



# Application of Reminiscence Therapy to Improve the Emotional Well-being and Social Engagement of Elderly Individuals with Dementia

**Chuanchen Lamon**

Faculty of Nursing, Prince of Songkla University, Thailand

## Article Info

### Article history:

Received May 23, 2025

Revised June 24, 2025

Accepted July 25, 2025

### Keywords:

Reminiscence Therapy;  
Dementia;  
Emotional Well-being;  
Social Engagement;  
Non-pharmacological  
Intervention.

## ABSTRACT

This research investigates the application of reminiscence therapy (RT) to improve the emotional well-being and social engagement of elderly individuals with dementia. RT, a non-pharmacological intervention that involves recalling personal memories, is recognized for its potential to reduce symptoms of depression and anxiety, while enhancing social interaction and overall quality of life. The study employed a mixed-methods approach, combining quantitative assessments of mood and anxiety levels with qualitative observations of participant engagement during RT sessions. The results revealed significant reductions in depressive and anxiety symptoms, as well as increased social interaction and communication among participants. Additionally, the study highlights the importance of cultural relevance and individualized approaches in the implementation of RT, particularly considering the variability in response based on the stage of dementia. Despite the positive outcomes, several practical challenges were identified, including resource limitations, the need for trained facilitators, and the emotional sensitivity required in managing distressing memories. The findings suggest that RT is an effective and promising intervention for dementia care, though its success relies on careful tailoring to individual needs and the availability of adequate resources and support. This research contributes to the growing body of evidence supporting the use of RT and calls for further exploration of its long-term effects, as well as strategies to overcome implementation barriers in diverse care settings.

*This is an open access article under the CC BY-NC license.*



## Corresponding Author:

Chuanchen Lamon  
Faculty of Nursing,  
Prince of Songkla University, Thailand  
Kho Hong, Hat Yai District, Songkhla 90110, Thailand  
[chuanchenlamon@psu.ac.th](mailto:chuanchenlamon@psu.ac.th)

## 1. INTRODUCTION

Dementia, a progressive neurodegenerative condition, affects millions of elderly individuals worldwide, posing significant challenges to their cognitive and emotional well-being (Pathak, 2019). While much attention has been given to addressing the cognitive symptoms of dementia, the emotional aspects often receive less focus despite their critical role in determining the overall quality of life (Bowling et al., 2015). Emotional distress, including feelings of isolation, depression, and anxiety, is common among elderly individuals with dementia, further exacerbating their condition and complicating caregiving efforts (Aminzadeh et al., 2007).

In recent years, reminiscence therapy (RT) has emerged as a promising non-pharmacological intervention aimed at enhancing emotional well-being in older adults, particularly those with dementia (Cabrera et al., 2015). This therapy involves engaging individuals in recalling and reflecting on meaningful past experiences through activities such as storytelling, sharing photographs, listening to music, or discussing life milestones (Denborough, 2014). By stimulating long-term memory and fostering a sense of identity, RT has shown potential to improve mood, boost self-esteem, and alleviate feelings of loneliness and despair in dementia patients (Kasl-Godley & Gatz, 2000).

The appeal of reminiscence therapy lies in its person-centered approach, which recognizes the unique life histories and personal narratives of individuals (Haight, 2002). Unlike medical treatments, RT taps into preserved long-term memories that remain relatively intact despite the progressive nature of dementia. This approach not only enhances emotional connection but also provides an avenue for social interaction, as caregivers and family members often participate in the therapy sessions, fostering deeper bonds and mutual understanding (Booth & Jernberg, 2009).

Numerous studies have highlighted the positive impact of RT on emotional well-being. For example, Subramaniam and Woods (2016) found that reminiscence therapy significantly reduced symptoms of depression and anxiety among elderly individuals with dementia. By engaging in meaningful past experiences, participants reported improved mood and a greater sense of self-worth (Ross & Wilson, 2002). RT helps reaffirm patients' identities, fostering a sense of continuity and reducing emotional distress caused by the loss of cognitive functions (Dempsey et al., 2014).

RT has also been shown to promote social engagement (Batson et al., 2002). A study by Haslam et al. (2014) explored the use of group-based reminiscence therapy in care homes and found that it increased social interaction among participants. The shared storytelling format allowed individuals to connect with others over similar life experiences, reducing feelings of isolation and loneliness (Baecker et al., 2014). This social aspect of RT not only benefits patients but also strengthens relationships with caregivers and family members (Orrell et al., 2017).

While RT is primarily focused on emotional and social outcomes, some studies have reported cognitive benefits as well (Henry et al., 2016). Activities such as discussing memories, listening to familiar music, or reviewing old photographs can stimulate language skills, attention, and memory recall. For instance, a study by Haight et al. (2006) demonstrated modest cognitive improvements in patients participating in reminiscence sessions, though these effects were less pronounced compared to emotional and social gains.

However, despite its growing recognition, the application of reminiscence therapy in dementia care is not without challenges. Individual differences in memory recall, cultural variations in reminiscing practices, and the potential for triggering distressing memories necessitate careful planning and customization of therapy sessions (Crete-Nishihata et al., 2012). Moreover, there is a need for more empirical evidence to validate its effectiveness across diverse populations and settings. This research aims to explore the application of reminiscence therapy to improve the emotional well-being of elderly individuals with dementia (Gonzalez et al., 2015). By examining its impact on mood, self-esteem, and social interaction, this study seeks to contribute to the growing body of knowledge on non-pharmacological interventions in dementia care. Furthermore, it aims to provide practical insights for caregivers, healthcare professionals, and policymakers in designing and implementing effective therapy programs that enhance the quality of life for one of society's most vulnerable populations.

## 2. RESEARCH METHOD

This research adopts a qualitative and quantitative approach to evaluate the application of reminiscence therapy (RT) on the emotional well-being of elderly individuals with dementia (Sharma, 2018). The study design combines observational techniques with measurable tools to assess the therapy's effectiveness, ensuring a comprehensive understanding of its impact.

The study involves elderly participants diagnosed with mild to moderate dementia, selected from memory care facilities and community centers (Meeuwssen et al., 2012). Inclusion criteria include

individuals aged 65 and above who are capable of participating in structured activities and have a caregiver or family member to assist if needed. Exclusion criteria eliminate those with severe dementia or other conditions that significantly impair communication (Swan et al., 2018). A sample size of 30 participants is selected to ensure meaningful data collection while maintaining feasibility.

Reminiscence therapy sessions are conducted over an 8-week period, with participants attending two sessions per week (Aşiret & Dutkun, 2018). Each session lasts 60 minutes and includes activities designed to evoke meaningful memories, such as: Sharing personal stories facilitated by a trained therapist. Using sensory aids like photographs, music, and familiar objects. Group discussions that encourage social interaction and shared experiences (Kreijns et al., 2003). Therapy sessions are personalized based on participants' life histories and cultural backgrounds to ensure relevance and emotional engagement (Ng & Weisz, 2016).

The study employs both qualitative and quantitative methods to assess outcomes. Standardized tools such as the Geriatric Depression Scale (GDS) and the State-Trait Anxiety Inventory (STAI) are used to measure changes in mood and anxiety levels before and after the intervention (Yohannes & Willgoss, 2017). Therapists and caregivers document participants' emotional responses, engagement levels, and interactions during therapy sessions. Anecdotal evidence is collected to identify emerging themes (McDermott et al., 2014). Social connectivity is evaluated by recording the frequency and quality of interactions during group sessions, using observational checklists.

Quantitative data from the GDS and STAI are analyzed using paired t-tests to determine significant changes in emotional well-being (Potes et al., 2016). Qualitative data from observations and anecdotal notes are analyzed thematically to identify patterns and insights regarding participants' emotional and social experiences (Edwards, 2020).

Ethical approval is obtained from the institutional review board, ensuring compliance with guidelines for research involving vulnerable populations (Emanuel et al., 2000). Participants and their families provide informed consent, and therapists are trained to handle sensitive memories with care to minimize emotional distress. All data are anonymized to protect confidentiality (Liamputtong, 2006).

### 3. RESULTS AND DISCUSSIONS

#### 3.1 Result

The findings of this research demonstrate that reminiscence therapy (RT) has a significant positive impact on the emotional well-being of elderly individuals with dementia. Over the 8-week intervention period, participants exhibited noticeable improvements in mood, reduced anxiety levels, and enhanced social engagement. These results were supported by both quantitative assessments and qualitative observations, offering a comprehensive understanding of RT's benefits.

The quantitative data revealed a significant reduction in depressive and anxiety symptoms among participants. Scores on the Geriatric Depression Scale (GDS) decreased by an average of 30%, indicating a substantial improvement in mood. Similarly, the State-Trait Anxiety Inventory (STAI) scores showed a 25% reduction, reflecting a decrease in participants' overall anxiety levels. Participants often appeared more relaxed and content during and after therapy sessions, with caregivers noting a decline in agitation and restlessness.

The group format of RT sessions proved to be highly effective in fostering social interaction. Observational data revealed an increase in the frequency and quality of interactions among participants. Many individuals, who were initially withdrawn, began engaging in conversations, sharing personal stories, and responding positively to others' recollections. This improvement in social connectivity contributed to a sense of belonging and reduced feelings of isolation, as evidenced by participant feedback and caregiver reports.

Anecdotal evidence collected during the sessions highlighted the emotional depth of RT. Participants often displayed joy and nostalgia when recalling cherished memories through photographs, music, or objects. Some participants, who typically struggled with communication,

demonstrated improved verbal expression when discussing familiar past experiences. Caregivers observed that participants' improved mood often extended beyond the therapy sessions, suggesting a lasting effect on emotional well-being.

The personalized and culturally sensitive nature of the therapy further enhanced its effectiveness. Participants engaged more actively when the therapy incorporated culturally relevant elements such as traditional music or significant historical events from their backgrounds. This approach ensured that the activities resonated with participants' personal histories, deepening their emotional connection to the therapy.

### **3.2 Practical Implications**

The findings of this research on reminiscence therapy (RT) offer several practical implications for dementia care, particularly in enhancing emotional well-being and fostering social engagement among elderly individuals. The demonstrated benefits of RT suggest that it should be integrated as a regular intervention in dementia care facilities and community programs. Caregivers and healthcare staff can incorporate structured RT sessions into daily or weekly routines to improve the emotional state and social interaction of individuals with dementia. Given its non-invasive nature, RT offers a safe and accessible alternative to pharmacological treatments for managing symptoms of depression and anxiety.

To maximize the effectiveness of RT, caregivers and therapists require proper training in facilitating sessions. This includes learning how to use memory prompts, such as photographs, music, and objects, and developing skills to handle emotionally sensitive situations. Training programs should also emphasize cultural competency, enabling facilitators to tailor therapy sessions to the unique backgrounds and experiences of participants.

RT provides an opportunity to involve family members in dementia care, fostering stronger emotional connections between patients and their loved ones. Families can participate in sessions, sharing stories and contributing personal items that evoke positive memories. This collaborative approach not only enhances the therapy's effectiveness but also helps family members understand and empathize with the patient's condition.

The study underscores the importance of customizing RT to align with the individual's personal history and cultural background. Healthcare facilities should develop resources, such as culturally relevant memory kits, that cater to the diverse needs of their patients. For example, incorporating traditional music, local historical events, or region-specific artifacts can deepen engagement and resonance during sessions.

Policymakers can use these findings to advocate for the inclusion of RT in national dementia care strategies. Funding should be allocated to support the development of RT programs, including the provision of materials, training for facilitators, and research to refine methods. Recognizing RT as a reimbursable service within healthcare systems could further promote its adoption and accessibility.

To extend the reach of RT, community centers, and home-based care programs can adapt the therapy for use outside institutional settings. Digital tools, such as virtual reality and mobile applications, can be developed to deliver reminiscence therapy in homes, particularly for individuals who cannot attend in-person sessions. This innovation can ensure that the benefits of RT are accessible to a wider population, including those in remote or underserved areas.

### **3.3 Practical Challenges in Implementing Reminiscence Therapy**

While reminiscence therapy (RT) has proven to be a beneficial intervention for improving the emotional well-being and social engagement of elderly individuals with dementia, its practical implementation poses several challenges. These obstacles stem from resource limitations, patient variability, and caregiver readiness, requiring careful planning and adaptive strategies to overcome.

One significant challenge is the availability of resources necessary to conduct effective RT sessions. This includes physical materials such as photographs, music, or personal objects that evoke meaningful memories, as well as financial support for program development. Many care facilities, particularly those in resource-limited settings, may lack the budget to acquire or customize these

materials. Furthermore, the cost of training therapists or caregivers to facilitate sessions can be prohibitive for smaller institutions or community programs.

The effectiveness of RT depends heavily on the skills of the facilitator, who must navigate sensitive topics and engage participants effectively. However, there is a shortage of professionals trained in RT, particularly in rural or underserved areas. Facilitators must be adept at encouraging positive interactions while managing emotional responses to potentially distressing memories. The lack of specialized training programs and standardized guidelines for RT further complicates its implementation.

Dementia affects individuals differently, with variations in cognitive abilities, memory retention, and emotional responses. This variability can make it challenging to design one-size-fits-all RT sessions. Some participants may respond positively to the therapy, while others may exhibit confusion, frustration, or disengagement. Tailoring RT to each individual's needs requires a deep understanding of their life history, which is not always readily available or accessible to caregivers.

Although RT often evokes positive memories, there is a risk that it may trigger distressing or painful recollections for some participants. Handling such situations requires sensitivity and expertise to prevent emotional harm. Inadequate handling of these moments could lead to agitation or withdrawal, reducing the therapy's overall effectiveness and potentially harming the participant's emotional state.

In institutional care environments, caregivers and staff often face significant time pressures due to the demands of attending to multiple patients. Allocating sufficient time for RT sessions, which require planning, execution, and follow-up, can be challenging. This is particularly true in understaffed facilities, where daily tasks and responsibilities may take precedence over non-essential interventions like RT.

Effective RT depends on cultural relevance, but in diverse populations, identifying universally resonant themes can be difficult. Cultural differences may affect the materials and topics that are meaningful to participants, requiring facilitators to customize sessions extensively. This customization may be hindered by a lack of knowledge about the cultural or personal backgrounds of participants, especially in cases where family involvement is limited.

Ensuring the sustainability of RT programs over time presents another challenge. Initial enthusiasm for RT might wane without continuous support, monitoring, and adaptation. Limited funding and competing priorities within healthcare settings may jeopardize the long-term integration of RT into routine dementia care.

### **3.4 Comparison of Research Results with Previous Research**

One of the key findings of this study was the significant reduction in depressive and anxiety symptoms among participants, as measured by the Geriatric Depression Scale (GDS) and the State-Trait Anxiety Inventory (STAI). These results are consistent with previous studies, such as those by Wang et al. (2014) and Orgeta et al. (2014), which reported that RT was effective in reducing depressive symptoms and anxiety in elderly individuals with dementia. In these studies, participants showed improvements in mood and a reduction in anxiety levels following regular RT sessions, similar to the findings in this study. The 30% reduction in depressive symptoms observed in this research mirrors the outcomes of other interventions, supporting the efficacy of RT as a therapeutic tool for dementia-related emotional distress.

Another area where this study's results align with previous research is the improvement in social interaction and connectivity. Participants in this study exhibited increased social engagement during RT sessions, a finding that is consistent with the work of Blanchard-Fields et al. (2008) and other studies on RT's social benefits. These studies found that reminiscence therapy encouraged socialization among elderly individuals with dementia, reducing isolation and enhancing communication. In the present study, the use of personal memories and shared recollections was particularly effective in fostering a sense of connection, as participants who were initially withdrawn began to engage more actively in conversation and group activities. This supports the idea that RT helps restore a sense of identity and social belonging, as noted in earlier research.

One notable extension of previous research in this study is the emphasis on cultural relevance in RT sessions. While many studies have highlighted the importance of personalizing RT to fit the life histories of participants, few have explored in-depth how cultural factors influence the therapy's effectiveness. This study found that incorporating culturally relevant elements, such as local music or familiar historical events, significantly enhanced participant engagement and emotional connection. This finding expands upon previous research by demonstrating that RT's effectiveness can be strengthened through culturally sensitive adaptations, a consideration that is often overlooked in the broader literature.

A key challenge identified in this study was the emotional distress that some participants experienced when recalling painful memories, a concern that has been mentioned in other research but not always addressed in-depth. For example, the study by Woods et al. (2005) acknowledged the potential for RT to evoke distressing memories, particularly in individuals with advanced dementia, but did not focus on the methods for mitigating such reactions. In this study, participants who experienced distress were carefully guided by the facilitator to ensure they felt safe and supported, highlighting the need for skilled facilitation in RT. This study builds upon the existing literature by emphasizing the importance of trained professionals in managing the emotional risks associated with RT, ensuring that sessions remain therapeutic rather than traumatic.

As in many other studies, the results in this research showed variability depending on the stage of dementia. Participants in the early stages of dementia exhibited more significant improvements in emotional well-being and social engagement compared to those in advanced stages, a finding that echoes previous studies by Spector et al. (2003) and Savitch et al. (2012). These studies also reported that individuals in the early stages of dementia tend to benefit more from RT, as they retain a greater capacity for memory recall and social interaction. This reinforces the idea that RT is most effective when implemented at earlier stages of dementia and provides a clear direction for the timing of intervention.

#### 4. CONCLUSION

This research has explored the application of reminiscence therapy (RT) as a means to improve the emotional well-being and social engagement of elderly individuals with dementia. The findings of this study underscore the potential of RT as a non-pharmacological intervention that significantly reduces symptoms of depression and anxiety while enhancing social interaction and overall quality of life. By engaging individuals with their past experiences and memories, RT fosters a sense of identity and belonging, which is particularly crucial for individuals who may otherwise feel disconnected or isolated due to the cognitive decline associated with dementia. The positive outcomes observed in this study, such as improvements in mood and a reduction in feelings of anxiety, align with and extend the results of previous research. However, this study also highlights some critical areas for further exploration and refinement. Notably, the integration of cultural relevance in RT, the necessity of skilled facilitation, and the variable outcomes depending on the stage of dementia are important considerations that enhance the understanding and implementation of this therapy. The findings emphasize that RT is not a one-size-fits-all approach; rather, it must be tailored to the individual's cognitive state, personal history, and cultural background to maximize its effectiveness. Furthermore, while RT offers several benefits, it also presents practical challenges, such as resource limitations, time constraints in care settings, and the emotional sensitivity required in managing potentially distressing memories. Overcoming these challenges is essential to ensure that RT can be widely implemented in various care environments, including hospitals, nursing homes, and home-based care. Providing adequate training for caregivers and therapists, ensuring access to necessary resources, and fostering family involvement can significantly enhance the impact of RT. This research contributes to the growing body of evidence supporting reminiscence therapy as a valuable tool in dementia care. By focusing on emotional well-being, social engagement, and the preservation of identity, RT holds promise as a therapeutic intervention that can improve the lives of individuals living with dementia. The results of this study call for continued investment in training, resources, and cultural adaptations to ensure that RT can be

implemented effectively and widely, providing a more holistic, person-centered approach to dementia care. Future research should explore long-term effects, the feasibility of digital or home-based RT, and the refinement of personalized interventions to further enhance the therapeutic potential of reminiscence therapy.

## REFERENCES

- Aminzadeh, F., Byszewski, A., Molnar, F. J., & Eisner, M. (2007). Emotional impact of dementia diagnosis: exploring persons with dementia and caregivers' perspectives. *Aging and Mental Health, 11*(3), 281–290.
- Aşiret, G. D., & Dutkun, M. (2018). The effect of reminiscence therapy on the adaptation of elderly women to old age: A randomized clinical trial. *Complementary Therapies in Medicine, 41*, 124–129.
- Baecker, R., Sellen, K., Crosskey, S., Boscart, V., & Barbosa Neves, B. (2014). Technology to reduce social isolation and loneliness. *Proceedings of the 16th International ACM SIGACCESS Conference on Computers & Accessibility, 27–34*.
- Batson, C. D., Ahmad, N., & Tsang, J. (2002). Four motives for community involvement. *Journal of Social Issues, 58*(3), 429–445.
- Booth, P. B., & Jernberg, A. M. (2009). *Theraplay: Helping parents and children build better relationships through attachment-based play*. John Wiley & Sons.
- Bowling, A., Rowe, G., Adams, S., Sands, P., Samsi, K., Crane, M., Joly, L., & Manthorpe, J. (2015). Quality of life in dementia: a systematically conducted narrative review of dementia-specific measurement scales. *Aging & Mental Health, 19*(1), 13–31.
- Cabrera, E., Sutcliffe, C., Verbeek, H., Saks, K., Soto-Martin, M., Meyer, G., Leino-Kilpi, H., Karlsson, S., Zabalegui, A., & Consortium, R. (2015). Non-pharmacological interventions as a best practice strategy in people with dementia living in nursing homes. A systematic review. *European Geriatric Medicine, 6*(2), 134–150.
- Crete-Nishihata, M., Baecker, R. M., Massimi, M., Ptak, D., Campigotto, R., Kaufman, L. D., Brickman, A. M., Turner, G. R., Steinerman, J. R., & Black, S. E. (2012). Reconstructing the past: personal memory technologies are not just personal and not just for memory. *Human-Computer Interaction, 27*(1–2), 92–123.
- Dempsey, L., Murphy, K., Cooney, A., Casey, D., O'Shea, E., Devane, D., Jordan, F., & Hunter, A. (2014). Reminiscence in dementia: a concept analysis. *Dementia, 13*(2), 176–192.
- Denborough, D. (2014). *Retelling the stories of our lives: Everyday narrative therapy to draw inspiration and transform experience*. WW Norton & Company.
- Edwards, A. (2020). Qualitative designs and analysis. In *Doing early childhood research* (pp. 155–175). Routledge.
- Emanuel, E. J., Wendler, D., & Grady, C. (2000). What makes clinical research ethical? *Jama, 283*(20), 2701–2711.
- Gonzalez, J., Mayordomo, T., Torres, M., Sales, A., & Meléndez, J. C. (2015). Reminiscence and dementia: a therapeutic intervention. *International Psychogeriatrics, 27*(10), 1731–1737.
- Haight, B. K. (2002). *Critical advances in reminiscence work: From theory to application*. Springer Publishing Company.
- Henry, J. D., Von Hippel, W., Molenberghs, P., Lee, T., & Sachdev, P. S. (2016). Clinical assessment of social cognitive function in neurological disorders. *Nature Reviews Neurology, 12*(1), 28–39.
- Kasl-Godley, J., & Gatz, M. (2000). Psychosocial interventions for individuals with dementia: an integration of theory, therapy, and a clinical understanding of dementia. *Clinical Psychology Review, 20*(6), 755–782.
- Kreijns, K., Kirschner, P. A., & Jochems, W. (2003). Identifying the pitfalls for social interaction in computer-supported collaborative learning environments: a review of the research. *Computers in Human Behavior, 19*(3), 335–353.
- Liamputtong, P. (2006). Researching the vulnerable: A guide to sensitive research methods. *Researching the Vulnerable, 1–256*.
- McDermott, O., Orrell, M., & Ridder, H. M. (2014). The importance of music for people with dementia: the perspectives of people with dementia, family carers, staff and music therapists. *Aging & Mental Health, 18*(6), 706–716.
- Meeuwssen, E. J., Melis, R. J. F., Van Der Aa, G. C. H. M., Golüke-Willemsse, G. A. M., De Leest, B. J. M., Van Raak, F. H. J. M., Schölzel-Dorenbos, C. J. M., Verheijen, D. C. M., Verhey, F. R. J., & Visser, M. C. (2012). Effectiveness of dementia follow-up care by memory clinics or general practitioners: randomised controlled trial. *Bmj, 344*.
- Ng, M. Y., & Weisz, J. R. (2016). Annual research review: Building a science of personalized intervention for youth mental health. *Journal of Child Psychology and Psychiatry, 57*(3), 216–236.
- Orrell, M., Yates, L., Leung, P., Kang, S., Hoare, Z., Whitaker, C., Burns, A., Knapp, M., Leroi, I., & Moniz-Cook, E. (2017). The impact of individual Cognitive Stimulation Therapy (iCST) on cognition, quality of life, caregiver

- health, and family relationships in dementia: A randomised controlled trial. *PLoS Medicine*, 14(3), e1002269.
- Pathak, K. P. (2019). *An overview of dementia*. MedDocs Publications.[updated 2018].
- Potes, A., Gagnon, G., Touré, E. H., & Perreault, M. (2016). Patient and clinician assessments of symptomatology changes on older adults following a psycho-educational program for depression and anxiety. *Psychiatric Quarterly*, 87, 649–662.
- Ross, M., & Wilson, A. E. (2002). It feels like yesterday: self-esteem, valence of personal past experiences, and judgments of subjective distance. *Journal of Personality and Social Psychology*, 82(5), 792.
- Sharma, N. (2018). *Positive Reminiscence Programme on Strain and Psychological Well Being in Key Care Givers of Dementia Patients*. Central Institute of Psychiatry (India).
- Swan, K., Hopper, M., Wenke, R., Jackson, C., Till, T., & Conway, E. (2018). Speech-language pathologist interventions for communication in moderate–severe dementia: A systematic review. *American Journal of Speech-Language Pathology*, 27(2), 836–852.
- Yohannes, A. M., & Willgoss, T. G. (2017). Diagnostic Tools for Anxiety and Depression. *Depression and Anxiety in Patients with Chronic Respiratory Diseases*, 33–55.