








Self-perceived health among older adults at risk of clinical-functional vulnerability in an Open University

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Abstract

Objective: To identify and understand the self-perceived health of older adults at risk of clinical-functional vulnerability who participate in an Open University within a public higher education institution in Northeastern Brazil. **Method:** This analytical, qualitative study was based on secondary data from the project titled “Assessment of Frailty in Older Adults Participating in the Open University for Maturity.” Inclusion criteria were being an older adult, participating in the university, presenting no cognitive impairment, and presenting vulnerability risk according to the Clinical-Functional Vulnerability Index (CFVI-20). Thus, of the 102 participants, 34 were included and 68 were excluded from the sample. Data were analyzed using thematic categorical analysis, and categories were established inductively. **Results:** Three thematic categories were identified: Health as the absence of disease; Health as a state of biopsychosocial and spiritual well-being; and Health as the ability to overcome clinical-functional vulnerabilities and how the Open University contributes to this process. **Conclusion:** Continuous clinical-functional assessment of older adults is essential for the early detection of vulnerabilities and the implementation of educational interventions. In Open University programs, the social interaction promoted by institutional initiatives fosters discussion on quality of life and contributes to self-awareness in health promotion and maintenance during aging.

Keywords: Aging. Health of the Elderly. Health Promotion. Self-Perception.

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INTRODUCTION

Aging is a gradual and dynamic process that occurs universally among all human beings and is accompanied by biological, functional, biochemical, psychological, and sociocultural changes that result in a significant loss of an individual's ability to adapt to the environment over time. Functional decline increases the risk of frailty, which may arise from the aging process itself or from disabling diseases or falls that may ultimately lead to death¹.

As age advances, the disabilities accumulated over the years contribute to increased vulnerability among older adults. Geriatric syndromes (iatrogenesis, cognitive impairment, family insufficiency, sphincter insufficiency, immobility, communication impairment, and postural instability), together with the loss of social roles and experiences of loneliness, pose potential risks to active or healthy aging²⁻⁴. Within the context of demographic transition, studying functional profiles and the extent to which they affect the health of older adults becomes an essential parameter for guiding healthcare practices in response to population aging^{5,6}.

Positive self-perceived health among older adults is directly related to social determinants and health behaviors, which substantially shape the orientation of care. Self-perception is recognized as an important indicator of well-being and can guide prevention and health promotion strategies in accordance with the guidelines of the National Policy for the Health of Older Adults (PNSPI). By considering both organic and non-organic factors that affect functionality, findings from previous studies reinforce the importance of integrated multiprofessional interventions focused on quality of life⁶.

Thus, the well-being of older adults is understood to be determined by the maintenance of autonomy and independence, including the potential for social engagement and participation^{7,8}. To this end, assessing activities of daily living (ADLs) and instrumental activities of daily living (IADLs) and using validated scales that evaluate functionality and the risk of frailty and vulnerability constitute essential prerequisites for planning care-oriented actions within older adult health programs⁹.

Frailty in aging is a multidimensional condition associated with multiple factors and is characterized by reduced energy reserves and decreased resilience to stressors, which increase vulnerability and the risk of adverse clinical outcomes such as functional decline, falls, institutionalization, hospitalization, and mortality¹⁰. Recognizing that older adults have the right to access higher education institutions and participate in lifelong educational activities is a crucial component for advancing the guidelines of healthy aging. One notable example is that of Open Universities, which promote greater social interaction and shared experiences within academic environments, providing opportunities for diverse experiences, skill development, and settings that foster intergenerational encounters^{2,11-14}.

The Open University fulfills its social role by developing educational activities for older adults, guided by the fundamental principle of promoting intergenerational exchange among academics (professors and students) and older participants, fostering dialogue between academic knowledge and the lived experiences of those involved. In this context, it seeks to promote discussions that emphasize the value of knowledge, the preservation and improvement of communication, and the encouragement of the active integration of aging individuals into society¹²⁻¹⁴.

The main justification for the present study was based on the observation that academic programs within Open Universities must also incorporate clinical-functional assessment, particularly in institutions that provide training in the health sciences. Furthermore, when considering older adults who participate in such programs and are at risk of frailty, it becomes necessary to understand how they perceive their own health and how these academic environments may contribute to promoting healthy aging. Thus, the general objective was to identify and understand the self-perceived health of older adults at risk of clinical-functional vulnerability who participate in an Open University within a public higher education institution in Northeastern Brazil.

METHOD

The study was submitted to and approved by the Ethics and Research Committee of the

Universidade Estadual da Paraíba (UEPB), under opinion number 6.297.534 and Certificate of Ethical Review Submission (CAAE): 73350323.6.0000.5187. All ethical procedures followed Resolution No. 510/2016¹⁵ of the National Health Council of the Ministry of Health. Accordingly, the Informed Consent Form (ICF) and the Authorization Form for the use of secondary data were used in this study.

This is an analytical, qualitative, cross-sectional study based on secondary data from a larger umbrella project conducted between September 2023 and September 2024, titled “Assessment of Frailty in Older Adults Participating in the Open University for Maturity.” The study was conducted in two stages. In Stage I, participants were recruited, and a sociodemographic questionnaire was administered for participant characterization, followed by the Mini-Mental State Examination (MMSE) and the Clinical-Functional Vulnerability Index (CFVI-20). In Stage II, interviews were conducted using an established qualitative interview technique.

The study was carried out at the Open University for Maturity (UAMA). UAMA/UEPB is an institutional program headquartered on Campus I of the Universidade Estadual da Paraíba, located in the municipality of Campina Grande, Paraíba, in Northeastern Brazil. Data collection occurred from November 2023 to April 2024 during sessions held throughout the program’s regular academic period.

UAMA aims to address the educational needs of older adults without requiring previous academic degrees. Its institutional mission is to contribute to the improvement of personal, functional, and sociocultural capacities through educational and social activities that enhance quality of life. The initiative also seeks to promote academic integration among older adults, enabling them to deepen their knowledge in various areas, including health, leisure, general knowledge, culture, aging studies, law, and quality of life. Upon completing the course, participants submit a final assignment titled “Life History Narrative” and receive a certificate in Education for Human Aging.

The study population consisted of older adults regularly enrolled in UAMA who attended classes and participated in all activities developed during

the study period, totaling 102 regular morning participants at the time.

Inclusion criteria were being an older adult, participating in the university, not presenting cognitive impairment, and being at risk of vulnerability according to the Clinical-Functional Vulnerability Index (CFVI-20). Exclusion criteria were older adults who self-perceived their health positively in comparison to others of the same age, that is, those who answered excellent, very good, or good based on the CFVI-20.

Thus, of the 102 participants, 34 were included in the sample and 68 were excluded. This exclusion was necessary to understand the phenomenon of self-perceived health among those at risk of vulnerability who did not self-perceive their health as positive. It is important to note that self-perceived health is a subjective health indicator among older adults and is related to social determination^{6,14}. Therefore, the analytical focus resulted in a sample of 34 older adults at risk of vulnerability with negative self-perceived health. Based on this sample, the following guiding questions were analyzed: How do you self-perceive your health? How does the Open University influence your health perception?

The Mini-Mental State Examination (MMSE) is a widely used screening scale for cognitive impairment among different populations, including adults and older adults. It proposes different scoring thresholds according to the individual’s years of schooling. Cut-off points between 19 and 20 are recommended for older adults with no formal education, and between 23 and 24 for those with prior schooling, such that scores below these thresholds indicate cognitive impairment¹⁶.

The Clinical-Functional Vulnerability Index (CFVI-20) is a Brazilian rapid screening tool that identifies clinical-functional vulnerability among older adults and may be administered by any trained healthcare professional. It contains 20 items addressing different health domains, with a total possible score of 40 points. Scores from 0 to 6 indicate a robust older adult, scores from 7 to 14 indicate moderate risk of frailty, and scores above 15 indicate high frailty, classifying the individual as frail¹¹.

Interviews were audio-recorded using an Android smartphone and transcribed verbatim with the support of pre-tested headphones. Three rounds of transcript revision were conducted based on repeated listening to the recordings. Narrative identification was performed through a coded organization of the interviews, using the letter “i” (older adult) followed by the ordinal code of each transcript. Thus, the participant labeled as i.1 refers to the transcript of the first interviewee. This procedure enabled the construction of the interview *corpus*.

The narratives were organized and methodologically assessed using thematic categorical analysis. Bardin (2009)¹⁷ defines a set of content analysis techniques comprising the following stages: (1) pre-analysis, involving initial reading and corpus organization; (2) exploration of the material, categorization, and coding; and (3) treatment of the results, inference, and interpretation. The thematic categories were established inductively.

DATA AVAILABILITY

All datasets supporting the findings of this study are available upon request to the corresponding author, given that they contain information that could compromise the privacy of the research participants.

RESULTS AND DISCUSSION

A total of 34 older adults were analyzed, classified as being at risk of clinical-functional vulnerability according to the CFVI-20 and who self-perceived their health as poor or very poor. This characterization highlights the need to deepen the understanding of how they perceive their own health, as well as how participation in the Open University influences their well-being. Three thematic categories were identified: Category I, Health as the absence of disease; Category II, Health as a biopsychosocial and spiritual state of well-being; and Category III, Health as the ability to overcome clinical-functional vulnerabilities and how the Open University supports this process.

The category identified as “Health as the absence of disease” was recognized in the statements of seven participants, whose self-perceived health was

described by directly associating health with the absence of illness. When health is defined as the absence of disease, a limited awareness emerges regarding the possibilities of managing aging based on the pillars of health promotion, prevention of health conditions, stabilization, supported self-care, and continuous assessment of potential risk stratification, as recommended in the guideline for older adult care¹¹.

The narratives in this thematic category highlight the predominance of the hegemonic biomedical model, which fragments care and hinders a comprehensive health approach. This perspective reflects long-standing challenges in healthcare systems regarding the management of chronic conditions and reinforces the need to broaden debate and incorporate this topic into the agendas of the health sciences. Representative statements include:

“Health is being well cared for when illness appears; it is not feeling pain, not needing to take so much medication, and not having diseases. It is going to the physician and being attended; it is going to the clinic and having physicians and medications for our problems, and we do not have that. Health is being treated and undergoing treatment; for this reason, my health is poor as an older adult.” (i.1)

“I think health is everything as a whole, right? It is having a physician to provide care; it is not having disease. Health is living without illness, without having many types of diseases like I do. There is hypertension, taking medication, diabetes, osteoporosis, so many ailments.” (i.17)

There is a clear need to expand health-education spaces that include older adults, with the purpose of promoting new conceptions that guide individuals toward understanding healthy aging. Similarly, there is a need for gerontological and geriatric training in healthcare, considering that many curricula still do not include mandatory components focused on older adult care¹⁸.

Open Universities expand discussions on topics such as health education; however, there remains a need for educational spaces that enable the general population to understand self-perceived health

not merely as the absence of disease and curative pharmacological treatments, but as an integral perspective of well-being and maintenance of functional capacity, even when illness is present.

The World Health Organization (WHO) defines health as a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity⁶. This supports the current debate highlighting the need to contextualize aging within the framework of the chronic disease care model, demystifying aging from the perspective of being treated as a disease¹¹.

The health of older adults must be understood broadly, considering not only the absence of disease but also the physiological and mental changes, the environmental and cultural contexts of aging, the social determinants of health, and the role of healthcare training in the quality of care provided¹⁸.

Health conditions in aging are shaped by multiple health indicators, particularly physical, cognitive, and muscular strength deficits. Thus, the onset of disease is understood as a form of wear that may occur in various ways and at different points in the human lifespan, not only among those who grow old. However, confronting these conditions is inherent to the physiological changes attributed to the aging process itself^{19,20}.

Considering this thematic category analyzed in an open university setting, where health promotion is grounded in dialogue with older adults, it became evident that there is a need for further advancement in strategies to reach the aging population, with the aim of optimizing effective health practices according to the guidelines for healthy aging. Such resources may support lifestyle changes, strengthen self-perceived self-care, and contribute to disease prevention, thereby optimizing active aging and enhancing longevity and quality of life among older adults¹⁹⁻²². Therefore, the open university is recognized as an educational space for the promotion of health among older adults, as well as a setting for the exchange of experiences among academics (faculty and students), older participants, and the broader community.

In the second thematic category, “Health as biopsychosocial and spiritual well-being,” 17 participants referred to health as a balance of biopsychosocial and spiritual dimensions. In this context, findings indicate that these individuals cultivate healthy lifestyle practices, even while perceiving their health as fair or poor. Examples include the following statements:

“Health is living with tranquility, having love, having peace, always receiving a hug that cures any illness. That, for me, is health. Even today, I am not feeling very well because I woke up with knee pain, but even so, I feel balanced; I just wish the pain would improve a little more.” (i.9)

“In my view, health is peace of mind. I think health has no price, right? It is the most important thing you must have in your life—first health, and then peace. Because when you do not have these two things, you have nothing. Everything you try to do, if you have a problem, you cannot manage it. I, thank God [...] have my ailments, and although today I feel a little shaken in terms of my health, I am seeking balance each day, following my diets, praying daily, and also following the recommendations of the regimens.” (i.32)

In this category, it is possible to observe that even in the presence of health complaints and situations initially classified as poor or very poor, health is understood as well-being and as biopsychosocial and spiritual balance. This understanding emerges in the context of confronting challenges through resilience and lifestyle reorganization, within the limitations inherent to aging. Therefore, health is recognized as a path of ongoing pursuit of balance, even amid the complaints resulting from the human aging process and its trajectory of risks for vulnerability and frailty.

Health is understood as a state of well-being that must be continuously constructed, requiring willingness, self-care, self-knowledge, and adequate socioeconomic conditions, as well as access to essential services. Thus, there is a need to foster new perspectives on health aimed at more comprehensive models of care that restore autonomy and independence in care practices, together with incentives for disease prevention and health promotion.

In this regard, when examining the self-perceived health of participants at risk of vulnerability in health, it becomes evident that quality of life remains a reference point for the basic health needs of the group analyzed. It is also noteworthy that education, cultural factors, basic sanitation, and spiritual, physical, mental, psychological, and emotional well-being, across various domains including existential, personal fulfillment, family, environmental, social, and professional spheres, are essential for a resilient view of healthy aging with quality of life²⁰⁻²².

Thus, quality of life in aging requires an empowered understanding of health among this population with regard to health promotion, enabling social participation, recognition, and social support. For this reason, health policies and initiatives that encourage active aging, with attention to the biopsychosocial and spiritual dimensions of the individual, become essential²⁰.

In the third thematic category, titled “Health is being able to overcome clinical-functional vulnerabilities and how the open university helps in this process,” ten participants mentioned in their responses that the open university serves as a collaborative space for coping with clinical-functional vulnerability. The open university promotes social interaction and health education, contributing to a realistic and positive view of health and of overcoming challenges, as expressed in the statements below, in which participants describe their efforts to overcome difficulties and seek knowledge to face the human aging process:

“I consider my health poor because I have diabetes and hypertension, but UAMA has brought me better quality of life through learning. At this stage of life, being able to study and meet committed professors from whom I have learned a great deal is invaluable. Even though I think my health is poor, what saves me is having friendships that I will carry throughout my life. Seeking to improve my self-esteem, this is what happens to us here at UAMA.” (i.7)

“I do not consider my health good because I have a lot of pain and fatigue, but I overcome all of this with faith in God by coming to UAMA. That is what matters, sharing with friends the pains of

aging. Here at UAMA it is very good. We learn a lot, and that helps me overcome my problems.” (i.8)

“For me, health is taking care of myself. For example, I need several treatments, and one of them is urgent, physical therapy, which I have not been able to do because of a fall I had, and this arm no longer lifts. I also have balance problems, so I really need assistance. Even so, I overcome all of this with my knowledge. I always seek improvement and never give up. I learned from life, but UAMA also helps us gain more understanding about overcoming age-related challenges.” (i.10)

Although the statements refer to negative aspects that corroborate the problems experienced, they are framed from a positive perspective, since these older adults participate in a space that provides health education, opportunities for socialization, and support from a professional team in carrying out activities. Group-based practices for older adults foster continuity of autonomy and independence and also contribute to reducing the risks of loneliness and social isolation^{22,23}.

In this sense, the narratives of older adults help elucidate how they perceive changes in their daily lives and in their own life trajectories when they are included in an educational environment for older learners. Open Universities are thus understood as fundamental institutions that influence improved self-esteem, self-knowledge, the establishment of affective bonds, and the sharing of experiences. Through these processes, they justify how essential such programs are for empowering this population and fostering satisfaction in acquiring new knowledge^{4,12,13}.

Self-perceived health, as well as the aging process, are intrinsically interconnected and reflect the ongoing pursuit of understanding quality of life, thereby expanding the continuity of efforts to promote and implement actions that benefit this age group. In this perspective, previous studies indicate that older adults participating in an Open University for Mature Adults seek to remain up to date, engage in memory exercises, reduce anxiety, and take an active role in decision-making related to health matters, pursuing meaningful engagement that promotes active aging^{12,13,22,23}.

Accordingly, open universities bear the responsibility of reframing actions related to aging and ensuring that older adults remain actively integrated into their communities and society. This enables them to feel useful and valued, allows their knowledge to be recognized in enriching environments, and promotes well-being and satisfaction. Moreover, it respects their life experiences and diversity of perspectives while supporting the maintenance of functional capacity and cognitive abilities^{11,12}.

It is important to emphasize that the role of professionals in these environments includes providing assistance and care to older adults, assessing their health, establishing humanized care plans, and fostering relevant themes for shared discussion. Such professionals and their socioeducational interventions offer encouragement and contribute to modifying life habits, with the aim of promoting functional independence and autonomy²⁰.

The study also identified that a minority, seven participants, perceived their health as fair or poor, associating their self-perceived health exclusively with the presence of diseases. Divergent paradigms emerged, as seventeen participants understood health as well-being rather than the mere absence of disease, recognizing that physical, social, mental, and spiritual well-being are essential components for feeling well throughout the human aging process. Given the heterogeneity of the group, expanding spaces for dialogue on health within the open university may stimulate creative and targeted initiatives that support healthy aging.

Considering the benefits observed among older adults participating in UAMA, the importance of such environments for human development and for understanding this stage of life becomes clear. This underscores the urgent need for effective public policies that promote the creation of similar initiatives aimed at meeting the needs of this population. These spaces not only provide new knowledge but also ensure the promotion of health.

The bonds, learning experiences, and social interactions fostered by UAMA gave new meaning to the lives of the participants, including those facing adversities inherent to aging, contributing to a more fulfilling older age. The expansion of open university

programs, understood as spaces that promote social interaction, health, and intergenerational encounters, represents significant progress for gerontological discussions in both academia and society.

A limitation of this study was its conduct in only one open university unit, highlighting the need for further investigations that broaden the discussion of self-perceived health in other academic and geographic contexts to deepen understanding of this topic.

CONCLUSION

It was observed that some participants perceived health as the absence of disease, while most associated it with biopsychosocial and spiritual well-being. It was also evident that the open university contributes to health discussions within the context of social interaction among older adult participants, as well as to the training of students, and serves as a platform for promoting health education for the aging community.

Accordingly, self-perception may vary among individuals, while the construction of knowledge and the ongoing pursuit of independence aim to broaden understanding, preventing self-perceived health from being limited to a single, isolated definition. Continued research on this topic is necessary to strengthen scientific knowledge and to support the robustness of functional capacity, given the evident growth of this population.

It is essential to continuously assess the health of older adults to prevent vulnerabilities and promote educational actions, especially in environments such as open universities, which foster care and self-awareness in the aging process.

AUTHORSHIP

- Santos, N. A. – initial drafting, conceptualization, data curation, writing, investigation, methodology.
- Silva, J. R. L. – formal analysis, investigation, visualization, review and writing.

- Medeiros, A. C. T. – review and editing, visualization.
- Silva, J. – review and editing, funding acquisition, visualization.
- Medeiros, F. A. L. – formal analysis, project administration, investigation, methodology, funding acquisition, review and editing, validation, and visualization.

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