

Declaration of authorship

I, Nicholas de Beer declare that this research report is my own work. It is being submitted for the degree of Master of Science in Physiotherapy to the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other University.

Signed

Date

Abstract

The use of reliable and valid outcome measures in clinical research as well as clinical practice is very important. Self reported questionnaires are widely used as outcome measures to assess the subjective perception of disability caused by low back pain (LBP). The Roland Morris Disability Questionnaire (RMDQ), Quebec Disability Scale (QDS) and Waddell Disability Index (WDI) have been identified as reliable and valid instruments for assessing disability caused by LBP in English speaking patients. The three questionnaires were translated, back-translated and tested in a final version for use with Tswana speaking subjects. The questionnaires were tested on one hundred respondents, who met the inclusion criteria, at five hospitals in Tswana speaking areas. Of the one hundred respondents 31 were retested 24 hours later. No significant floor or ceiling effects were found for all three questionnaires. There was moderate correlation between the RMDQ, WDI and the DRI (0.74 and 0.63, respectively). The correlation between the QDS and the Disability Rating Index (DRI) was strong (0.85). The RMDQ, QDS and WDI correlated moderately with the VAS (pain) (0.63, 0.68 and 0.74, respectively). The RMDQ, QDS and WDI appeared to be internally consistent scales with Cronbach's alpha values of 0.92, 0.95 and 0.75, respectively. The RMDQ, QDS and WDI showed excellent test-retest reliability with intra-class correlation coefficient values of 0.93, 0.91 and 0.84, respectively. The results suggest that the Tswana versions of the RMDQ, QDS and WDI validated in this study are easy to understand, valid and reliable instruments for the measurement of functional disability caused by LBP in a Tswana speaking population. Therefore, these translated instruments may be useful clinical methods for collecting standardised data on activity limitations resulting from LBP in a Tswana speaking population.

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Table of Contents

Declaration of Authorship.....	i
Abstract.	ii
Acknowledgements.....	iii
Table of Contents.....	iv
List of Tables.....	viii
List of Figures.....	ix
List of Appendices.....	x
List of Abbreviations.....	xii

Chapter One: Introduction

1.1 Chapter Aims.....	1
1.2 Introduction.....	1
1.3 Significance of the study.....	3
1.4 Research question.....	3
1.5 Aims.....	3
1.6 Objectives.....	3

Chapter two: Literature Review

2.1 Chapter Aims.....	4
2.2 Pain.....	4
2.3 LBP epidemiology and management	4
2.4 Self reported outcome measures.....	5
2.5 Translation and cross cultural adaptation.....	6
2.6 Evaluating health outcome measures.....	7

2.6.1	Practical features.....	7
2.6.2	Scale range.....	7
2.6.3	Missing data.....	8
2.6.4	Validity.....	8
2.6.5	Internal Consistency.....	10
2.6.6	Test-retest reliability.....	11
2.6.7	Responsiveness.....	12
2.7	Research tools.....	12
2.7.1	Roland Morris Disability Questionnaire (RMDQ).....	12
2.7.2	Quebec Disability Scale (QDS).....	14
2.7.3	Waddell Disability Index (WDI).....	15
2.7.4	Visual Analogue Scale (VAS) (pain)	16
2.7.5	Disability Rating Index (DRI).....	17
2.8	Chapter conclusion.....	19

Chapter Three: Method

3.1	Chapter Aims.....	20
3.2	Study Design.....	20
3.3	Research participants.....	20
3.3.1	Sample selection.....	20
3.3.2	Inclusion criteria.....	21
3.3.3	Exclusion criteria.....	21
3.3.4	Sample size.....	21
3.3.5	Ethical considerations.....	21
3.4	Research tools.....	22
3.4.1	RMDQ.....	22
3.4.2	QDS.....	22
3.4.3	WDI.....	22
3.4.4	DRI.....	22
3.4.5	VAS (pain) scale.....	22
3.5	Procedure.....	23

3.6	Translation procedure.....	24
3.7	Statistical analysis.....	25
3.8	Chapter conclusion.....	25

Chapter 4: Results

4.1	Chapter Aims.....	26
4.2	Translation and cross cultural adaptation.....	26
4.2.1	RMDQ.....	26
4.2.2	QDS.....	26
4.2.3	WDL.....	27
4.3	Demographic data.....	27
4.4	Missing data.....	29
4.5	Scale range.....	30
4.6	Validity.....	30
4.7	Internal consistency.....	34
4.8	Test-retest reliability.....	38
4.9	Chapter conclusion.....	38

Chapter Five: Discussion

5.1	Chapter aims.....	39
5.2	Translation and cross cultural adaptation.....	39
5.3	Missing data.....	39
5.4	Scale range.....	40
5.5	Validity.....	40
5.6	Internal consistency.....	41
5.7	Test-retest reliability.....	42
5.8	Chapter conclusion.....	44

Chapter 6: Conclusion

6.1	Chapter aims.....	45
6.2	Conclusion.....	45
6.3	Further clinical recommendations.....	46

List of Tables

2.1	Relevant domains, of the activities and participation component of the ICF, that may be experienced by people with LBP	9
2.2	Summary of characteristics of the Roland Morris Disability Questionnaire.....	13
2.3	Summary of characteristics of the Quebec Disability Scale	14
2.4	Summary of characteristics of the Waddell Disability Index.....	16
2.5	Comparison of questionnaires content by ICF classification of activities and participation domains.....	18
4.1	Demographic Data.....	27
4.2	Education level of subjects.....	28
4.3	The percentage of missing data for each question of the QDS.....	29
4.4	Floor and ceiling effects of the RMDQ, QDS and WDI.....	30
4.5	Pearson correlation coefficient of the Tswana versions of RMDQ, QDS and WDI with the DRI	30
4.6	Pearson correlation coefficient of the Tswana versions of RMDQ, QDS and WDI with the VAS (pain).....	32
4.7	Internal consistency (Cronbach's alpha) of the RMDQ	34
4.8	Internal consistency (Cronbach's alpha) of the QDS.....	35
4.9	Internal consistency (Cronbach's alpha) of the WDI	36
4.10	Internal consistency (Cronbach's alpha) of the DRI	37
4.11	Test-retest reliability of RMDQ, QDS and WDI	38

List of Figures

4.1	Scatter diagram of scores for the QDS, which had the strongest association with the DRI.....	31
4.2	Scatter diagram of scores for the WDI, which had the strongest association with the VAS (pain).....	33
A1	Scatter diagram of scores for the RMDQ and its association with the DRI.....	65
A2	Scatter diagram of scores for the WDI and its association with the DRI.....	66
A3	Scatter diagram of scores for the RMDQ and its association with the VAS (pain).....	67
A4	Scatter diagram of scores for the QDS and its association with the VAS (pain).....	68

List of Appendices

Appendix A: Original English versions of the RMDQ, QDS, WDI, DRI and VAS (pain).....	47
Appendix B: Tswana versions of the RMDQ, QDS, WDI, DRI and VAS (pain).....	52
Appendix C: Personal data questionnaire.....	57
Appendix D: Copy of ethical clearance	58
Appendix E: Information sheet and consent form (English and Tswana).....	60
Appendix F: Letter of permission from hospital management.....	64
Appendix G: Scatter diagrams of scores for the RMDQ, WDI and their association with the DRI.....	65
Appendix H: Scatter diagrams of scores for the RMDQ, QDS and their association with the VAS (pain).....	66

References.....	69
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List of Abbreviations

DRI= Disability Rating Index

ICC= Intraclass Correlation Coefficient

ICF= International Classification of Functioning, Disability and Health

LBP= Low back pain

RMDQ= Roland-Morris Disability Questionnaire

QDS= Quebec Disability Scale

VAS (pain)= Visual Analogue Scale (pain)

WDI= Waddell Disability Index

WHO= World Health Organisation