Title: Establishing a Glocalization Methodology for Developing and Updating Evidence-based Clinical Practice Guidelines: Taiwan experience.

Background: High-quality Clinical Practice Guidelines (CPGs) require rigorous and transparent methodology with updating in time for optimal healthcare decisions. Evidence generation and clinical recommendations formation have been updated with the introduction and evolution of the GRADE (Grading of Recommendations, Assessment, Development, and Evaluations) methodology. Developing a credible method for glocalization CPGs development is imperative.

Objectives: To establish a glocalization methodology for developing and updating evidence-based CPGs in Taiwan.

Methods: To systematically review internationally developed methodologies for evidence-based CPGs, and to analyze qualitative data by Delphi methodology, focus group discussion, and expert interview; propose a tailor-made glocalization methodology for developing and updating CPG in Taiwan.

Results: A total of 8 CPGs development manuals were included in the systematic review. Initially, the research team summarized the 4-stage, 27-phase CPG development process. Sixteen external experts were invited to organize the CPG development committee, including government leaders, legislator, society professionals, quality promotion managers, experienced guideline developers, and patient group representatives. The Cronbach α of two rounds of the Delphi consensus was 0.82 and 0.92, respectively. Additionally, we conducted two focus group discussions and four expert interviews to reach a consensus and establish a “Taiwan Clinical Practice Guidelines Development and Update Manual.” Finally, experts adopted the GRADE as the methodology for evidence evaluation and clinical recommendations formation. It was essential to include the opinions of patients and stakeholders in the guideline development process. Considering the feasibility of CPG development, experts identified a 4-step (planning, development, publishing, and updating) and 16-phase approach to guideline development, as shown in Figure 1.

Conclusions: This study proposed a tailor-made glocalization methodology for developing and updating CPG. Following this, Taiwan Nurses Association established the “Evidence-based Clinical Practice Guidelines for Pain Management” based on the method to verify its methodological rigor and feasibility. We recommend that government take action to disseminate the methodology of CPG development for promoting the quality of healthcare.

Patient, public and/or healthcare consumer involvement: Patient group representatives were invited to be the key experts in this project. She worked with all the experts in developing the methodology.
Key words:
Evidence-based practice guidelines, Methodology, Guideline development, Grading of Recommendation Assessment, Development and Evaluation (GRADE), Appraisal tool, Evidence based medicine, Taiwan Clinical Practice Guidelines Development and Update Manual

Figure 1.
Taiwan Clinical Practice Guidelines Development and Update Process: a 4-step and 18-phase approach to evidence-based clinical practice guideline development methodology

CPG: clinical practice guideline
GDG: guideline development group
COI: Conflicts of Interest