A critical review to nutrition clinical practice guideline

Background

Good nutritional status is crucial to health. In view of the importance of nutrition, many nutrition clinical practice guidelines (NCPGs) have been developed. However, the quality of these clinical practice guidelines are variable. To evaluate the quality of nutrition clinical practice guidelines (NCPGs) included in National Guideline Clearinghouse (NGC), explore the factors influencing the quality of NCPGs and provide recommendations and evidence for organizations that develop similar guidelines.

Methods

We searched the NGC website and selected all NCPGs. We used the Appraisal of Guidelines for Research & Evaluation II (AGREE II) and Reporting Items for practice Guidelines in Healthcare (RIGHT) instrument to assess the quality of included guidelines, and analyzed the Pearson correlation of the two instruments. We evaluated the degree of agreement by intraclass correlation coefficient (ICC) and used STATA 15.0 and SPSS 21.0 software to analyze the related data.

Conclusion

The quality of NCPGs is high, but there is still space for improvement. Future guidelines development can be reported based on the items of these two instruments, and more attention should be paid to the application of the guidelines.

Results

We included a total of 45 NCPGs. The median scores and range for each AGREE II domain were as follows:
1. Scope and purpose (63.89%, 47.22% to 88.89%);
2. Stakeholder involvement (52.78%, 11.11% to 77.78%);
3. Rigor of development (58.33%, 27.08% to 86.46%);
4. Clarity and presentation (69.44%, 27.78% to 88.89%);
5. Applicability (41.67%, 12.5% to 70.83%); and
6. Editorial independence (75.00%, 8.33% to 95.83%).

The report rates for each RIGHT domain were: basic information domain (69.00%); background domain (86.00%); evidence domain (84.00%); recommendations domain (81.00%); review and quality assurance domain (88.00%); funding, declaration and management of interests domain (71.00%); other information domain (68.00%). The item 9a, 9b with a highest reporting rate as 100%, item 1b with the lowest reporting rate 7%. The ICC values for nutrition guidelines using the AGREE II ranged from 0.874 to 0.987, and there was high correlation between reporting completeness of NCPGs by AGREE II and RIGHT instrument (R = 0.629, P < 0.001).

Figure 1. Characteristic of 45 NCPGs