

## Permanent assessment of the methodological quality of clinical practice guidelines as an urgent need

*Evaluación continua de la calidad metodológica de las guías de práctica clínica como una necesidad urgente*

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Dear Editor:

Clinical Practice Guidelines (CPGs) are documents that, based on systematic literature reviews and in order to provide tools to improve health care standards, synthesize the best available evidence and develop treatment recommendations for different conditions in specific scenarios.<sup>1</sup> Therefore, and because of the usefulness of CPGs in improving health care quality standards, many government agencies hire thematic and methodological expert groups to produce them.

The AGREE II instrument is a tool designed to facilitate the elaboration and appraisal of CPGs; it is the most extensively used and is considered the gold standard for such processes. This instrument consists of 23 items distributed in 6 domains: *Scope and purpose, Stakeholder involvement, Rigor of development, Clarity of presentation, Applicability, and Editorial independence*.<sup>2</sup>

The permanent methodological assessment of CPGs allows to evaluate their quality and determine whether they are reproducible and applicable in different scenarios.<sup>3</sup> In this context, Huapaya-Huertas *et al.*<sup>4</sup> conducted a study in which they aimed to describe the characteristics of CPGs approved by Peruvian public health agencies between July 2015 and September 2017, finding that most of them did not meet the quality criteria assessed, that their preparation process had many shortcomings, even after the release of the AGREE II instrument, and that this is common in other latitudes.

In the study by Huapaya-Huertas *et al.*,<sup>4</sup> more than 500 CPGs were evaluated based on 3 criteria (expert panel that prepared the document; protocol for identification, collection and evaluation of evidence, and level of evidence supporting each recommendation) and it was found that 65.8% did not specify the authors, 81.5% had no bibliographic citations, and 97.7% did not describe any method of searching for evidence that supported the recommendations. It should be noted that one of the limitations of that study was that the AGREE II instrument was not used as an evaluation method, which ultimately hinders the interpretation of the results and compromises their external validity.<sup>4</sup>

Furthermore, during the study period, the authors collected 1 376 CPGs that were approved by resolution, but only analyzed 558 of them since they were received by the General Directorate of Insurance and Health Care Exchange, leaving more than half of the guidelines outside the study. In spite of the above, it is important to recognize the researchers' efforts in evaluating those documents, as it is the first step to generate changes that positively impact their development because only these types of studies allow for the establishment of a starting and improvement point for future CPG design and elaboration projects.<sup>4</sup>

It should also be noted that the findings of Huapaya-Huertas *et al.*<sup>4</sup> contrast with the reports by Coello *et al.*,<sup>5</sup> who published in 2010 a systematic review of the studies that used the AGREE instrument to assess the quality of CPGs and found 42 studies with a total of 626 guidelines published between 1980 and 2007. In that research, the mean scores were acceptable for the domains *Scope and purpose* and *Clarity and*

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presentation, moderate for the domain *Rigor of development*, and low for the domains *Stakeholder involvement*, *Editorial independence* and *Applicability*. In addition, it was found that 62% of the guidelines that included an overall assessment were recommended or recommended with caveats.<sup>5</sup>

On the other hand, in 2015, Delgado-Noguera *et al.*<sup>6</sup> evaluated the methodological quality of Colombian CPGs in pediatrics developed by the Instituto de Evaluación Tecnológica en Salud (Institute of Technological Assessment in Health) and found scores of 74-98%, so they recommended the 10 documents evaluated after obtaining acceptable scores in all domains. This evaluation was carried out using the AGREE II instrument.

Currently, amid the health emergency caused by the new SARS-CoV-2 coronavirus and the multiple concerns surrounding the pandemic caused by COVID-19, CPGs have been developed to help health professionals provide the best recommendations based on the scarce evidence available; however, knowing the methodological quality utilized to establish each of these recommendations is essential to decide which of them should be adopted.

Consequently, in May 2020, Dagens *et al.*<sup>7</sup> published the first assessment study of CPGs for the treatment of COVID-19, in which they found methodological flaws in various domains such as *Variability in recommendations*, *Applicability*, *Editorial independence* and *Stakeholder involvement*. The study included only 18 documents because a quick search of the literature available up to that time was performed, but it is still a good example of the usefulness of these assessments when it comes to adopting or not a CPG.

Clearly, given the flood of information that the scientific world is currently facing, there is great uncertainty about the best behavior to adopt in some instances; for that reason, CPGs are designed to assist professionals in these situations, with which we clinicians must deal on a daily basis. However, we must proceed with caution when implementing the recommendations, and the permanent assessment of the methodological quality of the guidelines is precisely the best tool for embracing or rejecting them on a sound basis.

For all the aforementioned reasons, the scientific and medical community should be encouraged to constantly

evaluate the methodological quality of CPGs and thus identify their flaws and opportunities for improvement.

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