Research communication guidance, tools, and frameworks: a rapid scoping review

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1. Background

Evidence-informed policy making (EIP) integrates the best available evidence on policy issues into context-sensitive decision-making processes to drive change and achieve impact (1). EIP requires that policymakers have access to complete, relevant, trustworthy evidence presented in a way that is easy to understand and apply (2). This also implies that current needs and individual preferences of how policymakers receive evidence products are taken into consideration, and research is thematically relevant and produced and communicated in a timely way (3). Understanding how policymakers consider, access, and incorporate evidence in relation to their political environment of decision-making is crucial for effectively communicating evidence to support evidence-informed policy (4).

Research evidence is not always available to policymakers and, even when it is, it is not always communicated in a way that is relevant and usable. Even the most relevant, applicable, or convincing piece of evidence addressing a policy issue must be translated to effectively drive policy and practice change. To bridge this research-to-policy (R2P) gap, evidence should be communicated well, such as by making data available, providing clear summaries and syntheses of problems and solutions, and disseminating research through a range of outputs such as social media, blogs, and policy briefs (5).

A lack of active dissemination and strategic communication of research evidence is a well-known barrier to closing the R2P gap, next to other factors such as lack of relevant or clear research evidence and the costs associated with accessing and using research evidence, the

lack of timeliness or opportunity to use research evidence when it matters, and the lack of policymaker skills or awareness necessary to effectively use research evidence (6). Most policymakers prefer to inform decision-making processes through a range of information sources combining personal experience, peer-reviewed scientific evidence, 'grey' literature, public opinion, and feedback from consultation (4). This requires applicable evidence to be framed and packaged in a way that is relevant and actionable for policymakers alongside competing interests and other sources of information (7).

For communication to be effective, its content should be accessible, understandable, and thematically relevant, the messaging should be actionable, the authors credible and trusted, and it should be disseminated in a timely manner (8). Knowledge translation describes the process of making use of research evidence in EIP through exchanging, synthesizing, and effectively communicating reliable and relevant research (9). It focuses on developing relationships and interactions among researchers, policymakers, and other stakeholders to remove barriers to research use and adapting information for different target audiences to improve its uptake (9). While research exists on the facilitators and barriers to the uptake of research evidence in EIP (e.g., 4-6,10-16), only limited evidence is available on frameworks and strategies to effectively communicate evidence for policy and practice change (17).

2. Aim of the scoping review

A scoping review will be carried out with the aim to systematically identify and map evidence (18) about needs, preferences, and perspectives of policy makers for receiving scientific information, as well as guidance, tools, and frameworks to support the communication on research evidence to them.

3. Methods

3.1. Criteria for considering studies for this review

Types of studies

- We will include qualitative and quantitative primary and secondary studies that investigate how policymakers prefer to receive information about research evidence.
- We will include studies about communication guidance, tools, and frameworks to support effective communication on research evidence strategies for decision makers.
- We will include studies regardless of when they were undertaken or published.
- We will include both published and unpublished studies in English, Portuguese, and Spanish languages.
- We will exclude studies published in other languages due to the very short timeline for this review.

Topic of interest

- We will include studies which refers to the needs, preferences, and perspectives of health policymakers as well as frameworks, guidance, tools and approaches for communicating research evidence to inform policy decision-making.

Types of participants

- We will include studies about policymakers from all levels of the health systems.
- We will exclude studies about other stakeholders like health professionals and health services users.

Types of settings

- We will include studies that collected data in any country, conducted in any healthcare setting, including community-based care, primary health facilities and any other level of care.

3.2. Search methods for identification of studies

- We will search the following electronic databases: Medlina (via PubMed), BVSalud, Embase, Cochrane Library, Health Systems Evidence (HSE), Social Systems Evidence (SSE), Epistemonikos and Scopus.
- Grey literature searches will be conducted to identify government documents, theses, dissertations, and abstracts published in conference annals, eligible for this scoping review. Sources of unpublished studies and grey literature to be searched will include the repository of the Opengrey and the Google Scholar (the first 10 pages).
- We will develop search strategies for each database. We will not apply any limits on language or publication date. We will search all databases from inception to the date of search. See Appendix for final search strategy for PubMed.

3.3. Selection of studies

- The selection will be carried out with the support of Rayyan QCRI (19).
- Two review authors will independently assess each title and abstract of the identified records to evaluate eligibility. We will resolve disagreements by discussion or, when required, by involving a third review author.
- We will retrieve the full text of all the papers identified as potentially relevant. One review author will then assess these papers and another one will check them.
- We will include a PRISMA flow diagram to show our search results and the process of screening and selecting studies for inclusion.
- We will present a table listing the references of studies that we excluded from our review at full-text stage, and the main reason/s for exclusion.

3.4. Extraction of study information and charting

- We will develop and pilot a data extraction form.
- One review author will extract and chart study characteristics and data into the categories of the data extraction form. One review author will check all extracted data.
- Where data is not available in relation to a category, we will indicate this as 'not reported'.

These categories will include the following:

- Study information (lead author, year of publication).
- Aim/s or objective/s.
- Study participants and settings (countries in which the research was undertaken, types of participants, healthcare setting/s in which the study was carried out).
- Methods: type of data collection (individual interviews, focus group discussions, document analysis, observation, other – specify, unclear); type of data analysis (thematic, framework, etc., unclear); type of communication way, e.g., policy briefs, messaging, media or data exchange.
- Results/findings: study findings regarding policymakers' view of the communications way of research results; checklists, frameworks, tools, or models about how to communicate research results to policymakers.

3.5. Collation, summary and reporting of the results

- Assessment of study quality: The quality appraisal of the published studies included will use the Joanna Briggs Institute critical assessment tools (https://jbi.global/critical-appraisal-tools), considering the methodological design of each study. Grey literature documents will be similarly evaluated, where appropriate.
- The review report will adhere to the Joanna Briggs Institute Reviewer's Manual (20) and follow the PRISMA Extension for Scoping Reviews (21). Figures and tables will be used as needed.

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Contributions of authors

TST, JOMB and MCB led the protocol elaboration. All authors revised and approved the protocol.

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Declarations of interest

Authors declare no known financial conflicts of interest.

Appendix 1: Search strategies for PubMed, 12 October 2021.

# Search	Strategy	Result
1	((((Knowledge Management) OR (Evidence-Informed Policy)) OR (use of evidence)) OR (know-do gap)) OR (knowledge translation)	2,327,212
2	((((Health Communication) OR (Information Dissemination)) OR (Communication Barriers)) OR (Communications Media)) OR (Communications)	1,010,440
3	(((((((Policy Making) OR (policymaker)) OR (policymakers)) OR (policymaker)) OR (policymakers)) OR (Decision Making)) OR (decision-maker)) OR (decision-makers)	481,363
4	((needs) OR (preferences)) OR (perspectives)	1,775,898
5	((((Checklist) OR (model)) OR (framework)) OR (guidance)) OR (tool)	4,991,420
1 AND 2 AND 3 AND 4 AND 5	((((((((Knowledge Management) OR (Evidence-Informed Policy)) OR (use of evidence)) OR (know-do gap)) OR (knowledge translation)) AND (((((Health Communication) OR (Information Dissemination)) OR (Communication Barriers)) OR (Communications Media)) OR (Communications))) AND ((((((((Policy Making) OR (policymaker)) OR (policymakers)) OR (policymaker)) OR (policymakers)) OR (Decision Making)) OR (decision-maker)) OR (decision-makers))) AND (((needs) OR (preferences)) OR (perspectives))) AND (((((Checklist) OR (model)) OR (framework)) OR (guidance)) OR (tool))	1,939