Quality of life and subjective well-being of the elderly in the health academy program

Calidad de vida y bienestar subjetivo de ancianos en el programa academia de la salud

Qualidade de vida e bem-estar subjetivo de idosos no programa de academia de saúde

ABSTRACT
Objective: to survey the sociodemographic profile and the conditions of quality of life and subjective well-being of elderly participants in health academies, investigating the significant correlations between these data. Method: This is a cross-sectional study carried out in the municipality of Sinop, Mato Grosso, with 82 elderly people, in January 2019, using the following instruments: Sociodemographic Questionnaire, WHOQOL-bref, and the scales: Life satisfaction , Well-Being of Positive and Negative Affections and Subjective Happiness. Results: The better the QOL in the physical domain, the better the QOL in the psychological, social relations, environment, perception of general QOL, satisfaction with health and BES related to life satisfaction, positive affections and happiness, even that causality cannot be affirmed in these relationships. Conclusion: The Health Academy is of paramount importance in contributing to a healthy aging of the population, becoming a strategy for prevention and promotion of public policies aimed at the elderly population.
DESCRIPTORS: Quality of life; Motor activity; Health of the Elderly; Psychology.

RESUMEN
Objetivo: relevar el perfil sociodemográfico y las condiciones de calidad de vida y bienestar subjetivo de los ancianos participantes en las academias de salud, investigando las correlaciones significativas entre estos datos. Método: Se trata de un estudio transversal realizado en el municipio de Sinop, Mato Grosso, con 82 ancianos, en enero de 2019, utilizando los siguientes instrumentos: Cuestionario Sociodemográfico, WHOQOL-bref, y las escalas: Satisfacción con la vida. , Bienestar de los Afectos Positivos y Negativos y Felicidad Subjetiva. Resultados: Cuanto mejor es la CV en el dominio físico, mejor es la CV en el ámbito psicológico, relaciones sociales, medio ambiente, percepción de CV general, satisfacción con la salud y BES relacionados con la satisfacción con la vida, afectos positivos y felicidad, incluso que la causalidad no se puede afirmar en estas relaciones. Conclusión: La Academia de la Salud es de suma importancia para contribuir a un envejecimiento saludable de la población, convirtiéndose en una estrategia de prevención y promoción de políticas públicas dirigidas a la población anciana.
DESCRIPTORES: Calidad de vida; Actividad del motor; Salud de los ancianos; Psicología.

RESUMO
Objetivo: levantar o perfil sociodemográfico e as condições de qualidade de vida e bem-estar subjetivo de idosos participantes de academias de saúde investigando as correlações significativas entre esses dados. Método: Trata-se de um estudo transversal desenvolvido no município de Sinop, Mato Grosso, com 82 idosos, no mês de janeiro de 2019, sendo utilizados os seguintes instrumentos: Questionário Sociodemográfico, WHOQOL-bref, e as escalas: Satisfação com a vida, Bem-Estar de Afetos Positivos e Negativos e Felicidade Subjetiva. Resultados: Quanto melhor a QV no domínio físico, melhor a QV nos domínios psicológico, relações sociais, meio ambiente, percepção da QV geral, satisfação com a saúde e ao BES relacionado à satisfação com a vida, aos afetos positivos e à felicidade, ainda que não se possa afirmar uma causalidade nessas relações. Conclusão: A Academia de Saúde é de suma importância na contribuição de um envelhecimento saudável da população tornando-se uma estratégica para ações de prevenção e promoção de políticas públicas voltadas a população idosa.
DESCRITORES: Qualidade de vida; Atividade motora; Saúde do Idoso; Psicologia.

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INTRODUCTION

Quality of Life (QOL) and subjective well-being (SWB) are constant concerns in the lives of individuals, consisting of topics of interest to specialized literature since the last century and enabling the expansion of the search for a better understanding of the reality of various social segments, such as the elderly Brazilian population. [1]

The elderly person has factors indicative of QOL and SWB, and these factors are intrinsic (personality, spirituality, subjective interpretations of events, among others) and extrinsic (health conditions, income, education, marital status, social support, among others). [2] Thus, aging is a phenomenon that consists of a natural and progressive process that occurs in all species. In humans, in particular, this process is verified in the physical, mental and social dimensions, which do not necessarily occur simultaneously, but can interfere by accelerating or decreasing the aging process. [3]

The concept of QOL has been considered as a multidimensional and complex phenomenon, involving the subjective perception of each person about objective, subjective aspects and interfaces between these two. [4,5] The SWB concept, on the other hand, is a restructuring of the concept of general well-being in that it understands the subjectivity of positive and negative aspects, happiness and satisfaction with life. [6,7]

In this sense, the Health Academy Program is aimed at serving Health Promotion strategies through the implementation of Health Academy (Academia de Saúde - AS) and was created in Brazil in 2011, with the implementation of actions aimed at group body practices, highlighting as a qualified tool of Primary Health Care with the purpose of strengthening preventive actions in the community. [8,9]

QOL and SWB are important variables to be considered in gerontological studies, as they make it possible to assess the behavior of the elderly in relation to the degree of adaptation in the face of physical and psychological changes and their social relationships in the aging process. [10,11]

In view of the above and considering the lack of evidence about the QOL and SWB conditions of the elderly in AS, this study aimed to raise the sociodemographic profile and the QOL and SWB conditions of the elderly who participate in the AS program, as well as how to investigate the significant correlations between sociodemographic data, the dimensions of QOL and SWB (satisfaction with life, positive and negative affects and happiness) of elderly people which go to the AS.

METHOD

Quantitative, cross-sectional and correlational study developed in the municipality of Sinop, Mato Grosso. The sample consisted of 82 elderly people, between 60 and 81 years old, of both sexes, who actively participated in the Health Academy Program. Elderly people aged 60 years or older registered at AS with attendance at least once a week were included. Those who failed to respond to any item in the investigation instruments were excluded.

Data collection was performed at the AS, in January (2019), through the individual application of the instruments. Sociodemographic data and the evaluation of the elderly regarding satisfaction with AS were obtained using a form structured in three axes: (1) sociodemographic data (age, sex, marital status, religion, degree of religiousness, level of education, number of people home and dependents); (2) frequency of the elderly to the AS (months of participation, weekly frequency and activities performed); and, (3) importance/relevance of AS for the elderly and the degree of satisfaction and motivation.

To assess QOL, the Whoqol-bref questionnaire was used, considered a Likert-type scale composed of 26 phrases, distributed in four domains (physical, psychological, social relations and environment) and two questions (1 and 2) that refer to general QOL, in which item 1 assesses the perception of QOL and item 2 assesses satisfaction with health. The answers follow the Likert scale and vary from 1 to 5, in which the higher the score, the better the QOL. [8]

To evaluate SWB, the Life Satisfaction Scale - SLWS prepared by Diener was used [9], and aims to assess satisfaction with life. [12] Thus, the higher the score obtained in the final result, the better the satisfaction with the respondent's life. [10,11] Another instrument used was the PANAS Scale developed and validated by Watson, Clark and Tellegen, [12] with the objective of measuring the affective experience of individuals from the dimensions: Positive Affection (AP) and Negative Affection (AN). [13] In the NA dimension, subjective displeasure and malaise are evaluated and include emotions such as fear, nervousness and disturbance. In the PA dimension, pleasure and subjective well-being are evaluated, including emotions of enthusiasm, inspiration and determination. [14]

Finally, the subjective happiness scale - SHS, constructed and validated by Lyubomirsky and Lepper, was used [15] in order to assess happiness from the respondent's perspective, based on his general judgment, on how happy he feels, regardless of his recent experiences. [16]

The research project was approved by the

Research Ethics Committee of PUG Goiás on CAAE: 89996318.5.0000.0037 and, in compliance with Resolution No. 466, of December 12th, 2012, which has guidelines and regulations for research involving human beings. Subsequently, the elderly in the AS were approached personally and invited to participate in the study. With them, the signature was read and collected in the Informed Consent Form (ICF).

For data analysis, the software package Statistical Package for Social Sciences (SPSS) version 22.0 was used. Descriptive analyzes were performed for sociodemographic data, QOL and SWB levels. Correlational analysis was also used for the sociodemographic variables, QOL and SWB of the surveyed subjects.

According to The Whoqol Group, 1998 17, the domains and alphas of the instrument correspond to: Physical (α = 0,829); Psychological (α = 0,793); Social Relations (α = 0,704); Environment (α = 0,881); and General QOL (α = 0,877). These data indicate that there is internal consistency between the items and, therefore, the scale is valid for measuring QOL in this group. The following intervals were considered as standard for QOL (The Whoqol Group, 1998) 18 from 1 to 2.9 (need to improve), from 3 to 3,9 (regular), from 4 to 4,9 (good), and 5 (very good).

For the present study, Cronbach's alpha analysis of the SLWS scale 10 was performed to confirm the internal consistency between the items and the validity of this instrument, being found α = 0,908, confirming the psychometric validity. The analysis of the PANAS scale made it possible to confirm the internal consistency of the items and the psychometric validity of the positive affects (PA) which obtained α = 0.876 and the negative affects (NA) which obtained α = 0,865. Cronbach's alpha analysis was also performed for the SHS scale and α = 0,737 was obtained, confirming its psychometric validity and presenting a better consistency than Spagnoli et al. [18]

RESULTS

First, sociodemographic data are presented (age, sex, marital status, religion, degree of religiousness, level of education, number of people living with the elderly, and if there are dependents - Table 1). Following are Spearman's correlation analyzes (Table 2), where it is possible to verify the relationships between sociodemographic data, QOL domains and BES in relation to life satisfaction (SLWS), to positive affects (PA) and negative (NA) and happiness (SHS). Significant statistical relationships for $p \leq 0.05$ were taken into account.

In Table 1, 82 elderly people responded to the present study and of these, there was a prevalence of the age group from 60 to 70 years old (70,7%), female (70,7%), married (56,1%), Catholics (68,3%), with complete secondary education (32,9%) (Table 1).

Table 2, in the correlation analysis, in relation to age, it was observed that there is a significant negative correlation (r= -0,209; p= 0,001) between the number of people residing, the physical domain (r= -0,313; p= 0,000), the psychological domain (r= -0,201; p= 0,002), social relationships (r = -0,348; p = 0,000), the environment (r= -0,196; p= 0,002), the perception of quality of general life (r= -0,148; p= 0,023), and satisfaction with health (r= -0,133; p= 0,041). Thus, it can be inferred that the older the elderly, the smaller the number of people who live with the same and the worst are in relation to the physical and psychological domains, social relationships, environment, perception of quality of life (QOL) and satisfaction with general health. However, there was no significant correlation between age and SWB variables (SLWS, PA NA and SHS) (Table 2).

E In relation to the results obtained with the variable time in the gym, significant positive correlations were noted between physical (r= 0,165; p= 0,011), psychological (r= 0,202; p= 0,002), perception of general QOL (r = 0,272; p= 0,000), satisfaction with general health (r=0,171; p= 0,008), as well as with SWB in relation to SLWS (r= 0,272; p= 0,000), and SHS (r=0,343; p= 0,000). These data make it possible to infer that the longer the time in the gym, the better the QOL in the physical, psychological domains, in the perception of the general QOL and in satisfaction with health, as well as, in relation to SBW related to life satisfaction and happiness (Table 2).

When correlating the physical QOL domain with the other QOL and SWB variables, he observed that there are significant positive correlations between the

Table 1: Sociodemographic description of elderly participants in AS in the municipality of Sinop-MT (N = 82).			
Variáveis	**Categorias**	**N**	**%**
Idade	60 a 70	58	70,7
	71 a 80	22	26,8
	>80	2	2,4
Gênero	Masculino	24	29,3
	Feminino	58	70,7
Estado Civil	Solteiro(a), viúvo(a), separado(a) e sem parceiro(a) regular	36	43,9
	Casado(a), união estável, com parceiro(a) regular	46	56,1
Religião	Católico(a)	56	68,3
Escolaridade	Ensino Fundamental Completo	15	18,3
	Ensino Fundamental Incompleto	13	15,9
	Ensino Médio Completo	27	32,9
Total		82	100

Source: Elaborated by the author (2019), Sinop-MT.

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QOL domains: psychological (r= 0,609; p= 0,000), social relationships (r= 0,634; p= 0,000), environment (r= 0,632; p= 0.000), perception of general QOL (r= 0,418; p= 0,000) and general satisfaction with health (r= 0,353; p = 0,000); and the dimensions that measure SWB: satisfaction with life (r= 0,424; p = 0,000), positive affects (r= 0,239; p= 0,000) and happiness (r= 0,276; p= 0,000). With these data, it can be said that the better the QOL in the physical domain, the better the QOL in the psychological, social relations, environment, perception of general QOL, satisfaction with health and SWB related to satisfaction with life, positive affects and happiness, although it is not possible to affirm a causality in these relationships (Table 2).

When assessing QOL in the psychological domain, it was noted that the better it is, the better the QOL in the domains: social relationships (r= 0,535; p=0,000), environment (r= 0,556; p=0,000), perception of general QOL (r= 0,432; p=0,000), satisfaction with health (r= 0,406; p=0,000); and SWB: satisfaction with life (r= 0,588; p=0,000), positive affects (r= 0,478; p=0,000) and happiness (r= 0,399; p=0,000). When evaluating the domain of social relations, a statistically significant correlation was found positively in the domains of QOL: environment (r= 0,561; p=0,000), perception of general QOL (r= 0,205; p=0,001), satisfaction with health (r= 0,188; p=0,000); and SWB: satisfaction with life (r= 0,354; p=0,000), positive affects (r= 0,227; p=0,000) and happiness (r= 0,209; p=0,001) (Table 2).

It was observed that there is a significant positive correlation between the domain of QOL environment and the domains of QOL: perception of general QOL (r= 0,282; p=0,000), satisfaction with health (r= 0,181; p=0,005); and SWB: satisfaction with life (r= 0,419; p=0,000), positive affects (r= 0,229; p=0,000) and happiness (r= 0,185; p=0,000). These data make it possible to infer that the better the environment, the better perceived QOL, satisfaction with health and life, positive affects and happiness.

Regarding the perception of QOL, it was observed that there is a significant positive statistical correlation with satisfaction with health (r= 0,598; p=0,000) and with SBW related to life satisfaction (r= 0,412; p=0,000), positive affects (r= 0,247; p=0,000) and happiness (r= 0,365; p=0,000). QoL in the health satisfaction domain obtained a statistically significant correlation with BES in relation to life satisfaction (r= 0,351; p=0,000), to positive affects (r= 0,257; p=0,000) and happiness (r= 0,356; p=0,000) (Table 2).

When evaluating SBW related to life satisfaction, it was observed that there was a significant positive statistical correlation with SWB related to positive affects (r= 0,430; p = 0,000) and happiness (r= 0,419; p= 0,000), making it possible to infer that the better the satisfaction with life, the more positive affects and the better the happiness of the elderly. However, SWB assessed from life satisfaction showed a statistically significant negative correlation with negative affects (r= -0,168; p = 0,000) showing that the lower the satisfaction with life, the more negative affects are presented by the elderly (Table 2).

Finally, in relation to BES regarding

Table 2 - Correlations between sociodemographic data, WHOQOL-bref, Life Satisfaction Scale-SLWS, positive and negative affects-PANAS and subjective happiness scale (SHS)

Variáveis		1	2	3	4	5	6	7	8	9	10	11	12
1. Id	r	1											
	p												
2.NPMC	r	-0,209**	1										
	p	0,001											
3.TA	r	-0,033	-0,025	1									
	p	0,610	0,697										
4.DF	r	-0,313**	-0,101	0,165*	1								
	p	0,000	0,121	0,011									
5.DP	r	-0,201**	0,117	0,202**	0,609**	1							
	p	0,002	0,071	0,002	0,000								
6.DRS	r	-0,348**	0,072	0,077	0,634**	0,535**	1						
	p	0,000	0,266	0,240	0,000	0,000							
7.DMA	r	-0,196**	0,091	0,050	0,632**	0,556**	0,561**	1					
	p	0,002	0,162	0,439	0,000	0,000	0,000						
8.PQVg	r	-0,148*	0,059	0,272**	0,418**	0,432**	0,205**	0,282**	1				
	p	0,023	0,362	0,000	0,000	0,000	0,001	0,000					

9.SS	r	-0,133*	0,068	0,171**	0,353**	0,406**	0,188**	0,181**	0,598**	1			
	p	0,041	0,293	0,008	0,000	0,000	0,004	0,005	0,000				
10.SLWS	r	-0,088	0,109	0,272**	0,424**	0,588**	0,354**	0,419**	0,412**	,351**	1		
	p	0,177	0,094	0,000	0,000	0,000	0,000	0,000	0,000	0,000			
11.AP	r	-0,031	-0,005	0,123	0,239**	0,478**	0,227**	0,229**	0,247**	0,257**	0,430**	1	
	p	0,632	0,943	0,059	0,000	0,000	0,000	0,000	0,000	0,000	0,000		
12.AN	r	0,018	0,063	0,084	-0,007	-0,116	-0,034	-0,062	-0,013	-0,060	-0,168**	-0,448**	1
	p	0,778	0,335	0,199	0,920	0,074	0,607	0,345	0,839	0,355	0,009	0,000	
13.SHS	r	-0,007	0,098	0,343**	0,276**	0,399**	0,209**	0,185**	0,365**	0,356**	0,419**	0,382**	-0,045
	p	0,917	0,132	0,000	0,000	0,000	0,001	0,000	0,000	0,000	0,000	0,000	0,490

Source: Elaborated by the author (2019), Sinop-MT.
NOTES: *. Significant Spearmam correlation at the 0,05 level; **. Significant Spearmam correlation at the 0.01 level.
The acronyms used in the table with their references - sociodemographic variables (Id: age, NPMC: number of people living with the elderly person, TA: Time at the gym); Quality of life (DF: physical domain, DP: psychological domain, DRS: social relations domain, DMA: environment domain, PQVg: perception of general quality of life, SS: satisfaction with health); Subjective well-being (SLWS: satisfaction with life, AP: positive affects, NA: negative affects, SHS: happiness).

positive affects, there was a significant negative statistical correlation with negative affects (r= -0,448; p = 0,000) and positive with happiness (r= 0,382; p = 0,000). These data make it possible to infer that the more negative affects experienced by the elderly, the less positive affects they have and that the more positive affects experienced, the more happiness the elderly perceive (Table 2).

DISCUSSION

Health gyms provide the elderly with the establishment of social support networks that can contribute to the improvement of QOL and SBW. The data demonstrated that AS is relevant to health in general, personal life, making friends, general psychological well-being, social interactions, reduction of social and family disaffections and to experience the aging process, corroborating with the authors 19 who pointed out that healthy aspects of human development permeate social relationships that involve family affective bonds and extend to the affective bonds of friendship between peers (community members) built throughout the life cycle.

The importance of AS in strengthening family and social bonds (friendships) meets authors 20 who demonstrated the maintenance of an affective family bond, strengthening positive affections and satisfaction with life. Thus, the authors point out that advanced age and reduced functional capacities (cognitive and affective) require family support for a better perception of QOL and SWB in this population. [21]

The importance of AS in strengthening family and social bonds

In short, the elderly showed an improvement in the perception of QOL and SWB resulting from the practice of physical activities such as dance, exercises and/or stretching, verifying that QOL in the physical domain obtained significant positive correlations with psychological QOL, with social relationships, with the perception of general QOL, with satisfaction with health and life, with positive affections and with happiness. [19]

The increase in the interest of the elderly person in the search for physical practices is correlated to the fact of belonging to groups of active elderly people, independent and motivated by AS. [16] This is in line with authors who verified the importance of maintaining the physical domain arising from low-intensity aerobic practices in the elderly between 60 and 70 years of age, making it possible to show the significant and positive increase in the search for programs aimed at preventing the emergence of morbidities, the in order to obtain improvement with life satisfaction, physical and psychological conditioning, social relations and QoL. [22]

There was a significant negative correlation between positive and negative affects, understanding that the higher the levels of disaffection in the lives of the elderly (fear, anger), the worse the perception of positive affects (happiness). This data leads to the reflection of how important psychological support is in individual interventions in relation to unfavorable negative events (negative affects) of the aging process, especially with regard to the reduction of capacities and acceptance of cognitive functional limitations. [21]

In this context, it was observed that social relationships, the perception of general QOL and satisfaction with health and life were positively correlated with positive and negative affects and, happiness,

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showing a positive understanding that the elderly (as) do in relation to the acceptance of the limitations of the aging process and the improvement in the perception of QOL and SWB. [22]

Finally, the happiness measured by the SWB proved to be relevant in the perceptions of QOL and SWB in the elderly, reinforcing the need for more research developed on AS, in order to better understand the experiences and expectations in longevity. [23]

CONCLUSION

It was concluded that there are significant correlations in relation to the sociodemographic profile, the QOL conditions and the SWB of the elderly through activities offered in the AS, favoring, in turn, a better perception of QOL and SWB. The results also reveal the importance of SA in contributing to a healthy aging of the population, which, in the end, recognizes its strategic position in public policies related to prevention and health promotion actions. ■

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