

## Editorial

# Maximizing impact of health research for improving quality, safety and outcomes of health care services: The way forward

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## Article Information

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## Introduction

Research is a core function of healthcare. Research reduces the uncertainties and improves the evidence base thus leading to improvements in patient outcomes and the quality and safety of the healthcare services.<sup>1</sup>

The World Health Organization (WHO) defines Health Research as “a systematic collection or analysis of data to develop generalizable knowledge to understand health challenges and mount an improved response to them”.<sup>1</sup> The UK Policy Framework for Health and Social Care Research expresses research as “an attempt to derive generalizable or transferable new knowledge to answer or refine medical, social, and economically relevant questions with scientifically sound methods”.<sup>2</sup>

Healthcare research uses a variety of methodologies to generate new knowledge, which includes clinical trials to evaluate the quality, safety, and effectiveness of medicines; translational research where evidence from basic research is developed into results that directly benefit people; research to support the decisions of policy-makers in terms of health care costs and their applications; observational studies to assess the disease patterns and risk factors; public health, and social care research to study the outcomes of healthcare interventions, etc.<sup>2</sup>

Research reinforces all advances in healthcare and is the basis for evidence-based practice.<sup>3</sup> Furthermore, research is the cornerstone of the invention of new medicines and healthcare interventions introduced.<sup>2</sup> The United Kingdom plays a lead role in research and inventions in healthcare, with around 25% of the world's top 100 prescription medicines being discovered and developed in the UK.<sup>2</sup>

Research led to the discovery of many of the cutting-edge vaccines and medicines in use today.<sup>3</sup> The use of dexamethasone for COVID-19, the first proven treatment against the ‘cytokine storm’, resulted from research, which saved millions of lives worldwide during the pandemic.<sup>3</sup>

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Further, the policy-makers and health administrators need evidence to support and implement the decisions around delivering and transforming healthcare services.<sup>1</sup> Evidence supportive of superior health outcomes with cost benefits could be considered to inform policy changes.

### **Quality, safety, and outcomes of health care services**

The safety of all healthcare interventions performed on patients is of utmost importance. Literature provides evidence for circumstances where certain interventions resulted in serious adverse effects and poor patient outcomes.<sup>3</sup>

New evidence generated from research ensures the delivery of the best possible care to patients by selectively employing the most effective and safe interventions. In this context, the research plays a pivotal role in prior recognition, thereby minimizing the incidence of unforeseen and deleterious events among patients. The previous literature reports a lower incidence of mortality rates in research-active hospitals due to the implementation of healthcare practices supported by the research findings.<sup>3</sup>

### **The way forward to maximize the impact of healthcare research**

Recognition of the health problem and its cause/s, development of solution/s, implementation of solutions or evidence into policies or practice, and evaluation of the effectiveness of solutions are the key areas of focus in health research.<sup>1</sup> However, the ultimate benefit of health research lies in its translation into practice that is effectively and appropriately delivered for the benefit of the people.<sup>1</sup>

An integrated, systematic, collaborative approach to research is recommended, while recognizing the gaps in knowledge in the prioritized areas of healthcare services, locally and nationally.<sup>3</sup> Further, it is recommended to utilize the knowledge generated to promote evidence-based practice improving the quality, safety, and outcomes of healthcare services. The same could influence policymakers to address priorities and needs, set up and fund national-level research projects, and develop a research-oriented workforce in the country.

### **Recognizing gaps in the knowledge base**

Premeditated needs assessments at the local or national level are recommended at the planning stage to recognize research priorities.<sup>3</sup> The gaps in the knowledge base are identified through observations, learned from experts,

stakeholders, and previous research at local, national, and international levels. Evidence gathered should be used to formulate research questions and to design appropriate research methodologies to facilitate efficient evaluation of interventions to find solutions to answer gaps in the knowledge base.

### **Translating research evidence into practice**

Research utilization is a process of “transforming research knowledge into practice”.<sup>5</sup> Research findings can be utilized to implement evidence-based changes to practice by incorporating them in future health interventions, clinical guidelines, accreditation programs, and knowledge transfer.<sup>5</sup> Gaps in implementing research findings need to be understood and attempts should be made to translate evidence into practice to avoid the wastage of valuable resources spent on research. Researchers, clinical leaders, and policy-makers should be brought together to work collaboratively to promote the use of research evidence for quality improvement in healthcare services.<sup>1</sup> Patients and public-targeted health education and awareness programs are another means of translating research findings into accessible information for the benefit of the public and patients.

### **Disseminating findings of research**

Research done is wasted if the evidence generated is not disseminated and informed to the stakeholders of the healthcare system. Dissemination of evidence is crucial to ensure the maximum impact and utility of research evidence.<sup>3</sup> To reap the benefits of research, effective and efficient methods of sharing and delivery must be planned. Sharing of research findings through presentations, conferences, webinars, CPD programs, etc., and publishing in peer-reviewed journals, and newsletters are recommended. Moreover, efficient sharing of existing or new knowledge reinforces future inventions and innovations.

### **Involving patients and the public in research**

In research settings where people and communities are directly involved, public and patient involvement (PPI) has increased in the recent past. PPI is viewed as indispensable to improving the value and relevance of research.<sup>3,6</sup> PPI in research facilitates the identification of research needs, design of research, and recruitment of participants. Additionally, it promotes the dissemination and awareness of findings among all stakeholders.

### **Engaging healthcare workers and organizations in health research**

Engaging clinicians, healthcare workers, and organizations in health research facilitate the promotion of overall

standards of healthcare delivery and the growth of collaborative research networks<sup>3,7</sup>. Having a research-driven healthcare setting with staff competent in generating new research, and implementing actionable research into practice is key to establishing and sustaining a promising research culture. Training and education in research methodology for capacity building, and promoting research careers to support clinical or care roles within the healthcare system are critical steps to maximize the benefits. Apart from transforming healthcare services, staff who are involved in research have shown greater satisfaction, potential for recruitment, and retention in the job.<sup>3</sup> Current evidence vouches for the improvements made to healthcare performance through the collaborative engagement of individuals and healthcare organizations in health research.<sup>7</sup>

## Conclusions

Research is a key element of healthcare that underpins evidence-based practice, potentially promoting safety, quality, and outcomes of care services. The impact of health research could be maximized by adopting a pro-research culture promoting research in prioritized areas and generating and translating evidence to practice through efficient sharing with the stakeholders including patients and the public. Engagement and capacity building

of the health workforce in research, reinforce and facilitate the sustenance of evidence-based practice through their commitment to ensure the well-being of patients and the public.

## References

1. World Health Organization (WHO) – Research for health. <https://www.who.int/Health-topics>
2. UK Policy Framework for Health and Social Care Research.
3. Maximizing the benefits of research: Guidance for integrated care systems. Publication reference: PR1662 <https://www.england.nhs.uk/long-read/maximising-the-benefits-of-research/>
4. The Value, Importance, and Oversight of Health Research. <https://www.ncbi.nlm.nih.gov/books/NBK9571/>
5. Davies B, Dobbins M, Edwards N, Griffin P, Ploeg J, Skelly J, Virani T. Methods for assessing the sustained use of research evidence in practice. <https://abstracts.cochrane.org/search?f%5B0%5D=year%3A16>
6. Antoine Boivin et al. Evaluating patient and public involvement in research. *BMJ* 2018; **363**: k5147. doi: 10.1136/bmj.k5147
7. Boaz A, Hanney S, Jones T, Soper B. Does the engagement of clinicians and organizations in research improve healthcare performance: a three-stage review. *BMJ Open*. 2015; **5**(12): e009415. doi: 10.1136/bmjopen-2015-009415. PMID: 26656023; PMCID: PMC4680006