

INPLASY PROTOCOL

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Conflicts of interest:
None declared.

INTRODUCTION

Review question / Objective: Clinical practice guideline development group systematic summary of research evidence, so they have the most capacity and energy

Knee osteoarthritis clinical practice guidelines should pay more attention to identify and report research priorities to increase research value and decrease waste: a systematic review

Gao, YC¹; Liu, ZH²; Cao, R³; Feng, YT⁴; Tao, LY⁵; Su, CY⁶; Guan, XM⁷; Fang, R⁸; Deng, YJ⁹; Xiang, WY¹⁰; Fei, YT¹¹.

Review question / Objective: Clinical practice guideline development group systematic summary of research evidence, so they have the most capacity and energy to identify research priorities. We systematically evaluated the reporting form and content of research priorities in clinical practice guidelines (CPGs) related to knee osteoarthritis (KOA).

Information sources: We searched 6 databases including PubMed, Embase, VIP Database for Chinese Technical Periodicals, Wanfang, Chinese Biomedical Literature Database, and China National Knowledge Infrastructure. In addition, The official websites of 40 authoritative orthopedic societies, rheumatology societies and guideline development organizations were additionally searched.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 18 April 2023 and was last updated on 18 April 2023 (registration number INPLASY202340063).

to identify research priorities. We systematically evaluated the reporting form and content of research priorities in clinical practice guidelines (CPGs) related to knee osteoarthritis (KOA).

Rationale: Knee osteoarthritis (KOA) is a common disorders worldwide, and it is already well known that its increasing burden of disease puts grand pressure on the health system. Therefore, it is crucial to conduct priority clinical research of KOA. At present, there are many clinical practice guidelines (CPGs) for KOA as guidance documents for clinicians to guide clinical practice, But there is an unavoidable challenge that there were plenty of recommendations in the CPGs without enough evidence, which is gradually attracting the attention of clinical investigators and methodology researchers on guideline development.

For recommendations that lack evidence in the development of CPGs, many CPGs and methodological literature will often proposed research priorities at specific locations of the CPGs and conducted comprehensive elaboration and presentation as topics. For guideline development groups, they are in an ideal position to identify research priorities, on the one hand, it is important to acknowledge that the limitations caused by the lack of evidence, on the other hand, provide guidance to researchers ready to invest into "uncertain" field, and promptly stop researchers who continue research waste in field where strong evidence already exists.

Research priorities in the CPGs had broad implications, which can be used as a summary of the limitations of recommendations in terms of evidence, and can call for researchers to conduct adequately research on clinical questions with insufficient evidence or low quality evidence , and to timely stop research for clinical questions with strong and sufficient evidence. At the same time, the research priorities themselves can also be used as a form of recommendation. Guideline development manuals published by some authoritative organizations such as the World Health Organization (WHO), Scottish Intercollegiate Guidelines Network (SIGN) and National Health and Medical Research Council (NHMRC) proposed that research priorities should be reported in the CPGs to help inform future research. It should be

noted that the research priorities is not research gap. Strictly, the proposal of the research priorities can be based on the research gap, which we can consider it results after consensus of the research gap in the CPGs.

There are many studies on the research gap in the formulation of CPGs, but there is not much methodology exploration on research priorities, and their studies on the formulation methods, report form and report content of research priorities is not comprehensive. This study provides a reference for the development and reporting of research priorities by systematically investigating them made in KOA and critically evaluating its reporting entries and report content.

Condition being studied: Not applicable.

METHODS

Search strategy: We searched 6 databases including PubMed, Embase, VIP Database for Chinese Technical Periodicals, Wanfang, Chinese Biomedical Literature Database, and China National Knowledge Infrastructure, search keywords including knee osteoarthritis, osteoarthritis, clinical practice guidelines, etc. In addition, The official websites of 40 authoritative orthopedic societies, rheumatology societies and guideline development organizations were additionally searched.

Participant or population: No patient involved.

Intervention: Not applicable.

Comparator: Not applicable

Study designs to be included: The KOA CPGs included in this study include two types: KOA-specific CPGs (all recommendations for KOA) and comprehensive arthritis CPGs (recommendations for multiple arthritis, including KOA). We defined KOA recommendations as all recommendations developed for KOA.

Eligibility criteria: We excluded duplicate publication, older versions of the CPGs as well as the guidance documents for guideline development. The CPG includes at least one recommendation for KOA.

Information sources: We searched 6 databases including PubMed, Embase, VIP Database for Chinese Technical Periodicals, Wanfang, Chinese Biomedical Literature Database, and China National Knowledge Infrastructure. In addition, The official websites of 40 authoritative orthopedic societies, rheumatology societies and guideline development organizations were additionally searched.

Main outcome(s): We will include the following parts: search results, guidelines characteristics, presentation of research priorities in the clinical practice guidelines, characteristic of research priorities, focus of the research priorities.

Additional outcome(s): None.

Data management: The two authors independently screened the titles, abstracts and full texts, and extracted the following two types of information according to the designed data extraction table: (1) the basic information of the each CPG, including the scope of the CPG, the development organizations, published year, types of arthritis included, etc, (2) information related to research priorities, report or not, location, quantity, name, type, reasons for research priorities, etc. We also assessed the structure of the research priorities, analyzing whether it provides sufficient information to explicitly describe the structure (e.g., population, intervention, comparison, and outcome) to be used for the development of clinical questions or research questions. Any disagreement may be decided through discussion or by a third author (FY).

Quality assessment / Risk of bias analysis: Not applicable.

Strategy of data synthesis: Descriptive statistics were used and absolute

frequencies and proportions of related items was calculated.

Subgroup analysis: Not applicable.

Sensitivity analysis: Not applicable.

Language restriction: None.

Country(ies) involved: China.

Keywords: Clinical practice guidelines; Research priorities; Research gap; Report; waste.

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