

Executive Summary (영문)

The status and dissemination plan of clinical practice guidelines in Korea

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□ Background

In 2011, the Institute of Medicine defined clinical practice guideline as follows: a "statements that included recommendations intended to optimize patient care that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options" (Steinberg et al., 2011). This is clearly distinguished from other types of clinical guidelines and the meanings behind such guidelines (e.g., professional agreements, consultations, criteria, etc.), and it highlights the characteristics of clinical practice guidelines based on systematic review. In 2010, professionals in Korea were using RAND methods and agreed that they provided "a statement developed systematically and scientifically built on evidence to help health care providers and patients make decisions in specific clinical situations" (Ji et al., 2010).

Clinical practice guidelines support doctor's decision-making processes in

clinical situations, and these are ultimately aimed at improving the quality of care. Recently, the development and application of clinical practice guidelines received a great deal of attention since evidence-based medicine is characterized by the demand to accept scientific and objective evidence in clinical settings (Turner et al., 2008).

The developers and users of clinical practice guidelines vary. Professional clinical associations, government and public institutions, and health-related companies use clinical practice guidelines, and these guidelines can be used in health care plans. However, suggestions in clinical practice guidelines cannot be trusted if the evidence from which they are extracted has limitations (lack of evidence, low-quality of evidence, etc.) or its development process is not transparent. This can cause confusion in clinical practice or health policies.

As evidence-based approaches have become more common in recent research, academic interest in clinical practice guidelines has increased, and guidelines are being actively developed at the academic level (Hee Sook Cho et al., 2013). Advanced countries have systematic development and dissemination support at the national level (Turner et al., 2008), while clinical professional societies volunteer to develop and disseminate such guidelines in Korea. Therefore, the government must take a policy-based approach in cooperation with professional societies at the national level to effectively support the development and dissemination of trustworthy clinical practice guidelines. Also, research on the general analysis and rigour of developing and disseminating clinical practice guidelines in Korea has not been conducted since Ahn and Kim's (2012) study of the current status of 52 clinical practice guidelines and the research of 66 clinical practice guidelines developed until the first half of 2009 (Jo et al., 2013).

Therefore this study aims to understand the overall and specific development status of current clinical practice guidelines in Korea and establish strategies to develop and disseminate trustworthy clinical practice guidelines.

□ Objective

This study aims to understand the current status and problem of clinical practice guidelines development and dissemination in Korea, and to identify collaborative research demands to improve the quality of future clinical practice guidelines and guideline implementation.

The specific research objectives for developing clinical practice guidelines and understanding the dissemination status of these guidelines are as follows:

- 1) Collect clinical practice guidelines in Korea and understand their development status
- 2) Evaluate the methodological quality of the recently developed clinical practice guidelines and establish strategy for improvement
- 3) Understand how the main clinical practice guidelines disseminate and propose improvement plans accordingly

□ Methods

The research method largely consisted of analyzing clinical practice guidelines, evaluating the quality of these guidelines, and investigating guideline's dissemination and implementation.

I. Development Status Analysis and Appraisal of Clinical Practice Guidelines in Korea

Collectable original guideline documents developed after 2000 were collected through national/international database searches and manual searches to understand the development status of clinical practice guidelines in Korea. Clinical practice guidelines were selected from the collected original documents based on the inclusion and exclusion standards of this research, and two researchers evaluated them independently. The selected guidelines were analyzed in detail, and the category items of the National Guideline Clearinghouse (NGC) from the United States, the IOM trustworthy standards, and the evaluation items of the appraisal tool AGREE II were used for reference. Moreover, quality evaluation was conducted using AGREE II to

evaluate the methodological appraisal of clinical practice guidelines from the last five years and compare it with previous research findings. To evaluate the rigour of the development methodology of clinical practice guidelines, TAAD ver.1.0 was used as a guideline adaptation method, and evaluations for each were conducted independently by two researchers.

II. Understanding the dissemination and implementation status of Clinical Practice Guidelines in Korea

Online survey was conducted with subjects who have experience with developing clinical practice guidelines to understand the actions and influences associated with operating, developing, disseminating and implementing related to clinical practice guidelines. Also, professional advisory conferences were held twice to collect feedback from professionals and policy makers who have experience developing clinical practice guidelines in order to understand the problems that might arise in the development, dissemination and implementation process and gather their opinions on collaborating with the National Evidence-Based Healthcare Collaborating Agency (NECA).

□ Results

- Analyzing the development status of clinical practice guidelines in Korea
- Appraisal of clinical practice guidelines developed in the past five years in Korea
- Understanding how clinical practice guidelines are disseminated and implemented in Korea

I. Development Status of Clinical Practice Guidelines in Korea

Among the 262 original guidelines collected from the electronic literature data search and the manual search, 161 clinical practice guidelines were included in this study based on inclusion/exclusion standards. Clinical practice guidelines have developed rapidly over the past five years in Korea, which

shows that guidelines have been developing more actively. The subject of the development was mostly academic society. Since 2009, two or more academic associations have collaborated to develop guidelines more frequently. Only 30% of the guidelines included methodological professionals. About 40% of the guidelines were available to public. Most of clinical practice guidelines were developed to treat frequently occurring diseases or complex diseases. It was difficult to categorize these guidelines because either the development method categorization was not directly stated or there were many guidelines with unclear development methodologies. It is important to search for evidence, decide on the level of evidence and level of recommendation, and extract recommendation in using formal consensus method and descriptions of the updating plans must be specifically stated.

II. Evaluating the Appraisal of Clinical Practice Guidelines Developed in the Past Five Years in Korea

The evaluation results of the AGREE II and TAAD clinical practice guidelines developed in the past five years in Korea were compared to the previous research results of Jo et al. (2013).

The general quality scores of the current guidelines had increased compared to the scores of the guidelines before 2009. Specifically, rigour of development had increased from about 25% before 2009 to 37.8% after 2009. Stakeholder involvement had increased from 16.6% to 39.1%, and editorial independence had greatly increased from 5.2% to 30.7%. The applicability score increased from 6.0% to 14.6%, but this was significantly lower than the increases in other areas.

III. Understanding Dissemination and Implementation Status of Clinical Practice Guidelines in Korea

1. Online Survey

A total of 958 people received the online surveys, and 139 had participated

in the development of clinical practice guidelines. The response rate was 14.54%, and 77% of the respondents were physicians. The activities for disseminating clinical practice guidelines included education, approval, and publication activities. For educational activities, it was most common to disseminate guidelines through academic conferences (discussions, workshops, etc.). Regarding approval activities, most guidelines were published in academic journals officially approved by professional associations. For publication activities, it was most common to distribute copies of guidelines or post them on academic homepages.

2. Professional Advisory Conference

The respondents stated that time and money are needed to acquire methodologies for developing clinical guidelines, and there is a need for professionals. They also responded that it is difficult to search for and integrate new evidence and summary of evidence with previous work. Since each association has different time requirements, human resources, and costs, methodological collaboration for evaluating evidence was demanded highly. Development groups, multi-disciplinary collaborations, and official funding support were also demanded.

However, not enough interest or action was directed toward implementing clinical practice guidelines as compared with the interest in developing and disseminating those guidelines. It was mentioned that public health guideline development did not receive enough attention.

Some stated that if National Evidence-based Healthcare Collaborating Agency(NECA) support with sufficient professional human resources in searching, integrating and evaluating evidence, would be helpful to improve disseminate trustworthy clinical practice guidelines.

□ Conclusions

Recent clinical practice guidelines, methodological quality, and collaborative

research demands were identified. This study aimed to provide preliminary data to establish the priorities of collaborative efforts in order to develop trustworthy clinical practice guidelines. It also sought to establish dissemination and implementation activities for future clinical practice guidelines by collecting and categorizing clinical practice guidelines and evaluating the quality of guidelines.

The analysis of clinical practice guidelines developed after 2000 showed that the quality and quantity of these guidelines improved after 2009 due to the dissemination of evidence-based methodologies. However, we still need to address problems such as the formation of multi-disciplinary development groups, participation of methodological professionals, and improvement of applications.

To develop trustworthy clinical practice guidelines that can improve the quality of patient care in the future, it is necessary to form multi-disciplinary development groups (collaboration between various professional associations) support systematic reviews, evidence evaluation, and methodologies and determine the clinical areas (diagnosis, medical imaging, surgery, anesthesia, etc.) that need to be developed and supported.

Specifically, not enough interest and action are directed toward implementing and applying these guidelines as compared with the interest in developing and disseminating them. Since it is difficult to determine causes and specific barriers in the process of examining the general status, research must be conducted to understand the barriers for each guideline and develop an monitoring indicators. It is crucially important to understand the barriers and establish strategy through collaborative research with the Korean Academy of Medical Society and clinical academic associations.

Key words

clinical practice guideline, guideline development status, evidence-based method, appraisal of guidelines