Editorial

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Introduction to the GRADE Approach for Evidence-Based Clinical Practice Guideline Development

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In recent years, there has been a drastic increase in the number of published clinical practice guidelines to assist in clinical decision-making based on scientific evidence. In view of the current trend, the Korean Urological Association has published clinical practice guidelines on the management of urological diseases, such as the Korean clinical practice guidelines for benign prostatic hyperplasia, which represents an important milestone for Korean patients [1]. With these guidelines, efforts have been dedicated towards reducing inappropriate practices, improving public health, controlling the increasing costs of healthcare, and facilitating the translation of research into clinical practice.

The Institute of Medicine has defined clinical practice guidelines as statements that provide recommendations to optimize patient care based on a systematic review of evidence and an assessment of the benefits and harms of alternative care approaches [2]. In addition to this definition, guideline developers should follow explicit, judicious, and transparent processes to propose trustworthy guidelines.

The development of an efficient framework that can help translate the enormous medical knowledge into recommendations accurately and transparently has attracted considerable attention. The most widely adopted tool for grading the quality of evidence and making recommendations is GRADE (Grading of Recommendations, Assessment, Development, and Evaluations), which has been officially endorsed by more than 100 organizations worldwide. GRADE is a methodologically rigorous, comprehensive, and unified system for presenting summaries of evidence, and it provides a systematic approach for making clinical practice recommendations [3,4]. Clinical practice guidelines depend fundamentally on an appraisal of the quality of scientific evidence related to clinical questions in healthcare. GRADE provides the overall confidence of a treatment effect estimate in terms of the mean difference or risk ratio within the 95% confidence interval from summaries of currently available evidence from systematic reviews and meta-analyses. The GRADE approach involves a four-tiered rating system, including high, moderate, low, and very low, which reflects the extent of credibility to support a particular clinical recommendation. In addition to the overall quality of effect estimates, GRADE considers three more factors to decide the direction (for or against) and strength (strong or weak) of recommendations: balance between the benefits and harm, patients' values and preferences, and resource consideration [3,4]. The Institute of Medicine has found GRADE to be advantageous in terms of applicability across a great range of clinical areas, providing the quality of evidence and strength of recommendation in a transparent and explicit manner, and accounting for individual preferences and

values [2].

Therefore, the Guideline Development Committee in the Korean Association of Urogenital Tract Infection and Inflammation decided to translate the most comprehensive GRADE series published in the *BMJ* to facilitate a more effective and transparent guideline development process [3-8]. In addition to the brief review of evidence-based clinical practice guidelines published in the *Urogenital Tract Infection* journal, this translation series is expected to impart knowledge to Korean guideline developers to assist them in moving from evidence to recommendations [9].

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

AUTHOR CONTRIBUTIONS

E.C.H. and J.H.J.: participated in data collection and wrote the manuscript, J.H.J.: helping to draft the manuscript, and final approval.

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REFERENCES

1. Yeo JK, Choi H, Bae JH, Kim JH, Yang SO, Oh CY, et al. Korean clinical practice guideline for benign prostatic hyperplasia. Investig Clin Urol 2016;57:30-44.
2. Graham R, Mancher M, Wolman DM, Greenfield S, Steinberg E. Clinical practice guidelines we can trust. Washington, DC: National Academies Press; 2011.
3. Guyatt GH, Oxman AD, Vist GE, Kunz R, Falck-Ytter Y, Alonso-Coello P, et al.; GRADE Working Group. GRADE: an emerging consensus on rating quality of evidence and strength of recommendations. BMJ 2008;336:924-6.
4. Guyatt GH, Oxman AD, Kunz R, Vist GE, Falck-Ytter Y, Schunemann HJ; GRADE Working Group. What is "quality of evidence" and why is it important to clinicians? BMJ 2008;336:995-8.
5. Guyatt GH, Oxman AD, Kunz R, Falck-Ytter Y, Vist GE, Liberati A, et al.; GRADE Working Group. Going from evidence to recommendations. BMJ 2008;336:1049-51.
6. Schunemann HJ, Oxman AD, Brozek J, Glasziou P, Jaeschke R, Vist GE, et al.; GRADE Working Group. Grading quality of evidence and strength of recommendations for diagnostic tests and strategies. BMJ 2008;336:1106-10.
7. Guyatt GH, Oxman AD, Kunz R, Jaeschke R, Helfand M, Liberati A, et al.; GRADE Working Group. Incorporating considerations of resources use into grading recommendations. BMJ 2008;336:1170-3.
8. Jaeschke R, Guyatt GH, Dellinger P, Schunemann H, Levy MM, Kunz R, et al.; GRADE Working Group. Use of GRADE grid to reach decisions on clinical practice guidelines when consensus is elusive. BMJ 2008;337:a744.
9. Jung JH, Franco JVA, Dahm P. Moving towards evidence-based clinical practice guidelines. Urogenit Tract Infect 2018;13:45-50.