

Cognitive functioning in persons with lower limb amputations: a review

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Abstract

Purpose: To review the literature on cognitive functioning in persons with lower limb amputations. *Method:* A search of the MEDLINE, PsycINFO and Web of Science databases was carried out. *Results:* Thirty papers were found that met the inclusion criteria. The studies were characterised by heterogeneity of design, methodological quality, sample characteristics, assessment of cognitive functioning, and outcomes examined. The research published to date suggests that cognitive impairment is more prevalent among persons with lower limb amputations than in the general population, and is linked with a number of important outcomes in this patient group, including mobility, prosthesis use, and maintenance of independence following amputation. *Conclusions:* These findings highlight the importance of assessing the cognitive abilities of persons with lower limb amputations. An understanding of the cognitive profile of these patients could assist rehabilitation teams in determining their suitability for prosthetic or wheelchair rehabilitation, ascertaining appropriate and realistic goals for rehabilitation, and tailoring rehabilitation programmes to patients’ strengths so that maximal mobility and independence is achieved.

Implications for Rehabilitation

- Cognitive impairment appears to be more prevalent among persons with lower limb amputations than in the general population.
- Cognitive impairment is negatively associated with mobility, prosthesis use, and maintenance of independence following amputation.
- Cognitive screening prior to rehabilitation could assist in determining patients’ suitability for prosthetic or wheelchair use, ascertaining appropriate goals, and tailoring rehabilitation to patients’ strengths so as to optimise their mobility and independence.