Quality of life of elderly. Comparison between urban and rural areas

Darlene Mara dos Santos Tavares¹ Alisson Fernandes Bolina² Flavia Aparecida Dias³ Pollyana Cristina dos Santos Ferreira⁴ Vanderlei José Haas⁵

Quality of life of elderly. Comparison between urban and rural areas

Objective. Comparing the scores of quality of life according to place of residence (urban and rural areas). Methods. A crosssectional study involving 2142 elderly in urban area and other 850 in rural area of the municipality of Uberaba (Minas Gerais, Brazil). Instruments used: Olders Americans Resources and Services, World Health Organization Quality of Life - BREF (WHOQOL-BREF) and World Health Organization Quality of Life Assessment for Older Adults (WHOQOL-OLD). Results. We found that in urban area predominated women and men in rural areas. It was common in two areas: 60F70 years old, married marital status, schooling of 4 to 8 years of study and the income of a minimum wage. The elderly residing in the urban area with their children and in rural areas did so with the spouse. In the evaluation of the quality of life, rural elders presented scores significantly higher than the urban area in the domains of physical, psychological, and social relations in the WHOQOL-BREF: and in the facets of autonomy, past, present and future activities, social participation and intimacy of the WHOQOL-OLD. For the latter instrument facets sensory ability and of death and dying the elderly's urban area had higher scores than the rural area. **Conclusion.** The elders of the urban area showed a greater involvement of the quality of life than the residents in the rural area. Nurses who work in primary care should address health strategies according to the specific needs of the urban and rural areas.

Key words: quality of life; health of the elderly; rural health; urban health.

Calidad de vida de los ancianos. Comparación entre las áreas urbana y rural

Objetivo. Comparar los puntajes de dos instrumentos que evalúan la calidad de vida en ancianos de las áreas urbana y rural. **Metodología.** Estudio de corte transversal en el que participaron 2 142 ancianos de zona urbana y otros 850 de zona rural del municipio de Uberaba (Mato Grosso, Brasil). Se utilizaron los instrumentos: *Olders Americans Resoucers and Services, World*

- RN, PhD. Professor, Federal University of Triangulo Mineiro (UFTM), Uberaba, Minas Gerais, Brazil. email: darlenetavares@enfermagem.uftm.edu.br
- 2 RN, PhD candidate. University of São Paulo at Ribeirão Preto College of Nursing, São Paulo, São Paulo, Brazil. email: alissonbolina@yahoo.com.br
- 3 RN, PhD candidate. UFTM, Brazil. email: flaviadias@yahoo.com.br
- 4 RN, PhD candidate. UFTM, Brazil. email: pollycris21@bol.com.br
- 5 Physicist, PhD, Professor, UFTM, Brazil. email: vjhaas@uol.com.br

Subventions: Fundação de Amparo à Pesquisa do Estado de Minas Gerais (FAPEMIG) e Conselho Nacional de Pesquisa e Desenvolvimento Tecnológico (CNPq).

Conflicts of interest: none.

How to cite this article: Tavares DMS, Bolina AF, Dias FA, Ferreira PCS, Haas VJ. Quality of life of elderly. Comparison between urban and rural areas. Invest Educ Enferm. 2014; 32(3): 401-413.

Health Organization Quality of Life – BREF (WHOQOL-BREF) y World Health Organization Quality of Life Assessment for Older Adults (WHOQOL-OLD). **Resultados.** Se presentó un predominio de mujeres en el área urbana y de hombres en la rural. Fue común en las dos áreas: el estado civil casado, la escolaridad de 4 a 8 años, y la renta individual mensual de un salario mínimo. En el área urbana, los ancianos residían con sus hijos, y en la rural con el cónyuge. En la evaluación de la calidad de vida, los ancianos de esta última presentaron puntajes significativamente superiores a los del área urbana en los dominios físico, psicológico y de relaciones sociales en el WHOQOL-BREF; y en autonomía, actividades pasadas, presentes y futuras, participación social e intimidad del WHOQOL-OLD. Para este último instrumento, los ancianos del área urbana tuvieron mayores puntajes que los del área urbana presentaron una mayor afectación de la calidad de vida que los residentes en el área rural. Los enfermeros que laboran en atención primaria deben direccionar las estrategias de salud de acuerdo con las especificidades de las áreas urbana y rural.

Palabras clave: calidad de vida; salud del anciano; salud rural; salud urbana.

Qualidade de vida dos anciãos. Comparação entre as áreas urbana e rural

Objetivo. Comparar as pontuações de dois instrumentos que avaliam a qualidade de vida em anciãos das áreas urbana e rural. Metodologia. Estudo de corte transversal no que participaram 2 142 anciãos de zona urbana e outros 850 de zona rural do município de Uberaba (Mato Grosso, Brasil). Foram utilizados os instrumentos: Olders Americans Resoucers and Services, World Health Organization Quality of Life – BREF (WHOQOL-BREF) e World Health Organization Quality of Life Assessment for Older Adults (WHOQOL-OLD). Resultados. Encontrou-se que predominaram as mulheres na área urbana e os homens na rural. Foi comum nas duas áreas: a idade de 60-70 anos, o estado civil casado, a escolaridade de 4 a 8 anos de estudo e a renda individual mensal de um salário mínimo. Os anciãos residiam na área urbana com seus filhos e na rural o faziam com o côniuge. Na avaliação da gualidade de vida, os anciãos da área rural apresentaram pontuações significativamente superiores às da área urbana nos domínios físico, psicológico e de relações sociais no WHOQOL-BREF; e em autonomia, atividades passadas, presentes e futuras, participação social e intimidade do WHOQOL-OLD. Para este último instrumento os domínios funcionamento dos sentidos e de morte e morrer os anciãos da área urbana tiveram maiores pontuações do que os da área rural. **Conclusão**. Os anciãos da área urbana apresentaram uma maior afetação da qualidade de vida do que os residentes na área rural. Os enfermeiros que laboram em atendimento primário devem direcionar as estratégias de saúde de acordo com as especificidades das áreas urbana e rural.

Palavras chave: qualidade de vida; saúde do idoso; saúde da população rural; saúde da população urbana.

Introduction _

Aging is an individual process that happens in a peculiar way to each individual. This is due to different factors that influence this aspect of the course of life, such as: physiological, social, psychological, economic, environmental and cultural factors; may also affect the quality of life.¹ The quality of life has been conceptualized in so many approaches, being the subject of considerable research in the health field. For the World Health Organization, the quality of life is considered by subjectivity, multidimensionality and positive and negative elements. It is defined as the "individual's perception of their position in life in the context of culture and value systems in which they live and in relation to their goals, expectations, standards and concerns".²

The scientific literature has shown that environmental factors. socioeconomic and demographic characteristics, lifestyle, among others, may affect the quality of life of the elderly.³ Given these findings, it is possible that older adults exhibit differences related quality of life according to place of residence: however, the influence of the urban or rural environment in this regard is still not well understood in the scientific community.⁴ Thus, the question is: what is the relationship between place of residence and the quality of life of seniors? Survey in Concordia-Santa Catarina noted that the social and health domains of elderly men from rural areas obtained more satisfactory results compared to those living in urban.⁵ Another research conducted in India found that the elderly resident in urban community showed significantly lower scores in physical and psychological domains than those living in rural area. However, the scores of social and environmental relations those living in rural areas had significantly lower mean compared to the urban area. This result was justified due to differences between localities in terms of sociodemographic characteristics, lifestyle, and financial resources among others.³

Unlike the present investigation, these studies did not apply control for potential confounding variables.^{3,5} Thus. considering that the sociodemographic factors can interfere with quality of life,⁵ it is necessary that there are studies aimed at understanding this aspect in different localities. Reinforcing this need, it is known that 16.5% of the elderly population still resides in rural areas;⁶ however, the Brazilian scientific literature has neglected publications in this area.7 Thus, we believe that research on the subject contributes to the construction of knowledge about the aspects of quality of life for seniors who need health interventions in different contexts. This knowledge may provide subsidies for nursing professionals in primary care, to target health strategies according to the specificities of the urban and rural areas.

In this perspective, this study aimed to describe the characteristics of elderly residents in urban and rural areas according to socioeconomic and demographic variables; and comparing the scores of quality of life regarding the place of residence, adjusted for gender and age.

Methodology ____

This research is a part of two wider studies of household survey type, observational and crosssectional conducted in urban areas in 2008, and rural in 2011, of the city of Uberaba-Minas Gerais by the Research Group on Public Health. Federal University of Triangulo Mineiro. In urban areas the population sample selected in previous research was used and calculated considering 95% confidence interval, 80% power of the test. a precision of 4.0% for the interval estimates and an estimated prevalence of 0.5 for the proportions of interest. Inclusion criteria were: 60 years or more: live in the urban area of Uberaba-MG: agreing to participate and not show cognitive decline. Starting from a population sample of 2683 seniors, there were excluded 541 seniors, of which 201 were not found after three visits, 174 refused, 142 died and 25 were hospitalized. Thus, the sample of urban area was of 2142 elderly.

To compose the population of the rural area was obtained in June 2010 a listing of elderly enrolled by Family Health Strategy (FHS), which is distributed in three health districts and offer 100% coverage. Amounted in 1297 elderly; being the inclusion criteria: age 60 or older; live in the rural area of the municipality; agree to participate and not show cognitive decline. Of the elderly, 447 were excluded; of which 117 had changed their address, 105 had cognitive decline, 75 refused to participate, 57 were not found after three attempts of the interviewer, 11 had already died, three were hospitalized and 79 due to other reasons, such as residing in the city. Thus, the final population consisted of 850.

Data collection was conducted in the homes of elderly, by trained interviewers, and that told

in the countryside with the collaboration of Community Health for the location of residence. Regular meetings were held with field supervisors and researchers.

Prior to the beginning of the interview was conducted the cognitive assessment through the instrument Mini Mental State Examination (MMSE). For the elderly in the urban area was used the reduced version validated by researchers of Project SABE,⁸ and for seniors of the countryside, translated and validated instrument in Brazil.9 Both instruments consider the education level of the respondent to establishing the cutoff point. This change in the instrument is justified because of the collection having occurred at different moments, and realized that in Brazil⁹ translated and valid instrument would be more appropriate for the target population of this research. It was used the Olders Americans Resoucers and Services (OARS) guestionnaire, developed by Duke University (1978), and adapted to the Brazilian reality,10 to characterize the socioeconomic and demographic data. To measure the quality of life of older were used the generic instrument World Health Organization Quality of Life - BREF (WHOQOL-BREF) and the specific to the elderly population World Health Organization Quality of Life Assessment for Older Adults (WHOQOL-OLD): both validated in Brazil.^{11,12}

The WHOQOL-BREF, a generic instrument, consisting of four domains: physical (pain and discomfort, energy and fatigue, sleep and rest, activities of daily living, dependence on medication or treatments and ability to work); psychological (positive feelings, thinking. learning, memory and concentration, self-esteem, body image and appearance, negative feelings, spirituality, religiousness and personal beliefs); social relationships (personal relationships, social support and sexual activity); environment (physical security and safety in the home environment, financial resources, health care and social; availability and quality; opportunity to acquire new information and skills, participation and opportunity for recreation / leisure: physical environment: pollution, noise, traffic, climate and

transportation).¹¹ The WHOQOL-OLD is a specific module for the elderly that has six facets: sensory abilities (sensory functioning and assesses the impact of the loss of sensory abilities on quality of life); autonomy (refers to independence in old age, describes the extent to which it is able to live independently and make their own decisions); past, present and future activities (describes satisfaction over achievements in life and the things that longs); social involvement (participation in daily activities, especially in the community), death and dying (worries, concerns and fears about death and dying) and intimacy (assesses the ability to have personal and intimate relationships).¹²

The variables investigated were: gender (male, female); age in years (60-69, 70-79 and 80 or older); marital status (never married or lived with a partner(a); married; widowed; separated or divorced); schooling, in years of schooling (no schooling, 1-4, 5-7, 8, 9 and more); individual monthly income in minimum wage (no income, <1, 1, 2-3, 4-5, > 5; living arrangement (living alone, with professional caregiver, only with a spouse, with another of his generation, with children / with or without spouse, with grandchildren / with or without a partner, other arrangements); physical, psychological, social relationships and environment, and; facets functioning of the senses: autonomy: past. present and future activities: social participation: death and dying; intimacy. The application of the instruments in the urban area occurred in the period from August to December 2008 and in rural June 2010 to March 2011.

The data collected in each study, i.e. urban and rural areas were processed on a microcomputer, for two people, double entry in Excel program. Afterwards, we proceeded to fix inconsistent data when necessary, by consulting the original interview. Data were imported in the Statistical Package for the Social Sciences (SPSS) software version 17.0. In analyzing the quality of life, the interpretation was based on the syntax as proposed by the WHOQOL group, with the scores ranging from 0-100. The higher the score the better perceived quality of life. For the first objective, descriptive statistical analysis by distribution of absolute and percentage frequencies was performed. For the second objective, we used bivariate analysis using the Student t test. The adjustment for age and gender was performed by multiple linear regression. In this multivariate model all domains and facets of quality of life were inserted. The significance level (α) was 1 % and the tests considered significant when $p \leq \alpha$. Both projects were approved by the Ethics Committee on Human Research of the Federal University of Triangulo Mineiro, protocols No. 897 and No. 1477. Seniors signed the consent form after the relevant clarifications. Only after the consent of the interviewee, the interview was conducted.

Results _

Table 1 below shows the socioeconomic and demographic characteristics of the study population according to the place of residence. In the present study, most of the urban elderly were female; while in rural, male. Both groups were concentrated in the age group 60F70 years old; however, a higher percentage of elderly aged 80 and over in urban areas was higher than rural. Related to marital status, married individuals predominated in urban and rural areas: nevertheless, the percentage of urban elderly widowed was higher than that found in rural areas. Most elderly had 4H8 years of study and individual monthly income of a minimum wage in both groups. Regarding the living arrangement, in the urban area the highest percentage lives with its children, while in rural resided only with the spouse. In the self-assessment of quality of life, most seniors considered as good, both among the elderly in the urban area (64.8%) as among those from rural areas (59.5%). Related to satisfaction with health, 64.9% of urban elderly and 60.2% of rural reported being satisfied.

In Table 2, below, is a comparison of scores of quality of life of elderly studied according to place of residence and the multiple linear regression analysis for adjusting the age and the gender variables. Concerning the quality of life for the WHOQOL-BREF, it became evident higher scores in social relationships domain in both groups. The lowest scores were observed in the physical domain to the elderly in the urban environment, and in the domain environment for those living in rural areas.

Comparing the domains of quality of life it was observed that the rural elderly had scores significantly higher than those in urban physical $(\beta = 0.23, p < 0.001)$, psychological ($\beta = 0.10$, p < 0.001) and social relations ($\beta = 1.65, p$ <0.001), even after adjustment. Thus, it was found that rural elderly had scores of quality of life higher than urban elderly in three of the four domains of the WHOQOL-BREF. Regarding quality of life measured by WHOQOL-OLD it was observed higher scores in the functioning of senses facet in the urban elderly and the intimacy facet in the rural elderly. It concentrated in the lowest scores for the group of urban area on the autonomy facet, while in rural area concentrated in social participation. The rural elderly had higher scores than urban autonomy ($\beta = 0.22$, p < 0.001); past, present and future activities ($\beta = 0.16$, p <0.001); social participation facet ($\beta = 0.10$, p < 0.001) and intimacy ($\beta = 0.15, p < 0.001$) and remained related even after controlling.

However, the facets of the sensory abilities (β = -0.18, *p* <0.001) and death and dying (β = -0.06, *p* <0.001) urban elderly had statistically higher scores to residents in rural areas, even after adjusting for age and sex. It was verified that the elderly residents in rural area had assessment of quality of life scores higher than urban area in four of the six domains of the WHOQOL-OLD.

		Urban		Rural	
Variables		n	%	n	%
Gender	Female	1338	62.5	401	47.2
	Male	804	37.5	449	52.8
Age	60-69	994	46.4	515	60.6
(in years)	70-80	822	38.4	261	30.7
	80 and over	326	15.2	74	8.7
Marital status	Never married or lived with a partner	110	5.1	61	7.2
	Married	1046	48.9	572	67.3
	Widowed	796	37.2	161	18.9
	Separated or divorced	188	8.8	56	6.6
Schooling	No schooling	426	20.1	209	24.6
(in years)	1-3	683	32.2	256	30.2
	4-7	705	33.2	312	36.7
	8	95	4.5	29	3.4
	9 and more	215	10.1	43	5.1
Individual income	No income	224	10.5	86	10.1
(minimum wage)*	< 1	24	1.1	31	3.7
	1	1179	55.4	409	48.2
	1-3	577	27.1	259	30.5
	4-5	84	3.9	46	5.4
	> 5	40	1.9	18	2.1
Living arrangement	Alone	227	12.9	136	16.0
	Only with caregiver	21	1.0	-	-
	Professional				
	Only with spouse	486	22.7	401	47.2
	With others of its generation	71	3.3	79	9.3
	With children/with or without spouse	714	33.4	176	20.7
	With grandchildren/with or without spouse	103	4.8	36	4.2
_	Other arrangements	467	21.8	22	2.6

Table 1. Distribution of the frequency of demographic and economic variables of the elderly according to place of residence. Uberaba, Minas Gerais, 2008 and 2011

* Minimum wage in the collection period: urban zone (R\$ 415) and countryside (R\$ 545)¹³

-						
Quality of life	Urban area	Rural area	t	р	β	p*
WHOQOL-BREF						
Physical	59.59	69.22	15.08	< 0.001	0.23	< 0.001
Psychological	66.70	70.14	6.55	< 0.001	0.10	< 0.001
Social relationship	69.07	73.87	9.76	< 0.001	0.17	0.001
Environment	62.74	63.33	1.21	0.226	0.02	0.173
WHOQOL-OLD						
Sensory abilities	80.26	72.59	8.69	< 0.001	-0.18	< 0.001
Autonomy	60.62	68.51	11.22	< 0.001	0.22	< 0.001
Activities past/present/future	65.85	70.18	8.38	< 0.001	0.16	< 0.001
Social participation	64.75	68.01	6.05	< 0.001	0.10	< 0.001
Death and dying	75.87	72.94	2.94	< 0.001	-0.06	< 0.001
Intimacy	68.72	74.26	8.23	< 0.001	0.15	< 0.001

 Table 2. Distribution of quality-of-life scores of WHOQOL-BREF and

 WHOQOL-OLD seniors, according to urban and rural areas and analysis adjusted for control variables, gender and age. Uberaba, Minas Gerais, 2008 and 2011

* adjusted for gender and age.

Discussion .

The prevalence of female in the urban area and male in the countryside differs from survey developed with the elderly in Rio Grande do Sul, which found higher percentage of women in both locations, urban (65.2%) and rural (64.5%).¹⁴ However, research confirms that observed significant masculinization of the rural elderly population in all districts of the Central Region of Rio Grande do Sul.¹⁵ It is noteworthy that according to the Brazilian Institute of Geography and Statistics (IBGE) in the male dominated environments rural with approximately 107 men to 100 women.¹⁶ This fact may be related to increased migration of women from rural to urban centers. This trend relates to the pursuit of service and conditions of the urban environment provides, as well as the opportunity to live as children / grandchildren or relatives. It is emphasized that the typical rural environment provides more targeted activities men can justify their prevalence in this locality.¹⁶

Regarding age, the findings converge with Brazilian demographics data which prevailing 60-69 years old (55,7%).¹⁶ It is highlighted that the highest percentage of older seniors residing in the urban environment can be elucidated by the difficulty of adapting these individuals in the field due to the growing fragility in this age group.^{17,18} Thus, these individuals tend to migrate to cities in an attempt to facilitate access to public health services and / or feeling of security provided by the company of the children have already migrated to this medium.¹⁷ The higher prevalence of elderly married was also demonstrated in the survey conducted in southern Brazil, where 68.1% of urban and 75.5% rural were married or lived with a partner.¹⁴ However, the higher percentage of widowers in the urban environment is possibly associated with the predominance of the female sex in this environment, since it is known that women have a higher life expectancy than males,⁶ increasing chances of widowhood.

Related to education, the results of this investigation corroborate in part with census found that a higher percentage of elderly Brazilians with four to eight years of education (38.0%), followed by those uneducated and less than one year of schooling (22.1%).⁶ In contrast, survey developed in Rio Grande do Sul noted that most of the elderly in both groups had up to four years of study, urban areas (68.3%) and rural (76.4%).¹⁴ the individual monthly income of a minimum wage prevalent in both media was consistent with data from the Brazilian population that found a higher percentage of elderly (43.2%) with monthly income of a minimum wage.⁶ Another study conducted in Sergipe also identified income of a minimum wage among the majority of elderly in both areas, urban (73.1%) and rural (75.4%).17

Consistent with the results of this study in relation to the living arrangement of urban elderly, census data indicate that 43.2% of the elderly population lives with children and/or others.⁶ However, the highest percentage of elderly living only with their spouse in the rural areas may be associated with migration of adults to the cities in search of job opportunities and living conditions more satisfactory.¹⁷ It is necessary that the nurse, as a member of the health team of primary care, make the diagnosis of sociodemographic indicators economic and the elderly to contribute in the implementation of health actions based on the real needs of each context. Thus, it is emphasized that nurses during their training process, is encouraged to recognize the specificities of each population, considering the differences related to the environment in which they live in order to better target health actions.

Regarding quality of life, the positive evaluation by most older people refers to the fact that, possibly, the perception of quality of life, which is subjective, is more related to personal issues than other factors, such as environment or place where lies.⁷ As for the self-assessment of satisfaction with health, the findings of this research are consistent with research conducted with older urban area in São Paulo, where the highest percentage reported being satisfied with their health (42.1%).¹⁹ Moreover, research conducted with elderly people in rural areas found that the highest percentage reported as fair (46.7%);¹⁸ however this research was developed with octogenarians and may explain the difference in the outcome of this investigation.

The self-assessment of the elderly about their health may indicate factors that are affecting their health and quality of life. Thus, in addition to biological aspects, it is suggested that nursing acts in the psychological and social components considering that these can also impact the daily lives of the elderly. It is noteworthy that although the self-assessment of this study is positive, the nurse should be alert to the socioeconomic characteristics of these elderly people, considering their possible interference in the health-disease process in order to program the actions directed to their specifications. Among rural elderly should be alert to men's health by optimizing the support of the spouse in order to maximize their health. But among those residing in the urban area, should be addressed women considering to the age group, due to their possible relationship with a greater unmber of comorbidities.

In that matches the WHOQOL-BREF, the higher scores in social relations in urban and rural areas corroborate study in João Pessoa-PB among the elderly.²⁰ It is noteworthy that this domain evaluates the relationships and social support, and sexual activity;¹¹ So possibly these aspects remain preserved among the elderly in the various locations. The lowest score in the physical domain for the elderly and the urban environment for those residents in the rural area was similar to that found in a study conducted with elderly João Pessoa-PB.²⁰

Comparing the groups, WHOQOL-BREF, the highest scores among rural elderly refers the need for reflection on factors that have contributed to this result. In the physical domain this fact may be related to the maintenance of industrial activities in the field even at older ages, which contributes the most satisfactory physical condition. Moreover, it is likely that those without physical condition to remain in the field migrate to the cities, it is known that in rural areas the distance of health centers coupled with the lack of transportation may hinder access to services health.²¹ In addition, the proportion of older women and elder elderly in urban area were higher than rural, and may be related to the higher number of comorbidities and health complications; thus favoring the pain, discomfort, dependence on medication or treatments and fatigue hampering the activities of daily living, items assessed on their domain.¹¹ survey among urban elderly in India suggests that the presence of comorbidities and complications is a factor important to be considered during the evaluation of the quality of life.²² This sense, it is relevant that the nurse periodically assess the elderly, considering the locality in which they live, in order to identify changes related to physical conditions. The early identification of health problems can contribute to specific interventions for health promotion, disease prevention, diagnosis and treatment, and promote the maintenance of quality of life. However, it is worth noting that in the urban area, the FHS does not have 100% coverage, a factor that may have influenced this result.

Referring to the psychological domain, research conducted in India also noted that elderly people living in rural areas had higher scores compared to urban (p = 0.01).³ A study conducted in Porto Alegre-RS found that seniors who scored higher on the physical domain scores obtained higher on the psychological.²³ Thus, this may be related to higher scores for psychological dominance among rural elderly, since they also had higher scores in the physical domain. It is assumed that higher scores in the physical domain, represented by a better physical health condition, can impact the psychological domain, by decreasing concerns about the treatment of diseases, for example.²³ In this context, it is noted that nursing can contribute through research on the feelings and beliefs of urban elderly through nursing consultation or home visit.

The higher scores in social relations among rural elderly compared to urban areas is consistent

with the study conducted in a city in Rio Grande do Sul (p < 0.001).¹⁴ Another study among older adults in India also noted low score in this area.²² It is possible that the link between elderly living in rural communities to be established as a lasting relationship between neighbors and relatives. Nevertheless, in the urban area may be a greater distance of bonding, favoring social isolation.²⁰ Moreover, the highest percentage of married elderly in rural areas may have contributed to this result, since this area also assesses personal relationships and sexual activity.¹¹ Thus, it is suggested that it investigated the quality of the support network of the elderly in urban area considering that most reside together. Research conducted in Vietnam noted that elderly people living in urban areas want to live near their children, but not necessarily together. This fact relates to tensions between independent living and family influence in your life.24

The sensory abilities facet assesses the functioning of the senses and the impact of the loss of sensorial skills.¹² Assuming that the elderly residing in urban areas have better access to health services, it is inferred that it favors identification and intervention earlier problems related to sensory abilities compared to those who reside in rural areas. Research conducted in Brazil found that rates of use of health services were not consistent with the real needs of the elderly in rural areas and the health care the patient was inappropriate. It there was also higher proportion of elderly in the urban area who used health services in relation to the rural.²¹ Added to this area, another study in Brazil found inefficient identification and intervention of health services for problems related to hearing and vision elderly residents in the rural area.¹⁸ Thus, these factors are likely influencing the lower scores on the sensory abilities facet among those living in the rural environment. Thus, it reinforces the need for health services, represented by the active FHS these locations, seeking to provide overall assessment of the elderly, seeking to identify sensory changes present in order to early intervention, minimizing complications arising from this situation.

The greatest scores of the elderly in the rural autonomy facet may have been influenced, among other factors, income, since this facet assesses the ability of the elderly to live independently and make their own decisions.¹² In both groups the highest percentage receives a minimum wage, according to the IBGE, Brazil, this income usually comes from retirement.⁶ But the field retirement presents a different denotation of the urban area. Many of the elderly continues to work even after they have retired, remaining asset.²⁵ In the present study, we observed that there was a higher percentage of rural seniors who received more than the minimum wage, which may mean that maintain work activities even after retirement. Moreover, the rural retirement, as additional rent, may favor greater autonomy, peace and freedom to the elderly.²⁶

Moreover, the highest percentage of elderly residing with children in urban areas may have favored the lowest scores on this facet. It is possible that children may influence the decisionmaking capacity of the elderly when they reside in the same home environment, which might be remarkable when there is impairment of physical condition, as occurred with the urban elderly. The health team should seek to discuss with family members and the elderly about the importance of maintaining autonomy, even when in the presence of constraints imposed by the natural aging process or by illness. The nurse can be a facilitator of this process, while conducting home visits and consultations nursing.

The facet relating to past, present and future activities can be negatively impacted when there is a commitment to family dynamics, especially when seniors are not satisfied with the recognition of the family, about what they have achieved in life and with the possibility of future achievements.²⁷ In this study, it was observed during data collection which there was in the countryside a close bond between the elderly and their families, and may explain the higher scores of rural elderly in relation to those of the urban environment.

The social participation facet evaluates, among other aspects, the satisfaction with the level

of activity and how the elderly use the time.¹² Thus, possibly, the lowest scores of the urban elderly are related to lack of occupancy of these individuals. Unlike in rural work and productivity are valued by subjects, even at older ages; fact observed during data collection. This facet also assesses satisfaction with opportunities to participate in activities in the community.¹² In urban environment a distance between neighbors and decreased emotional bonds between people can occur and may result in the isolation social.²⁰ However, in rural relations between neighbors and close people tend to stay in a lasting way. In addition, the elderly tend to participate more regularly in activities in the community, as in typical and religious festivals. This fact may have contributed to the higher scores in rural compared to urban areas.

Regarding facet death and dying, the highest scores among those who lived in the urban area denotes the greatest tranquility of the elderly living in the city with regard to aspects related to death. Nevertheless, it is possible that in the field the distance from urban centers, health care and family can bring greater insecurity and fear about the factors involving death. It is noteworthy that the acceptance of the finitude of life can lead to inner peace, improving the quality of life for years to be lived.²⁸ Thus, the approaching end of life should be an issue to be discussed by health professionals with the elderly, in order to increase the emotional support at this stage of life.

In the intimacy facet scores higher in rural compared to urban may have related to the fact that in rural areas a tendency to preserve the interpersonal relationships, mainly related to the ties of kinship.²⁵ Moreover, the aging process can be accompanied by a reduction in social contacts, resulting in an active selection of people that there is an important for the best adaptation of the elderly in this phase of life closer emotional relationship. It is also possible to incur losses of friends and family who were part of the elderly social relations network and adapt to these changes requires social support and maintaining good self-esteem.²⁹ Thus, it

should be emphasized to the elderly possibility of building new friendships, expanding the support network,²⁹ in order to establish relationships of trust and support.

It is believed that nursing can contribute to maximizing the quality of life of the elderly, in that it is integrated into the context of this population, seeking solutions to the community, seniors and families.



The elderly in rural areas had higher scores of quality of life than residents in urban areas both in most domains and facets. These data suggest that reside in urban areas may be negatively impacting the quality of life for seniors. It is noteworthy that the nurse must have skills to meet the social needs of population health.³⁰ Attention should be given to elderly residents in the urban area, since greater impact on quality of life. Nursing consultation can contribute to identification of diseases, favoring the intervention practices related to disease prevention and health promotion, particularly when it refers to the physical conditions. The greater proximity between households and health facilities can improve to access to health services and the active search of the elderly through home visits. Community spaces can also be used to facilitate the formation of groups of health education and socialization activities, expanding the network of support, encouraging reflection about future aspirations and personal relationships.

In rural areas health professionals shoud be aware to the cultural specificities and habits, trying to identify with the elderly plausible strategies to be performed, considering the physical distance of health facilities and households. It is also important to the achievement of clinical evaluation in order to identify the existence of sensory changes early in order to establish the therapeutic planning. The question of the finitude of life should be also the subject of discussion, as this item is found impacted in the countryside. This study presents a limitation due to the time difference in data collection in rural and urban areas. Initially held collection in the urban area, in which a representative sample of the elderly is already being investigated and monitored by the Research Group on Public Health since 2005. Later, there was a possibility to investigate the elderly population residing in rural areas, which has full coverage by the FHS. The choice of instruments for different cognitive assessment, although similar, was based on the possible cultural differences among the elderly assessed with reasoning in scientific literature in the subject area.

However, despite the limitations it is believed that the research can contribute to the formation of professionals in the field of health, in order to highlight the reflection on the local impact of housing for health conditions and quality of life of the elderly. Furthermore, to meet the realities of rural elderly can contribute to greater knowledge about this population, with peculiar characteristics and still little explored, in addition to being able to establish relation of comparison between those residing in the urban area. The knowledge of these aspects can subsidize the elaboration of actions and policies more specific health, considering the different realities.



- 1. Celich SLK, Creutzberg M, Goldim JR, Gomes. Ageing with quality of life: the perception of elderly participants in groups of senior citizens.REME Rev Min Enferm. 2010; 14(2):226-32.
- 2. World Health Organization. The World Health Organization Quality Of Life Assessment (WHOQOL): position paper from the world health organization. Soc Sci Med. 1995; 41(10):1403-9.
- Mudey A, Ambekar S, Goyal RC, Agarekar S, Wagh VV. Assessment of Quality of Life among Rural and Urban Elderly Population of Wardha District, Maharashtra, India. Ethno Med. 2011; 5(2):89-93.
- Oguzturk O. Differences in quality of life in rural and urban population. Clin Invest Med. 2008; 31(6):E346-50.

- Beltrame V, Cader SA, Cordazzo, F, Dantas EHM. Quality of life of elderly people of urban and rural area of the municipality of Concórdia, SC. Rev Bras Geriatr Gerontol, Rio de Janeiro. 2012; 15(2):223-31.
- 6. The Brazilian Institute of Geography and Statistics (IBGE). Synthesis of social indicators: an analysis of the living conditions of the Brazilian population. Brasilia: IBGE; 2010.
- 7. Alencar NA, Aragão JCB, Ferreira MA, Dantas EHM. The evaluation of the quality of life in elderly residents in urban and rural environments.Rev Bras Geriatr Gerontol. 2010; 13(1):103-9.
- 8. Icaza MC, albala C. Projeto SABE. Minimental State Examination (MMSE) the study of dementia in Chile: statistical analysis. Washintong:OPAS; 1999.
- Bertolucci PHF, Brucki SMD, Campacci SR, Juliano Y. The mini-exame of the mental state in a general population: impact of schooling.Arq Neuro-Psiquiatr, São Paulo. 1994; 52(1):1-7.
- Ramos LR. Growing old in São Paulo, Brazil: assessment of health status and family support of the elderly of different socio-economic strata living in the community [Dissertation]. London: London School of Hygiene and Tropical of Medicine; 1987.
- 11. Fleck MPA, Chamovich E, Trentini, C. Development and validation of the Portuguese version of the WHOQOL-OLD module. Public Health Magazine. 2006; 40(5):785-91.
- 12. Fleck MPA, Louzada S, Xavier M, Vieira G, Santos L, Pinzon V. Application of the Portuguese version of the abbreviated instrument for assessing the quality of life "WHOQOL-bref". Public Health Magazine. 2000; 34(2):178-83.
- The Inter-Union Department of Statistics and Socioeconomic Studies (DIEESE) [Website]. São Paulo: dieese.org.br; 2014 [cited Feb 3 2012]. Available from: http://www.dieese.org.br/rel/rac/ salminMenu09-05.xml
- 14. Dal Pizzol TS, Pons ES, Hugo FN, Bozzetti MC, Sousa MLR, Hilgert JB. Use of medications among elderly residents in urban and rural areas of municipality in southern Brazil: a population-based study. Cad Public Health. 2012; 28(1):104-14.
- Froehlich JM, Rauber CC, Carpes RH, Toebe. M. Selective exodus, masculinization and rural population ageing in the central region of Rio Grande do Sul. Rural Science. 2011; 41(9): 1674-80.

- 16. The Brazilian Institute of Geography and Statistics (IBGE). Synthesis of social indicators: an analysis of the living conditions of the Brazilian population. Brasilia: IBGE;2008.
- 17. Cabral SOL, Oliveira CCC, Vargas MM, Neves ACS. Environment and health conditions in the elderly residents in rural and urban areas in a municipality of the northeastern region.Geriatric Gerontology. 2010; 4(2):76-84.
- 18. Morais EP, Rodrigues RAP, Gerhardt TE. The elderly elders in rural areas: reality of life and health of a population of interior Gaucho. Text Context Nursing. 2008; 17(2):374-83.
- 19. Gutierrez BAO, Auricchio AM, Medina NVJ. Measurement of the quality of life of elderly in living centers. J Health Sci Inst. 2011; 29(3):186-90.
- 20. Martins CR, Albuquerque FJB, Gouveia CNNA, Rodrigues CFF, Neves MTS. Evaluation of subjective quality of life of the elderly: a comparison between seniors living in rural and urban cities.Estud. interdiscip. Aging. 2007; 11:135-54.
- 21. Travassos C, Viacava F. Access to and use of health services by seniors living in rural areas, Brazil, 1998 e 2003. Cad Public Health. 2007; 23(10):2490-502.
- 22. Kumar SG, Majumdar AG. Quality of Life (QOL) and Its Associated Factors Using WHOQOL-BREF Among Elderly in Urban Puducherry, India. J Clin Diagn Res. 2014; 8(1):54-7.
- 23. Souza LC, Lautert L, Hilleshein EF. Quality of life and volunteer work in the elderly. Rev Esc Enferm USP. 2011; 45(3):665-71.
- 24. Huong NT, Hai Ha le T, Quynh Chi NT, Hill PS, Walton T. Exploring quality of life among the elderly in Hai Duong province, Vietnam: a rural-urban dialogue. Glob Health Action. 2012; 22(5):1-12.
- 25. Tavares DMS, Gávea Jr SA, Dias FA, Santos NMF, Oliveira PB. Quality of life and functional capacity of the elderly residents in the countryside.Rev Rene. 2011; 12(n. esp.):895-903.
- 26. Tavares VO, Teixeira KMD, Wajnman S, Loreto MDS. Interfaces between the income of the elderly retirees and the family context. Texts And Contexts.2011; 10(1):94-108.
- 27. Torres GB, Reis LA, Reis LA, Fernandes MO. Quality of life and associated factors in elderly dependents

in an inner city in the Northeast. Brazilian Journal of Psychiatry. 2009; 58(1):39-44.

- Maués CR, Paschoal SMP, Jaluul O, França CC, Jacob Filho W. Evaluation of quality of life: comparison between elderly young and very elderly.Brazilian Magazine of Medical Clinic. 2010; 8(5):405-10.
- 29. Nicolazi MC, Silva JKC, Coelho L, Cascaes AM, Büchele F. Quality of life in the elderly: a study on primary health care. Cogitare Nursing. 2009; 14(3):428-34
- 30. Montenegro LC, Brito MJM. Aspects that facilitate or hinder the formation of nurses in primary health care. Invest Educ Enferm. 2011; 29(2):238-47.