



Patient Satisfaction in Spine Surgery: A Systematic Review of the Literature

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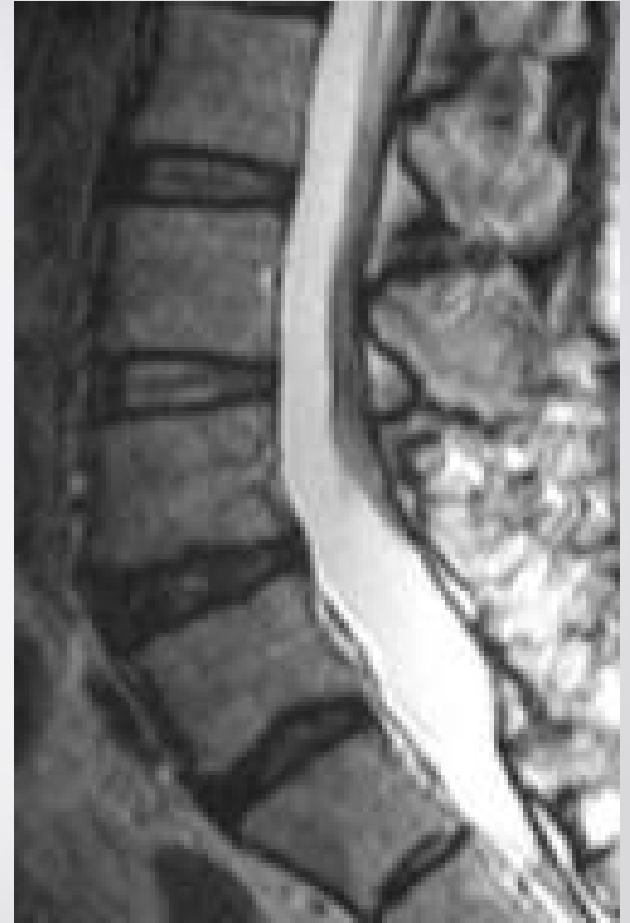
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Knowledge that will change your world

Disclosures

- None of the authors have disclosures

- Financial considerations
- Improved patient outcomes
- Defining a successful treatment



Hudak's Axes



Hudak PL, Wright JG: The characteristics of patient satisfaction measures. **Spine (Phila PA 1976) 28:** 3167-3177, 2000

Systematic Review



**THE COCHRANE
COLLABORATION**



Systematic Review: Results

Dominant Characteristic	Percentage of Studies
Global	84.1%
Outcome	94.9%
Generic	78.3%
Direct	77.7%
Affective	79.0%
Closed-ended	94.3%
Questionnaire	81.5%
Likert Scale	79.0%

Systematic Review: Results

Less Frequent Characteristics	Tools Utilized
Multi-Dimensional	NASS, SF-36, SRS-24, SRS-30, Zurich
Disease Specific	NASS, SRS-30, Zurich

Ideal Instrument

Content

Multidimensional
with global
questions

Outcome and
Care

Disease Specific

Direct

Method

Affective

Closed-ended
questions

Self-
administered
questionnaire

Likert

Dimensions Affecting Patient Satisfaction

Pain

Function

Efficacy of Care

Caregiver
Interpersonal
Manner

Postoperative
Care

Specific Patient
Health
Characteristics

Patient
Expectations

Pain

- 41% of papers correlated satisfaction with perception of pain
- This includes overall pain level as well as perceived relief or exacerbation of pain
- Persistent back pain, rather than leg pain, seems to drive patients towards dissatisfaction

Function

- 40% of papers correlated satisfaction with post-operative functional capacity
- The effect of functional capacity on satisfaction was found to be subordinate to pain control in multiple studies
- Increases in ambulation and mobility were most strongly associated with increased satisfaction
- Pre-operative functional status was found to be inversely related to satisfaction

Efficacy

- 16% of papers correlated satisfaction with treatment efficacy
- No consistent correlation between achievement of desired radiographic outcome and satisfaction
- Peri-operative complications related to decreased satisfaction
- One study found imperfect correlation between patients' perception of surgical success and satisfaction: 20% of "very dissatisfied" patients reported the surgery was successful and helped "some" or "a lot" and 10% of satisfied patients reported that the surgery "did not help" or "made me worse"¹

1. Mannion AF, Porchet F, Kleinstück FS, Lattig F, Jeszenszky D, Bartanusz V, et al.: The quality of spine surgery from the patient's perspective. Part 1: the Core Outcome Measures Index in clinical practice. **Eur Spine J Off Publ Eur Spine Soc Eur Spinal Deform Soc Eur Sect Cerv Spine Res Soc** 18 Suppl 3:367–373, 2009

Caregiver Manner

- 11% of papers correlated satisfaction with care from the primary physician
- Improved perception of pre-operative counseling-especially with regards to expected post-operative pain-was related to higher rates of satisfaction

Post-op Care/Therapy

- 5% of papers correlated satisfaction with post-operative therapy
- Universally found that patients who participated in physical therapy post-op were more satisfied

Patient Specific Characteristics

- 33% of papers correlated satisfaction with patient specific characteristics
- Increasing co-morbidities related to decreased satisfaction
- No difference in satisfaction among different age groups
- Multiple studies found increasing income levels were associated with increased satisfaction

Patient Expectations

- 16% of papers correlated satisfaction with patient expectations
- Increased expectations about post-operative function was consistently associated with a higher degree of satisfaction while high expectations about post-operative pain relief was associated with a lower degree of satisfaction

Future Directions

Birmingham Spine Patient Satisfaction Index

1. I am satisfied with pain control following the surgery.
1 2 3 4 5 6
Very Dissatisfied Very Satisfied

2. I am satisfied with the improvement in my leg pain following the surgery.
1 2 3 4 5 6
Very Dissatisfied Very Satisfied

3. I am satisfied with my ability to stand and walk following the surgery.
1 2 3 4 5 6
Very Dissatisfied Very Satisfied

4. I am satisfied with my ability to care for myself following the surgery.
1 2 3 4 5 6
Very Dissatisfied Very Satisfied

5. My expectations regarding pain control were met by the surgery.
True False

6. My expectations regarding improvement in strength or functional capacity were met by the surgery.
True False

7. I am satisfied with the surgical procedure.
1 2 3 4 5 6
Very Dissatisfied Very Satisfied

8. I would undergo the procedure again in the same circumstances.
1 2 3 4 5 6
Very Unlikely Very Likely

9. I am satisfied with the availability and ability of my surgeon for pre-operative counseling.
1 2 3 4 5 6
Very Dissatisfied Very Satisfied

10. I am satisfied with the post-operative care I received from my surgeon and his/her office.
1 2 3 4 5 6
Very Dissatisfied Very Satisfied