



The Roland Morris Disability Questionnaire

Summary

Description: The Roland Morris Disability Questionnaire is a self-reported outcome measure that was first published in 1983. It provides a tool for measuring the level of disability experienced by a person suffering from low back pain.¹ Since then, it has become one of the most widely used outcome measures for low back pain.² The original 24-item measure has been shortened to create 18-item and 23-item versions and has been cross-culturally adapted or translated for use in other countries. The original and the different language/cultural versions are available at www.rmdq.org; no permissions are required for their use or reproduction. Despite the various adaptations of the Roland Morris Disability Questionnaire, the original is still the most widely used and validated. Therefore, the original version will be the focus of this summary.

The Roland Morris Disability Questionnaire consists of 24 statements relating to the person's perceptions of their back pain and associated disability. This includes items on physical ability/activity (15), sleep/rest (3), psychosocial (2), household management (2), eating (1) and pain frequency (1). It is designed to take approximately 5 minutes to complete, without any assistance from the administrator.

Instructions and scoring: The Roland Morris Disability Questionnaire can be administered face-to-face, electronically or over the phone. The respondent is presented with each statement and asked if they feel the statement is descriptive of their own circumstance on that day. For example, the first statement is 'I stay at home most of the day because of the pain in my back'. If the respondent feels that this statement applies to them they 'tick' the statement, otherwise they leave it blank. To score the responses, a practitioner need only add up the number of items ticked. There is

no weighting applied to the statements, therefore the score can range from 0 (no disability) to 24 (maximal disability). No training is required to administer or score the questionnaire. A slight modification of the scoring method is to have yes/no boxes to be ticked. In this way it is possible to distinguish a missing value from a deliberate 'no' response. If this method is used, the 0 to 24 score should be converted to a percentage score, dropping unanswered questions from the total when more than a single question is left unanswered.³

Clinimetric properties: Both internal consistency (Cronbach's $\alpha = 0.84$ to 0.96) and test-retest reliability ($r = 0.83$ to 0.91) of the Roland Morris Disability Questionnaire are good.⁴ It has a moderate to large⁵ correlation with other self-reported disability questionnaires such as the Quebec Back Pain Disability Scale (Quebec Scale) ($r = 0.6$) and the Oswestry Disability Index ($r = 0.5$). There is a small to moderate correlation with physical performance assessments such as the Progressive Isoinertial Lifting Evaluation ($r = -0.32$; the negative sign is because the two measures are scored in different directions) or the Back Performance Scale ($r = 0.44$).⁶ The Roland Morris Disability Questionnaire also has moderate to large correlation with pain intensity ($r = 0.34$ to 0.57)⁷ and the responsiveness against global perceived effect scales is generally rated as good (area under the curve = 0.77).⁸ This responsiveness is similar to other disability questionnaires such as the Oswestry Disability Index and the Quebec Scale.⁸ However, one study reported the Oswestry Disability Index as superior to the Roland Morris Disability Questionnaire,⁹ (area under the curve = 0.75 and 0.69 , respectively).

Commentary

Low back pain is an extremely common condition with global significance. Of the many disability questionnaires for low back pain, the Roland Morris Disability Questionnaire is the most validated,⁴ second most widely used² and has been suggested as a core outcome measure for low back pain.¹⁰ Other strengths of the Roland Morris Disability Questionnaire include its ease of use and acceptability by users, and its availability in a variety of different languages, many of which have been validated. Clinimetric properties are acceptably high and similar to alternate disability questionnaires.⁸ Although some newer questionnaires have a greater focus on disability (eg, the Quebec Scale) the widespread use of the Roland Morris Disability Questionnaire allows for easier comparison with the literature. However, due to the numerous versions, translations and cultural adaptations, care must be taken to ensure that the version being used has been properly validated. Overall, the Roland Morris Disability Questionnaire is a useful tool for assessing back-related disability and is easy to use for patients and clinicians, meaning that it can be readily adopted in clinical practice.

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