Brief Pain Inventory (BPI) – Interference Scale

Assessment Overview

Assessment Area

ICF Domain:
Body Functions
Subcategory:
Sensory Functions

You Will Need

Length:
7, 10, or 12 items, 5-10 minutes

Scoring:
0-10 rating scale for items
Mean of item scores is used as the Pain Interference score

Summary

The Brief Pain Inventory (BPI) is a self-report/interview-based assessment, modeled after the McGill Pain Questionnaire. It provides information on the intensity of pain (sensory dimension) and the degree to which pain interferes with function (reactive dimension). It also asks questions about pain relief, pain quality, and the patient's perception of the cause of pain.

The reactive dimension (i.e. the interference scale) of the inventory is often used alone. It is also the only part of the BPI that has been tested in the SCI population. **Therefore the information presented here refers to the BPI-Interference scale only.**

Three modified versions of the BPI – Interference scale have been developed for the SCI population (7-item, 10-item, and 12-item). Pain is rated on a scale of 0 (no interference) to 10 (interferes completely).

Availability

Available for purchase here:
http://www3.mdanderson.org/depts/symptomresearch/

Languages: English, French, Chinese, Filipino, Hindi, Italian, Spanish, and Vietnamese

Assessment Interpretability

Minimal Clinically Important Difference

Not established in SCI

Statistical Error

Not established in SCI

Typical Values

Mean (SD) Scores:
7-item 3.63 (2.60)
10-item 3.53 (2.62)
12-item 3.31 (2.58)

(Raichle et al. 2006; n=127, 92 males; mixed injury types; community; mean (SD) time since injury = 16.6(10.6) years)

Measurement Properties

Validity – Moderate to High

High **correlation with Pain Intensity Numerical Ratings Scale:**
7-item: r = 0.62
10-item: r = 0.63
12-item: r = 0.61

High **correlation with Short Form-36 (SF-36) Mental Health Scale:**
7-item: r = -0.62
10-item: r = -0.60
12-item: r = -0.61

(Raichle et al. 2006; n=127, 92 males; mixed injury types; community; mean (SD) time since injury = 16.6(10.6) years)

High **correlation between BPI-Interference (12-item) and MPI-SCI Life Interference subscale:**
r = 0.75

Moderate **correlation between BPI-Interference (12-item) and MPI-SCI Pain Interference subscale:**
r = 0.50

(Soler et al. 2013; n=126, 78 males; mixed injury types; mean (SD) time since injury = 11.8(10.8) years)

Number of studies reporting validity data: 2

Reliability – High

High **Internal Consistency:**
7-item: α = 0.92
10-item: α = 0.95
12-item: α = 0.96

(Raichle et al. 2006; n=127, 92 males; mixed injury types; community; mean (SD) time since injury = 16.6(10.6) years)

Number of studies reporting reliability data: 1

Responsiveness

Floor/Ceiling Effect:
Not established in SCI

Effect Size:
Not established in SCI

Number of studies reporting responsiveness data: 0