

Engagement, Empowerment and Connection:

A pilot feasibility study of music and art therapy in persons with mild to moderate dementia

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Introduction

- Dementia causes progressive cognitive decline, behavioural and psychological symptoms (BPSD), and reduced quality of life (QOL).
- Music and art therapy are person-centred interventions promoting emotional expression, sensory engagement and empowerment.
- Existing evidence is mixed and most studies omit caregiver and healthcare staff (HCS) perspectives.
- Aim: To evaluate feasibility and impact on cognition, behaviour, and QOL in patients with mild-moderate dementia, including caregiver and HCS experiences.

Methods

Mixed Methods Pre-Post Intervention Pilot Study	
Setting	Subacute Dementia Ward, Tan Tock Seng Hospital, Singapore over 2 years
Participants	20 patient-caregiver dyads (10 music therapy, 10 art therapy) and 10 HCS
Inclusion	Diagnosis of mild-moderate dementia, medically stable and not in active delirium
Intervention	2-4 individualized sessions (30-60 min) over 1-2 weeks, therapy choice by patient preference
Therapists	Board-certified music therapist, trained art therapist
Quantitative	Modified Chinese Mini-mental state examination (mCMMSE), Pittsburgh Agitation Scale (PAS), Quality of Life in Alzheimer’s Dementia (QOL-AD). Done pre and post-intervention by the same rater. Analysis with Wilcoxon signed-rank test (SPSS v27)
Qualitative	Semi-structured interviews, using thematic analysis

Results

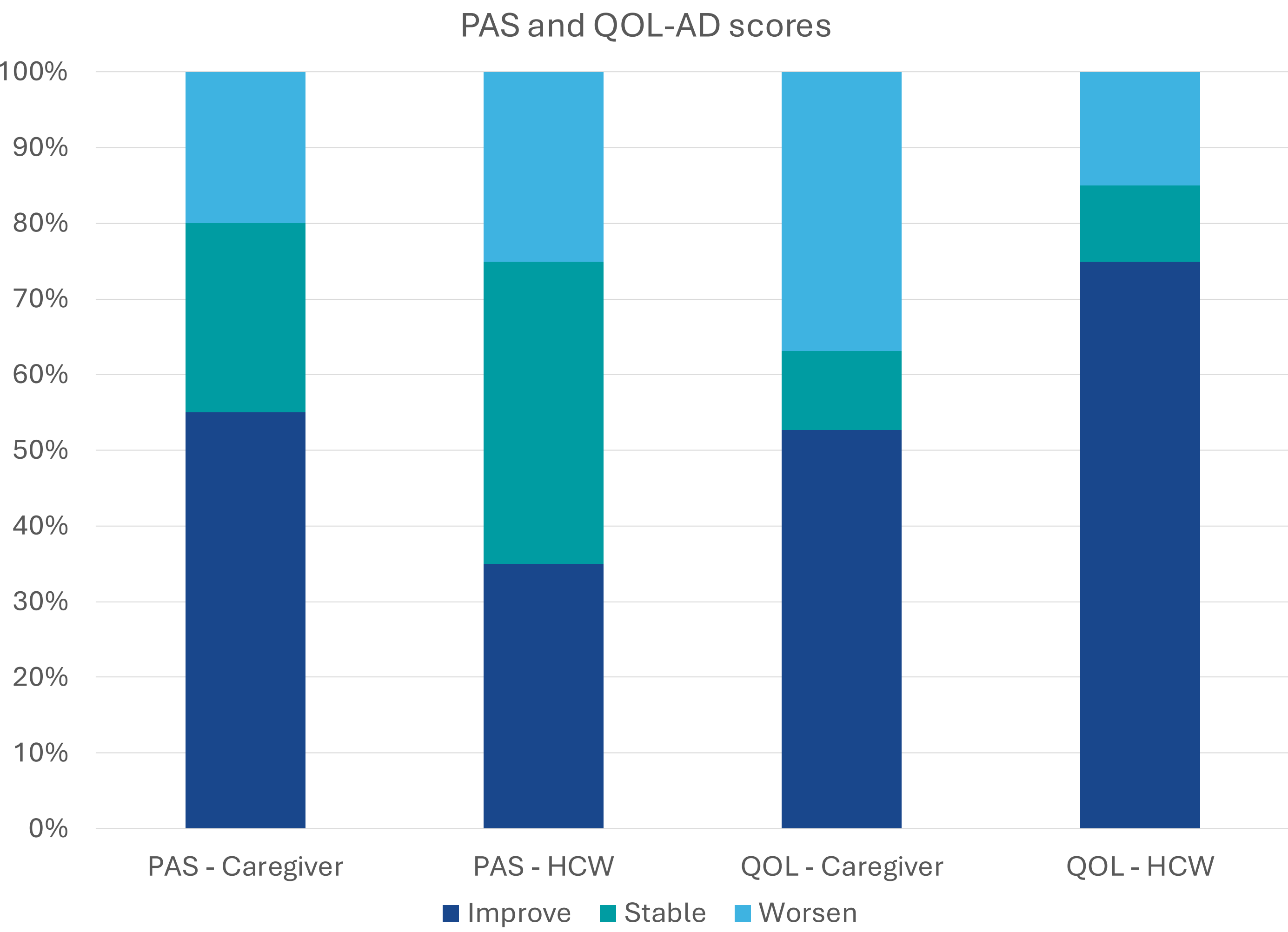
20 patients recruited; mean age **87.75 years**; **90%** female; **90%** Chinese ethnicity; **70%** moderate dementia; **55%** Alzheimer's disease aetiology.

n=20 Patients	87.8 Mean age (yrs)	90% Female	70% Mod Dementia
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Medication profile: 75% on antidepressant; 65% on antipsychotic; 45% on cognitive enhancer.

Median 3 therapy sessions (range 2–4).

Quantitative Findings



PAS and QoL-AD: Improvement in the PAS and QoL-AD scores post-therapy reported by both caregiver and HCS with a p-value of 0.016 and 0.024 respectively. 80% of caregiver and 75% of HCS reported improvement of stable PAS scores post-therapy, while 60% of caregiver and 85% of HCS reported improvement or stable QoL-AD scores post-therapy.

mCMMSE: No statistically significant change post-therapy (p = 0.938). Expected given the short intervention window of 1–2 weeks; cognition stabilisation rather than change was the anticipated proximal outcome.

Qualitative Themes

Qualitative analysis from 20 patient–caregiver dyad interviews and 10 HCS interviews identified **4 interrelated themes** capturing the experiential and observed outcomes of the music and art therapy programme.

Form of Engagement <i>In-the-moment, process-oriented joy</i>	Empowerment <i>Reclaiming agency and identity</i>
<i>‘Art therapy is engaging. I see that during the art sessions, they really enjoy with the therapists. My patients are engaged and they are calm and happier.’</i> - Nurse caring for Subject 11	<i>‘If I succeed in doing the art, it’s good. If not, it’s alright as well. I just try my best, to the best of my abilities’</i> - Patient, Subject 2
Improvement in behaviour <i>A calming and communicative shift</i>	Relationship Building <i>Reconnect and co-creating</i>
<i>‘One time this patient was quite agitated... when (the therapist) tried the music, the patient calmed down. Calmed down by the music itself’</i> - Nurse caring for Subject 8	<i>‘I was quite surprised that she can do all this, this was never her hobby, but I discovered another side of her’</i> - Caregiver, Subject 6

Conclusion

- Music and art therapy are feasible and acceptable for persons with mild-moderate dementia in a subacute ward setting.
- These findings support embedding creative therapies as mainstream non-pharmacological services in dementia care.
- Future work involves larger randomized controlled trials with extended follow-up and cost-effectiveness evaluations.

References

Van der Steen JT, Smaling HJ, van der Wouden JC, Bruinsma MS, Scholten RJ, Vink AC. Music-based therapeutic interventions for people with dementia. *Cochrane Database Syst Rev.* 2018;7: CD003477

Bleibel M, Cheikh AE, Sadier NS, Abou-Abbas L. The effect of music therapy on cognitive functions in patients with Alzheimer’s disease: a systematic review of randomized controlled trials. *Alz Res Therapy.* 2023;15:65

Savazzi F, Isernia S, Farina E, Fioravanti R, D’Amico A, Saibene F et al. “Art, Colors, and Emotions” Treatment (ACE-t): A Pilot Study on the Efficacy of an Art-Based Intervention for People With Alzheimer’s Disease. *Front Psychol* 2020; 11:1467.

Wang QY, Li DM. Advances in art therapy for patients with dementia. *Chinese Nursing Research* 2016; 3: 105-108.