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INVOLVING STAKEHOLDERS IN RESEARCH PRIORITY SETTING: A SCOPING REVIEW PROTOCOL

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1. INTRODUCTION

Traditionally, researchers decide on the questions that research should answer most urgently. However, when it comes to the research needs of stakeholders, these decisions might be flawed: Researchers might choose the “wrong” relevant questions that do not match questions of relevance to stakeholders, which in turn may lead to ineffective use of scarce resources and hamper science’s impact on society (Chalmers & Glasziou, 2009). Key to align researchers’ priorities with stakeholders’ priorities and resolve possible mismatches of research priorities is “research priority setting”.

Research priority setting¹ encompasses any activities that involve identifying, prioritizing, and reaching consensus on research areas, topics, or questions of importance to stakeholders (Tong et al., 2019). Meaningfully involving stakeholders is hereby an indispensable part of the process (Viergever et al., 2010). Ultimately, research priority setting helps to make the most effective use of scarce resources, it ensures that critical evidence gaps are identified, it creates joint ownership of the research agenda and thus shared responsibility and accountability in implementing research agendas, and ultimately it promotes the relevance and legitimacy of research overall (Tong et al., 2019).

To date, several scoping reviews on research priority setting exercises exist. These reviews have all aimed at systematically compiling, analyzing and evaluating research priority setting exercises for the field of health. Some have done so for specific health subtopics (Bourne et al., 2018; Graham et al., 2020; Odgers et al., 2018; Rylance et al., 2010; Tong et al., 2015; Tong et al., 2017)². Others have looked at priority setting exercises conducted in specific geographical areas (Bryant et al., 2014; McGregor et al., 2014; Rudan et al., 2010; Tomlinson et al., 2011)³, during specific time periods (Swingler et al., 2005; Viergever et al., 2010; Yoshida, 2016)⁴, or fulfilling a mix of parameters (Reveiz et al., 2013; Yasamy et al., 2016)⁵. And lastly, other studies have reviewed specific design characteristics of priority setting exercises (Cromwell et al., 2015; Kaur et al., 2019; Manafo et al., 2018; Manafo et al. 2018; Mitton et al., 2009)⁶.

An exhaustive and comprehensive overview of any exercises in which stakeholders were involved in setting research priorities - not only for the field of health - is yet missing. This study thus aims to

¹ The terms “research agenda setting”, “resource allocation” and “rationing” are sometimes synonymously used with research priority setting.

² Bourne et al., 2018: musculoskeletal conditions; Graham et al., 2020: women’s health; Odgers et al., 2018: childhood chronic diseases; Rylance et al., 2010: tuberculosis; Tong et al., 2015: kidney disease; Tong et al., 2017: organ transplantation

³ Bryant et al., 2014: Australia, Canada, UK, USA; McGregor et al., 2014: low- and middle-income countries (LMICs); Rudan et al., 2010: LMICs; Tomlinson et al., 2011: LMICs

⁴ Swingler et al., 2005: years 1190 to 2002; Viergever et al., 2010: years 2005 to 2010; Yoshida, 2016: years 2001 to 2014

⁵ Reveiz et al., 2013: Latin America and Caribbean, years 2002 to 2012; Yasamy et al., 2016: mental health, LMICs

⁶ Cromwell et al., 2015: prioritization criteria; Kaur et al., 2019: prioritization criteria; Manafo et al., 2018: patient and public involvement and engagement (PPIE); Manafo et al., 2018: PPIE; Mitton et al., 2009: PPIE

describe, synthesize and evaluate research priority setting exercises worldwide with a particular focus on how stakeholder involvement - the most crucial element in these exercises - has been designed and implemented. Mapping out the complex landscape of stakeholder involvement in research priority setting exercises may ultimately guide future efforts to involve stakeholders effectively, inclusively, and transparently in priority setting exercises, which in turn may increase the overall value of research for society.

2. RESEARCH QUESTIONS

Aim of this scoping review is to map out stakeholder involvement in research priority setting exercises exhaustively. The review questions therefore touch three broad areas of interest: (1) the basic setup of these exercises, (2) the design of stakeholder involvement, and (3) the implementation of stakeholder involvement. The specific review questions thus are: (1) How did the basic setup of these priority setting exercises look like? More precisely: (1.1) For which research topics and in which countries were stakeholders involved? (1.2) Which stakeholder groups were involved? (1.3) What were the outcomes of these exercises? (2) What role did stakeholder involvement play in the design of these exercises? More specifically: (2.1) How far did the objectives, rationales and governance structure of these exercises reflect the importance of stakeholder involvement? (3) What role did stakeholder involvement play during the implementation of these exercises? More specifically: (3.1) How were the specific methods and approaches to elicit stakeholders' research priorities designed?

3. INCLUSION AND EXCLUSION CRITERIA

The scoping review will consider all manuscripts regardless of publication status or source (e.g., peer-reviewed journal articles, grey literature) that report how research priority setting exercises were designed and implemented. No study design limits will be imposed. Secondary sources (e.g., systematic literature reviews, narrative reviews) will be excluded.

In order to comprehensively and exhaustively map out the landscape of research priority setting exercises, this scoping review will not be limited in terms of geography, topical focus, organizational set-up or time frame. In other words, all priority setting exercises on any research topic, implemented by any global, national or local organizations, research groups or individual researcher, without any time restrictions will be included. Language of publication will be restricted to the English language.

4. SEARCH STRATEGY

A comprehensive electronic literature search will be conducted from June to July 2020. To minimize any possible biases, several electronic databases will be searched, from inception to June/July 2020. The searches will be updated prior to submitting the final version of the scoping review to a journal. The databases are: PubMed, Scopus and Web of Science. Reflecting the importance of the grey literature, the following sources will additionally be screened: Google Scholar, the website of the James

Lind Alliance, the website of the Cochrane Priority Setting Methods Group, and the website of the WHO priority setting methods. The following English keywords will be searched for in titles and abstracts: “priority setting”, “research priorit*”, “priority research”, “research agenda setting”, “agenda setting + research”, “agenda setting + priorit*”, “research agenda + priorit*”, “resource allocation + priorit*”, “allocation of resources + priorit*”, and “rationing + priorit*”.

5. STUDY SELECTION

After the literature search is conducted and duplicates are removed, titles and abstracts of each study will be screened for eligibility according to the inclusion criteria outlined above via an automated approach. Validity and reliability of this approach will be thoroughly tested. Studies that may meet the inclusion criteria will be retrieved in full. The review decision process will be presented in a PRISMA flowchart.

6. DATA EXTRACTION

Data from all eligible studies will be extracted using a data abstraction form aligned to the objectives and research questions of this review. This form has yet to be developed specifically for this scoping review. It will be piloted on 25 studies. The reviewer will then independently chart the data, and continuously update the data-charting form in an iterative process.

7. DATA PRESENTATION

The extracted data will be described in relation to the objectives and research questions of this scoping review. The results will be presented in tabular form (e.g., simple frequency counts) accompanied by charts and figures, and a narrative summary based on more advanced analyses (i.e., descriptive qualitative content analysis).

REFERENCES

- Bourne, A. M., Johnston, R. V., Cyril, S., Briggs, A. M., Clavisi, O., Duque, G., ... & Buchbinder, R. (2018). Scoping review of priority setting of research topics for musculoskeletal conditions. *BMJ Open*, 8(12), e023962. DOI: 10.1136/bmjopen-2018-023962
- Bryant, J., Sanson-Fisher, R., Walsh, J., & Stewart, J. (2014). Health research priority setting in selected high income countries: A narrative review of methods used and recommendations for future practice. *Cost Effectiveness and Resource Allocation*, 12(23). DOI: 10.1186/1478-7547-12-23
- Cromwell, I., Peacock, S. J., & Mitton, C. (2015). ‘Real-world’ health care priority setting using explicit decision criteria: a systematic review of the literature. *BMC Health Services Research*, 15(1), 1-11. DOI: 10.1186/s12913-015-0814-3

- Graham, L., Illingworth, B. J., Showell, M., Vercoe, M., Crosbie, E. J., Gingel, L. J., ... & Duffy, J. M. (2020). Research priority setting in women's health: a systematic review. *BJOG: An International Journal of Obstetrics & Gynaecology*, 127(6), 694-700. DOI: 10.1111/1471-0528.16150
- Kaur, G., Prinja, S., Lakshmi, P. V. M., Downey, L., Sharma, D., & Teerawattananon, Y. (2019). Criteria used for priority-setting for public health resource allocation in low- and middle-income countries: A systematic review. *International Journal of Technology Assessment in Health Care*, 35(6), 474-483. DOI: 10.1017/S0266462319000473
- Manafò, E., Petermann, L., Mason-Lai, P., & Vandall-Walker, V. (2018). Patient engagement in Canada: A scoping review of the 'how' and 'what' of patient engagement in health research. *Health Research Policy and Systems*, 16(1), 1-11. DOI: 10.1186/s12961-018-0282-4
- Manafò, E., Petermann, L., Vandall-Walker, V., & Mason-Lai, P. (2018). Patient and public engagement in priority setting: A systematic rapid review of the literature. *PloS ONE*, 13(3), e0193579. DOI: 10.1371/journal.pone.0193579
- McGregor, S., Henderson, K. J., & Kaldor, J. M. (2014). How are health research priorities set in low and middle income countries? A systematic review of published reports. *PloS one*, 9(10), e108787. DOI: 10.1371/journal.pone.0108787
- Mitton, C., Smith, N., Peacock, S., Evoy, B., & Abelson, J. (2009). Public participation in health care priority setting: A scoping review. *Health Policy*, 91(3), 219-228. DOI: 10.1016/j.healthpol.2009.01.005
- Odgers, H. L., Tong, A., Lopez-Vargas, P., Davidson, A., Jaffe, A., McKenzie, A., ... & Craig, J. C. (2018). Research priority setting in childhood chronic disease: a systematic review. *Archives of Disease in Childhood*, 103(10), 942-951. DOI: 10.1136/archdischild-2017-314631
- Reveiz, L., Elias, V., Terry, R. F., Alger, J., & Becerra-Posada, F. (2013). Comparison of national health research priority-setting methods and characteristics in Latin America and the Caribbean, 2002-2012. *Revista Panamericana de Salud Pública*, 34(1), 1-13.
- Rudan, I., Kapiriri, L., Tomlinson, M., Balliet, M., Cohen, B., & Chopra, M. (2010). Evidence-based priority setting for health care and research: Tools to support policy in maternal, neonatal, and child health in Africa. *PLoS medicine*, 7(7), e1000308. DOI: 10.1371/journal.pmed.1000308
- Rylance, J., Pai, M., Lienhardt, C., & Garner, P. (2010). Priorities for tuberculosis research: a systematic review. *The Lancet Infectious Diseases*, 10(12), 886-892. DOI: 10.1016/S1473-3099(10)70201-2
- Swingler, G. H., Irlam, J. H., Macharia, W. M., Tietche, F., & Meremikwu, M. M. (2005). A systematic review of existing national priorities for child health research in sub-Saharan Africa. *Health Research Policy and Systems*, 3(1), 7. DOI: 10.1186/1478-4505-3-7
- Tomlinson, M., Chopra, M., Hoosain, N., & Rudan, I. (2011). A review of selected research priority setting processes at national level in low and middle income countries: Towards fair and legitimate priority setting. *Health Research Policy and Systems*, 9(1), 1-7. DOI: 10.1186/1478-4505-9-19

- Tong, A., Chando, S., Crowe, S., Manns, B., Winkelmayer, W. C., Hemmelgarn, B., & Craig, J. C. (2015). Research priority setting in kidney disease: A systematic review. *American Journal of Kidney Diseases*, 65(5), 674-683. DOI: 10.1053/j.ajkd.2014.11.011
- Tong, A., Sautenet, B., Chapman, J. R., Harper, C., MacDonald, P., Shackel, N., ... & Craig, J. C. (2017). Research priority setting in organ transplantation: A systematic review. *Transplant International*, 30(4), 327-343. DOI: 10.1111/tri.12924
- Viergever, R. F. (2010). *Health Research Prioritization at WHO: An Overview of Methodology and High Level Analysis of WHO Led Health Research Priority Setting Exercises*. Geneva: World Health Organization.
- Yasamy, M. T., Maulik, P. K., Tomlinson, M., Lund, C., Van Ommeren, M., & Saxena, S. (2011). Responsible governance for mental health research in low resource countries. *PLoS Med*, 8(11), e1001126. DOI: 10.1371/journal.pmed.1001126
- Yoshida, S. (2016). Approaches, tools and methods used for setting priorities in health research in the 21st century. *Journal of Global Health*, 6(1), 010507. DOI: 10.7189/jogh.06.010507