

Reminiscence Therapy for Older People suffering from Loneliness, Anxiety and Depression: A Review of the Literature

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Abstract

Reminiscence therapy is generally used to treat mental health problems. Reminiscence therapy uses the recall of past events, feelings and thoughts to facilitate pleasure, quality of life or adaptation to present circumstances. Reminiscence therapy is believed to provide numerous benefits to older people, especially those with loneliness, anxiety and depression. The aim of this review was to explore the literature related to reminiscence therapy for older people with loneliness, anxiety and depression. This review considered all types of research design. The inclusion criteria were studies that included older people aged 60 years and over, and outcomes on loneliness, anxiety or depression. A literature search strategy involved published and grey literature. Twenty-four studies met the inclusion criteria. Five key themes were derived from the literature: integration of theories in reminiscence therapy, different classification of reminiscence therapy, factors that may influence reminiscence therapy, the effectiveness of reminiscence therapy and the integration of new elements in reminiscence therapy. Further research in this area is needed in terms of improvement of methodological quality such as rigorous control group and integration of new elements in reminiscence therapy.

Keywords: anxiety, aged, depression, depressive symptoms, loneliness, nursing research, reminiscence

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Introduction

With advancing age, older people may develop loneliness, anxiety and depression due to numerous changes in their roles and relationships (Brownie & Horstmanshof, 2011). In Malaysia, the current trends showed increasing of nuclear family (Department of Statistics, 2010) and many older people left alone after their children choose to move out after getting married. Moving to a new place such as a residential aged care facility may become a stressful event to the older people. Older people need to have the skills in making friends and able to socialize with new people (Nancy, Vicki, Douglas, & Amy, 2004). Difficulty in adapting to new environments may increase the possibility of developing loneliness, anxiety and depression.

Loneliness, anxiety and depression in older people are interconnected mental health problems. Loneliness was found as a risk factor for anxiety (Barg et al., 2006) and depression (Alpass & Neville, 2003). Meanwhile, anxiety usually presents with depression, nevertheless some older people also have anxiety without depression (Bryant, Jackson, & Ames, 2008). It was found that anxiety and depression left untreated may increase the risk of developing lower quality of life, several disorders and decrease in life expectancy (Freudenstein, Jagger, Arthur, & Donner-Banzhoff, 2001). Depression is a major health problem in older people, leading to increased risk of suicidal action (Han & Richardson, 2010). The complexity of depressive symptoms due to coexistence of physical problems and misbelief that it is part of the normal aging process may contribute to undiagnosed depression in older people (Mary, Connie, Ebony, & Suzanne, 2008). Therefore, treating loneliness, anxiety and depression among older people is a challenging task to the health care providers.

The options to treat loneliness, anxiety and depression can be classified into pharmacological interventions and non-pharmacological interventions. While pharmacological intervention is common to treat anxiety and depression, loneliness is always treated with psychosocial interventions such as group therapy and counseling. Regarding pharmacological intervention, psychotropic drugs such as tricyclic antidepressants (TCAs), selective serotonin reuptake inhibitors (SSRIs) and monoamine oxidase inhibitors were all effective in treating depression among institutionalised older people (Wilson, Mottram, Sivananthan, & Nightingale, 2001). However, pharmacological interventions may provide various adverse effects towards older people (Coupland et al., 2011). It was found that forgetfulness also increased non-compliance to medications among older people (Henriques, Costa, & Cabrita, 2012). Due to all possible risk factors, non-pharmacological intervention such as reminiscence therapy (RT) may be a better option for older people with loneliness, anxiety and depression.

Reminiscence therapy can be defined as a therapy that uses the recall of past memories or stories, feelings and thoughts to facilitate pleasure, quality of life or adaptation to present circumstances (Bulechek, Butcher, & Dochterman, 2008). The benefits of RT include no requirement of new skills (Chen, Li, & Li, 2012), its suitability for older people with cognitive impairments and physical limitations (Hsieh & Wang, 2003). Thus, the present study aimed to review the literature related to reminiscence therapy for older people with loneliness, anxiety and depression.

Methodology

Literature searched strategy

Several keywords with Boolean operators were used to find relevant articles such as ‘remembrance’, ‘remembrance therapy’, ‘older people’, ‘older adults’, ‘aged’, ‘lonely’, ‘loneliness’, ‘anxiety’, ‘depression’ and ‘depressive symptoms’. The databases involved were Medline, Cinahl, Pubmed, Cochrane, Scopus, Sciencedirect and PsycInfo. Grey literature such as Google scholar and Proquest database for dissertations and theses also were used to search related articles to the topic of interest. Hand searches of reference lists of retrieved articles also were implemented to ensure all relevant articles had been retrieved. This review was limited to full text articles only. Only articles published from 2002 to 2014 were reviewed in the present study. Only articles published in English or Malay language were selected. The titles and abstracts of identified published articles were screened for topic relevance to identify potentially relevant articles. All of the full text articles were then screened and included or excluded on the basis of the related topic to the study. This review included all types of studies, qualitative or quantitative studies. The population of interest was people aged 60 years and over.

The literature search strategy identified 3364 potentially relevant studies (Figure 1). Based on the irrelevance of title to the topic of interest, 2989 studies were excluded. Due to duplications another 151 studies were discarded, resulting in 224 potential studies. Another 169 studies were omitted as loneliness, anxiety and depression were not the main interest in the study and involved participants younger than 60 years of age. The total number of studies included in the review was 24.

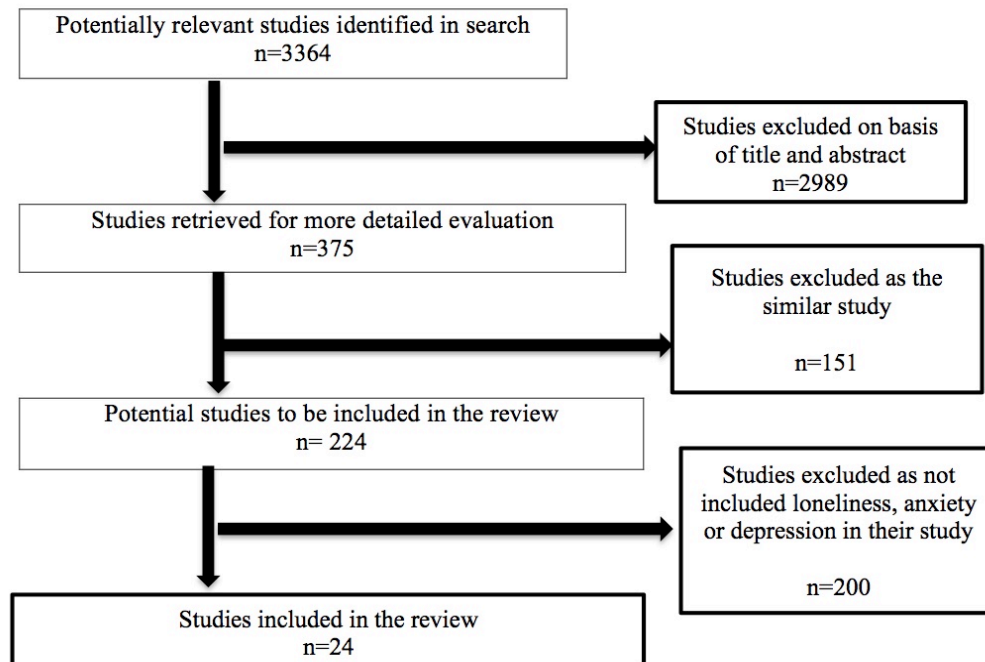


Figure 1 Literature searches strategy

Results

The total number of studies involved in the review was 24 (Table 1). Five themes were found from the literature; (1) Integration of theories in reminiscence therapy; (2) The different classification of reminiscence therapy; (3) Factors that may influence reminiscence therapy, (4) The effectiveness of reminiscence therapy for older people with loneliness, anxiety and depression and (5) The integration of new elements in reminiscence therapy.

Table 1 Summary of selected studies

No	Studies	Country	Design	Sample size	Setting	Result
1.	Chiang et al. (2010)	Taiwan	Experimental	92	A nursing home	A significant positive short-term effect on depression and loneliness in the experimental group than those in the control group.
2.	Emery (2002)	USA	Experimental	35	Assisted living facilities	Spiritual reminiscence therapy reported no significant outcome on anxiety and depression.
3.	Housden (2009)	UK	Systematic review	10 studies	Residential aged care facilities	Development of themes in RT <ul style="list-style-type: none"> • Social interaction • The functions of reminiscence • Purposeful structuring groups & activities • Participants' relationships with group leaders • Expressing feelings
4.	Haslam et al. (2010)	Australia & UK	Experimental	73	Specialized care units	Results indicated that RT group produced effective outcomes and significantly decrease depression.
5.	Shellman, Mokel, and Hewitt (2009)	USA	Experimental	56	Community	Integrative RT has a positive effect on decreasing depressive symptoms in older African Americans.

6.	Afonso, R. M., et al. (2011)	Portugal	Experimental	90	A health center	Older people with depression showed significant increases in psychological well-being and ego integrity.
7.	Chueh and Chang (2014)	Taiwan	Quasi-experimental	21	A nursing home	After 4 weeks of RT, the experimental group significantly improved their depression in the post-test, 3 months and 6 months follow-up data compared with the control group.
8.	Hanaoka, Muraki, Yamanaka, Shimizu, and Okamura (2011)	Japan	Experimental	22	Community	Geriatric Depression Scale-15 showed significant changes after RT.
9.	Karimi et al. (2010)	Iran	Pre-test and post-test	29	A nursing home	The findings showed that integrative RT led to statistically significant reduction in depression compared to control group. Although instrumental RT also reduced depression, this improvement was not statistically significant compared to the control group.
10.	Sharif, Mansouri, Jahanbin, and Zare (2010)	Iran	Quasi-experimental design	49	A day centre	The depression decreased significantly immediately after the intervention and 1 month after the intervention.

11.	Stinson and Kirk (2006)	USA	Experimental	24	An assisted living facility	Data revealed a non-significant decrease in depression in the RT group
12.	Hsu and Wang (2009)	Taiwan	Quasi-experimental	45	Four long term care facilities	Reminiscence sessions resulted in a significant 2-point decrease in the Geriatric Depression Scale-short form.
13.	Wilson (2006)	USA	Quasi-experimental	45	Two nursing homes	RT effective in decreasing depression scores.
14.	Chao et al. (2006)	Taiwan	Quasi-experimental	24	A nursing home	The effect of group RT on depression was not significant.
15.	Liu, Lin, Chen, and Huang (2007)	Taiwan	Quasi-experimental	26	Community	RT significantly lessened loneliness among older people who are living alone. The reduction in depression levels did not reach statistical significance.
16.	Willemse, Depla, and Bohlmeijer (2009)	The Netherlands	Quasi-experimental	36	Three psychiatric hospitals and one sheltered housing program	Older people with a psychotic problem showed their depressive symptoms increased significantly after RT.
17.	Bohlmeijer, Smit, and Cuijpers (2003)	The Netherlands	Meta-analysis	20 studies	Community, nursing homes, hospital	Reminiscence therapy is potentially effective treatments for depression in older people.
18.	Webster, Bohlmeijer, and Westerhof (2010)	Canada The Netherlands	Review	Not applicable	Not applicable	The review found that there is a gap in RT in terms: <ul style="list-style-type: none"> • Lack of conceptual clearness • The inconsistent evidence of the therapeutic

						<p>effects of RT</p> <ul style="list-style-type: none"> • Lack of rigorous experimental design • Numerous studies focused on empirical knowledge that commonly presented with inadequate theoretical connections.
19.	Meléndez Moral, Fortuna Terrero, Sales Galán, and Mayordomo Rodríguez (2014)	Republic Dominican	Quasi-experimental	34	Community	Integrative RT demonstrated statistically significant reduction in depression
20.	Meléndez-Moral, Charco-Ruiz, Mayordomo-Rodríguez, and Sales-Galán (2013)	Spain	Quasi-experimental	34	Two retirement homes	RT significantly reduced depression.
21.	Zhou et al. (2012)	China	Experimental	125	Community	Geriatric Depression Scale decreased significantly in experimental group than in control group after six weeks intervention.

22.	Wang (2005)	Taiwan	Quasi-experimental	48	Long-term care facilities	The results indicated that the experimental group reported less depression on the post-test comparing to the control group.
23.	Ghanbaranah, Khoshkhab, and Mohammedi Shahbalaghi (2014)	Iran	Experimental	72	An institution for older people	Depression level decreased significantly in experimental group.
24.	Gaggioli et al. (2013)	Italy	Experimental	32	Social senior centres	The finding showed that the older people reported significantly less loneliness.

Note: RT: Reminiscence Therapy; UK: The United Kingdom; US: United State of America

Discussion

Integration of theories in Reminiscence Therapy

In relation to the literature search, three different theories have been integrated in RT such as Social identity theory (Haslam et al., 2010); Cognitive adaptation theory (Shellman et al., 2009); and Erikson's theory (Emery, 2002; Stinson & Kirk, 2006).

From a social identity theory perspective, RT helps preserve the social identity and well-being of older people. It was found that RT delivered in a group situation facilitated participants' well-being and social identity (Haslam et al., 2010). A cognitive adaptation perspective suggests that RT could assist older people to reframe their life events from undesirable feelings to better ways of thinking and feeling about them and was significantly effective in reducing depression (Shellman et al., 2009).

Other studies integrated Erikson's theory in RT (Emery, 2002; Stinson & Kirk, 2006), proposing that RT was beneficial for older people to achieve ego-integrity by reducing feelings of anxiety and depression. This was supported in two studies of older people with anxiety (Emery, 2002) and depression (Emery, 2002; Stinson & Kirk, 2006), however no study that integrated Erikson's theory had specifically targeted older people with loneliness.

The particular theory underpinning RT mainly depended on the study purposes. For example, Erikson's theory may be a suitable theory if the main objective of RT was to reduce feelings of anxiety and depression by helping older people to accept their previous life events. Social identity theory might be useful for a study focused on using RT in increasing social interaction for older people with loneliness.

Different classification of Reminiscence Therapy

Three types of RT have been identified as simple reminiscence, life review and life review therapy (Webster et al., 2010). Simple reminiscence is unstructured, spontaneous reminiscence with the aim to improve social wellbeing of older people (Webster et al., 2010). It is mainly for those with low levels of stress to encourage social interaction and to improve quality of life. Life review is more structured compared to simple reminiscence and focused on positive and negative life experiences. The more advanced life review is called life review therapy. This type of therapy focused on people with severe anxiety and severe depression in order to decrease these symptoms.

Although some studies tend to use life review and reminiscence interchangeably, the definition of life review is definitely different from RT. Life review is a subcategory of RT itself and can be conducted when dealing with a problem (Stinson & Kirk, 2006). The similarity of life review and reminiscence is the recall of past memories. The life review therapy is developed to be psychotherapeutic for people who are severely depressed or anxious (Webster et al., 2010).

From this review, it was also found that some studies implemented different types of RT. For example, integrative RT was integrated in several studies (Karimi et al., 2010; Meléndez Moral et al., 2014; Shellman et al., 2009). By definition, integrative RT reviews the past events regardless of negative or positive events (Wong & Watt, 1991). Meanwhile, instrumental RT has been compared with integrative RT in a study for older people with depression (Karimi et al., 2010). Instrumental reminiscence can be defined as how past events have been resolved (Wong & Watt, 1991). In summary, integrative RT was found to be significantly effective in reducing depression whereas instrumental RT was not significant in reducing depression.

Factors that may influence Reminiscence Therapy

Sociodemographic factors are believed to influence the effectiveness of RT. These factors include age, gender, ethnicity and personality (Webster et al., 2010). In relation to age, older people may more frequently reminiscence than younger age groups (Webster et al., 2010). The influence of gender in RT outcomes is inconclusive, mainly due to differences of methodological approaches and measurements (Webster et al., 2010).

Since a number of studies were conducted in western countries and only a few studies conducted in Asian countries, it is challenging to discuss the impact of ethnicity on reminiscence therapy. Although not many studies conducted on the impact of ethnicity to RT, it was found in China, for instance, RT is preferable in unisex groups for several reasons. It was found that female older people felt uncomfortable to share

their stories in the presence of men and only shared their opinions in the absence of men (Chong, 2000). It was also difficult to retain the participation of men in the group if only a few of them were in attendance (Chong, 2000). This factor needs further exploration in future studies.

Another sociodemographic factor is personality. Introverted and extroverted personality required different reminiscence approaches (Webster et al., 2010). To elaborate, sharing memories was more difficult for those with introverted personalities than extroverted personality (Webster et al., 2010). Further, the effectiveness of RT might not be influenced by living arrangements. It was found that living alone did not influence the effectiveness of RT for older people with depression (Liu et al., 2007).

It is unclear about the influence of time duration for RT. The effect of RT duration is inconclusive and studies of between four to 16 weeks duration were found to be effective

(Afonso, Bueno, Loureiro, & Pereira, 2011; Chiang et al., 2010; Chueh & Chang, 2014, Gaggioli et al., 2013, Ghanbarpanah et al., 2014; Hanaoka et al., 2011; Haslam et al., 2010; Hsu & Wang, 2009; Karimi et al., 2010; Liu et al., 2007; Meléndez-Moral et al., 2013; Meléndez Moral et al., 2014; Sharif et al., 2010; Shellman et al., 2009; Stinson & Kirk, 2006; Wang, 2005; Wilson, 2006; Zhou et al., 2012).

The effectiveness of Reminiscence Therapy for Older People with Loneliness, Anxiety and Depression

The effectiveness of Reminiscence Therapy for older people with Loneliness

Since loneliness often overlooked, only three studies were published regarding the effectiveness of RT for older people with loneliness. These three studies found that RT significantly lessened the feelings of loneliness (Chiang et al., 2010; Gaggioli et al., 2013; Liu et al., 2007). Although these studies were conducted in different settings, RT showed its effectiveness for older people who live alone (Liu et al., 2007), who live in institution (Chiang et al., 2010) and who live in community (Gaggioli et al., 2013). These two studies shared similar characteristics; that is, each used UCLA Loneliness Scale to measure outcomes and the same RT duration (ten weeks to two months) (Chiang et al., 2010; Liu et al., 2007). The implementation of different scales (Seniors' perceived levels of loneliness) and shorter RT duration (three weeks) were reported in another study, however, no control condition was implemented (Gaggioli et al., 2013).

A rigorous study design is recommended as with previous studies that used a waiting list control group (Chiang et al., 2010) and active control group (Liu et al., 2007), to differentiate the effects of RT from the effects of social interaction and the social group (Haslam et al., 2010). It is also important to highlight that asking for feedback after RT may provide further information about the effectiveness of RT to the facilitator. One study reported feedback from the participants after RT (Liu et al., 2007). After completed RT, most of older people said they felt happy and less lonely (Liu et al., 2007). Thus, it showed that rigorous control group and feedback after RT is needed in future RT study for older people with loneliness.

The effectiveness of Reminiscence Therapy for older people with Anxiety

Regarding RT for older people with anxiety, there are inadequate sources available to conclude the findings. It was found that only two studies conducted on the effectiveness of RT for older people suffering from anxiety (Emery, 2002; Haslam et al., 2010). Of two studies, only one study found that RT is effective in reducing anxiety in older people (Haslam et al., 2010). It is difficult to conclude that RT in general is effective for older people with anxiety due to different types of RT used in these two studies. In Haslam et al. (2010), group RT was compared to individual RT while Emery (2002) compared spiritual reminiscence therapy group, RT group and a control group. Since there were very limited studies on RT and anxiety, it is difficult to draw conclusion about RT and anxiety.

The effectiveness of Reminiscence Therapy for older people with Depression

A number of previous studies examined the effectiveness of RT for older people with depression (Afonso et al., 2011; Chao et al., 2006; Chiang et al., 2010; Chueh & Chang, 2014; Emery, 2002; Ghanbarpanah et al., 2014; Hanaoka et al., 2011; Haslam et al., 2010; Hsu & Wang, 2009; Karimi et al., 2010; Liu et al., 2007; Meléndez-Moral et al., 2013; Meléndez Moral et al., 2014; Sharif et al., 2010; Stinson & Kirk, 2006; Wang, 2005; Willemse et al., 2009; Wilson, 2006; Zhou et al., 2012). The evidence showed that RT is effective for older people suffering from depression (Afonso et al., 2011; Chiang et al., 2010; Chueh & Chang, 2014; Emery, 2002; Ghanbarpanah et al., 2014; Hanaoka et al., 2011; Haslam et al., 2010; Hsu & Wang, 2009; Karimi et al., 2010; Liu et al., 2007; Meléndez-Moral et al., 2013; Meléndez Moral et al., 2014; Sharif et al., 2010; Stinson & Kirk, 2006; Wang, 2005; Wilson, 2006; Zhou et al., 2012). RT also was found to be clinically effective for older people with depression in a meta-analysis study (Bohlmeijer et al., 2003).

However, three further studies found that RT was not significantly effective for older people with depression (Chao et al., 2006; Emery, 2002; Willemse et al., 2009). One of the factors that influenced these results was a higher dropout rate due to the duration of the intervention (Chao et al., 2006). In one of these studies RT conducted over nine weeks led to an increase in depression level among the participants with a psychotic disorder (Willemse et al., 2009).

Another important component that may influence the result of RT for older people with depression is the implementation of rigorous control group. A number of studies have reported the implementation of control group in the RT study. For example; control conditions without any intervention or waiting-list control conditions (Chao et al., 2006; Chiang et al., 2010; Chueh & Chang, 2014; Emery, 2002; Meléndez-Moral et al., 2013; Meléndez Moral et al., 2014; Wang, 2005; Wilson, 2006), control group with unknown activities (Afonso et al., 2011; Ghanbarpanah et al., 2014; Haslam et al., 2010; Karimi et al., 2010; Liu et al., 2007; Stinson & Kirk, 2006); control group with regular activities in institutional care (Hsu & Wang, 2009; Liu et al., 2007) and control group with health education (Zhou et al., 2012). Some studies did not use a control group (Hanaoka et al., 2011; Sharif et al., 2010). Employing a rigorous control condition is highly recommended for future studies.

A number of quantitative studies found RT is effective in alleviating depression. It has been suggested that conveying feelings is one of the important findings in RT for older people with depression (Housden, 2009). Thus, qualitative measurement on feelings after RT seems an essential ingredient for understanding the effectiveness of RT from the perspective of older people.

The integration of new elements in reminiscence therapy

It has been suggested that spirituality can offer a significant role in psychotherapy (Abu Raiya & Pargament, 2010). Psychotherapy such as spiritual reminiscence therapy is one way of meeting a persons' spiritual needs (MacKinlay & Trevitt, 2006). Introduction of new elements in RT for older people was reported in Emery (2002). However it is clear that more studies using spiritual reminiscence are needed to examine its effectiveness for older people with loneliness, anxiety and depression.

Conclusion

The selection of theories in RT depends on the study objectives. In the literature search there was no one theory more relevant than others. It was also found that there were several classifications of RT. Several factors that may influence RT were found such as age, gender, ethnicity, personality, living arrangement and time duration. Regarding the effectiveness of RT, it was found that there was limited evidence on the effectiveness of RT for older people with loneliness and anxiety. Conversely, there was strong evidence to support the effectiveness of RT for older people with depression. It was also found that some studies integrated new elements such as spirituality in reminiscence therapy. These elements need further exploration in the future studies.

References

Abu Raiya, H., & Pargament, K. I. (2010). Religiously integrated psychotherapy with Muslim clients: From research to practice. *Professional Psychology: Research and Practice, 41*(2), 181-188. doi: 10.1037/a0017988

Afonso, R. M., Bueno, B., Loureiro, M. J., & Pereira, H. (2011). Reminiscence, Psychological Well-Being, and Ego Integrity in Portuguese Elderly People. *Educational Gerontology, 37*(12), 1063-1080. doi: 10.1080/03601277.2010.500585

Alpass, F. M., & Neville, S. (2003). Loneliness, health and depression in older males. *Aging & Mental Health, 7*(3), 212-216. doi: 10.1080/1360786031000101193

Barg, F. K., Huss-Ashmore, R., Wittink, M. N., Murray, G. F., Bogner, H. R., & Gallo, J. J. (2006). A mixed-methods approach to understanding loneliness and depression in older adults. *The journals of gerontology. Series B, Psychological sciences and social sciences, 61*(6), S329-339.

Bohlmeijer, E., Smit, F., & Cuijpers, P. (2003). Effects of reminiscence and life review on late-life depression: a meta-analysis. *International Journal of Geriatric Psychiatry, 18*(12), 1088-1094. doi: 10.1002/gps.1018

Brownie, S., & Horstmanshof, L. (2011). The management of loneliness in aged care residents: an important therapeutic target for gerontological nursing. *Geriatric Nursing, 32*(5), 318-325. doi: 10.1016/j.gerinurse.2011.05.003

Bryant, C., Jackson, H., & Ames, D. (2008). The prevalence of anxiety in older adults: methodological issues and a review of the literature. *Journal of Affective Disorders, 109*(3), 233-250. doi: 10.1016/j.jad.2007.11.008

Bulechek, G. M., Butcher, H. K., & Dochterman, J. M. (2008). *Nursing Intervention Classification (NIC)* (5 ed.). St Louis: Mosby.

Chao, S., Liu, H., Wu, C., Jin, S., Chu, T., Huang, T., & Clark, M. J. (2006). The effects of group reminiscence therapy on depression, self esteem, and life satisfaction of early nursing home residents. *Journal of Nursing Research (Taiwan Nurses Association), 14*(1), 36-44.

Chen, T. J., Li, H. J., & Li, J. (2012). The effects of reminiscence therapy on depressive symptoms of Chinese elderly: study protocol of a randomized controlled trial. *BMC Psychiatry, 12*(189).

Chiang, K. J., Chu, H., Chang, H. J., Chung, M. H., Chen, C. H., Chiou, H. Y., & Chou, K. R. (2010). The effects of reminiscence therapy on psychological well-being, depression, and loneliness among the institutionalized aged. *International Journal of Geriatric Psychiatry, 25*(4), 380-388. doi: 10.1002/gps.2350

Chong, A. (2000). Reminiscence Group for Chinese Older People-A Cultural Consideration. *Journal of Gerontological Social Work, 34*(2), 7-22. doi: 10.1300/J083v34n02_03

Chueh, K. H., & Chang, T. Y. (2014). Effectiveness of group reminiscence therapy for depressive symptoms in male veterans: 6-month follow-up. *International Journal of Geriatric Psychiatry, 29*, 377-383.

Coupland, C., Dhiman, P., Morriss, R., Arthur, A., Barton, G., & Hippisley-Cox, J. (2011). Antidepressant use and risk of adverse outcomes in older people: population based cohort study. *British Medical Journal, 343*. doi: 10.1136/bmj.d4551

Department of Statistics, M. (2010). Population distribution and basic demographic characteristics 2010. Malaysia.

Emery, E. E. (2002). *Living history-spiritually...or not? A comparison of conventional and spiritually integrated reminiscence groups*. (Doctoral dissertation), Bowling Green State University, US.

Freudenstein, U., Jagger, C., Arthur, A., & Donner-Banzhoff, N. (2001). Treatments for late life depression in primary care—a systematic review. *Family Practice, 18*(3), 321-327. doi: 10.1093/fampra/18.3.321

Gaggioli, A., Morganti, L., Bonfiglio, S., Scaratti, C., Cipresso, P., Serino, S., & Riva, G. (2013). Intergenerational Group Reminiscence: A Potentially Effective Intervention to Enhance Elderly Psychosocial Wellbeing and to Improve Children's Perception of Aging. *Educational Gerontology, 40*(7), 486-498. doi: 10.1080/03601277.2013.844042

Ghanbarpanah, I., Khoshknab, M. F., & Mohammadi Shahbalaghi, F. (2014). Effects of 8 weeks (8 Sessions) group reminiscence on mild cognitive impaired elders' depression. *International Journal of Biosciences, 4*(5), 11-22. doi: 10.12692/ijb/4.5.11-22

Han, J., & Richardson, V. E. (2010). The Relationship Between Depression and Loneliness Among Homebound Older Persons: Does Spirituality Moderate This Relationship? *Journal of Religion & Spirituality in Social Work: Social Thought, 29*(3), 218-236. doi: 10.1080/15426432.2010.495610

Hanaoka, H., Muraki, T., Yamane, S., Shimizu, H., & Okamura, H. (2011). Testing the Feasibility of Using Odors in Reminiscence Therapy in Japan. *Physical & Occupational Therapy in Geriatrics, 29*(4), 287-299. doi: 10.3109/02703181.2011.628064

Haslam, C., Haslam, S. A., Jetten, J., Bevins, A., Ravenscroft, S., & Tonks, J. (2010). The social treatment: the benefits of group interventions in residential care settings. *Psychology and Aging, 25*(1), 157-167. doi: 10.1037/a0018256

Henriques, M. A., Costa, M. A., & Cabrita, J. (2012). Adherence and medication management by the elderly. *Journal of Clinical Nursing, 21*(21-22), 3096-3105. doi: 10.1111/j.1365-2702.2012.04144.x

- Housden, S. (2009). The use of reminiscence in the prevention and treatment of depression in older people living in care homes: A literature review. *Groupwork: An Interdisciplinary Journal for Working with Groups*, 19(2), 28-45. doi: 10.1921/095182410X490296
- Hsieh, H. F., & Wang, J. J. (2003). Effect of reminiscence therapy on depression in older adults: a systematic review. *International Journal of Nursing Studies*, 40(4), 335-345.
- Hsu, Y.-C., & Wang, J.-J. (2009). Physical, Affective, and Behavioral Effects of Group Reminiscence on Depressed Institutionalized Elders in Taiwan. *Nursing research*, 58(4), 294-299. doi: 10.1097/NNR.0b013e3181a308ee
- Karimi, H., Dolatshahee, B., Momeni, K., Khodabakhshi, A., Rezaei, M., & Kamrani, A. A. (2010). Effectiveness of integrative and instrumental reminiscence therapies on depression symptoms reduction in institutionalized older adults: an empirical study. *Ageing & Mental Health*, 14(7), 881-887. doi: 10.1080/13607861003801037
- Liu, S. J., Lin, C. J., Chen, Y. M., & Huang, X. Y. (2007). The effects of reminiscence group therapy on self-esteem, depression, loneliness and life satisfaction of elderly people living alone. *Mid-Taiwan Journal of Medicine*, 12(3), 133-142.
- MacKinlay, E., & Trevitt, C. (2006). *Facilitating spiritual reminiscence for older people with dementia a learning package* (2006 ed.). New South Wales: National Library of Australia Catalogue in Publication Data.
- Mackinlay, E., & Trevitt, C. (2010). Living in aged care: using spiritual reminiscence to enhance meaning in life for those with dementia. *International Journal of Mental Health Nursing*, 19(6), 394-401. doi: 10.1111/j.1447-0349.2010.00684.x
- Mary, B. H., Connie, J. M., Ebony, H., & Suzanne, S. (2008). Depression and the Elder Person: The Enigma of Misconceptions, Stigma and Treatment. *Journal of Mental Health Counseling*, 283-296.
- Meléndez-Moral, J. C., Charco-Ruiz, L., Mayordomo-Rodríguez, T., & Sales-Galán, A. (2013). Effects of a reminiscence program among institutionalized elderly adults. *Psicothema*, 25(3), 319-323.
- Meléndez Moral, J. C., Fortuna Terrero, F. B., Sales Galán, A., & Mayordomo Rodríguez, T. (2014). Effect of integrative reminiscence therapy on depression, well-being, integrity, self-esteem, and life satisfaction in older adults. *The Journal of Positive Psychology*, 1-8. doi: 10.1080/17439760.2014.936968
- Nancy, H., Vicki, A., Douglas, A., & Amy, E. (2004). Biobehavioral correlates of relocation in the frail elderly: Salivary cortisol, affect, and cognitive function. *Journal of the American Geriatrics Society*, 52(11), 1856.
- Sharif, F., Mansouri, A., Jahanbin, I., & Zare, N. (2010). Effect of group reminiscence therapy on depression in older adults attending a day centre in Shiraz, southern Islamic Republic of Iran. *Eastern Mediterranean Health Journal*, 16(7), 765-770.

Shellman, J. M., Mokel, M., & Hewitt, N. (2009). The effects of integrative reminiscence on depressive symptoms in older African Americans. *Western Journal of Nursing Research, 31*(6), 772-786.

Stinson, C. K., & Kirk, E. (2006). Structured reminiscence: an intervention to decrease depression and increase self-transcendence in older women. *Journal of Clinical Nursing, 15*(2), 208-218. doi: 10.1111/j.1365-2702.2006.01292.x

Wang, J. J. (2005). The effects of reminiscence on depressive symptoms and mood status of older institutionalized adults in Taiwan. *International Journal of Geriatric Psychiatry, 20*(1), 57-62. doi: 10.1002/gps.1248

Webster, J. D., Bohlmeijer, E. T., & Westerhof, G. J. (2010). Mapping the Future of Reminiscence: A Conceptual Guide for Research and Practice. *Research on Aging, 32*(4), 527-564. doi: 10.1177/0164027510364122

Willemse, B. M., Depla, M. F., & Bohlmeijer, E. T. (2009). A creative reminiscence program for older adults with severe mental disorders: results of a pilot evaluation. *Aging & Mental Health, 13*(5), 736-743. doi: 10.1080/13607860902860946

Wilson, K., Mottram, P. G., Sivananthan, A., & Nightingale, A. (2001). Antidepressants versus placebo for the depressed elderly. *The Cochrane database of systematic reviews*. doi: 10.1002/14651858.CD000561

Wilson, L. A. (2006). *A comparison of the effects of reminiscence therapy and transmissive reminiscence therapy on levels of depression in nursing home residents*. (3206563 Ph.D.), Capella University, Ann Arbor. ProQuest Dissertations & Theses Full Text database.

Wong, P. T. P., & Watt, L. M. (1991). What Types of Reminiscence Are Associated With Successful Aging? *Psychology and Aging, 6*(2), 272-279.

Zhou, W., He, G., Gao, J., Yuan, Q., Feng, H., & Zhang, C. K. (2012). The effects of group reminiscence therapy on depression, self-esteem, and affect balance of Chinese community-dwelling elderly. *Archives of Gerontology and Geriatrics, 54*(3), e440-447. doi: 10.1016/j.archger.2011.12.003

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