Stroke

Approximately 50,000 Canadians have a stroke each year; 75% of those surviving are left with some level of disability.[1] Physiotherapy for stroke survivors is an integral part of the rehabilitation treatment plan. As members of stroke teams, physiotherapists address physical function issues and prevention of subsequent strokes, which are key determinants of quality of life (QOL).

Role of Physiotherapy in Stroke Rehabilitation

Physiotherapy focuses on restoring physical function following stroke. Rehabilitation services for stroke survivors, including physiotherapy, are provided in specialized stroke units, inpatient hospital wards and rehabilitation units, and in the community.

Physiotherapy has a positive impact in the prevention of subsequent acute events and supports the individual's ability to live independently through targeted interventions aimed at improving balance, strength, coordination and function. Physiotherapy is a key component in the continuum of care by providing support for the transition from hospital to home.

Impact on Patient Experience

Physiotherapy's focus on restoring physical function offers a positive outcome to stroke patients during the recovery process.

- Physiotherapy targets the recovery of physical function of stroke patients through low risk activities resulting in high patient satisfaction.[1]
- Stroke survivors report that they could benefit from more physiotherapy than is routinely provided in the rehabilitation setting.[2]
- Early intervention improves long term functional recovery, decreases the number of subsequent events, and improves rates of independent living in 81% of patients receiving rehabilitation returning home.[4]

Impact on Population Health

Early, high-intensity physiotherapy programs with task specific interventions and individual discharge planning contributes to improved outcomes for stroke survivors.[3]

- In-patient care in a stroke unit provided by a multidisciplinary team, including physiotherapists, reduces patient mortality and morbidity rates.[1]
- Physiotherapy post-stroke has a positive impact on disability, physical and social function and QOL and reduces the risk of poor health outcomes.[5]
- Admission for rehabilitation, including physiotherapy, within 30 days of a first, unilateral stroke results in greater functional gains and shorter lengths of stay (LOS) than admission to rehabilitation beyond 30 days.[6]

Impact on Health Care Costs

Early triage of stroke patients and early admission to inpatient rehabilitation reduces long-term health care costs.[4]

- Early mobilization interventions 24 hours post-stroke results in significantly less mean costs per patient than standard care ($13,939 compared to $22,4473 at 3 months follow-up and $18,057 compared to $30,585 at 12 months).[7]
- Early mobilization is cost-effective and produces better outcomes.[4,7]
- Early supported discharge with physiotherapy services decreases hospital LOS with few adverse events, reducing overall health care costs.[8]

Summary

There is strong research evidence to support physiotherapy, specialized stroke units, and outpatient physiotherapy services in the management of stroke. Overall, specialized stroke units are effective in the reduction of mortality and morbidity rates while decreasing costs associated with LOS and re-hospitalization. Participation in rehabilitation programs post-stroke increases social and physical function and has a positive impact on the individual's QOL. A key cost determinant in the provision of post-stroke physiotherapy services is the degree of match between the service provided and the patient needs.

Physiotherapy services following stroke reduces the risk for poor health outcomes, increases daily living and personal activity, and reduces costs to the health care system.

Key References:

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The value of a health care service is more than its proven cost-effectiveness. Quality of life, access, and continuity of care and integration of services are equally important criteria when looking at the broader concept of value.

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