

The Epworth Sleepiness Scale (ESS)

By: Carole Smyth MSN, APRN, BC, ANP/GNP, Montefiore Medical Center

WHY: Sleep is critical to health and sense of well-being. However, normal aging changes, medical problems, psychiatric problems, and psychosocial issues can alter the pattern and quality of sleep as one grows older, and, thus affect the quality of life in the older adult. Assessment of sleep patterns enables the nurse to intervene immediately by implementing interventions with the client, or by referring the client for further assessment.

BEST TOOL: While simply asking a person, "How is your sleep?" can give some information, the use of an assessment tool assists in finding the cause of the sleep disturbance. The Epworth Sleepiness Scale (ESS) is an effective instrument used to measure excessive sleepiness or excessive daytime sleepiness. The ESS differentiates between average sleep and significant issues with sleepiness that require intervention. The client self-rates on how likely it is that he/she would doze in eight different situations. Scoring of the answers is 0-3, with 0 being "would never doze" and 3 being "high chance of dozing". A sum of 9 or more from the eight individual scores reflects "very sleepy and should seek medical advice" (Johns, 1991).

TARGET POPULATION: The ESS may be used for both initial assessment and ongoing comparative measurements with older adults across the health care continuum.

VALIDITY AND RELIABILITY: There is a high level of internal consistency between the eight items in the ESS as measured by Cronbach's alpha, ranging from 0.73 to 0.88. Numerous studies using the ESS have supported high validity and reliability.

STRENGTHS AND LIMITATIONS: The ESS is a subjective measure of sleepiness. Self-reporting by clients can empower the client, but can reflect inaccurate information if the client has difficulty understanding what is written, or cannot see or physically write out responses. Moreover, the scale is presented in English and has not been tested in other languages. The scale can be adapted to enable the client to respond verbally to items on the scale by having the nurse read the statements to the client.

MORE ON THE TOPIC:

Best practice information on care of older adults: www.ConsultGeriRN.org.

Goldstein, I.B., Ancoli-Israel, S., & Shapiro, D. (2004). Relationship between daytime sleepiness and blood pressure in healthy older adults. *American Journal of Hypertension*, 17(9), 787-92.

Johns, M.W. (1991). A new method for measuring daytime sleepiness: The Epworth sleepiness scale. *Sleep*, 14, 540-545.

Johns, M.W. (1992). Reliability and factor analysis of the Epworth Sleepiness Scale. *Sleep*, 15, 376-381.

Johns, M.W. (1994). Sleepiness in different situations measured by the Epworth Sleepiness Scale. *Sleep*, 17, 703-710.

Li, F., Fisher, K.J., Harmer, P., Irbe, D., Tarse, R.G., & Weimer, C. (2004). Tai chi and self-rated quality of sleep and daytime sleepiness in older adults: A randomized controlled trial. *JAGS*, 52(6), 892-900.

Redeker, N.S., Ruggiero, J.S., & Hedges, C. (2004). Sleep is related to physical function and emotional well being after cardiac surgery. *Nursing Research*, 53(3), 154-62.

The Epworth Sleepiness Scale (ESS)

How likely are you to doze off or fall asleep in the following situations, in contrast to feeling just tired? This refers to your usual way of life in recent times. Even if you have not done some of these things recently try to work out how they would have affected you. Use the following scale to choose the most appropriate number for each situation:

0 = would *never* doze

1 = *slight* chance of dozing

2 = *moderate* chance of dozing

3 = *high* chance of dozing

SITUATION	CHANCE OF DOZING
Sitting and reading	
Watching television	
Sitting inactive in a public place (<i>e.g. a theater or meeting</i>)	
As a passenger in a car for an hour without a break	
Lying down to rest in the afternoon when circumstances permit	
Sitting and talking to someone	
Sitting quietly after a lunch without alcohol	
In a car, while stopped for a few minutes in the traffic	
TOTAL SCORE	

SCORE RESULTS:

1-6 Congratulations, you are getting enough sleep!

7-8 Your score is average

9 and up Very sleepy and should seek medical advice

Johns, M.W. (1991). A new method for measuring daytime sleepiness: The Epworth sleepiness scale. *Sleep*, 14, 540-545. Permission for single-use of the information contained in this material was obtained from the Associated Professional Sleep Societies, LLC, September 2006.