

RESPONSIVENESS OF HEALTH STATUS QUESTIONNAIRES IN MUSCULOSKELETAL DISORDERS: A SYSTEMATIC REVIEW



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ABSTRACT

Background: Chronic diseases, as musculoskeletal disorders (MSDs), represent a serious public health problem because they are some of the most important causes of disabilities and absenteeism. Because of researches and therapy improving, there are many people working even experiencing MSDs. Responsiveness evaluation of measures instruments is useful to detect changes in performance and self-report symptoms during rehabilitation therapies and return to work. **Objective:** This is a systematic review with the aim to identify studies involving responsiveness of instruments able to evaluate musculoskeletal disorders and workplace investigations. **Methods:** An electronic search was conducted, using Medline, Nursing Journals and Scielo, including papers from 2001 to June-2011, using the word responsiveness in any part of the title, abstract or text. **Results:** Searches showed 1179 papers, being 50 (4,25%) about developing or psychometric evaluation of measurement tools. Americas (38%) and Europe (36%) have most of publications. About the subjects, 10 studies (20%) are about MSDs, 1 about job aspects (2%) and 1 about rehabilitation (2%). **Discussion and conclusion:** Psychometric properties, including reliability, validity and responsiveness, are recognized as important aspects to be considered during an instrument develop and evaluation. Responsiveness is not commonly evaluated in studies of MSDs and return to work. This represents a preoccupation, since longitudinal evaluations are necessary and essential for rehabilitation therapies in the field of occupational health. Complete psychometric studies are still required in this area.

INTRODUCTION

Chronic diseases, as musculoskeletal disorders (MSDs), represent a serious public health problem because they are some of the most important causes of disabilities and absenteeism. Because of researches and therapy improving, there are many people working even experiencing MSDs, with physical and mental and social disabilities (1).

Treatment evaluation implicates to rate disabilities and intensity of physical symptoms, satisfaction and unexpected drugs effects. Increasingly, it's more important also to consider patient's perspective about diseases and treatment effects (2).

Theory references describe many tools, developed to verify many aspects, being always necessary to know psychometric properties of these instruments, to access reliable information about patients (3-4).

One of these psychometric properties is responsiveness, useful to detect changes in performance and self-report symptoms during rehabilitation therapies and return to work, with a defined interval (5).

The aim of this study was to identify studies involving responsiveness of instruments able to evaluate musculoskeletal disorders and workplace investigations, using a systematic review.

METHODS

A systematic review was conducted, following international references, with: guiding question, literature review, papers selection and critical analysis, and results syntheses.

An electronic search was conducted, using National Library of Medicine-USA (Medline), Nursing Journals, EMBASE, PsycINFO, and Scientific Electronic Library Online (SCIELO), including papers from 2001 to June-2011, using the expressions validation studies, reproducibility of tests, responsiveness and clinimetrics as key

words or in any part of the title, abstract or text.

Inclusion criteria: Studies, published in English or Portuguese, involving development and/or validation instruments' responsiveness, which evaluate musculoskeletal disorders or disabilities. **Exclusion criteria:** Papers about health status questionnaires in different languages, without responsiveness evaluation, or measuring different conditions than musculoskeletal disorders or disabilities.

RESULTS AND DISCUSSION

Search showed 1179 papers, including initially 50 studies after analysis of including or excluding criteria, being seven validated survey instruments used for healthcare students and professionals, about musculoskeletal disorders evaluation (Table 1).

These instruments were originally developed for the following target populations: general population (n = 4); dental students (n = 1); nursing students (n = 1); and rehabilitation professionals (n = 1).

The most widely validated and used tool was developed in the late 1960s while the most recent instrument was developed in the early 1990s

Table 1 - Evaluated studies.

Study	Diagnostic or Symptoms evaluation	Year	Language	Country of the study
Visual Analogue Scale Validity and Responsiveness	Osteoarthritis	2010	English	UK
Shoulder pain and disability index responsiveness	Shoulder pain	2008	English	Norway
Health assessment questionnaire disability index psychometric properties	Gout	2008	English	Mexico
Comparison of disability scales	Neck pain	2007	English	Turkey
Carpal Tunnel Syndrome Instrument responsiveness	Carpal Tunnel Syndrome	2007	English	Japan
Clinimetrics properties - systematic review	Chronic ankle disability	2007	English	Belgium
Boston carpal tunnel questionnaire psychometric properties - systematic review	Carpal Tunnel Syndrome	2006	English	UK

In all studies, psychometric properties, including reliability, validity and responsiveness, are recognized as important aspects to be considered during an instrument develop and evaluation.

Responsiveness is not commonly evaluated in studies of MSDs and return to work, as showed in the small number of founded researches.

CONCLUSION

Results represent a preoccupation, since longitudinal evaluations are necessary and essential for rehabilitation therapies in the field of occupational health. Complete psychometric studies are still required in this area.

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