

# VALIDITY AND RELIABILITY ASSESSMENT OF THE RUSSIAN VERSION OF THE CATQUEST-9SF QUESTIONNAIRE

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## GOAL

To assess validity and reliability of the Russian version of the Catquest-9SF questionnaire.

## PATIENTS & METHODS

During 2019-2020, 1896 patients with cataracts from four regional ophthalmology centers of the Russian Federation were questioned. The mean age of the patients was 69.9±10.3 years old, the ratio of men and women was 0.47. Self-assessment of visual function was performed by patients using Catquest-9SF with the assistance of the trained interviewer from medical personnel. The validity and reliability of the Russian version of the questionnaire were assessed with the use of the WINSTEPS (MINISTEP)<sup>®</sup> ver. 6.4.0 (for the assessment of the questionnaire compliance with the Rasch model) and IBM SPSS<sup>®</sup> Statistics ver.22 (for the calculation of Cronbach's alpha).

## RESULTS

The Person Separation Index was >2.5, the reliability value in the Rasch measurement model was > 0.8. Cronbach's alpha was 0.85.

## LIMITATIONS

The use of the WINSTEPS software was limited to the non-commercial (reduced) version, which allowed to upload the data on 75 subjects only (for the assessment of the questionnaire compliance with the Rasch model). The conditions for the questionnaire application across the four centers were not equal. Patient subpopulations, participated in the study in the four centers, differed statistically by age, sex, as well as by type of the cataract. It is not completely clear what type of technologies were applied for the treatment of cataract in different centers. Moreover, the amount of missing data was quite considerable and unequal in all four centers.

## CONCLUSIONS

The Russian-language version of the Catquest-9SF questionnaire demonstrated adequate validity and reliability. The Russian version of the questionnaire can be used for assessing PROs among the Russian-speaking patients.