determine risk factors. The Cuban Scale to measure Quality of Life was also applied.<sup>(9)</sup>

The variables were age (60 - 69, 70 - 79, 80 and over), sex (female, male), chronic diseases (present, absent), sequelae post hip fracture (present, absent), schooling (illiterate, primary, secondary, pre-university, university), losses (present, absent), feelings of loneliness (present, absent), absence of confidant (present,

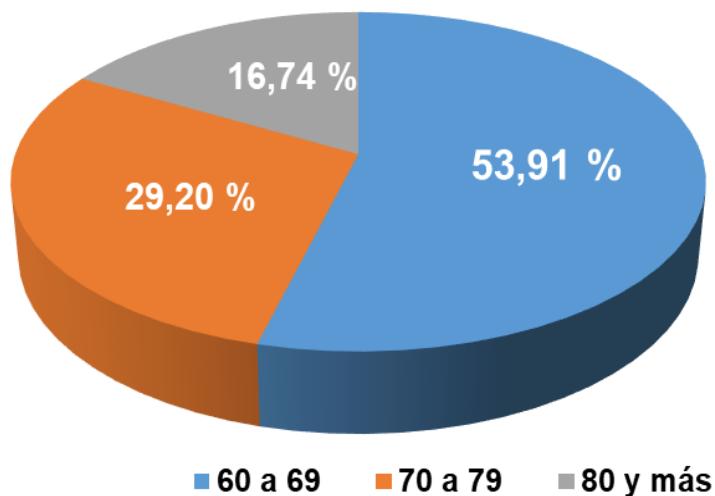
absent), feeling of inactivity (present, absent), maladjustment to retirement (present, absent), loss of social roles (present, absent), dissatisfaction with daily activities (present, (present, absent), inadequate living conditions (present, absent), physical disability (present, absent), physical disability (present, absent), ability to use the telephone (present, absent), shopping (independent, dependent), food preparation (independent, dependent), household management (independent, dependent), laundry (independent, dependent), mode of transportation (independent, dependent), responsibility for own medications (independent, dependent), ability to manage finances (independent, dependent), quality of life (very low, low, medium, high).

The data were obtained from the medical records of the older adults and through the instruments above, which were emptied into contingency tables for their understanding and discussion. The percentage method was used to analyze the results.

The ethical principles of the Declaration of Helsinki<sup>(10)</sup> were respected. The research was presented and approved by the Scientific Council and the Ethics Committee of the Pedro Borras Astorga Polyclinic of Pinar del Río.

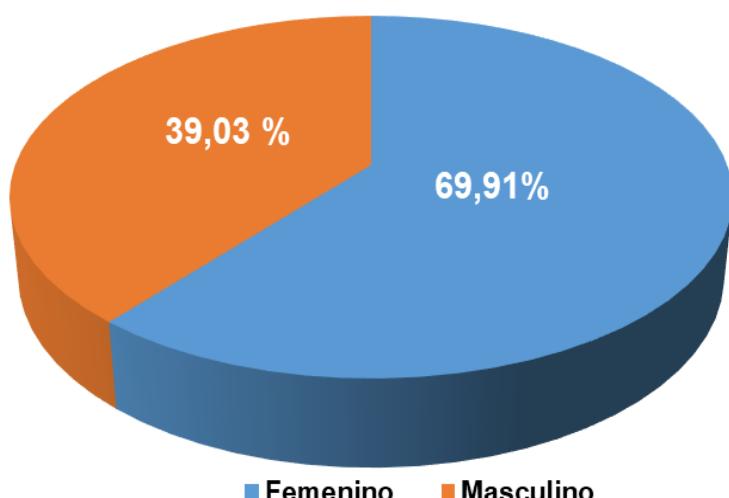
## RESULTS

The elderly aged between 60 and 69 prevailed, 473 (53,91 %), followed by those aged 70 to 79, 256 (29,20 %), and those aged 80 years and over (16,74 %), figure 1.



**Figure 1.** Age of the elderly of the Ceferino Fernandez Popular Council, Pedro Borras Astorga health area of Pinar del Rio during the year 2024  
**Source:** Medical records

Female sex predominated with 534 elderly, 69,91 %, figure 2.



**Figure 2.** Sex

The risk factors for disability that prevailed were the presence of chronic disease in 493 elderly (56,27 %), 319 of the female sex (36,41 %), and 174 of the male sex (19,86 %), followed by the loss of social roles in 441 elderly (50,34 %), 278 of the female sex (31,73 %) and 163 of the male sex (19,86 %), (50,34 %), 278 of the female sex (31,73 %) and 163 of the male sex (18,60 %), and losses in 388 (44,29 %), 201 (22,94 %) of the female sex, and 187 (21,34 %) of the male sex (table 1).

**Table 1.** Risk factors for disability according to sex

Risk factors for disability	Sex				Total	
	Female		Male			
	No	%	No	%	No	%
Chronic illness	319	36,41	174	19,86	493	56,27
Loss of social roles	278	31,73	163	18,60	441	50,34
Losses	201	22,94	187	21,34	388	44,29
Dissatisfaction with daily activities	162	18,49	91	10,38	253	28,88
Inadaptation to retirement	138	15,75	86	9,81	224	25,57
Absence of confidant	123	14,04	98	11,18	221	25,22
Post hip fracture sequelae	96	10,95	47	5,36	143	16,32
Feeling of inactivity	91	10,38	75	8,56	166	18,94
Feelings of loneliness	67	7,64	43	4,90	110	12,55
	34	3,88	27	3,08	61	6,96

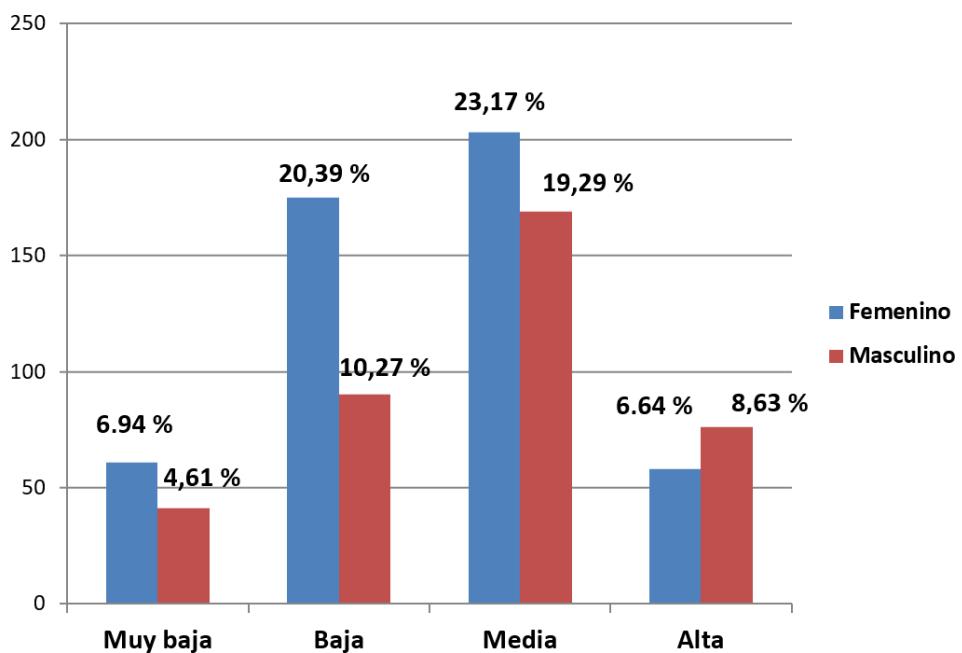
The disabilities that prevailed in the studied elderly are related to the mode of transportation in 614(7.09 %), 401 (45,77 %) female and 213 (24,31 %) male; laundry in 596 (67,80 %), 329 (37,55 %) female and 265 (72,05 %) male and to the ability to handle finances in 566 elderly (64,61 %), 315 (35,95 %) female and 251 (28,65 %) male, table 2.

**Table 2.** Disability by sex

Disability	Sex				Total	
	Female		Male			
	No	%	No	%	No	%
Mode of transportation	401	45,77	213	24,31	614	70,09
Laundry	329	37,55	265	30,25	594	67,80
Ability to manage finances	315	35,95	251	28,65	566	64,61
Responsibility for own medications	207	23,63	286	32,64	493	56,27
Physical Disability	265	30,25	187	21,34	452	51,59
Household management	169	19,29	197	22,48	366	41,78
Mental Disability	196	22,37	112	12,78	308	35,15
Food preparation	89	10,15	142	16,21	231	26,36
Shopping	134	15,29	82	9,36	216	24,65
	98	11,18	103	11,75	201	22,94

**Source:** Lawton index (Instrumental Activities of Daily Living Scale).

The largest number of elderly with disabilities have a medium quality of life, 372 (42,46 %), 203 of the female sex (23,17 %) and 169 of the male sex (19,29 %), followed by those with low quality of life, 268 (30,59 %),178 (20,31 %) of the female sex and 90 (10,27 %) of the male sex, figure 3.



**Figure 3.** Quality of life of the disabled elderly

Source: Cuban scale for measuring Quality of Life

## DISCUSSION

The aging population has contributed to an increase in the prevalence of disability in the elderly. In the study carried out by Macareño Avila et al.<sup>(11)</sup>, the highest Odds Ratio (OR) was obtained among the dichotomous qualitative variables. In this case, it was shown in the variable sex with 4,79, which expresses that the probability of disability appearing in the elderly is five times higher in the female sex.

The results of this research agree with those of Zayas Lavielle et al.<sup>(12)</sup>, who identified that functional limitation occurs more frequently in the female sex.

Multiple explanations can be found in the reviewed bibliography. There are authors<sup>(13,14)</sup> who state that the decrease in estrogen levels that accompany the postmenopausal period may increase disability since these usually have a protective role. Other assertions indicate to be more reliable, as they involve social factors; thus, it is alleged that women are dedicated to household chores and their functions as mothers, with minimal opportunities to engage in intellectual work, which requires greater interpretation and analysis of phenomena, which could be associated with the older woman being more sensitive to the decline or loss of intellectual skills.

It has been demonstrated that chronic diseases increase with age, and those of the osteoarticular system and the central nervous system are the most associated with disabilities in the elderly.<sup>(15)</sup>

The results of this study showed a higher prevalence than that found by Pinilla Cárdenas and collaborators<sup>(16)</sup> about the presence of losses related to disability, who state that during aging, losses increase, as well as the changes of role, both familiar and social, which force a readaptation, which could lead to the failure of such adaptive mechanisms.

With old age, people go from a certain degree of validation to dependence on others, which is added to the loss of relationships, such as work, and above all, children, who can fend for themselves and do not need the help of parents, which causes them to tend to feel less valuable.<sup>(17)</sup>

In reviewed research,<sup>(18,19)</sup> it is reported that with increasing age, there are changes in memory since perception, inductive reasoning, symbolization, verbal intelligence, and intelligence quotient decrease with the years.

In his study, Santalla Corrales<sup>(20)</sup> found that 89,8 % of the women could take their medications by themselves, while in men, this percentage was lower. Of the women, approximately 84,44 % prepared their food by themselves, while 76,61 % of the men did so, and 88,93 % did their housework by themselves, in contrast to 61,41 % of the men.

Guerra Orozco and collaborators<sup>(21)</sup> obtained similar results, in which almost all of the elderly surveyed have a low perception of their quality of life. The results of this research are even more unfavorable since no elderly person reported a high quality of life, which may be associated with the fact that they are institutionalized elderly.

The elderly with a stable partner maintain supportive relationships that make their lives more pleasant and

tolerable. They help each other from a spiritual point of view. In the event of the partner's loss, feelings of loneliness arise in the elderly that can cause states of depression, sadness, grief, and others, which, if they persist, would disturb the perception of their quality of life.<sup>(22)</sup>

Rodriguez Aguilar et al.<sup>(23)</sup>, when relating the quality of life with sex, evidenced the absence of a relationship between these variables. Still, it was demonstrated that women were the ones who mostly presented a poor quality of life in comparison with men.

Hidalgo César and collaborators<sup>(24)</sup> suggest a prevalence of older adults who were not reintegrated into work activities, which influenced the appearance of depressive symptoms and the negative perception of their quality of life.

## CONCLUSIONS

It was possible to prove that disabilities had a negative influence on the quality of life of older adults in the Ceferino Fernandez Popular Council, Pedro Borras Astorga health area of Pinar del Rio, in 2024.

## Scientific Contribution

This research contributes to the knowledge of disabilities and quality of life of older adults belonging to a health area, of great transcendence for the modes of action of professionals in the first level of public health care and especially responds to the program of care for the Elderly, a prioritized program in Cuba. It offers valuable information to design actions aimed at reducing disabilities and improving the quality of life in this sensitive population group.

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## **CONFLICT OF INTEREST**

The authors declare that there is no conflict of interest.

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