Specialist Medical and Mental Health Unit compared with standard care for older people with delirium and dementia: randomized controlled trial

John Gladman¹, Rowan Harwood², Sarah Goldberg¹, Lucy Bradshaw¹, Katherine Whittamore¹, Pippa Foster¹, Davina Porock³, Robert Jones¹, Catherine Russell²

¹ University of Nottingham, UK; ² University Hospital Nottingham, UK; ³Buffalo University, USA

Background

Older people admitted to hospital with acute physical illness or injury often have cognitive impairment, mostly from dementia, delirium or both.

Outcomes for those with cognitive impairment are worse than for those without. Family carers are often stressed and complain that healthcare staff do not recognise or understand dementia, that communication is poor, and that little stimulation is provided in hospital. Hospital staff report lack of training, and that they struggle to deal with difficult behaviours and to keep patients safe.

We developed a specialist Medical and Mental Health Unit (MMHU) for older people with suspected dementia or delirium as a model of best practice, and evaluated it in a randomised controlled trial.

Method

Design: Randomised controlled trial.

Setting: Large acute general hospital in the UK

Participants: Six hundred participants aged over 65 admitted for acute medical care, identified on admission as 'confused'.

Interventions: Participants were randomised to a specialist Medical and Mental Health Unit (MMHU), designed to deliver best practice care for people with delirium or dementia, or to standard care (acute geriatric or general medical wards). Features of the MMHU included:
- joint medical and mental health professional staffing
- enhanced staff training in delirium, dementia, and person-centred dementia care
- provision of organised purposeful activity
- environmental modification to meet the needs of those with cognitive impairment
- delirium prevention
- a proactive and inclusive approach to family carers.

Outcome measures

The primary outcome was the number of days spent at home over the 90 days following randomisation.

Secondary outcomes measured at 90 days included:
- Quality of life (Demogol, Euroqol EQ5D, short-London Handicap Scale);
- Behavioural and psychological symptoms (Neuro-Psychiatric Inventory);
- Physical disability (Barthel Index);
- Cognitive impairment (Mini-Mental State Examination);
- Carer strain (Carer Strain Index);
- Carer psychological well-being (General Health Questionnaire, GHQ-12);
- Carer satisfaction (overall, admission, car parking, feeding, medical management, being kept informed, dignity and respect, the needs of a confused patient, discharge arrangements, timing of discharge);
- Patient experience (structured non-participant observations using Dementia Care Mapping).

Results

Participants were old (median 85 years), a quarter came from care homes, two-thirds had prior diagnosed dementia, half had delirium, and behavioural and psychological symptoms were common.

There was no statistically significant difference in days spent at home over the subsequent 90 days between the intervention and control groups. (median 51 vs 45 days; 95% CI for difference -12 to 24; p=0.3). Median index hospital stay was 11 vs 11 days, mortality 22% vs 25% (-9%,4%), readmission 32% vs 35% (-10%, 5%), and new care home admission 20% vs 28% (-16%, 0), for the MMHU and standard care respectively. Participants returning home spent a median of 70.5 vs 71 days at home (-6 to 6.5).

Health status outcomes, carer strain and carer psychological wellbeing were no different between groups 90 days after randomisation.

Participants on the MMHU spent significantly more time with positive mood or engagement (79% vs 68%; 95% CI for difference 2%, 15%; p=0.05). Participants returning home spent more staff interactions that addressed emotional and psychological needs (median 4 vs 1 per observation; p<0.001).

More family carers in the intervention group were satisfied with care (overall 91% vs 83%; 95% CI for difference 2%, 15%; p=0.004), and severe dissatisfaction was reduced (5% vs 10%; 95% CI for difference -10%, 0; p=0.05).

Conclusions

This is the first randomised trial of a specialist Medical and Mental Health Unit for older people. There were no statistically significant differences in days spent at home, or other health status outcomes, between patients managed on a specialist MMHU and standard hospital care.

However, patients’ experiences were better and family carers were more satisfied with care on the specialist unit. These positive results are valuable: patient experience and carer satisfaction are appropriate measures of success for frail older people approaching the end of their lives.

References


For further information contact:
Professor John Gladman
john.gladman@nottingham.ac.uk

Professor Rowan Harwood
Rowan.harwood@ruh.nhs.uk

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