What are patient-reported outcome measures and why should optometrists care about them?

In times of person-centred eye care, patient-reported outcome measures (PROMS) are (or should be) in high demand. This is because many relevant eye problems of modern society have no specific, objective test that can reflect the patient's symptoms. Therefore, symptoms as measured with the best available PROMS remain the "gold standard test" for diagnosing conditions such as computer vision syndrome (CVS). PROMS can also be used as the main outcome measure in clinical trials when other tests are unresponsive to the interventions tested (Hernández-Moreno et al., 2022; Pearce et al., 2011).

Most optometrists and practitioners in related professions have little competence on how scales for symptoms are developed, partly because this aspect has received little attention during their education. Therefore, good quality guidance for optometrists is necessary. Even researchers seem to have incomplete understanding of existing scales or PROMS and tend to misuse them. An example is the use of the Ocular Surface Disease Index (OSDI), a very popular scale to assess symptoms of ocular disease problems (Roth et al., 2022) that was initially developed by Schiffman et al. (2000). Despite lacking validation for use in children, it has been used for that age category in what are expected to be high quality studies (Chen et al., 2021). Further, clinicians and researchers seem to confound validity with reliability despite the knowledge that one can exist without the other. For example, some studies recommend the use of dry eye scales that have been developed for adults to be used in children immediately after checking for the repeatability (Chidi-Egboka et al., 2021). However, they seem to forget that the scales also need to be valid.

Another example is the Convergence Insufficiency Symptoms Survey (CISS) developed by Borsting et al. (1999). Children with, for example, ADHD are expected to achieve different scores than children without that diagnosis. Despite this, there are anecdotal reports of clinicians still using CISS norms as a reference in all types of cases (Barnhardt et al., 2012). That is, the same cut-off values for CISS are used in children with pure binocular vision problems, children with dyslexia and/or ADHD and all mixed together. The very simple problem here is, how much attention will be paid to the text in the scale? How does, for example, dyslexia interfere with the interpretation of the questions? What is the concept of grading problems in a grading scale 1–5 for a 6- or 7-year-old child? These facts show how important it is to inform the community on how PROMS work and their limitations while, at the same time, addressing the unmet needs for new scales in eye care.

New PROMS may be necessary to, for example, measure comfort and perceived quality of vision in children wearing contact lenses, for dry eye and digital eye strain in children, and for binocular vision problems in children with "competing diagnoses".

In the next issues of *SJOVS* we would like to hear from the community on how clinicians and researchers embrace PROMS and if they are ready to use scales in their practice in the same way they use objective tests. Clinicians must keep in mind that patients care about what and how they feel, and that is often different from what is anticipated based on measurements using machines or clinical observations. It is important to move away from isolated questions during assessments of complex clinical conditions without clear gold standard tests. Awareness, correct use of scales, and development of new scales for the unmet needs should improve patient and clinician satisfaction with the quality of eye care that is provided. Articles on emerging issues are welcome and they may include original studies or literature reviews on the need for new or better PROMS in optometry and eye care.

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