



The Use of Patient Reported Outcome Measures in Adult Spinal Deformity Over the Past Decade

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Introduction

Patient centered health measures have become the gold standard to assess efficacy of surgical spine procedures and are an essential component of cost-effectiveness research. This study aims to assess incidence, trends and use of patient centered health measures over the past decade to better define various instruments used in adult spinal deformity research.

Methods

A search was conducted on PubMed from 2004-2013 of five orthopaedic journals: The Journal of Bone and Joint Surgery American Volume, The Bone and Joint Journal (formerly JBJS British Volume), The Spine Journal, The European Spine Journal and Spine. All journal abstracts were inspected for adult spinal deformity surgery and inclusion of patient centered outcome instruments. Articles were then analyzed for diagnosis, procedure and level of evidence. Prevalence of outcome instruments and level of evidence were reported as percentages of total studies included.

Results

From 19,736 article published, 1,090 articles included patient outcomes. A total of 99 articles addressed adult spinal deformity surgery with most coming from Spine (70.7%). In total, there were 23 distinct outcome measures. The top six most used outcome measures in descending order were: Scoliosis Research Society-22 (48.5%), Oswestry Disability Index (47.5%), Scoliosis Research Society-24 (21.2 %), Short Form-36 (14.1%), Visual Analog Score (12.1%) and Short Form-12 (7.1%). Most articles were of Level IV evidence (45.5%), while no articles of Level I evidence were identified.

Learning Objectives

- 1) Increase awareness of patient centered outcomes in spine surgery
- 2) Understand the existence of large amount of PRO instruments and their incorrect use in spinal deformity surgery
- 3) The need to consolidate and only use the most valuable PRO instruments in spinal deformity surgery

Conclusions

A number of different instruments continue to be utilized in adult spinal deformity surgery research. A consensus may be needed to use a fewer number of most relevant instruments on a consistent basis for more effective communication and comparison without overburdening patients.