Prevention and self-management interventions are top priorities for osteoarthritis systematic reviews

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Abstract

Objective: To identify high-priority research questions for osteoarthritis systematic reviews with consideration of health equity and the social determinants of health (SDH).

Study Design and Setting: We consulted with experts and conducted a literature search to identify a priority-setting method that could be adapted to address the health equity and SDH. We selected the Global Evidence Mapping priority-setting method, and through consultations and consensus, we adapted the method to meet our objectives. This involves developing an evidence map of the existing systematic reviews on osteoarthritis; conducting one face-to-face workshop with patients and another one with clinicians, researchers, and patients; and conducting an online survey of patients to rank the top 10 research questions. We piloted the adapted method with the Cochrane Musculoskeletal Review Group to set research priorities for osteoarthritis.

Results: Our focus was on systematic reviews: we identified 34 high-priority research questions for osteoarthritis systematic reviews. Prevention and self-management interventions, mainly diet and exercise, are top priorities for osteoarthritis systematic reviews. Evaluation against our predefined objectives showed that this method did prioritize SDH (50% of the research questions considered SDH). There were marked gaps: no high-priority topics were identified for access to care until patients had advanced disease—lifestyle changes once the disease was diagnosed. This method was felt feasible if conducted annually.

Conclusion: We confirmed the utility of an adapted priority-setting method that is feasible and considers SDH. Further testing of this method is needed to assess whether considerations of health equity are prioritized and involve disadvantaged groups of the population. © 2013 Elsevier Inc. All rights reserved.

Keywords: Priority setting; Health equity; Osteoarthritis; Social determinants of health; Systematic reviews; Methods; Methodology; Research priorities

1. Introduction

The Cochrane Collaboration is an international network dedicated to assisting health care providers, policy makers, patients, advocates, and carers make informed decisions about health care. It does this by summarizing the evidence generated worldwide to answer health-related questions in "systematic reviews" that are published online in The Cochrane Database of Systematic Reviews [1]. Since its inception in 1993, the Cochrane Collaboration has produced more than 4,000 systematic reviews but estimates that at least 10,000 are required to summarize the health care information produced to date and that 5,000/year will need to be updated. Given limited resources and time, the Cochrane Collaboration is faced with the difficult task of prioritizing topics.

Historically, the selection of systematic review topics was based on the personal interests of professionals conducting the reviews or, alternatively, on the interests of funders. The Campbell and Cochrane Equity Methods Group identified a lack of Cochrane systematic reviews relevant to the greatest burden of disease in disadvantaged people

What is new?

Key findings
- We confirmed that a priority-setting method for Cochrane review groups which has explicit criteria for health equity and patient values is feasible and results in more equity-focused questions.

What this adds to what was known?
- This study adds a new feasible method for priority setting which can be used by Cochrane review groups to increase the focus on health equity and patient values in their topic lists (both for new topics and for updates of prior systematic reviews).

What is the implication and what should change now?
- More work is needed to assess whether stakeholders and patients engaged in priority setting understand the concept of health equity.

and proposed that methods were needed to explicitly consider equity in selecting topics for Cochrane review groups using priority setting. Priority setting is a structured approach to distribute resources (e.g., funds and researchers) among competing interests (e.g., research topics) [2—4].

2. Current situation within the Cochrane Collaboration

A article in this issue found that there is a lack of structure in setting priorities within the Cochrane Collaboration: only 13 of the 66 entities that make up the Cochrane Collaboration had a structured method to set priorities [Nasser, in this issue]. Also, there are no sustainable processes to identify priority topics: most priority-setting exercises are one-time pilots that are not repeated, and health equity was rarely used as criteria for prioritization [4].

In 2008, the Commission on Social Determinants of Health (CSDH) published a report that defined health inequity as a moral position: "Where systematic differences in health are judged to be avoidable by reasonable action they are, quite simply, unfair" [5]. This avoidable unfairness is labeled as *health inequity*. This report also established that action on the social determinants of health (SDH) is an effective way to address health equity.

3. Osteoarthritis

Osteoarthritis is among the top 10 leading causes of years lived with disability and affects 1 in 10 Canadians. The Cochrane Musculoskeletal Group (CMSG) currently

has more than 100 systematic reviews on osteoarthritis, but although the scope is comprehensive, there has been no explicit consideration of health equity for selecting topics. With increases in new technologies, behaviors, exercises, and pharmaceuticals, there is a need to set priorities for future topics to meet the needs of users of The Cochrane Library. Key factors influencing the selection of osteoarthritis for this project were easy access to the editorial group because of involvement of the coordinating editor (P.T.), buy-in from a representative of the consumer group, easy access to clinical experts, opportunity to apply the results of the study, and previous priority-setting experience within their group. We chose osteoarthritis primarily because of the high level of burden of the disease and the influence of SDH on osteoarthritis prevalence and risk factors such as obesity.

4. Objectives

To identify the top 10 priority research questions for Cochrane systematic reviews on osteoarthritis with emphasis on the patient perspective, SDH, and health equity.

5. Methods

This study received ethical approval from the Ottawa Hospital. Through a literature search and interviews with content experts in systematic reviews and priority setting, we identified a priority-setting method to adapt to incorporate SDH and health equity. We selected the Global Evidence Mapping methods [6] and developed the adaptations using an iterative approach (Fig. 1).

5.1. Adaptations

The first adaptation involved classifying the existing systematic reviews in a framework that focused on patients' needs, made sense to patients, and could be used to identify gaps in the existing systematic reviews. To identify a framework, we searched MEDLINE, PubMed, Cochrane CENTRAL, and Cochrane Database of Systematic Reviews for the existing models of interventions for osteoarthritis. In addition, we undertook a grey literature search that included site-specific searching and a general Google search. Because one of the objectives was to test methods for osteoarthritis, we narrowed the search to frameworks that were developed for arthritis. We identified the National Service Improvement Framework as the most suitable framework. This framework aimed to provide a blueprint for national efforts to improve the health-related quality of life of people living with osteoarthritis, rheumatoid arthritis, and osteoporosis; reduce the cost and prevalence of those conditions; and reduce the impact on individuals, their carers, and communities within Australia [7]. We made one main modification to the framework, which was to add SDH. The framework provided a holistic view of