Acta Scientific Neurology (ASNE)

Volume 9 Issue 2 February 2026

Editorial

Enhancing Independence and Quality of Life: Occupational Therapy in Traumatic Brain Injury Rehabilitation

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Received: January 27, 2026

Published: January 31, 2026

Traumatic brain injury (TBI) refers to an alteration in normal brain function resulting from an external force, such as a blow, jolt, or penetrating injury to the head. The severity of TBI ranges from mild to severe and is classified based on the degree of brain damage and associated clinical symptoms. Common causes include falls, motor vehicle collisions, sports-related injuries, and acts of violence

How occupational therapy helps?

Occupational therapy (OT) plays a significant role in the rehabilitation of individuals with traumatic brain injury (TBI) by promoting independence, functional performance, and quality of life.

Occupational therapists adopt a client-centered approach, working collaboratively with individuals and their families to facilitate safe and meaningful participation in daily activities.

Assessment and individualized goal setting

Rehabilitation begins with a comprehensive assessment of the individual's cognitive, physical, and psychosocial functioning to identify strengths, limitations, and rehabilitation needs. Based on the assessment findings, individualized and measurable goals are established to enhance performance in activities of daily living (ADLs) and instrumental activities of daily living (IADLs).

Cognitive rehabilitation

Occupational therapy interventions target cognitive impairments commonly associated with TBI, including deficits in attention, memory, problem-solving, and executive functioning. Therapeutic strategies include structured task-based activities, cognitive exercises, compensatory techniques, and the use of external memory aids to support functional cognitive recovery.

Physical rehabilitation and adaptive interventions

To address physical and functional limitations, occupational therapists implement interventions aimed at improving motor control, coordination, and balance. Adaptive equipment and assistive technology are prescribed and training is provided to facilitate independence in self-care and daily activities such as dressing, grooming, and meal preparation.

Sensory integration and community participation

Sensory processing dysfunction following TBI is addressed through sensory integration-based interventions designed to improve the individual's ability to process and respond to sensory stimuli. Occupational therapy further supports community reintegration by developing functional skills necessary for independent living, including mobility, community navigation, and social participation.

Psychosocial and vocational rehabilitation

Occupational therapists address the psychosocial consequences of TBI by providing emotional support and coping strategies to individuals and their families. Vocational rehabilitation services may include evaluation of work-related skills, job readiness training, and recommendations for workplace accommodations to facilitate return to employment.

Education and interdisciplinary collaboration

Education is an integral component of occupational therapy intervention, focusing on increasing awareness of TBI, promoting effective coping strategies, and establishing structured routines to support long-term recovery. Occupational therapists collaborate with multidisciplinary healthcare teams to ensure coordinated, comprehensive, and evidence-based rehabilitation outcomes.