Clinician's commentary on Blonski et al.¹

Of the 40,000–50,000 people diagnosed with stroke in Canada each year, approximately one-third are recurrent cases of stroke.² Physical inactivity is a particularly powerful risk factor for stroke and has been identified by the INTERSTROKE study as one of the five main health hazards that account for more than 80% of the global risk of stroke.³ Moreover, Towfighi and colleagues, in a recent cross-sectional study of US civilians with previous stroke (n = 388), demonstrated that regular exercise and abstinence from smoking were each independently associated with lower all-cause mortality after stroke.⁴ Despite the importance of physical activity for people following stroke, few stroke survivors exercise regularly.^{4–6} This may be because structured programmes aimed at reducing risk of recurrent stroke and comorbid cardiac disease are not widely available or accessible.^{7,8}

The issues of inactivity, lack of access to exercise programmes, and risk of secondary stroke may be intensified with people who have both physical and communication deficits following a stroke. Unfortunately, people with communication issues—approximately 30% of all people with stroke⁹—are often excluded from studies or are not examined as a distinct cohort within larger studies. We therefore know less about their experiences with barriers to exercise programmes and the short-term and long-term effects of these barriers.

To fill this knowledge gap, Blonski and colleagues have conducted a qualitative study exploring the communication, environmental, and personal facilitators and barriers that people with post-stroke aphasia experience when they attempt to access and participate in community-based exercise programmes.¹ They conducted face-to-face interviews with 10 people with stroke recruited from the Aphasia Institute in Toronto, Canada. Most participants (80%) had mild to moderate forms of aphasia; more than half were male (60%), and all were trained in supported conversation at the Aphasia Institute. Most (90%) were participating in at least one supervised exercise programme for people with stroke, including the in-house exercise programme offered at the Aphasia Institute (90%), stroke-specific exercise programmes (20%), and community-based exercise programmes (40%).

In the interviews, people with aphasia identified nonverbal communication, patience, and clear, simple instructions delivered in a slow, unhurried manner were important facilitators of exercise participation. They also identified a need for aphasiaspecific exercise programming, presence of a communication partner, family support, transportation resources, and extra exercise instructors. In addition, they noted that lack of general public awareness about aphasia, the high cost of exercise programmes, and lack of knowledge of exercise programme locations represent further challenges. Improved advertising of available programmes specific to people with aphasia and greater availability of accessible programmes were identified as areas of need.

Blonski and colleagues report that although the interviewers focused on communication-related facilitator and barriers, physical impairments such as mobility deficits and hemiparesis repeatedly emerged as primary barriers for study participants.¹ This finding of physical impairment as a primary barrier concurs with those of Wallace and colleagues, who measured motor impairment, communication, and participation in 16 life activities in 41 people with aphasia.¹⁰ While participants in Wallace and colleagues' study rated communication issues as a greater barrier than physical limitations to overall *life participation*, physical limitations interfered more than communication issues in the subcategory of *exercise and recreation*.

While removing the barriers posed by physical limitations is important, Blonski and colleagues' study highlights the importance of addressing specific communication issues as well.¹ Future studies examining barriers and facilitators for accessing and participating in exercise programmes should embrace the full spectrum of stroke deficits—particularly because people with aphasia are likely to be older, with more severe strokes and decreased rates of functional recovery,^{9,11} than those who do not experience aphasia after stroke. The results of Blonski and colleagues' study are especially important because exercise training, both aerobic and resistance, is emerging as an important treatment in post-stroke recovery and secondary prevention,¹² and Blonski and colleagues' findings reinforce that both physical and communication barriers to participation must be addressed.

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