

ISCTM Autumn 2016 abstract

Translation of the National Institutes of Health Stroke Scale (NIHSS) List of Words:

Methodology and Challenges

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The Methodological Question Being Addressed. This abstract intends to address the methodological question of translating the list of words of the National Institutes of Health Stroke Scale (NIHSS). The main difficulty was in developing the best methodology to create translations using satisfactory phonological equivalents and testing the same difficulties in articulation as the original US terms.

Objectives. The NIHSS was developed in the US to assess stroke severity across 11 categories. One of them, dysarthria, is evaluated with a list of six terms, each one exploring different movements of the lips and the tongue: “MAMA”, “TIP-TOP”, “FIFTY-FIFTY”, “THANKS”, “HUCKLEBERRY”, “BASEBALL PLAYER”. The objective of our study was to present the methodology used to translate this list of words into Canadian French, Bulgarian, Korean and US Spanish, and the resulting outcomes. The aim of the translation was not to find conceptual equivalents but words testing the same difficulties in articulation and using similar phonological characteristics as the original terms.

Methods. The traditional translation process had to be adapted. In each country, instead of a classical linguistic validation, a thorough forward translation was performed with a neurologist and a speech therapist, native speakers of the target languages. Then the suggested words were validated by an expert panel and, if needed, alternate words were requested.

Results. Only one word, i.e., “MAMA” was translated literally in all languages, the pronunciation being similar. The translation of “TIP-TOP” used satisfactory phonological equivalents in all languages. “THANKS” was difficult to translate because the sound [θ] does not exist in the target languages. In the end, equivalent words allowing measuring the weakness of the tongue were used: [tenis] in Bulgarian and Korean, “TAXES” in Canadian French and “DANDO” in US Spanish. “FIFTY-FIFTY” was rendered completely differently in Korean, since the fricative sound [f] does not exist in this language. The Korean translation of “HUCKLEBERRY” could not contain all the original sounds. As for “BASEBALL PLAYER”, all languages except Korean and US Spanish referred to the loanword “baseball”.

Conclusion. It was necessary to adapt the classical linguistic validation process to translate the NIHSS list of words. Finding phonological equivalents to terms used to assess dysarthria was not an easy task and needed the collaboration of specialists and the developer in each target language. In comparison to

the Indo-European languages of the study, Korean was the most challenging in determining words requiring the same movements due mainly to the absence of equivalent sounds.

Word count: 349 (not including title and author information)

Word limit: 500 words