Life review with older women: an intervention to reduce depression and improve autobiographical memory*

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ABSTRACT. ***Background and aims:*** *As life expectancy rises worldwide and the population grows older, psychopathology in older adults becomes a significant public health concern and intervention methods acquire renewed importance. The aim of the present study was to assess the efficacy of Life Review as an intervention strategy in working with older women with depressive symptoms, specifically through promotion of the specificity of autobiographical memories.* ***Methods:*** *Twenty-two participants were randomly assigned to experimental or control conditions. Intervention consisted of four individual sessions of Life Review, structured along 14 questions aimed at prompting autobiographical memory specificity. Participants in the control condition did not receive intervention.* ***Results:*** *Results indicated a significant change in the experimental group, appearing as the reduction of depressive symptoms ($t(20)=3.58$, $p<0.05$) and an increase in life satisfaction ($t(20)=-3.83$, $p<0.05$), as well as a significant increase in the specificity ($t(20)=-3.46$, $p<0.05$) and positivity ($t(20)=-4.23$, $p<0.05$) of autobiographical memories. All variables reached high effect sizes, with an effect size of $r=0.64$ regarding depressive symptoms.* ***Conclusions:*** *Results suggest that Life Review is a valuable tool for use with older adults, and that promotion of specific autobiographical memories is a mechanism through which the strategy attains its effectiveness.*

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INTRODUCTION

Population aging is a worldwide phenomenon. As life expectancy rises, the probability of pathology also grows, due to biological, physiological, individual, and social changes (1). In Portugal, a substantial number of older adults present risk factors for developing depressive symptoms, such as illiteracy, low income, and incapacities that interfere with daily living (2), entailing the need for developing further and more accurate interventions. In a recent meta-analysis about effective psychotherapeutic and behavioral interventions in clinical depression in older adults (3), cognitive-behavioral therapy and reminiscence therapy (RT) yielded the best results. Life review (LR) is a structured form of reminiscence, covering life themes. Both techniques constitute noteworthy tools for work with older adults, reaching an overall effect size of $d=0.84$ (4).

Autobiographical memory (AM) may be conceived as a memory subtype composed of episodic knowledge and semantic facts, mainly characterized by its visual representation, abstract and self-referred knowledge, and hierarchical structure (5). AM deficits may aggravate anxiety symptoms (6) and mood disorders (7). Although the specific mechanisms that relate AM with depressive symptoms are not clear, Williams (5) proposed that painful memories interfere with the hierarchic search, resulting in an elaborated and complex but inefficient network: the search process within the memory structure is blocked on a general level, resulting in a pervasive cognitive style characterized by the inability to recover specific memories, a phenomenon defined as overgeneralization which, in the long-term, interferes with decision-making, ruminative thoughts and other depressive mechanisms (5, 8). Recent studies indicate the possibility of using reminiscence therapy strategies with depressed older people, aiming at promoting the specificity of autobiographical memories, thus decreasing depressive symptoms (9). We chose to implement a short psychological intervention with a sample of depressed older women, based on LR. The main aim of this intervention was to reduce depressive symptoms in a sample of depressed older adults.

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Key words: Autobiographical memory, depression, life review, older women, reminiscence therapy.

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METHODS

Participants and instruments

Samples were collected from an adult social daycare center located in the north of Portugal. The center works during business hours, providing meals and social activities for older adults, who meet in two common rooms. The sample inclusion criteria were: (i) age over 65 years; (ii) absence of cognitive deterioration, as measured by the Mini Mental State Examination (cut off >20) (10, 11); (iii) presence of clinically significant depressive symptoms, as measured by the Geriatric Depression Scale (cut off ≥4) (12); and (iv) no antidepressant medication or maintenance for over 8 weeks. According to these criteria, 32 of 62 initially assessed older adults were excluded, due to cognitive deterioration (n=11), absence of depressive symptoms (n=20), modification in antidepressant medication in the last 2 months (n=15), and lack of interest in participating in the study (n=3). Some of them matched more than one criterion. Our final sample comprised 22 older women (M=80.7 years, SD=4.5), mainly illiterate (59%) and widowed (55%). Cognitive functions were measured by the MMSE (10), with Portuguese norms (11). To evaluate depressive symptoms, we used the short version of the GDS (12). Life satisfaction was measured with the Life Satisfaction Index (LSI) (13). Autobiographical memory was addressed through the Autobiographical Memory Test (AMT) (7), composed of 15 emotion-related words aimed at promoting recall of personal memories, of events that lasted less than one day.

Procedure

In the first week, pre-test measures (GDS, LSI and AMT) were performed in two separate sessions, following which participants were randomly assigned to a treatment group or a control group. At pre-test, there were no significant differences in age or in designated dependent variables (GDS [$t(20)=-1.87$, $p>0.05$]; LSI [$t(20)=-0.17$, $p>0.05$] and AMT specificity [$t(20)=-0.74$, $p>0.05$] and valence, both positive [$t(20)=-1.21$, $p>0.05$] and negative [$t(20)=0.28$, $p>0.05$]). The intervention consisted of four sessions, with two sessions per week for two consecutive weeks, based on LR (9). Each session focused on a life period (Session 1: infancy; Session 2: adolescence; Session 3: adulthood; Session 4: present and future), and comprised 14 questions, aimed at recalling specific and positive memories (e.g.: S1, Q6: "Do you remember receiving a present, being a child or an adolescent, which made you extremely happy?"; S3, Q1: "Do you remember achieving an important goal, when you were an adult?"). The average length of each session was one hour. Post-test measures were taken one week after the intervention was completed.

RESULTS

Results revealed statistically significant changes in the treatment group, in all measures used, suggesting that LR is a worthy strategy for therapeutic work with depressive elders. Depressive symptoms declined from 10.10 to 5.00 in the experimental group, with a statistically significant difference with respect to the control group [$t(20)=3.58$, $p<0.05$] and a large effect size (r=0.64). Life satisfaction results indicated an increase in mean scores, from 13.40 to 21.20 [$t(20)=-3.83$, $p<0.05$]. Comparison between groups at post-test demonstrated r=0.67. In the AMT, changes in positive and specific memories were highlighted. Positive memories increased from 5.20 to 8.30 [$t(20)=-4.23$, $p<0.05$] and specific memories from 7 to 11.20 [$t(20)=-3.46$, $p<0.05$], differences between groups demonstrating effect sizes of 0.68 and 0.78, respectively. The control group also registered changes from pre-test to post-test, following the same orientation as the experimental group, but without statistical significance.

DISCUSSION

It is noteworthy that, as the specificity of memories increased, depressive symptoms decreased and life satisfaction improved. Results thus suggest that participants submitted to AM recall training recovered more specific memories, and it was possible to observe the transition of retrieved memories, from a wider perspective (e.g., "when I lived in my village"), until a focused and narrowed memory of a single event (e.g., "and I can really see my son, standing over there, with the broom in his hand"). At the same time, participants scored lower on the scale of depressive symptoms and higher in life satisfaction. Results indicate significant changes in all dependent variables, and the promotion of specific past memories may even be the mechanism through which RT reaches the positive results found in various studies (e.g., 9, 14). Although the interacting mechanisms between AM and depressive symptoms have not yet been clarified (5), there is a considerable body of evidence revealing the inability to retrieve specific life events as a vulnerability factor for depression (15). In view of our results, that overgeneralization of autobiographical memories which characterizes depressive states may be suitable for intervention, through specific strategies, results which have also been found in other studies (e.g., 16).

There are two main limitations to our study. The first is sample characteristics, i.e. the reduced size and constant contact which participants had with each other. The second is the absence of a third group submitted to other types of intervention, as our results may have been obtained by other mechanisms, such as constant interaction with the therapist. However, it is noteworthy that, due to the setting – a daycare center where older adults shared two common rooms – spontaneous communications and

structured activities were frequent, thus making social interactions normative and decreasing the impact of the mere presence of the researcher.

Life review proved to be a worthy method in working with older adults, particularly through the promotion of specific autobiographical memories, as also shown by previous clinical results (9, 17). Using older adults' memories means that the need to learn new techniques or exercises can be avoided, an appealing characteristic, as it makes low intellectual demands. This is undoubtedly a positive factor, as older adults can feel more comfortable with the required tasks (18). However, there is still a considerable requirement for additional research in this field, to define all the concerned variables carefully. Establishing intentional goals and methodologies and also continuous assessment strategies are the best ways of guaranteeing the accuracy of interventions such as life review.

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