

Occupational Therapy's Role with **Stroke Rehabilitation**

Stroke is a leading cause of adult disability in the United States, with an estimated 7 million stroke survivors. Each year, approximately 795,000 people have either a new or recurrent stroke (Go et al., 2013). Stroke survivors face multiple challenges, such as weakness on one side of the body, decline in cognitive and emotional functioning, social disability, inability to walk and care for themselves, and a decrease in community participation. Occupational therapy can be instrumental in addressing these challenges at all stages in the continuum of care (i.e., acute, sub-acute, chronic, and post-rehab at home and in the community) and is an important component of the interdisciplinary care provided to stroke survivors in a variety of settings (e.g., neuro intensive care units, inpatient and outpatient rehabilitation facilities, home care).

Rehabilitation and the Resumption of Participation

The focus of occupational therapy is to help individuals achieve health, well-being, and participation in life through engagement in occupations (i.e., activities) (American Occupational Therapy Association [AOTA], 2014). Occupational therapy practitioners collaborate with clients and their families or caregivers to determine what activities are necessary, meaningful, and/or relevant to them. Based on their education and clinical expertise, and the philosophical basis of the profession, occupational therapy practitioners are uniquely able to analyze the interactions among the person, the environments in which they need to function, and the occupations they need or want to perform.

Many stroke survivors have changes in their physical, cognitive, and emotional abilities that impede them from independently performing their daily activities related to work, school, parenting, or leisure. Depending on the extent of the stroke, the needs and goals of the client, and the phase of stroke recovery, occupational therapy goals and services may include, but are not limited to, the following:

- Further retraining in self-care skills and adapting tasks or environments (post-rehab), including the appropriate use of adaptive equipment to maximize the ability to perform activities of daily living (ADLs) safely (e.g., bathing, dressing, functional mobility)
- Addressing ongoing deficits such as weakness, sensory loss, and cognitive or visual impairments that limit engagement in ADLs and instrumental ADLs (IADLs: carrying groceries, cooking a meal, managing money, parenting)
- Training in community reintegration and modifying tasks or environments, including, where appropriate, assessment of and training in the use of assistive technology, to maximize independent engagement in IADLs.
- Performing work-related task analysis and work site evaluations, and recommending modifications to the workplace; collaborating with educational facilities to facilitate return to school; working with the client on child-care-related tasks and adaptations for safe parenting responsibilities; and recommending adaptations to resume former leisure activities or develop new ones as feasible.
- Evaluating and treating swallowing difficulties
- Developing coping strategies to support psychosocial health and well-being (including relaxation techniques, if appropriate)



- Teaching and promoting healthy lifestyle habits and routines to minimize risk of secondary stroke
- Developing strategies to overcome barriers to sexual intimacy
- Providing pre-driving and driving evaluations, equipment recommendations for safe return to driving, or education on alternate means of transportation

Paving the Way for Increased Independence

Occupational therapy during rehabilitation focuses on ensuring that the client will function as well as possible after discharge, which often includes caregiver education and training, if needed, during post-rehab intervention. Other occupational therapy interventions include home modifications, assistive technology training, and wheelchair prescriptions (manual or powered) for improving quality of life and increasing independence.

Home modifications may include accessible designs for all rooms in one's house, ramps, wheelchair lifts or elevators, and stair lifts.

Assistive technology may include environmental control units, augmentative communication, and computer access technology. The occupational therapist considers the client's available range of motion, strength, coordination, cognitive status, etc., and works with the vendor as needed to select the most appropriate assistive technology equipment, set it up, and provide training to ensure that it is functional for that individual.

Community mobility is often a primary goal for people recovering from a stroke, and many people want to return to driving. Occupational therapists can perform pre-driving screens and driving assessments, which include a comprehensive physical, cognitive, and visual-perceptual evaluation prior to a road assessment. A road assessment entails all aspects of driving, such as parking, switching lanes, turning one's head to look for cars, reaction time, and the ability to follow driving rules. Equipment recommendations may include a spinner knob for people with limited voluntary movement of one hand or arm, or a left foot accelerator for people who have weakness in the right leg. Occupational therapy practitioners also work with individuals and their families in planning alternative transportation and community mobility methods, such as access-a-ride, family or friend assistance, and senior center transportation systems.

Conclusion

Occupational therapy practitioners understand the importance of emotional well-being, social connections, and healthy life habits for individuals post-stroke. In addition to ongoing physical rehabilitation as needed, they engage stroke survivors and family members to take charge of their lives, create human connections, and lead healthy lifestyles. This may include developing coping strategies to deal with loss, individualized ways to promote psychosocial health, education to minimize potential for a second stroke, promotion of increased exercise and healthy eating, and strategies to overcome barriers to sexual intimacy.

Stroke can cause serious long-term disability, and many stroke survivors face barriers to engaging in productive activity. Occupational therapy practitioners use their expertise in activity analysis and adaptive methods to facilitate the client's performance of needed or meaningful occupations within realistic contexts to promote independence.

References

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Occupational therapy enables people of all ages live life to its fullest by helping them to promote health, make lifestyle or environmental changes, and prevent—or live better with—injury, illness, or disability. By looking at the whole picture—a client's psychological, physical, emotional, and social make-up—occupational therapy assists people to achieve their goals, function at the highest possible level, maintain or rebuild their independence, and participate in the everyday activities of life.