

Description of translation process of the CTM-15 into Hebrew, Arabic and Russian:

All versions were translated using the backward-forward technique. The Hebrew and Arabic translations were pretty much straight forward, however, the translation into Russian was more complicated. As I have learned, Russian is a richer language with numerous possible word-phrasings and multi-layer meanings for each concept. Due to this reason we undertook the below described process in the translation into Russian.

Because of these issues with the Russian translation we went back to the Hebrew and Arabic translations in order to maintain concept equivalence between all 3 languages. We gave the translated versions to independent reviewers (Bilingual Hebrew-English or Arabic-English) and asked them to comment on the translation. This resulted in a change in two items in the two versions that improved the coherence of the sentences (items 2 and 3). This approach is described as symmetrical or decentered by Chapman & Carter, 1979; Translation procedures for the cross—cultural use of measurement instruments. *Educational Evaluation and Public Analysis*, 1(1):71-6.

Translation of the Russian version of the CTM-15:

Backward-forward translation was conducted by 2 persons with health related MA level education (nursing and public health).

Due to significant discrepancies between the 2 versions the following process was undertaken –

Four bilingual reviewers: 2 who are healthcare professionals (nurses) and 2 lay persons highly proficient in both languages, received the Russian and original English versions and were asked to comment and suggest translations for items with significant discrepancies between the 2 versions. All 4 versions were compared by 2 additional judges (with PhD or MA level education in nursing, highly proficient in both languages). For each item the 2 judges selected the final version for translation according to 2 criteria – 1. had the highest consensus, 2. Most closely reflected the meaning of the English version. This approach to translation is described by: Strickland, O.L., 2001; *Journal of Nursing Management*. 9 (2): 111-12.