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ORIGINAL PAPER

INFLUENCE REMINISCENCE THERAPY ON QUALITY OF LIFE PATIENTS IN THE LONG-TERM HOSPITAL

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Abstract

Aim: The aim of the research was to identify and describe the quality of life of the elderly admitted to the Long Term Care Institution (LTCI) of Municipal Hospital of Ostrava (OCH) and compare it with the population norm. Furthermore, to evaluate the influence of reminiscence on their quality of life, cognitive function, and the presence of depressive symptoms. And to recognize the importance of reminiscence in the provision of nursing care for the elderly in a health care facility. *Methods:* The research sample consisted of 41 patients older than 60 who were admitted to the LTCI with reduced cognitive function, MMSE test results of 24 or less and who had signed an informed consent form. The method chosen was quantitative research using standardized measuring instruments used in geriatrics, namely the WHOQOL-BREF, WHOQOL-OLD, AAQ, MMSE and GDS questionnaires. These questionnaires were used before and after intervention. The reminiscence intervention therapy was carried out in groups of 5-10 participants once a week for 6-8 weeks and had a narrative character. *Results:* The elderly in the LTCI had slightly reduced quality of life in terms of independence and social participation. In other areas of life which were measured by the standardized WHOQOL-BREF and WHOQOL-OLD questionnaires quality of life was determined as within the interval of the population norm. It was found that reminiscence had a positive effect on quality of life in the domains of physical health, mental health, and also on the state of cognitive functions and the presence of depression. *Conclusion*: Reminiscence is an inexpensive non-pharmacological intervention, which has contributed to improving quality of life, cognitive function and a reduction in depression among the elderly hospitalized at the LTCI. Reminiscence work should become an example of good practice at every health-care facility which provides nursing care for the elderly and dementia sufferers.

Key words: quality of life, reminiscence, an elderly person, dementia.

Introduction

Quality of life is the subject of interest of various scientific disciplines. In the past, the focus was on the elimination and alleviation of suffering of the ill and the poor. Nowadays satisfaction with one's life is under investigation. Quality of life is about needs and the satisfaction of one's needs, values and preferences, which naturally change with the development of a human personality (Čevela et al., 2013, p. 198-199).

With life expectancy increasing, it is becoming more and more important to consider the factors that can positively influence ageing and quality of life in old age. The basic starting point for the application of reminiscence in the care of the elderly in institutions is the adoption of the principles of patient-centered care – such care which would be based on respect and aimed at promoting human dignity. Reminiscence techniques help to evoke pleasant memories from the past. They also facilitate the development of a proactive approach to life in the elderly and to foster a sense of self value. This technique is particularly suitable for those with dementia (Janečková et al., 2008). Dementia is not an accompanying symptom of ageing, but a disease in itself. If we could better understand dementia, we could better explain its manifestations in patients' behaviour, and attribute this undesirable behaviour to the disease, not to the patient (Koběrská et al., 2003,

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p. 9). Dementia is considered a serious disease causing distress not only to the patient, but also to those around them. An important role in controlling the symptoms of the disease is played by the patient's premorbid personality, and how informed they, their family and carers are about the disease (Kučerová, 2006, p. 12). Comprehensive care of patients with dementia includes both pharmacological and non-pharmacological approaches, including the ensuring of an adequate environment which can help to preserve quality of life and self-sufficiency and allay the sufferer's behavioural disorders (www.alzheimer.cz). Gudex et al. (2010) deals with the strengthening of the self-concept and self-esteem of the elderly with dementia in institutions, stating that reminiscence can positively affect quality of life within 12 months. The results of randomized controlled trials (n = 102), published by Wang (2009), suggest that structured reminiscence may contribute to the slowing of decline in cognitive function ($p = 0.015$) and that it can enhance affective functions ($p = 0.026$) in the elderly with impaired cognitive functions.

Non-pharmacological management of dementia is guided by the principles of good communication with the patient and their health status. According to Janečková (2007) the reminiscence approach is a method of communication which should bring the elderly with dementia and their carers closer to each other.

One way to regard the elderly with dementia as unique individuals and to gain an insight into their lives is listening to the stories they tell. Communicating with elderly dementia sufferers and understanding them is indeed difficult, but possible. Once the techniques of reminiscence interviews have been mastered, nursing care can be better planned (Russell, Timmons, 2009).

One of the most important principles of reminiscence is the need to regard a person as a unique being. When providing care for the elderly, this approach can help us to understand who this elderly person with dementia used to be, to look at them in their integrity and completeness. Reminiscence therapy has been accepted as a special method of working with the elderly in institutions which provide long-term care, creating scope for listening to the elderly, so that their memories will not be omitted and overlooked (Špatenková, Bolomská, 2011). It is a useful method, readily available and easily applicable, which can be a source of joy and pleasure, not only for the elderly, but also for their carers (Janečková, Vacková, 2010). Reminiscence offers nursing staff a way to learn about people with dementia in a deeper and more meaningful way (Haslam et al., 2010). It is simply good old-fashioned communication, which should never go out of fashion in nursing (Klever, Sandy, 2013).

Aims

The aim of our research was to identify and describe the quality of life of elderly patients hospitalized in the LTCI of OCH, to compare it with the population norm and assess their attitudes to old age and also to assess the impact of reminiscence as a non-pharmacological intervention in the provision of nursing care, on quality of life, cognitive function and depression. A final aim was to draw attention to the recognition of the importance of reminiscence in the provision of nursing care for the elderly in a health care facility.

Methods

The work is pilot research for which a quantitative research method was chosen, with the help of a questionnaire survey by standardized measuring tools used in geriatrics.

Sample

The research was carried out in the LTCI of OCH with the approval of the ethics committee of the institution. The sample consisted of 41 patients who were hospitalized at the LTCI. The selection of participants was deliberate and was conducted according to inclusion criteria: a lower age limit of 60; an MMSE cognitive test result value in the range of 9-24; willingness to cooperate in reminiscence therapy; and the signing of an informed consent form. The selection of participants was conducted in cooperation with their doctors. The sample included 60 participants, but 19 participants were excluded for failure to comply with the frequency of intervention.

Reminiscence therapy

Reminiscence therapy was carried out in selected groups of 5-10 patients, once a week for eight weeks in the form of 40-60 minute sessions. A narrative character of reminiscence was chosen. Most often it consisted of telling story which was free of evaluation and did not try to reveal the person's inner self. Topics focused on the areas of: childhood and youth (games, friends, and first love); favourite foods; and important people (relatives, friends, historical figures) according to Janečková and Vacková (2010, p. 83-84).

Measurement

Before and after the intervention, in order to quantify the effect of reminiscence therapy on quality of life, a

survey by questionnaire was conducted using standardized instruments for measuring quality of life and identification of attitudes towards ageing and old age. Questionnaires were completed with participants in two steps over one day. For assessment of depression, the Yesavage Geriatric Depression Scale (GDS), a short form, was used. The evaluation of cognitive function was conducted using the MMSE (Mini Mental State Examination) questionnaire for measuring degree of cognitive impairment. The results of the GDS and MMSE questionnaires were categorized according to Topinková (2010, p. 217-218, 224). The MMSE test results of 25-30 points is standard, 24-18 points indicates mild cognitive disorder, 17-9 moderate, 8 points or less severe cognitive impairment. A GDS score range of 0-5 = no depression, 6-10 = mild depression, a score over 10 points = apparent depression. To evaluate quality of life, the WHOQOL-OLD questionnaire was used containing 24 items grouped into four domains and the WHOQOL-BREF questionnaire also containing 24 items grouped into four domains and two individual items - overall quality of life and satisfaction with health. The range of scales for individual questions is 1-5, for domains it is 4 to 20. Higher scores indicate better quality of life.

For the assessment of attitudes to age and ageing, the AAQ (The Attitude to Aging Questionnaire) was used, which contains 23 items in three domains. The range of scales in the questions is 1-5, for domains it is 8-40, whereby higher scores indicate a higher degree of agreement.

Data analysis

The data from the WHO-QOL-BREF, WHOQOL-OLD, AAQ questionnaires were processed according to Dragomirecká from the User's Manual of the Czech version of the World Health Organization questionnaire for evaluating quality of life in old age (Dragomirecká, Prajsová, 2009).

For comparison of the results of quality of life with the population norm, descriptive statistics were used. Values of population norms were obtained from the User's Manual of the Czech version of the World Health Organization for evaluating quality of life in old age (Dragomirecká, Prajsová, 2009, p. 42). To compare the values of the first and second measurements by the GDS, MMSE and all domains (WHOQOL-BREF, WHOQOL-OLD, AAQ) the Wilcoxon paired sample test was used. For these items the basic characteristics of descriptive statistics were also calculated. To compare the categories of the first and second measurements of the GDS and MMSE questionnaires, Bowker's test was used. Frequency values for these variables were also calculated- absolute and relative. Statistical tests were evaluated at a significance level of 5%. Statistical analysis was performed with the use of NCSS V. 7 1.14 statistical software. For data collection, the EPIDATA program was used. To convert data into electronic format and to process data, MS Excel was used.

Results

The research involved 41 participants, of whom 7 were men and 34 women aged 63-96 (the mean age of the sample was 82.64). The most numerous group consisted of participants of 80 years of age and above (30), the smallest numbers of participants were in the age group of 60-69 (4). Nineteen participants had elementary education; 12 had vocational education; 6 secondary education (including the graduation exam); and 4 participants had university education. All participants felt unwell although their health status was stable. Using the MMSE test, mild cognitive impairment was found in 76% participants and moderate cognitive impairment was found in 24% participants. The GDS test revealed depressive symptoms in 61% participants.

Evaluating quality of life

As a comparison of the results from individual domains of the WHOQOL-BREF and WHOQOL-OLD questionnaires with the population norm suggests, patients at the LTCI at the beginning of their hospitalization (within three days of admission), achieve the mean score in terms of quality of life in the domains of social relations, sensory function and death and dying. In the domain of physical health, mental health, environment, fulfilment, and close relationships, the results are also in the interval of the norm, albeit at its lower limit. In the domain of independence and social participation, the results correspond to a slightly reduced quality of life (see table 1). The domain of social relations received the highest ratings, while the domain of social participation was evaluated worst.

The highest values for the individual items of the WHOQOL-BREF questionnaire were found in the following items: personal relations (3.68), support of friends (3.66) and environment (regarding area of residence) (3.46). Values higher than in the population norm were identified in the following items: environment (3.02), finance (3.34) and access to health care (3.71). The items which received the lowest rating are: pain (2.37), opportunity to pursue hobbies (2.41), mobility (2.61), working performance (2.71), daily activities (2.78) and presence of negative feelings (2.88).

The most highly evaluated items of the WHOQOL-OLD supplementary module were: importance of friendship (3.88); satisfaction with life achievements (3.83); and freedom in decision making (3.82). The following items received higher values than the population norm: problems with the senses and communication with people (2.44) and the recognition they deserve (3.44). The results with the lowest values were found in the following items: concerns about means of dying (2.12), sensory loss and engagement in activities (2.22), sensory deterioration and everyday life (2.24).

Table 1 Mean scores of WHOQOL-BREF and WHOQOL-OLD domains in the sample and the population norm

Domains	**LTCI** Patients** (n = 41)	Extended	**Population norm*** Interval of the norm (n = 325)			Extended
	mean ±s	Slightly decreased quality	Lower limit	Mean±SD	Upper limit	Slightly increased quality
Domain 1 (physical health)	11.69±3.05	10.7	12.2	13.71±3.00	15.2	16.7
Domain 2 (mental health)	12.50±2.49	11.6	12.8	13.95±2.38	15.1	16.3
Domain 3 (social relations)	14.68±2.22	11.7	12.8	13.96±2.25	15.1	16.2
Domain 4 (environment)	12.93±1.60	11.5	12.5	13.58±2.11	14.6	15.7
Sensory functioning	14.32±4.05	10.6	12.4	14.32±3.75	16.2	18.1
Independence	12.93±2.38	11.5	13.1	14.64±3.12	16.2	17.8
Fulfilment	13.15±2.04	11.3	12.6	13.80±2.47	15.0	16.3
Social participation	11.07±3.04	11.0	12.5	13.98±2.94	15.5	16.9
Death and dying	14.34±3.86	8.7	10.7	12.77±4.05	14.8	16.8
Close relations	13.59±3.20	11.1	12.7	14.27±3.14	15.8	17.4

* Dragomirecká, Prajsová, 2009, s. 42; **pre-test; SD – standard deviation

Evaluation of attitudes towards age and ageing

Participants express higher levels of agreement most often with statements included in the domain of psychosocial losses (see table 2). The highest levels of agreement are achieved in the domain of psychological growth. The items "it is very important to pass on one's experience to young people" and "I want to set a good example for young people", from the domain of psychological growth, achieved the highest values in the questionnaire (3.76 and 3.83 respectively), which were also higher than the population norm. The lowest values were found in the items "health problems do not prevent me doing what I want" (2.49) and "ageing is easier than I thought" (2.59), both in the domain of physical changes.

Changes in attitudes towards age and ageing after the completion of reminiscence therapy are shown in Table no. 2. Reminiscence has a beneficial effect on attitudes towards ageing and old age in the domain of psychological growth (p 0.0143). The second measurement (post-test) shows improvement, although values remain below the population norm. In the items "as I get older, I find that it is more difficult for me to talk about my feelings" and "as I get older, I become less physically self-sufficient" no changes occurred.

Evaluation of the influence of reminiscence therapy on quality of life

The influence of reminiscence on quality of life is shown in table 3. which presents the results that were obtained in domains and individual items of the WHOQOL-BREF and WHOQOL-OLD questionnaires. The second measurement (post-test) shows improvement, with the exception of the domain of independence. In the WHOQOL-BREF questionnaire, statistically significant improvement was found in the domain of physical health, mental health and in the individual answer concerning

overall quality of life. In the WHOQOL-OLD questionnaire, statistically significant improvement was achieved in the domain of social participation.

Table 2 Selected items of the AAQ questionnaire: a comparison with the population norm, the impact of reminiscence on attitudes towards old age

AAQ items	**Pre-test** (n = 41) Mean ± SD	**Post-test** (n = 41) Mean ± SD	***Population norm** (n = 325) Mean ± SD
AAQ3 Loneliness is usual in old age	3.41±1.14	3.27±0.95	3.01±1.03
AAQ6 Depression is usual in old age	3.46±0.95	3.15±0.99	3.05±0.96
AAQ9 As I grow old, talking about my feelings is more difficult	3.20±0.98	3.20±0.93	2.64±1.10
AAQ12 I see old age as a series of losses	3.17±0.92	3.12±0.81	3.03±1.04
AAQ15 As I grow old, I become less physically self-sufficient	3.71±0.72	3.71±0.75	2.66±1.16
AAQ17 As I grow old, making new friends becomes more difficult	3.51±0.87	3.24±1.04	2.79±1.24
AAQ22 Age makes me feel excluded from various activities	3.54±0.95	3.51±0.93	2.66±1.15

* Dragomirecká, Prajsová, 2009, p. 42; SD – *standard deviation*

The evaluation of the impact of reminiscence on cognitive functions and depression

The second measurement (post-test) showed a statistically significant improvement in the incidence of depression among participants (see table 4). The use of the Geriatric Depression Scale (GDS) showed that before intervention commenced 70% participants had had depressive symptoms. After completing reminiscence therapy the number of participants with depressive symptoms decreased to 37%. Before intervention, mild depression was found in 17 (41%) participants and apparent depression in 8 (20%) participants. In the second measurement, mild depression was found in 10 (24%) participants, apparent depression in 5 (12%) participants and 26 (64%) participants were without depression.

The results obtained by MMSE testing indicate that before intervention 31 (76%) participants had mild cognitive impairment and 10 (24%) participants had moderate cognitive impairment. After completing reminiscence therapy there was a statistically significant improvement in participants' cognitive function (see table 4). In the second measurement, 21 respondents (60%) had MMSE test values within the normal range, 14 (34%) had mild cognitive impairment, 5 (12%) had moderate cognitive impairment and 1 participant (2%) deteriorated to severe cognitive impairment.

Correlation between the presence of depression, cognitive functions and quality of life

A reasonably close negative linear relationship (r = -0.4575) was found between the presence of depressive symptomatology and overall satisfaction with health status. For other tested WHOQOL-BREF items (Q1 overall quality of life, Q2 satisfaction with health) and MMSE and GDS values no linear relationship was found. Tested variables showed insignificant congruity in the relationship in the pre-test and post-test. The results of the correlation coefficient were below the value of ± 0.20.

Table 3 Comparison of the LTCI patients' quality of life before and after reminiscence therapy

Domains	Pre-test (n = 41)		Post-test (n = 41)		
	Mean	SD	Mean	SD	p
Domain 1 (physical health)	11.69	3.05	12.77	2.62	**0.0170**
Domain 2 (mental health)	12.5	2.49	13.63	2.51	**0.0093**
Domain 3 (social relations)	14.68	2.22	14.73	2.64	0.6331
Domain 4 (environment)	12.93	1.60	13.43	1.58	0.0909
Q1 (overall quality of life)	3.17	0.97	3.54	0.87	**0.0426**
Q2 (overall satisfaction with health)	2.80	1.01	2.90	1.07	0.3908
Sensory functioning	14.32	4.05	13.68	3.67	0.4774
Independence	12.93	2.38	12.85	3.46	0.6532
Fulfilment	13.15	2.04	13.49	1.79	0.2848
Social participation	11.07	3.04	12.78	3.09	**0.0019**
Death and dying	14.34	3.86	14.59	3.81	0.6348
Close relations	13.59	3.20	13.90	2.98	0.5283

SD – standard deviation; p - p value at 5% level of statistical significance

Table 4 Evaluation of the influence of reminiscence on the GDS and MMSE in the sample

	MMSE (n = 41)			GDS (n = 41)		
	Mean	SD	p	Mean	SD	p
Pre-test	19.49	3.73		7.61	3.15	
Post-test	23.63	5.67	**<0.001**	5.20	3.90	**0.0002**

SD - standard deviation; p - p value at a 5% level of statistical significance

Discussion

Quality of life in the observed sample of participants (soon after hospitalization), consisting of elderly patients with dementia at the LTCI Radvanice, is slightly lower in the areas of independence and social participation in comparison with the population norm. In other areas of quality of life, as measured by the WHOQOL-BREF and WHOQOL-OLD questionnaires, established quality of life is in the interval of the norm. The observed influence of reminiscence on quality of life, including its effects on cognitive function and the presence of depressive symptomatology, has produced unexpectedly favourable results which could also have been influenced by variables which were not monitored. These findings are subject to verification and should be a stimulus for further research. Current Czech research into the use of reminiscence in the care of those with dementia, depressive conditions and behavioral changes is represented by Janečková and Holmerová, whose project between the years 2005 - 2007 dealt with the effect of reminiscence therapy on the health status and quality of life of the elderly living in institutions. Their research is based on increasing interest in studying the influence of non-pharmacological methods (reminiscence among them) on health status and quality of life of the elderly. It produces quantitative results which, while not yet sufficiently convincing, suggest trends that point to a positive influence of reminiscence on the symptoms of dementia, and depressivity. According to Dragomirecká and Prajsová (2009, p. 28) depressivity is the strongest predictor of quality of life. In a search for information sources from the MEDLINE, CINAHL and MEDVIK electronic databases in the period between 2009-2013, using the key words 'reminiscence', 'dementia', and 'nursing', reviews, randomized controlled studies, combined research, qualitative research and clinical research were found. Most of these works (especially quantitative research) do not necessarily provide evidence that reminiscence therapy will improve quality of life of the elderly. The results of our pilot research, which provide statistically significant positive findings, may have been affected by unmonitored influences, the small sample of participants (n = 41) and the absence of a control group. Nevertheless, the works of Janečková et al., 2008; Chung et al., 2009; Gudex et al., 2010, and Wang, 2009, among others, do supply proof of improvement in cognitive function and alleviation of depression, as mirrored in our own work, suggesting a statistically significant improvement in depressivity and cognitive status among participants after intervention.

Qualitative studies and combined studies assess reminiscence techniques as beneficial nursing interventions in the care of elderly patients with dementia in their qualitative results. Protocols and recommendations for reminiscence work are also the subject of research abroad. Stinson (2009) provides a protocol for organizing group reminiscence, containing a detailed description of the structure of individual sessions over a six-week period. She recommends group therapy as a nursing intervention to improve perceptions of life. In Czech research published by Janečková and Vacková (2010) the protocol does not appear. Life story work is described in Czech and foreign recommendations as the most appropriate method for the application of reminiscence in nursing. Spittel (2011) states that life story work is helpful for people with dementia. It allows them to tell their stories and refine their identity. This creates an opportunity to talk about personal life experiences and enhances socialization. Giving scope for people with dementia to talk about their own life experiences is essential to the promotion of reminiscence and the calling forth of memories.

Life story work is also useful for nursing staff, giving them the opportunity to learn more about those with dementia and to better assess their needs and, in the process, drawing attention to the person rather than the disease. Narrative interviews and personal experiences in life stories are a useful tool for people with dementia to bolster their own identity.

Reminiscence work is based on the fact that most people feel a need for recognition. Most of us are healthy and self-sufficient individuals; we can actively look for support if required. Elderly patients, especially those with dementia, are isolated and have difficulty finding anyone to listen to them and confirm their personal value. They often feel incompetent in the contemporary world.

Wisdom gained after years of experience may seem insufficient in our rapidly changing world. Reminiscence therapy can help the elderly reaffirm the importance of their hard-earned wisdom (Klever, Sandy, 2013, p. 36-37). Reminiscing has a beneficial effect on the process of adapting to changes that ageing and old age bring, and helps emphasize the positive aspects of a human personality (Špatenková, Bolomská, 2011).

Conclusion

In comparison with the population norm represented by healthy older people, elderly dementia sufferers hospitalized in the LTCI of OCH have slightly reduced quality of life in terms of independence and social participation. In other quality of life domains measured by the WHOQOL-BREF and WHOQOL-OLD questionnaires, quality of life is found to be in the normal interval. Participants' attitudes towards ageing and old age (measured by the AAQ) are characterized by a higher degree of agreement with statements expressing psychosocial losses, such as loneliness, loss of self-sufficiency and the presence of depression. They also concur with the statements that it is very important to pass on experience to young people and to be a positive example to them. Group reminiscence affected quality of life in the domain of physical health and mental health; in an individual question on the overall perception of the quality of life; and in the domain of social participation. Our findings suggest that cognitive function was improved and the presence of depression reduced. Between the presence of depressive symptomatology and overall satisfaction with health status (an individual item) a reasonably close negative linear relationship was established. A positive effect of reminiscence on attitudes towards ageing and old age was found in the domain of psychological growth. Despite these positive findings, we cannot claim categorically that the results of observed indicators were affected purely by reminiscence. In the course of hospitalization, the participants could have been influenced by a number of variables which were not monitored and could have affected this outcome. It is therefore necessary to systematically monitor indicators of quality of life and the functional status of people with dementia in connection with reminiscence in order to have valid evidence of its effectiveness and usefulness. The growing number of people with dementia and the increasing cost of care provide an important stimulus for the development of and research into methods to promote effective and financially viable interventions. In the health care of those with dementia, much attention is still paid to pharmacological interventions, but it is clear that reminiscence, as a psychosocial intervention, can be appropriate and effective.

Ethical aspects and conflict of interest

The authors declare that the study has no conflict of interest and that all ethical aspects of the research were observed while conducting it. All participants were informed about the purpose of the research and agreed to be included in the sample.

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