

Making Bioscience-related Health Innovations Work for the Poor: Are Public-Private Partnerships the Answer?

Prof Joanna Chataway, Rebecca Hanlin, Dr Joseph Murphy & Dr James Smith

Public Private Partnerships (PPPs) in the area of health are currently the focus of considerable debate. They are seen by some as a way of overcoming the crisis of 'neglected diseases' and the fact that 90% of the world's spending on health-related research benefits only 10% of its population. A workshop hosted by the ESRC Genomics Forum and attended by policy experts, practitioners and academics examined the role of global PPPs (GPPPs) in developing new drugs and vaccines designed to combat diseases that are common in poorer countries¹. This policy brief focuses on two issues highlighted at the workshop. Participants felt these issues require the attention of policy makers if GPPPs are to be successful in the long-term.

PPPS ARE INNOVATIVE: PRODUCING NEW TECHNOLOGIES AND BUILDING CAPACITY

GPPPs have generated new drug development initiatives focussed on the needs of the world's poor. A number of these operate with relative autonomy from large public sector or multi-lateral bureaucracies. They are relatively flexible and responsive to changing and complex environments. For example, the International Aids Vaccine Initiative (IAVI) and the South African Aids Vaccine Initiative (SAAVI) have been particularly adept at global and local advocacy work. They have brought into focus the ways in which science and technology might be used to address the needs of people in poorer countries.

In the case of AIDS, although a vaccine has yet to emerge, IAVI has nevertheless made a substantial contribution to capacity building in developing countries. This is an important observation because capacity building is not part of IAVI's mission even though it is a strategic necessity. Particularly in Africa, real achievements have been made in the areas of scientific and technological capabilities – including competence to prepare and carry out clinical trials. Because such initiatives cut across traditional boundaries and systems, such as public and private, health and industrial sectors, a broad range of capacities can be built through product oriented activity. For example, with IAVI's assistance, Rwanda, Kenya and Uganda have developed potential centres of excellence in vaccine clinical trials.

Product development GPPPs offer valuable ways forward in producing vaccines *and* in capacity building in developing countries. However, the success of GPPPs is rooted in how they link to a variety of other organisations and institutions. This broader institutional and organisational context and the broader capacity building benefits should not be ignored. While PPPs may offer one option, they are not the only alternative.

MAINTAINING A BROADER PERSPECTIVE AND A BALANCE OF METHODOLOGICAL ISSUES

Workshop participants expressed concern that narrow approaches may lead to short-term formulas but may miss the point. For example, current discussions about the role of advanced purchase agreements, tax credits and other incentives for private sector involvement are likely to deliver appealing policy recommendations. But the formulas will be based on narrow assumptions that economic 'pull' policy mechanisms will resolve underlying problems. GPPPs are embedded within societal structures. The development of PPPs and the extent to which they are able to offer solutions to the development and diffusion of vaccines will be affected by a broad range of social, cultural and political issues not simply those of an economic nature.

There is considerable evidence that organisational capacities and broader institutional mechanisms are as important in creating constructive participation in drug development. An important consideration, for example,

is that many private sector companies have withdrawn from vaccines development because profit prospects were unappealing. The loss of expertise and capacities to produce vaccines will not be restored via financial incentives alone.

A range of other perspectives and methodologies can provide additional research and recommendations that will lead to more rounded and viable solutions. Historical work on vaccine development can provide insights into success and failure in past vaccine development. In particular, historical analysis suggests that the public sector may have an essential role to play in maintaining expertise in areas which are critical over the longer term. Additionally, a sociological framework can provide perspective on the role of the private and public sectors in sustaining the development and delivery of appropriate vaccines over the longer term.

This mix of methodologies can be used to examine a wider range of issues particularly in relation to health systems delivery capacity that need thorough consideration if new drugs are to be effectively diffused as well as developed. Maintaining a broader perspective and methodological framework will provide better opportunities for a full range of expertise to be engaged in planning for product development and delivery within local contexts. The implication here is that funding for GPPPs should not substitute for supporting a range of actors needed to deliver drugs and services to the world's poor.

CONCLUSIONS

GPPPs offer exciting opportunities and the best deserve further funding. This funding, however, needs to be delivered in ways that reinforce the involvement of a range of actors. Not all funding oriented towards developing new vaccines and drugs can be channelled into GPPPs. More active involvement of private sector companies, although welcome, is unlikely to deliver a panacea to the problem of bridging the gap between modern bioscience and applications essential to the majority of the world's population. Funding needs to be channelled to GPPPs but balanced with additional funding for a range of science-based organisations, particularly perhaps public sector laboratories and private and public sector organisations and institutions engaged with product diffusion and delivery.

NOTES

¹ Workshop on "Making vaccines work for the poor: Are public private partnerships the answer?" held at ESRC Genomics Policy and Research Forum, University of Edinburgh, December 13th-14th 2004. For a full list of attendees see www.innogen.ac.uk/events

EGN research ranges across the whole field of genomics, covering areas as diverse as plant and animal genetics, embryonic stem cell research, and associated health applications.

The Network ranges across five of the UK's leading universities, and involves over a hundred researchers, from professors to PhD students, as well as administrative and support staff and an international cast of visiting research fellows. It is one of the largest social science investments in the ESRC's current portfolio, and is growing into the largest concentration of social scientific research on genomics in the world.

Professor Joanna Chataway and Rebecca Hanlin are based at the ESRC Innogen Centre, Technology Faculty, The Open University, Walton Hall, Milton Keynes MK7 6AA, UK Tel: +44 (0)1908 654782; Email: r.e.hanlin@open.ac.uk

Dr James Smith is based at the Centre of African Studies and the ESRC Innogen Centre, University of Edinburgh, High School Yards, EH1 1LZ, UK Tel: +44 (0)131 650 9113; Email: james.smith@ed.ac.uk

Dr Joseph Murphy is a former Deputy Director at the ESRC Genomics Policy and Research Forum at the University of Edinburgh and is now based at the University of Leeds