

The Impact of Painting Therapy on Alleviating Anxiety and Enhancing Emotional Expression in Alzheimer's Patients

Jingyi Lin

*Central Academy of Fine Arts, Beijing, China
joxiaolyn@126.com*

Abstract. Patients with Alzheimer disorders tend to develop nervousness and emotional difficulties that influence their quality of life and worsen the symptoms of cognitive impairment. Traditional medicines are necessary, but they do not usually help to deal with the mood disturbances associated with anxiety. The non-pharmacological interventions especially the use of creativity using paints has been promising as support therapy in the recent past. This paper examines the possibilities of painting therapy in the treatment of anxiety issues and emotional maximization of patients with Alzheimer. A seven week structured painting therapy process was carried out ranging over 50 minutes weekly over seven weeks to give a secure opportunity to express emotions. The results indicate that painting activities helped the participants to re-experience the memories, emotion and self awareness which are some of the contributing factors to their emotional strength and interest. Notwithstanding, other limitations like the small sample size and the use of subjective assessments make it clear that more research that use larger sample size and quantitative methods is necessary. Further research and investigation can compare the impact of different art therapeutic processes, like music or dance, to have a better insight into their possible use in dementia care and cognitive maintenance.

Keywords: Alzheimer's disease, painting therapy, anxiety reduction, emotional expression, non-pharmacological intervention

1. Introduction

Individuals affected by diseases of the mind, including Alzheimer disease, get to experience increased anxiety, and other associated mental issues that can so negatively affect the quality of their life. Cognitive symptoms may be aggravated by anxiety leading to mood instability and interruption of normal functioning. Although conventional medical therapy is also very fundamental, it often fails to provide efficient ways of curing these affective disorders, particularly anxiety related disorders [1]. Emotional regulation happens upon an even greater challenge to the individuals with Alzheimer as cognitive functioning deteriorates and they begin losing the capacity to interpret and efficiently deal with emotions. Lately, the non-drug method especially the creative manifestation has been promising in aiding the emotional health, in the form of activities such as painting. Painting is also another avenue of expression that may bring the feeling of achievement and alleviate anxiety [2].

This paper will examine the possibilities of painting as a psychotherapeutic intervention that helps to lower the levels of anxiety and slow the progression of cognitive abilities in people with Alzheimer. The seven-week course of the painting therapy will be performed as a sequence of sessions that will

be 50 minutes long and held every week during October 14-25, 2023. These organized activities are aimed at encouraging emotional expression and attachment where patients will undergo a variety of artistic activities under the guidance of a safe and supportive atmosphere. Through these creative practices, in this study, the influence of painting on mood and anxiety will be evaluated, which provides the information about how these interventions can have implications on emotional and cognitive wellbeing. In particular, the study aims at learning the way in which drawing exercises can be used to minimize levels of anxiety and enhance emotional ilxes in individuals living with Alzheimer.

2. Literature review

2.1. Relationship between cognitive impairment and anxiety

Patients with mild cognitive impairment (MCI) can experience anxiety and depression, and it has become a critical issue that determines the quality of life and the progression of the disease. The domestic and foreign research findings indicate that from 10-74 per cent of MCI patients have anxiety symptoms and between 6.1-63.3 per cent of patients display depressive symptoms. Besides impairing the normal functioning of patients on a day-to-day basis, anxiety and depression may hasten the further deterioration of cognitive abilities [3]. Beijing Aging Longitudinal Study was done on a large scale surveying of the 55 year and above residents in three regions of Beijing using stratified random sampling. The depressive signs among the elderly were also common as indicated in this survey that showed a total incidence of 13.5. Interestingly, the results indicated a very high prevalence of the symptoms of depressions among people with mild cognitive impairment (MCI), which implies that the patrons of MCI are more vulnerable to developing depression. This association is an indication of the possible association between cognitive impairment and susceptibility to mood disorders among the elderly [4]. Moreover, Solfrizzi et al. tracked down 2,963 aged aged over 55 and older under three and a half years in the Italian Aging Longitudinal Study. This study established mild cognitive impairment (MCI) among 139 participants of 2,963. In this group, the prevalence of the depressive symptoms among these persons was found to be 63.3 which is very high compared to the general prevalence rate in the elderly. This observation highlights the high susceptibility to depression in patients with MCI, indicating the close relationship between the deterioration of cognition and the emergence of depressive symptoms in elderly people [5]. This result reinforces the risk of MCI and depressive symptoms coexistence which implies that emotional regulation of MCI patients in the aging population would be beneficial in delaying the cognitive decline. Some other researchers have also demonstrated the proximity between the mildly impaired cognitive (MCI) patients and the presence of depressive symptoms. It has been observed that when the brain of patients with mild cognitive impairment (MCI) starts to undergo pathological developments, the patients develop neuropsychiatric symptoms as they progress. Mood swings, perceptual disturbances, and thought disorders are also often included in these symptoms that not only affect the mental health of patients but also contribute to the cognitive deterioration and augment the difficulties in everyday life. As a result, these neuropsychiatric problems also lead to faster worsening of the cognitive functioning and create a high load on the daily life of patients.

To illustrate this Baiyewu et. al. conducted research on 21 healthy aged individuals, 34 dementia individuals and 53 MCI individuals in Nigeria and tested the association between psychiatric and behavioral symptoms of the elderly and their physical and perceptual dysfunction. The research concluded that the rate of psychiatric and behavioral symptoms was intimately connected to the physical health of the patient (severe arthritis, impaired vision, etc.), as well as, to a great extent, associated to the daily living activities and the cognitive degree of the patient [6]. This implies that not only the pathologic modifications in the brain precondition depression and other psychiatric

symptoms in MCI patients, but also the physiological and functional influences play a role in influencing these symptoms.

2.2. Analysis of the advantages of painting for emotional management

Non-pharmacological interventions in dementia care have gained increasing attention due to their minimal side effects and ability to offer holistic support for both the physical and mental well-being of patients. These approaches provide multi-dimensional benefits, addressing emotional, cognitive, and social needs, which can enhance overall quality of life without the risks associated with medication. At present, non-drug therapies such as music therapy, horticultural therapy and art therapy have been widely used in the care of patients with dementia. Among them, painting creation as a unique art therapy has also shown significant effects in dementia intervention. In the book "The Interpretation of Dreams", Freud first mentioned the concept of subconsciousness, believing that a person may reveal some forgotten or suppressed expressions and symbols through dreams or artistic creations. Jung further studied the subconscious and proposed the concept of "collective unconsciousness". Freud and Jung both paid attention to the symbolic characteristics of art, and would encourage the consulting subjects to express their dreams or emotions that they could not express in words through art such as painting. In other words, engaging in painting can enable patients to express unspoken emotions while also stimulating coordination between visual and motor perception. Through the use of colors and images, painting activities encourage personal emotional expression, helping to reduce anxiety and fostering a sense of self-awareness and cognitive engagement. As a more personalized intervention method, painting can activate the creative potential of patients, bring them psychological pleasure and a sense of accomplishment, and thus help improve the quality of life of patients with dementia and slow down the process of cognitive decline. In recent years, there has been an increasing number of studies related to this topic, and different research results have shown that art therapy can improve participants' self-confidence, coping ability, emotions, cognitive and executive functions, social abilities, and physical functions [7]. Painting can also help patients express their understanding and acceptance of the disease and changes in life, enhance their identification with their own identity and sense of existence, and thus relieve anxiety. Emblada and Mukaetova-Ladinska reviewed studies on art therapy as a non-pharmacological intervention for dementia from 2015 to 2020. Analyzing seventeen studies with 853 participants, they found that 88% showed improvements in well-being, quality of life, BPSD, or cognitive function. Art therapy, especially "in the moment" activities, enhanced communication between patients and caregivers, supported person-centered care, and created a positive, supportive environment for individuals with dementia [8].

3. Methodology

3.1. Research design

This study plans to relieve the anxiety of patients with Alzheimer's disease through a 7-week painting creation therapy. The therapy activity will be carried out once a week, each lasting 50 minutes, starting from October 14, 2023, and lasting until November 25. In each activity, the patient will be helped to complete the painting creation through action guidance, and the mood assessment will be conducted at the beginning and end of each treatment to intuitively understand the impact of painting creation on the patient's mood and mentality.

3.2. Participants

The subject of the study is an Alzheimer's patient (grandmother), who is about 70 years old, suffers from moderate cognitive impairment, and often shows symptoms such as anxiety and emotional

instability. The patient's self-care ability and memory have declined, and memory loss in daily life has a great impact on his mood and cognitive function.

3.3. Intervention method

Session One: Patients will draw a portrait of someone they are most familiar with, using a variety of art materials. This exercise aims to help them reconnect with the painting process, restoring a sense of familiarity and building confidence in their artistic abilities.

Session Two: Using colored pencils, patients will draw their own homes. This activity is designed to deepen their sensory and emotional connection with their living environment, reinforcing a sense of belonging and affirming their daily living abilities.

Session Three: Patients will engage in neural drawing with markers, a technique intended to connect with the subconscious. This process can help alleviate stress and support mental well-being by encouraging a flow state through freeform expression.

Session Four: Using color powders, patients will create images representing their self-energy groups. This session focuses on fostering emotional awareness, providing a channel for unconscious expression, and helping release negative emotions.

Session Five: Patients will create collages called "brain world" using magazines, scissors, and glue. This creative process is designed to stimulate memory retrieval, encouraging patients to explore personal memories and reduce fears associated with memory loss.

Session Six: Through the use of mixed media, patients will draw an "inner world map." This self-reflective exercise allows for inner emotional regulation, providing an opportunity for self-expression and enhancing self-awareness.

Session Seven: Patients will copy famous paintings to practice focus and color perception. This exercise is intended to relax the mind, foster concentration, and relieve anxiety by immersing them in structured, calming activity.

3.4. Data collection

At the beginning and end of each healing activity, the researcher will evaluate the patient's mood. The assessment method includes observing the patient's emotional changes during the painting process and interviewing family members or caregivers to understand the patient's performance and emotional response during the healing process.

4. Result and analysis

4.1. Analysis of painting therapy works

The sessions and the analysis of the works created in the painting therapy show how every session helped Grandma and Grandpa to express themselves, control their emotions, and have confidence in their creativity. During the first session- when they were drawing portraits of one another, the careful and subtle lines of Grandma compared to the simple lines of Grandpa, demonstrating her shy nature and his natural ability in the process, which reflects the character of both of them and their involvement in the process self-expression through art. During the second session, Grandma used colored pencils to draw her family house, but she could not accurately describe her environment. However, her drawing expressed her love towards her family, and the session caused emotions to be expelled and her headache to be relieved, highlighting the fact that painting can do away with emotions. Session 3 entailed neuronal painting wherein Great grandmother employed extremely saturated colors to convey a complicated emotional geography, suggesting that she aspired to possess feelings and diminishing her nervousness through the repetitive process of coloring, and also

reminiscence of her childhood. Session 4, devoted to the attraction of a self-energy group, helped Grandma to express emotions through the choice of favorite colors and graphics allowing to facilitate relaxation and stability and make her more interested in the family activities. During the session 5, the collage therapy made her feel free to be creative without any limitation imposed by conventional painting methods, which enabled her relieve of inner tension and experience fun in artistic exploration. Grandma, in developing her inner world map during her Session 6, used different lines and colors to segment her inner world into a landscape of life and a secret garden in order to portray her knowledge as well as her affection with life. As a last note, it is in Session 7 where she copied the work of Hilma af Klint and made her creative changes, changing the color preferences to reflect her spiritual heart and exhibiting a sense of confidence towards art. The sessions provided the opportunity to derive emotions and alleviate her mood and also represented her growing comfort with the process of creativity.

4.2. Result

4.2.1. Improvement of emotional expression and communication

During the whole process of painting therapy, painting creation has become an important medium for patients to express their emotions. By drawing works such as portraits, family scenes, and self-energy maps, patients can release long-term repressed emotions and communicate effectively with their family members and caregivers. In Session 1, grandma and grandpa jointly carried out the activity of “drawing portraits for each other”. This process not only allowed Grandma and Grandpa to express themselves through art, but also facilitated deeper emotional communication. As Grandma gradually relaxed during the creation process, her interactions with Grandpa became more natural and enjoyable. Painting therapy served as a bridge for connection, enabling patients to feel increased support and understanding when engaging with others.

In addition, the creation of "family paintings" in Session 2 allowed grandma to recall her former living environment, and she transformed these memories into images through painting, expressing her love for life. Although grandma failed to accurately recall the details of the house when painting, she expressed her emotional connection with her home through simple pictures. This way of expression has a significant healing effect on emotional communication.

4.2.2. Enhancement of self-cognition and self-esteem

Painting activities play an important role in patients' self-cognition and self-esteem. Through creation, patients can not only re-examine themselves, but also feel the realization of self-worth in the process. For example, in Session 1, although grandma lacked confidence in her painting ability at the beginning, she gradually overcame this psychological barrier by painting with her family, and even enjoyed the satisfaction brought by artistic creation in the process of painting. For grandpa, after seeing grandma's mood improve, he expressed his high recognition of this activity and hoped to continue similar painting therapy activities to help grandma maintain emotional stability.

In Session 4, by drawing the "self-energy group," grandma began to explore and recognize her emotions more deeply. She selected colors like red, green, and yellow to symbolize her inner vitality, healing, and creativity. Through this expressive process, she not only experienced emotional release but also developed a deeper understanding of her inner strength. This newfound emotional awareness contributed to an improved sense of self-esteem, reinforcing her confidence in her personal resilience and capacity for self-expression. In summary, painting has proven beneficial in reducing anxiety among patients with cognitive impairment.

5. Conclusion

This research shows that the therapeutic use of painting therapy has the prospective value of reducing anxiety and increasing emotional expression in patients with Alzheimer. The structured art activities, undertaken by the participants through out a seven week program, offered an avenue within which the participants got to connect with their memories, and also express their feelings, as well as building their self-awareness. The codes that were analyzed during the sessions have implied that painting exercises not only enabled the participants to express their emotions successfully but also enhance their emotional fortitude and involvement with their surroundings. The personalized nature of each session in particular (creating portraits, drawing neurons, and inner world maps) made it possible to approach each patient with a unique nature that leads to compliance with the emotional and cognitive requirements of Alzheimer patients.

Nevertheless, this research is not devoid of shortcomings. The participants were only one patient, and this is a limitation to the generalizability of the results. Also, subjective evaluation took a lot on the observations of the caregivers and family interview, thus it could be subject to observational bias. In subsequent studies, increased heterogeneous sample sizes can be considered in order to be able to apply the results broadly. Subjective scales may also be supplemented with quantitative ones, including anxiety and mood scales, which would provide a more effective assessment of the effectiveness of painting therapy. In upcoming research, the researcher should consider potential research questions like considering other types of non-verbal art therapies, e.g. music or dance, as this may offer a comparative view of the different therapeutic mediums in dementia care. The study of the long-run implications of art therapy in influencing cognitive ability may also contribute to the information on how art therapy could help in the retarding of cognitive ability.

References

- [1] Stites, S. D., Harkins, K., Rubright, J. D., & Karlawish, J. (2018). Relationships between cognitive complaints and quality of life in older adults with mild cognitive impairment, mild Alzheimer disease dementia, and normal cognition. *Alzheimer Disease & Associated Disorders*, 32(4), 276-283. <https://doi.org/10.1097/WAD.0000000000000269>
- [2] Morris, F. J. (2014). Should art be integrated into cognitive behavioral therapy for anxiety disorders? *The Arts in Psychotherapy*, 41(4), 343-352. <https://doi.org/10.1016/j.aip.2014.06.004>
- [3] Feng, Y. (2023). Research progress on anxiety and depression in patients with mild cognitive impairment. *Clinical Medical Progress*, 13(2), 1795-1804. <https://doi.org/10.12677/ACM.2023.132249>
- [4] Xiang, M., & Liu, R. (1996). Baseline survey of the multidimensional longitudinal study on population aging in Beijing. *Chinese Journal of Geriatrics*, 15(6), 328-331.
- [5] Solfrizzi, V., D'Introno, A., Colacicco, A. M., et al. (2007). Incident occurrence of depressive symptoms among patients with mild cognitive impairment—The Italian Longitudinal Study on Aging. *Dementia and Geriatric Cognitive Disorders*, 24, 55-64. <https://doi.org/10.1159/000103632>
- [6] Baiyewu, O., Unverzagt, F. W., Ogunniyi, A., et al. (2012). Behavioral symptoms in community-dwelling elderly Nigerians with dementia, mild cognitive impairment, and normal cognition: Nigeria Mild Cognitive Impairment Dementia Behavioral Symptoms. *International Journal of Geriatric Psychiatry*, 27, 931-939. <https://doi.org/10.1002/gps.2804>
- [7] Eskel, A., Nie, J., & Li, X. (2023). Progress in the application of creative art therapy for the mental and behavioral symptoms of dementia patients. *Journal of the Chinese Academy of Medical Sciences*, 45(2), 322-326. <https://doi.org/10.3881/j.issn.1000-503X.15009>
- [8] Emblad, S. Y., & Mukaetova-Ladinska, E. B. (2021). Creative art therapy as a non-pharmacological intervention for dementia: A systematic review. *Journal of Alzheimer's Disease Reports*, 5(1), 353-364. <https://doi.org/10.3233/ADR-200262>