

Measuring Back Pain: Using the ODI

► If you have ever thought, “Oh, my aching back!” you are not alone. Back pain is one of the most common medical problems, affecting eight out of 10 people at some point during their lives.

Whether back pain is caused by overuse, strenuous activity or improper use (i.e., repetitive or heavy lifting, exposure to vibration for prolonged periods of time), trauma, injury/fracture, arthritis, degeneration of vertebra, infection, obesity, ligament tears, muscle strains or a multitude of other mechanisms, health care providers need to have a way to objectively examine the effects of back pain on function.

The original Oswestry Disability Index (ODI), also known as the Oswestry Disability Questionnaire, developed by Fairbank et al was designed to provide clinicians with information regarding day-to-day function and pain.¹ The developers of the ODI are committed to updating and modifying the instrument to provide consistency and ease of administration.²⁻⁴ The latest iteration (version 2.1a), updated September 2006, will be reviewed.⁴

Using the Oswestry

As stated, the ODI was developed to specifically assess how back and subsequent leg pain affects a person’s ability to function in daily activities. It is a self-administered questionnaire that contains 10 sections. Section 1: Pain intensity (ranging from “I have no pain at the moment” to “The pain is the worst imaginable at the moment”); Section 2: Personal care (e.g., washing, dressing; ranging from “I can look after myself normally without causing extra pain” to “I do not get dressed, wash with difficulty and stay in bed”); Section 3: Lifting (ranging from “I can lift heavy weight without extra pain” to “I cannot lift or carry anything”); Section 4: Walking (ranging from “Pain does not prevent me walking any distance” to “I am in bed most of the time”); Section 5: Sitting (ranging from “I can sit in any chair as long as I like” to “Pain prevents me from sitting at all”); Section 6: Standing (ranging from “I can stand as long as I want without extra pain” to “Pain prevents me from standing at all”); Section 7: Sleeping, (ranging from “My sleep is never disturbed by pain” to “Pain prevents me from sleeping at all”); Section 8: Sex life (if applicable; ranging from “My sex life is normal and causes no extra pain” to “Pain prevents any sex life at all”); Section 9: Social life (ranging from “My social life is normal and gives me no extra pain” to “I have no social life because of pain”), and Section 10: Traveling (ranging from “I can travel anywhere without pain” to “Pain prevents me from traveling except to receive treatment”). The ODI is estimated to take about two minutes to complete.⁵

The ODI has been translated into numerous languages including German, Iranian, Greek, Chinese, Hungarian, Japanese, Korean, Spanish and Thai. Reliability and validation studies have

been performed and are summarized by Fairbank and Pynsent² and on the ODI website.⁴

Scoring

Scoring the ODI (all versions) is accomplished by scoring the six statements within each section from 0 to 5 with the first statement scoring 0 through to the last statement. The developers indicate that if a patient answers more than once in each section (i.e., checks two boxes), then take the highest score. Calculation of the ODI index occurs in the following manner: Total score/5 x Number of questions answered x 100.

There are currently four English versions of the Oswestry. The ODI has been an extremely important tool used by researchers and clinicians to measure a patient’s chronic functional disability.

The test has been around for 28 years and is considered the “gold standard” of low-back functional outcome tools. For individuals who find themselves in the unfortunate position of saying “Oh, my aching back,” the ODI can be a useful tool in highlighting problem activities, which can help the clinician focus on treatment and enhance daily function. ■

References

1. Fairbank, J., Couper, J., Davies, J., & O’Brian, J. (1980). The Oswestry low-back pain questionnaire. *Physiotherapy*, 66, 271-273.
2. Fairbank, J., & Pynsent, P. (2000). The Oswestry Disability Index. *Spine*, 25, 2490-2453.
3. Roland, M., & Fairbank, J. (2000). The Roland-Morris Disability Questionnaire and the Oswestry Disability Questionnaire. *Spine*, 25, 3115-3124.
4. Fairbank, J., & Pynsent, P. (2008). *Oswestry Disability Index*. Retrieved from the World Wide Web: <http://www.orthosurg.org.uk/odi/>. Accessed June 2, 2008.
5. Lewis, C., Wilk, K., & Wright, R. (2001). *The Orthopedic Outcomes Tool Box*. Dayton, OH: Great Seminars and Books Inc.

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