Fatigue Impact Scale (FIS)

Purpose The FIS was developed to assess the symptom of fatigue as part of an underlying chronic disease or condition. Consisting of 40 items, the instrument evaluates the effect of fatigue on three domains of daily life: cognitive functioning, physical functioning, and psychosocial functioning [1]. In addition to the original version, a shorter 21-item measure called the Modified Fatigue Impact Scale (MFIS) has been developed and validated for use in those situations where a longer instrument might be fatiguing [2]. Similarly, Fisk and Doble used Rasch analyses to reduce the original to a mere eight items that could be used for monitoring daily changes in fatigue, creating the Daily Fatigue Impact Scale (D-FIS; [3]).

Population for Testing The scale was initially validated in a population of adult patients presenting at a clinic for the treatment of infectious diseases. The FIS and its variants have been used to assess symptoms of fatigue associated with a variety of conditions, including multiple sclerosis [4] and hepatitis C [5].

Administration The FIS is a self-report, paperand-pencil measure requiring between 5 and 10 min for completion.

Reliability and Validity The original FIS was validated initially by developers [1], who found an internal consistency of >than .87 for all three

subscales. The FIS also accurately distinguished between the patient group with multiple sclerosis and the group with chronic fatigue. More recently, Mathiowetz [6] found a test-retest reliability ranging from .68 to .85 in patients with multiple sclerosis. Additionally, scores on the FIS were moderately correlated with those obtained on the SF-36 (Chap. 76) – though this support for the scale's convergent validity was undermined by a low correlation between results on the FIS and the Fatigue Severity Scale (Chap. 35). The MFIS has been shown to possess an internal consistency ranging from .65 to .92 [2] and the D-FIS has an internal consistency of .92 [7].

Obtaining a Copy A copy of the original FIS cannot be found in the article published by developers [1]; however, examples of the items in the scale can be found in this article. The MFIS can be found in an article by Kos and colleagues [2] and the D-FIS is available in an article by Fisk and Doble [3]. The original FIS can be obtained through MAPI Research Trust at their website www.mapi-trust.org/test/123-fis

Direct correspondence to: John D. Fisk Department of Psychiatry Dalhousie University QEII Health Sciences Centre Halifax, Nova Scotia B3H 2E2 **Scoring** Respondents are asked to rate the extent to which fatigue has interfered with certain aspects of their day-to-day functioning using a scale that ranges from 0 ("no problem") to 4 ("extreme

problem"). Scores are then tallied to produce an overall score with a potential maximum of 160. Subscale scores can also be calculated to give a more nuanced impression of fatigue.

Daily Fatigue Impact Scale

Fatigue is a feeling of physical tiredness and lack of energy that many people experience from time to time. In certain medical conditions, feelings of fatigue can be more frequent and more of a problem than usual. The following questionnaire has been designed to help us understand how you experience fatigue and how it has affected your life. Below is a list of statements that describe how fatigue may cause problems in people's lives. Please read each statement carefully and place an 'X' in the box that indicates best HOW MUCH OF A PROBLEM FATIGUE HAS BEEN FOR YOU TODAY. Please check ONE box for each statement and do not skip any items.

	No problem 0	Small problem 1	Moderate problem 2	Big problem 3	Extreme problem 4
1. Because of fatigue, I feel less alert.					
2. Because of fatigue, I have to reduce my workload or responsibilities.					
 Because of fatigue, I am less motivated to do anything that requires physical effort. 					
 Because of fatigue, I have trouble maintaining physical effort for long periods. 					
5. Because of fatigue, I find it difficult to make decisions					
6. Because of fatigue, I am less able to finish tasks that require thinking.					
7. Because of fatigue, I feel slowed down in my thinking.					
 Because of fatigue, I have to limit my physical activities. 					

With kind permission from Springer Science+Business media: John et al. [3], Appendix A.

References

- Fisk, J. D., Ritvo, P. G., Ross, L., Haase, D. A., Marrie, T. J., & Schlech, W. F. (1994a). Measuring the functional impact of fatigue: initial validation of the fatigue impact scale. *Clinical Infectious Diseases*, 18, S79–83.
- Kos, D., Kerckhofs, E., Carrea, I., Verza, R., Ramos, M., & Jansa, J. (2005). Evaluation of the modified fatigue impact scale in four different European countries. *Multiple Sclerosis*, 11, 76–80.
- Fisk, J. D., & Doble, S. E. (2002). Construction and validation of a fatigue impact scale for daily administration. *Quality of Life Research*, 11, 263–272.
- Fisk, J. D., Pontefract, A., Ritvo, P. G., Archibald, C. J., & Murray, T. J. (1994b). The impact of fatigue on patients with multiple sclerosis. *Canadian Journal of Neurological Sciences*, 21(1), 9–14.
- Hassoun, Z., Willems, B., Deslauriers, J., Nguyen, B. N., & Huet, P. M. (2002). Assessment of fatigue in patients with chronic hepatitis C using the fatigue impact scale. *Digestive Diseases and Sciences*, 47(12), 2674–2681.
- Mathiowetz, V. (2003). Test-retest reliability and convergent validity of the fatigue impact scale for persons with multiple sclerosis. *The American Journal of Occupational Therapy*, 57(4), 389–395.

 Martinez-Martin, P., Catalan, M. J., Benito-Leon, J., Moreno, A. O., Zamarbide, I., Cubo, E., van Blercon, N., Arillo, V. C., Pondal, M., Linazasoro, G., Alonso, F., Ruiz, P. G., & Frades, B. (2006). Impact of fatigue in Parkinson's disease: the fatigue impact scale for daily use (D-FIS). *Quality of Life Research*, 15, 597–606.

Fatigue Impact Scale

Vanage, S. M., Gilbertson, K. K., & Mathiowetz, V. (2003). Effects of an energy conservation course on fatigue impact for persons with progressive multiple sclerosis. *The American Journal of Occupational Therapy*, 57(3), 315–323.

Modified Fatigue Impact Scale

Chwastiak, L., Gibbons, L., Ehde, E., Sullivan, M., Bowen, J., Bombardier, C., & Kraft, G. (2005). Fatigue and psychiatric illness in a large community sample of persons with multiple sclerosis. *Journal of Psychosomatic Research*, 59(5), 291–298.