Breathing Problems Questionnaire (BPQ) Scoring Instructions for both versions

Brief history: The items of the Breathing Problems Questionnaires were developed from interviews with patients which were organised and conducted by Michael Hyland (health psychologist) and Julia Bott (physiotherapist). A short version was developed using data collected by Sally Singh (physiotherapist). The long version (33 items) gives a more complete picture of quality of life in these patients. The items of the short version (10 items) were selected on the basis that they were most sensitive to change

Publications

Hyland ME, Bott J, Singh S, Kenyon CA (1994) <u>Domains, Constructs And The Development</u> <u>Of The Breathing Problems Questionnaire.</u> Quality Of Life Research 3 (4), 245–256.

Hyland ME, Singh SJ, Sodergren SC, Morgan MP (1998) <u>Development Of A Shortened</u> <u>Version Of The Breathing Problems Questionnaire Suitable For Use In A Pulmonary</u> <u>Rehabilitation Clinic: A Purpose-Specific, Disease-Specific Questionnaire.</u> Quality Of Life Research 7 (3), 227–233.

Haave, E., M. E. Hyland, and S. Skumlien. (2006) The relation between measures of health status and quality of life in COPD. *Chronic Respiratory Disease* 3.4: 195-199.

Long version (33 items)

Scoring of individual items in the long version

Note the general rule is that if there is no problem identified or the problem is within the normal range then the score is zero. For some questions, there is more than one response that can receive a zero. Item scores increase with increasing level of problem.

The following items have one zero and are scored 0-3

1,2,4,12,13,14,15,16,18,19,20,21,24,25,26,28,29,30,31,32,33.

The following items have one zero and are scored 0-4

6,22

The following item has two zeros and is scored 0-2

9

The following items have two zeros and are scored 0-3

5,8,10,11, 23,27

The following items have two zeros and are scored 0-4

3, 7, 17

Minimum score = 0, maximum score = 103

1. To produce an overall score, add values for all 33 items 2. To produce *domain-specific scores*, add the values for items in each of the following 13 domains Walking: 1, 2, 3 Bending or reaching: 6, 10 Washing and bathing: 4, 5 Household chores: 7, 8, 9 Social interactions: 12, 13, 14 Effects of weather or temperature: 15, 16, 17, 18 Effects of smells and fumes: 30, 31 Effects of colds: 23 Sleeping: 19, 20 Medicine: 21, 22 Dysphoric states: 11, 24, 25, 26, 27 Eating: 28, 29 Excretion urgency: 32, 33

3. It is also possible to produce *construct valid sub-scales* relating to two health constructs: health knowledge and health appraisal. To produce the health appraisal score, add the values of the following 6 items: 13, 23, 24, 25, 26, 27. To produce the health-knowledge score, add the values of the remaining 27 items. Note: health-knowledge correlates with exercise tolerance whereas health appraisal correlates with neuroticism.

Shortened-version (10 items)

This is normally scored as a single scale made from the summation of all 10 items. However, it can also be scored as two subscales, the physical subscale comprising items 1-4 and the emotional subscale comprising items 7 - 10. Previous research has shown items 5 and 6 crossload in factor analysis, so are not pure indicators of either physical or emotional problems and therefore excluded from this subscale analysis.