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Quality of Life and Independence of the Elderly

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ABSTRACT

Objective: The study aimed to investigate how seniors living at home and at nursing homes view their quality of life from the perspective of independence in activities of daily living.

Methods: The international quality of life questionnaire WHOQOL-BREF and the Barthel ADL Index were used in the study. At-home-living seniors completed a questionnaire delivered by visiting nurses and nursing home residents a questionnaire delivered by nurses working in the nursing home. A total of 140 seniors participated in the research.

Results: Statistical analysis did not confirm any statistically significant difference in the attitude of the elderly living at home and the elderly living at nursing homes towards their quality of life in daily activities.

Conclusion: The findings are useful for medical staff working in geriatric nursing.

KEY WORDS

senior, independence, social facilities, home care, quality of life

INTRODUCTION

Quality of life is studied by many scientific disciplines, which also cover aging and old age. Tokárová (2002, 8) finds that the contents of the concept of quality of life draw our attention particularly at a time of a life change, for example successful completion of treatment or, conversely, an onset of disease; fulfilment or failure of life plans, etc. In all similar and less dramatic contexts of life we become aware of the values and chances we acquire or lose, which may lead to self-reflection and self-realization.

Do the elderly contemplate the quality of life? Certainly, as everyone wishes to live the best life possible, with the elderly being no exception. Reaching the retirement age introduces a major change in their life that alters their social position and frequently also the hierarchy of values (Balogová, 2005). Tokárová (2002) believes that the attitude the senior adopts to old age is one of the crucial attributes in their life, which should bring about new standards, prompt them to fulfil their own ideas of how to live a quality life. It is important to what degree the senior considers quality of life a subjective category despite the fact that it is affected by external factors (Balogová, 2005, s. 49).

The ability to live an independent life depends on self-sufficiency and the ability to ensure basic living needs. According to Trachtová (2006), self-sufficiency is the degree of autonomy, or the participation of an individual in carrying out daily activities such as hygiene, dressing, eating, and toileting. A healthy individual with sufficient strength to perform these activities will carry them out independently, regularly, and is self-sufficient without the help of another person. Self-sufficiency and ability to take care of oneself is affected by many factors such as the developmental life stage of the person, the functional condition of the person, and the environment in which the person lives. The subjective factors of the quality of life include moral agents, life satisfaction, self-esteem, the ability to control one's life, relationships, spiritual life and faith. Objective factors include the physical condition, cognitive functions, emotional status, functional capacity, social and sexual function. Other significant factors include housing, environment, social network with social support, satisfaction with the government and public institutions, and crime (Draganová, 2006).

OBJECTIVE

The research aimed to investigate how the elderly living at home and seniors living at nursing homes evaluate their quality of life, health, and other life aspects in relation to self-sufficiency and independence in activities of daily living. The following hypotheses were established:

The starting hypothesis: Is there any is a relationship between the level of physical health of the elderly, the degree of self-sufficiency in ADL and quality of life?
WH 1 – We assume that the elderly living at home report higher self-sufficiency in activities of daily living than senior nursing home residents.
WH 2 – We assume that the elderly living at home perceive their quality of life as higher than senior nursing home residents.

PARTICIPANTS AND METHODS

Data were generated using two methods.

The first method was the international quality of life questionnaire WHOQOL-BREF, which measures four basal principles of quality of life – comprehensiveness, subjectivity, relative importance of various facets of life, and cultural relevance (Dragomerická, Barton, 2006). The second method was the Barthel scale of activities of daily living – ADL. WHOQOL-BREF comprises 26 items classified into four areas: DOM 1-DOM 4 physical, mental, social, and environment. The statistical analysis used a 5-point Likert scale, which was statistically analyzed with the Excel programme, in which the results are expressed in the form of four domain scores and average raw scores in two separate items that assess the overall quality of life and health. The results of the questionnaire and the ADL test were analysed with the methods of descriptive and inductive statistics (frequency table, standard deviation, t test, hypothesis test for a sample mean, Chi-square). A total of 140 responses were subjected to statistical evaluation. Of these, 70 were seniors living at home and 70 senior nursing home residents.

RESULTS

The average age of seniors living at home (Group A) was 71 years. The average age of senior nursing home residents (Group B) was 75 years. The issue of health is in an interactive relation to the issue of the individual's self-sufficiency and independence in activities of daily living. Self-sufficiency and independence of the elderly were tested using the Barthel Scale/ADL.

After determining the cumulative absolute and relative frequency in Group A it can be stated that 70 seniors (100% of the total) scored 100 or lower (line 12). Of these, 36 seniors (51.48% of all participants) scored precisely 100. After determining the cumulative absolute and relative frequency it can be stated that 70 seniors (100% of the total) scored 100 or lower (line 19). Of these, 14 seniors (20.02% of all participants) scored precisely 100. Despite the fact that bathrooms are fully wheelchair accessible and have a sufficient amount of bathing aids, 44% of seniors from Group B are unable to bathe themselves. 7% of seniors is totally depend on the help of other of people in getting dressed. 36 % of seniors a partially dependent on the help of othere.

In Group A, 94% participants are self-sufficient in basic personal hygiene, while 31% are unable to bathe themselves independently. No assistance with dressing is needed by 83% of the respondents.

While 34% of seniors from Group B are unable to navigate stairs independently, 53 % seniors are self-sufficient to medium-dependent in walking on flat surfaces as 13 % seniors from Group B use wheelchairs. In Group A, the average of 53% of respondents is self-sufficient in walking on flat surfaces, while 40% need assistance. Fully continent are on average 85% seniors from Group A and 19% seniors from Group B.

Table 1 ADL statistics in groups A and B

At home A		*Nursing home B*	
Median value	87.0714286	Median value	68
Standard deviation	19.4953145	Standard deviation	28.97275
Sample variance	380.067288	Sample variance	839.4203
Number	70	Number	70
Highest (1)	100	Highest (1)	100
Lowest (1)	10	Lowest (1)	0

P(T ≤ t) one-tail
p = 5,94E-06 = 0,059

H0 is rejected in favour of an alternative hypothesis. We presume that the elderly living at home report higher self-sufficiency in activities of daily living than senior nursing home residents.

The quality of life was measured on a 5-point Likert scale of the questionnaire WHOQOL-BREF, expressing the amount (not at all – maximum), capacity (not at all – full), frequency (never – always), and evaluation (very dissatisfied – very happy; very bad – very good). Domains 1–4 of the groups A + B of the questionnaire processed in the Excel programme produced the value of the individual domains (Tables 5 + 6). The generated results were compared with the WHOQOL-BREF standard, indicating that seniors from both the groups scored a moderately reduced quality of life in DOM 2–3, below the lower limit of the standard. In DOM 4 they scored mean quality of life (standard). In DOM 1 Physical Health, both the senior groups A + B score a reduced quality of life.

The acquired WHOQOL-BREF data were subjected to correlation analysis. A hypothesis test for a sample mean was carried out using the statistical method Chi-square, which tests the statistical null hypothesis. Pearson's chi-squared test was performed using a frequency table, where the frequency distribution in each category is consistent with the expected (theoretical) distribution. If p = lower than the selected significance level (conventionally 5% = 0.05), the null hypothesis is rejected. This means that the difference between frequencies established in the sample and the expected frequencies is too big to be merely the result of random selection – it is statistically significant. The value established in our study, p = 0.705, shows that the difference between frequencies identified in the sample and the expected frequencies may be due to random selection, and therefore it is not statistically significant. Hence the null hypothesis cannot be rejected. The findings of one research proved thad the guality of life of seniors does not depend on the level of physical health and the degree of self-suffisiency of ADL.

Table 2 Values of WHOQOL domains and A + B groups

	STD	mean
Dom 1	2.5	
QoL		14.3 < **15.60** > 16.8
A		12.33
B		11.51
Dom 2	2.4	
QoL		13.6 < **14.80** > 16.0
A		12.90
B		12.98
Dom 3	2.9	
QOL		13.5 < **15.00** > 16.4
A		13.02
B		12.95
Dom 4	2.1	
QOL		12.3 < **13.30** > 14.3
A		13.37
B		13.10
STD deviation A	3.86	
STD deviation B	2.75	
p		= 0.705

DISCUSSION

One of the first surveys of the assessment of individual quality of life of healthy seniors was the Dublin study SEIQOL (Schedule for the Evaluation of Individual Quality of Life). This method was based on a structured interview built on an individual value system of the elderly. The seniors were to interpret five areas that are the most important for their lives. Values the elderly considered the most significant included social life and leisure, health, family, housing, and religion (Dragomirecká, 2009, p 10).

Using the WHOQOL-BREF questionnaire, Ležovič (2011) studied the quality of life of senior nursing home residents in Bratislava in 2009. The study worked with 183 seniors aged 76.6 years on average. Ležovič found that the quality of life decreases with age, and that the strongest correlator of quality of life is the subjective evaluation of one's health. While 38% of the respondents were satisfied with their health, 22% of the respondents were dissatisfied. Only 1% of the seniors responded with 'very satisfied'. Furthermore, his findings indicate that 49% of the respondents rated their quality of life as good, 42% of the respondents as neither good nor poor, 5% as poor, and 1% as very poor. In our survey, in Q1 facet evaluating the quality of life, 37% of the seniors rated their quality of life as poor and 74% as good. In the second separate Q2 facet, who evaluated overall health, 57% of the respondents expressed dissatisfaction and 41% satisfaction with their health. Only 3% of the seniors were very satisfied with their health and quality of life. Farský and Solárová (2010) also studied the quality of life of senior nursing home residents, using the standardized questionnaire WHOQOL-BREF on a sample of 40 seniors in Třebíč. Their findings suggest that respondents suffered the greatest deficiency in physical health.

Hudáková and Derňárová (2011) investigated the differences between the monitored groups of seniors in self-sufficiency, using the ADL questionnaire. The respondents were senior nursing home residents and seniors from geriatric wards. Their findings indicate that nursing home residents showed a higher degree of self-sufficiency in self-service activities than the geriatric patients. Both the groups were age-balanced. The authors believed that an important factor was the current health status, which is worse in geriatric patients, making them more dependent on the assistance from nurses and paramedical staff compared with the senior nursing home residents. The quality of life is reflected in the overall life satisfaction, which is the result of the individual's relationship to their environment (Tokárová, 2002, p 165). The environment is a positive aspect of nursing homes as it provides barrier-free access for the elderly. The seniors can call for help whenever they need, whether in the event of a fall or health deterioration. At home it is also possible to adapt the domestic environment with minor modifications to accommodate the senior's health needs. Seniors living in a single home should have a telephone available.

When asked "How safe do you feel in your everyday life", 59 % seniors of Group A in our survey responded with 'moderately'. This option was selected by 46% of nursing home residents. However, as many as 20% of seniors from Group B feel very safe in their environment compared with 11% of seniors from Group A. We believe that the availability and proximity of health care in nursing homes is the decisive factor of the seniors' more positive view of the safety of their home environment. Although nursing home residents have poorer physical health than seniors living at home, human interaction improves the individual's well-being and ensures the residents do not feel alone at important moments of their lives. This assumption is based on the fact that being part of community helps even the elderly be more active and motivates them to be interested in their own lives. This is fundamental for eliminating negative feelings that seniors living at home are more inclined to have as in most cases these seniors need, to a lesser or greater extent, to rely on themselves.

CONCLUSION

The elderly living at home report higher self-sufficiency in activities of daily living than senior nursing home residents. In the quality of life assessment, seniors from both the groups scored a moderately reduced quality of life in DOM 2–3 (below the lower limit of the standard). In DOM 4 they scored mean quality of life (standard). In DOM 1 Physical Health, both the senior groups A + B score a reduced quality of life. We therefore presume that the quality of life of the elderly does not depend on health and dependency in self-sufficiency deficit in activities of daily living.

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