

Critical Review:

Does reminiscence therapy including life story work improve the quality of life of people with dementia?

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This critical review examines whether reminiscence therapy and life-story work improve the quality of life of individuals with dementia. A review of the literature yielded five studies, four of which were randomized control trials and one single group pre-posttest design. Overall, the results of these studies provided suggestive evidence that reminiscence therapy and life-story work may be an intervention option for people with dementia. However, the evidence base for this field of research is limited and the studies reviewed lacked consistency in intervention design of reminiscence therapy and life-story work. Clinical implications and recommendations for further research are discussed.

Introduction

Currently, 5-7% of people over the age of 60 are living with dementia; this number is projected to double over the next twenty years (Price et al., 2013). In light of the increasingly aging population, and more specifically an increasing number of older adults with dementia, it is essential for the health care system to develop and implement effective strategies for managing the care of aging adults (Haslam et al., 2010). Behavioral and psychological characteristics associated with dementia cause a loss of quality of life and the gradual loss of independence as the disease progresses (Lin, Li, & Tabourne, 2011). Therefore, it is imperative that the strategies used to manage dementia aim to maintain quality of life and build upon retained abilities (Haslam et al., 2010).

Additionally, there is increasing emphasis being placed on person-centered care to help manage the needs of residents with dementia. Life-story type work has been promoted as a way for healthcare workers to identify with the resident by allowing them to link past experiences with present preferences for care. Giving meaning to the words and actions of the resident, in turn improves the care of residents (McKeown, Clarke, Ingleton, Ryan, & Repper, 2010).

Reminiscence therapy (RT) involves using visual aids (e.g. pictures, music, objects and tangible materials) to share past memories and experiences. The main goal of RT is to improve the well-being and communication of the individual and their family, as well as stimulate memory (Haslam et al., 2010). Reminiscence is believed to maintain the

integrity of identity for persons with dementia and aid health care practitioners in providing person-centered care (Clarke, Hanson & Ross, 2003).

In comparison, life story work involves working with patients and their families in reviewing and evaluating a person's life; it is based on the principles of reminiscence but identifies the present and future wishes of the patient (McKeown et al., 2010). Life story work involves therapeutic activities that support a person with dementia in processing life memories and providing counseling when necessary (Lin et al., 2011). In essence, life story work is a highly structured form of reminiscence. Life story books can be developed through reminiscence work and can act as a tangible reminder for the person with dementia which may help maintain a sense of continuity for those with memory deficits (Subramanian, Woods and Whitaker, 2013) as well as provide a reference for staff and family to reflect on.

Objectives

The primary objective of this paper is to outline and critically evaluate the existing literature regarding the effect of reminiscence therapy and life story work on the quality of life of persons living with dementia and the family members who care for them. The secondary objective is to offer evidence-based recommendations regarding the clinical use of reminiscence therapy for people with dementia. Suggestions for further research will also be discussed.

Methods

Search Strategy

Articles related to the topic of interest were found using the following computerized databases: PubMed, ProQuest Nursing and Allied Health sources, CINAHL and PsycINFO. Keywords used for the database search were as follows: ((Dementia) OR (Alzheimer's disease) AND (life story review) OR (reminiscence therapy) AND (Quality of Life). Reference lists of articles were manually searched for additional studies relevant for the purpose of this critical review.

Selection Criteria

Studies selected for inclusion in this clinical review were limited to articles that included a quality of life score as an outcome measure; studies were not dismissed if additional outcome measures were included. Primary research was included and no limits were set on publication date or geographical location of the research participants.

Data Collection

Results of the literature search yielded the following types of articles congruent with the selection criteria mentioned above: single-group pre-posttest (1) and randomized controlled trial mixed (between and within group) (4).

Results

Lin, Li, and Tabourne (2011) examined the impact of an adaptive life review program (LRP) on perceived quality of life of 7 elderly people with mild to moderate dementia using a single group pre-posttest design. LRP sessions (10 in total) consisted of facilitated discussion through leisure activities designed to trigger memories relevant to Erikson's life stages. Perceived quality of life change was measured using the Medical Outcomes Study 36 item Short Form Health Survey (SF-36). Appropriate statistical analysis revealed no significant improvement on quality of life following LRP, however, results showed a trend towards greater improvement for patients with moderate cognitive impairment as compared to mild cognitive impairment.

Strengths of this study include a detailed description of intervention protocol that is based on sound evidence that LRP has a positive effect on well-being. Additionally, cognitive impairment was taken

into consideration during analysis to determine if level of impairment had an influence of the effectiveness of the intervention.

Limitations of this study include a small sample size limiting the potential to find significant results. Additionally, the selection criteria required a certain score on the Mini Mental State Exam (MMSE) but the researchers did not adjust for education level when determining level of cognitive ability. This is of importance because education level is known to influence success on the MMSE (Murden, McRae, Kaner, & Buckman, 1991). Similarly, there is insufficient evidence supporting the reliability and validity of the SF-36 in Taiwanese elders with dementia (Tseng, Lu, Gandek, 2003).

Furthermore, the leader admitted to paying greater attention to the participants with the highest level of cognitive and functional impairment by giving more prompts and interaction. This could have biased the results of quality of life change with relation to levels severity of dementia.

Moreover, without a control group, researchers could not account for confounding variables such as social interaction to explain any observed effects of intervention

Mildly suggestive evidence was provided in regards to the use of an adaptive life review program for improving quality of life of people with dementia. The overall validity of this study is equivocal.

Randomized control trial (RCT) studies

The remaining articles used RCT design, which has a high level of evidence due to the random allocation of participants, decreasing allocation bias, matched variance between groups, decreasing confounding variables and prospective trial comparing treatment and control groups.

Azurra (2012) compared the effect of RT with active and passive controls on the quality of life of 135 nursing home residents with Alzheimer's dementia (AD). RT sessions (24 in total) consisted of peer group interactions using photographs and tangible items to promote sharing and discussion of memories. Quality of life was measured using a Self-Reported Quality of Life Questionnaire (SRQoL). Appropriate statistical analysis revealed an improvement in quality of life at post-treatment for

all groups. Further analysis revealed additional improvements in quality of life for the RT group at 12 weeks and 6 months post treatment.

Strengths of this study include a large sample size and selection criteria requiring participants to meet DSM-IV criteria for Alzheimer's dementia. Additionally, confounding variables such structured sessions (without life story work) and social contact alone were controlled for.

A limitation of this study is the use of an outcome measure that lacks reliability in this population (Kane et al., 2003). Furthermore, cognitive decline was not controlled for and could have counteracted any potential improvements caused by the intervention (Kane et al., 2003).

Despite these limitations, the overall validity of the study provides moderately suggestive evidence for the use of RT to improve the quality of life of individuals with dementia.

Haslam et al. (2010) compared the effect of group RT with independent RT and group control (social contact without RT) on the quality of life of 73 adult care residents with Alzheimer's dementia. Group and individual RT sessions (6 in total) consisted of facilitated conversations about pre-determined topics using tangible objects from each time period. Quality of life was measured using a well-being score consisting of the Quality of Life in Alzheimer's disease (QoL-AD), the Quality of Life Change Scale and the Life Improvement Scale. Appropriate statistical analysis showed greater improvement in well-being scores for the control group relative to either intervention group. The authors determined that RT therapy improved memory, whereas group social interaction improved quality of life. They conclude that RT may have improved memory, making residents more aware of their situation leading to no change in quality of life, although no evidence is provided to support this idea.

Strengths of this study include controlling for the potential confounding variable of social interaction. Furthermore, the methodology included implementation of a protocol congruent with RT.

A limitation of this study includes inconsistency in participants regarding presence of dementia. Additionally, residents with significant language impairments were excluded from participating. As

language impairment is one of the defining characteristics of dementia the generalizability of the results to dementia is limited (McKhann et al., 2011). Furthermore, administration of intervention and assessment were completed by the same researchers allowing for biased results.

Overall mildly suggestive evidence was provided that indicates RT may not have an effect on quality of life.

Subramanian, Woods, and Whitaker (2013) examined the effect of life story book creation and use on the quality of life of 23 individuals with dementia. During the sessions (12 in total) life story books were developed by the family members, with or without participant involvement. The life story was presented in chronological ordering using pictures and memorabilia from the participant's life. Quality of life was measured using the QoL-AD. Appropriate statistical analysis showed improvement in quality of life for the intervention group immediately following development of the life-story book. Quality of life measures 6 weeks post receipt of the life story showed improvement in quality of life regardless of involvement in its creation.

Selection criteria requiring a formal diagnosis of dementia as determined by the DSM-IV and a clinical dementia rating of mild-moderate impairment are strengths of this study. The initial phase of treatment controlled for the confounding variable of social contact by having the "gift" group act as the control group receiving normal care.

Limitations of this study include a small sample size and the use of multiple statistical tests in the analysis, increasing the risk that results will reach statistical significance by chance.

Despite these limitations, the evidence is suggestive that life story work improves quality of life and does so with or without the involvement of the person with dementia in its creation.

Thorgrimsen, Schweitzer, and Orrell (2002) examined the effect of Remembering Yesterday, caring today (RYCT) on the quality of life of 11 community residents with dementia. A subset of RYCT sessions (9 of 18 sessions) consisted of peer group interactions using pictures, music and dance as reminiscence tools. The remaining sessions (11 of 18 sessions) were attended only by the informal

caregivers who were provided training on implementation of RYCT at home, as well as communication strategies. Quality of life was measured using the QoL-AD. Multiple t-tests revealed no significant change in quality of life post intervention.

Strengths of this study include selection criteria requiring a diagnosis of dementia and the blinding of the assessor to group allocation. Expected change over time was controlled for using a group of participants who received usual care.

Limitations of this study include a small sample size making significant results more difficult to obtain and increasing the possibility of Type II error. Additionally, the use of multiple t-test warrants some caution as it increases the possibility of Type I error.

Furthermore, family members provided the majority of the intervention but their skill level was not assessed. Inconsistency in quality and amount of RT received at home may have limited the possibility of finding an effect in a limited sample.

Due to these limitations, this study provides equivocal evidence for the use of RYCT for people with dementia to improve quality of life.

Discussion

Overall, the evidence for reminiscence and life-story work for improving quality of life of people with dementia indicates a potential positive effect. Of the five studies, four determined either that RT or life story work significantly improves quality of life, or the results were trending towards positivity.

An overall limitation of all the above studies is the use of a quality of life measure to indicate success of treatment. Self report is known to be unreliable in this population and the quality of life measures administered in these studies relied solely on the patients report (Kane et al., 2003). Specifically, the QoL-AD is comprised of two scales (one for the patient and one for the informal caregiver) to be used together yet the above studies chose only to use the patients' report. It is plausible that alternative outcomes measures would provide stronger evidence for use of RT and life story work in clinical practice.

A common theme was the use of tangible objects to illicit reminiscence. The two studies that used

personal items showed an improvement in quality of life where as those that used generic items concluded no significant change in quality of life. It is possible that personal items may elicit more in-depth reminiscence and allow for greater gains or maintenance in quality of life. Further research is required to confirm this hypothesis.

The evidence is unclear regarding impact of facilitated social interaction as a confounding variable. Passive control groups were used to try to eliminate this possibility but the results were inconsistent and therefore further research is necessary. It is important to determine which variable is associated with improved quality of life so that allocation of resources is not placed into training group leaders specifically on RT, when all that is necessary is facilitated social interaction.

Level of cognitive decline is another confounding variable not accounted for in the majority of studies. Lin et al. (2011) suggested that participants with moderate cognitive decline benefited more than those with mild cognitive decline. The other studies did not control for level of cognitive decline which may have impacted their results. The degenerative nature of dementia manifests itself in a decline in language function and an increase on the reliance of others; progression of the disease and other medical problems may also be confounding variables not controlled for in the current literature. This provides additional evidence that quality of life may not be an ideal outcome measure in this population.

Healthcare professionals may gain a better understanding of residents with dementia by reflecting on the life story book. Knowledge of the resident's past will aid in improving person-centered care by helping healthcare professionals view the resident not for the dementia but for who they are as a person (McKeown et al., 2010).

Further research may be warranted on the following topics:

1. Is a quality of life measure ideal for determining the impact of RT or life story work? Other outcome measures could include social involvement, communication interactions, or resistance to care.
2. Does Dementia type (i.e. Alzheimer's, Vascular or Lewy body) influence the effectiveness of life story work?

3. What are the benefits on life-story work with populations other than dementia where communication or memory is deficient?

The validity of the above evidence is suggestive that RT and life story work have a positive effect on quality of life. Due to these inconsistencies and limitations, the above clinical review reveals that RT and life story work are important areas that require further evaluation.

Clinical Implications

Due to the limited research in this area, and the inconsistency in implementation of RT and life-story work within the literature, a conclusive statement regarding the effect of this type of intervention on quality of life cannot be made at this time. Clinician's should proceed with an evidence informed approach when using RT or life story work. The use of personal pictures and memorabilia is recommended. Training staff in facilitated social interactions may improve the interactions between patients and staff surrounding the life story book. Involvement of staff in this type of program may improve quality of care of residents by encouraging person-centered care.

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