Self-management programs for quality of life in people with stroke

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Self-management can offer stroke survivors a pathway to promote their recovery. Self-management programs for people with stroke can include specific education about stroke and likely effects but essentially also focus on skills training to encourage people to take an active part in their own management. Such skills training can include problem-solving, goal-setting, decision-making, and coping skills.

The objectives of this review were to assess the effects of self-management interventions on the quality of life of adults with stroke who are living in the community, compared with inactive or active (usual care) control interventions.

Our methods included searching the following databases from inception to April 2016: the Cochrane Stroke Group Trials Register, Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, EMBASE, CINAHL, PsycINFO, SCOPUS, Web of Science, OTSeeker, OTSearch, PEDro, REHABDATA, and DARE. We also searched the following trial registries: ClinicalTrials.gov, Stroke Trials Registry, Current Controlled Trials, World Health Organization, and Australian New Zealand Clinical Trials Registry. We used the Cochrane Stroke Group search strategies and adapted for each database. Our selection criteria included randomized controlled trials of adults with stroke living in the community, who received self-management interventions. These interventions included more than one component of self-management or targeted more than a single domain of change or both. Interventions were compared with either an inactive control (waiting list or usual care) or active control (alternate intervention such as education only). Measured outcomes included changes in quality of life, self-efficacy, activity or participation levels, impairments, health service usage, health behaviors (such as medication adherence or lifestyle behaviors), cost, participant satisfaction, or adverse events. Two authors independently extracted prespecified data from all included studies and searched the following trial registries: ClinicalTrials.gov, Stroke Trials Registry, Current Controlled Trials, World Health Organization, and Australian New Zealand Clinical Trials Registry. We used the Cochrane Stroke Group search strategies and adapted for each database. Our selection criteria included randomized controlled trials of adults with stroke living in the community, who received self-management interventions. These interventions included more than one component of self-management or targeted more than a single domain of change or both. Interventions were compared with either an inactive control (waiting list or usual care) or active control (alternate intervention such as education only). Measured outcomes included changes in quality of life, self-efficacy, activity or participation levels, impairments, health service usage, health behaviors (such as medication adherence or lifestyle behaviors), cost, participant satisfaction, or adverse events. Two authors independently extracted prespecified data from all included studies and...
assessed trial quality and risk of bias. Meta-analyses were performed where possible to pool results.

Main Results
Fourteen trials were included with a total of 1863 participants. Evidence from 6 studies showed that self-management programs improved quality of life in people with stroke (standardized mean difference random effects 0.34, 95% confidence interval 0.05–0.62, \( P = 0.02 \); moderate-quality evidence; Figure) and improved self-efficacy (standardized mean difference, random effects 0.33, 95% confidence interval 0.04–0.61, \( P = 0.03 \); low-quality evidence) compared with usual care. Individual studies reported benefits for health-related behaviors, such as reduced use of health services, smoking, and alcohol intake, as well as improved diet and attitude. However, there was no superior effect for such programs in the domains of locus of control, activities of daily living, medication adherence, participation, or mood. Statistical heterogeneity was mostly low; however, there was much variation in the types and delivery of programs. Risk of bias was relatively low for complex intervention clinical trials where participants and personnel could not be blinded.

Conclusions
The current evidence indicates that self-management programs may benefit people with stroke who are living in the community. The benefits of such programs lie in improved quality of life and self-efficacy. These are all well-recognized goals for people after stroke.

There is evidence for many modes of delivery and examples of tailoring content to the target group. Leaders were usually professionals, but peers (stroke survivors and carers) were also reported—the commonality is being trained and expert in stroke and its consequences. It would be beneficial for further research to be focused on identifying key features of effective self-management programs and assessing their cost-effectiveness.

Disclosures
None.

References

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Key Words: quality of life ■ randomized controlled trials ■ self-management ■ stroke ■ systematic review
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