Reliable and valid measures

Assessment measures in clinical practice in the Netherlands

Until the first part of the 20th century, health was defined as the absence of disease and was measured in terms of morbidity and mortality. This simple definition of health was rejected in 1948 with the expansion of the concept of health by the World Health Organization (WHO), defining it as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (World Health Organization 1948).

Text: Harriët Wittink, Sandra Beurskens, Jan Custers, Roland van Peppen, Raymond Swinkels

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This definition reflects the multidimensionality of the concept of health. It encompasses more than just biological markers, considering also a person’s ability to function in the physical, psychological and social aspects of everyday life. A need to focus on outcomes other than mortality has arisen from a number of developments in healthcare: technological advances, rising costs, the adoption of an evidence-based approach, and the decrease and actual reversal of the proportion of care rendered for acute illnesses versus chronic diseases. The pressing requirement for tools to monitor and adjust treatment, and to approach clinical decision-making from a viewpoint that is evidence-based and patient-centred, has fuelled the development of numerous tests and assessment measures over the past few decades. These are intended to help the health professional in deciding which treatments reduce symptoms, which improve functional status, social functioning and mental health, and particularly which treatments are cost-effective. A number of publications, however, show that physical therapists have difficulty choosing and using the appropriate measures. In addition, physical therapists find it hard to interpret the results of their assessments.

PHYSICAL THERAPY AND ASSESSMENT Whereas physical therapists used to focus on impairments, they now shifted their engagement towards optimising patients’ physical functioning and their ability to get about in society. It is therefore essential to assess the impact of physical therapy interventions on patients’ everyday lives. Understanding the efficacy and effectiveness of our interventions, and thus the quality of our care, is also important for the increasing requirement to justify costs associated with specific treatments. Using assessment measures may be one significant strategy for improving the quality of our care and professional accountability. In the Netherlands, the Royal Dutch Society for Physical Therapy (KNGF) recognised the need for physical therapists to use assessment measures, not just for outcome assessment, but for diagnostic and prognostic purposes as well. In the 2005 “professional profile of physical therapy”, which describes the required competencies of the (Dutch) physical therapist, assessment is included as follows: “For the purpose of his physical therapeutic diagnosis and treatment plan, and for the evaluation of the treatment objectives, the physical therapist uses validated assessment measures as much as possible. These assessment measures apply to the disease/disorder found and are suitable for evaluating the results of physical therapeutic intervention”. The use of assessment measures that are reliable and valid (and responsive in case of outcome measurement) in all parts of the process of physical therapy (evaluation, prognosis, outcome) is considered a characteristic of good clinical practice.

Articles discussing the assessment properties of various instruments appear monthly in the Dutch physical therapy journal Nederlands Tijdschrift voor Fysiotherapie, but according to a large survey, Dutch physical therapists need more support in using assessment measures. It also appeared that the use of assessment measures as advised in the KNGF guidelines was problematic for many practitioners. External pressure from insurers who see assessment measures as quality of care indicators further fuelled the demand for more knowledge on how to use these measures.

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In 2008 the KNGF started the project “Assessment in clinical practice” with the help of two research groups. The aim of the project was to implement assessment measures into clinical practice on a nationwide scale in an accessible and non-threatening manner.

The first step the project group took was to get insight into what factors impeded and which facilitated the use of assessment measures. The analysis consisted of:

- A literature review. This was conducted to determine existing knowledge about the implementation of assessment measures into physical-therapeutic practice. At that time the available literature was extremely limited.
- Semi-structured interviews with physical therapists in private practices and nursing homes. These two groups were chosen because private practitioners represent the largest group of physical therapists in the Netherlands, while nursing home physical therapists were thought to represent a distinctly different group of practitioners.
- A survey. This was based on the results of the semi-structured interviews conducted among 468 physical therapists (74 in nursing homes, 394 private practice).

The results of this analysis indicated a limited use of assessment measures, general lack of knowledge, a need for ongoing education and a need for a compact set of (valid and reliable) assessment measures (a toolkit).

In the second stage of the project two sets of toolkits – one for private practice and one for nursing homes – were developed with the help of experts in the field. No more than ten (reliable and valid) assessment instruments were included in each toolkit. The instruments were then tested by a group of practitioners for their feasibility in clinical practice. In addition, a short training module (four half days) was developed for both groups. In this module the instruments in the toolkit were discussed: their use for diagnostic, prognostic or evaluative purposes and the interpretation of test results. Physical therapists were also taught how to implement assessment measures into their own organisations, and how to make the use of these instruments part of organisational policy.

After the initial pilot phase and further fine-tuning of the training module, all Universities of Applied Sciences with physical therapy degrees were contacted and invited to send up to four faculty members for a two-day “teach the teacher” course. This course would enable them to teach the training modules in their own settings. All Universities of Applied Sciences responded, ensuring a good coverage of the Netherlands. In 2010 more than 800 physical therapists took the training module, the courses for 2011 are fully booked, and there is a waiting list for 2012. This shows the extent to which Dutch physical therapists embrace this opportunity to improve their ability to use assessment measures in clinical practice.


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