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Introduction to the series “GRADE in Spanish”: Basic articles about the use of evidence in clinical practice

Introducción a la serie “GRADE en español”: Artículos básicos acerca del uso de la evidencia en la práctica clínica

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INTRODUCTION

The GRADE working group (Grading of Recommendations Assessment Development and Evaluation) is a group of health professionals established in 2000 and committed to developing an optimal system for evaluating the certainty of evidence from systematic reviews and health technology assessments, as well as determining the strength and robustness of recommendations in clinical practice guidelines. Undoubtedly, these two steps are critical when using evidence in health decision-making.

Since its inception, the GRADE group has had a significant impact on how the evidence conclusions are drawn, and clinical practice guidelines are developed and implemented worldwide. With the support of more than 100 international organizations, the GRADE approach has been widely adopted, enhancing clarity and transparency in evidence assessment and recommendation formulation. This group, with over 200 members globally, has

maintained a constant collaborative approach to improve and expand its methods (1).

The first articles from the GRADE group were published in the British Medical Journal and focused on describing how to use evidence summarized in evidence profiles and summary of findings tables to generate recommendations within clinical practice guidelines (2-6). These initial publications did not provide detailed guidance on how to create these tables or how to formulate recommendations based on the assessment of the certainty of evidence for each critical or important outcome. To address this gap, starting in 2011, the GRADE group began to publish a series of articles in the Journal of Clinical Epidemiology, describing in detail the necessary steps to: 1) assess the certainty of the evidence and, 2) formulate recommendations in clinical practice guidelines. Additionally, in 2017, the online GRADE handbook was launched, summarizing essential methodological information on the correct application of GRADE concepts.

OBJECTIVE OF THE SERIES

The series of articles “GRADE in Spanish” aims to guide and familiarize clinicians and health professionals who use evidence synthesis, to understand the concepts of the GRADE approach and improve the interpretation of evidence in the context of systematic reviews, health technology assessments and evidence-based clinical practice guidelines. Furthermore, these series not only seek to familiarize health professionals with the theoretical concepts of the GRADE approach, but also to provide practical examples and case studies that facilitate its application in real situations of clinical practice. At the end of the series, readers will be equipped to use GRADE in evidence assessment and informed decision-making.

METHODOLOGY AND CONTENT OF THE SERIES

The GRADE Network Colombia has decided to publish a series of articles in Spanish - which will not just be translations of the original articles but will use them as guides to develop manuscripts that explain GRADE concepts for each of its domains, applied to practical examples of evidence synthesis (7).

The GRADE in Spanish series has been specifically designed to address the unique needs and contexts of healthcare professionals in Spanish-speaking countries. Using relevant examples and case studies, the articles will provide a contextualized and applicable understanding of GRADE principles.

This series will be published in the Colombian Journal of Anesthesiology and will cover the assessment of certainty in evidence and the making of recommendations in clinical practice guidelines, when the evidence comes from both interventional and observational studies, including diagnostic performance

studies. The articles will provide an overview of the series, and the terminology used to assess the certainty of evidence, providing practical and contextual examples applicable to various disciplines and areas of clinical practice and health decision-making (Table 1).

The first four articles in this series will describe the basic principles of the GRADE approach. The first article will focus on presenting the evidence using GRADE evidence tables, including evidence profiles and summary of findings tables (8). The second will address the formulation of clinical questions using the PICO structure (patients, intervention, comparison and outcomes). The third article will classify the relative importance of outcomes (9), and the fourth will introduce the GRADE domains for downgrading the certainty of evidence (10). The following six articles will explore each of these domains: risk of bias in randomized studies (11), inconsistency (12), indirectness (13), imprecision (14, 15) and publication bias (16). An article on additional domains to increase the certainty of evidence (17) will also be included.

The 11th article in the GRADE in Spanish series will describe how to conduct a global assessment by outcome and across all outcomes of a clinical question, as systematic review authors must determine the certainty in the body of evidence for each critical and important outcome, and guideline developers must globally grade the certainty of evidence considering how it applies to the scenario where the recommendations will be made (18). The last two articles will address the development of evidence profile tables and summary of findings tables for systematic reviews and clinical practice guidelines for both continuous and dichotomous outcomes, also reviewing the absolute estimation of the magnitude of effects for the latter (19, 20). Table 2 summarizes the GRADE approach across the domains described in the series.

Terminology of certainty in evidence using the GRADE approach

Conceptually, GRADE defines the certainty in the evidence as “the confidence that the true effect, accuracy measure, or association lies on one side of a threshold or within a specific range” (15, 21, 22). This definition has evolved over time, and while initially terms such as “quality of evidence” or “confidence in effect estimates” were initially used, the currently preferred term is “certainty in the evidence”. This change in terminology aims to avoid confusion and ensure better understanding among different users and contexts (23).

Recently, the GRADE group has clarified and refined the definition of “certainty in evidence”, emphasizing the importance of considering specific thresholds and ranges of effects. This approach allows for a more precise and contextualized assessment of evidence, which is crucial for the formulation of recommendations in clinical practice guidelines (23).

For example, “quality of evidence” is well understood in some contexts and conveys the desired meaning, which is the certainty or confidence in the estimation of an effect. However, this concept can sometimes be confused with “risk of bias”, which is one of the domains that could lower the certainty in the estimate of an effect. Sometimes the quality in evidence is also interpreted as the overall assessment that a researcher has about a study, rather than as a judgment about the certainty in the estimate of an effect derived from research (1).

Although “confidence in effect estimates” can be easily understood in many contexts and is more likely to convey the meaning desired by GRADE in the case of systematic reviews, it can also be confusing at times. For example, it can be confused with “confidence intervals” (imprecision), which is also one of the several domains that could lower the certainty in effect estimates. Therefore, the GRADE group continues to discuss and

Table 1. List of articles in the GRADE series in Spanish and their corresponding original GRADE article.

Deliveries	Articles in Spanish in this series	Original GRADE articles
1	GRADE Approach in Spanish - Introduction to Basic GRADE Articles for Practical Applications	· GRADE guidelines: A new series of articles in the Journal of Clinical Epidemiology (1)
2	GRADE Approach 1 in Spanish: introduction to GRADE evidence profiles and summary of findings tables	· GRADE guidelines: 1. Introduction—GRADE evidence profiles and summary of findings tables (8) · GRADE guidelines 26: informative statements to communicate the findings of systematic reviews of interventions (24) · Improving GRADE evidence tables part 1: a randomized trial shows improved understanding of content in summary of findings tables with a new format (25) · Improving GRADE evidence tables part 2: a systematic survey of explanatory notes shows more guidance is needed (26) · Improving GRADE evidence tables part 3: detailed guidance for explanatory footnotes supports creating and understanding GRADE certainty in the evidence judgments (27)
3	GRADE Approach 2 in Spanish: framing the clinical question	· GRADE guidelines: 2. Framing the question and deciding on important outcomes (9)
4	GRADE Approach 3 in Spanish: deciding the importance of the outcomes	
5	GRADE Approach 4 in Spanish: rating the certainty in the evidence	· GRADE guidelines: 3. Rating the quality of evidence (10) · The GRADE Working Group clarifies the construct of certainty of evidence (23)
6	GRADE Approach 5 in Spanish: risk of bias in intervention studies	· GRADE guidelines: 4. Rating the quality of evidence—study limitations (risk of bias) (11)
7	GRADE Approach 6 in Spanish: inconsistency	· GRADE guidelines: 7. Rating the quality of evidence—inconsistency (28) · GRADE guidance 36: updates to GRADE's approach to addressing inconsistency (12)
8	GRADE Approach 7 in Spanish: indirect evidence	· GRADE guidelines: 8. Rating the quality of evidence—indirectness (13)
9	GRADE Approach 8 in Spanish: imprecision	· GRADE guidelines 6. Rating the quality of evidence—imprecision (16) · GRADE Guidance 34: update on rating imprecision using a minimally contextualized approach (14) · GRADE guidance 35: update on rating imprecision for assessing contextualized certainty of evidence and making decisions (15)
10	GRADE Approach 9 in Spanish: publication bias	· GRADE guidelines: 5. Rating the quality of evidence—publication bias (29)
11	GRADE Approach 10 in Spanish: other judgments that affect (increase) the certainty in the evidence	· GRADE guidelines: 9. Rating up the quality of evidence (17) · GRADE guidance 38: Updated guidance for rating up certainty of evidence due to a dose-response gradient (30)
12	GRADE Approach 11 in Spanish: overall rating of the certainty in the effect estimates for a single outcome and for all outcomes	· GRADE guidelines: 11. Making an overall rating of confidence in effect estimates for a single outcome and for all outcomes (18)
13	GRADE Approach 12 in Spanish: preparation of summary of findings tables for dichotomous outcomes and the interpretation of relative effects vs absolute effects for the interpretation of the evidence	· GRADE guidelines: 12. Preparing Summary of Findings tables—binary outcomes (19)
14	GRADE Approach 13 in Spanish: preparation of summary of findings tables for continuous outcomes and the interpretation in the magnitude of the effect	· GRADE guidelines: 13. Preparing Summary of Findings tables and evidence profiles—continuous outcomes (20)

Source: Authors from [\(1\)](#).

Table 2. GRADE approach to rate the confidence in effect estimators (certainty, confidence or quality in the evidence).

1. Establish an initial level of certainty		2. Consider reducing or increasing the level of certainty		3. Final rating of the level of certainty
Study design	Initial certainty in the effect estimate	Reasons to reduce or increase the level of certainty (GRADE domains)		Certainty in the effect estimate across domains
		Reduce if...	Increase if...	
Randomized clinical trials	High certainty	Risk of bias	Large effect	Alto ⊕ ⊕ ⊕ ⊕
		Inconsistency	Dose-response gradient	Moderado ⊕ ⊕ ⊕ ○
Observational studies	Low certainty	Indirect evidence	Plausible residual confounding and bias	Bajo ⊕ ⊕ ○ ○
		Imprecision	It would reduce a demonstrated effect or suggest a spurious effect if no observed effect was present	Muy bajo ⊕ ○ ○ ○
		Publication bias		

Source: Authors from (1).

evaluate other alternatives, such as the one presented in this series of articles, which is the most accepted so far: "certainty in the evidence." Consequently, and with the aim of clarifying the terminology that will be used in this series of articles, the GRADE Colombia Network has decided to use the term "certainty in the evidence" to refer to the terms quality or confidence in the body of evidence (1).

In this regard, the GRADE Colombia group presents the concept that prevails from the collaboration at the global level: "In the context of a systematic review, ratings of certainty in the evidence reflect the degree of confidence that the effect estimates are correct. In the context of making recommendations, ratings of certainty reflect the degree of confidence that effect estimates are adequate to support a particular decision or recommendation".

CONCLUSION

Through this series of articles, the GRADE Network Colombia aims to facilitate the

understanding and application of GRADE concepts in the Ibero-American context, bridging the gap in knowledge transfer between English-language scientific publications and their use in practice. This series will provide extensive, up-to-date, and comprehensive information on the application of GRADE in systematic reviews, health technology assessments, and clinical practice guidelines.

We invite all readers to actively participate in the discussion and application of the concepts presented in this series. By adopting the GRADE approach, we can move towards a more evidence-based clinical practice, thereby improving health outcomes and the quality of life of patients in our region.

Conflict of interests

JJYN, IDF, KEO, OMC, OMMV are founders of the GRADE Network Colombia, which is part of the GRADE working group. JAC is Editor in Chief of the Colombian Journal of Anesthesiology.

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