Getting patients up and moving shortens length of hospital stay

Encouraging patients admitted to hospital for medical problems to mobilise improved aerobic capacity and reduced length of stay, but did not reduce falls, according to research summarised in a National Institute for Health Research Signal.

From 2016 to 2017, there were 19.7 million hospital admissions in the UK; people aged >65 years accounted for 6.3 million of these. Older inpatients confined to bed are at risk of losing physical condition, function and independence, which can delay discharge. Although there is guidance on mobilisation after surgery, there is no national guidance on the mobilisation of patients in hospital for medical treatment. People are advised to keep mobile to avoid problems like pressure sores and blood clots, but that may not be easy for older people who are frail.

To assess the impact of interventions promoting mobilisation on the physical function of older medical inpatients, researchers carried out a systematic review and meta-analysis (Cortes et al, 2019). They looked at 13 randomised controlled trials involving 2,703 older people (average age 75 years) in hospital for problems such as blood clots, heart failure, pneumonia and acute or chronic illnesses. The interventions included moving from the bed to a sitting position, standing, walking and exercises.

The research found that walking speed significantly improved, and length of stay was two days shorter on average in patients who had taken part in mobilisation programmes compared with controls (who had received usual care). These results relate to structured, regular and defined activities, as opposed to unstructured, ad-hoc movement. The possible benefits of introducing mobilisation programmes would seem to outweigh the risks, although the high rate of falls in both groups while in hospital is a cause for concern.

We do not know exactly what kind of support, at what level of intensity and by what professional (therapist, nurse or support staff) is most effective and cost effective to achieve these benefits. Furthermore, the 13 studies were over 10 years old, most were of moderate quality, there was wide variation between them, and there was evidence of publication bias.

However, reducing the average length of stay for an older person admitted to hospital for medical treatment by two days would be a considerable benefit for hospitals struggling with bed shortages and budgets. For patients, retaining or even improving their physical functioning would add to their quality of life and possibly help them maintain their independence after discharge.

Encouraging hospital inpatients to mobilise may be a relatively cheap and effective way of reducing length of stay and improving patient wellbeing.

What did the review find?

- Participants randomised to mobilisation programmes stayed in hospital on average 2.18 fewer days than controls
- Mobilisation programmes improved walking ability compared with the control group (mean difference 0.24 metres per second, which equates to walking an extra 86m over a six-minute walking test)
- Among patients with pulmonary embolism, fewer developed new clots in the lungs in the intervention group than in the control group (5.4% versus 13%)
- There was no difference between the groups for balance (measured using the Timed Up and Go test)
- There was no difference in the rate of falls while in hospital, which occurred in 44.4% of patients in the mobilisation group and 44.6% of patients in the control group

Implications for nursing

For older people, unplanned hospital admissions can lead to prolonged periods of reduced mobility and functional decline, either as a result of ill health, subsequent treatment or constraints of the hospital environment. This review confirms the importance of maintaining patients’ mobility and function during acute hospital admissions through targeted programmes of mobilisation and exercise.

Mobility is often considered to be the domain of physiotherapists, but promoting independence in the hospital should be a multidisciplinary endeavour that is embedded into both ward culture and practice.