Adherence rates to home exercise programs in older adults following hip fracture: a systematic review and meta-analysis

HIP FRACTURES

Home exercise programs (HEP) have shown to be effective for improving function in older patients following surgery for hip fractures. Adherence to HEP is an essential component for successful rehabilitation outcomes.

This review aimed to determine the adherence rates to prescribed HEP in older adults following a hip fracture

METHOD

A systematic search of three databases was conducted. A tailored search strategy was designed to capture key search terms related to older adults, HEP and surgically managed hip fractures. Two independent reviewers extracted the data and appraised study quality using the PEDro scale. Random-effects meta-analysis of participant adherence rates was performed using a DerSimonian-Laird model.

RESULTS

6 studies (Fig 1) were included with a total of 683 participants over 60 years, dwelling in the community who had undergone hip surgery post fracture. Mean Pedro score was 6.2 (range 3-8).

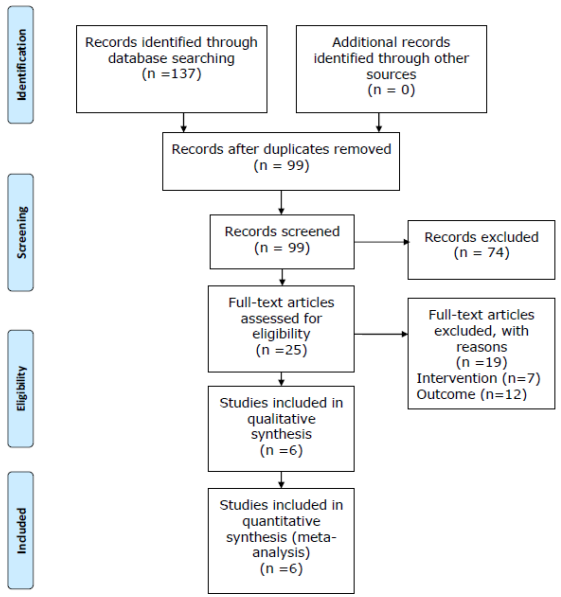

Fig 1: PRISMA flow chart

The primary meta-analysis of all studies showed a pooled adherence rate of 61% (95%CI 0.53, 0.68) of sessions completed, with results ranging from 45-82% (Fig 2).

In HEP less than 6-months duration, pooled adherence rates were 71% (95% CI 0.63, 0.79). HEP longer than 6 months had a pooled adherence rate of 55% (95% CI 0.48, 0.63).

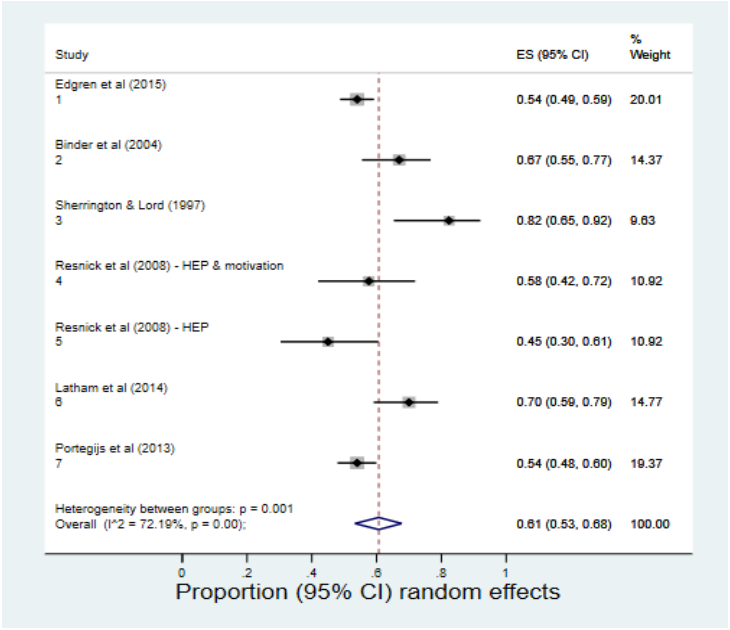

Fig 2: Random-effects meta-analysis forest plot displaying proportion of older adults fully adherent to a HEP following a hip fracture

CONCLUSIONS

The results highlight the need for clinicians to consider the length of their interventions and service provision for older adults following a hip fracture.

L Yau[1], K Soutter[1], B Cook[2], T Nguyen[2], H Curtis[2], S-E Soh[2]
1 Department of Physiotherapy, Alfred Health
2 Department of Physiotherapy, Monash University

AlfredHealth MONASH University