



Reliability and validity of a cross-culturally adapted Hindi version of the SRS-22r questionnaire in Indian patients

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INTRODUCTION

- In recent years, health-related quality of life (HRQoL) measures have superseded the use of objective clinical and radiographic measurements for assessing health-related outcomes since these imbibe the patients' personal and social status which can influence the outcome of treatment
- SRS-22r (refined) is a disease-specific questionnaire based on HRQoL measures for AIS patients that has been extensively validated and found to have high psychometric standards.
- With an increase in research collaborations between different countries and attempts to put existing treatment modalities in a global context, adapting health-related measures to different cultures and languages has become a necessity.
- The SRS-22r has not been cross-culturally adapted or validated in any Indian language so far.
- The purpose of the present study was to develop a cross-culturally adapted Hindi version of SRS-22r score, evaluate its reliability and validate it in a sample of Hindi-speaking, Indian AIS patients.



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AIM

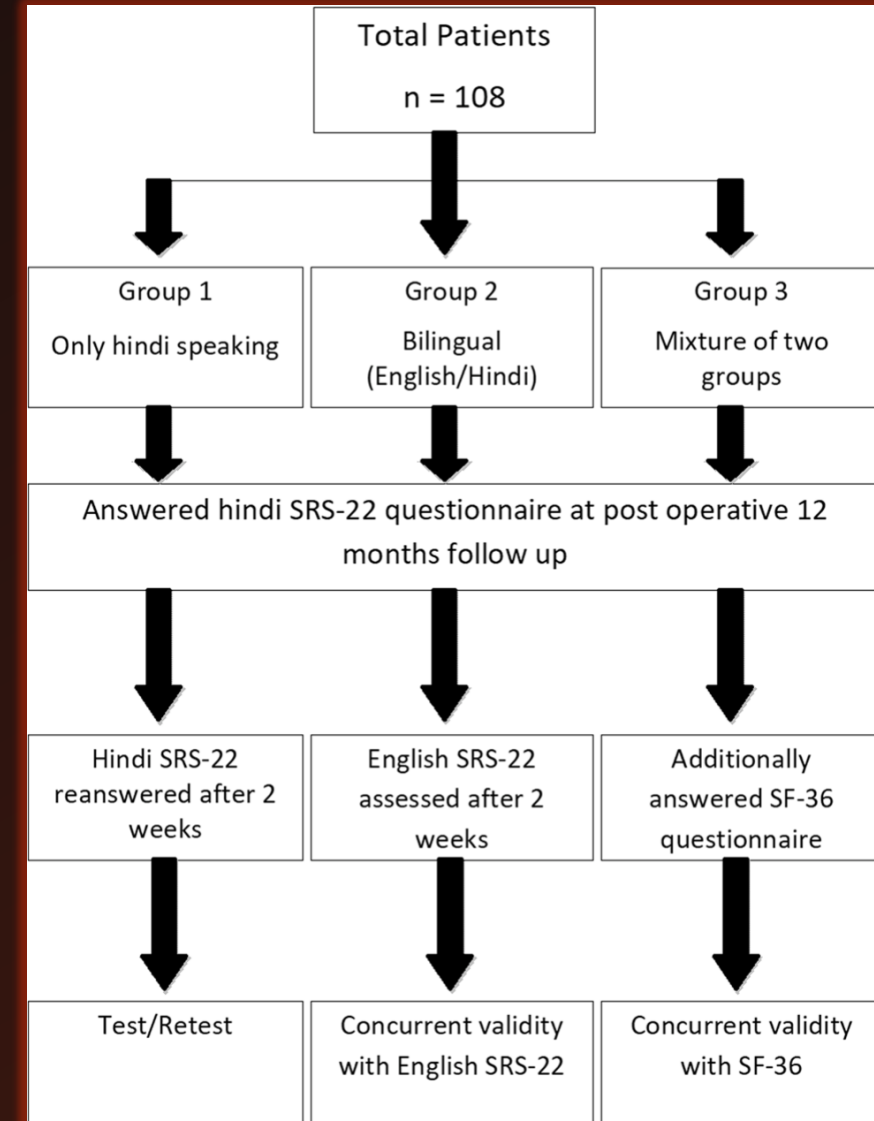
To develop a cross-culturally adapted Hindi translation of the Scoliosis Research Society (SRS)-22r (refined) questionnaire & validate it in Hindi-speaking Indian patients with adolescent idiopathic scoliosis (AIS).



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METHODS

- Study Design : Cross-sectional, observational
- A Hindi version of SRS-22r was developed in accordance with standard guidelines for cross-cultural adaptation.
- The final Hindi version was administered to 108 AIS patients. Subsequently, 58/108 patients answered the Hindi version again after 10-14 days. Another 50/108 bilingual patients answered the original English version after 10–14 days.
- In addition, 52/108 patients answered a previously validated Hindi version of Short Form (SF)-36 health survey.
- Content analysis, floor/ceiling effects, internal consistency, test/retest reproducibility and concurrent validity with the English version and the SF-36 questionnaire were determined for the Hindi version of SRS-22r





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RESULTS

- High ceiling effect was noted for the pain and satisfaction with management domains of Hindi version of SRS-22r.
- Overall internal consistency was good (Cronbach $\alpha = 0.77$) all domains, except the function domain ($\alpha = 0.61$) had good or excellent internal consistency.
- The test/retest reliability for all domains was excellent (intraclass coefficient/ICC > 0.80).
- The concurrent validity with the English version showed an excellent correlation for all domains (ICC > 0.80).
- Concurrent validity with SF-36 showed good correlation between relevant domains of SRS-22r and SF-36, except for the self-image and satisfaction with management domains of SRS-22r.



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CONCLUSION

Based on the results proving its reliability and validity, the adapted Hindi version of SRS-22r can be effectively used in Hindi-speaking, Indian AIS patients.