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Challenges in applying GRADE to health systems and public health interventions

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Background

- The Grading of Recommendations Assessment, Development and Evaluation (GRADE) Working Group has developed and tested a rigorous, systematic and transparent framework for making judgments about the quality of evidence and strength of recommendations.¹
- However, there has been some debate about the 'fit-for-purpose' of the GRADE framework for health systems/public health interventions.²

Objectives

To identify significant challenges to the use of the GRADE framework in the field of health systems/public health

Methods

- We conducted semi-structured interviews with individuals that have applied the GRADE framework in the context of systematic reviews or guidelines in the fields of health systems and public health.
- We primarily identified potential participants through the recommendations of members of the GRADE Working Group and the Guidelines Review Committee at the World Health Organization (WHO). Potential participants were initially contacted by e-mail.
- Responses were obtained by telephone interview or email, and written interview summaries were validated with participants.
- Data were analyzed across interviews qualitatively to distill common themes.

Results

- We conducted 22 interviews and obtained 15 in-depth responses relating to specific systematic review or guideline projects.
- All respondents that have used GRADE appreciated the systematic and transparent process of assessing the quality of the evidence, suggesting that GRADE principles are suitable to health systems/public health interventions.
- The rating of individual experiences, however, varied greatly from GRADE being applied without significant challenges to being used with major challenges.
- Specific challenges reported relate to the nature of public health interventions, the nature of public health evidence, GRADE terminology and the characteristics of the guideline development processes (see example in Box 1)

References

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Box 1. Using GRADE in preparing SUPPORT summaries

The SUPPORT Collaboration has prepared a number of structured summaries of reviews of clinical and health systems interventions³. In using GRADE to summarise review's findings, some issues has been raised:

- The multiplicity of outcomes makes difficult to select just one of them or to lump them in categories.
- The use of a "general" narrative measure of impact is – in some cases – more suitable that a quantitative effect measure making judgments about inconsistency and imprecision difficult.
- The limited quantity of evidence available for some health systems intervention makes judgments about publication bias less reliable.

Discussion

- All respondents that have employed GRADE in a systematic review or guideline project appreciated the systematic and transparent process of assessing the quality of the evidence.
- However, GRADE in its current form is perceived to lack applicability, reproducibility and clarity and may not fully do justice to public health interventions.
- Most of the challenges identified are associated with the nature of public health interventions and the nature of public health evidence.
- Likewise, several of these challenges seem more related to the overall guideline development and systematic review process than to grading the quality of evidence.
- While we approached a large number of organisations and individuals, encompassing a range of health issues and types of public health interventions, we could have overlooked many others – and therefore potentially missed other relevant insights.
- Even when GRADE has been endorsed by a number of organizations around the world, the majority of specific GRADE applications in the field of public health to date appears to have taken place at WHO . This still rather limited experience with GRADE could imply that some of the insights are based more on theory than on real experience with the approach.
- Many of the challenges identified are currently being addressed by different groups.^{4,5}

Conclusion

- GRADE principles seem to be applicable to health systems/public health interventions.
- However, users suggest that a combination of carefully revisiting concepts and terminology, better guidance on how to apply GRADE to complex interventions and some modifications to the existing grading scheme could improve the applicability of the GRADE approach to health systems/public health interventions

