

IMPACT OF WHELD INTERVENTION ON NEUROPSYCHIATRIC SYMPTOMS, ANTIPSYCHOTIC USE AND QUALITY OF LIFE IN PEOPLE WITH DEMENTIA LIVING IN NURSING HOMES: A CLUSTER RANDOMIZED TRIAL

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Background: Agitation is a common and distressing symptom affecting large numbers of people with dementia and impacting significantly on quality of life. In the absence of safe, effective pharmacological therapies there is a need for evidence-based, cost-effective first-line non-drug treatments. A factorial study has enabled us to optimize the intervention, which we have now evaluated in a large cluster RCT. Methods: Design: A randomized controlled cluster trial comparing the WHELD intervention with treatment as usual in 69 UK nursing homes Participants: Nursing home residents with dementia Intervention: All nursing homes receiving the WHELD intervention received staff training in person-centered care (PCC), social interaction (Sol) and antipsychotic review (AR) followed by ongoing delivery through a care staff champion model. Main Outcome Measures: Quality of life (DEMQOL-proxy), agitation (Cohen Mansfield Agitation Inventory), neuropsychiatric symptoms (NPI), antipsychotic use and pain (Abbey Pain Scale). Results: Are presented as weight mean difference in change with 95% Confidence Intervals (CI). Intervention costs were calculated using published cost function figures and compared with usual costs. Results: 971 people were randomized to WHELD or treatment as usual. WHELD conferred a significant improvement in agitation (CMAI 8.63 95% CI 1.06 to 16.19, $p=0.025$). There was also a numerical non-significant benefit in quality of life (DEMQOL proxy 10.93 95% CI -2.82 to 24.68, $p=0.12$), which became significant in people with agitation (DEMQOL proxy 16.56 95% CI 0.35-32.78, $p=0.045$). An exploratory analysis showed benefit in the participants with moderate or severe pain at baseline (Abbey Pain Scale 2.93 95% CI -2.46 -.49, $p=0.003$). Antipsychotic drug prescribing was stable in both treatment groups. The WHELD intervention reduced cost compared to treatment as usual, and the benefits achieved were therefore associated with a cost saving. Conclusions: This is the largest RCT of a non-pharmacological intervention for people with dementia in nursing homes. WHELD conferred improvements in agitation and in quality of life amongst individuals with agitation, over 9 months and reduced cost. WHELD therefore has a number of advantages compared to pharmacological treatments currently used to treat agitation.