The Effectiveness of spinal cord injury ADL inpatient education on rehabilitation outcomes: a systematic review and meta-analysis

METHODS AND ANALYSIS

The authors used the Cochrane Handbook for Systematic Reviews of Interventions (Higgins and Green, 2008) as a guide to perform this systematic review and the PRISMA (Moher et al., 2009) to complete the write-up of this review.

Stage 1: Identifying the research question

The research question was developed with our target population and context in mind, but also stated as broadly as possible, as to not exclude any relevant studies.

The question was: What is the effect of ADL education on rehabilitation outcomes in SCI adult patients treated in an inpatient rehabilitation setting?

Stage 2: Identifying relevant studies

The search included three phases, namely: a database search, hand-searching of relevant journals and screening of reference lists of already included articles in previous phases.

The authors chose the Medline, Cochrane, EMBASE, PsychInfo, and CINAHL as relevant databases for the search. These include research in the field of education and allied healthcare professions.

The authors selected the parameters to limit their search as follows:

Parameter	Description
Studies	Published in peer-reviewed journals and in English
Population	Adult patients with SCI
Intervention	ADL education
Setting	Inpatient rehabilitation setting
Outcome	Any outcome tool
Timeframe	Not limited

After considering the research question, the search strategy was devised to find papers about:

▪ Spinal cord injury or ▪ Paraplegia or ▪ Quadriplegia or ▪ Tetraplegia	In combination with terms for	▪ Activities of daily living or ▪ ADL ▪ and Education

After the initial search was done, the duplicates of the exact results were removed by the principal researcher who considered all the titles against the inclusion and exclusion criteria, after which selected articles were included for the abstract screen. Then two co-authors double checked the results.

Inclusion Criteria
▪ Clinical trials (published English full report, of any time, involving human participants) investigating the effectiveness of SCI ADL education on rehabilitation outcomes. ▪ Intervention with sufficient description to allow a clear decision that it is a programme or format of SCI ADL inpatient rehabilitation education. ▪ No restriction was applied based on the type of SCI ADL patient education, formats, duration, the phase of inpatient rehabilitation, rehabilitation outcome tools, and educator. ▪ Any number of individual adults, the age of 16 years and above, with spinal cord injury of any cause, both genders (men or women), of any ethnic groups, and from any geographic location.
Exclusion criteria
▪ Studies included interventions not focusing on SCI ADL education. ▪ Studies that did not include outcome measure tool(s). ▪ Studies that included only qualitative data. ▪ Studies that included other disabilities besides SCI or individuals under 16 years.

Stage 3: Study selection

The principal researcher read the abstracts and the two co-authors double checked, considering the inclusion and exclusion criteria and selected articles for full text reading.

Studies that met all the inclusion and exclusion criteria were added to the final list of articles for this review. All reference lists of studies selected for final inclusion were scanned for additional articles that may meet our inclusion criteria. These articles were reviewed and included if appropriate. The whole process was documented using the PRISMA flow diagram indicating the various stages and results of articles review.

Stage 4: Charting the data

The reviewers developed a data-charting form, using Excel. Data were extracted by the principal researcher and double checked by two co-authors on characteristics of the population, the methodology and the results and recommendations. Excel data extraction forms are attached with this word document (PRISMA Process, Searches results & Data Pool - PhD 2017, and Data extraction sheet).