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The living and health conditions of elderly people participating in a coexistence group in Belo Horizonte

EXPERIENCE REPORT

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ABSTRACT

Introduction: With the aging of the population, it is essential to discuss health care that promotes well-being, with a focus on health promotion and disease prevention. In this perspective, health education initiatives and objective assessments of the general health conditions of the elderly are important tools to empower individuals and support public policies that improve the living and health conditions of this age group.

Objective: To discuss the importance of health education actions for the elderly, as well as to evaluate the general health conditions and quality of life of participants in a community group in Belo Horizonte. **Experience report:** 40 elderly women participated, and the meetings took place from August to December 2022. Health education actions were carried out, addressing topics such as chronic diseases (diabetes and hypertension); healthy diet and good lifestyle habits; Pink October (breast cancer prevention); mental health; and sleep quality. During the meetings, sociodemographic information, anthropometric measurements, general health conditions and quality of life were collected using the SF-36 instrument.

Final considerations: Stimulating the development of health education actions at this stage of life is essential for maintaining the autonomy and empowerment of the elderly, resulting in positive attitudes to promote well-being. Furthermore, evaluating the general health conditions and

the quality of life of this age group allows for targeting and strengthening existing public policies that support healthcare for the elderly.

Keywords: Hypertension; Diabetes Mellitus; Health Education; Health Promotion; Quality of Life.

INTRODUCTION

In Brazil, there is a high prevalence of Non-Communicable Chronic Diseases (NCDs) in the adult population, affecting up to 52% of this segment.¹ With the aging of the Brazilian population, the incidence of NCDs is expected to increase even further, especially among individuals aged 65 or older, whose numbers will nearly triple by 2060.² These comorbidities have a direct impact on people's quality of life, as defined by the World Health Organization (WHO), as the individual's perception of the implications of diseases in their lives and their goals, expectations, standards, and concerns.

It is essential for individuals to maintain their autonomy and health over the years, as aging increases the chances of NCDs appearing. Additionally, the increased survival of patients with NCDs has made discussions around quality of life more valued.³ According to the Ministry of Health, monitoring risk factors for the occurrence of NCDs and the economic and social impact of these comorbidities constitute a strong argument for their prevention.⁴ Thus, analyses of blood pressure, body mass index (BMI), and waist-to-hip ratio are important indicators to detect possible conditions related to the onset of NCDs.

Systemic Arterial Hypertension (SAH) is a multifactorial chronic condition characterized by elevated systolic and diastolic blood pressure levels, with blood pressure monitoring being essential at all ages, but especially in individuals over 65 years old who usually present more alterations in blood pressure.⁵ BMI analysis is important to determine if an individual's weight is appropriate for their height or if there is a risk of obesity.⁶ Additionally, waist-to-hip ratio analysis assists in the prevention of NCDs by relating fat concentration values in these regions to the possible development of cardiovascular diseases, diabetes, and atherosclerosis.⁷ Studies have shown that due to misinformation and lack of monitoring, many people have elevated BMI, blood pressure, and waist-to-hip ratio values, which consequently negatively impact quality of life.⁸

In this context, collective health promotion and education actions, such as operative groups, are alternatives used as a means of assisted care for these patients to ensure autonomy and protagonism in the health-disease process and consequent improvement of quality of life.⁹ Such groups are developed in public spaces, such as basic health units, squares, sports courts, and spaces of voluntary private institutions. Therefore, members of an Academic League focused on collective health from a private Higher Education Institution (HEI) in the city of Belo Horizonte, Minas Gerais, conducted the present study. The objective of this study was to discuss the importance of health education actions for the elderly and evaluate the general health conditions and quality of life of participants in a coexistence group in Belo Horizonte, Minas Gerais.

EXPERIENCE REPORT

This is an experience report of an extension project developed with 40 participants from a coexistence group located in Belo Horizonte, Minas Gerais. All participants were women, aged between 52 and 83 years (average age = 73.3 years [Standard deviation-SD=9.64]). Health education actions were planned based on themes defined according to the demands of the coexistence group and were grounded in previous literature, aiming to choose appropriate methodologies for this age group. The activities conducted had the aim of sharing knowledge and experiences about health care, with the goal of empowering the elderly. Additionally, the assessment of general health conditions and quality of life was performed using validated questionnaires, with the objective of understanding the health of this age group and supporting public policies aimed at improving living conditions during aging.

The project took place between September and December 2022, through weekly meetings (twice a week), lasting two hours each day. There were 8 (eight) meetings in total.

Before starting the assessment, all participants signed the Informed Consent Form (ICF). The project was approved by the Research Ethics Committee (CAAE: 64531722.3.0000.5134).

In the first meeting, the elderly participated in a group discussion to establish the topics of interest to be addressed in the following meetings, focusing on chronic diseases (diabetes and hypertension); healthy

eating and good lifestyle habits; Pink October (breast cancer prevention); mental health; and sleep quality. After this moment, participants were invited to answer the questionnaire about general health conditions and quality of life.

The questionnaire regarding general health conditions was developed by the researchers themselves and contained the following information: 1) sociodemographic: age, gender, and level of education; 2) anthropometric measurements: weight, height, Body Mass Index (BMI), and waist/hip ratio; and 3) general health condition: blood pressure, oxygen saturation, heart rate. The questionnaire used to assess quality of life was the SF-36¹¹. Subsequently, the data were recorded in a spreadsheet for control and statistical analysis.

The sociodemographic, anthropometric, and quality of life assessment was conducted with the elderly individuals who participated in at least two meetings (n=12). For the proper classification of BMI, reference values from the Ministry of Health's Elderly Health Booklet were used¹⁰. The waist-to-hip ratio was calculated by the formula: waist circumference in centimeters (cm) divided by hip circumference in cm, both measured using a measuring tape.

The assessment of overall health status was performed at the beginning of each meeting, and the obtained values were recorded in a spreadsheet for control and statistical analysis, where an arithmetic mean was calculated with all collected vital signs values for each participant. In case of significant changes in the elderly's vital signs data, a protocol was developed by the researchers where participants were instructed to

seek their Basic Health Unit (UBS) for a consultation with a doctor. Blood pressure was measured using a sphygmomanometer and stethoscope, while oxygen saturation and heart rate were measured using a pulse oximeter.

To assess quality of life, the SF-36¹¹ was used, which is a generic health assessment tool, easy to administer and understand, consisting of 36 questions, covering eight components: functional capacity, physical aspects, pain, general health status, vitality, social aspects, emotional aspects, and mental health evaluated by 35 questions and one comparative question about current health. Scores were calculated according to the instrument instruction by Ciconelli¹¹. The results obtained by this questionnaire are scores ranging from 0 (zero) to 100 (one hundred), where 0 represents the worst state in that domain and 100 represents the best state in that domain. It is called a raw scale because it does not present any unit of measure.

From the second meeting onwards, activities were directed towards the previously chosen themes by the participants. The meeting on chronic diseases, especially diabetes and hypertension, was conducted through a group discussion to promote greater interaction among participants. Initially, space was left open for everyone to express their views on the topic. Subsequently, the academics sought to elucidate the information clearly and objectively, using resources such as whiteboards for drawings. It was found that most of the elderly present had some chronic disease and were under treatment.

The discussion about healthy eating and good lifestyle habits began with a roundtable conversation aimed at listening to, welcoming, and understanding the demands and realities of each elderly woman in their individualities and dietary conditions. The elderly were guided on simple changes they could make in preparing their meals, such as reducing the amount of salt by replacing it with natural and easily cultivable seasonings. Additionally, the importance of reducing the consumption of ultra-processed foods, such as sodas, filled cookies, sausages, ice creams, instant seasonings, and ready-made tomato sauces, was discussed. The approach involved presenting plastic bags with the amount of salt or sugar present in each of these foods. Many elderly women were surprised to see the high volume of these condiments in the foods they consumed. Another relevant point discussed was the importance of engaging in some physical activity, such as short walks outdoors. This practice is associated with lowering blood pressure levels¹² and consequently improving quality of life. However, it was advised to avoid sun exposure between 10 a.m. and 4 p.m. due to the higher incidence of ultraviolet rays, which are causative agents of skin cancer, as well as the importance of using sunscreen when exposed to the sun.¹³

During the themes of chronic diseases and healthy eating and good lifestyle habits, it was essential for the development of activities that the elderly had knowledge of their anthropometric measurements and general health conditions. Having knowledge of the objective health conditions in the medium to long term helped participants understand the importance of the information provided by the academics.

In October, the chosen theme was “Pink October”, highlighting the importance of body self-awareness and breast cancer prevention. Participants in the age range recommended by the Ministry of Health (50 to 69 years) were advised on self-awareness of their breasts, and a practice of breast self-examination was performed. In this meeting, academics addressed characteristics in the breasts that are not normal and risk factors contributing to the onset of the disease. To illustrate the importance of early detection, a dynamic was carried out where each participant received a breast made of a balloon filled with flour, and they had to palpate and examine these “breasts” to find any abnormalities. Grains of beans were placed amidst the flour filling the balloons, where the participants had to locate. It was emphasized that breast self-examination is not sufficient to identify early lesions and that it is important to follow the Ministry of Health’s recommendations for screening, undergoing mammography every two years, and seeking help from healthcare professionals¹⁴. Despite initially seeming embarrassed to talk about their own bodies, the elderly were made comfortable by the academics throughout the meeting.

During the activity on mental health, various aspects related to emotional well-being in old age were addressed. Academics directed the discussion to topics such as mood, weight loss, insomnia, agitation or psychomotor retardation, dissatisfaction, feelings of guilt, and recurrent thoughts of death. The objective of this approach was to identify possible signs and symptoms of depression and other mental illnesses that could be affecting the quality of life of the elderly and thus promote early and adequate intervention.

After the conversation, it was possible to observe that many participants showed possible signs of depression according to the Diagnostic and Statistical Manual of Mental Disorders 5th edition (DSM-5)¹⁵, as well as still feeling the impact of the loss of loved ones. In this perspective, the activity aimed to provide a safe and welcoming space for the elderly to express their emotions and concerns, while allowing the academics to better understand the mental health demands and needs of this population. The academics were empathetic, actively listened, and welcomed each complaint. The elderly were advised to seek support groups, social groups, and their reference Health Center.

Regarding sleep quality, the elderly were explained the influence that quality sleep has on health. The importance of maintaining a bedtime routine was discussed, such as avoiding heavy meals two hours before bedtime; turning off electronic devices; calming the mind; keeping the environment dimly lit to promote the production of melatonin (a hormone that aids in sleep promotion)¹⁶; avoiding daytime naps; establishing a bedtime and wake-up time. Additionally, it was emphasized that engaging in physical activity associated with a healthy diet are positive factors for improving sleep. The elderly had a moment to express their greatest difficulties in achieving adequate sleep, and together with the academics, they brainstormed effective actions that could help achieve some significant improvement.

The last meeting had meditation as its theme. This theme was proposed due to the need expressed by the elderly in previous meetings, where they repor-

ted excessive anxiety and concern, mainly triggered by poor sleep quality. Meditation is a practice that can bring various benefits to the physical and mental health of individuals, mainly for those suffering from chronic diseases or for the elderly. One of the best-known techniques is mindfulness meditation, which involves being fully present in the moment without judgment¹⁷. It should be done in a calm environment with little noise stimulation, the person should sit comfortably, close their eyes, and focus on their breathing, taking deep and slow breaths. This technique may reduce stress and anxiety levels, which is particularly useful for those facing chronic diseases or significant life changes¹⁸. The technique can also help improve sleep quality, reduce insomnia, and decrease pain perception, which is especially useful for elderly individuals. Furthermore, the practice may increase resilience and the ability to cope with life's challenges. It was emphasized that mindfulness meditation does not replace appropriate medical treatment and should not be seen as the only solution to health problems. It can be used as a complementary tool to improve overall quality of life and well-being, but further studies are needed to confirm its effects on certain health conditions¹⁸.

Throughout the meetings, the academics noticed the participants' interest in receiving care and attention. This interest was demonstrated through words of gratitude along with large number of personal stories re-

lated to health, which were brought by the elderly to each meeting, whether related to health or not. It was also noticed that some of the participants had a greater awareness of their overall health status, as they showed clarity about their diet, what makes them feel good, and what brings discomfort symptoms. Additionally, the participants were able to talk about their sleep, emotional state, and even more objective issues, such as which medications they use and if they have comorbidities. In the mental health meeting, the elderly reported feeling welcomed and important.

It was noted that the less regular attendees had a more passive attitude and sometimes lacked clarity about their overall health condition, as when asked about signs and symptoms of morbidities or difficulties in performing daily activities, they had difficulty responding to such questions.

On the part of the academics, it was perceived that there was motivation to share health knowledge with the participants and interest in listening to their personal stories. There was some frustration with the lack of regularity of some participants, but there is an awareness that this occurrence is natural in group activities. Furthermore, representatives of the institution where the action took place reported their satisfaction with the work done and expressed interest in continuing the activities for the next semester.



FIGURE 1: APPLICATION OF THE SHORT FORM HEALTH SURVEY 36 (SF-36) IN ELDERLY PARTICIPANTS OF A SOCIAL GROUP, IN BELO HORIZONTE (SEPTEMBER 2022).

SOURCE: IMAGE BY THE AUTHORS



FIGURE 2: GROUP DISCUSSION WITH ELDERLY PARTICIPANTS OF A COMMUNITY GROUP IN BELO HORIZONTE (NOVEMBER 2022).

SOURCE: IMAGE BY THE AUTHORS

Outcome of the evaluations

Regarding sociodemographic data, anthropometric measures, health perception, and quality of life, data were collected from 12 women who attended at least two meetings.

The average age was 73.3 years [Standard Deviation-SD = 9.64], with the youngest being 52 years old and the oldest 83 years old. The predominant level of education was Complete Elementary School (58.3%), furthermore, 75% of the participants were married.

Anthropometric measures and the average vital signs are presented in Table 1.

The average BMI observed was 24.4, with the lowest being 20.6 and the highest 35.7. The average waist-to-hip ratio was 0.92, ranging from 1.02 to 0.83cm. Lastly, the mean systolic blood pressure was 128 mmHg, and the diastolic pressure had an average of 77 mmHg, with the highest readings being 160 and 90, respectively. The two participants with a blood pressure of 160/90 mmHg reported using antihypertensive medications, and they had taken their medication on the day of the measurements. Therefore, they were advised to consult their cardiologist to monitor the effectiveness of the medication. The average oxygen saturation was 96%, although only one participant had a value below the normal range, which was 85%, and she was also advised to consult her referring

TABLE 1: ANTHROPOMETRIC MEASURES AND ARITHMETIC MEAN OF VITAL SIGNS DATA OF ELDERLY INDIVIDUALS IN BELO HORIZONTE (N=12)

Participant	BMI (kg/m ²)	Waist/Hip Ratio	BP (mmHg) – average	Oxygen Saturation (%)–average	Heart Rate (bpm)–average
1	32,5	0,95	110x 70	95	69
2	35,6	0,93	150x70	97	95
3	24,3	0,97	110x70	85	91
4	28,3	0,96	120x75	97	68
5	24,2	0,83	160x90	100	60
6	28	0,95	150x90	96	65
7	27,4	0,93	130x70	98	77
8	25,1	0,85	110x70	98	77
9	20,6	0,97	120x90	97	82
10	23,6	1,02	160x90	97	63
11	23,6	0,83	110x70	96	68
12	22,6	0,85	110x70	98	83

BMI: Body Mass Index; BP: Blood Pressure; Sat O2: Oxygen Saturation; HR: Heart Rate

physician for follow-up and to determine a possible cause (her other data were within normal values). Regarding heart rate, the average was 75 bpm, with no participant showing results outside the normal range. Additionally, out of the 12 participants whose measurements were taken, only four reported not taking continuous medication.

Table 2 presents the domains of the SF-36 questionnaire, including functional capacity, limitations due to physical aspects, pain, general health status, vitality, social functioning, limitations due to emotional aspects, and mental health.

The study by Laguardia and colleagues¹⁹ presents normative data for the Brazilian elderly population, suggesting cutoff points. The authors segmented it into four different age groups, as age could influence the results of each score. Among the participants in the present study who answered the SF-36 questionnaire, six fall into the last age group, meaning they are 75 years old or older. Of these, all scored above the cutoff points proposed by Laguardia and colleagues¹⁹ for “capacity functioning.” For “physical functioning limitation,” four (33.3%) scored above and two (16.6%) scored below. In the “pain” domain, only one participant aged 75 or older scored below the cutoff point. In

TABLE 02: SF-36 SCORES FOR 8 DOMAINS (AND OVERALL MEAN PER DOMAIN) OF ELDERLY PARTICIPANTS IN THE ELDERLY COMMUNITY GROUP IN BELO HORIZONTE

Participant	Capacity Functional	Physical Functioning Limitation	Pain	General Health Status	Vitality	Social Functioning	Emotional Functioning Limitation	Mental Health
1	50	25	62	52	65	100	100	80
2	75	100	50	40	95	100	100	100
3	75	0	0	25	65	62,5	0	72
4	80	0	74	57	80	87,5	100	92
5	90	100	100	92	90	100	100	92
6	60	100	72	55	95	100	100	68
7	65	25	41	47	45	37,5	33,3	44
8	85	75	100	52	80	100	100	96
9	75	25	84	52	95	75	100	92
10	65	100	100	72	95	100	100	96
11	50	100	51	52	60	87,5	100	64
12	80	100	51	77	90	100	100	80
Avarage	70,8	62,5	65,4	56,1	79,6	87,5	86,1	81,3

the “general health status” category, four out of 6 participants scored below the reference used, but in “vitality,” all scored above. In “social functioning,” “emotional functioning limitation,” and “mental health,” the six participants aged 75 or older scored above the cutoff points described by Laguardia and colleagues¹⁹ for this age group.

Regarding the other 6 participants under 75 years old: In terms of “capacity functioning,” only one participant scored lower than the descriptive measure for age, while in “physical functioning limitation” and “vitality,” three participants scored above the standardized score and three below. In the categories of “pain” and “general health status,” only two out of the 6 participants scored above the measures described by Laguardia and colleagues¹⁹. In the domains of “social functioning,” “emotional functioning limitation,” and “mental health,” two participants in each category were under 75 years old and achieved scores lower than those described for this population.

It is also possible to compare the results found with a study conducted by Pimenta *et al.* (2008)²⁰ in Belo Horizonte, in which the same instrument was applied to 87 retirees in Belo Horizonte with an average age of 57.3 years. It is important to note that the average age of the sample in the present study was 73.25 years, 16 years older than the sample in the study by Pimenta *et al.* (2008)²⁰. The only domain in which the average scores of the 12 participants were lower than those presented by Pimenta *et al.* (2008)²⁰ was “general health status,” which had the lowest mean score in both studies. Also, “physical functioning limitation” and “pain” follow as the next lowest scores in both

studies. Therefore, it is possible to consider that pain and physical functioning limitations may contribute to a poorer general health status of the elderly population studied.

REFLECTIONS

In the national test conducted by IBGE for the 2021 census, enumerators estimated that 14.7% of the total Brazilian population are elderly individuals²¹. Projections indicate that the number of people aged 65 and over will nearly triple by 2060, reaching 58.2 million people, equivalent to 25.5% of the population²². These estimates point to a deceleration in the pace of growth and a consequent inversion in the Brazilian age pyramid²³.

In the face of the current demographic transition and the consequent aging of the population, the discussion focused on health promotion and quality of life, as well as disease prevention, is indispensable. The National Policy for the Health of the Elderly (PNSPE) addresses aging and highlights the importance of health education practices for disease prevention and the promotion of healthy aging²⁴.

Thus, with a focus on healthy and active aging, the proposal for health promotion, focused on health education, emerges as an important intervention tool for better living conditions with a reduction in the number of dysfunctions and diseases²⁵. Educational interventions allow for the construction of new ideas, knowledge, and perspectives, as well as stimulating self-care and providing alternatives to attitudes that influence the incorporation of healthy lifestyle habits.

In this perspective, health education and the care provided bring intelligent exchanges of learning for both the community and the health professionals and students involved²⁶. These exchanges were observed throughout the health education activities with the group of elderly women as demonstrated in the results and constitute a central element in the context of health operative groups. Although, it is important to emphasize that in the face of a large turnover of participants throughout the action, this study has a limitation in establishing objective statistical measures.

Regarding the panorama of population aging, it is understood that the increase in life expectancy represents a social achievement but also poses a significant challenge, since it is expected that these years are lived with quality²⁷. According to Santos (2019), population aging has increased healthcare expenditures both by the Unified Health System (sus) and by supplementary health, and will increasingly require an increase in health, social, and economic demands²⁸. Faced with this, according to Camarano (2002), if there were a positive association between greater longevity and improvements in the living conditions of the elderly population, healthcare and pension expenditures would decrease²⁹. For Sousa (2003), quality of life and well-being are fundamental for successful aging, which must be fostered throughout individuals' lives³⁰.

FINAL CONSIDERATIONS

The approach and discussion of prevalent public health topics in groups formed by elderly individuals stimulate the development of practices that promote a healthier lifestyle, well-being, and disease preven-

tion. A space developed for this population, adapted with language and dynamics appropriate for age and sociocultural level, promotes reflection and makes possible the exchange of knowledge and reflection on new habits. Moreover, social groups provide an opportunity to build bonds, facilitating the educational process which aims to maintain functionality, independence, and autonomy for elderly individuals.

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