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THE RELATIONSHIP OF SELF-SUFFICIENCY AND QUALITY OF LIFE OF SENIORS IN THE EAST REGION

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Introduction

Increasing age and the presence of chronic diseases influence the whole series of functional defects what makes self sufficiency worse and develops the dependence elderly (Bayliss, et al., 2008). In the early stage there is a deficit carry out daily activities such as shopping, cooking, medication, and other chores. In the next period associating absence of basic daily activities such as eating, drinking, dressing, personal hygiene, emptying urine and faeces and movement. According to several authors (Hegyí et al., 2009, Kalvach et al., 2004, Bartošovič et al., 2004, Curless, et al., 2003) self-sufficiency is one of the most important factors affecting the quality of life of the individual.

The aim of the work

Aim of the present study was to evaluate to what extent depends on the quality of life of self-sufficiency in basic daily activities in our eastern population of seniors. We hypothesized that the level of self-sufficiency in geriatric hospitalized patients and residents of facilities for the elderly are significantly different.

Subjects and methods

Altogether 204 patients of Geriatric department of Faculty hospital J.A.Reiman Presov and 182 residents of Facility for elderly in Presov (Slovakia) took part in survey. In our survey we used causal - comparable research. For selecting individual components we used in research the method of gaining the information with the help of two batteries of standardized tests:

- test of life quality WHOQOL – BREF. It is a standardized questionnaire finding out the quality of life associated with health (value of Crombach alpha as a parameter of reliability of used method moved between the interval of 0,7184 - 0,8418 for individual items)

- test of self serving daily activities ADL (Barthel test – it is a standardized self judging scale that finds out the level of managing the self serving activities performed daily; the value of Crombach alpha of used method moved between the interval of 0,8217 - 0,9122 for individual items).

For statistical comparison of surveyed groups we used the test for two independent selections, Mann – Whitney test. This unparametrical method enabled us to find out statistically the major differences between the groups in researched parameters. For evaluation of mutual relationships between parameters we used the unparametrical Spearman's correlation parameter.

Results

We list the results of surveyed groups in self sufficiency according of items to test ADL. The values are evidently different in all tested items (toilette, food income, dressing, appearance, mobility and bathing). Examined the differences between the two groups are presented in Table 1.

Table 1

Statistical results of search of differences between both groups found out by Mann – Whitney test

Parameter	Geriatric patients		Institutions for seniors		Z
	M	SD	M	SD	
Toilette ADL	2,00	1,36	1,48	0,97	- 4,264***
Food income ADL	1,66	1,05	1,16	0,41	- 5,283***
Dressing ADL	1,83	1,12	1,25	0,52	- 5,557***
Appearance ADL	2,02	1,10	1,61	0,81	- 3,658***



Mobility ADL	2,64	1,45	2,33	1,48	- 2,541**
Bathing ADL	2,08	1,08	1,63	1,02	- 2,541***
ADL rough score	11,65	5,82	8,92	3,53	- 4,885***

Legend: level of importance: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; M - Median, SD - Standard Deviation, Z – Z Score

From the results in table 1 it is obvious that there is a major dependence of level of self sufficiency from the life quality of seniors ($p < .001$). The results of ADL test evaluated the self sufficiency of researched people where worse results were measured with geriatric patients (M=11,65) than with residents of facilities for elderly (M=8,92).

Residents of facilities for the elderly, according to our assumption exhibit a higher degree of self-sufficiency in self service activities as hospi-

talized geriatric patients. Cause we see the worst health status in hospitalized patients compared with facilities for senior citizens.

For finding out the mutual relationships among parameters we used the unparametrical Spearman's correlation parameter. We offer the results of search of Spearman's correlations between the items of ADL questionnaire and rough score of BREF questionnaire of geriatric patients (Table 2) and of residents of facilities for elderly (Table 3).

Table 2

Statistical results of researching Spearman's correlations between items of ADL test and rough score of BREF of geriatric patients

	Toilette	Meals	Dressing	Appearance	Mobility	Bathing	RS ADL	RS BREF
Toilette	-	0,668 ***	0,706 ***	0,673 ***	0,602 ***	0,681 ***	0,817 ***	-0,487 ***
Meals	0,668 ***	-	0,772 ***	0,785 ***	0,624 ***	0,729 ***	0,798 ***	-0,485 ***
Dressing	0,706 ***	0,772 ***	-	0,826 ***	0,685 ***	0,791 ***	0,858 ***	-0,562 ***
Appearance	0,673 ***	0,785 ***	0,826 ***	-	0,718 ***	0,808 ***	0,891 ***	-0,498 ***
Mobility	0,602 ***	0,624 ***	0,685 ***	0,718 ***	-	0,750 ***	0,824 ***	-0,432 ***
Bathing	0,681 ***	0,729 ***	0,791 ***	0,808 ***	0,750 ***	-	0,897 ***	-0,513 ***
HS ADL	0,817 ***	0,798 ***	0,858 ***	0,891 ***	0,824 ***	0,897 ***	-	-0,544 ***
HS BREF	- 0,487 ***	-0,485 ***	-0,562 ***	-0,498 ***	-0,432 ***	-0,513 ***	-0,544 ***	-

Legend: level of importance: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$, RS – Rough Score



Table 3

Statistical results of researching Spearman's correlations between items of ADL test and rough score of BREF of residents of facilities for elderly

	Toilette	Meals	Dressing	Appearance	Mobility	Bathing	RS ADL	RS BREF
Toilette	-	0,688 ***	0,702 ***	0,555 ***	0,591 ***	0,549 ***	0,714 ***	- 0,304 ***
Meals	0,688 ***	-	0,683 ***	0,559 ***	0,504 ***	0,521 ***	0,613 ***	-0,334 ***
Dressing	0,702 ***	0,683 ***	-	0,669 ***	0,622 ***	0,606 ***	0,705 ***	-0,309 ***
Appearance	0,555 ***	0,559 ***	0,669 ***	-	0,712 ***	0,753 ***	0,855 ***	-0,386 ***
Mobility	0,591 ***	0,504 ***	0,622 ***	0,712 ***	-	0,708 ***	0,911 ***	-0,319 ***
Bathing	0,549 ***	0,521 ***	0,606 ***	0,753 ***	0,708 ***	-	0,844 ***	-0,484 ***
HS ADL	0,714 ***	0,613 ***	0,705 ***	0,855 ***	0,911 ***	0,844 ***	-	-0,428 ***
HS BREF	- 0,304 ***	-0,485 ***	-0,309 ***	-0,386 ***	-0,319 ***	-0,484 ***	-0,428 ***	-

Legend: level of importance: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$, RS – Rough Score

From the stated correlations it is obvious that the individual items of ADL test significantly positively. Conversely the overall quality of life is reduced proportionally with increasing deficits sufficiency geriatric patients and thus the correlative relationship is negative. On the basis of stated facts we can say that the correlative relationships of both groups among evaluated parameters have comparable power and direction.

Discussion and conclusion

The stated results prove our supposition that increasing deficit of self sufficiency causes the decline of life quality of geriatric patients and of residents in facilities for elderly. That means that their correlative relationship is negative. In our research we found out the diminished self sufficiency (rough score with ADL test = 11,65) with geriatric patients in comparison to residents of facilities for elderly (rough score with ADL test = 8,92). Our results proved that less self sufficient are especially hospitalized geriatric patients in

comparison to clients of institutions for seniors. Rough score of ADL questionnaire in relation to scale of BFEF is -0,544 with geriatric patients and -0,428 with residents in facilities for elderly. That is why within care giving and rehab care we should stimulate the patients into active participation on recovery regime instead of position of passively accepting help. ADL test should be the main functional test for disclosing self sufficiency (or lack of it) with geriatric patients and support of their self sufficiency should be the domain of geriatric care givers. Positive task can play various compensation aid gadgets for increasing self sufficiency of patients in all its areas (Dainty, 2007). For maintaining the adequate physical capabilities it is necessary to provide for seniors various mobility activities by the form of every day exercises and common mobility programs. Equally important is the psychical support of seniors that are from the point of their age and functional conditions always a risk group for medicine and care



giving (Kalvach, et al. 2004).

According to several authors the quality of life for seniors of factors influence (Hegyí et al., 2009). The most important is considered to be self-sufficient and then sets out additional attributes (Bar-tošovič et al., 2004). Farský et al. (2003) considered as significant determinant of quality of life, the meaning of life. Emptiness to meet the meaning of life is often correlated with psychological discomfort. The subjective factors leading to increased mental stability and coping with life's problems, including illness and loss of self-sufficiency pointed Antonovsky (1996) in his concept salutogenézy. Aim of the salutogenetic research is to find a relationship between existing conditions and internal capabilities of an individual to strengthen his sense of coherence they contribute to increase his control over his live and finding meaning in every situation in which he finds himself. The East region are among the poorest in the EU. Moreover it's specifics (spirituality, satisfaction with modest conditions, family ties ...), which envisage consideration to whether the seniors in our quality of life will significantly affect the (non-) self-sufficiency.

It has been shown that the self-sufficiency principle affects the quality of life of seniors in the area of eastern Slovakia. ADL test (test routine daily activities of BT under) should be the main functional test of a comprehensive geriatric assessment in the elderly. Aging of population almost everywhere in the world is the challenge for all who plan and provide social and health welfare of senior population so that they would look after not only medical intervention but their functional status as well (Hegyí, et al. 2009). The task of National program of protection of seniors that was accepted by Slovak government in 2001 is to maintain their self sufficiency, social participation, integration and thus to support the quality of life of seniors (Žiaková, et al., 2003). Geriatric age has many specific characteristic features. Satisfaction of seniors we look after either in hospital or in institutions of social care is important indicator of quality of care from the point of medical procedures and care giving. Care giving interventions in praxis should enable quality life not only survival of geriatric population in somatic, psychical and social area (Avlund, et al., 2003).

Summary. Aim: The aim of this work was to determine how perceived self-sufficiency and quality of life among seniors in the institutional facilities.

Methodology: In this work we investigated the relationship of self-sufficiency and quality of life for the senior population. The research sample consisted of 386 probands. We use item quality of life questionnaire WHOQOL - BREF and ADL scale test to determine the components of research. We used the Spearman correlation coefficient for data analysis. We used the test for two independent selections, Mann - Whitney test the statistical comparison of observed groups

Results: We found poorer self-sufficiency in geriatric patients ($M = 11.65$) compared with facilities for elderly people ($M = 8.92$) on the basis of statistical comparison. Confirmed the fact that self-sufficiency is the dominant attribute influencing the quality of life for seniors.

Conclusion: The quality of life of hospitalized patients is an important indicator of care from the perspective of geriatrics and geriatric nursing.

Key words: Quality of life. Self-sufficiency. Geriatric patient. Senior.

Порівняння рівня здатності до самозабезпечення та якості життя літніх людей у Східній Словаччині

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Резюме. Мета роботи – дослідити порівняльний взаємозв'язок між рівнем здатності до самозабезпечення та якістю життя літніх людей у спеціалізованих медичних закладах.

Методологія. дослідну групу склали 386 пробандів. Для вирішення поставленої мети дослідження були використані опитувальник для оцінки якості життя WHOQOL -BREF та шкала ADL (тест Бартела). Статистична оцінка отриманих результатів проводилася із використанням коефіцієнта кореляції Спірмена для аналізу даних та критерію Манна – Уїтні для двох незалежних вибірок.

Результати: за результатами проведеного дослідження та на основі статистичної оцінки отриманих результатів виявлено, що здатність до самозабезпечення у пацієнтів геріатричного відділення є на нижчому рівні ($M = 11,65$) у порівнянні з особами у соціально-медичних закладах для літніх людей ($M = 8,92$). Також підтверджено, що рівень здатності до



самозабезпечення є домінуючим фактором, що визначає якість життя людей похилого віку. Висновок: показник якості життя є важливим критерієм рівня соціально-медичної турботи про пацієнтів похилого віку з точки зору геріатрії та геріатричного догляду.

Ключові слова: якість життя, здатність до самозабезпечення, геріатричний пацієнт, люди похилого віку.

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