



What factors influence adult wheelchair users' participation in social and community activities?

Purpose

To systematically identify factors presented in existing literature that are associated with adult wheelchair users' (WCUs) participation in social and community activities.

Summary

- The Cochrane Library and several database were systematically searched using relevant keywords and medical subject headings. Included studies were quantitative and qualitative peer-reviewed publications written in English that presented original research and focused on factors influencing adult WCUs' (manual or power wheelchairs) participation in social and community activities.
- The review was conducted according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines. Identified factors were categorized using the most relevant International Classification of Functioning, Disability and Health (ICF) code and labeled as either modifiable or non-modifiable.
- Results of the review suggest that factors from all ICF domains are associated with participation of WCUs in social and community activities. In addition, evidence regarding participation appears to differ according to wheelchair type.
- Wheelchair factors (comfort, durability, and fit) and accessibility have been identified as the most frequently reported factors regarding participation. Additional frequent and modifiable factors are wheelchair skills, pain, finances, and level of education.
- Little research has focused on depression and confidence so far; however, these factors might provide relevant insights after further inclusion in multi-variable analyses.

Possible Applications

- Determining which modifiable factors influence participation in social and community activities has the potential to guide future experimental research and appropriate interventions to enhance participation among WCUs.
- Given the complexity of participation, applying multi-modal interventions in clinical practice that focus on two or more factors might be the most promising approach.

Research Abstract

A Review of Factors Influencing Participation in Social and Community Activities for Wheelchair Users

Purpose: To systematically identify factors associated with participation in social and community activities for adult wheelchair users (WCUs).

Methods: *Data sources:* PubMed/MEDLINE, CINAHL, PsycINFO and EMBASE. *Study selection:* Quantitative and qualitative peer-reviewed publications were included, which were written in English, reported original research and investigated factors associated with social and community participation in adult WCUs. *Data extraction:* The Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines were used. Factors were organized using the International Classification of Functioning, Disability and Health (ICF). *Data synthesis:* Thirty-five studies were selected: two of power WCUs, 10 of manual WCUs and 23 of both. Six qualitative studies, ranging in quality from 8/10 to 9/10 and 29 quantitative studies were included, ranging in quality from 4/15 to 11/15.

Results: Fifteen body function, 4 activity, 5 participation, 15 environmental and 14 personal factors were found to be associated with social and community participation.

Conclusion: Social and community participation of WCUs is associated with factors from all ICF domains. Wheelchair factors, accessibility, skills with wheelchair use, pain, finances and education are modifiable factors frequently reported to be associated with participation. Experimental research focusing on modifiable factors is needed to further our understanding of factors influencing participation among WCUs.

Smith, E.M., Sakakibara, B.M., & Miller, W.C. (2014). A review of factors influencing participation in social and community activities for wheelchair users. *Disability and Rehabilitation Assistive Technology*, 4, 1-14