

The Scores of SNOT-22 in Croatian-Speaking Subjects without Symptoms of Chronic Rhinosinuitus: a pilot study

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Background: Previous studies carried out in different countries have shown the range of "normal" SNOT-22 scores from $\bar{X}=4.49$ to $\bar{X}=17.59$ in persons without chronic rhinosinuitis (CRS). Due to a possible cultural bias, we wondered whether the previously proposed "normal" SNOT-22 score may be applied to a Croatian-speaking population in Bosnia and Herzegovina. **Aim:** To determine the SNOT-22 score in adults without CRS in our region.

Methods: Subjects with no known sino-nasal disorders were randomly recruited and asked about their previous diagnosis of rhinosinuitis or nasal polyps, major rhinosinuitis symptoms, and the use of nasal medication. Negative respondents underwent anterior rhinoscopy (\pm nasal endoscopy), otoscopy, and oropharyngoscopy. Subjects who met inclusion criteria completed the Croatian version of the SNOT-22 and a questionnaire containing sociodemographic data (age, gender, formal education level) and information about smoking habits, bronchial asthma, allergy, and their health.

Results: The average age of the subjects was 41 years. Most (28%) of the subjects were in the third decade. There were 41% males. The SNOT 22 score ranged from 0 to 45 with a mean score of 16.54 and the median score was 11. In comparison with females, males reported statistically significant more severe difficulties in the nasal domain symptoms (Student's t-test=3.121; p=0.002). Subjects under 40 years of age showed statistically more severe difficulties in the nasal domain symptoms than subjects aged 40 years and older (Student's t-test=2.020; p=0.046). There were no significant correlations of the SNOT-22 scores with smoking status, presence of allergy, formal education level, and duration of formal education. In comparison with other general health categories, subjects in "fair health" category showed statistically more severe difficulties in the Otologic symptoms and Emotional symptoms domain and higher scores of the total SNOT-22.

Conclusions: The mean value of 16.544 found in our study group belongs to the group of higher "normal" values of the SNOT-22 reported in several countries. Sex and age showed a correlation with the severity of handicap measured using the SNOT-22. Smoking habits, allergy and formal education level did not correlate with the SNOT-22 scores.

Key words: sinusitis, paranasal sinus disease, questionnaire, health-related quality of life, patient-reported outcome measure