## A Post-Stroke Assessment: The Frenchay Activities Index

By Carole Lewis, DPT, GCS, GTC, MSG, MPA, PhD, FAPTA, and Keiba Shaw, EdD, MPT, MA

Posted on: July 28, 2009 Reprinted with permission from Advance for Physical Therapists and PT Assistants

Contrary to our musings about living a pampered life and having our every need taken care of, the fear of being left dependent on someone to address some or all of our most basic needs is real. Even our ability to perform menial chores is missed when we are no longer capable of doing them. We all crave and strive for a certain amount of independence in our lives, and we are left bereft if it is lost.

For individuals who have had a stroke, quality of life, overall function and performance of daily activities is impacted in varying degrees. Determining which activities of daily living can the patient perform without assistance and to what extent he/she will be dependent upon others for help are questions that need to be answered in order to better help to formulate a plan of care suitable to the patient and his/her caregivers.

Additionally, assessing the social capabilities and finding ways to enhance this role would be useful to know. In order to obtain answers to these questions, numerous instruments have been developed.

One such instrument is the Frenchay Activities Index1 (FAI) developed by Holbrook and Skilbeck in 1993. This instrument has been touted as one that has the capabilities of measuring activities that reflect a higher level of independence (or dependence) as well as one's ability to interact on a social level in individuals post-stroke.

There are 15 items included on the FAI each of which is scored on a 4-point scale (0 to 3), to yield a total score ranging from 0 (inactive) to 45 (active). Each item requires some decision making and organizing on the part of the patient inside and outside the home. Answers to the items on the FAI may be obtained via a patient interview or by having the patient or caregiver record the answers. A single summary score as well as three subscale scores: domestic, leisure/work, and outdoors can be obtained.1,2 Estimated completion time is approximately 5 minutes.

In a study assessing the properties of the FAI by comparing groups of prestroke, poststroke and control individuals, the mean scores in the prestroke, poststroke, and control group demonstrated differences in functional status with the reliability of scores showing Cronbach's  $\square$  ranges from 0.78 to 0.87.2 Inter-rater reliability of the total score of the FAI was good (0.90; 95% CI 0.82-0.94), as was reliability at the item level (kappa >0.60) in 11 out of 15 items. There were four items, "local shopping," "social occasions," "gainful work" and "actively pursuing hobby" that were found to have poor reliability.3 Test-retest reliability was high (r=0.96).4

The construct validity of the FAI was supported by meaningful correlations between itself and scores on the Barthel Index and Sickness Impact Profile. The FAI has been validated in community-dwelling older adults across a variety of cultures including Japan and South Korea.5,6

It should be noted that in both the original study by Holbrook and Skilbreck and subsequent studies that there were differences in scores related to gender.1 Holbrook and Skilbeck found significant differences in domestic subscale scores, but little difference in the leisure/work and outdoor/other subscales whereas Turnbull et al. found the greatest differences among the three subscales to be in domestic subscale scores, on which men scored lower.1,4 Women scored lower on leisure/work activities and no differences existed in scores for outdoor/other activities.4

The FAI appears to be a useful instrument for determining one's ability to function in a variety of activities after

a stroke. It usefulness among socio-culturally diverse older population living in the community has been shown. A preliminary study has shown that the FAI may be usefully in teens and young adults with the addition of items that reflect sport, physical exercise and caring for children.4 The FAI is quick and easy to use and can be easily accessed online and included in the Appendices of references 1, 2 and 4.

## References

- 1. Holbrook, M., & Skilbeck, C. (1983). An activities index for use with stroke patients. Age and Ageing, 12, 166-170.
- 2. Schuling, J., de Haan, R., Limburg, M., & Groenier, K. (1993). The Frenchay Activities Index. Assessment of functional status in stroke patients. Stroke, 24, 1173-1177.
- 3. Post, M., & de Witte, L. (2003). Good inter-rater reliability of the Frenchay Activities Index in stroke patients. Clinical Rehabilitation, 17, 548.
- 4. Turnbull, J., Kersten, P., Habib, M., McLellan, L., Mullee, M., & George, S. (2000). Validation of the Frenchay Activities Index in a general population aged 16 years and older. Archives of Physical and Medical Rehabilitation, 81, 1034-1038.
- 5. Han, C., Yajima, Y., Nakajima, K., Lee, E., Meguro, M., & Kohzuki, M. (2006). Construct validity of the Frenchay Activities Index for community-dwelling elderly in Japan. Tohoku Journal of Experimental Medicine, 210(2), 99-107.
- 6. Han, C., Lee, E., & Kohzuki, M. (2009). Validity and reliability of the Frenchay Activities Index for community-dwelling elderly in South Korea. Tohoku Journal of Experimental Medicine, 217(3), 163-168.

Dr. Lewis is a private practice and consulting clinical specialist for ProfessionalSportsCare and Rehab. She lectures exclusively for GREAT Seminars and Books, Inc. Dr. Lewis is also the author of numerous textbooks. Her Website address is www.greatseminarsandbooks.com. Dr. Shaw is an assistant professor in the physical therapy program at the University of South Florida dedicated to the area of geriatric rehabilitation. She lectures exclusively for GREAT Seminars and Books in the area of geriatric function.