Translation of the Danish version of the international Hip Outcome Tool 33 (iHOT-33)

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Introduction: Hip problems are commonly described in young to middle-aged adults with an increased rate of published papers during the recent 10 years[1]. Moreover, interventions such as hip arthroscopy, corticosteroid injections and exercise programmes are advancing rapidly to treat hip and groin pain in young to middle-aged adults[2]. Consequently, reliable and valid health-related patient-reported outcomes designed for this population are needed. In 2012, an international group of hip specialists (i.e. researchers and clinicians) developed the International Hip Outcome Tool (iHOT-33) to asses health-related quality of life[3] and later a shorter version of the iHOT-33 was also developed (i.e. iHOT-12)[4]. However, there are no Danish translation and/or cross-cultural adaptation of the iHOT-33 following the COSMIN guidelines[5].

Objective: To translate and cross-culturally adapt the original English version of the iHOT-33 into a Danish version, according to existing guidelines[5].

Design and Methods: The original iHOT-33 developer (Dr. Nicolas Mohtadi) gave permission to translate the questionnaire. The iHOT-33 was translated and cross-culturally adapted using the COSMIN-guidelines[5]: Two translators with Danish as their mother tongue independently translated the iHOT-33 from English into Danish, creating two versions. One translator was a language professional with a Masters' degree in the English language (LJ) with no medical or clinical background. The other translator was a Danish physiotherapist working with patients with hip and groin problems (SKB). The two forward translators created a synthesised version of the forward translations. After forward-translation, two native English speakers independently translated the synthesised version back into British English, blinded to the original version of the iHOT-33. The back translators were both fluent in Danish. The two back translated versions were harmonised into one version, creating a pre-final version. Further corrections of this version were made according to suggestions from the original developer (NM). The pre-final Danish iHOT-33 was pilot-tested on 19 patients (11 females, aged 20-52 years), who had undergone hip arthroscopy and were attending their 3-month postoperative follow up. The patients were asked to reflect on the following two aspects when answering the questionnaire: 1)"*Were some of the questions difficult to understand?* And *"If so, please tell us which and why*" and 2) "*Should we change some of the wording or sentences in order to clarify/better explain what is asked?"* and *"If so, what are your suggestions for improvement?"*

Results: Discrepancies between the original English iHOT-33 and the back translated Danish iHOT-33 existed for Question 1 in the iHOT-33, where the Danish back translation was "*How often do you have pain in your hip/groin?*" which was changed to another Danish word ("*ondt*") instead of pain ("*smerte*"), Question 4 in the iHOT-33 where the Danish back translation ended in *"…pain while you sit down*" was altered to "*while sitting*", Question 21 in the iHOT-33 where the Danish term "*skifte retning*" was altered to "*retningsskift*", and in Question 24 in the iHOT-33 where *"Hvor store problemer…*" was corrected to*"Hvor svært…*".

Patient interviews resulted in the following: 17 patients had no suggestions for corrections and felt that the questionnaire was adequate, understandable, and reflected their symptoms. Two patients said that they missed an opportunity in the questionnaire for rating symptoms that originated from other body parts than the hip.

Conclusion: A Danish version of the iHOT-33 is now available for use in clinical trials and clinical practice. However, the reliability, validity and responsiveness of the Danish version of the iHOT33 should be specifically assessed in a Danish population in future research.

References

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The final version of the Danish iHOT33 was completed the 13th of June 2016 and has been used since, but the translation has never been published online until now.