

Feasibility of a multimodal sleep intervention for community-dwelling dyads of people living with dementia and their caregivers

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A dyadic, multimodal sleep intervention delivered online is feasible and shows early evidence of improvements in sleep and wellbeing for people living with dementia and their caregivers

INTRODUCTION

- People living with dementia frequently experience sleep disturbances.
- Informal caregivers are at a high risk of poor sleep.
- Yet, **few interventions** address the **unique sleep interplay and challenges within caregiver-care-recipient dyads**.

This study evaluated the feasibility and preliminary efficacy of a multimodal intervention to address sleep disturbances in dyads of people living with dementia and their caregivers.

SLEEP INTERVENTION



Six-week sleep intervention **co-developed** with people with lived experience



Multimodal: combined Cognitive Behavioural Therapy-Insomnia (CBT-I), mindfulness, physical activity, and light strategies.



Delivered **online** by a psychologist. Mix of **group and personalised** sessions

METHODS

Feasibility outcomes: Attrition & attendance rates, Client Satisfaction Questionnaire-8.

Pre- post- and 10-week follow up sleep & wellbeing outcomes: Pittsburgh Sleep Quality Index (PSQI), Insomnia Severity Index (ISI), PROMIS Sleep Related Impairment-8a, Depression, Anxiety, Stress Scale-21 (DASS-21), Quality of Life in Alzheimer's Disease

Data analysis: Feasibility outcomes evaluated descriptively. Sleep & wellbeing outcomes analysed using linear effects models

RESULTS

Feasibility outcomes

N=23 dyads were recruited & consented

- Completion:** **n=18 dyads** ($M_{age}=67.34\pm10.76$ years)
- Attrition:** **n=4** dyads withdrew prior to the intervention, **n=1** dyad withdrew after intervention had commenced
- Attendance:** All caregivers attended at least 4/6 sessions & 7 caregivers attended all sessions
- Dyads reported high satisfaction** on the CSQ-8 (Fig 1)

RESULTS

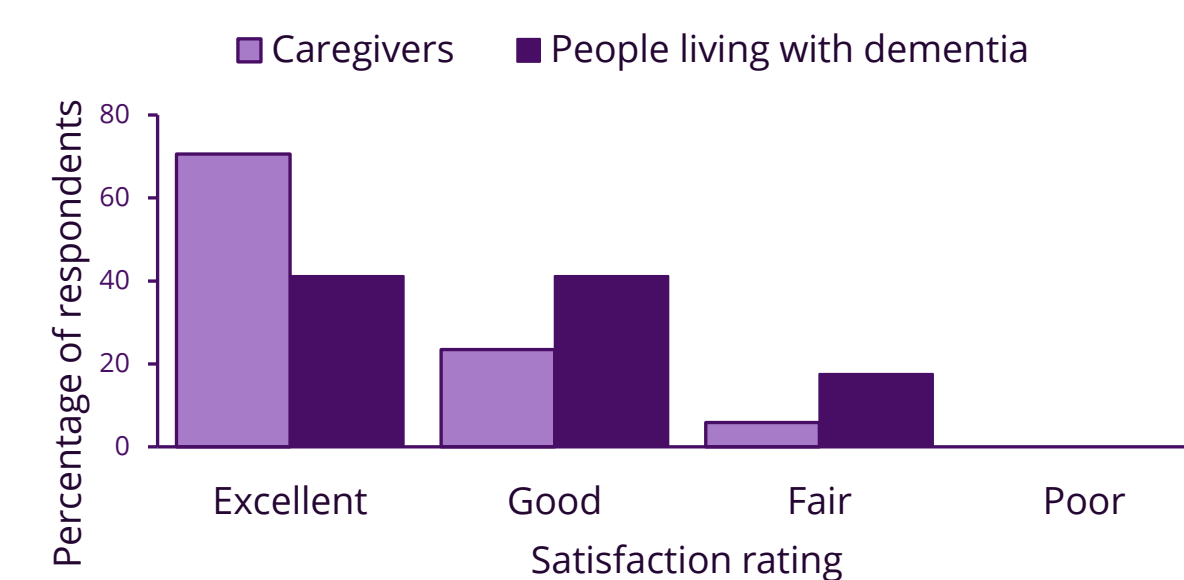


Fig 1. Satisfaction ratings by Caregivers and People Living with Dementia

Sleep outcomes

Caregivers: significant reductions in **insomnia symptoms** post-program and follow up (Fig 2) & **improvements in sleep quality** (Fig 3)

People living with dementia: significant **reductions in insomnia severity** (Fig 4) & **sleep-related impairment** (Fig 5)

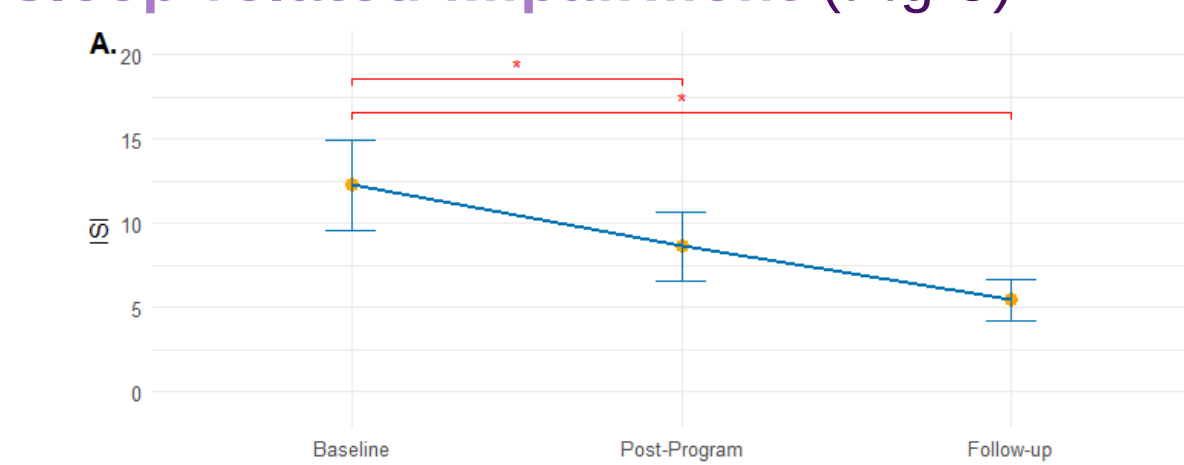


Fig 2. ISI results for caregivers across time points

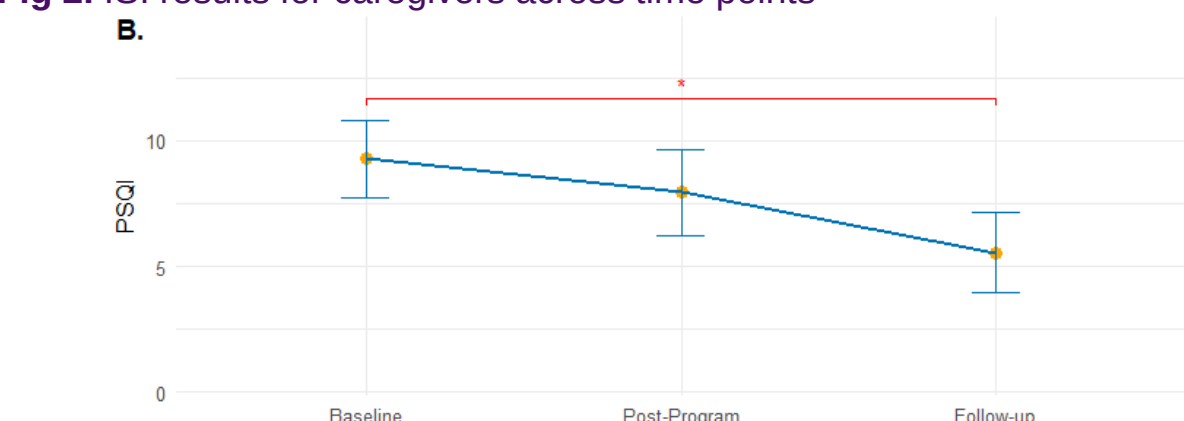


Fig 3. PSQI results for caregivers across time points

RESULTS

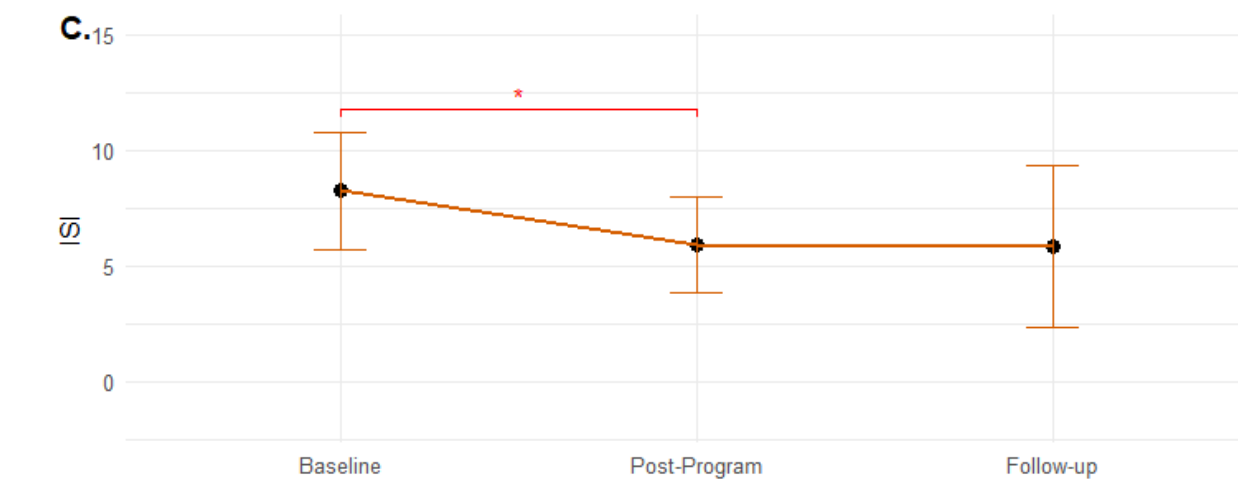


Fig 3. ISI results for people living with dementia across time points

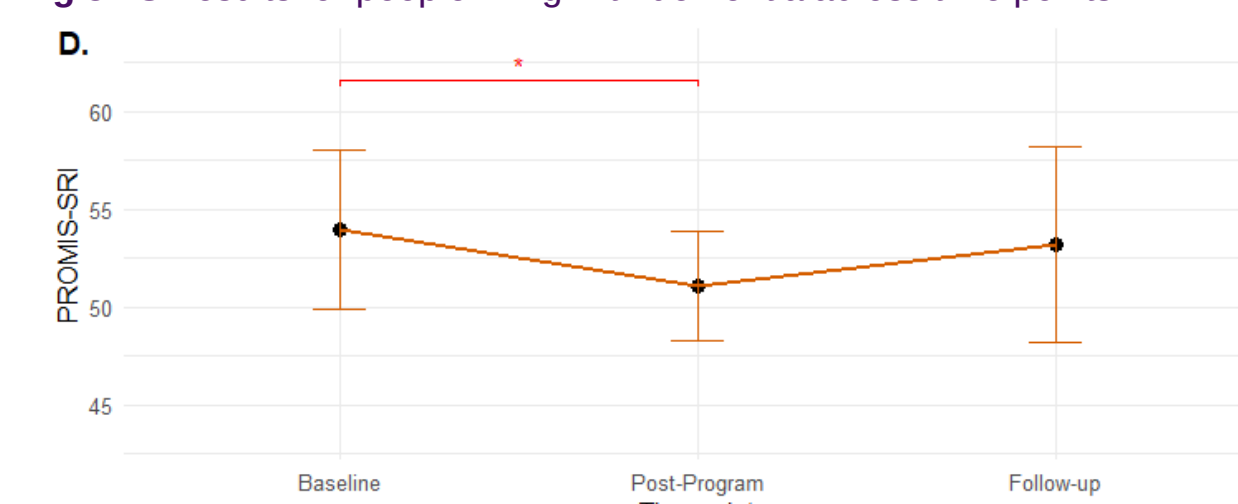


Fig 4. PROMIS-SRI results for people living with dementia across time points

Wellbeing outcomes

People living with dementia: significant **reductions in depression** (Fig 5) and **stress** (Fig 6) at post-program and **quality of life** at follow-up (Fig 7)

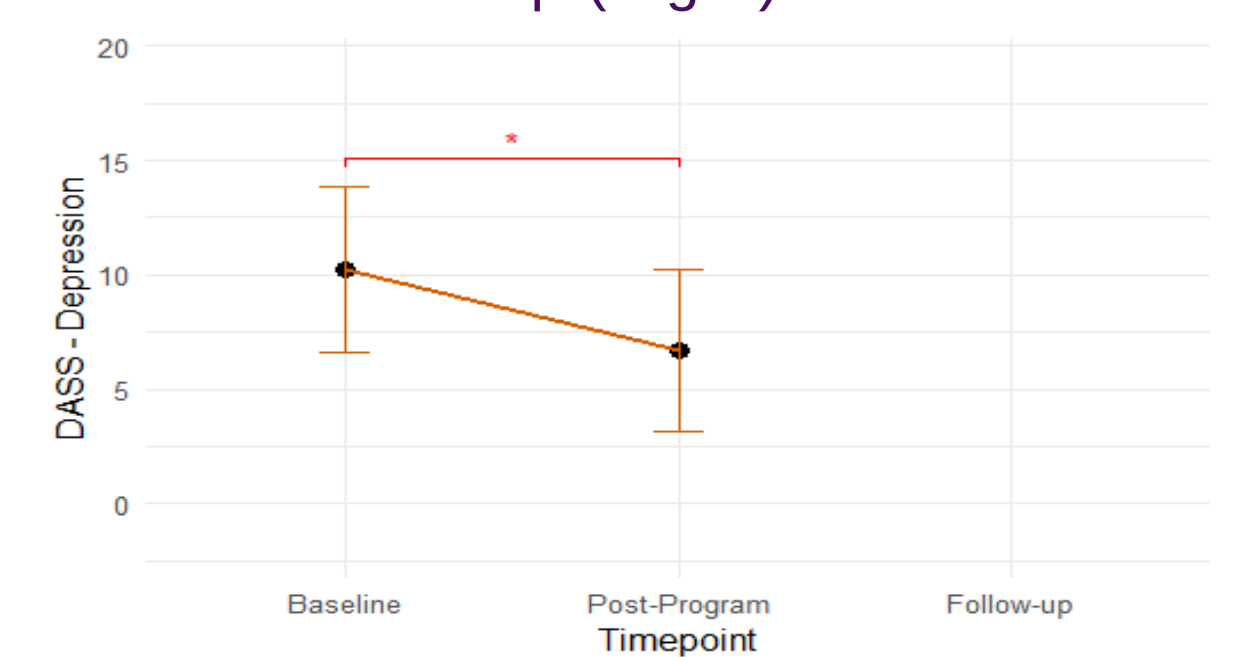


Fig 5. DASS-21 Depression results for people living with dementia across time

RESULTS

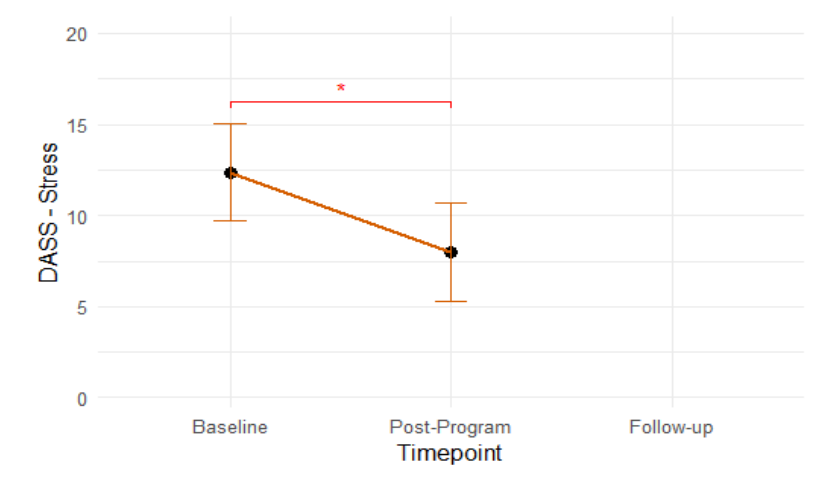


Fig 6. DASS-21 Stress results for people living with dementia across time points

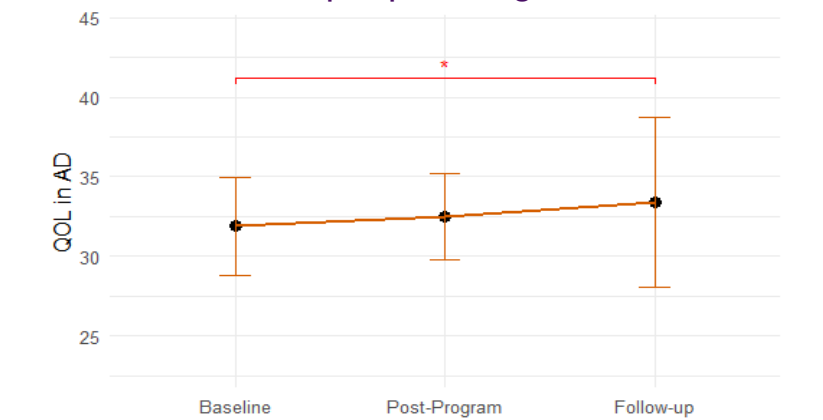


Fig 6. Quality of Life in Alzheimer's Disease results for people living with dementia across time points

CONCLUSIONS

- The Dementia Sleep and Wellbeing intervention was **feasible**, with **high attendance and satisfaction** across dyads
- Preliminary findings highlight that a **multimodal dyadic sleep intervention improves sleep and wellbeing outcomes** for people living with dementia and their caregivers