

Gender Differences in Quality of Life Among Seniors With and Without Mental Disorder – Example from Moravia, Czech republic



Medical Science

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ABSTRACT

Objective The objective of this study is to compare gender differences in the life quality of seniors hospitalized for a mental disorder in the Kroměříž Mental Hospital in the Czech Republic, and seniors without a mental disorder living in community.

Methods This study is based on a quantitative approach. WHOQoL BREF and WHOQoL OLD questionnaires were used as instruments; the total score achieved by the subjects was measured. Two groups of subjects were formed: a group of seniors hospitalized in a psychogeriatric ward in the Kroměříž Mental Hospital due to a mental disorder, and a group of seniors living in a community in Kroměříž. The gender aspect was taken into account. The results were analyzed using the Statistica 7.0 version Software with the Chi2 test, the U- Mann-Whitney test, and ANOVA tests. The statistical significance threshold was set at a p-value of 0.05.

Results The women achieved a significantly lower total score (they had a worse life quality) in comparison to the men both in WHOQoL BREF and WHOQoL OLD questionnaires, regardless their mental condition. Women with a mental disorder achieved the lowest total scores among all the scores in this study (they had the worst life quality) comparison to men with a mental disorder or healthy male controls ($p = 0.0012$). Women without a mental disorder seem to be at a higher risk of bad life quality in comparison to men. The situation is even worse in the case of the presence of a mental disorder - women with a mental disorder achieved the lowest total scores in WHOQoL BREF and WHOQoL OLD questionnaires among all the scores obtained in this study, and they are extremely frail to perceive low life quality.

Conclusions Women had a lower total score in WHOQoL BREF and WHOQoL OLD questionnaires than men. The presence of a mental disorder means further deterioration of perceived life quality. Gender differences should be taken into account when treating mental disorders with the challenge of improving life quality.

Introduction

Life quality can not be determined by a simple definition. It is a highly subjective, dynamic, and complex category that varies from individual to individual, and that may even vary in one individual in the course of time (life time aspects) [1-3]. There are many determinants that may influence life quality – health and functionality and the level of autonomy, personal needs fulfillment, [4] as well as psychological, economical, social, and environmental aspects. Evaluating life quality is an uneasy challenge – if it is difficult with healthy people, then with seniors with dementia it is even more difficult [5, 6]. Very little is known about gender differences in life quality, especially in the senior population with mental disorders [7]. There are two different research approaches on how to study life quality – a qualitative and a quantitative approach. The qualitative approach is based on an individual interview, focus group interview, content analysis of expert opinions, or analysis of panel discussions.

The methodology and level of quality of qualitative approach studies varies from study to study. The quantitative approach is based on the use of questionnaires. Studying life quality may influence the estimation of the efficacy of health and social care systems in relation to the cost of an effective analysis.

Methods

The objective of the observational study was to investigate gender differences in the life quality of seniors with and without a mental disorder. Research was done from January to December 2011 in psychogeriatric wards of the Kroměříž Mental Hospital in seniors living in a community (65+). Two questionnaires from the World Health Organization evaluating the global level of subjectively perceived life quality were used (WHOQoL BREF instrument and WHOQoL OLD instrument). WHOQoL BREF is a 26-item questionnaire with good validity and reliability, and it is approved for use in the general population. Each item is scored from one to five, the total score ranges from 26 to 130. Interpretation of the total score is estimative: higher total score means a higher general level of life quality. No exact values are given for “low” or “high” life quality – this can not be determined by any numbers or scores. WHOQoL OLD is a 24-item questionnaire with good validity and reliability, and it is approved for use in the population of seniors including seniors with mild and moderate dementia. Each item is scored from one to five, the total score ranges from 26 to 120. Interpretation of the total score is estimative: higher total score means a higher general level

of life quality. No exact values are given for “low” or “high” life quality – this can not be determined by any numbers or scores. Each subject agreed to his / her participation in the research (informed consent). Subjects faced to no ethical or moral hazard when participating in the observational study. The results were analyzed using the Statistica 7.0 version Software with the Chi2 test, the U- Mann-Whitney test, and ANOVA tests. The statistical significance threshold was set at a p-value of 0.05.

Results

Descriptive data: Group of seniors living in a community: 968 seniors older than 65 years living in a community in Kroměříž were studied in relation to their life quality. From these seniors, 577 were women (59.6 %) and 391 men (40.4 %). The average age of the seniors in this group was 72.2 $\pm$ 6.8 years (women: 76.4 $\pm$ 8.5 years, men: 66.9 $\pm$ 6.6 years). Group of seniors hospitalized in a psychogeriatric ward: In 2011, 1 012 patients older than 65 years were admitted to the Kroměříž Mental Hospital for treatment. From these patients, 611 were women (60.4%) and 401 were men (39.6%). The average age of the patients was 75.6 $\pm$ 7.9 years (women: 79.7 $\pm$ 9.6 years, men: 73.8 $\pm$ 7.5 years). The average duration of the hospitalization in the sample was 101.3 $\pm$ 48.7 days.

Data about life quality:

The life quality of seniors living in a community was measured by WHOQoL BREF and WHOQoL OLD total scores. Women had a significantly lower total score (generally worse life quality) in comparison to men in both life quality questionnaires (in WHOQoL BREF p-value 0.042, in WHOQoL OLD p-value 0.023). For details see Table 1.

Table 1. Group of community-dwelling seniors - quality of life total scores

	MEAN (women)	MEDIAN (women)	SD (women)	MEAN (men)	MEDIAN (men)	SD (men)	P-VALUE (women/ men)
WHOQoL BREF total score	113.6	108	12.56	122.8	116	9.45	0.042
WHOQoL OLD total score	100.3	95	11.17	111.5	106	8.26	0.023

The life quality of seniors hospitalized in a psychogeriatric ward in the Kroměříž Mental Hospital was measured by WHO-QoL BREF and WHOQoL OLD total scores. Again, women had a significantly lower total score (generally worse life quality) in comparison to men in both life quality questionnaires (in WHO-QoL BREF p-value 0.024, in WHOQoL OLD p-value 0.038). For details see Table 2.

Table 2. Group of seniors hospitalised in psychogeriatric ward - quality of life total scores

	MEAN (women)	MEDIAN (women)	SD (women)	MEAN (men)	MEDIAN (men)	SD (men)	P-VALUE (women/ men)
WHOQoL BREF total score	85.5	80	13.20	93.6	89	10.05	0.024
WHOQoL OLD total score	80.2	78	12.65	89.5	84	10.12	0.038

Statistical comparison of life quality measured by a total score of WHOQoL BREF and WHOQoL OLD questionnaires in seniors living in a community and seniors hospitalized in a psychogeriatric ward showed statistical differences between women and men too – women with a mental disorder achieved the lowest total scores among all scores in this study (they generally had the worst life quality) in comparison to men with a mental disorder or healthy male controls (p = 0.0012).

Discussion

Mainstream research in the field of life quality around the world focuses mostly on evaluating the life quality of seniors living in a community [8], residential settings and care homes

[9], nursing homes [10], institutionalized seniors [11], or in seniors having dementia [12]. In the presented study, women (with or without a mental disorder) achieved the lowest total scores in WHOQoL BREF and WHOQoL OLD questionnaires of all scores in this study (they generally had the worst life quality) in comparison to men (with or without a mental disorder). The cause of this finding may vary – there are many different biological aspects (loneliness in women due to a different life expectancy than men), financial aspects (poverty), sociocultural and environmental aspects (the different position of women in society compared to men). Limitations of the study: although WHOQoL BREF and WHOQoL OLD questionnaires were recommended for the senior population even with mild and moderate dementia [8], different questionnaires evaluating the life quality of seniors could be used (see web link to Patient-Reported Outcome and Quality of Life Instruments Database in references). Another limitation of the study can be seen in evaluation of WHOQoL BREF and WHOQoL OLD questionnaires. Only the total scores achieved in the WHOQoL BREF and WHOQoL OLD questionnaires were measured, with no regard to domains or determinants that could show other subtle gender differences in life quality.

Conclusion

Women without a mental disorder seem to be at a higher risk of bad life quality in comparison to men. The situation is even worse in the case of the presence of a mental disorder - women with a mental disorder achieved the lowest total scores in WHOQoL BREF and WHOQoL OLD questionnaires among all the scores obtained in this study, and they are extremely frail to perceive low life quality.

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