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An investigation into the use of the Oswestry Disability Index in a Zulu speaking population. A pilot study

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Declaration of authorship

I, Christelle Grebe declare that this research report was written and compiled by me. It has not been submitted to any other institution or University and is being submitted currently as part of the requirements to obtain a Masters degree in Physiotherapy. All resources used are acknowledged and referenced where appropriate.

_____ _____

Signed Date

Abstract

Background Lower back pain (LBP) is a very prevalent and potentially disabling condition throughout the world not excluding South Africa. Most people in South Africa make use of Government hospitals making the results of this research applicable to the general population. Questionnaires like the Oswestry Disability Index (ODI) are easy and effective research tools to assess disability from LBP but most of them are developed in English. In South Africa however, many people are often not literate in English or struggle to fill in a questionnaire correctly without some assistance. This is possibly due to the previous education system adopted by the Apartheid government, variety of different cultures and the 11 official languages.

Objectives To formulate a culturally adapted English version of the ODI suitable for possible use in the Zulu speaking population. Secondly, to establish whether there is a relationship between the degree of assistance needed to fill in the questionnaire and the level of education of the subject. Thirdly, to measure the internal consistency of the modified ODI and lastly to identify inconsistencies when using a translator for data collection.

Study Design Explorative cross-sectional study

Methods Cultural adaptation of the ODI was done suitable for the Zulu speaking population. Recordings were made of the participants filling in the modified ODI to identify problematic questions and inconsistencies in translations offered by the research assistant. The amount of assistance needed for each participant was scored with a rating scale and relationships were shown with regards to level of education. The internal consistency of the modified ODI was determined.

Results A culturally adapted English version of the ODI was produced and problematic phrases altered. Two groups were identified from the data collection process; the assisted (20) and the Independent group (36).Overall the assisted group had lower levels of education and needed up to 100% assistance with the questionnaire compared with the Independent group. The overall Internal consistency of the questionnaire was found to be 0.8183 (Chronbach alpha)

which is considered as good reliability. Inconsistencies with translations were identified and reported.

Conclusion A significant amount of the target population needed assistance when filling in the English ODI despite the cultural adaptation thereof. This may be due to lower levels of education and the fact that they were mostly schooled in Zulu. Making use of a translator may not be the most reliable form of data collection but keeping in mind the literacy levels in South Africa, it may be a more accurate way of collecting correct data from individuals compared with incurring massive costs in translating of documents into a target language.

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I hope that this research report will be valuable for current and future research especially in the Zulu speaking population.

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List of Abbreviations

ODI:	Oswestry Disability Index
CLBP:	Chronic Lower Back Pain
AFR:	Afrikaans
Ave:	Average
LOE:	Level of Education