



## Enhancing Research Funding Efficiency and Equity in Higher Health Education Institutions: A Policy Brief

### Executive summary

- Challenges to funding in health research at higher education institutes (HEI) are multidimensional: inadequate budget allocation, regional disparities, unclear research priorities, duplication of efforts, inconsistent grant eligibility criteria, and a lack of accountability and transparency.
- HEIs should institutionalize a priority-setting process with periodic reviews, develop centralized and transparent research databases to avoid redundancy, incentivize research that aligns with national priorities, and ensure transparency and accountability through regular audits and public access to funding information.
- Collaboration among national research governing bodies, academic institutions, and funding agencies is essential to implement these measures and enhance the impact of health research

## Introduction

Addressing the problems of research funding in higher education institutions (HEIs) is crucial for ensuring healthy lives and promoting well-being for all ages, a focus point for the Sustainable Development Goal (SDG) 3. While HEIs are central to advancing medical knowledge, developing new treatments, and improving public health policies, the current funding systems' inefficiencies and biases hinder these institutions' ability to support groundbreaking health research (Sörlin, 2007). When deserving projects are overlooked due to systemic biases or an overly complex or insufficient funding process, innovative solutions to critical health issues could be stifled. This directly impacts the quality and scope of health research outputs from HEIs, limiting their contributions to addressing pressing global health challenges.

Funding for health research flows through various channels, including government agencies and philanthropic organizations like the Bill and Melinda Gates Foundation (BMGF), the Wellcome Trust, and the National Institute for Health Research (NIHR). These organizations significantly contribute to health research funding. For instance, BMGF provides funding for research capacity development, studies on disease epidemiology, discovery research, and large-scale projects involving new technologies and medical formulations (Charani et al., 2022). Monitoring and evaluating how these research funds are utilized is essential to ensuring that projects deliver their intended outcomes and contribute to advancing public health goals.

HEIs have a significant responsibility to act and enhance their contributions to health and well-being research, being centers of learning and knowledge dissemination. They play a pivotal role in training the next generation of healthcare professionals and researchers. Moreover, HEIs typically have access to significant resources, including expert faculty and state-of-the-art research facilities, positioning them to make meaningful contributions to the field. They function as a link between patients, students, and industry.

Biases in funding allocation create barriers for emerging scholars, particularly those from underrepresented groups, thereby perpetuating inequities and limiting diversity within the health research community. This has long-term implications for the inclusivity and richness of academic and research environments in HEIs. Addressing these funding issues is essential to ensuring HEIs can effectively support and nurture future health and well-being research leaders. Additionally, HEIs' involvement in health research often includes hosting incubation centers where prototypes can be developed into translational products, bridging the gap between research and practical application (Guerrero, 2017). Efficient funding processes enable HEIs to contribute more effectively to national health goals and community well-being. Thus, addressing the challenges in research funding also maximizes their positive impact on public health and societal well-being, in line with the objectives of SDG 3.

## Current Challenges

Higher education institutes, particularly those in low and middle-income countries, face significant challenges in the grant funding process for medical research. The institutions often allocate only a small share of their overall budget to research. This is evidenced by the national spending on health R&D, which is between 5-15% of research spending for most regions in the world. Moreover, stark disparities exist between regions, with underfunding most prevalent in regions with the highest need (Global Observatory on Health Research and Development, World Health Organisation, 2024). Higher education institutions, as major recipients of biomedical research grants, are in a unique position to address these challenges by adopting fair and transparent grant budgeting policies. Such policies are essential for optimizing the use of available resources, ensuring equitable access to funding, and promoting high-quality and impactful research. (Global Observatory on Health Research and Development, World Health Organisation, 2023).

A primary issue is the lack of clear research priorities due to inadequate needs assessments and insufficient stakeholder consultation. This ambiguity can lead to misaligned funding, where resources are not directed toward the most pressing and impactful research areas. Consequently, the potential of HEIs to contribute to critical health advancements is diminished, and innovative solutions to significant health issues may be overlooked (Millum, 2024). Another major challenge is the duplication of research efforts, resulting from a lack of coordination and connectivity between HEIs. Research is often conducted in isolation, leading to situations where multiple institutions unknowingly pursue the same or very similar projects. This fragmentation not only wastes valuable resources but also dilutes the overall impact of research outputs. By failing to leverage synergies and collaborative innovation, HEIs miss out on the benefits that could arise from shared knowledge and resources.

Moreover, HEIs need a balanced approach that distributes funds across research projects, capacity building, and infrastructure development. Without strategic allocation, resources may be unevenly spread, leading to inefficiencies and gaps in research capabilities. Establishing fair and transparent eligibility criteria for research grants is crucial for ensuring equity in funding distribution. Inconsistency in the allocation process can discourage promising researchers, particularly those from underrepresented groups, from applying for grants, thereby perpetuating existing disparities within the academic community. This problem directly results from the limited availability of information regarding the allocation and expenditure of research budgets.

Most HEIs have a competitive grant process based on merit and potential impact, however, it lacks accountability and transparency, resulting in potential favoritism and inefficiency (Liwanag et al., 2023). This is further complicated by a lack of standardized performance metrics, making evaluating the success and impact of funded research projects difficult. Without a centralized platform to track and share research activities, HEIs inadvertently embark on redundant projects, hampering scientific progress.

Addressing these policy gaps is critical for improving the management of research funding in HEIs. Implementing a comprehensive research database could mitigate this issue. Maintaining clear and accessible records will enable HEIs to demonstrate the effective use of funds, fostering confidence among stakeholders. Additionally, it may enable the government to leverage domestic evidence and expertise to significantly improve the nation's health outcomes, aligning with Sustainable Development Goal 3 (SDG 3) (Research Consulting, n.d.).

## Solutions



### **1. Institutionalize a priority-setting process and periodically review research priorities.**

The governing body for health research in a national context, such as the Nepal Health Research Council in the Nepalese context, should work together with research stakeholders to co-create a priority setting and institutionalize the priority-setting process within the national framework. Given that research priorities can evolve, the governing body should also create an operational guideline that clearly outlines who will take the lead in reassessing these priorities, the criteria to be used in defining priorities, the frequency of such reviews, and the procedures to be followed.

### **2. Develop Centralized, Transparent Research Repositories and Databases.**

To ensure complementary research efforts and avoid redundancy, HEIs could establish robust networks for collaboration, in addition to the necessity for platforms for several purposes, the basic of which is the communication of ongoing research work to avoid duplication. As a production of this network, a centralized transparent research repository and database can be developed.

This repository could include:

**a. Research is being undertaken, and expertise is available.**

The absence of a comprehensive database of ongoing research activities and available expertise hampers the ability to pool resources and knowledge effectively, leading to inefficiencies in health research. This also results in the duplication of research initiatives, causing a waste of resources that could be better utilized elsewhere. Therefore, a network of academic institutions or a process led by the national governing body should take the initiative to develop a comprehensive database of ongoing research and maintain a repository of completed studies organized by priority areas. This effort also aids in identifying areas where evidence is already abundant and those that require additional research, thus enabling the periodic review of research priorities.

**b. Budget allocation and expenditure.**

Maintaining the budget allocation and expenditure database of research initiatives promotes transparency, makes academic institutions more accountable, and thus promotes fiscal discipline. Apart from having details on ongoing research and expertise, the database should also be designed to include data on budget allocation and expenditure. This can assist in mapping the flow of resources within the health sector, understanding changes in the financing landscape over time, identifying resource gaps, and developing strategies to secure additional resources for health research.

A network of academic institutions or the national research governing body can spearhead this process, ensuring that the data is publicly accessible while safeguarding sensitive information from disclosure.

**3. Incentivize research that aligns with national priorities.**

Developing a specific list of health research priorities and creating a national database can help align research initiatives with national goals. While a country cannot dictate the focus of all research, it can encourage alignment with national priorities through various incentives. Policy measures to achieve this alignment may vary by country but could include the following strategies:

- Directing national funding towards periodically updated priority areas. Countries can set grant criteria such that research that fosters innovation in national priorities is more likely to be awarded.
- Encouraging universities to align PhD and other academic research with national priorities by offering additional funding for research projects that adhere to these priorities.
- Offering technical support, capacity building, or additional funding for research that aligns with national priorities.
- Reducing ethical clearance fees for research that aligns with these priorities.

**4. Audit and ensure transparency of resources spent on health research.**

To ensure that academic institutions and other research organizations effectively utilize resources for health research, regulatory agencies should mandate internal and external audits. Additionally, funding-related

information such as research topics, total grants received, grant recipients, total expenditures, and research deliverables should be linked to a national database and made publicly accessible to enhance transparency in research initiatives.

## Recommendations

### **Recommendations for national research governing bodies**

- Take initiatives to co-create a priority-setting process engaging diverse stakeholders, including academic institutions, bilateral/multilateral partners, funding agencies, for-profit or not-for-profit research organizations, and experts at a national level and identify strategies to institutionalize priority setting process within the national research framework/system
- Formulate a policy document outlining strategies to align ongoing research activities with national research priorities. This may include initiatives to incentivize research activities that align with national priorities, like waiving or subsidizing ethical clearance fees or supporting capacity development initiatives for researchers.
- Develop (or help the network of academic institutions develop) a centralized research repository and database that includes ongoing research activities, available expertise, and completed studies categorized by priority areas.

### **Recommendations for academic institutions**

- Take initiatives to align PhD and other research with national priorities. Academic institutions should organize regular interaction programs regarding national priorities for health research to ensure that research scholars within the institutions are well informed of the evidence gap at a national level.
- Encourage affiliated researchers to consider national research priorities while applying for research calls at the national and international levels. Also, consider mapping the expertise and facilitating the pull of research expertise for undertaking research within the institution.
- Undertake internal audit of the research expenditure within the institution, make the data publicly accessible, and ensure transparency and fiscal discipline within the institution

### **Recommendations for funding agencies and multilateral/ bilateral partners**

- Take into account national research priorities when making funding-related decisions. This could serve as one of several criteria for determining funding allocations.
- Ensure transparency by requiring fund recipients to maintain transparency regarding research expenditures and knowledge products.



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