

The Pittsburgh Sleep Quality Index (PSQI)

By: Carole Smyth, RNC, MSN

WHY: Sleep is a necessary part of life. 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: The Pittsburgh Sleep Quality Index (PSQI) is an effective instrument used to measure the quality and patterns of sleep in the older adult. It differentiates “poor” from “good” sleep by measuring seven areas: subjective sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep disturbances, use of sleeping medication, and daytime dysfunction over the last month. The client self-rates each of these seven areas of sleep. Scoring of answers is based on a 0 to 3 scale, whereby 3 reflects the negative extreme on the Likert Scale. A global sum of “5” or greater indicates a “poor” sleeper. Although there are several questions that request the evaluation of the client’s bedmate or roommate, these are not scored (not reflected in attached instrument). Refer to “More on the Topic”, Buysse et al., 1989, for these questions.

TARGET POPULATION: The PSQI can be used for both an initial assessment and ongoing comparative measurements with older adults across all health care settings.

VALIDITY/RELIABILITY: The PSQI has internal consistency and a reliability coefficient (Cronbach’s alpha) of 0.83 for its seven components. Numerous studies using the PSQI have supported high validity and reliability.

STRENGTHS AND LIMITATIONS: The PSQI is a subjective measure of sleep. Self-reporting by clients can empower the client, but can reflect inaccurate information if the client has difficulty understanding what is written, or can not see or physically write out responses. Moreover, the scale is presented in English. 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:

Beaton, S.R., Voge, S.A. (1998). *Measurements for Long-Term Care* (pp.169-170). Thousand Oaks, CA: Sage Publications.

Beck-Little, R., Weinrich, S.P. (1998). Assessment and Management of Sleep Disorders in the Elderly. *Journal of Gerontological Nursing*, 24(4), 21-29.

Buysse, D.J., Reynolds III, C.F., Monk, T.H., Berman, S.R., Kupfer, D.J. (1989). The Pittsburgh Sleep Quality Index: a New Instrument for Psychiatric Practice and Research. *Journal of Psychiatric Research*, 28 (2), 193-213.

Pittsburgh Sleep Quality Index (PSQI)

Instructions: *The following questions relate to your usual sleep habits during the past month only. Your answers should indicate the most accurate reply for the majority of days and nights in the past month. Please answer all questions.*

During the past month,

1. When have you usually gone to bed? _____
2. How long (in minutes) has it taken you to fall asleep each night? _____
3. When have you usually gotten up in the morning? _____
4. How many hours of actual sleep did you get that night? (This may be different than the number of hours you spend in bed) _____

5. During the past month, how often have you had trouble sleeping because you...	Not during the past month (0)	Less than once a week (1)	Once or twice a week (2)	Three or more times a week (3)
a. Cannot get to sleep within 30 minutes				
b. Wake up in the middle of the night or early morning				
c. Have to get up to use the bathroom				
d. Cannot breathe comfortably				
e. Cough or snore loudly				
f. Feel too cold				
g. Feel too hot				
h. Have bad dreams				
i. Have pain				
j. Other reason(s), please describe, including how often you have had trouble sleeping because of this reason(s):				
6. During the past month, how often have you taken medicine (prescribed or "over the counter") to help you sleep?				
7. During the past month, how often have you had trouble staying awake while driving, eating meals, or engaging in social activity?				
8. During the past month, how much of a problem has it been for you to keep up enthusiasm to get things done?				
	Very good (0)	Fairly good (1)	Fairly bad (2)	Very bad (3)
9. During the past month, how would you rate your sleep quality overall?				

- Component 1** #9 Score C1 _____
- Component 2** #2 Score (≤ 15 min (0), 16-30 min (1), 31-60 min (2), >60 min (3))
+ #5a Score (if sum is equal 0=0; 1-2=1; 3-4=2; 5-6=3) C2 _____
- Component 3** #4 Score (>7 (0), 6-7(1), 5-6(2), <5 (3) C3 _____
- Component 4** (total # of hours asleep)/(total # of hours in bed) x 100 C4 _____
 $>85\%=0$, $75\%-84\%=1$, $65\%-74\%=2$, $<65\%=3$
- Component 5** # sum of scores 5b to 5j (0=0; 1-9=1; 10-18=2; 19-27=3) C5 _____
- Component 6** #6 Score C6 _____
- Component 7** #7 score + #8 score (0=0; 1-2=1; 3-4=2; 5-6=3) C7 _____

Add the seven component scores together _____ **Global PSQI Score** _____

Reprinted from *Journal of Psychiatric Research*, 28(2), Buysse, D.J., Reynolds III, C.F., Monk, T.H., Berman, S.R., & Kupfer, D.J. The Pittsburgh Sleep Quality Index: A New Instrument for Psychiatric Practice and Research, 193-213, Copyright 1989, with permission from Elsevier Science.

Try This: Best Practices in Nursing Care to Older Adults, A series from the Hartford Institute for Geriatric Nursing www.hartfordign.org