

**ORAL PRESENTATION**

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# Body image in idiopathic scoliosis: a comparison study of psychometric properties between four patient-reported outcome instruments

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## Background

Four patient-reported outcome (PRO) instruments are used to assess body image in idiopathic scoliosis (IS): Quality of Life Profile for Spinal Deformities (QLPSD), SRS-22 Self Image scale, Spinal Appearance Questionnaire (SAQ), and Trunk Appearance Perception Scale (TAPS).

## Aim

To compare the psychometric properties of these four assessment instruments.

Design: This is a cross-sectional study. Inclusion criteria were patients with IS, 10 to 40 years old, Cobb angle  $\geq 25^\circ$ , without previous surgical treatment.

## Methods

80 patients (mean age 20.3 years) were included. The four instruments in a Spanish version were administered. In addition, full-spine x-ray was obtained. Sample was stratified into two groups according to Cobb angle (less and more than  $45^\circ$ ). Psychometric properties studied included internal consistency, convergent (correlation between self-image scales and Cobb angle) and divergent validity (correlations with Health Related Quality of Life domains: function, pain, mental health, measured through SRS-22).

## Results

All the PRO instruments presented high internal consistency (QLPSD Body Image,  $\alpha=0.80$ ; SRS-22 Image,  $\alpha=0.78$ ; SAQ,  $\alpha=0.89$ ; TAPS,  $\alpha=0.87$ ). Pictorial scales showed higher correlations with Cobb angle (SAQ

Appearance  $r=0.61$  and TAPS  $r=-0.62$ ) than textual scales (QLPSD-bi ( $r=0.36$ ); SRS-22 Self-Image  $r=-0.41$ ). The four image scales showed significant correlations with other HRQL SRS22 dimensions (from  $r=-.2$  to  $0.7$ ).

## Conclusions

All four instruments have good psychometric properties. To evaluate patients with IS is advisable to add pictorial image perception scales to HRQL assessment instruments.

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