

# How to Assess Quality of Life in Adults with Scoliosis: Comparison of Two Questionnaires

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## Introduction

Scoliosis is a very frequent problem during adulthood. Surgery is a very common option for these patients, but there are relevant risks and side effects and not all patients are willing for such treatment. For these reasons many patients seek for a conservative treatment in rehabilitation centers. For the assessment of quality of life in patients with scoliosis. The SRS-22 questionnaire was first developed, and more recently the ISYQOL questionnaire, with the latter tested only in youngsters.

## Objective

The aim of the present study is to test the properties of the ISYQOL in a group of adults with scoliosis and compare its properties to the SRS-22.

## Methods

We retrospectively review the record of all the adult patients included in our prospective database running between 2003 and 2017. The inclusion criteria were: diagnosis of idiopathic scoliosis with a curve of 30° Cobb or more, no surgical treatment, availability of the SRS-22 and ISYQOL. The SRS-22 includes 5 subscales (Function, Psychological Wellbeing, Pain, Aesthetics and Treatment Satisfaction), with scores ranging from 5 (no impairment) to 0 (high impairment). The ISYQOL is a Rasch consistent questionnaire based on 13 questions that gives a continuous value of quality of life ranging from 0 to 100. The Cronbach alpha was used to check the internal validity, and a Rasch analysis was run to explore the features of the different tools.

## Results

100 patients (29 males) met the inclusion criteria. The mean Cobb angle was  $46\pm 14^\circ$ , age  $42\pm 15$ . The Cronbach alpha value was above 0.70 for both questionnaires. This means that their internal consistency is good, and allows their application in a clinical setting. The Rasch analysis of the values of both questionnaires would allow a more precise comparison.

## Conclusion

This is the first study reporting the general characteristics of patients affected by scoliosis attending a specialized rehabilitation center based on the SRS-22 and ISYQOL questionnaires. Both questionnaire can describe the population of adult with scoliosis, and are able to assess the quality of life. Adult scoliosis patients need specific tools of evaluation mainly for quality of life and pain. The SRS-22 and the ISYQOL seem to be able to accomplish this task.