

THE NECK DISABILITY INDEX (NDI)

An informal "blurb" from the author

Howard Vernon, D.C.

The Neck Disability Index (NDI) was developed in 1989 by Howard Vernon. The Index was developed as a modification of the Oswestry Low Back Pain Disability Index with the permission of the original author (J. Fairbank, 1980). In 1991, Vernon and Mior published the results of a study of reliability and validity in the Journal of Manipulative and Physiologic Therapeutics. Since then, approximately ten articles have appeared in the indexed literature on the NDI. All of these studies have confirmed the original reports of a high level of reliability and validity. We currently know that the NDI consists of one factor - "physical disability" - although NDI scores correlate well with SF-36 mental component scores as well. We know that the minimum detectable score and the minimal clinically important difference amounts to the same figure - 5 NDI points.

The NDI has become a standard instrument for measuring self-rated disability due to neck pain and is used by clinicians and researchers alike.

Each of the 10 items is scored from 0 - 5. The maximum score is therefore 50. The obtained score can be multiplied by 2 to produce a percentage score. Occasionally, a respondent will not complete one question or another. The average of all other items is then added to the completed items.

The original report provided scoring intervals for interpretation, as follows:

0 - 4 = no disability
5 - 14 = mild
15 - 24 = moderate
25 - 34 = severe
above 34 = complete.

Please note: This means 15-24 out of 50 (the RAW SCORE) equates with moderate disability.

It is recommended that the NDI be used at baseline and for every 2 weeks thereafter within the treatment program to measure progress. As noted above, at least a 5-point change is required to be clinically meaningful. Patients often do not score the items as zero, once they are in treatment. In other words, it is common to find that patients will continue to score between 5 - 15 despite having made excellent recovery (i.e., they may be back to work). The practitioner should avoid the trap of "treating till zero", as this is

not supportable based on current evidence.