

# **Home-based family caregiver-delivered music and reading interventions for people living with dementia: an international randomised controlled trial (HOMESIDE trial)**

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Music interventions provided by music therapists within residential aged care are effective at attenuating behavioural and psychological symptoms (BPSD) of people with dementia (PwD). The impact of music interventions on dementia symptom management when provided by family caregivers is unclear.

We implemented a community-based, pragmatic, international, superiority, single-masked randomised controlled trial to evaluate if caregiver-delivered music was superior to usual care (UC) on reducing BPSD of PwD measured by the Neuropsychiatric Inventory-Questionnaire (NPI-Q). The study included an active control (reading). People with dementia (NPI-Q score  $\geq 6$ ) and their caregiver (dyads) from one of five countries (Australia, Norway, United Kingdom, Germany, and Poland) were randomly allocated to caregiver-delivered music, reading, or UC with a 1:1:1 allocation stratified by site. Caregivers received three online protocolised music or reading training sessions delivered by therapists and were recommended to provide five 30-minute reading or music activities per week (minimum twice weekly) over 90-days. The NPI-Q severity assessment of PwD was completed online by masked assessors at baseline, 90- (primary) and 180-days post-randomisation and analysed on an intention-to-treat basis using a likelihood-based longitudinal data analysis model.

We randomised 432 eligible of 805 screened dyads (music n=143, reading n=144, UC n=145). There was no statistical or clinically important difference in the change from baseline BPSD between caregiver-delivered music (-0.15, 95% CI -1.41 to 1.10, p=0.81) or reading (-1.12, 95% CI -2.38 to 0.14, p=0.082) and UC alone at 90-days. No related adverse events occurred. No significant intervention-related improvements in enduring BPSD were found, however, the activities used in the intervention were safe, producing no intervention-related adverse events, and short-term effects were reported by caregivers. Subgroup analyses highlighted the possibility that people with severe symptoms and those with vascular dementia were more responsive to the caregiver-delivered music intervention than those with milder systems and with Alzheimer's disease.

## Biography

**Professor Felicity Baker** is Associate Dean Research and Director, International Research Partnerships for the Creative Arts and Music Therapy Research Unit at The University of Melbourne. She has received €10M in competitive research funding which has enabled her to lead large clinical trials including Australian MIDDEL (published in *The Lancet Healthy Longevity*, 2022), HOMESIDE (*eClinicalMedicine [The Lancet]*, 2023) which was an International randomised controlled trial involving research teams in Australia, UK, Norway, Poland and Germany; and MATCH (Music Attuned Technology Care eHealth).

She is currently Associate Editor, *Journal of Music Therapy*. She has received a number of awards including the American Music Therapy Association Research Award (2015), the World Federation of Music Therapy Research Award (2017) and an ADC Australian Leadership Award (2011). Felicity has published widely with over 190 publications and has been keynote speaker at over 30 conferences including the 2020 and 2023 World Congress of Music Therapy.

## Recent publications and conference presentations

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