

# The PRWHE form in Norwegian – assessment of hand and wrist afflictions

A Norwegian-language evaluation tool for hand and wrist problems has been requested for many years. Now, the Patient-Rated Wrist and Hand Evaluation has been translated into Norwegian and the form is available to everybody free of charge.

In the case of harmless, but painful and impairing conditions, the effect of follow-up should be evaluated and, if possible, quantified. With few exceptions, this applies to all forms of orthopaedic treatment and hand surgery. Traditionally, evaluation of satisfaction, range of motion (ROM), strength and radiological outcome have been the main indicators for the clinician, but these have not always tallied with the patient's assessment.

Scoring forms have been developed for a number of afflictions or anatomical regions, and most of the published studies referring to the motor apparatus have made use of one or more. Such evaluation forms must be relevant to the patient, easily understandable, quick to fill in to ensure completeness (a precondition to calculate scores), and ensure a high response rate. To the examiner, the forms must be clinically relevant and able to indicate important changes in the condition without undue interference from other afflictions/disorders/conditions. They also need to be easy to administer in everyday clinical practice.

Evaluation forms may be generic (evaluating the complete state of the patient's health), disease-specific (for follow-up of specific diseases), joint-specific or region-specific (e.g. for the upper extremities). Most forms have been developed to indicate variations in the patient's condition over time, most frequently before and after treatment (1). When used in retrospective studies without any pre-operative scores, they provide less information and should in such cases not be applied to compare the benefits of various courses of treatment.

Even though the subjective patient-rated forms have some limitations, they provide a quantification that can be used to assess the effects of a course of treatment and an opportunity to compare different forms of treatment of one and the same disorder. To be able to compare results, however, it is crucial that an identical, validated and correctly translated questionnaire is used for all patients.

## Patient-Rated Wrist and Hand Evaluation (PRWHE)

For arm and hand afflictions, DASH (Disability of Arm, Shoulder and Hand) (2) has been frequently used. The form was introduced in 1996, and contains 30 questions targeting symptoms and problems in perfor-

ming and participating in various physical and social activities. The DASH form has been translated into Norwegian and validated (3). The abbreviated version Quick-DASH, with 11 of the original questions, can be used to increase the response rate (4). An advantage of the DASH form is that

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it regards the upper extremities as a whole, in which problems in one anatomical region affect other regions. Its main limitation is that other afflictions/disorders in the same or the opposite arm may «contaminate» the treatment outcome one seeks to evaluate.

Most injuries and many of the afflictions of the upper extremities that are treated surgically are located in the hands and wrists. An evaluation tool limited to the hands and wrists has therefore been requested in Norway. The Canadian questionnaire Patient-Rated Wrist and Hand Evaluation is such a tool (5, 6).

The form was developed to identify the degree of pain and functional impairment of the hand and wrist. It consists of two parts, one that contains five questions that focus on pain, and one with ten questions that deal with function. The questions are answered on a numerical scale from 0 to 10, where 0 means no pain or impairment and 10 the worst pain imaginable, or inability on the part of the patient to perform a certain activity. Pain and function are weighted equally by dividing the function scores by 2, and a total sum ranging between 0 and 100 is obtained. A change of > 20 points indicates a clinically significant difference,

while a change of < 10–12 points has little or no significance (7, 8).

By targeting areas of activity, the form also captures functional impairment in which a lack of endurance is part of the problem, for example with regard to repetitive movements/strains in job situations and leisure activities. The DASH form and most other questionnaires fail to capture this aspect. The PRWHE form has been validated and translated into a number of languages. It is self-explanatory and quickly completed (approximately seven minutes). It is currently being used in most prospective studies related to wrist and hand problems (9, 10).

To be able to compare results across countries and language boundaries, it is essential that foreign questionnaires are translated in such a way as to preserve the intention behind the questions – i.e. including an adaptation that takes cultural differences into account. We have undertaken such a cross-cultural translation of the PRWHE form on the basis of recommendations by Beaton and collaborators (11). The process report and the official Norwegian translation have been approved by the Canadian group that holds the copyright to the questionnaire.

The questionnaire is available free of charge to those interested as an appendix to this article ([www.tidsskriftet.no/reigstadappendiks](http://www.tidsskriftet.no/reigstadappendiks)), on the website of the Norwegian Association of Hand Surgery (12), the website of the Norwegian Society for Hand Therapy (13) and on the international website of the workgroup that has produced the questionnaire. Here, a comprehensive user manual, including background documentation, is also available (14).

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