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## ORIGINAL ARTICLE

### QUALITY OF LIFE OF RURAL ELDERLY AND ASSOCIATED FACTORS

#### QUALIDADE DE VIDA DE IDOSOS RURAIS E FATORES ASSOCIADOS

#### CALIDAD DE VIDA DE LOS ADULTOS MAYORES RURALES Y FACTORES ASOCIADOS

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#### ABSTRACT

**Objective:** verifying the socioeconomic and health factors associated with quality of life (QoL) of elderly residents in the countryside. **Method:** cross-sectional, observational study involving 850 elderly residents in the rural area of a municipality of Minas Gerais. There were used structured data collection instruments. Data were analyzed using the SPSS® software from descriptive analysis and multiple linear regression ( $p < 0,05$ ). The project was approved by the Research Ethics Committee, Opinion 1477. **Results:** male gender prevailed, 60-70 years old, married, low income and Schooling, reported good QoL and satisfaction with their health. Negative self-perception of health, more number of diseases, lack of income, use of medications, no mates and drinking were associated with lower QoL scores. **Conclusion:** it is vital that health services identify the aspects that contribute to worsening of self-perception of health and conduct follow-up actions of health conditions. **Descriptors:** Elderly; Quality of Life; Rural Population; Geriatric Nursing.

#### RESUMO

**Objetivo:** verificar os fatores socioeconômicos e de saúde associados à qualidade de vida (QV) de idosos residentes na zona rural. **Método:** estudo transversal e observacional em que participaram 850 idosos residentes na zona rural de um município de Minas Gerais. Foram utilizados instrumentos estruturados para coleta de dados. Os dados foram analisados por meio do *software* SPSS®, a partir de análise descritiva e regressão linear múltipla ( $p < 0,05$ ). O projeto foi aprovado pelo Comitê de Ética em Pesquisa, parecer 1477. **Resultados:** predominou o sexo masculino, 60-70 anos, casados, baixa renda e escolaridade, referiram boa QV e satisfação com sua saúde. Autopercepção negativa da saúde, maior número de doenças, ausência de renda, uso de medicações, ausência de companheiro e etilismo estiveram associados aos menores escores de QV. **Conclusão:** é relevante que os serviços de saúde identifiquem os aspectos que contribuem para piora da autopercepção de saúde bem como realize ações de acompanhamento das condições de saúde. **Descritores:** Idoso; Qualidade de Vida; População Rural; Enfermagem Geriátrica.

#### RESUMEN

**Objetivo:** verificar los factores socio-económicos y de salud asociados con la calidad de vida (QOL) de ancianos en el campo. **Método:** este es un estudio transversal y observacional conducido con 850 ancianos residentes en la zona rural del municipio de Minas Gerais. Se utilizaron instrumentos de recolección de datos estructurados. Los datos fueron analizados utilizando el *software* SPSS®, del análisis descriptivo y de regresión lineal múltiple ( $p < 0,05$ ). El proyecto fue aprobado por el Comité de Ética en la Investigación, Opinión 1477. **Resultados:** predominó el sexo masculino, 60-70 años, casados, de bajos ingresos y escolaridad, informó buena calidad de vida y la satisfacción con su salud. La autopercepción negativa de la salud, más enfermedades, la falta de ingresos, el uso de medicamentos, la ausencia de compañeros y beber se asociaron con las puntuaciones de calidad de vida más bajas. **Conclusión:** es importante que los servicios de salud a identificar los aspectos que contribuyen al empeoramiento de la auto-percepción de salud, bien como llevar a cabo las acciones de seguimiento de las condiciones de salud. **Descriptor:** Ancianos; Calidad de Vida; Población Rural; Enfermería Geriátrica.

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## INTRODUCTION

The elderly population has increased over the years amounting to approximately 21 million people in Brazil. Among these, 83,5% live in urban areas and 16,5% in rural.<sup>1</sup> In the place where this work was conducted, Uberaba-MG, the total population corresponds to 295.988 inhabitants, of which 97,77% live in the urban area and 2,23% in rural.<sup>2</sup> The proportion of seniors in this city (12,09%) is above the national average (10,2%).<sup>3</sup> Among those residing in urban areas, 12,66% are elderly and in rural, 10,96%.<sup>2</sup>

It is noteworthy that the elderly from rural areas face some challenges in relation to those residing in urban zones, such as the lower supply of health resources, culture and leisure. So, use less health services which may reflect the access pattern<sup>4</sup>, and can pass on their quality of life (QOL).

Whereas the aging must be accompanied by QoL, personal satisfaction and happiness<sup>5</sup>, it is necessary to carry out research to enhance understanding about this issue. Thus, this research will adopt the concept of QoL proposed by a group of experts from the World Health Organization (WHO), namely "individual's perception of its position in life in the context of culture and value systems in which we live and in relation to its goals, expectations, standards and concerns"<sup>6:1405</sup>

The scientific literature on this subject has increased in recent decades. However, it is worth noting that elderly people living in rural areas often remain on the margins of both health care as the research, given the difficulties of access. In this sense, there is in Brazil that most research is conducted with the elderly in urban areas.<sup>7</sup> In this context, question what factors impact more on the QoL of rural elderly.

Considering the result QoL, it has to be the health perception may contribute to it because it encourages participation in building political decisions and social.<sup>8</sup> Moreover, the better perception of health among older adults may be associated with lower presence of comorbidities and the use of medications to their control<sup>9</sup>, as well as behavior change decision such as leaving smoking habit and alcohol consumption.

The interaction of these factors can impact in a positive or negative way on QoL, depending on the choices made by the elderly. Added to that the presence of diseases and the use of medications may affect the operation of the senses<sup>10</sup>, that aspect has been evaluated in instruments that

measure QoL in elderly.<sup>11</sup> From this perspective, this research has the objective to understand how these variables are associated with QoL among older people in rural areas. It is intended, in this way; contribute to building knowledge to support the formulation of public policies and actions for improving the QoL of the elderly, according to the specificities of those residing in rural areas.

Thus, this study aims to verifying the socioeconomic and health factors associated with quality of life (QoL) of elderly residents in the countryside.

## METHOD

This research is part of a larger study, family survey, analytical, cross-sectional, observational, called "Health and quality of life of the elderly population of rural Uberaba." The population consisted of 1.297 elderly enrolled in the Family Health Teams (FHT) of rural Uberaba-MG, covering 100% of the population. The Municipal Health Department offered the lists containing the names and addresses of the elderly by FHS, in June 2010.

They established the following inclusion criteria: older people aged 60 and older; residents in the rural municipality of Uberaba-MG; without cognitive decline and who agreed to participate. 447 elderly people were excluded, and 117 (9%) had changed address, 105 (8,1%) showed cognitive decline, 75 (5,8%) refused to participate, 57 (4,4%) were not found after three attempts by the interviewer, 11 (3,8%) had gone to death, three (0,2%) were hospitalized and 79 (6,1%) due to other reasons, such as reside in the city. Thus, the end 850 seniors participated.

Interviews were conducted by 14 interviewers, trained and properly instructed as to how to approach the interviewee, the correct completion of the instrument and on the ethical issues related to research. Data collection took place from June 2010 to March 2011. It counted with the collaboration of the Community Health Agents, which accompanied the interviewers to the home of the elderly.

The interviews were reviewed by field supervisors, who found incomplete issues and inconsistency of responses. When necessary, the interview was returned to the interviewer for it to be done the proper fill.

Before starting the interview there was applied the Mini Mental State Examination (MMSE)<sup>12</sup> to verify the cognitive capacity of the elderly in answering questions. To collect the data related to socio-economic profile and

health of the elderly, it used part of the Brazilian Functional Assessment Questionnaire and Multidimensional (BOMFAQ), adapted to the Brazilian reality<sup>13</sup>.

There was applied also the World Health Organization Quality of Life - BREF (WHOQOL-BREF), validated in Brazil.<sup>14</sup> The WHOQOL-BREF consists of 26 questions, including two referring generally to the QoL and other relate with four domains: physical, psychological, social relationships and environment.<sup>4</sup> It was also used the World Health Organization Quality of Life Assessment for Older Adults (WHOQOL-OLD), specific for assessment of QoL of elderly people, validated in Brazil.<sup>11</sup> The WHOQOL-OLD has 24 items of Likert scale assigned to six facets: sensory abilities; autonomy; past, present and future activities; social participation, death and dying and intimacy.<sup>11</sup>

For the socioeconomic profile there were selected the variables: gender (male, female); age in years (60-70, 70-80 and 80 or over); marital status (never married or lived with a partner; lives with husband/wife or partner, a widow (er); separated / divorced, ignored; schooling in years of education (illiterate, 1-8, 8, 9 or more); individual monthly income in minimum wages (no income, <1, 1, 1-3, 3-5, > 5).

Related to health there were used: perception of the current health (bad/poor, fair, good/ excellent); number of morbidities; regular use of medication (yes, no); hospitalization (yes, no) and number of hospitalizations; smoking habit (yes, no), alcohol use (yes, no). QoL was analyzed for the domains of WHOQOL-BREF and facets of WHOQOL-OLD.

Electronic database was built in Excel®, and the data collected were processed in duplicate. Later, it was transported to the software Statiscal Package for Social Sciences (SPSS), version 17.0, to do the examination.

Each WHOQOL-BREF domain and facet of the WHOQOL-OLD were analyzed separately, with their scores calculated according to the syntax provided by WHO. The score ranges from 0 to 100, with the highest number being the highest QoL.

Descriptive analysis was performed and the bivariate, preliminary analysis using the Student t test and ANOVA F-tests. Nominal variables were recategorized, becoming dichotomous: marital status (with or without partner), education (with or without), income (or without). For numeric variables (number of morbidity and hospitalization) was used Pearson correlation according to data normality. The tests were considered significant when  $p < 0,1$ .

Were included in the multiple linear regression model, with reverse scheduling (backward method), only the variables that met the above criteria ( $p < 0,1$ ). In the multivariate model, significance level ( $\alpha$ ) was 95%.

The project was approved by the Ethics in Human Beings Research Committee of the Federal University of Triangulo Mineiro, opinion nº 1477. Interviewers presented the elderly the research objectives and Informed Consent and Informed. After the consent of the interviewee and signed a term he proceeded to the interview.

## RESULTS

There was a predominance of men (52,8%), aged between 60-70 years old (60,6%), followed by 70-80 years old (30,7%), married (67,3%), with 4-8 years of education (36,7%) and monthly individual income of a minimum wage (48,1%).

Most seniors evaluated the QoL as good (59,4%) and were satisfied with the health (60,2%). The WHOQOL-BREF the highest score was observed in the field of social relations (73,87) and the lowest score in the environment domain (63,31). As for the facets of WHOQOL-OLD, the highest score was related to intimacy (74,27) and the lowest score corresponded to social participation (68,01).

Regarding the factors associated with QoL, initially held the bivariate analysis to determine which variables would meet the established criteria ( $p < 0,1$ ) according to the domains and facets of QoL. The variables that met these criteria are described in Tables 1 and 2.

Table 1. Multivariate analysis of the factors related to QoL, according to the WHOQOL-BREF. Uberaba, 2012.

|                                        | Initial model  |        | Final model    |        |
|----------------------------------------|----------------|--------|----------------|--------|
|                                        | B standardized | p      | B standardized | p      |
| WHOQOL-BREF                            |                |        |                |        |
| Physical                               |                |        |                |        |
| Schooling                              | 0,092          | 0,007  | 0,105          | 0,001  |
| Income                                 | 0,073          | 0,030  | -              | -      |
| Self-perception of health bad/worse    | -0,284         | <0,001 | -0,282         | <0,001 |
| Self-perception of regular health      | -0,295         | <0,001 | -0,290         | <0,001 |
| Use of medication                      | -0,159         | <0,001 | -0,183         | <0,001 |
| Smoking                                | 0,061          | 0,069  | -              | -      |
| Alcoholism                             | 0,105          | 0,002  | 0,116          | 0,001  |
| Age                                    | -0,060         | 0,084  | -              | -      |
| Number of hospitalizations             | -0,167         | <0,001 | -0,169         | <0,001 |
| Psychological                          |                |        |                |        |
| Marital status                         | 0,053          | 0,135  | -              | -      |
| Schooling                              | 0,095          | 0,008  | 0,098          | 0,002  |
| Income                                 | 0,031          | 0,391  | -              | -      |
| Use of medication                      | 0,008          | 0,835  | -              | -      |
| Alcoholism                             | 0,133          | <0,001 | -              | -      |
| Number of morbidities                  | -0,153         | <0,001 | -0,193         | <0,001 |
| Number of hospitalizations             | -0,069         | 0,055  | -              | -      |
| Self-perception of health very bad/bad | -0,15          | <0,001 | -0,170         | <0,001 |
| Self-perception of regular health      | -0,234         | <0,001 | -0,232         | <0,001 |
| Social relationships                   |                |        |                |        |
| Marital status                         | 0,090          | 0,020  | 0,104          | 0,002  |
| Self-perception of health very bad/bad | -0,123         | 0,003  | -              | -      |
| Self-perception of regular health      | -0,117         | 0,005  | -0,143         | <0,001 |
| Use of medication                      | 0,001          | 0,989  | -0,160         | <0,001 |
| Alcoholism                             | 0,057          | 0,147  | -              | -      |
| Age                                    | 0,030          | 0,445  | -              | -      |
| Number of morbidities                  | 0,009          | 0,846  | -              | -      |
| Number of hospitalizations             | 0,047          | 0,222  | -              | -      |
| Environment                            |                |        |                |        |
| Schooling                              | 0,060          | 0,090  | -              | -      |
| Income                                 | 0,057          | 0,112  | -              | -      |
| Self-perception of health very bad/bad | -0,194         | <0,001 | -0,208         | <0,001 |
| Self-perception of regular health      | -0,281         | <0,001 | -0,273         | <0,001 |
| Use of medication                      | 0,060          | 0,125  | -              | -      |
| Alcoholism                             | 0,041          | 0,258  | -              | -      |
| Number of morbidities                  | -0,151         | <0,001 | -0,153         | <0,001 |
| Number of hospitalizations             | -0,065         | 0,074  | -              | -      |

Table 2. Multivariate analysis of the factors related to QoL, according to the WHOQOL-OLD. Uberaba, 2012.

|                                        | Initial model  |        | Final model    |        |
|----------------------------------------|----------------|--------|----------------|--------|
|                                        | B standardized | p      | B standardized | p      |
| WHOQOL-OLD                             |                |        |                |        |
| Operation of the senses                |                |        |                |        |
| Income                                 | 0,060          | 0,079  | -              | -      |
| Self-perception of regular health      | -0,156         | <0,001 | -0,182         | <0,001 |
| Self-perception of health very bad/bad | -0,143         | <0,001 | -0,171         | <0,001 |
| Use of medication                      | -0,039         | 0,293  | -              | -      |
| Alcoholism                             | 0,036          | 0,284  | -              | -      |
| Age                                    | -0,057         | 0,094  | -              | -      |
| Number of morbidities                  | -0,048         | 0,226  | -              | -      |
| Autonomy                               |                |        |                |        |
| Income                                 | 0,172          | <0,001 | 0,181          | <0,001 |
| Self-perception of regular health      | -0,138         | 0,001  | -0,167         | <0,001 |
| Self-perception of health very bad/bad | -0,099         | 0,014  | -0,124         | 0,001  |
| Use of medication                      | -0,028         | 0,483  | -              | -      |
| Alcoholism                             | 0,097          | 0,009  | 0,107          | 0,004  |
| Number of morbidities                  | -0,077         | 0,072  | -              | -      |
| Number of hospitalizations             | -0,079         | 0,035  | -0,092         | 0,014  |
| Past, present and future activities    |                |        |                |        |
| Income                                 | 0,086          | 0,020  | 0,088          | 0,008  |
| Self-perception of regular health      | -0,157         | <0,001 | -0,151         | <0,001 |
| Self-perception of health very bad/bad | -0,153         | <0,001 | -0,160         | <0,001 |
| Use of medication                      | 0,076          | 0,061  | -              | -      |
| Alcoholism                             | 0,105          | 0,005  | -              | -      |
| Number of morbidities                  | -0,135         | 0,002  | -0,113         | 0,002  |
| Number of hospitalizations             | -0,020         | 0,597  | -              | -      |
| Social participation                   |                |        |                |        |

|                                        |        |        |        |        |
|----------------------------------------|--------|--------|--------|--------|
| Schooling                              | 0,065  | 0,074  | -      | -      |
| Income                                 | 0,089  | 0,016  | 0,088  | 0,017  |
| Self-perception of regular health      | -0,128 | 0,001  | -0,129 | 0,001  |
| Self-perception of health very bad/bad | -0,149 | <0,001 | -0,152 | <0,001 |
| Use of medication                      | 0,019  | 0,643  | -      | -      |
| Alcoholism                             | 0,145  | <0,001 | 0,143  | <0,001 |
| Number of morbidities                  | -0,114 | 0,007  | -0,109 | 0,007  |
| Number of hospitalizations             | 0,081  | 0,030  | -0,079 | 0,033  |
| Death and Dyeing                       |        |        |        |        |
| Schooling                              | -0,073 | 0,036  | -0,086 | 0,012  |
| Income                                 | 0,067  | 0,053  | -      | -      |
| Self-perception of regular health      | -0,122 | 0,001  | -0,122 | 0,001  |
| Self-perception of health very bad/bad | -0,105 | 0,004  | -0,107 | 0,003  |
| Use of medication                      | -0,080 | 0,032  | -0,080 | 0,022  |
| Age                                    | 0,050  | 0,160  | -      | -      |
| Number of morbidities                  | -0,002 | 0,966  | -      | -      |
| Intimacy                               |        |        |        |        |
| Marital status                         | 0,203  | <0,001 | 0,205  | <0,001 |
| Self-perception of regular health      | -0,115 | 0,001  | -0,121 | <0,001 |
| Self-perception of health very bad/bad | -0,070 | 0,045  | -0,075 | 0,029  |
| Use of medication                      | -0,036 | 0,293  | -      | -      |
| Alcoholism                             | -0,041 | 0,224  | -      | -      |

In the multivariate analysis, it was observed that the physical domain remained as predictors of lower QoL scores the absence of education (p = 0,001), self-perception of poor health/poor (p <0,001) and regular (p <0,001), medication use (p <0,001), the absence of alcohol consumption (p = 0,001) and the largest number of admissions (p <0,001), Table 1. The predictors that contributed most to the lower QoL scores were regular self-perceived health (B = - 0,290) and poor/bad (B = -0,282), Table 1.

In the psychological domain there were associated with lower QoL scores the absence of education (p = 0,002), self-perception of poor health/poor (p <0,001), regular self-perceived health (p < 0,001) and the largest number of morbidities (p <0,001), Table 1. Regular self-perceived health (B = -0,232) and the largest number of morbidities (B = -0,193) were the predictors that contributed most with the lowest scores in this area, Table 1.

In social relations remained significant predictors of lower QoL scores the absence of companion (p = 0,002), regular self-perceived health (p <0,001) and the use of medication (p <0,001), Table 1. The predictors that contributed most with lower QoL scores were regular self-perceived health (B = -0,160) and medication (B = -0,143), Table 1.

In the environment domain remained as predictors of lower QoL scores the self-perception of poor health/poor (p <0,001), regular self-perceived health (p <0,001), and the highest number of comorbidities (p <0,001), Table 1. The predictors that contributed most with the lowest scores were regular self-perceived health (B = -0,273) and self-perception of poor health/poor (B = - 0,208), Table 1.

In the facet sensory abilities remained as predictors of lower QoL scores the self-

perception of poor health / poor (p <0,001), regular self-perceived health (p <0,001), Table 2. The predictor that contributed with the lowest score was self-perception regular health (B = -0,182), Table 2.

Remained as predictors of lower QoL scores in facet autonomy the absence of income (p <0,001), self-perceived poor health/poor (p = 0,001), regular self-perceived health (p <0,001) and no alcohol consumption (p = 0,004) Table 2. Predictors that most contributed to the lower scores were the absence of income (B = 0,181) and regular self-perceived health (B = -0,167), Table 2.

In the facet past, present and future activities remained as predictors of lower QoL scores the absence of income (p = 0,008), regular self-perceived health (p <0,001), self-perceived poor health/poor (p <0,001) and greater number of comorbidities (p = 0,002), Table 2. Predictors that most contributed to the lower QoL scores were self-perception of poor health/poor (B = -0,160) and regular self-perceived health (B = -0,151), Table 2.

Social participation remained as predictors of lower QoL scores the absence of income (p = 0,017), regular self-perceived health (p = 0,001), self-perception of poor health/poor (p <0,001), the absence of alcohol consumption (p <0,001) and the largest number of comorbidities (p = 0,007), Table 2. Predictors that contributed most with the lowest scores were self-perceived health bad/ bad (B = - 0,152) and no alcohol consumption (B = 0,143) Table 2.

In the facet death and dying remained as predictors of lower QoL scores the absence of education (p = 0,012), regular self-perceived health (p = 0,001), self-perceived poor health/poor (p = 0,003) and use and medication (p = 0,022), Table 2. Predictors that contributed most with the lowest scores

were regular self-perceived health ( $B = -0,122$ ) and self-perception of poor health/poor ( $B = -0,107$ ), Table 2.

Predictors of lower QoL scores in facet intimacy were the lack of a partner ( $p < 0,001$ ), regular self-perceived health ( $p < 0,001$ ), self-perceived health bad/bad ( $p = 0,029$ ), Table 2. Predictors that contributed with the lowest scores were the absence of fellow ( $B = 0,205$ ) and regular self-perceived health ( $B = -0,121$ ), Table 2.

## DISCUSSION

Regarding the predominance of men, differing results were found in a rural community of Rio Grande do Sul, corresponding to 55,9% for women.<sup>15</sup>

Concerning the age group study conducted with elderly people in a rural community of Rio Grande do Sul is consistent with the findings of this survey, in which 55,9% had 60-70 years old, followed by 70-80 (35,3%).<sup>15</sup> Regarding marital status, most married seniors resembles the survey of elderly in rural Viçosa-MG (69,2%).<sup>16</sup>

Regarding the level of education there were observed divergent results obtained in the study in Carlos Barbosa-RS, where 72,4% of the elderly living in rural areas had up to four years of education.<sup>17</sup>

The predominance of income of a minimum wage converges with the findings of Viçosa-MG elderly (72,3%).<sup>16</sup> It is noteworthy that the income of the elderly despite ever supplement is considered an indispensable factor for the livelihood of rural families. Moreover, it is often considered as an obligation, as an acknowledgement for being held by the family in aging. On the other hand, may pose to the elderly the possibility of achieving freedom and autonomy, since when they retire can decrease or cease work activities and dedicate themselves to other projects in life.<sup>16</sup>

Regarding the QoL measured by WHOQOL-BREF, the highest score in the field social relationships may be related to the existence of a larger identity among people in rural areas, favoring the maintenance of emotional bonds, the greater contact and neighborhood network and strengthening social interaction, aspects evaluated in this domain.<sup>7,14</sup>

Related to lower scores in the environment domain, similar results were found in a study of elderly in the city of Teixeira-MG.<sup>18</sup> Health professionals should be aware of environmental issues such as limited mobility and safety of older people living in rural areas. Whereas this domain evaluates, among other factors, health and social care.<sup>14</sup> It is

necessary to organize the provision of health services to the rural elderly population in order to meet its territorial specificities.

The WHOQOL-OLD, the highest score obtained on the facet intimacy can be related, though not investigated the prevalence of married elderly. The presence of the companion could represent improved personal relationships, favoring their QoL.

Regarding the lowest score in social participation, it is emphasized that the lower participation in daily activities has been observed between rural elderly regions.<sup>19</sup> This fact may be related to the distance and difficulties of access to referral centers for socializing. It is necessary to look to the community, alternative activities that can increase the social participation of the elderly.

In that matches the factors associated with lower QoL scores, the worst self-rated health contributing to the lowest scores in the physical domain may be related to comorbidities and medication use among the elderly of this study, considering that this domain evaluates, among other factors, dependence on medication and health care.<sup>14</sup> This finding highlights the need for actions to improve the self-esteem of the elderly, and monitoring of their health conditions. Access to health care needs to be expanded and can be made possible through home visits and regular attendance at strategic locations in the community.

In the psychological domain, regular self-perceived health and greater number of morbidities contributing to lower QoL scores are consistent with study of elderly in the city of Botucatu, which showed that emotional status of the elderly was related to their health satisfaction.<sup>20</sup> It is inferred that the negative perception about health may contribute to the advent of negative feelings, constituting a complicating factor for facing the health events. It is assumed that the sharing feelings, anxieties and experiences can rise confront these issues.

Referring to the social relationships domain, the self-perception of regular health and medication use as predictors that contributed most to the lower QoL scores, suggests that interpersonal relationships established by elderly<sup>14</sup>, there are vulnerable by their condition and health perception. In this way, the social and family support needs to be strengthened, understanding, even the relations between the members.

In the environment domain, the relationship with the self-perception of

regular health and bad/ poor may be related, though not investigated, the financial resources of the elderly, which could influence access to health services considering the difficulties in the countryside. Thus, it is relevant to identify the difficulties related to the environment that are favoring the worst self-perception of health to establish adaptive measures to minimize these factors.

In the facet functioning of the senses, the scientific literature describes that the operation of sensory may be compromised by the presence of diseases, medication use and the process itself and aging.<sup>10</sup> In this sense, it is important to identify the sensory losses and realize the establishment of corrective measures.

Concerning the facet autonomy in relation to the absence of income and regular self-perceived health, it is emphasized that considering the existing environmental problems in rural areas, coupled with the low income of the elderly, it appears that the limited financial resources may be hindering the freedom of decision, by following, diminishes self-esteem and negatively influences the perception of health when compromised.

In the facet past activities, present and future stood out the self-perception of poor/bad and regular health as predictors of lower QoL scores. This facet measures the satisfaction with what has been achieved, the opportunity to achieve other things in life and what you can expect in the future.<sup>14</sup> Thus, the bad perception of health, the elderly, is related to dissatisfaction with the gains of context during of life and what is expected of the future. A little prospect of future acquisitions may commit more health and QoL if the elderly remain passive by everyday situations.

Regarding the facet social participation, relates to the participation in activities in the community.<sup>11</sup> Thus, it is inferred that negative self-perception of health influence in social participation, possibly the worst health conditions. One has to consider also that in rural areas the opportunities for participation in community activities are scarce. The lack of use of alcohol as a factor that impacts negatively on QoL may be due to the paradox of reverse causality, ie the elderly who have alcohol habit tend to seek spaces for socialization, encouraging the participation in community activities.

Noteworthy is also that in the facet death and dying, the worst self-rated health is contributing to enlarge the fear of death, making the elderly feel less quiet on this

issue. One can seek support from religious institutions that are compatible with the old beliefs, so it has the opportunity to reflect on this and overcome the fear of facing death.

Regarding the privacy aspect is emphasized that involves the ability to establish personal and intimate relationships.<sup>11</sup> The absence of fellow has committed the QoL of the elderly. On the other hand, survey conducted in Botucatu found that the presence of personal relationships contributed to greater satisfaction with health.<sup>20</sup> In this investigation the results demonstrate the inverse relationship, in which the negative perception of health is associated with the worst related QoL the establishment of social relations.

It is noteworthy that the FHS is a salutary role in the practice of health care to match the user's gateway to the service center and because of the possibility of longitudinal follow-up and bond with the team. In this context, the use of instruments that measure the QoL of the population by health professionals can function as an indicator of the committed life dimensions of the elderly and serve<sup>21</sup> as input for the development of specific health actions. It is believed that these actions caution should consider the reality of the individual, listening to him in its yearnings and doubts provided the sharing of knowledge and practices.<sup>22</sup> In this context, we emphasize the importance of effective communication in professional-old relationship.<sup>23</sup>

## CONCLUSION

The study found that in the investigated rural zone a predominance of men, aged between 60-70 years old. Most had a companion and had low schooling and income. In general, older people assessed QoL as good and were satisfied with their health. In the analysis of QoL showed lower scores in WHOQOL-BREF for the environment domain and WHOQOL-OLD, the facet social participation.

The negative self-perception of health, as many diseases, lack of income, use of medications, lack of mate and the lack of drinking were associated with lower QoL scores among the elderly living in rural areas. It is noteworthy that the negative self-perception of health was the factor most attended in the fields and facets that make up the measurement of QoL. New studies deserve to be conducted in other locations to check the impact of this variable in the QoL. It is noteworthy that the cross-cutting, limitation of this study does not establish causal

relations between the variables investigated. However, this research expanded the knowledge about the socioeconomic profile and health status of the elderly in the countryside as well as the factors that may impact the QoL of this population. Thus, these results can contribute to the development of health actions directed to this population.

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