Original Article

TEXTO & CONTEXTO ENFERMAGEM
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RELIGIOUSITY, SPIRITUALITY AND QUALITY OF LIFE OF ELDERLY ACCORDING TO STRUCTURAL EQUATION MODELING

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ABSTRACT

Objective: to analyze the relationship of sociodemographic predictors, morbidities, depression indicative score, as well as the mediating role of religiosity, spirituality and personal beliefs about quality of life.
Method: cross-sectional study conducted between March and July 2016, with 613 elderly, applying the instruments; Spirituality, Religiousness and Personal Beliefs of World Health Organization Quality of Life questionnaire, Brief version of World Health Organization Quality of Life questionnaire and World Health Organization Quality of Life Assessment for Older Adults. In the data analysis, through Statistical Package for Social Sciences, absolute and relative frequency, measures of central tendency and variability and modeling with structural equations involving exogenous and endogenous latent constructs were used to highlight the mediating role of religiosity, spirituality and beliefs between the indicative of depression and quality of life ($p \leq 0.005$).
Results: females, 60├ 70 years old, married, with 4 ├7 years of schooling, income of one minimum wage, 6.16±3.70 morbidities and average of 3.84±3.01 for the indicative depression score prevailed. The highest score was for the connection with spiritual being or strength facet, Social Relations domain and Intimacy; Totality and integration facet, the Environment domain and the Death and dying facet had the lowest scores. There was a mediating function of religiosity, spirituality and personal beliefs, between the indicative depression score and the quality of life.
Conclusion: it is necessary to invest in the practice of religiosity, spirituality and personal beliefs, as a health strategy, since they have shown an impact on the decrease of depression and a significant increase in quality of life.

DESCRIPTORS: Health of the elderly. Religion. Spirituality. Depression. Quality of life.

HOW CITED: Molina NPFM, Tavares DMS, Haas VJ, Rodrigues LR. Religiousity, spirituality and quality of life of elderly according to structural equation modeling. Texto Contexto Enferm [Internet]. 2020 [cited YEAR MONTH DAY]; 29: e20180468. Available from: http://dx.doi.org/10.1590/1980-265X-TCE-2018-0468

RELIGIOSIDADE, ESPIRITUALIDADE E QUALIDADE DE VIDA DE IDOSOS SEGUNDO A MODELAGEM DE EQUAÇÃO ESTRUTURAL

RESUMO

Objetivo: analisar a relação de preditores sociodemográficos, morbidades, escore do indicativo de depressão, bem como o papel mediador da religiosidade, espiritualidade e crenças pessoais sobre a qualidade de vida.
Método: estudo transversal realizado, entre março a julho de 2016, com 613 idosos, aplicando-se instrumentos *Spirituality*, *Religiousness and Personal Beliefs of World Health Organization Quality of Life questionnaire*, *Brief version of World Health Organization Quality of Life questionnaire e World Health Organization Quality of Life Assessment for Older Adults*. Na análise de dados, por meio do *Statiscal Package for Social Sciences*, utilizou-se frequência absolutas e relativas, medidas de tendência central e variabilidade e a modelagem com equações estruturais, envolvendo construtos latentes exógenos e endógenos para evidenciar o papel mediador da religiosidade, espiritualidade e crenças entre o indicativo de depressão e a qualidade de vida (p≤0,005).
Resultados: prevaleceu o sexo feminino, 60┤70 anos, casados, 4 ├7 anos de estudo, renda de um salário mínimo,6,16±3,70 morbidades e média de 3,84±3,01 do indicativo de depressão. O maior escore foi para a faceta conexão com ser ou força espiritual, domínio Relações sociais e faceta Intimidade; já o menor escore foi para a faceta Totalidade e integração, domínio Meio ambiente e faceta Morte e morrer. Houve uma função mediadora da religiosidade, espiritualidade e crenças pessoais, entre o escore do indicativo de depressão e a qualidade de vida.
Conclusão: faz-se necessário investir na prática da religiosidade, espiritualidade e crenças pessoais, como estratégia na saúde, uma vez que demonstraram impacto na diminuição do indicativo de depressão e aumento significativo da qualidade de vida.

DESCRITORES: Saúde do idoso. Religião. Espiritualidade. Depressão. Qualidade de vida.

RELIGIOSIDAD, ESPIRITUALIDAD Y CALIDAD DE VIDA DE LOS ANCIANOS SEGÚN EL MODELO DE ECUACIÓN ESTRUCTURA

RESUMEN

Objetivo: analizar la relación de predictores sociodemográficos, morbilidad, puntaje indicativo de depresión, así como el papel mediador de la religiosidad, espiritualidad y creencias personales sobre la calidad de vida.
Método estudio transversal realizado entre marzo y julio de 2016, con 613 personas mayores aplicando instrumentos *Spirituality*, *Religiousness and Personal Beliefs of World Health Organization Quality of Life questionnaire*, *Brief version of World Health Organization Quality of Life questionnaire e World Health Organization Quality of Life Assessment for Older Adults.* En el análisis de datos, a través del Statiscal Package for Social Sciences, se utilizaron frecuecias absolutas y relativas, medidas de tendencia central y variabilidad y moldeado con ecuaciones estructurales que implican constructos latentes exógenos y endógenos para resaltar el papel mediador de la religiosidad, la espiritualidad y creencias entre indicativos de depresión y calidad de vida (p≤0.005).
Resultados: prevaleció el género femenino, 60┤70 años, casados, 4 ├7 años de escolaridad, ingreso de un salario mínimo,6,16±3,70 morbilidades y media de 3,84±3,01 del indicativo de depresión. El puntaje más alto fue para la faceta de conexión con el ser o fuera espiritual, el dominio de las relaciones sociales y la faceta intimidad; el puntaje más bajo fue para la faceta Totalidad e integración, el dominio Medio ambiente y la faceta Muerte y morir. Hubo una función mediadora de religiosidad, espiritualidad y creencias personales, entre el puntaje indicativo de depresión y la calidad de vida.
Conclusión: es necesario invertir en la práctica de la religiosidad, la espiritualidad y las creencias personales, como estrategia en salud, ya que han demostrado un impacto en la disminución de los indicadores de depresión y un aumento significativo en la calidad de vida.

DESCRIPTORES: Salud de los ancianos. Religión. Espiritualidad. Depresión. Calidad de vida.

INTRODUCTION

The significant increase in the elderly worldwide and also in Brazil is one of the consequences of decreased fertility rates and increased life expectancy. Although aging is inherent in life, longevity is not always accompanied by quality of life (QOL).[1]

In the aging process, natural physiological changes, social losses such as retirement, death of family members, lower social support and psychological losses such as memory may compromise QOL.[2]

When aging is accompanied by chronic diseases, such as depression, there is a negative impact on QOL, as well as a greater possibility of premature death among those affected.[1] Knowing and developing strategies that positively reflect the QOL of this population should be a priority in health care and public policy target.

Therefore, it is essential to understand QOL from the perspective of the elderly, as this population has great heterogeneity among themselves due to their own physical, mental, social, psychological and economic conditions.

Studies on QOL among healthy elderly individuals or with specific morbidity in the urban and rural community have been performed in the international and national literature,[2–5] however, the evaluation of QOL related to spirituality and religiosity of the elderly still needs further studies.[6]

Religiosity, spirituality and personal beliefs are essential for culture and social life, and play a significant role in the physical and mental health of the individual, and are considered objective indicators of QOL, as well as the physical, mental and environmental component.[7–8] Personal beliefs, in particular, can help to deal with adverse situations, as they offer meaning to human behavior and can influence QOL.[9]

Thus, religiosity, spirituality and QOL can contribute to the health and well-being of the elderly and have a positive effect on the physical, mental and social health of this population, which may be opportune tools for coping with the healthy aging process and also those with some morbidity.[10]

Given this context, the present study aimed to analyze the relationship of sociodemographic predictors, morbidities, depression indicative score, as well as the mediating role of religiosity, spirituality and personal beliefs regarding quality of life.

METHOD

A quantitative, analytical, cross-sectional and observational household study. Developed as part of a larger study entitled “Depressive symptoms, associated factors and access to health services among elderly residents in the Triângulo Sul Mineiro” (Brazil), developed by the Public Health Research Group of the *Universidade Federal do Triângulo Mineiro* (UFTM)

A study conducted in the urban community of Uberaba, Minas Gerais, Brazil. Participants were aged 60 years and over, without cognitive decline. The population sample was defined by multistage cluster sampling appropriate for Structural Equation Modeling, using the recommended sample size of over 200 participants.[11] Therefore, 613 elderly adults participated in the survey.

Data were collected at the home of the elderly participants, from March to July 2016, by means of interviews. The instruments used were: Mini Mental State Examination (MMSE), for participants’ cognitive assessment, translated and validated in Brazil, [12] a questionnaire prepared by the Research Group for sociodemographic variables; the elderly-specific geriatric depression scale (GDS-15).[13]

The WHOQOL-SRPB (Spirituality, Religiousness and Personal Beliefs of World Health Organization Quality of Life questionnaire) was also used. This instrument was developed by the World Health Organization (WHO) to assess religiosity, spirituality and personal beliefs related to QOL,[14]

validated in Brazil,[15] which measures eight facets: Connection with spiritual being or force; Meaning of life; Admiration; Totality and integration; Spiritual strength; Inner peace; Hope and optimism; and faith.

The WHOQOL-BREF (Brief version of World Health Organization Quality of Life Questionnaire), also developed by WHO and validated in Brazil, evaluates abbreviated QOL through four domains: Physical, Psychological, Social Relations and Environment.[16] The WHOQOL-OLD (World Health Organization Quality of Life Assessment for Older Adults), which evaluates the specific QOL for the elderly population, validated in Brazil,[17] and should be applied in conjunction with the WHOQOL-BREF, consisting of 24 questions with six facets: Sensory functioning; Autonomy; Past, present and future activities; Social participation; Death and dying; and intimacy.

As soon as the interviews were conducted and delivered to the responsible researcher, the field supervisors performed the reviews. When necessary, the interviews were returned to the interviewer to in order to add to the information.

Subsequently, an electronic database was elaborated using the Excel® program so that the collected data could be processed in a double-input microcomputer to verify the existence of mistaken or different records through internal consistency. The original interview was used for verification and correction in case of inconsistent data. After the conclusion of these steps, the database was imported into the "Statistical Package for Social Sciences" version 21.0 application for analysis.

Categorical variables were presented in absolute and relative frequency tables during data analysis; and the quantitative variables were summarized using measures of central tendency as well as variability.

During QOL evaluation, their respective syntaxes were used according to WHOQOL-BREF and WHOQOL-OLD.

Finally, structural equation modeling was used to highlight the mediating role of religiosity, spirituality, and beliefs between the indicative of depression and QOL through a model involving exogenous (independent) and endogenous (QOL) latent constructs.

In this paper, mediation was considered statistically significant when the causal path between the depression score and religiosity, spirituality and personal beliefs, as well as the causal path between religiosity, spirituality and personal beliefs and QOL, was simultaneously statistically significant ($p \leq 0.005$).

Structural equation modeling (SEM) is a multivariate technique that allows the simultaneous examination of relationships between measured variables and latent constructs, i.e., those variables that are not directly measured are variables that have only conceptual definitions, i.e. a construct.[18]

In this study, the final structural model resulted from both the classical regression analysis and the causal analysis without latent variables, i.e., the final model resulted from causation patterns suggested by the data. A significance level of $\alpha=0.05$ was considered in the present study.

The participants of this research were contacted at their homes and presented with the objectives, the Informed Consent Form (ICF) and the relevant information. The interview was conducted after the interviewees signed the consent form.

RESULTS

Among the 613 elderly participants interviewed, the highest percentage was female (68.0%), aged 60├ 70 years (43.9%), declared as married (46.5%), followed by widowers (35.9%). 4 ├7 years of schooling (39.2%) was the most prevalent and individual monthly income of one minimum wage (43.2%).

Regarding clinical data for the variable number of diseases, the elderly in the present study had a mean morbidity of 6.16±3.70, ranging from no disease to 23 associated morbidities.

As for the depression indicative score, there was a variation from zero to 15 points and an average of 3.84±3.01.

The highest score for religiosity, spirituality, and personal beliefs was for the Connection with Spiritual Being or Strength facet (17.04±2.86), while the lowest score was for the Totality and Integration facet (15.53±2.62) Table 1.

Table 1 – Distribution of mean scores of domains and facets of religiosity, spirituality, personal beliefs and quality of life according to WHOQOL-SRPB*, WHOQOL-BREF† and WHOQOL-OLD‡ of community-dwelling elderly study participants. Uberaba, MG, Brazil, 2018. (n=613)

Religiosity, Spirituality and Personal Beliefs	Minimum	Maximum	Average	Median	Standard deviation
Connection with spiritual being or force	4	20	17.04	16.00	2.86
Meaning in life	4	20	16.06	16.00	2.63
Admiration	4	20	16.37	16.00	2.60
Totality and integration	4	20	15.53	16.00	2.62
Spiritual strength	4	20	16.52	16.00	2.59
Inner peace	4	20	15.54	16.00	2.76
Hope and optimism	4	20	15.75	16.00	2.74
Faith	4	20	17.01	16.00	2.42
WHOQOL-BREF†					
Physical	4	100	61.81	64.29	17.96
Psychological	4	100	65.33	66.67	14.70
Social relationships	8	100	72.73	75.00	14.49
Environment	13	100	61.34	62.50	12.73
WHOQOL-OLD‡					
Sensory Functioning	6	94	35.06	31.25	18.21
Autonomy	6	100	65.25	68.75	15.98
Past, present and future activities	13	100	66.26	68.75	14.66
Social participation	0	100	62.79	68.75	16.25
Death and dying	0	100	23.92	18.75	25.41
Intimacy	0	100	71.33	75.00	16.72

*WHOQOL-SRPB (Spirituality, Religiousness and Personal Beliefs of World Health Organization Quality of Life questionnaire); †WHOQOL-BREF (Brief version of World Health Organization Quality of Life questionnaire); ‡WHOQOL-OLD (World Health Organization Quality of Life Assessment for Older Adults).

Regarding QOL, in the question regarding self-assessment of QOL, the majority (51.1%) considered it as good. Regarding satisfaction with their own health, 47.8% said they were satisfied.

The highest score for the WHOQOL-BREF was in the social relations domain (72.73±14.49) and the lowest in the environment domain (61.34±12.73). The highest score for WHOQOL-OLD was for the Intimacy facet (71.33±16.72) and the lowest for the Death and dying facet (23.92±25.41), Table 1.

In addition to Tables 2, 3 and 4, Figure 1 presents the result of causal modeling with latent variables, i.e., the final and complete structural model. The socioeconomic condition latent variables are presented, explained by the variables gender, age, education and income, as well as the religiosity, spirituality and personal beliefs explained by the domains of WHOQOL-BREF and the facets of QOL WHOQOL-OL

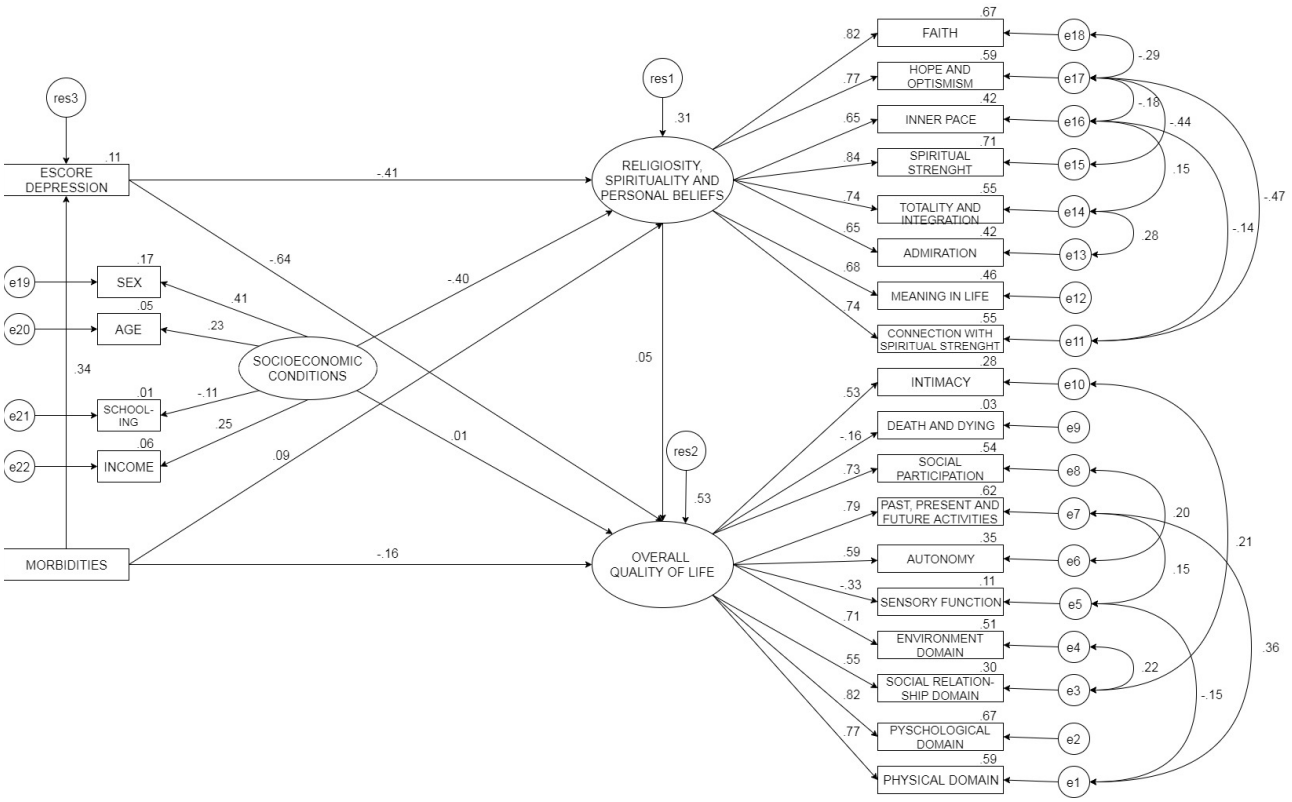

Figure 1 – Final causal diagram with latent variables illustrating the mediating function of religiosity, spirituality, and personal beliefs regarding the general quality of life of community-dwelling elderly study participants. Uberaba, MG, Brazil, 2018. (n=613)

Note: Goodness of Fit Index=0.90; Tucker-Lewis Index=0.90; Root Mean Square Error of Approximation=0.07

There is a mediating function of religiosity, spirituality and personal beliefs between the indicative depression score and QOL. It is observed that the total effect of the depression indicative score on overall QOL in standard deviation units is given by -0.64+(-0.41x0.05)=-0.66, thus indicating a negative influence of the indicative depression score on QOL scores. It is seen that this negativity is mediated by religiosity, spirituality and personal beliefs, which, in turn, positively impacts QOL.

Table 2 – Result of the structural equations with latent variables analysis, showing the non-standardized and standardized regression coefficients, with the general quality of life of the community-dwelling elderly study participants as an outcome. Uberaba, MG, Brazil, 2018. (n=613)

Variables			Nonstandard regression coefficient	Standardized regression coefficient	Standard error	Critical Reason	*p*
Depression score	←	Nº of diseases	0.27	0.34	0.03	8.87	<0.001
Religiosity, spirituality and personal beliefs	←	Depression score	-0.06	-0.41	0.01	-9.94	<0.001

Table 2 – Cont.

Variables			Nonstandard regression coefficient	Standardized regression coefficient	Standard error	Critical Reason	*p*
Religiosity, spirituality and personal beliefs	←	Socioeconomic condition	-2.34	-0.40	0.83	-2.81	0.005
Religiosity, spirituality and personal beliefs	←	Nº of diseases	0.01	0.10	0.01	2.43	0.015
Overall quality of life	←	Religiosity, spirituality and personal beliefs	7.10	0.34	0.82	8.65	<0.001
Overall quality of life	←	Socioeconomic condition	1.00	0.01	-	-	-
Overall quality of life	←	Depression score	-1.60	-0.50	0.14	-11.28	<0.001
Overall quality of life	←	Nº of diseases	-0.49	-0.20	0.08	-5.86	<0.001
Faith Facet	←	Religiosity, spirituality and personal beliefs	1.00	0.81	-	-	-
Hope and optimism facet	←	Religiosity, spirituality and personal beliefs	1.10	0.77	0.06	17.98	<0.001
Inner Peace Facet	←	Religiosity, spirituality and personal beliefs	0.96	0.66	0.06	16.97	<0.001
Spiritual Strength Facet	←	Religiosity, spirituality and personal beliefs	1.14	0.83	0.05	22.90	<0.001
Totality and integration facet	←	Religiosity, spirituality and personal beliefs	1.05	0.75	0.05	20.20	<0.001
Admiration Facet	←	Religiosity, spirituality and personal beliefs	0.88	0.65	0.05	17.14	<0.001
Meaning in life Facet	←	Religiosity, spirituality and personal beliefs	0.97	0.68	0.05	18.16	<0.001
Connection with spiritual being or strength Facet	←	Religiosity, spirituality and personal beliefs	1.13	0.74	0.06	19.44	<0.001
Intimacy Facet	←	Overall quality of life	1.00	0.57	-	-	-
Death and dying facet	←	Overall quality of life	-0.44	-0.16	0.11	-3.82	<0.001
Social Participation Facet	←	Overall quality of life	1.35	0.74	0.11	12.83	<0.001

Table 2 – Cont.

Variables			Nonstandard regression coefficient	Standardized regression coefficient	Standard error	Critical Reason	*p*
Past, present, and future activities facet	←	Overall quality of life	1.26	0.79	0.09	13.75	<0.001
Autonomy facet	←	Overall quality of life	1.23	0.59	0.09	14.26	<0.001
Sensory Function Facet	←	Overall quality of life	-1.00	-0.32	0.08	11.87	<0.001
Physical Domain	←	Overall quality of life	1.03	0.71	0.07	13.49	<0.001
Social Relations Domain	←	Overall quality of life	0.96	0.56	0.07	12.77	<0.001
Psychological domain	←	Overall quality of life	1.28	0.82	0.09	14.69	<0.001
Physical Domain	←	Overall quality of life	1.45	0.76	0.10	13.93	<0.001
Have income	←	Socioeconomic condition	1.00	0.27	-	-	-
Have schooling	←	Socioeconomic condition	-0.51	-0.11	.34	-1.50	0.133
Age	←	Socioeconomic condition	22.11	0.23	8.88	2.49	0.013
Sex	←	Socioeconomic condition	2.41	0.40	0.84	2.85	0.004

Table 3 – Result of the structural equations with latent variables analysis, presenting the coefficient of determination, with the general quality of life of the community-dwelling elderly study participants as an outcome. Uberaba, MG, Brazil, 2018. (n=613)

Variables	Determination coefficient
Depression score	0.11
Religiosity, spirituality and personal beliefs	0.31
Quality of life	0.53
Sex	0.17
Age	0.05
Have schooling	0.01
Have income	0.06
Physical Domain	0.60
Psychological domain	0.67
Social Relations Domain	0.31
Environment Domain	0.51
Facet Sensory Function Facet	0.11
Autonomy facet	0.35
Past, Present, and Future Activities Facet	0.62
Social Participation Facet	0.54

Table 3 – Cont.

Variables	Determination coefficient
Death and dying facet	0.03
Intimacy Facet	0.28
Connection with spiritual being or strength Facet	0.55
Meaning in life Facet	0.46
Admiration Facet	0.42
Totality and integration Facet	0.55
Spiritual Strength Facet	0.71
Peace Facet	0.42
Hope and optimism facet	059
Faith Facet	0.67

Table 4 – Result of the analysis of structural equations with latent variables, showing the correlation between the errors, with the general quality of life of the elderly community-dwelling elderly study participants as an outcome. Uberaba, MG, Brazil, 2018. (n=613)

Covariances between errors			Nonstandard regression covariances	Standardized Regression Correlations	Standard error	Critical Reason	*p*
e4	<-->	e3	23.82	0.22	4.67	5.09	<0.001
e7	<-->	e1	-34.40	-0.33	5.21	-6.60	<0.001
e5	<-->	e1	-31.76	-0.16	9.12	-3.48	<0.001
e8	<-->	e6	27.88	0.20	6.40	4.35	<0.001
e10	<-->	e3	34.44	0.21	6.91	4.98	<0.001
e17	<-->	e11	-0.09	-0.44	0.01	-7.62	<0.001
e17	<-->	e16	0.03	0.17	0.01	3.01	0.003
e14	<-->	e13	0.05	0.27	0.01	5.91	<0.001
e17	<-->	e15	-006	-0.39	0.01	-6.13	<0.001
e16	<-->	e11	-0.04	-0.16	0.01	-3.51	<0.001
e16	<-->	e14	0.03	0.13	0.01	3.10	0.002
e18	<-->	e17	-0.03	-0.24	0.01	-3.98	<0.001
e7	<-->	e5	21.53	0.14	7.03	3.06/	0.002

DISCUSSION

Regarding sociodemographic variables, the present study is similar to international and national findings regarding the gender variable.[8,19–22] The feminization of aging is a worldwide trend, related to both higher mortality among males and greater self-care practice among women.[1]

Understanding the context of aging and the specificities of the elderly regarding gender has a difference in care and health care. It must be a priority for health professionals and services which thus provides improvement in the QOL of the elderly.

The age group is similar to other studies by representing younger elderly.[19,20,23] Technological advances in health, associated with public policies, have contributed substantially to greater longevity. Although younger elderly were evidenced, there is a growing increase among the older elderly. Such profile requires health professionals to be better prepared in order to promote health and add QOL to the years lived.

Regarding marital status, the data from the present study differ from a study with elderly people from France, however they are similar to those from Chilean, North American and elderly people from São Paulo and Northern Brazil.[19–22] The divergence between the literature may be related to the different ways of aging in developed and developing countries, as well as the locoregional diversities. Having a partner beyond social character can positively impact QOL and the spiritual/religious dimension of elderly people.[15]

There was also a difference in relation to education in the elderly in national and international research[19,21,23–24] due to lower socioeconomic conditions among those in developing countries. The education of Brazilian elderly is low, among other reasons, because they come from a time when the priority was work, not study. Stimulating learning strategies, such as universities open to older people, even at an advanced ages, may favor social relations and increase access to information, which are related to the improvement of QOL.[19]

The individual monthly income data corroborate the findings of a Brazilian capital.[24] Lower income of the elderly may compromise QOL, causing the elderly to depend financially on family members.[2] Lower income may also impact health care, especially among those with multiple morbidities and/or dependencies.

Regarding the number of diseases, a lower result was identified in a study of elderly people from São Paulo (Brazil).[21] Although self-reported, the high average of associated morbidities among the elderly refers to greater care and attention, as they are associated with worsening of QOL and may lead to limitations, complications and even early mortality.[4] Nursing consultation is a timely strategy for monitoring these elderly, both to sensitize them to self-care such as following-up morbidities.[25]

Also noteworthy is the fundamental role of religiosity, spirituality and personal beliefs in this context of chronic morbidity. There are studies that suggest the positive influence of spiritual beliefs on health beliefs; those with greater spirituality tend to have greater self-care, deal with illness better, and seek health care more; attributing better health to spiritual strength.[26–27]

It is noteworthy that identifying the indicative depression scores helps in the prevention of disease and enables the creation of strategies to care for the symptoms. The increase in the indicative depression score proportionally decreased the QoL scores measured by WHOQOL-BREF in studies with adults and the elderly in China.[28] During the nursing consultation, using the screening tests, the nurse can request confirmation of the diagnosis, enabling early intervention and strengthening the bond between health professionals and the elderly.[25]

In a study with adults on depressive symptoms and religiosity, spirituality and personal beliefs in an outpatient treatment in Croatia, the higher the depression score, the lower the facet scores according to WHOQOL-SRPB.[29]

Regarding the findings of WHOQOL-SRPB, the highest score in the Connection with spiritual being or force facet diverged from the validation research of that instrument, in which the highest scores were in the Totality and integration and inner peace among the elders facets; among those without morbidities, the highest score was in the Meaning of Life facet and Faith facet among those with morbidities.[15]

The lowest score was identified in the Totality and integration facet, differing from the validation study, in which the lowest scores among healthy and morbidly aged and elderly individuals were, respectively, in the connection with being or spiritual strength facet.[15]

Sociodemographic differences between the investigated populations may partly explain the divergence between the findings of the validation study and the present survey.

The highest score in the social relations domain and the lowest in the environment domain corroborate studies with elderly people from the community in a capital and a city in the state of São Paulo, Brazil, in which the highest and lowest scores were identified for the above domains,

and partially, in a study with adults and seniors from China, which identified a lower score in the Environment domain.[19,24,28]

In another study of older adults from the Southern Brazilian community, a higher score was also found in the social relations domain.[30] Religious/spiritual practice and personal beliefs are related to better physical and mental and social QOL.[21]

The Social Relations domain is related to social support, personal relationships and sexual activity.[16] The higher percentage of married elderly may partly explain the higher score in this domain.

The environment, in relation to to financial resources, health care, transportation, among others,[16] may have had a lower score due to the individual monthly income of the elderly in this study, which is minimum wage, and may not be satisfactory for the needs of these elderly people, especially considering the costs of treating multiple associated morbidities.

Regarding QoL according to the WHOQOL-OLD, the highest score for the Intimacy facet and the lowest for Death and dying differed, in part, from research with community elderly, where the highest scores were for the Social Participation and Past, present and future activities facet, however the Death and dying facet had the lowest score.[24] A study of elderly people from São Paulo State also identified different results of this study, in which the highest score was for the Death and dying facet and the lowest for Past, present and future activities.[19]

The intimacy facet assesses the ability to have personal and intimate relationships.[17] The highest score of this facet meets the highest score in the Social Relations domain, reinforcing good personal and intimate relationships among the elderly in this study. On the other hand, sensory losses should be observed and investigated by health professionals who care for the elderly, since they affect the participation of activities, especially in the community.[24]

Observing the final result of structural equation modeling, it was evidenced that the negative influence of the depression indicative score on the QoL scores was observed by the inverse relationship, in which the increase of the depression indicative score causes lower QoL. It is seen that this negativity is mediated by religiosity, spirituality and personal beliefs, which, in turn, positively impacts QOL.

This is in agreement with research conducted with elderly patients in outpatient treatment in São Paulo (Brazil), in which there was an inverse relationship between religiosity and spirituality with depressive symptoms and a positive relationship with QoL.[10] Among the changes evidenced due to aging, affective decline, decreased memory, difficulty in assimilating ideas, mood swings, were observed among others that are evaluated in the indicative depression score.[2] These changes can generate stress and impact on QOL, impacting social and emotional life.

A study with elderly people from the community in São Paulo (Brazil) also used SEM to assess QoL, religiosity and spirituality, highlighting the direct relationship between these constructs. The author highlighted that, even though greater religiosity and spirituality were evidenced among women, they proportionally presented worse QOL scores in the physical and mental domain.[21]

Depression symptoms affect more women, due to hormonal changes, social and cultural changes.[5] On the other hand, they tend to express greater religiosity and spirituality,[21] thus reflecting in QOL. The higher prevalence of females supports the findings in the SEM of the present survey.

It is a fact that religiosity and spirituality have been shown to be an important psychosocial protector, increasing psychological well-being and minimizing thoughts and symptoms of depression.[21]

However, this tool is often overlooked by health professionals, who do not value the fundamental performance of religiosity and spirituality in life, health and QOL, especially of the elderly.

It should be emphasized that religiosity, spirituality and personal beliefs act as mediators when faced with these inherent life conditions and reduce the impact of stressors, and is an important tool in social relations and assist psychological and physical issues which are measures evaluated in QL.[7–8]

Associating health care holistically, whether at the primary, secondary or tertiary level of care, and valuing the practices of religiosity, spirituality and personal beliefs, positively reflects on the QOL of the elderly, providing improvement in physical, mental and spiritual health.

The limited scientific literature that uses the influence of sociodemographic and clinical predictors and the mediating action of religiosity, spirituality and personal beliefs in the QOL of the elderly presented itself as a limitation of the present study.

CONCLUSION

There was a prevalence of females, 60┤70 years old, married, 4 ├7 years of schooling and individual monthly income of one minimum wage; had a mean morbidity of 6.16±3.70 and a score of 3.84±3.01 in the indicative depression score. Regarding religiosity, spirituality and personal beliefs, the highest score was for the with spiritual being or strength facet and the lowest for the Hope and optimism facet. In QOL, the highest score for WHOQOL-BREF was in the Social Relations domain and lowest in the Environment domain. For WHOQOL-OLD, the highest score was for the Intimacy facet and lowest for the Death and dying facet.

The mediating function of religiosity, spirituality and personal beliefs between the indicative depression score and QOL was also identified; therefore, indicating a negative influence of the depression indicative score on QOL scores. It is seen that this negativity is mediated by religiosity, spirituality and personal beliefs, which, in turn, positively impacts QOL.

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NOTES

ORIGIN OF ARTICLE

Extracted from the thesis - Religiosity, spirituality and personal beliefs as a mediator of the indicative of depression on the quality of life of the elderly, presented to the Graduate Program in Health Care, *Universidade Federal do Triangulo Mineiro*, in 2018.

AUTHOR CONTRIBUTION

Study design: Molina NPFM, Tavares DMS, Rodrigues LR.
Data collection: Molina NPFM.
Analysis and interpretation of the data: Molina NPFM, Haas VJ, Rodrigues LR.
Discussion of results: Molina NPFM, Haas VJ, Rodrigues LR.
Writing and / or critical review of content: Molina NPFM, Tavares DMS, Rodrigues LR.
Revision and final approval of the final version: Molina NPFM, Tavares DMS, Haas VJ, Rodrigues LR.

ACKNOWLEDGMENT

To the Coordination for the Improvement of Higher Education Personnel.

FINANCING

Research Support Foundation of the State of Minas Gerais, Process No. APQ-CDS-APQ-02889-2015.

APPROVAL OF RESEARCH ETHICS COMMITTEE

Approved by the Research Ethics Committee of the *Universidade Federal do Triangulo Mineiro*, opinion no.2,295,596 / 2017, Certificate of Presentation for Ethical Appreciation no. 69897617.2.0000.5154.

CONFLICT OF INTERESTS

There is no conflict of interest.

HISTORY

Received: February 07, 2019.
Approved: July 10, 2019.

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