

# Role of Assistive Devices in Different Neurological Conditions: A Systematic Review

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## ABSTRACT

**Introduction:** Assistive technology refers to a broad range of products, systems, and services designed to assist individuals to perform a particular task. These assistive devices aid neurologically impaired individuals in carrying out their activities within the community. Some examples of assistive technologies are mobility aids such as wheel chairs, walkers, canes, crutches, prosthetic and orthotic devices.

**Aim:** To identify and highlight the role of assistive devices in enhancing mobility, Quality of Life (QOL) and functional independence in neurological conditions.

**Materials and Methods:** In this study, the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) was used. Because of their credibility and reliability, databases such as Google Scholar, Science Direct, PubMed, and Research Gate were utilised. Nevertheless, none of the databases, such as Science Direct and Research Gate, are comprehensive or entirely thorough.

**Result:** Assistive devices are frequently utilised in the rehabilitation process for neurological conditions. For stroke patients, wheelchairs,

walkers, and crutches are mainly utilized for mobility and everyday activities. Individuals with cerebral palsy also utilize wheelchairs, walkers, and crutches to enhance quality of life. Certain assistive devices serve both therapeutic functions and modifications for activities of daily living, potentially enhancing and sustaining quality of life.

**Conclusion:** Assistive devices aid a physiotherapist in reaching optimal objectives during rehabilitation for various neurological conditions. Various assistive devices were utilized for both treatment purposes and modifications to activities of daily living, enhancing and preserving their quality of life. However, understanding the correct usage of these devices is crucial, along with addressing the significant concerns regarding their overuse and inappropriate application. Such misuse can result in increased dependency among neurological patients, ultimately hindering their rehabilitation progress.

**Keywords:** Activities of daily living, Rehabilitation process, Quality of life

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