Editorial

# "KISS" — Embracing Routine Patient Assessment

The KISS principle, "Keep it simple, stupid," is advocated by Ted Pincus and Tuulikki Sokka when clinicians are to measure the outcome in their patients with rheumatic disease[1]. Both authors are recognized protagonists for routine assessment of patient reported outcomes, which they also perform in their own daily practice.

Saving time and other resources in busy offices in private practice or in the environment of a hospital is today a condition *sine qua non*. If we choose to systematically evaluate patients in daily routine we must understand for what purpose this is being done. Within the frame of clinical trials, extensive assessments are less questionable, often including full 66/68 joint counts as well as questionnaires on quality of life, work-related conditions, and other areas of functioning. There is common acceptance that such trials are not representative for the way we assess our patients with rheumatoid arthritis (RA) in daily routine. While meticulous completion of case report forms and formal standard evaluation predominate in trials, patients receive more flexible and individually tailored assessment and treatment during routine followup visits with their rheumatologists.

During the encounter between patient and rheumatologist numerous issues may be raised, depending on the needs, either by the patient or by the physician. As a consequence, most patients with RA will probably not have been formally assessed when they leave the office of their rheumatologist. There may be many reasons for not systematically assessing patients using questionnaires: short time slots scheduled for every visit, patient-centered focus during the consultation, unwillingness to fill in questionnaires by both physicians and patients, and other logistical challenges. However, attention to "worries of the moment" may easily let the longterm perspective and treatment target move out of sight.

Yet, what is in the interest of the patient? And what should we assess to get a picture of how RA develops in an individual patient over years? If we are to assess patients on a regular basis during routine consultations, then we need to be sure that our assessments are reliable and valid, and that they contribute to making us better doctors who benefit their patients in the long run of their disease. How to best assess patients during routine consultations is the main question behind the editorial by Pincus and Sokka in this edition of *The Journal*[1]. The authors advocate the use of a solely patient-based index for disease activity assessment, thus applying the KISS principle to quantitative assessment of patient status. From the 3 self-report measures physical function, pain, and patient estimate of global status, a simple index can be calculated, named Routine Assessment of Patient Index Data 3 (RAPID3)[2]. The authors argue that patient-generated variables provide the foundation for clinical decisions.

But do we have reliable and valid measures that not only pick up a patient's present state of disease activity, but that also tell us whether a patient has improved or deteriorated?

The test-retest reliability of measures for disease activity in stable patients with RA shows considerable variation. None of the individual 7 core set measures[3] alone is able to tell us in a reliable way whether the patient has improved or deteriorated over a certain period of time. Even an index of disease activity, such as the Disease Activity Score (DAS28)[4], the Simple Disease Activity Index (SDAI)[5], the Clinical Disease Activity Index (CDAI)[6], the Rheumatoid Arthritis Disease Activity Index (RADAI)[7], or the Routine Assessment of Patient Index Data (RAPID3)[2], needs to demonstrate a considerable amount of change before we can assume that a patient really is better or worse[8]. The smallest detectable differences (SDD) of the DAS28, SDAI, and CDAI are close to limits to detect important improvement[8]. For example, for pain the SDD is more than 20 mm on a 100-mm visual analog scale, which means that pain needs to be scored 22 mm higher or lower so that we can be sure of a real improvement or deterioration between 2

See "Keep it simple, stupid," MDHAQ function, pain, global and RAPID3 quantitative scores, *page 1099*

assessments. However, when measures are summed up in the RAPID3 index, the normalized minimal detectable changes for RAPID3 and DAS28 are almost identical[8]. This indicates that the reliability of a combined index of the self-report core set data such as RAPID3 is about as good as that of other generally accepted disease activity measures.

Limitations in outcome measures must not leave us disappointed or discouraged. We know that fluctuations in individual patients occur as compared to changes observed in studies on a group level[9]. Further, clinicians base their treatment decisions also on information not collected from core set data or formal assessments.

A major strength of a simple patient-generated index like RAPID3 is the obvious face validity of the assessed dimensions: pain, assessment of overall status, and physical function. A clear additional advantage is that this measure can be easily scored. An important third reason to use self-report measures is that self-assessment may allow assessment without spending time and money on routine assessments, including formal joint counts by the physician or skilled health professionals, or on laboratory tests, where results are not immediately available. So, if a patient-generated index such as RAPID3 is as reliable and as valid as other disease activity indices (e.g., the DAS28, the SDAI, or the CDAI) with similar sensitivity to change, then its use in clinical practice would be advantageous.

RAPID3 scores based on physical function, pain, and patient global estimate distinguish between active and control treatments in RA clinical trials as efficiently as the other 4 core data set measures — swollen joint count, tender joint count, physician global estimate, and acute-phase reactant[10]. There is also evidence that RAPID3 characterizes disease severity states similarly to standard indices[11]. RAPID3 as a simple index includes information from only 3 outcomes. Therefore it is important to document how well RAPID3 discriminates and that important information is not lost by simplification. Loss of information could occur when fewer data are aggregated. The simplest question in routine assessment would be, "How are you with your RA today?" — which could be named SF-1 (Short Form-1) — and which probably would have reasonable correlation with any gold standard of disease activity, just like the item patient global assessment of disease activity.

A balance between sophisticated measures with somewhat higher discrimination and simpler, feasible measures is important in clinical assessment of patients. If the choice was to assess some patients completely with virtually no missing data or to collect some routine data in all but a few patients with minimal loss of discriminative ability, then the KISS principle would benefit more patients, and many rheumatologists would wholeheartedly embrace routine assessment of their patients. The OMERACT filter[12] consists of discrimination, truth, and feasibility as criteria for clinical trials. This filter exactly describes the need to consider a balance between discrimination and feasibility, which is also necessary in clinical practice.

On a more theoretical level the concept of disease activity is for practical reasons fitted into an index that contains metric properties to best represent RA activity. Physician and patient perspectives have different weights in different indices, and, not surprisingly, have limited correlation with each other[13]. When Pincus and Sokka advocate a disease activity index exclusively generated from the patient perspective, one would expect higher correlation with other patient-reported outcomes. As patients and physicians attribute different concepts to disease activity, their domains should probably be examined separately[9]. The patient perspective in rheumatic diseases is important, pain being the most important reason for the patient to seek the rheumatologist and the most important area for improvement[14]. Thus, indices of disease activity representing the patient perspective in RA must have a key role when we assess RA and evaluate treatment effects in daily practice.

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