ACTA MEDICA LITUANICA. 2008. Vol. 15. No. 3. P. 169–172

Quality of life throughout ageing

Helena A. Figueira[1],

Joana A. Figueira[2],

Danielli Mello[1],

Estélio H. M. Dantas[1, 3]

[1] *Stricto Sensu Post-graduation Program in Human Kinetics Sciences of Castelo Branco University, RJ, Brazil*

[2] *Family Health Program Perequê-Mirim-I Medical-Doctor, SP, Brazil*

[3] *Research Grant of National Council of Research*

Background. The older population increase demands changes in government's assistance models (1). In Brazil, the Family Health Program (FHP) was implemented by the Federal Government. As increased age brings considerable change in needs (2) the World Health Organization Quality of Life Group developed a quality of life (QOL) scale for older adults (WHOQOL-OLD). The purpose of this study was to evaluate the quality of life of the FHP older people as ageing progresses.

Material and methods. This study is a descriptive inquiry research. The non-selected volunteer older people from Perequê-Mirim-I FHP in Brazil were stratified in age-brackets: young-aged (60–69), middle-aged (70–79), and old-aged (over 80). Kolmogorov-Smirnov test of sample homogeneity was utilized; and the one-way ANOVA, score Z plus Tukey's Post Hoc tests were applied. The expected level II error was 10%, and the accepted level I error was 1%.

Results. Comparing the QOL by age-bracket statistics found the ageing progressive and statistically significant ($p = 0.0001 < 0.01$) interference in QOL. Conclusion: as ageing progresses the QOL decreases.

Conclusions. The main finding of this research is decreasing quality of life throughout ageing explained by losses in autonomy, future present and past activities plus social participation.

Key words: ageing, quality of life (QOL), WHOQOL-OLD, older people

INTRODUCTION

For the near future, virtually all the countries will face population ageing, although at varying levels of intensity and in different time frames. The associated shift in age structure will ensure a profound impact on a broad range of economical, political and social conditions (2). Population's longevity increases and still there is not much knowledge on the nature of ageing process regular flow: the aspects of ageing interact, therefore, it is necessary to learn it in its circular movement (3), as it is a highly individual structural and functional regression process (4). Policy makers around the world are currently dealing with the effects of population ageing (5). The increasing demands of the older population (over 60 years old (6)) have produced changes in government's assistance models (1). In Brazil, the Family Health Program (FHP) implemented by the Federal Government amplifies the health system access in municipality, increasing prevention and promotion in health care sphere (7).

Quality of life is a broad ranging concept affected in a complex way by the person's physical health, psychological state and level of independence, social relationships and their relationship to salient features of their environment (8). As increased age normally brings considerable change in aged needs (2) the World Health Organization Quality of Life Group (WHOQOL Group) developed a quality of life scale for assessment of QOL in older adults, in a transcultural perspective: the outcome is a 24-item 6-facet module which is known as the WHOQOL-OLD (9). Aiming to raise the older people's quality of life the quest is to identify: how ageing impacts the older people's quality of life, and how much each one of the WHOQOL-OLD six facets is considered priority by each group of the older people?

The purpose of the work was to evaluate the quality of life of the FHP older people as ageing progresses.

MATERIAL AND METHODS

This study is a descriptive inquiry research. The non-selected 31 volunteer older people of both genders, mean age 71.51 ± 8.36, representing 12% of the older population participating in the Perequê-Mirim-I Family Health Program (FHP) in Caraguatatuba São Paulo (SP) Brazil, were divided in the WHO three age-brackets: young-aged (60–69), middle-aged (70–79), old-aged (over 80) (10) representing respectively: 11% of the young-aged, 10.6% of the middle-aged, and 28% of the old-aged involved in the Program.

This essay complies with the Helsinki Declaration (11) on Human Being Research and was approved by Castelo Branco University Ethics Committee.

In this study the WHOQOL-OLD questionnaire, containing six facets, has been used: I on sensorial functioning; II on autonomy; III on future, present and past activities; IV on social participation; V on death and dying; and VI on intimacy (12). The result consists of a set of facet scores from 4 to 20 (as each facet possesses 4 items evaluated from 1 to 5) plus a total score (TS) combining the six facets scores (13), and a percentile

Correspondence to: Helena Andrade Figueira, Estr Rio Morto, 197 bl 10 c 107, Recreio, ZIP 22793-210 Rio de Janeiro, Brazil.
E-mail: helenafigueira@gmail.com

transformed score. The questionnaire was individually applied via face-to-face interview, when older people were asked to have in mind their own values based on last two weeks. Informed consent of the older people volunteers was given while being individually oriented related to the research goals. Comparison of the stratified by age-bracket older people's QOL statistics evaluated if ageing interferes in a progressive and significant way in QOL: Kolmogorov-Smirnov test of sample homogeneity was utilized; and one-way ANOVA, score Z plus Tukey's Post Hoc tests were applied. The expected level II error was 10%, and the accepted level I error was 1%.

RESULTS

Table presents sample distribution by age-bracket, frequency, percentile of each group in sample, mean age and standard deviation and minimum median plus maximum values by group.

Table. **Sample distribution by age-bracket**

Age-Brackets	60–69 years	70–79 years	Over 80
Frequency	17	9	5
% in Sample	54.8	29.0	16.1
Mean	65.5	74.6	86.4
Standard Deviation	3.1	2.9	4.5
Median	67	73	84

The normality of facets was investigated by Kolmogorov-Smirnov initially and later the existence of significant difference between the age-bracket groups and the facets by chi-square test ($p < 0.01$) with the following results: facet 1 $p = 0.845$; facet 2 $p = 0.343$; facet 3 $p = 0.315$; facet 4 $p = 0.152$; facet 5 $p = 0.915$; facet 6 $p = 0.090$. So it was observed that there was no significant difference ($p < 0.01$) configuring a normal distribution.

Fig. 1 presents the older people stratified by age-bracket QOL central tendency measures: mean for homogeneous sample, so coefficient of variation inferior to 25% (14), otherwise, by median (*). The figure shows the central tendency measures (either mean or median) allowing to visualize the decreasing total score of QOL (TS) throughout ageing due to facet 2 (autonomy), facet 3 (future, present and past activities) and to facet 4 (social participation).

Referring to death and dying (facet 5), there is a unanimous low score, although the old-aged reported their highest QOL. Concerning to social participation (facet) the old-aged reported lowest QOL of the whole set. As concerns sensorial functioning (facet 1), surprisingly, the lowest score comes from the young-aged while both the old-aged and the middle-aged report higher QOL when compared to the young-aged.

In Fig. 2 it is possible to visualize the distribution of the total score of QOL by age-bracket: young-aged (60–69), middle-aged (70–79), and old-aged (over 80). Their total score of QOL percentile values are shown in Table 1 (TS) ranging from 51.25 to 40.37. Therefore, this total score of QOL by age-bracket presented a statistically significant ($p = 0.0001 < 0.01$) decreasing evaluation as ageing progresses that can be clearly observed in Fig 2.

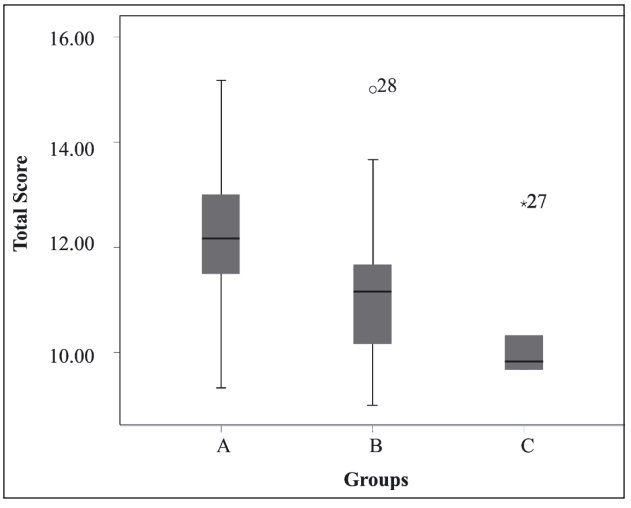

Fig. 2. The distribution of the total score of QOL by age-bracket

DISCUSSION

The aged voice must be sought in reaching operational definitions for the quality of life and as reporters on the quality of their own lives (15). Clinicians tend to underestimate the quality of life: they claim data lack information on patient preferences, relevant information of quality indicators (16). For aged quality of life is more than rating their physical health status; emotional

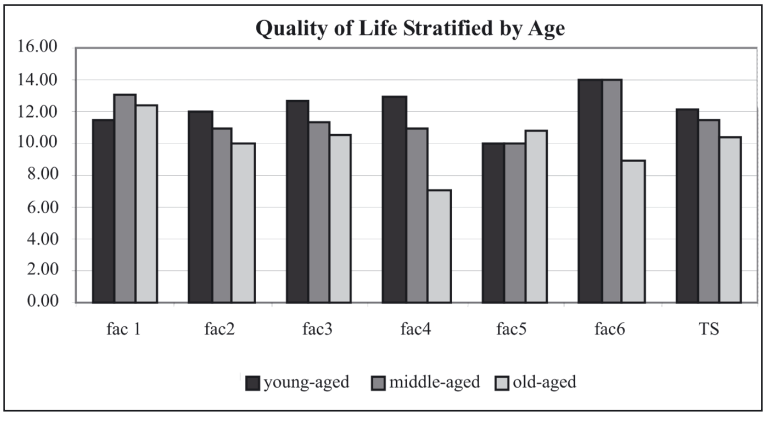

Fig. 1. Graphic visualization of QOL stratified by age-bracket

and social health are also recognized as very important factors for their well-being (17), as they perceive QOL as partly a product of health and personality (15), in agreement with a consensus well established as to QOL including both subjective and objective dimensions (18).

The older people in general do not propose themselves to walk toward a new future, but yet to maintain intact reanimating with reverence to the past over which present is modelled; the majority turn into automat, repeat themselves and sclerosis (3). These findings are consistent with other studies (19), as much as this research finding with low and decreasing QOL satisfaction referring to the future, past and present activities, though it opposes to the findings in India (20) where the highest QOL was in this facet. QOL begins to deteriorate with old age (21), which confirms this research finding. The findings of decreasing QOL with ageing could be discouraging. However, findings comparing centenarians with aged from 75 to 99 years old report that centenarians feel greater satisfaction in life than other older subjects: they are less inclined to complain and well adapted to circumstances having a positive attitude to life and good social and family relations (22).

Referring to the total score (TS) of QOL, this research results in oscillation from 51.25% (young-aged), 46.06% (middle-aged) to 40.37% (old-aged), which means a low QOL, compared to the findings with a large population of older people in Italy (23) showing TS = 71.06%. The young-aged declare to be less satisfied with sensorial functioning than to any other facet (exception to death and dying) suggesting that the initial impact of sensorial loss s quite significant. These results related to sensorial loss confirm the findings in India (20), as well as the finding (24) informing about the severity of hearing loss being associated with the reduced quality of life in older adults.

The older people must be recognized as human beings as a whole, accepting the interpersonal relationship as a vital area in their lives (25) opposed to traditional scientific vision. Being healthy, independent and physically active plus having economic independence were the most unanimous concepts of QOL (19), directly associated to social participation in agreement with the results of this research in which the old-aged underlined the loss of social participation to be inferior extreme of their QOL. The loss of occupational identity and the associated feeling of inadequacy lead to lower social interaction and decreased level of satisfaction (20). This result is confirmed by the literature (26–30) that finds highest QOL in individuals with best social participation, as much as (5) reporting that the most meaningful problems of older people are intrinsically social, the basic issue is that of their social integration.

CONCLUSIONS

The main finding of this research is decreasing quality of life throughout ageing explained by losses in autonomy, future, present and past activities plus social participation. The quest is being able to escape ageing limits (3) opening up to new adventures instead of allowing life to end as an impasse.

Received 30 June 2008
Accepted 23 September 2008

References

1. Veras RP. Em busca de uma assistência adequada à saúde do idoso: revisão de literatura e aplicação de um instrumento de detecção precoce e de previsibilidade de agravos. Caderno de Saúde Pública 2003; 19(3): 705–15.
2. Tareque V. Bangladesh population ageing and life expectancies: 1950–2050. Indian Journal of Gerontology 2008; 22(1): 119–26.
3. Beauvoir S. Velhice. 2nd ed. Rio de Janeiro (RJ). Nova Fronteira Publishers; 1990.
4. Dantas EHM, Vale RG. Atividade Fisica e Envelhecimento Saudavel. 1st ed. Rio de Janeiro (RJ): Shape Publishers; 2008.
5. Gierveld JJ, Hagestad GO. Perspectives on the integration of older men and women. Research on Ageing 2006; 28(6): 627–37.
6. IBGE. Censo Demografico Brasil 2000. Available from: URL: http://www.ibge.gov.br/ Accessed 18 January 2008.
7. SIAB. Sistema Informação Basica 2008 da Secretaria de Saude. Available from: URL: http://w3.datasus.gov.br/siab/siab.php. Accessed 18 January 2008.
8. WHOQOL Study protocol for the World Health Organization project to develop a Quality of Life assessment instrument (WHOQOL). Springer Netherlands 2004; 2(2).
9. Power M, Quinn K, Schmidt S. WHOQOL-OLD Group. Development of the WHOQOL-Old Module. Springer Netherlands 2005; 14(10).
10. Veras RP. Pais Jovem de cabelos brancos: Saude do Idoso no Brasil. 3rd ed. Rio de Janeiro (RJ): Relume Dumará UERJ Publishers; 1994.
11. HELSINKI DECLARATION. 1996. Available from: URL: http://www ufrgs.br/bioetica/helsin5.htm Accessed 18 January 2008.
12. WHO. WHOQOL-OLD MANUAL. Available from: URL: http://www.ufrgs.br/psiq/whoqol-old%20manual%20portugues. pdf. 2008 Accessed 18 January 2008.
13. Fleck MP, Chachamovich E, Trentini CM. Projeto WHOQOL-OLD: metodo e grupo focal no Brasil. Revista de Saúde Pública 2003; 37(6): 793–9.
14. Shimakura S. Coeficiente Variação. Available from: URL: http://leg.ufpr.br/~silvia/CE701/node24. html. Accessed 16 April 2008.
15. Kane RA. Definition, measurement, and correlates of quality of life in nursing homes: toward a reasonable practice, research and policy agenda. The Gerontologist 2003; 43: 28–36.
16. Tilden VP, Tolle S, Drach L, Hickman S. Measurement of quality of care and quality of life at the end of life. The Gerontologist 2002; 42 (Suppl 3): 71.
17. Srapyan Z, Haroutune K, Petrosyan V. Role of depressive and cognitive status in self-reported evaluation of quality of life in older people: comparing proxy and physician perspectives. Age and Ageing 2006; 35(2): 190–3.
18. Luleci E, Hey W, Subasi F. Assessing selected quality of life factors of nursing home residents in Turkey. Archives of Gerontology and Geriatrics 2008; 46(1): 57–66.
19. Eser E, Eser S, Ozyurt BC, Fidaner C. Perception of quality of life by a sample of Turkish older adults: WHOQOL-

OLD project Turkish focus group results. Turkish Journal of Geriatrics 2005; 8: 169–83.
20. Verma, M. Working and non-working rural and urban older people: subjective well-being and quality of life. Indian Journal of Gerontology 2008; 22(1): 107–18.
21. Arslantas D, Unsal A, Metintas S, Koc F, Arslantas A. Life Quality and daily life activities of older people in rural areas. Archives of Gerontology and Geriatrics 2008; 19.
22. Buono MD, Urciololi O, Leo D. Quality of life and longevity: a study of centenarians. Age and Ageing 1998; 27(2): 207–16.
23. Scocco P, Fantoni G, Caon F. Role of depressive and cognitive status in self-reported evaluation of quality of life in older people: comparing proxy and physician perspectives. Age and Ageing 2006; 35(2): Appendix 3.
24. Dalton A, Klein B, Wiley T, Nondahl DM. The impact of hearing loss on quality of life in older adults. The Gerontologist 2003; 43: 661–8.
25. Sumasy HA. Biopsychosocial-spiritual model for the care of patients at the end of life. The Gerontologist 2002; 42: 24–33.
26. Strandberg TE, Strandberg AY, Salomaa VV, Pitkälä K, Tilvis RS, Miettinen TA. Alcoholic beverage preference, 29-year mortality, and quality of life in men in old age. The Journals of Gerontology Series A: Biological Sciences and Medical Sciences 2007; 62: 213–8.
27. Cattan M, White M, Bond J, Learmouth A. Preventing social isolation and loneliness among older people: a systematic review of health promotion interventions. Ageing & Society 2005; 25(01): 41–67.
28. Graff MJL, Vernooij-Dassen MJM, Thijssen M, Dekker J, Hoefnagels WHL, Olderikkert MGM. Effects of community occupational therapy on quality of life, mood, and health status in dementia patients and their caregivers: a randomized controlled trial. The Journals of Gerontology Series A: Biological Sciences and Medical Sciences 2007; 62: 1002–9.
29. Samus QM, Rosenblatt A, Steele C et al. The association of neuropsychiatric symptoms and environment with quality of life in assisted living residents with dementia. The Gerontologist 2005; 45: 19–26.
30. Ceremnych J. Focus groups discussions with older adults and carers for development of pilot WHOQOL-OLD measure. Acta medica Lituanica 2003; 10: 03.