




Quality of life of older adults during periods of epidemiological control of the COVID-19 pandemic: associated factors

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Abstract

Objective: To investigate the association of physical and mental impairment scores on the Quality of Life instrument among older users of Community Centers with sociodemographic factors, characteristics of generalized anxiety disorder and leisure practices during periods of epidemiological control of the COVID-19 pandemic. **Method:** A cross-sectional analytical study was carried out in a capital city in the southeast region of Brazil at four Community Centers for the Third Age. The final sample comprised 345 older adults and data collection took place between June and December 2022. The dependent variable Quality of Life was analyzed using the eight domains of the 36-Item Short-Form Health Survey and the measures Physical Component Summary and Mental Component Summary, which were dichotomized (below average and above average). **Results:** On simple logistic regression, participants who had over 10 years of formal education, no characteristics of Generalized Anxiety Disorder and who performed more leisure activities were more likely to score above the mean on both physical and mental components of Quality of Life. **Conclusion:** The study revealed that more vulnerable participants had worse quality of life. The transient nature of the pandemic highlights the need for robust adaptable public policies that can respond effectively to future health crises, and for cross-sectoral policies that not only address immediate needs during health emergencies but also promote healthy aging in a sustainable manner.

Keywords: COVID-19.
Aged. Quality of Life.

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INTRODUCTION

In older age, good quality of life (QoL) is directly influenced by a multifactorial context which includes physical health, mental health, personal satisfaction, personal relationships, productivity, sexuality and spirituality. In addition, income, education, urbanization and quality of health services also play a part¹.

It is important to reiterate that the process of population aging involves numerous health issues that pose problems with regard to health and social welfare systems. However, aging is not synonymous with poor health, except in cases of associated diseases, but rather with good health status. Moreover, advances in the fields of health and technology allow populations that have access to adequate public or private services to enjoy better QoL in this phase of life².

Health-related quality of life can be defined as an individual's perception of their position in life in the context of a disease beyond its consequences and treatment, i.e., how illness impacts their life. Thus, the QoL of older individuals can be affected by biological, social and psychological factors, with special emphasis on the importance of an integrated approach ensuring healthy aging³⁻⁵.

The decade of Healthy Aging (2021-2030) represents a 10-year collaboration involving governments, civic society, international and professional organizations, academia, media and the private sector. The goal of this initiative is to empower these people, promote health via educational approaches and create safe, healthy living environments throughout life, ensuring recognition of the vulnerabilities of older individuals in humanitarian emergencies, such as pandemics⁶.

During the COVID-19 pandemic, the older population faced additional challenges due to their greater vulnerability. This has been confirmed by studies showing that psychological symptoms, such as anxiety and depression, were observed in individuals aged ≥ 66 years during the pandemic period⁷.

The COVID-19 outbreak highlighted the frailty of older individuals, who often face multiple diseases and are at greater risk of developing more severe

forms of disease. This scenario underscored the importance of caring for this group, not only by families, but society as a whole. Discussions about the pandemic have led to changes in biosafety measures and shifts in the way society views aging. Evidence shows that the pandemic significantly and unequally impacted health, income and care for older adults in Brazil, with disparities in terms of socioeconomic conditions and acceptance in the labor market^{8,9}.

Given the high prevalence of COVID-19 in the older population, a more vulnerable age group, coupled with the importance of QoL in these individuals, the objective of the present study was to investigate the association of physical and mental impairment scores on a QoL instrument among older users of Community Centers with sociodemographic factors, characteristics of generalized anxiety disorder and leisure-time practices during periods of epidemiological control of the COVID-19 pandemic.

METHOD

A cross-sectional analytical study was conducted at 4 Community Centers for the Third Age (CCTAs) in the Southeast of Brazil. The community centers, facilities of the *Community and Strengthening Ties Service* and part of the network of services provided for by the National Social Welfare Policy, are public places offering older adults educational, cultural, sports and leisure activities. The aim of these activities is to provide the Third Age with opportunities for interaction and socialization, promoting improved quality of life, valorizing self-esteem, affirming rights, strengthening affective family and community bonds, and preventing social isolation¹⁰.

The total number of CCTA users was 1,284 older adults, a figure used to calculate sample size. The following parameters were applied: CCTA population – 1,284 older adult, prevalence – 50% to maximize the sample, confidence level – 95%, sampling error – 5%, calculated sample size – $296 + 10\%$ (losses) = 326 participants. This number was subdivided to be representative in each area by stratifying the sample using proportional allocations, where: CCTA A - 165 users (sample of 42 older adults); CCTA B – 259 users (sample of 65 older adults); CCTA C – 389

users (sample of 98 older adults) and CCTA D 471 users (sample of 121 older adults).

The study included older adults of both genders who were registered users of activities offered by the CCTAs. Exclusion criteria were individuals who could not understand the interview questions or were unable to answer them for health reasons, although no subjects were excluded from the study.

Participants were invited to take part in the study during CCTA activities after receiving a brief explanation of the study. Data collection was carried out by interviewers, trained to apply 5 structured scripts, between June and December 2022 at CCTAs during morning and evening sessions on days when activities were run, giving all users equal opportunity to take part.

The dependent variable (quality of life) in the past 4 weeks was probed by applying the version of the 36-Item Short-Form Health Survey (SF-36) translated and validated for use in Brazil by Ciconelli et al. (1999), having proved apt for the socioeconomic and cultural conditions of the Brazilian population. The SF-36 comprises 11 questions and 36 items, with the latter further divided into 8 health domains: Physical functioning (10 items); Role-physical (4 items); Bodily Pain (2 items); General Health (5 items); Vitality (4 items); Social functioning (2 items); Role-emotional (3 items); Mental health (5 items); and a comparative question on perceived health currently and 1 year ago not added to the scores for the domains of the instrument^{11,12}.

Each scale item is scored on a scale from 0 to 100, where lower scores indicate poorer general health status and higher scores better general health. On the data analysis, the 8 domains were assessed as an outcome, comparing against the independent variables.

For the present study, the 8 domains were also divided into 2 continuous summary measures: Physical Component Summary (PCS), consisting of the domains physical functioning, role-physical, bodily pain and general health status; and Mental Component Summary (MCS), comprising the domains vitality, social functioning, role-emotional and mental health. With regard to scoring of

components (PCS and MCS), the mean of the 4 domains scores for each component was calculated¹³.

These domains, and also the 8 domains of the SF-36, are scored on a scale of 0-100, where 100 indicates the best possible health status. Scale scores below 50 ($PCS \leq 50$ and $MCS \leq 50$) indicate below average health and poorer QoL, whereas scores above 50 ($PCS > 50$ and $MCS > 50$) are classified as above average¹⁴.

The independent variables for sociodemographic characteristics were: sex (“male” and “female”); age/age group (“60-69 years” and “ ≥ 70 years”); marital status (“no partner” and “with partner”); education (“ ≤ 10 years of formal study”) and “ > 10 years of study”); self-reported race/color (“white” and “non-white”), where the “non-white” category encompasses black, brown, indigenous and yellow race/color); socioeconomic level (CSE) according to the Brasil – ABEP criteria¹⁵ (A, B1, B2, C1, C2, D-E, subsequently pooled into the groups “CSE A/B” and “CSE C/D-E”).

The independent variable for the psychological aspect was anxiety, analyzed using the version of the Geriatric Anxiety Inventory (GAI) translated and validated for use in Brazil^{16,17}, effective for distinguishing individuals with and without characteristics of Generalized Anxiety Disorder (GAD), adopting a cut-off of 13 for an area under the ROC curve of 0.90. In the present study, this was categorized into “without characteristics of Generalized Anxiety Disorder” – Without GAD (≤ 13) and “with characteristics of Generalized Anxiety Disorder” – With GAD (> 13).

For physical aspects, the independent variables assessed were leisure practices, categorized using the validated *Escala de Práticas de Lazer* (EPL) – Leisure Practices Scale¹⁸, a Likert-type scale with 11 response options covering 8 leisure domains. Domain scores were summed to yield the EPL result (range 0-80 points) and dichotomized into “less than or equal to median” / “greater than median”, denoted “less leisure” (≤ 55) and “more leisure” (> 55), respectively.

Descriptive statistics were expressed as mean and standard deviation. The Kolmogorov & Smirnov test was employed to check for normality of the data. Thus,

the Mann-Whitney test was applied to compare the PCS and MCS QoL scores against sociodemographic variables, anxiety and leisure practices. A simple logistic regression model was used to identify potential confounding factors between the independent variables and summary measures (PCS and MCS) of QoL (above mean), where variables within the 95% confidence interval ($p \leq 0.05$) were deemed significant.

The study project was approved on the 25th March, 2022 by the local Research Ethics Committee of the Center for Health Science of the Universidade Federal do Espírito Santo under permit no. 5.312.308, and complied with the criteria of Resolution no. 466/2012 of the National Board of Health¹⁹.

Study results were reported in accordance with the recommendations of the *Strengthening the Reporting of Observational Studies in Epidemiology* (STROBE) Statement. STROBE is a guideline for improving the quality of reporting of observational studies in epidemiology. More specifically, the goal is to ensure clarity, transparency and rigor in the publication of observational studies, including cross-sectional studies. The use of guidelines can also aid evaluations of risk of bias and generalization of results²⁰.

DATA AVAILABILITY

The complete dataset underpinning the results of the present study is available upon request from the corresponding author Adriana Drummond de Aguiar.

RESULTS

The final study sample comprised 345 older adults interviewed with validated questionnaires. The sociodemographic profile of respondents was predominantly female (91.3%), aged 70-79 years (48.4%), married (33.9%), white (48.4%), complete secondary/incomplete higher education (31.5%), complete higher education (31.0%), retiree or pensioner (87.8%), income of R\$ 1,212.00 = current minimum wage (22.4%) and socioeconomic level C2 (27.0%). Regarding living arrangements, 69.8% lived in apartments, 35.4% lived with a spouse, 52.5% had access to a computer, 54.8% had access to a computer in more than one place, 51.9% reported holding basic computing knowledge, and 80.3% cited television as their main source of information.

The highest mean score on the QoL domains was for social functioning (mean=83.2; SD±22.8), while the lowest mean score was for the general health status domain (mean=64.6; SD±19.0). Overall, participants had a mean PCS score of 72.1 (SD±20.0) and mean MCS of 77.8 (SD±21.2).

With respect to the association between QoL and socioeconomic level, of the 8 health domains assessed by the SF-36, participants with CSE AB had a higher QoL for role-physical, compared to individuals with CSE C/D-E revealing that the lower the CSE level, the worse the QoL (Table 1).

Table 1. Association between quality of life and socioeconomic level of users of Community Centers in Vitoria city, Espirito Santo state, 2022.

Dimension – SF36	CSE AB Mean rank	CSE CDE Mean rank	<i>p</i> -value*
Physical Functioning	181.98	170.67	0.390
Role-Physical	191.10	168.31	0.048
Bodily Pain	180.08	171.17	0.495
General Health Status	187.62	169.21	0.165
Vitality	190.18	169.21	0.102
Social Functioning	184.46	170.03	0.235
Role-Emotional	185.76	169.69	0.135
Mental Health	184.92	169.91	0.257

(*) Mann-Whitney Test; significant for $p \leq 0.050$ Rank – a score is attributed where lowest value receives lowest score and highest values the highest score and then mean of ranks is performed and test statistic calculated. Source: author elaboration.

The results presented in Table 2 show that participants without GAD characteristics had better QoL than those with GAD characteristics across all domains assessed by the SF-36.

In terms of leisure practices, participants who engaged in more leisure-time activities had a better QoL across all SF-36 domains (Table 3).

The association of QoL with sociodemographic variables, anxiety and leisure practices of users of

the Community Centers is presented in Table 4. Results showed that participants having >10 years of formal education had higher QoL compared to individuals with ≤ 10 years for both PCS and MCS. Participants without GAD characteristics had higher QoL compared to individuals with GAD characteristics, for both PCS and MCS. Participants who engaged in more leisure-time activities had higher QoL compared to those engaging in less leisure activities, for both PCS and MCS.

Table 2. Association between quality of life and anxiety of users of Community Centers in Vitoria city, Espirito Santo state, 2022.

Dimension – SF36	Without GAD Mean rank	With GAD Mean rank	<i>p</i> -value*
Physical Functioning	180.27	139.14	0.003
Role-Physical	181.36	134.07	< 0.001
Bodily Pain	180.64	137.43	0.002
General Health Status	178.20	148.78	0.036
Vitality	184.03	148.78	< 0.001
Social Functioning	184.31	120.36	< 0.001
Role-Emotional	183.60	123.67	< 0.001
Mental Health	189.99	93.89	< 0.001

(*) Mann-Whitney Test; significant for $p \leq 0.050$ Rank – a score is attributed where lowest value receives lowest score and highest values the highest score and then mean of ranks is performed and test statistic calculated. Source: author elaboration.

Table 3. Association between quality of life and leisure practices of users of Community Centers in Vitoria city, Espirito Santo state, 2022.

Dimension – SF36	Less Leisure Mean rank	More Leisure Mean rank	<i>p</i> -value*
Physical Functioning	148.99	197.15	< 0.001
Role-Physical	150.32	195.82	< 0.001
Bodily Pain	152.42	193.69	< 0.001
General Health Status	152.53	193.58	< 0.001
Vitality	139.96	193.58	< 0.001
Social Functioning	145.24	200.92	< 0.001
Role-Emotional	158.01	188.08	0.001
Mental Health	143.30	202.88	< 0.001

(*) Mann-Whitney Test; significant for $p \leq 0.050$ Rank – a score is attributed where lowest value receives lowest score and highest values the highest score and then mean of ranks is performed and test statistic calculated. Source: author elaboration.

Table 4. Association of quality of life with sociodemographic variables, anxiety and leisure practices of users of Community Centers in Vitoria city, Espirito Santo state, 2022.

Variables	PSC	<i>p</i> -value*	MSC	<i>p</i> -value*
	Mean rank		Mean rank	
Sex				
Male	204.27	0.072	179.45	0.711
Female	170.02		172.39	
Age group - years				
≤69	174.47	0.842	169.66	0.652
≥70	172.23		174.76	
Marital status				
No partner	166.02	0.085	168.62	0.279
With partner	185.29		180.71	
Race/Color				
White	183.63	0.055	182.27	0.094
Non-white ¹	163.03		164.30	
Education - years				
≤10	145.85	< 0.001	153.61	0.005
>10	189.22		184.58	
Socioeconomic level				
AB ²	188.87	0.133	188.01	0.155
CDE ²	168.89		169.11	
Anxiety Level				
Without GAD ³	184.07	< 0.001	188.52	< 0.001
With GAD ³	121.48		100.74	
Leisure Practices				
Less Leisure	143.32	< 0.001	137.98	< 0.001
More Leisure	202.85		208.22	

*Mann-Whitney Test; significant for $p \leq 0.050$ PCS - Physical Component Summary; MCS: Mental Component Summary Rank – a score is attributed where lowest value receives lowest score and highest values the highest score and then mean of ranks is performed and test statistic calculated. ¹Non-white: black, brown, indigenous and yellow race/color. ²Socioeconomic level (CSE) according to Brasil – ABEP criteria¹⁵ (A, B1, B2, C1, C2, D-E pooled into groups “CSE A/B” and “CSE C/D-E”). ³“Without characteristics of Generalized Anxiety Disorder” – Without GAD (≤ 13) and “With characteristics of Generalized Anxiety Disorder” - With GAD (>13)^{16,17}. Source: author elaboration.

Logistic regression models were fitted for controlling potential confounding factors. Results of simple logistic regression, on a priori analysis of PCS QoL showed that participants with >10 years of education were 2.3 (95%CI=1.27-4.30) times more likely to score above average on the physical component of QoL compared to individuals with ≤10 years (Table 5). Not having GAD characteristics was associated with a 2.1 (95%CI=1.06-4.24) times greater likelihood of scoring above average compared to having GAD characteristics. Lastly, participants

who engaged more in leisure-time activities had a 3.2 (95%CI=1.64-6.31) times greater chance of scoring above average on the physical component of QoL compared to those engaging less.

Analysis of MCS QoL showed that participants living with a partner were 4.3 (95%CI=1.76-10.41) times more likely to score above average on the mental component of QoL compared to individuals without a partner. Participants having >10 years of formal education had a 2.4 times (95%CI=1.25-4.44)

greater likelihood of having above average mental QoL scores compared to individuals with ≤ 10 years of education. Participants with socioeconomic level CSE AB had a 2.9 (95%CI=1.02-8.53) times greater likelihood of scoring above average than individuals with level CSE CDE. Not having GAD characteristics was associated with a 9.2 (95%CI=4.63-18.16) times

greater likelihood of scoring above average on mental QoL compared to having GAD characteristics. Participants who engaged more in leisure had a 3.1 (95%CI=1.56-6.32) times greater likelihood of scoring above average on the mental component of QoL compared to individuals who engaged less in these activities.

Table 5. Results for logistic regression of quality of life, demographic variables, anxiety and leisure practices of users of Community Centers in Vitoria city, Espirito Santo state, 2022.

Variables	PCS (Above average)				MCS (Above average)			
	<i>p</i> -value*	OR	95%CI for OR		<i>p</i> -value*	OR	95%CI for OR	
			Lower bound	Upper bound			Lower bound	Upper bound
Sex								
Male	-	1	-	-	-	1	-	-
Female	0.493	0.650	0.189	2.230	0.961	1.028	0.341	3.097
Age group - years								
≤ 69	-	1	-	-	-	1	-	-
≥ 70	0.974	1.010	0.535	1.907	0.609	0.839	0.427	1.646
Marital status								
No partner	-	1	-	-	-	1	-	-
With partner	0.231	1.500	0.773	2.911	0.001	4.273	1.755	10.407
Race/Color								
White	-	1	-	-	-	1	-	-
Non-white ¹	0.253	0.699	0.378	1.291	0.374	0.751	0.398	1.414
Education - years								
≤ 10	-	1	-	-	-	1	-	-
> 10	0.007	2.334	1.266	4.304	0.008	2.356	1.249	4.442
Socioeconomic level								
AB ²	0.126	2.017	0.822	4.947	0.046	2.947	1.019	8.525
CDE ²	-	1	-	-	-	1	-	-
Anxiety Level								
Without GAD ³	0.034	2.119	1.059	4.241	< 0.001	9.167	4.628	18.155
With GAD ³	-	1	-	-	-	1	-	-
Leisure Practices								
Less Leisure	-	1	-	-	-	1	-	-
More Leisure	0.001	3.214	1.638	6.307	0.001	3.143	1.563	6.320

* Simple logistic regression; OR - Odds Ratio; (1) reference category; significant for $p \leq 0.050$ PCS - Physical Component Summary; MCS - Mental Component Summary. ¹Non-white: black, brown, indigenous and yellow race/color. ²Socioeconomic level (CSE) according to Brasil - ABEP criteria¹⁵ (A, B1, B2, C1, C2, D-E pooled into groups "CSE A/B" and "CSE C/D-E"). ³"Without characteristics of Generalized Anxiety Disorder" - Without GAD (≤ 13) and "With characteristics of Generalized Anxiety Disorder" - With GAD (> 13)^{16,17}. Source: author elaboration.

DISCUSSION

The key finding of the present study was in highlighting the complex association of QoL with several socioeconomic and health-related factors in older adults who frequented Community Centers for the Third Age (CCTAs). This investigation of QoL in the older population is a challenge which calls for an appreciation of the different contexts and realities of these individuals, defining it as a multidimensional phenomenon²¹. In the context of an increasingly aging population, interest in monitoring QoL has become a global concern, serving as a useful indicator of public health²².

In the present study, participants exhibiting no characteristics of Generalized Anxiety Disorder (GAD) had better QoL across all domains analyzed by the SF-35 scale. These findings are consistent with the scientific literature, showing the importance of considering psychological factors in elucidating QoL in this population. However, the influence of anxiety on QoL in this older age group during the COVID-19 has been little investigated in rural and urban settings²³.

In addition to psychological factors, other factors such as leisure activities and social participation can influence QoL of older individuals²⁴. In this respect, the current findings are in line with the literature, showing that older adults with greater engagement in leisure activities had higher QoL across all domains of the SF-36. These results underscore the need to take into account both physical and psychosocial health factors to fully address QoL in the older population.

Given the adversities faced by this group during the COVID-19 pandemic, including an increased likelihood of limitations and losses, developing actions and initiatives to maintain the health and well-being of older adults is imperative²⁵. Gomes et al.²⁶, in an analysis of QoL of older adults before and during the pandemic, and of expectations for the post-pandemic period, found that maintaining independence of oldest-old individuals is fundamental to their serenity and autonomy. Therefore, implementing strategies aimed at preserving the independence and social involvement of these individuals is crucial

for improved QoL amid pandemic adversities, contributing not only to physical well-being, but also to the psychosocial health of this population²⁴.

With regard to the sociodemographic profile of the population assessed, the sample comprised predominantly women, reflecting a common tendency in investigations involving older age groups. This phenomenon, referred to as the “feminization of aging”, is observed globally and influenced by the typically longer life expectancy of women relative to men, owing to a number of factors. This characteristic contributed substantially to the pattern identified in the present study, in line with observations by other researchers in this area^{27,28}.

A previous study investigating the profile of QoL and functional capacity of older adults during lockdowns imposed by the COVID-19 pandemic found that most men had higher QoL, except in cases of limitations in physical functioning, when women scored higher²⁹.

Contrasting with these findings, a previous study assessing the relationship of QoL, nutritional status and age group in older individuals failed to find a significant association between QoL domains and gender³⁰. These disparities highlight the complexity of the relationships among variables, requiring careful contextual-based analysis for a deeper understanding.

With regard to age in the present study, no association of age group with QoL of the participants interviewed at CCTAs was found, contradicting the results of a previous Brazilian study conducted prior to the COVID-19 outbreak, in which advanced age was associated with lower QoL score among older adults³¹. A population-based study in Iranian older adults showed a significant negative association between age and QoL during the COVID-pandemic³².

These discrepancies can be attributed mainly to sociocultural differences, type of instrument used, and to the average age of study participants. Moreover, the variety of strategies adopted by different countries to deal with the pandemic, each with their own severity of lockdown restrictions, might be a factor influencing the disparity in results observed.

In terms of education of the study participants, an association was detected between this independent variable and the summary measures PCS and MCS, with simple logistic regression confirming that individuals with >10 years of education had better scores on both physical and mental QoL components. Romero et al.⁸ analyzed the educational level of individual who died in the city of Rio de Janeiro during the COVID-19 pandemic and found a positive correlation between low-educated individuals and higher mortality, possibly due to social-structural factors, given that level of education plays a role in access to health services and in recognizing situations of risk.

The present study found that marital status was a factor associated with QoL in older adults during the pandemic, where older individuals living with a partner scored above the mean for the QoL mental component compared to those without a partner. This result reveals that people who are married or live with a partner generally have better health status. Conversely, persons who live alone are more likely to have low QoL, where this proved especially true during the COVID-19 pandemic^{33,34}.

Further, participants with socioeconomic level CSE AB had better QoL compared with individuals classified as CSE C/D-E in terms of limitations in role-physical, showing that the lower the CSE, the worse the QoL. This is explained by the fact, in general, retirement and withdrawal from work leads to a change in financial situation, with loss of income, decline in standard of living and, consequently, a decrease in QoL³⁵.

This study has some limitations, including the analysis at a single timepoint, where the cross-sectional design precluded any conclusions on causality. Additionally, during the pandemic, the presence of older individuals at the research venues may have been reduced by lockdown measures, restrictions on movement and health concerns. The length of the questionnaire may also have been a limitation in that older respondents might have sustained greater cognitive fatigue, a scenario exacerbated by more comprehensive scales. During the pandemic, this fatigue might have been worsened

by the additional stress from worries over health, social isolation and changes in daily routine.

Nevertheless, existing evidence suggests high levels of validity of single assessments for capturing change in QoL linked to specific contexts. In this respect, it is important to reiterate that the SF-36 is a globally recognized instrument for analyzing QoL that offers satisfactory internal consistency and level of reliability. Thus, further studies exploring this topic are warranted, to provide an ongoing diagnosis of the deleterious effects of the SARS-CoV-2 virus on this population.

CONCLUSION

The present study, conducted during the period of epidemiological control of the COVID-19 pandemic, revealed that older adults with >10 years of education, no characteristics of Generalized Anxiety Disorder and greater engagement in leisure activities were more likely to have better QoL. The results showed that older individuals with higher social vulnerability were the worst hit by the adverse situation caused by the outbreak, raising important questions and yielding valuable information on the consequences of this public health crisis.

This study makes significant contributions to the field, providing insights on the factors which influenced the QoL of older adults amid the pandemic, besides reiterating the importance of external validity, considering the applicability of its findings in different geographic and social contexts. The transient nature of the pandemic underscores the need for robust adaptable public policies that can respond effectively to future health crises. Therefore, it is imperative to develop intersectoral policies which not only address immediate needs during health emergencies, but also promote healthy aging in a sustainable manner through proper planning and execution of strategic actions.

In addition, policies should promote broader access to mental health services, social support and physical activity programs, tailored to meet the specific needs of underserved older individuals. To

this end, establishing collaborations among different sectors, such as healthcare, social welfare and local communities, is vital to building a support network which can remain resilient amid future challenges.

AUTHORSHIP

- Adriana Drummond de Aguiar - Conception, data analysis and interpretation; writing or critical review of article, and approval of version for publication; responsible for all aspects of the study, vouching for any issues related to the accuracy or integrity of any part of the study.
- Caroline Rodrigues Thomes - Writing of article; approval of version for publication; responsible

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- Ghustavo Guimarães da Silva - Writing of article; approval of version for publication; responsible for all aspects of the study, vouching for any issues related to the accuracy or integrity of any part of the study.
- Maria Helena Monteiro de Barros Miotto - Critical review of article; approval of version for publication; responsible for all aspects of the study, vouching for any issues related to the accuracy or integrity of any part of the study.

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