

The validity and reliability of Thai Sinonasal Outcome Test-22

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Abstract

Background: Chronic rhinosinusitis (CRS) symptoms can significantly reduce quality of life. The Sinonasal Outcome Test-22 (SNOT-22) is frequently used to assess this disease-specific quality of life, although it has not been translated into Thai language.

Method: We translated the original SNOT-22 questionnaire to Thai using forward-backward technique, and validated it in CRS patients [n = 229, mean age of 52.6 (SD = 15.9)] recruited at outpatients of Otolaryngology clinic, Faculty of Medicine Ramathibodi Hospital, Bangkok, Thailand. A construct validity was assessed using factor analysis, reliability was assessed using intra-class correlation coefficient (ICC) after 3 days of taking the first questionnaire, and internal consistency was assessed using Cronbach's alpha.

Results: A total of 201 out of 229 patients completed SNOT-22 questionnaire. Factor analysis with oblique rotation was applied and yielded three domains with eigenvalue of 1 or higher. These domains were named as nasal-related, ear-general-psychological, and sleep-related domains. Estimated ICC ranged from 0.49 to 0.71 with a median of 0.64, and Cronbach's alpha was 0.94.

Conclusion: The Thai SNOT-22 questionnaire is reliable and valid with three domains. Thai SNOT-22 may be used in research and clinical practice to assess disease-specific quality of life and aid in management plan at CRS clinic.

Keywords: Validity _ Reliability _ Questionnaire _ Chronic rhinosinusitis _ Outcome _ Sinonasal Outcome Test

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