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# Strategies, facilitators, and barriers to interaction between health researchers and policy makers: Protocol for a systematic review

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## Abstract:

This systematic review protocol is developed with the objective to identify the strategies, facilitators, and barriers to interaction between researchers and policy makers to use research evidence in health policy making. It seems that review of interactive methods between researchers and policy makers can help to understand the role of researchers on evidence-informed policy making. Moreover, identifying barriers and facilitators of these interactions can help universities and institutions associated to health policy making in planning to improve the interaction between researchers and policy makers to facilitate evidence-informed policy making.

## Keywords:

Evidence-informed policy making, interaction, policy makers, research personnel

## Introduction

Health research can contribute to social and economic development by generating new knowledge for access to better technologies, improving people's lifestyles, and providing evidence-based decision-making opportunities, in addition to promoting community health.<sup>[1]</sup> However, the important point is that the production of new knowledge is effective when it is made available to stakeholders and used in decision-making. The importance of knowledge utilization in health-care system becomes even clearer when we know that in most countries, the government is the main sponsor for health research. Rapid growth of medical research and resource shortage, specifically in developing countries, has made it important to consider the application of knowledge to improve health-care

decision-making through the proper use of research results.<sup>[2]</sup>

In recent years, the use of research evidence to support health policies has been strongly promoted.<sup>[3]</sup> In fact, the introduction of research into politics is among the components of policy making capacity of any governance system. There is high potential for research and researchers to influence policy making,<sup>[4]</sup> but for now, capacity constraints on implementation research among policymakers and researchers are a major challenge to linking evidence to policy.<sup>[5]</sup> Researchers as knowledge producers and policy makers as knowledge users seem to have different interests, expectations, concerns, and priorities,<sup>[6]</sup> which have overshadowed the effective connections between the two groups. In the meantime, a number of research organizations have an effective function

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in relation to policy makers, but the work of these organizations has not been welcomed by policy makers because researchers do not fully understand the policy process or do not know how to communicate effectively with policy makers to share their research findings.<sup>[7]</sup> This interaction needs to be better understood to develop an evidence-informed policy making culture.<sup>[4]</sup>

Evidence-informed policy making is characterized by systematic and transparent access to evidence and its evaluation as input to the policy making process, which involves the use of the best available research evidence. It is assumed that increased application of research leads to more effective policies in terms of costs and health outcomes.<sup>[8]</sup> However, despite the special importance of evidence-informed policy making in the management of the health system, lack of proper communication between research and policy leads to ignorance or misuse of evidence, which is a challenging issue in health systems around the world.<sup>[9]</sup> The failure of health systems in the effective use of evidence leads to inefficiency and reduction in the quality and quantity of patients' life.<sup>[10]</sup> It has been stated that research results are not normally made available to policy makers and often do not have a tangible and obvious impact on important policies. Therefore, the relationship and interaction between researchers and research stakeholders, including policy makers, has been repeatedly emphasized. However, it should be noted that health policy makers and researchers work in different fields with various professional cultures, resources, requirements, and time frames. For example, policy makers seldom deliver clear messages about the policy challenges they face. Researchers, on the other hand, often produce scientific evidence that is cannot be always applied in a variety of contexts and is usually associated with complexity and a degree of uncertainty.<sup>[11]</sup> Therefore, to make better and more effective use of research findings and to reduce the gap between research and practice, it is necessary to facilitate the interaction between researchers and policy makers.

Emphasis on the use of research evidence in policy making has led to several researches on the gap between research and policy making in recent years. However, a review of literature shows that there has been no systematic review of the challenges regarding the interaction between researchers and policy makers as one of the most important factors in the gap between research and policy as well as existing strategies for interaction. Close investigation shows that the limited published systematic review in this respect has been conducted with an emphasis on facilitating the use of evidence in policy making in a particular country or a specific type of study. Some of these studies have also examined policy makers' perceptions of evidence use.<sup>[12-16]</sup> Accordingly, it is necessary to conduct a

comprehensive and systematic review of facilitators and barriers to such interaction to take advantage of research evidence in health policy as well as available strategies meant to improve such interaction.

## Objectives

This review will address the following questions:

1. What are the factors facilitating the interaction between researchers and policy makers to use research evidence in health policy making?
2. What are the barriers to interaction between researchers and policy makers to use research evidence in health policy making?
3. What are the strategies of interaction between researchers and policy makers to apply research evidence in health policy making?

## Materials and Methods

The present study is a protocol for a systematic review that has been registered with ethics code IR.MUI.RESEARCH.REC.1399.276 and scientific code 199218 in Isfahan University of Medical Sciences. This review will include studies focusing on the effective factors on interaction between health researchers and policy makers to take advantage of research evidence in health policy.

## Inclusion criteria

While the concept of evidence-informed policy making for the first time emerged in medicine after World War II, it expanded into areas of social policy, including education and development as well as international aid from 2000.<sup>[17]</sup> However, the popularity and the introduction of evidence-informed policy making concept were observed in 1997 in the UK.<sup>[18]</sup> Therefore, in this study, all studies published from 1997 on the subject of evidence-informed policy making emphasizing the interaction between researchers and policy makers in English that are found on international scientific databases will be examined. In terms of the document type, original articles, review articles, dissertations, and books/book chapters will be included in the study.

## Exclusion criteria

Studies with the following conditions will not be included in this study:

1. In terms of publication time: Studies published before 1997 will be excluded from the study
2. In terms of subject: After reviewing the titles and abstracts of articles obtained from searching the databases in question, articles that do not meet the main objectives of this systematic review will be removed. In this regard, studies related to clinical decision making will be excluded from the study
3. In terms of document language: In this study, language restrictions have been considered and

- articles whose full text is in a language other than English will be excluded from the study
- In terms of access: Documents whose full text is not accessible in any way will be removed from the study.

## Information sources and search strategy

### Search Keywords Selection

Search keywords include English words for the main concepts studied in this research. Due to the lack of subject coverage by Medical Subject Heading, the keywords have been selected based on the words extracted from investigations in this field.

### Search databases

The international databases including Web of Science, Scopus, PubMed, Cochrane, and ProQuest will be searched due to their thematic and temporal comprehensiveness and availability.

Search of WOS database will be performed in "TOPIC" field; Scopus in "TITLE-ABS-KEY" field; PubMed in "Title/Abstract" field; Cochrane in "ti, ab, kw" field; ProQuest in "abstract" field.

### Search strategy

According to the main concepts and synonyms extracted, the search strategy will be as follows:

*("Knowledge translation" OR "Knowledge transfer" OR "research utilization" OR "utilization of research\*" OR "utilization research\*" OR "research result\* effectiveness" OR "applying research result\*" OR "knowledge giving" OR "knowledge exchange" OR "Knowledge to action" OR "Knowledge to use" OR "knowledge into action" OR "research into action" OR "implement\* knowledge" OR "knowledge implementation" OR "research implementation" OR "Implement\* Research" OR "Evidence Informed Policy Making" OR "Evidence Informed PolicyMaking" OR "Evidence Based Policy Making" OR "Evidence Based PolicyMaking" OR "EvidenceBased Policy Making" OR "Evidence Based Decision Making" OR "EvidenceBased Decision Making" OR "Evidence informed Decision Making" OR "Evidence informed DecisionMaking" OR "informed Decision Making" OR "informed DecisionMaking" OR "evidence informed health Policy making" OR "evidence informed health Policymaking" OR "evidence based health Policy making" OR "evidence based health Policymaking" OR "policy decision making" OR "policy decisionmaking" OR "impact of research on policy" OR "research into policy" OR "science-policy" OR "research-policy" OR "policy-relevant research" OR "Health Policy" OR "Health Policies" OR "policy making" OR "policymaking") AND ("Policy maker\*" OR Policy maker\* OR "Decision maker\*" OR "Decisionmaker\*" OR "policy audience\*" OR "political actor\*" OR implementer\*) AND (Academics OR Academia\**

*OR researcher\* OR scholar\* OR "faculty member\*" OR scientist\* OR "Academic Knowledge Broker\*" OR "Knowledge Broker\*") AND (contact\* OR Communicat\* OR contribut\* OR collaboration\* OR relation\* OR interact\* OR partnership\* OR engag\* OR interface OR cooperat\* OR co-operat\*) AND (health).*

### Data collection process

Search results from the mentioned databases will be extracted using EndNote9 and we will remove duplicate records. After removing the overlaps, two reviewers (Kh. Sh and Sh. M) will independently screen all titles and abstracts followed by screening of selected full text studies for eligibility criteria to identify potentially included studies. This process is illustrated in Figure 1, PRISMA Flow Diagram (2009).<sup>[19]</sup> All included studies will be reviewed by two independent reviewers. Any disagreement that cannot resolve through discussion will be resolved by the team observer (MR. S). Articles that are not identified as relevant at the end will be included in the list of deleted studies (available to researchers). Once the identified relevant articles have been approved by the team observer, two reviewers will use the data extraction form [Appendix 1] in Microsoft Excel to extract the data from the studies.

### Data analysis

According to the goals of the present systematic review, the strategies, facilitators, and barriers to interaction between researchers and policy makers will be extracted from the finalized studies through content analysis. Data will be coded inductively and analyzed using thematic synthesis. Thematic synthesis will be performed in three stages: (1) coding text, (2) developing descriptive themes, and (3) developing analytical themes. The review's results will be presented in tabular form. Data coding and analysis will be done by two independent reviewers (Kh. Sh. and A. H), and team observer (MR. S) will check it for accuracy.

## Discussion

The link between research and policy is often weak. Researchers and policymakers are known as separate communities where low interactions and different priorities prevent the flow of research evidence between them. The evidence-informed policy making approach enables policymakers to communicate more effectively with researchers and make the most informed decisions to improve the functioning of the health system, using the best and most up-to-date research evidence. Therefore, addressing the issue of interaction between researchers and policy makers is important to provide practical and appropriate solutions to strengthen the relationship between research and policy.

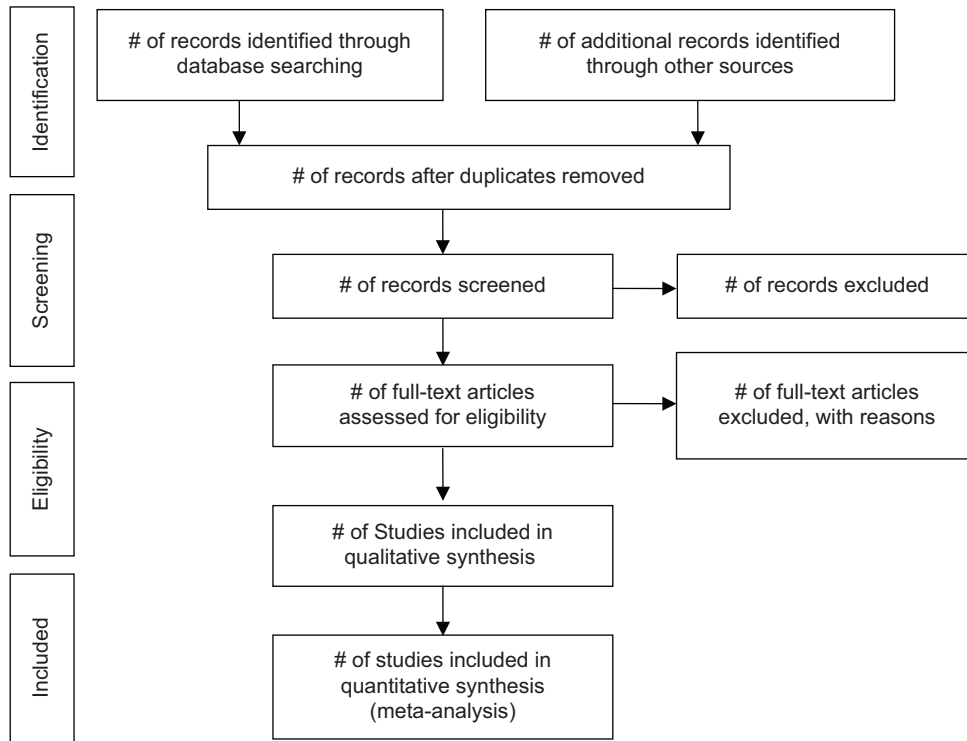


Figure 1: PRISMA flow diagram (2009)

## Conclusion

This review findings can help to understand the role of researchers on evidence-informed policymaking and how to communicate effectively with policy makers. Moreover, identifying barriers and facilitators of interaction between researchers and policy makers can help universities and institutions associated to health policy making in planning to improve this interaction to facilitate evidence-informed policy making.

### Limitation and recommendation

One of the possible limitations of this study will be the lack of access to the full text of some articles, which will try to overcome this limitation through correspondence with authors of the articles.

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### Conflicts of interest

There are no conflicts of interest.

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**Appendix 1: Template form for data extraction**

Author/title/ year	Country	Objectives	Publication type/ document type	Methods/tools used in project	Population of researches	Research's results identified strategies and factors		
						Strategies	Facilitators	Barriers
<hr/>								