





Body image in elderly women and associated factors (comorbidities, socioeconomic, physical activity, and sexual function)

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ABSTRACT

This research aimed to assess body image in elderly women and their associated factors. It is an observational-descriptive, quantitative cross-sectional study. We evaluated one hundred ten elderly women enrolled in language courses at the Open University of the Third Age (UNATI), at the Federal University of Pernambuco (UFPE), Recife-PE. The following were analyzed: body image, level of physical activity, sexual function and satisfaction, sociodemographic, and clinical conditions. It was found that 'hypertension' and 'live with' were related to body image. Sixty-eight (61.8%) women wanted to have a slimmer body. It was concluded that body image could influence 'live with' and co-morbidities such as high blood pressure. Moreover, it proves that most women dislike their bodies, unfortunately, thus affecting their self-esteem and quality of life.

Keywords: Elderly, Body image, Associated factors.

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INTRODUCTION

Aging is a gradual, universal, and irreversible process, causing a progressive functional loss in the body. Several organic changes characterize this process, such as reduced balance and mobility, physiological capacity, and psychological changes¹. Physical alterations face a society that discriminates against individuals considered unattractive. These people are likely to encounter social environments that reject them, discouraging them from engaging in social skills².

Body image plays an essential role in self-awareness for humans, in both mental image and perception. If the perception of the body is positive, the self-image will be positive, and if there is satisfaction with the body image, the self-esteem will be better³.

The perception of body image is a mental representation an individual has of their body, influencing their general health status⁴. Considering that each age in a particular way, some specific aspects can interfere in the concept the elderly have of their body images, such as gender, age⁵, nutritional status^{6,7}, socioeconomic level⁸, level of physical activity⁹, number of diseases¹⁰, and health perception¹¹.

When talking about body transformations, it is possible to observe that the hair whitens and becomes thinner. The hairs whiten, although they proliferate in certain areas. The skin wrinkles. Elongated ears are among the most apparent manifestations of the loss of tissue elasticity in the body. The thickness of the skin fold is significantly reduced on the forearm and back of the hands¹².

In this context, the changes in the body during aging are visible. Some changes are accepted, others, not always, which leads the elderly to use resources so that, in some way, they become (in) visible. Therefore, this work surveyed the opinion of this audience about how they see their body. This work aims to assess older women's body image and associated factors.

METHOD

It is an observational-descriptive, cross-sectional quantitative study. The research was

carried out at the Open University for the Third Age – UNATI, located on the Federal University of Pernambuco (UFPE) campus. One hundred twenty elderly women were selected by convenience sampling, but ten refused to participate in the research, making 110 respondents. All participants attended language courses (English, Spanish, and Italian). Because they take these courses, the elderly tend to have a good level of cognition, since learning a foreign language implies a better state of cognition¹³ and hearing, as it is a facilitator of the process throughout the course¹³, by consequence, it would not be necessary to evaluate them.

Sociodemographic and clinical data were consulted using the University Enrollment Form for the Elderly (UNATI). Body image assessment was performed using the Nine Silhouettes Scale proposed by Sorensen and Stunkard. Function and sexual satisfaction were assessed using the Female Sexual Quotient (QS-F)¹⁵. The level of physical activity was measured by the International Physical Activity Questionnaire (IPAQ)¹⁶. These data were complemented by a structured interview elaborated by the researcher.

The enrollment form consisted of questions that addressed personal data (housing, education level, marital status), socioeconomic information (monthly income, social security situation), comorbidities (high blood pressure, diabetes).

The Nine Silhouettes Scale proposed by Sorensen and Stunkard consists of drawings of nine frontal silhouettes sorted gradually from the smallest to the largest body size. For satisfaction or dissatisfaction with body image, the difference between the actual silhouette and the ideal silhouette is calculated, as indicated by the subject. If the person is satisfied with the appearance, the variation is equal to zero, or dissatisfied, the variation is different from zero. When the difference is positive, it is considered unsatisfactory due to being overweight, and when negative, dissatisfaction due to thinness. The elderly selected the silhouette that resembled them currently and the one they would like it to be¹⁴.

The QS-F assessed female sexual function and satisfaction consisting of ten questions related to aspects of sexual desire and interest (questions 1, 2, 8);

foreplay (question 3); woman's sexual arousal and harmony with the partner (questions 4, 5); comfort in sexual intercourse (questions 6, 7); orgasm and sexual satisfaction (questions 9, 10)¹⁵.

The extended version of the IPAQ has 27 questions related to physical activities performed in a typical week, with vigorous, moderate, and light intensity, with a minimum duration of ten continuous minutes, distributed in four dimensions of physical activity (work, transport, housework, and leisure)¹⁶.

The project was presented in the first contact with the elderly by filling in the questions mentioned above. After the presentation, the questionnaires were delivered, explaining each item in detail, leaving it open for anyone to ask questions. The interviews were carried out in the classrooms of UNATI/UFPE and always at the end of language course classes.

Data were entered with a double entry in the EPI-INFO software version 3.3.2. The results of categorical variables were presented as tables and/or graphs with their respective absolute and relative frequencies, whereas numerical variables were in measures of central trend.

We used Pearson's Chi-Square test, and when necessary, Fisher's exact test for possible associations between categorical variables. The variables that obtained p-values less than or equal to 0.05 were related to the level of physical activity. All analyses were performed using SPSS (Statistical Package for the Social Sciences) software for Windows, version 13.0.

The Research Ethics Committee of the Health Sciences Center of the Federal University of Pernambuco approved the methodological procedures of this study, under registration number CAAE 01436518.1.0000.5208. Participants signed the consent term, keeping their names safe. This article was extracted from the dissertation "Sexual function and satisfaction in elderly women and their associated factors", subdivided into several topics to elaborate further works.

RESULTS

One hundred ten elderly women aged between 60 and 84 years were interviewed, with an average of 67.17 years and a standard deviation of 5.24, with a higher concentration of elderly between 60 and 69 years.

The profile of the elderly women interviewed concerning social, demographic, clinical, and lifestyle aspects were: higher education 46 (41.8%), married 35 (31.8%), had children 94 (85.5%), retired 77 (70%), lived alone 34 (30.9%), 39 with income between one to two minimum wage (35.5%) (minimum wage in 2019 = R\$ 998,00). Ninety women (84.9%) did not drink alcohol, and 90 (84.9%) did not smoke either. Only three (2.7%) of them used illegal drugs. Moreover, 56 (50.9%) did not have hypertension, 54 (49.1%) were not diabetic, 81 (73.6%) did not have heart disease (92.7%), and 91 (82.7%) had no hormonal deficiencies, but 88 (80%) of them used medication, and 68 (61.8%) wanted to have a slimmer body (Table 2). Regarding function and sexual satisfaction, most elderly women obtained a "null to bad" level.

Table 1 shows the social, demographic, clinical, and lifestyle variables with body image.

Among the comorbidities, hypertension was the variable with a p-value close to 0.05. The variable Diabetes Mellitus did not associate with body image through Pearson's chi-square test.

The variable "Live with" was also associated with body image, as it had a p-value close to 0.05.

The variables of personal data (Education, Marital Status), socioeconomic status (Social Security Status, Monthly Income), Physical Activity, and Sexual Function were not statistically associated with the dependent variable (DV).

DISCUSSION

From the results, the variables related to body image were 'Live with' and 'Hypertension'. Contrasting with the literature, it is clear that body image can also be associated with variables Education¹⁷, Diabetes¹⁸, Marital Status¹⁹, Monthly Income²⁰, Sexual Function²¹, and Physical Activity²².

The factor 'Live with' showed an association with body image. This research highlights that long-lived elderly women prefer to live alone; having their own house gives them autonomy and freedom, but there was no relationship with body image²³. Therefore, it is likely that if the elderly live with their spouses, children, and relatives, this could influence their body image and, consequently, self-esteem.

Table 1. Relationship between body image and personal data, comorbidities, socioeconomic factors, physical activity and sexual function in elderly women attending the UNATI. Recife, PE, 2020

Variables	ESSS Final			p-value ¹
	Body Satisfaction N(%)	Have a bigger body N(%)	Have a thin body N(%)	
Education				0,309 ¹
From 5 to 8 years of study (former high school)	2 (33,3%)	1 (16,7%)	3 (50,0%)	
From 9 to 12 years of study (secondary education, teaching training)	11 (27,5%)	2 (5,0%)	27 (67,5%)	
Higher Education (graduate)	19 (41,3%)	2 (4,3%)	25 (54,3%)	
Graduate	3 (16,7%)	2 (11,1%)	13 (72,2%)	
Marital Status				0,997 ¹
Single	7 (31,8%)	1 (4,5%)	14 (63,6%)	
Married or in a stable relationship	10 (28,6%)	2 (5,7%)	23 (65,7%)	
Divorced	8 (33,3%)	2 (8,3%)	14 (58,3%)	
Widowed	10 (82,8%)	2 (6,9%)	17 (58,6%)	
Live with				0,049¹
Spouse or partner	7 (33,3%)	2 (9,5%)	12 (57,1%)	
Child or stepchild	9 (33,3%)	1 (3,7%)	17 (63,0%)	
Grandchildren	1 (33,3%)	1 (33,3%)	1 (33,3%)	
Sibling	1 (25,0%)	1 (25,0%)	2 (50,0%)	
Other Relatives, Friends	4 (80,0%)	0 (0,0%)	1 (20,0%)	
Alone	12 (35,3%)	2 (5,9%)	20 (58,8%)	
Other groupings	1 (6,3%)	0 (0,0%)	15 (93,8%)	
Social Security Situation				0,109 ¹
Not retired	1 (6,7%)	0 (0,0%)	14 (93,3%)	
Retired	28 (36,4%)	6 (7,8%)	43 (55,8%)	
Social security benefit	2 (20,0)	1 (10,0%)	7 (70,0%)	
Retired with social security benefit	4 (50,0)	0 (0,0%)	4 (50,0%)	
Monthly Income				0,477 ¹
Less than one minimum wage	0 (0,0%)	0 (0,0%)	6 (100,0%)	
From one to two minimum wages	15 (38,5%)	2 (5,1%)	22 (56,4%)	
Between 2 to 4	9 (30,0%)	1 (3,3%)	20 (66,7%)	
More than 4	11 (33,3%)	4 (12,1%)	18 (54,5%)	
No Income	0 (0,0%)	0 (0,0%)	2 (100,0%)	
Hypertension				0,042²
Yes	14 (25,9%)	1 (1,9%)	39 (72,2%)	
No	21 (37,5%)	6 (10,7%)	29 (51,8%)	
Diabetes Mellitus				0,683 ²
Yes	11 (37,9%)	2 (6,9%)	16 (55,2%)	
No	24 (29,0%)	5 (6,2%)	52 (64,2%)	
Physical Activity				0,868 ²
Active (>150 min /week)	28 (30,8%)	7 (36,8%)	57 (62,6%)	
Inactive (< 150 min /week)	7 (36,8%)	1 (5,3%)	11 (57,9%)	
Sexual Function				0,814 ¹
Good to Excellent	9 (25,7%)	2 (28,6%)	16(23,5%)	
Regular to Good	6 (17,1%)	1 (14,3%)	15(22,1%)	
Unfavorable to Regular	4 (11,4%)	1 (14,3%)	6(8,8%)	
Bad to Unfavorable	4 (11,4%)	1 (14,3%)	3(4,4%)	
Null to Bad	12 (34,3%)	2 (28,6%)	28(41,2%)	

¹ p-value of Fisher's exact test and ² p-value of Chi-square test for percentage comparison.

Table 2. Description of the scale of the nine silhouettes proposed by Sorensen and Stunkard in elderly women attending the UNATI/ UFPE, Recife. 2020.

Body Image	N	Percentage (%)
Body Satisfaction	35	31.8
Dissatisfaction with thinness	7	6.4
Dissatisfaction with overweight	68	61.8
Total	110	100.0

The results did not detect a relationship between body image and marital status, but it is known that the more the elderly feel satisfied with their body image, they tend to feel more confident with their marital relationship²⁴, thus proving that self-love and feeling good can influence the relationship with other people, including the spouse.

The variable systolic arterial hypertension interferes with body image. Corroborating the study, most hypertensive elderly (77%) were dissatisfied with their body image²⁵. Moreover, comorbidities limit the elderly to perform specific movements compromising the activities of daily living, associated with greater use of medications, which can lead to weight gain, and associated with aging, elderly women feel less attractive.

The results showed no relationship among education, income, and body image. Corroborating the research, elderly women with low income and low education obtained a good body image²⁶. Knowledge about methods to improve women's body image and money that can influence purchases of beauty products and aesthetic procedures can affect the psychological situation of older women. In general, many of them want to have the perfect body, but the ideal is to like the body without following a body pattern. On the other hand, elderly women with low income are likely to conform to the situation, as they do not have so much knowledge about aesthetics because they do not live with such mediocre and snobby people and are likely to have a good body image and self-esteem.

No relationship was found between body image and sexuality. In contrast, we noticed an essential factor in the loss of sexual interest is the negative reaction with the social context assesses the body and physical changes of elderly women.

The impairment of body image and self-image can accentuate negative thoughts, anxiety, and depression, especially for those who have difficulty dealing with these natural changes²⁷.

Physical activity did not influence body image, but it was shown that physical exercises help with well-being, control body weight, improve appearance and physical fitness and reduce stress, favoring self-esteem, efficiency, and self-perception, which are determinant components for body image²⁸.

The results obtained were different from other papers¹⁷⁻²⁸ analyzed. It is relevant to investigate deeper body image and its associated factors to offer a good quality of life for the elderly.

We concluded that most elderly women wanted to have a slimmer body. Corroborating the results, research indicates that elderly women interviewed are not satisfied with their body image, as they would like to have thinner silhouettes, despite being eutrophic individuals²⁹.

The search for a slimmer and perfect body still affects the population, especially elderly women. This obsession can compromise their psychological condition, leading to depression. The desire for the ideal body still needs to be debated; we must value what is ours and accept our imperfections. Even after surgical procedures, women continued to have some defects. It is difficult to convince them about valuing themselves and/or their own body, so it is necessary to study body image, self-esteem, and its consequences to the elderly population. Lectures and debates are fundamental for knowledge about this subject, as well as the influence of social networks and the media, which always show what would be the pattern of beauty; in these networks, the ideal would be to show that various bodies can be beautiful and that there is no perfect body. Measures like these can change the thinking of elderly women, making them accept themselves for who they are, thus avoiding a compromised body image, low self-esteem, and a decline in their quality of life.

CONCLUSION

Variables such as 'live with' and 'high blood pressure' were related to body image; however, other variables such as education, diabetes, marital status, monthly income, sexual function, and physical activity can influence the image body.

It is essential to study body image as it is related to self-esteem, self-love, and improved quality of life. By identifying factors associated with body image through studies and/or research, we can offer advantages for good aging in women, who are usually the ones most affected due to complications during this period.

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