Review Article

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Effective factors on establishment of knowledge translation in the health system policy-making: A protocol for systematic review

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Abstract:

Despite the importance and position of evidence-based policymaking in the proper management of the health system, studies show that the lack or improper and untimely use of evidence are still one of the main challenges of health systems. Knowledge translation as a solution to this challenge is a process that includes a period of time that starts of decision to choose the research topic and continue to publish of research results, in which the interaction of the researchers and stakeholders is the key factor and the main axis of the process. Since the recognition and promotion of knowledge translation processes resulting from research in health system policy-making will lead to the improvement of the health system, this review protocol was designed to identify factors affecting knowledge translation implementation, including barriers and facilitators of this process. Identifying these factors can be used as a guide for health system decision-makers and research managers in planning to select appropriate policies for deployment of the knowledge translation process to increase the use of research results in the health system.

Keywords:

Barriers, facilitators, knowledge translation, policymaking

Introduction

Research can help policymakers, physicians, health system staffs, and managers to identify areas and processes that need to be upgraded, evaluate existing systems, and design new policies and services based on what they have learned from failures and successes. In addition, using the evidence enables policymakers to implement policies based on the best available knowledge. Different evidence allows policymakers and programmers to compare different modes, and they can choose a solution that is appropriate to the current situation and their facilities and capacities.[1] Further, it is important to pay attention to the results of research and evidence in decision-making and policymaking because making evidence-enriched decisions helps the health system to reach its goals, achieving universal coverage and fair access to health system services.[2-4] Despite the importance and position of evidence-based policy-making in the proper management of the health system, studies show that the lack or improper and untimely use of evidence are still one of the main challenges of health systems.[5] Observations show that although many studies are conducted annually in the world, their results are not used properly and many decisions are made without regard to

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scientific evidence at different levels of decision-making, from clinical experts to policymakers and managers.[6]

The use of research results or knowledge translation and its impact on health systems is one of the important issues that have been considered by policy makers in recent years in Iran. Recently, publishing of research findings has been considered by Iranian universities of medical sciences, with the launch of systems for publishing health research results. However, the fact is that knowledge translation is a process that contains a period of time that starts from decision to choose a research topic and continue to the publication of research results, in which the interaction of the researchers and stakeholders is the key factor and the main axis of the process. Since knowledge translation in health system policy-making will lead to the improvement of the health system,[5] thus the first step in this field is to identify the causes and factors affecting the implementation of applied research and the optimal use of evidence in health system policy-making. Therefore, identifying the effective factors including inhibitors and facilitators on the implementation of the knowledge translation process in health area at the international level will be the first step to form and establish an effective process of knowledge translation and its application at the medical universities and health system policymaking area in the country. Based on it, it is possible to draw a vision and determine the future direction and strategic planning for the establishment of knowledge translation in health area to achieve the lofty goal of improving the performance of the health system and thus optimal health promotion in the country. By reviewing the literature, it seems that a comprehensive review study about the factors affecting the process of establishing knowledge translation in health area has not been done so far. And existing studies are mainly focused on the factors of non use of research results by policymakers and knowledge dissemination,[7,8] or has been investigated in a specific topic[9] or in a specific area.[10] Accordingly, this study is aimed to conduct a systematic review to identify factors related to the establishment and implementation of knowledge translation in health system policy-making. This protocol is submitted with the aim of informing other researchers that such research is ongoing to prevent similar and duplicate work.

Review Questions

- What are the effective facilitators' factors on the establishment of knowledge translation in health system policy-making?
- What are the effective barriers on the establishment of knowledge translation in health system policy-making?

Materials and Methods

This review study includes quantitative and qualitative studies to identify the factors affecting the deployment of knowledge translation in the health system.

Inclusion criteria

While the evaluation of applying health research results has continued at least since the mid-1960s, by using various terms and expressions, serious attention to this issue has accelerated over the past 25 years. Accordingly, the term knowledge translation was coined for the first time by Canadian Institutes of Health Research (CIHR) in 2000.[7] Reviewing the citations' databases reveals a considerable growth in the publications related to this issue from 2000 until now. Thus, this study will examine entire document about knowledge translation that has been published in English and Persian language in international scientific databases since 2000. In terms of document type, this study reviews original papers, review papers (narrative, scope, systematic reviews…), and dissertations and thesis.

PICO structure in systematic review studies

P	Population	The research population will include researchers and policymakers in the health system
I	Intervention	In this study, only confounding factors, including barriers and facilitators, will be extracted and the manner or extent of the effect of these interveners will not be investigated
C	Comparison	No comparison will be made in this study
O	Outcome	The consequences of knowledge translation in the health system are not considered

Exclusion criteria

Studies that have been published before 2000 in languages other than Persian and English or editorial letters, systematic reviews, and workshop reports or that studies that access to their full texts are impossible and studies related to knowledge translation that have been conducted outside the health area are excluded from this study.

Search strategy

Keywords

The search terms used to identify relevant studies in searched databases include entire Persian or English synonyms which have been used in health area for the concept of applying research results in practice or knowledge translation and, besides that, equations that are used for the concepts of obstacles, facilitators.

It should be noted that although the research topic is not covered by MeSH, the selected keywords did not match the MeSH or any other thesaurus.

These keywords are:

- "Knowledge translation," "knowledge mobilization," "Knowledge transfer*," "research utilization," "research results effectiveness," "knowledge

dissemination," "knowledge utilization," "applying research results," "knowledge giving," "knowledge exchange," "Knowledge to action," "Knowledge-to-use," "research capacity," "know-do gap," "getting knowledge into practice," "knowledge synthesis," "translation research into practice," "research translation," "translation research," "applied health research," "research implement*," "implement* research evidence," "evidence-Informed policy making," "evidence-Informed decision making"

- Barrier*, obstacle*, challenge*, "effective factor*", limit*, characteristic*, facilitator*
- "Health system"., "healthcare system".

Databases

Following databases will be searched due to their comprehensive coverage in various sciences, from 2000 to February 2021, equivalent to 1379 to Esfand1399:

Cochrane Library, WoS, Scopus, PubMed, EMBASE, ProQuest (Thesis), SID, Magiran, IranDoc, ISC.

These databases were selected because of following reasons: Cochrane library was selected because of comprehensive coverage of systematic review articles, WoS and Scopus were chosen due to the comprehensive thematic and temporal coverage of publications in various subject areas, including knowledge translation, PubMed and EMBASE were searched because of health coverage, and ProQuest was selected to access the thesis and dissertation. In addition, Iranian databases such as ISC, IranDoc, Magiran, and SID were selected to search Persian language document.

Hence, search strategy in this database is as follows:

("Knowledge translation" OR "knowledge mobilization" OR "Knowledge transfer*" OR "research utilization" OR "research results effectiveness" OR "applying research results" OR "knowledge giving" OR "knowledge exchange" OR "Knowledge to action" OR "Knowledge-to-use" OR "research capacity" OR "know-do gap" OR "getting knowledge into practice" OR "knowledge synthesis" OR "translation research into practice" OR "research translation" OR "translation research" OR "applied health research" OR "research implement*" OR "implement* research evidence") AND (Barrier * OR obstacle * OR challenge * OR limit * OR characteristic * OR "effective factor*" OR facilitatore*) AND ("health system*" OR "healthcare system*").

Search fields in any databases are title field for ProQuest, (TITLE-ABS-KEY) field for Scopus, Cochrane, EMBASE, (TOPIC) field for WoS, (Title/Abstract) for PubMed. For Persian databases including SID, Magiran,

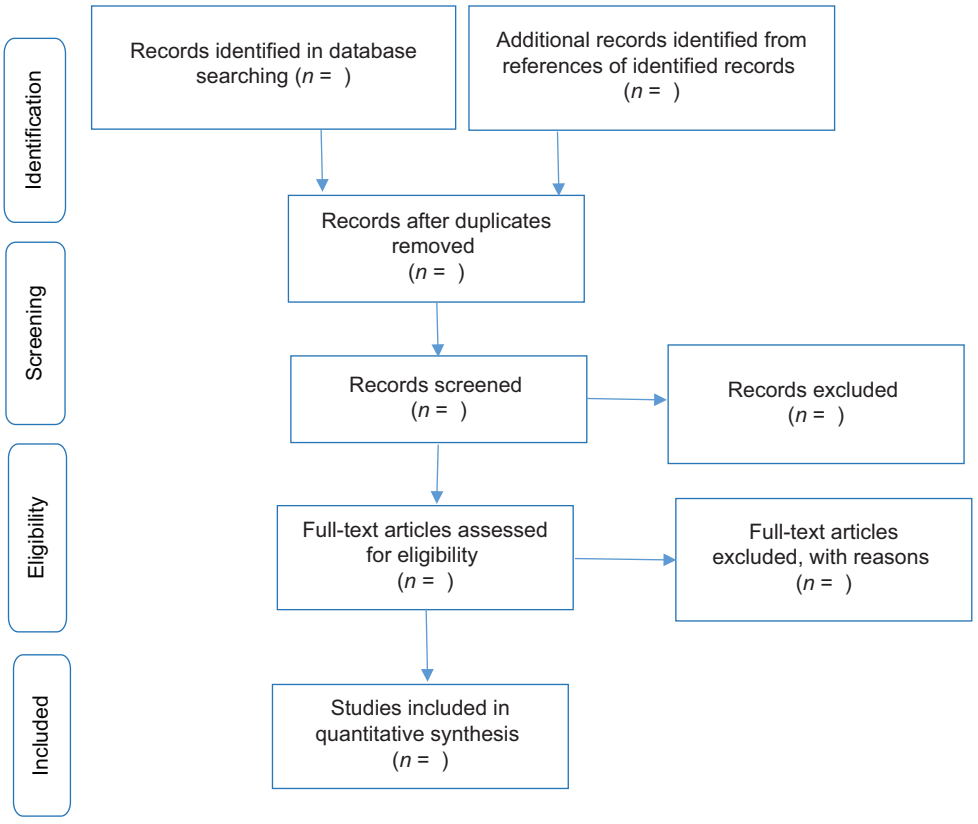

Figure 1: Flow diagram showing selection of articles reviewed in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Guidelines

IranDoc, and ISC, search was done in Title and Subject fields.

Data abstraction

After conducting the search using the determined search strategy, abstracts of document are extracted under the supervision of the team supervisor (MS), an Associate Professor of Library and Medical Information Sciences, who is an expert in the field of knowledge translation. After removing the overlaps, the two researchers (SM/KA) independently examine the relevance of the title and abstracts. Then, the full text of the detected related document is extracted and the full text is reviewed by two reviewers (SM/KA) and finally related documents are identified.

This study will be done based on Preferred Reporting Items for Systematic Reviews and Meta-qualitative Analyses [Figure 1].[11] According to this protocol, following steps including selecting studies, evaluation, and data extraction will be done by two researchers independently, and in case of differences in the obtained results, the third researcher will be consulted. Finally, all documents which are entered into the study will be reviewed and approved by the team supervisor as an expert.

A data extraction form has been designed based on previous research[12] which will specify what data should be extracted from the document [Appendix 1]. To manage the extracted resources, EndNote8 is used.

Data analysis

Considering the objectives of the present systematic review, the effective factors on establishment of knowledge translation in health system policymaking will be extracted from the finalized document by the content analysis method.

Discussion

The results of this review will identify the effective factors of facilitators and barriers on knowledge translation in the health system policymaking. This study results can be served as a guide for health system decision-makers and research managers in planning to select appropriate policies to establish knowledge translation. It is expected by deployment of knowledge translation, we see an increase in use of research results which are executed in this area.

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Conflicts of interest

There are no conflicts of interest.

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Appendix 1

Appraisal Critical Template

Author/title/year	Country	Document type	Methods	Population researches	Research's results identified factors	
					Facilitators	Barriers

This collection of study type includes:

1. Original articles includes articles that are as survey (descriptive, comparative, analytical) or a case study
2. Review article: Articles that have investigated the literature related to develop or evaluate a POME
3. Thesis
4. Book/Book Chapter
5. Conference Paper.