

Letter to the Editor concerning “Cross-Cultural Adaptation and Validation of the Arabic Version of the Intermittent and Constant Osteoarthritis Pain Questionnaire” *Sports Med Int Open* 2020; 4(01): E8–E12; DOI: 10.1055/a-1031-0947



To the editor,

An interesting paper was recently published regarding the translation and validation of the Intermittent and Constant Osteoarthritis Pain (ICOAP) questionnaire into the Arabic language [1]. The procedures described in the manuscript are clear and follow the recommended guidelines for appropriate translation of a self-reported measurement scale [2]. However, upon critical scrutiny of the paper we found some critical issues that would significantly hamper correct understanding of the translated version and, hence, its reported psychometric properties.

The issues we have noticed with the paper are mainly concerned with the correctness of the translation used in the Arabic version of the ICOAP (ICOAP-AR) questionnaire. We believe that the authors did not appropriately translate the ICOAP questionnaire, as it is obvious that they used Arabic terms that do not correctly infer comparable meaning. Furthermore, the reported structure of the ICOAP-AR items does not match the English version, and even the choices provided for answering the ICOAP-AR questions are incomparable with those of the English version. These inconsistencies would prevent reaching equivalence between the ICOAP and ICOAP-AR. Accordingly, the content validity of the ICOAP-AR would be significantly deficient.

The following are the inconsistencies that we have discovered upon critical appraisal of the ICOAP-AR with detailed elaboration. First, it was noted in the ICOAP-AR that the authors did not translate the instructional statement of the questionnaire that instructs the patient who fills the questionnaire about its purpose and how to fill it. Introductory and instructional statements of a questionnaire are essential components that should be clear enough for the patient to understand and follow. Guidelines do recommend translating the entire document including any instructions wherever available [2]

Second, the authors of the ICOAP-AR unified the available choices for all the questions, which is inconsistent with the original ICOAP. In the original ICOAP, each item has a separate list of five choices. This is very important because item “7” in section B (PAIN THAT COMES AND GOES) of the questionnaire inquires about the frequency of pain occurrence, which is different than the remaining items that inquire about the magnitude of the pain criteria of interest. Accordingly, the available answers for item “7” should be suitably different than the remaining items, which was not considered by the authors of the ICOAP-AR. Furthermore, Item numbering in the ICOAP-AR is inconsistent with that of the English version.

Third, in the original ICOAP questionnaire items “2, 3, 8, and 9” inquire about the magnitude of the impact of “CONSTANT” and “PAIN THAT COMES AND GOES” on sleep and quality of life [3]. However, in the ICOAP-AR the translation for these items infers something different. The Arabic statements inquire about the nature of the impact of pain. Thus, a backward translation of the Arabic items into English would be “*how has your pain affected?*” Instead of “*how much has your pain affected ...?*”. It is clear that both statements are significantly different inferring different pain criteria. Additionally, item “4” in the ICOAP-AR is missing the words “of your life”.

Fourth, items “5” and “11” are incorrectly translated in the ICOAP-AR. These items were originally structured to inquire about the magnitude of the psychosocial impact of pain in terms of mood disturbances [4]. Accordingly, the available answers are of quantifiable nature, e. g. mildly, moderately, severely.... etc. Surprisingly, the translated version of the same items in the ICOAP-AR were a Yes/No questions inquiring about whether the patient has been upset or worried because of pain. Similarly, item “7” that inquires about the frequency of occurrence of pain “*how frequently has ...*” was incorrectly translated in the ICOAP-AR to inquire

about the number of times the patient felt pain “*how many times did you feel pain?*”, which again is a different feature of pain.

Content validity of health-related patient-reported outcomes such as the ICOAP questionnaire is a very important and essential measurement property that must be established first before examining additional properties [5]. Critical appraisal of the ICOAP-AR reveals that its content validity is not established because of significant flaws in the translation and cross-cultural adaptation process, which renders it inequivalent to the original ICOAP and, consequently, invalid and inappropriate for assessing osteoarthritis pain in the Arab population in its current state.

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Sports Medicine International Open
2020; 4: E67–E68

DOI 10.1055/a-1231-6791

ISSN 2367-1890

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