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Strategies for research capacity building by family physicians in primary healthcare: a scoping review protocol

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ABSTRACT

Introduction The qualities of primary healthcare (PHC) make it a very relevant environment for research; however, there is still work to be done to enhance the research capabilities of family physicians in healthcare units. Considering there is no ongoing review that specifically addresses this objective, the proposed goal of this scoping review is to determine the depth of the literature on the current strategies that support research capacity building among family physicians in the context of PHC.

Methods and analysis The scoping review will include studies from PubMed, Scopus, Web of Science, Cochrane Library and grey literature, published from 2008 to 2023, that address strategies to promote research capacity building among family physicians in the context of PHC. Only studies published in English, Portuguese or Spanish will be considered. All study designs, including quantitative, qualitative and mixed-methods studies, will be eligible for inclusion. The literature search will be performed from January to March of 2024 and data charting will employ a descriptive-analytical method, systematically summarising study objectives, methodologies, findings and implications. This protocol follows the Preferred Reporting Items for Systematic Reviews and Meta-Analysis Protocols and the review will employ the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for scoping reviews.

Ethics and dissemination This review does not need ethical approval. Peer-reviewed publications, policy summaries, presentations at conferences and involvement with pertinent stakeholders are all part of our outreach approach.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ The review employs a comprehensive and systematic approach by following the Preferred Reporting Items for Systematic Reviews and Meta-Analysis Protocols guidelines and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for scoping reviews. This ensures a thorough and methodologically sound exploration of the topic.

⇒ Including diverse study designs (quantitative, qualitative and mixed-methods) allows for a multidimensional understanding of research capacity-building strategies in primary healthcare.

⇒ The review is limited to articles published in English, Portuguese or Spanish, which may exclude relevant studies in other languages, potentially leading to language bias.

INTRODUCTION

The importance of medical research in primary healthcare (PHC), particularly in the context of family medicine, cannot be overstated. It is crucial for developing academic and clinical excellence while respecting the community's local contexts and needs.[1 2] Family medicine encompasses various fields, including epidemiological, clinical, socioeconomic, behavioural, educational and health services research, making it a unique and valuable clinical practice context.[3 4] Proximity to communities and continuity of care are essential aspects of PHC, with the potential to significantly impact population health and reduce morbidity and mortality.[3 5] Recognising the need to strengthen research capacity in PHC, the World Organization of Family Doctors has emphasised the importance of developing research infrastructure and expertise.[1 2 6 7]

Despite the significance of PHC and its research potential, there is still a considerable gap in research capacity within healthcare units and academic departments.[8] The proportion of family physicians engaging in research remains low compared with other specialties, largely due to inadequate infrastructure and support for research within the PHC context.[9] To address this gap, the European General Practitioners Research Network emphasises the need to build research capacity and identify strategies that promote research engagement among family physicians.[10 11]

To advance the understanding and implementation of research capacity-building strategies, a scoping review is vital to examine the existing strategies employed by family physicians in PHC. This scoping review aims to explore the literature extensively and identify the range of research capacity-building strategies specifically tailored to family physicians in the PHC setting. A preliminary search of relevant databases, including PubMed, the Cochrane Database of Systematic Reviews, the Joanna Briggs Institute (JBI) Evidence Synthesis, PROSPERO, the Centre for Reviews and Dissemination Database and the Campbell Library of Systematic Reviews, revealed no current or ongoing systematic reviews addressing the proposed objectives of this study. The upcoming scoping review intends to fill this knowledge gap and provide specific recommendations for enhancing research capacity in PHC, particularly among family physicians.

ELIGIBILITY CRITERIA

Participants

This review will consider studies that include family physicians working in PHC settings.

Concept

This review will consider studies that explore strategies aimed at building research capacity among family physicians in PHC, including but not limited to training programmes, mentorship, networking opportunities and funding support.

Context

This review will consider any setting or country where family physicians work in PHC.

Types of sources

This scoping review will consider any type of source that reports on the strategies for research capacity building among family physicians in PHC, including but not limited to research articles, reports, policy documents and grey literature. In addition, the reference list of all the studies included in the review will be screened for additional papers.

METHODS AND ANALYSIS

The protocol for this scoping review was conducted following the latest guidelines of the JBI methodology.[12 13] The final review will be reported following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) extension for Scoping Reviews guidelines.[14] This review protocol was registered in the Open Science Framework, where data can be accessed.[15]

Search strategy

Two of the reviewers and an information specialist developed the search strategy and another reviewed the proposed strategy. The search strategy will aim to locate both published and unpublished studies. The JBI recommends that a three-step search strategy be implemented.[16] An initial limited search of PubMed was undertaken to identify articles on the topic. The text words contained in the titles and abstracts of relevant articles, and the index terms used to describe the articles were used to develop a full search strategy for PubMed, Scopus, Web of Science, Cochrane Library (see online supplemental appendix I) and grey literature. The electronic search strategy, including all identified keywords and index terms, will be adapted for each included database and/or information source. The reference list of all included sources of evidence will be screened for additional studies.

Study/source of evidence selection

Following the search, all identified citations will be collated and uploaded into Rayyan and duplicates will be removed. Titles and abstracts will then be screened by three or more independent reviewers for assessment against the inclusion criteria for the review. Two or more independent reviewers will assess the full text of selected citations in detail against the inclusion criteria. The reasons for excluding sources of evidence, which do not meet the inclusion criteria at the full-text stage, will be documented and reported within the scoping review. Any disagreements that arise between the reviewers at each stage of the selection process will be resolved through discussion, or with an additional reviewer/s. In case there is a full article that is of interest and cannot be accessed, its author(s) will be contacted via email or ResearchGate.

Studies published in English, Portuguese and Spanish will be included to allow for a proper interpretation by the research team members. Due to the amount of existing primary information, it is deemed most appropriate to include studies published from 2008 to 2023. It is important to note that there is a greater probability of finding instruments that best suit the reality of the current world in this period, which was also crucial for the temporal decision.

A methodological quality assessment of the included studies will not be conducted, as our primary aim is to synthesise strategies for research capacity building among family physicians in PHC, drawing from a wide array of sources.[13 16]

The source selection process will be presented as a PRISMA flow diagram[14] where reasons for study exclusion will be pointed out throughout the process.

Data extraction

Data will be extracted from papers included in the scoping review by three independent reviewers, using a framework developed according to the JBI proposed template[16] and aligned with the objectives and research question. A draft extraction tool is provided in online supplemental appendix II; however, it may be further refined as the iterative process of data extraction takes place.[13 16]

As suggested by Levac *et al*,[17] to ensure consistency of data extraction, an a priori pilot charting of the first 5–10

studies will be performed by two reviewers, independent of each other. Any disagreements in data extraction will be resolved by a third reviewer.

The data from each study will be charted as follows: study details (author, year, country, context, type of study), strategies for the promotion of research development and consequences of implementing these strategies.

In case of missing data, the study author(s) will be contacted to request further information on the data, as supported by Arksey and O'Malley's framework.[18] In case of data duplication, the reviewers will choose to report the primary study.

Data analysis and presentation

First, a descriptive summary will be provided for each strategy concerning the number of studies included, years of publication, characteristics of the study populations and countries where the studies were conducted.

Second, the data collected will be presented in a diagrammatic or tabular form. Regarding the review question, the strategies will be displayed according to the context of implementation and consequences. A descriptive summary will be provided regarding the charted results in alignment with this scoping review's objective.[16]

Lastly, to maximise the usefulness of the scoping review findings, the reviewers will establish the review's strengths and limitations and consider any gaps found or the value of undertaking a systematic review on the topic.

Ethics and dissemination

In this scoping review, all data were sourced from publicly available materials; thus, additional ethical approval was not required. This approach aligns with standard ethical practices for literature reviews. The results of this study will be disseminated through publications in multidisciplinary journals, adhering to ethical norms for the sharing and dissemination of scientific information.

Patient and public involvement

Patient and public involvement (PPI) in research is crucial for ensuring that studies are aligned with the needs and preferences of the target population, promoting inclusivity and enhancing the impact of findings. In this scoping review, while the primary focus is on family physicians in PHC, we acknowledge the importance of incorporating patient and public insights to enrich the study's relevance and applicability.

During the initial stages of this protocol, we engaged with family physicians, particularly those with research experience, through semistructured interviews. These interviews provided valuable insights into the challenges and opportunities in research capacity building within PHC. Their experiences and feedback were instrumental in identifying key research gaps and focusing on the review.[19]

However, recognising the value of broader PPI, we also sought inputs from patients and the general public. This was done through the inclusion of patients in a steering group for the project. Their perspectives contributed to refining our research question and understanding the broader implications of research capacity building in PHC.

In the dissemination phase, we plan to organise a public forum to present our findings, targeting family physicians and policymakers and inviting patients and the general public. This will foster a more inclusive dialogue and ensure that the perspectives of all relevant stakeholders are considered in interpreting the results and developing strategic recommendations.

In summary, while family physicians were primarily consulted for their expertise in PHC research, the views of patients and the public were also incorporated to ensure a well-rounded approach to enhancing research capacity in PHC.

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Contributors The study was conceived by MGC and PN. The study design was contributed to by the following authors: MGC, IC, SSS, RCR, CRP, CR, PB-G and VP, who provided specific methodological expertise. The initial draft of the study protocol was prepared by MGC and IC. MGC, IC, RCR and VP conducted the required literature reviews. SSS developed the final search strategy for the PubMed, Scopus and Web of Science databases, and IC developed the final search strategy for the Cochrane Library. MGC, IC, RCR, SSS, CRP, CR, PB-G, VP and PN contributed to revising and refining the manuscript with significant intellectual input. All authors approved the final version of the manuscript and agreed to take responsibility for all aspects of the work.

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Competing interests None declared.

Patient and public involvement Patients and/or the public were involved in the design, or conduct, or reporting, or dissemination plans of this research. Refer to the Methods section for further details.

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