Do older people with hip fractures benefit from multidisciplinary rehabilitation?

A Cochrane review compared multidisciplinary rehabilitation for fractured neck of femur with usual rehabilitation in inpatient and ambulatory settings.

REVIEW QUESTION
What are the effects of multidisciplinary rehabilitation in inpatient or ambulatory care settings for older patients with hip fracture?

NURSING IMPLICATIONS
Hip fractures are prevalent in older people and can contribute to loss of independence or death. The majority of patients with hip fracture (fractured neck of femur) undergo surgery and subsequent hospital care under the supervision of orthopaedic staff. It is therefore important for nurses to know whether patients would benefit from multidisciplinary rehabilitation.

STUDY CHARACTERISTICS
The review included 13 randomised and quasi-randomised controlled trials, including 2,498 patients, most of whom were women aged 65 years or older.

The methodological quality of the trials was generally good; however, five showed important differences in key patient characteristics, such as age, which could have influenced findings. Three trials excluded men and six excluded patients with dementia.

Multidisciplinary rehabilitation was defined in this review as “services provided by a multidisciplinary team with the goal of reducing disability by improving task oriented behaviour like walking and dressing”. The control group received usual care in an inpatient rehabilitation setting or an ambulatory rehabilitation setting or both. The trials provided multidisciplinary rehabilitation in different ways and settings. Eleven out of the 13 studies included trials that investigated multidisciplinary rehabilitation in an inpatient setting.

The primary outcome was termed “poor outcome” and included death and deterioration leading to dependency in the community or hospital admission. Secondary outcomes included mortality, hospital readmission and care burden.

SUMMARY OF KEY EVIDENCE
Extensive clinical heterogeneity in the trial interventions and populations was evident but meta analyses were conducted. There was an indication of improvement after multidisciplinary rehabilitation compared with usual care in an inpatient rehabilitation setting, although most results were not statistically significant.

Eight trials were pooled for “poor outcome” based on death or deterioration in residential status. Pooled results showed a non-statistically significant tendency in favour of the intervention (risk ratio (RR) 0.89; 95% confidence interval (CI) 0.78 to 1.07) at long term follow up (between four and 12 months).

For “poor outcome” at hospital discharge, based on mortality in hospital and discharge location, pooled data from seven trials showed a slightly statistically significant result in favour of multidisciplinary rehabilitation (RR 0.87; 95% CI 0.75 to 1.00).

Mortality, reported in 11 trials, did not differ between intervention and control groups (RR 0.90; 95% CI 0.76 to 1.07).

Hospital readmissions were analysed in six studies and showed no statistically significant differences (RR 0.99; 95% CI 0.82 to 1.19).

No serious harm to the participants was demonstrated.

The full review report can be accessed at tinyurl.com/mult-hip-fract

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REFERENCE