The Academy of Medical Sciences

Academy of Medical Sciences response to UK International Development White Paper: Call for Evidence – Deadline 16 September 2023

Q1. How do partnerships need to change to restore the credibility of international development and the multilateral system and regain the trust of Global South?

What role should the UK play in this and what specifically should we do differently?

What should we do to ensure we are listening better to those most in need?

In the Academy's response to the House of Commons' International Development Committee Inquiry into the future of UK Aid (2021), the Academy highlighted the contribution of Official Development Assistance (ODA) funds towards R&D and the detrimental impacts of the reduction in ODA from 0.7% to 0.5% of Gross National Income (GNI) (https://acmedsci.ac.uk/file-download/60264020).[1] For example, UKRI was faced with a £120 million gap between funding received and existing commitments in 2021-22, resulting in cuts to existing projects that had already started. Many of the ODA funded UKRI projects support medical research advances which have contributed to global health, such as developing technologies and education to reduce HIV transmission in sub-Saharan Africa and helping and empowering Brazilian researchers to understand and mitigate the impact of Zika virus (https://acmedsci.ac.uk/file-download/60264020) . Even this temporary reduction in ODA, projected to last until 2027/28 (SN03714.pdf)[2], will have lasting consequences for the UK science base and its ability to address international health challenges and achieve the UK's ODA and global priorities. Additionally, this research in overseas countries also protects the UK from threats posed by issues such as infectious diseases and antimicrobial resistance. The UK needs to build back the trust that has been lost following these cuts and country partners need to see that the UK's support is not short-term or volatile. As a first step, the UK government should return to spending 0.7% of GNI on ODA within the next Parliament and explore mitigation measures to address the detrimental impacts of reducing the ODA budget.

Although the damage from these cuts has persisted in the form of eroded trust from those in the Global South, there is an opportunity to reframe and change these relationships and partnerships for the better. At the centre of this, partnerships need to be equitable, with meaningful engagement that reflects Global South priorities and concerns. They should also be long-term and aimed at capacity strengthening, to enable the development of local researchers that can have a long-term benefit to a country's development. The UK is able to play a crucial role in this by focusing its ODA funding to support programmes that connect and empower researchers from the UK and around the world to work together on new ways to solve complex global challenges. For example, the Academy's Networking Grant scheme allows researchers from across disciplines, and from developing countries and the UK, to hold networking events to forge new links and generate innovative transdisciplinary research ideas to address global challenges (https://acmedsci.ac.uk/grants-and-schemes/grant-schemes/gcrf-networking-grants)[3]. Through supporting schemes such as these, the UK can help ensure the voices of researchers in countries of most need are heard and acted upon in the future.

Q2. What are the specific innovative proposals that can accelerate progress in international development?

What initiatives, policies, partnerships, or technologies could result in accelerated progress?

Are there big ideas on which the UK is particularly well placed to play a role?

Innovation will underpin progress in international development now and in the future. The Academy Fellows that we consulted, highlighted a number of important innovations in areas including implementation science, vaccine development, detection and management of mental health, antimicrobial resistance, optimising community health workers in managing chronic diseases outside the hospital system and developing effective communication strategies between countries.

Progress has been made in research capacity strengthening, through opportunities available for researchers in low- and middle-income countries. It is important that the increased expertise now available in low- and middle-income countries is recognised by high-income partners through continued support for researcher capacity strengthening as a means of accelerating progress. The need for effective bilateral relationships and initiatives that support elements of the whole pipeline on healthcare - from Research and Development (R&D) through to delivery of interventions was also identified. Other priorities highlighted by the Academy's Fellows included:

- Development of systems for data for collection, analysis, and curation, including technical capacity and the need to build public trust in the collection and use of data.
- Increasing the diversity of populations studied, for example in genomics.
- Greater public and patient involvement and engagement (PPIE) in research.
- Taking a life course approach for health and care research and policies.
- Developing opportunities for technology transfer (diagnostics, therapeutics, vaccines, digital).
- Developing technologies that can access marginalised populations, such as point of care diagnostics and treatments delivered at home or in peripheral settings.
- Mitigation and adaptation approaches for tackling climate change.
- Exploring different models of care (primary, secondary and tertiary) and where traditional roles of doctors, nurses and medical officers are broken down, as well as looking at the role of telemedicine especially when considering these.

In the Academy's input into the development of the Integrated Review (2020), the submission outlined that the UK is particularly well placed to play a role in data and digital solutions for health, brain, and mind disorders, global health security, and climate change. Our Fellows also highlighted additional areas where the UK is well placed to play a role including the large-scale use of genomics; clinical trial platforms that have generalisability; and early warning systems for emerging health challenges (which includes environmental, communicable, and non-communicable challenges).

Q3. What new ideas for development cooperation would make the biggest impact in, or for, low income countries?

What are the best ideas to accelerate progress for middle income countries which still have large numbers of poor people?

Ideas for development cooperation that would make the biggest impact for low-income countries include the development of long-term, costed health workforce education systems and future service delivery model thinking which consider opportunities for innovations in technology and workforce. Other suggestions shared by our Fellows, include long-term partnerships to develop health information analytic capabilities, and linked 'health intelligence' which applies insight gained from analysis to actions to ensure decisions are based on evidence – these might require innovative partnerships between government, academic communities, and civil society. Linked to this, exploring opportunities to align health data with civic data to form civic data cooperatives, where data can be accessed, linked, and analysed securely. Other ideas could focus on optimising health infrastructure for sustainability, environmental protection (including waste-management), safety and well-being. Additionally, ideas around implementation science for approaches which are known to be cost effective in other settings could have impact in low-income countries.

Ideas to accelerate progress for middle-income countries should be centred around equity focused solutions, for example research to determine how to improve the health of the poorest and most vulnerable in these countries. As noted in a 2019 Academy workshop in partnership with the InterAcademy Partnership, "Achieving universal health coverage in LMICs: The role of quality-of-care research", a key part of this is universal health coverage, which is also needed in low-income countries, to ensure everyone has access to basic health interventions – including both preventative and curative services. Policies and initiatives should also have a life course approach focused on the social determinants of health, and therefore the focus should include early life. Broader ideas beyond health, include addressing problems of unhealthy living environments and ensuring access to education is available to all children to accelerate progress (https://acmedsci.ac.uk/file-download/93434328).[4] In relation to middle-income countries, there may also be scope for matched funding.

Q4. How can Official Development Assistance (ODA) be most effectively targeted and built upon?

How can non-ODA financing be mobilised to ensure ambitious, innovative, and transformational international development?

As mentioned in response to question 1, the UK government should reinstate ODA to 0.7% of GNI within the next Parliament and explore mitigation measures to address the detrimental impacts of reducing the ODA budget. The continued investment of ODA funds is vital to the UK's ability to lead efforts to tackle global challenges, including by investing these funds in research to improve global health and strengthen research. Furthermore, ODA will be most effective when there is sustainability around funding, enabling long-term development and closer partnerships with recipient countries.

Additional considerations around ODA funding can include identifying a mechanism to be able to fund LMICs directly, and opening opportunities for ODA funds to be used to support infrastructure in LMIC institutions. Furthermore, ODA focus areas should be those which are both underserved and burdensome and/or projected to become increasingly burdensome e.g., poor mental health, non-communicable disease, and where the UK has greatest expertise to assist.

It is also important that ODA funded projects should add value to the efforts of the multilateral system, and effective evaluation and lesson learning should be built in to ensure value for money. Another innovation could be to include equity assessments of proposed funding and organisation of ODA.

Q5. How should scientific and technological expertise, private finance and the private sector, trade and investment, civil society networks and diplomacy be engaged to support global development action and accelerate progress towards the Sustainable Development Goals (SDGs)?

A recurring theme throughout the Academy's programme of global health policy workshops with LMICs (funded from ODA via the Global Challenges Research Fund) (https://acmedsci.ac.uk/policy/policy-projects/GCRF-workshops)[5], has been the importance of international interdisciplinary collaboration. In terms of scientific and technological expertise, sharing data, experience, and collaborative research efforts were identified by participants as important for closing key evidence gaps for global health issues to accelerate progress towards the Sustainable Development Goals (SDGs).

In some workshops, participants highlighted the need to engage with the private sector. For example, the private sector is likely to play a key role in diagnostics development and deployment in many LMICs. It was emphasised that efforts are needed to promote good diagnostics practice in the private sector and its involvement in national quality assurance processes. Furthermore, the private sector could play a role in boosting local research, R&D, and manufacturing. The COVID-19 pandemic has also demonstrated the importance of local capacity and capabilities for producing vaccines, therapeutics, and diagnostics. For issues where economic incentivisation is needed to overcome market failure, especially for issues predominately affecting LMICs, there could be a role for private finance in encouraging the development of interventions such as diagnostics that could contribute to improving clinical care and disease surveillance.

Furthermore, as mentioned in response to question 3, innovative partnerships between government, academic communities, and civil society to apply insights gained from analysis and data to actions to ensure decisions are based on evidence would contribute towards the SDGs. Linked to this suggestion, there is a need to incentivise health promotion (for example taxes on sugar and tobacco).

Q6. How can progress on tackling ending poverty, economic growth, and the challenges of climate change be best brought together, in the context of Agenda 2030 (including building resilience, adaptation, and sustainable growth)?

How can the opportunities be maximised? How can the limits and trade-offs be managed?

Climate change poses serious, and potentially catastrophic, threats to human health and to the natural systems that underpin civilisation, with increasing impacts witnessed on a global scale in recent years. These threats relate to the impacts of climate change on physical and mental health (including changes in the distribution of diseases), migration, economic prosperity, environmental degradation, risk of environmental disasters, and conflict over resources.

The Academy's report 'A healthy future: tackling climate change mitigation and human health together' outlines how climate change can affect human health with why health

impacts and co-benefits should be considered when developing mitigation and adaptation strategies.

There needs to be further investment in, and deployment of, low carbon technologies for energy, transport, industry, the built environment, battery technologies, and autonomous vehicles, as well as health and the life sciences. The UK could have a competitive advantage in this field, given its strengths in research and innovation in low carbon technologies. However, international standards, agreements, and incentives will be critical to achieve rapid change.

In addition, investment in adaptation infrastructure and building climate resilience in built environments, such as flood defences and sustainable agriculture and food systems, will be needed. This will require new technologies and long-term planning. For example, investment in new approaches to sustainable agriculture and food systems could be transformative in addressing food security and diet (obesity), among others, while simultaneously building a healthier population and economic prosperity through innovation.

Transformation will also be achieved by changing the environments that we live in, the so-called 'greening of cities'. This will include developing zero carbon buildings, reducing car ownership, increasing green space, improving air quality, improving access to active transport (e.g., electric bikes), as well as changing work patterns and social behaviours. Ensuring healthier populations should be seen as an important co-benefit (and aim) of these changes.

Addressing issues associated with climate change will also be important in LMICs that face a diverse range of challenges, from the potential loss of island nations through to megacities which present infrastructure and health risks. Supporting mitigation, adaption and resilience will be key to addressing the challenges of climate change both in the UK and working with our partners overseas.

Additionally, as reflected in the response to question 5, international collaboration guided by an interdisciplinary approach is an important first step in addressing inter-linked challenges. The Academy has organised two workshops to facilitate discussion on One Health in Kenya and Brazil, to explore the benefits of implementing a One Health approach to address health challenges. One Health is the concept that the health of humans, animals and the planet is linked. The World Health Organization (WHO) has recognised that collaboration across sectors and disciplines contributes to protecting health, addressing health challenges such as the emergence of infectious diseases, antimicrobial resistance, and food safety, and promoting the health and integrity of our ecosystems. A One Health approach may provide a helpful framework to address linked challenges and bring them together in the context of Agenda 2030.

Q7. What are the top priorities for strengthening multilateral effectiveness in international development?

What are the issues and challenges most suited to bilateral cooperation (considering all levers)?

It is important to minimise the duplication of efforts which could undermine multilateral effectiveness. A joined-up approach across initiatives with similar goals can harness synergies and maximise impact.

Additionally, as iterated throughout our response, it is important for country and regional perspectives and priorities to be reflected in multilateral initiatives and programmes, with community, and patient and public involvement prioritised.

[1] https://acmedsci.ac.uk/file-download/60264020
[2] https://researchbriefings.files.parliament.uk/documents/SN03714/SN03714.pdf
[3] https://acmedsci.ac.uk/grants-and-schemes/grant-schemes/gcrf-networking-grants
[4] https://acmedsci.ac.uk/file-download/93434328
[5] https://acmedsci.ac.uk/policy/policy-projects/GCRF-workshops