

10 best resources on . . . the current effects of global health initiatives on country health systems

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The last decade has seen momentous shifts in the global development assistance architecture for health. Actors at global level are changing. In addition to the WHO, UNICEF, the World Bank and donor governments, new actors including philanthropic trusts and other civil society organizations, private-for-profit organizations, global health initiatives (GHIs) and partnerships are becoming increasingly significant (Brugha 2008; Walt *et al.* 2009). GHIs are mobilizing substantial new resources for disease control programmes in low- and middle-income countries (LMICs) leading to dramatic scaling up of services, especially for HIV and AIDS. The Global Fund to Fight AIDS, Tuberculosis and Malaria, the President's Emergency Plan For AIDS Relief (PEPFAR) and the World Bank's HIV and AIDS programmes including the Multi-Country AIDS Program (MAP) collectively contribute more than two-thirds of all external funding for HIV and AIDS-related programmes in LMICs (Global Fund 2007; Oomman *et al.* 2007).¹ They have also introduced new forms of governance, engaged non-traditional actors—private-for-profit actors and civil society—and promoted increased political support around focal diseases and public health issues.

Due to the magnitude of funding there is a growing interest in the effects of these and other major GHIs, including the GAVI Alliance (Global Alliance for Vaccines and Immunisations).² Among the concerns expressed about GHIs are the unintended negative effects of disease-specific programmes (often perceived as 'vertical' programmes) including whether they undermine efforts to improve donor harmonization (co-ordination between donors) and alignment (co-ordination between donors and recipient government policies and programmes),³ place increased burdens on already weak health systems and unintentionally weaken the delivery of services for non-focal diseases (Brugha 2008; WHO Maximizing Positive Synergies Academic Consortium 2009).

Evidence is beginning to emerge from empirical studies conducted in several countries on GHI effects on country health systems. Much of the focus has been on HIV and AIDS initiatives and on the Global Fund in particular, reflecting its relative transparency (the existence of the *Global Fund Evaluation Library* <http://www.theglobalfund.org/en/library/> and the *Global Fund Observer* <http://www.aidspace.org/index.php> attest to the initiative's transparency). Inevitably many of the resources we recommend relate to GHIs for HIV and AIDS, and this is because much of what has been written so far focuses on these initiatives. However, we have included resources that are also concerned with the effects of the GAVI Alliance and the Global Fund's tuberculosis and malaria programmes. These studies are, however, not without methodological challenges: the complexity of country programmes funded by GHIs creates problems attributing the effects of a single initiative or programme in the context of multiple funding streams, and necessitates the adoption of non-traditional approaches such as mixed quantitative–qualitative studies and the synthesis of cross-country qualitative evidence.

Our interest in the country effects of GHIs stems from our involvement in the *Global HIV/AIDS Initiatives Network*, a network of studies in Africa, Europe, Asia and Latin America established in 2006 that is co-ordinated by our two institutions jointly, the London School of Hygiene and Tropical Medicine and the Royal College of Surgeons in Ireland.

An early attempt to anticipate health systems effects of the Global Fund was published in 2003 (the year after the initiative was launched) by Partners for Health Reform^{plus}: **The Systems-Wide Effects of the Global Fund to Fight AIDS, Tuberculosis and Malaria: A Conceptual Framework** (Bennett and Fairbank 2003). This resource was groundbreaking in the field of GHIs and country health systems: the framework put forward was intended to inform future monitoring

and evaluation efforts, and indeed it has been influential in shaping later studies on the Global Fund and other initiatives. Therefore, despite its publication in 2003 it remains a valuable resource in the field. The report predicted that the Global Fund would result in direct and indirect, intended and unintended positive and negative effects which the framework captures by drawing on the WHO's health system building blocks: *stewardship*, including the Global Fund principle of engaging non-governmental actors in the policy process; *resource development* effects, including shifts in the distribution of health workers resulting from the injection of significant funding from disease-specific Global Fund programmes; *financing functions*, including the recurrent funding implications of Global Fund financing, the degree to which Global Fund monies are additional, the efficiency of disbursement mechanisms and introduction of parallel financial accounting systems; *service delivery* effects, including shifts away from public sector delivery, greater 'verticalization' of delivery, the introduction of parallel pharmaceutical distribution systems and health management and information systems. The report anticipated that the Global Fund would be likely to have the most profound effects on the policy environment, the public-private mix, human resources, and pharmaceuticals and commodities. The WHO's *Alliance for Health Policy and Systems Research* went on to fund a number of country studies that explored these and other themes relating to GHIs and their effects (available on the *Global HIV/AIDS Initiatives Network* website and also reported as part of the World Health Organization *Maximising Positive Synergies Collaborative Group's* outputs—see below). Indeed these and other studies confirm many of the predictions made by Bennett and Fairbank in 2003.

A useful attempt to define GHIs, understand their development in the context of changes in global development assistance and reflect upon emerging evidence on their effects can be found in **Global health initiatives and public health policy** (Brugha 2008), an entry in the *International Encyclopaedia of Public Health*. The paper accepts that the terms global health partnerships (GHPs) and global health initiatives are used interchangeably, and that partnerships/initiatives are diverse in form and involve a variety of actors. It puts forward an inclusive definition of GHIs based on their functions rather than governance arrangements: '*a blueprint for financing, resourcing, coordinating and/or implementing disease control across at least several countries in more than one region of the world*' (Brugha 2008: 74). It then provides a valuable summary of major shifts in the development assistance architecture for health and relates this to the emergence of GHIs as significant global health actors. The paper brings together what was known at the time about the effects of GHIs on countries, although acknowledging that in 2007 the evidence was patchy, mostly based on small numbers of national and global level interviews focused on the Global Fund, and to some extent the GAVI Alliance. Evidence suggested that the Global Fund was seen as having relatively high levels of national ownership, although in some cases this was diminished by the insistence on its own procedures. While the Global Fund and GAVI Alliance reinforced globally driven policy/priority setting, later studies suggested that alignment with government programmes and priorities was improving, although alignment with country systems remained

problematic. The Global Fund had been effective in diversifying broad stakeholder participation, including engagement of civil society organizations in decision making and programme implementation.

An essential bookmark for anyone researching global HIV and AIDS initiatives is the **Center for Global Development's HIV/AIDS Monitor** http://www.cgdev.org/section/initiatives/_active/hivmonitor. The work of HIV/AIDS Monitor is focused on the Global Fund, PEPFAR and World Bank MAP both at the global and national levels, and draws heavily on studies conducted in Mozambique, Uganda and Zambia. Among the issues being researched are: the nature and volume of funding mechanisms, disbursement, procurement and supply chain management, delivery of services to vulnerable groups, monitoring and evaluation, and human resources for health. The website gives a simplified breakdown of the funding mechanisms of each of the GHIs, a welcomed resource given the complexity of their systems and procedures. One of the most valuable parts of the website is the *Recommendations and Policy Impact* section, which offers recommendations for each of the focal GHIs including issues relating to funding practices, interactions with health systems, information systems and supply chain management. While other attempts to study GHIs tend to focus on broad recommendations to initiatives generally, it is to be commended that specific recommendations are targeted to each GHI, while also giving suggested actions to all GHIs. The website provides links to relevant study reports (for example Oomman *et al.* 2007; Oomman *et al.* 2008), as well as access to PEPFAR's funding data, including previously unavailable data from its own information system, which otherwise is extremely difficult to obtain or breakdown.

The **Global HIV/AIDS Initiatives Network (GHIN) website** www.ghinet.org acts as a significant up-to-date resource for evidence on the effects of GHIs on country health systems, with a focus on national and sub-national levels across 15 countries in Africa, Asia, Latin America and Europe. In addition to presenting outputs from the studies that are part of GHIN—reports, journal articles, policy briefs and conference presentations—the website provides resources such as data collection tools as well as information on relevant conferences and upcoming calls for papers. The *piece de resistance* of the GHIN website is a searchable online GHI knowledge database based on ongoing systematic searches of research on GHIs for HIV and AIDS. While search engines throw up over 30 million hits on GHIs, very few provide strong evidence on their effects, and peer reviewed journal articles are slow to capture up-to-date evidence in a field that is rapidly developing. The GHIN database captures documents that provide primary quantitative or qualitative empirical data, independent external or internal evaluations of GHIs or analysis of secondary data that present new findings or knowledge. It is, as far as we are aware, the only existing database that specifically covers GHIs.

The effects of global health initiatives on country health systems: a review of the evidence from HIV/AIDS control (Biesma *et al.* 2009) represents the first systematic attempt to bring together country-level evidence on the effects of GHIs on country health systems, drawing on 31 country and cross-country reports and articles conducted between 2002 and 2007. An assessment framework was

developed focusing on policy formulation and policy development adapted from Bennett and Fairbank (2003) and incorporating national-level effects reported by Brugha (2008). Negative and positive effects of GHIs are presented. Negative effects focus on the non-adherence of GHIs with the Paris Principles for Aid Effectiveness, such as misalignment between GHI programmes and country policies and programmes resulting in poor co-ordination of GHI-funded and government-funded services, and duplication of reporting, monitoring and evaluation systems and funding/disbursement mechanisms. GHIs are also criticized for having undeveloped plans to strengthen country health systems' capacity, particularly human resources for health. Positive effects, often emerging more recently, include substantial scale-up of HIV and AIDS services and a widening of stakeholder participation, particularly by non-governmental organizations. Recommendations for GHIs include more meaningful engagement with the Paris Principles and a call for more analytical health policy and systems evaluations.

A key concern relating to the effects of GHIs on country health systems is human resources. One example of a study that explored this issue in detail at both national and sub-national levels using a qualitative policy analysis approach is the *Human Resources for Health* paper **What impact do Global Health Initiatives have on human resources for anti-retroviral treatment roll-out? A qualitative policy analysis of implementation processes in Zambia** (Hanefeld and Musheke 2009). As with many African countries, Zambia faces a chronic shortage of human resources for health. The study suggests that while major GHIs for HIV and AIDS operating there (Global Fund, PEPFAR and World Bank MAP) have funded substantial scale up of HIV-related services, they do little to address critical human resources problems. Indeed, these GHIs do not provide substantial financing for additional human resources and attract high numbers of public sector health workers into GHI-financed non-governmental service providers. GHI-funded programmes also have the effect of increasing the workload of existing public sector staff, and GHI incentives such as salary top-ups and overtime payments mean that antiretroviral services are more attractive to workers than non-focal disease and public health services.

Debates surrounding the tensions between 'vertical' (disease-specific) and 'horizontal' (health system-wide) models of health intervention were the main concerns of the *Maximising Positive Synergies Collaborative Group*, a WHO-led consortium which assembled existing evidence on GHIs in 2008 and 2009. One of the Group's outputs, **Interactions between Global Health Initiatives and Health Systems**, presents an anthology of findings from 21 country studies on interactions with country health systems of the Global Fund, PEPFAR, World Bank MAP and the GAVI Alliance based on a conceptual framework informed by WHO's 'building blocks' health systems components: stewardship; financing; health workforce; medical products; vaccines and technologies; information; service delivery. In addition community/civil society participation was explored. Timing was important for this document: it was prepared in order to report to the meeting of G8 policymakers in Italy (July 2009) to inform high level policy and funding for global health. The studies revealed there to be multiple positive effects of GHIs, not least substantial scale up of disease-specific services

resulting in improved coverage and access. Other positive effects in some countries included: strengthened human resources; improved infrastructure for focal diseases including laboratory facilities; strengthened surveillance and monitoring and evaluation systems; improved drug supply; better civil society capacity and participation; strengthened national co-ordination mechanisms; improved governance including better accountability and transparency. In a number of countries GHIs had exposed existing weaknesses in health systems including organizational, managerial and operational weakness and a lack of qualified human resources. Several negative effects were also identified in some countries: increases in the workload of some staff; increasing dependency among many non-governmental service providers on GHI funding; and poor national and/or sub-national GHI/donor harmonization and alignment including introducing parallel monitoring and evaluation and supply chain systems. The report argues that in order to understand complex systems it is important to embrace multiple research methods, and that further analysis is required to help gain greater insight into explanatory causal factors mediating the interactions between GHIs and health systems, including systematic cross-country comparative analysis.

A second output from the WHO Maximizing Positive Synergies Group is a policy piece published in *The Lancet* in June 2009 entitled **An assessment of interactions between global health initiatives and country health systems**. This is a timely compendium of existing (99 peer-reviewed and 122 non peer-reviewed reports) and new evidence (15 studies presenting global, country and cross-country evidence) submitted to the WHO to explain the nature of GHIs and health systems. Four initiatives are focused on: the Global Fund, PEPFAR, World Bank MAP and the GAVI Alliance. The piece is useful not only for its findings, some of which confirm those reported by other studies, but also for its recommendations to GHIs, and in the action points which it outlines for global partners, policymakers, programme managers and researchers. Another strength lies in the number of divergent stakeholders which have come together to put forward these recommendations. Some of these include: the need to place more emphasis on the health systems strengthening agenda; the need to introduce health systems strengthening indicators as a central part of GHI programmes and the generation of more reliable data; the improvement of co-ordination and joint planning among GHIs.

In 2006 the Global Fund launched a major review of its performance, which became known as the Global Fund Five-Year Evaluation. The Evaluation was structured around three components: Study Areas One and Two focus on organizational effectiveness and efficiency of the Global Fund and partner environment, respectively. It is the Study Area Three report which we want to put forward as a best resource, entitled **The Impact of Collective Efforts on the Reduction of the Disease Burden of AIDS, Tuberculosis and Malaria** and published in May 2009. We consider this a particularly valuable resource since it reports a multi-country study to assess the health impacts of the Global Fund (and indeed of all external donors—direct attribution of Global Fund-specific interventions was not attempted) in the reduction of HIV/AIDS, tuberculosis and malaria in 20 countries, with special

attention to the effects on health systems. Secondary analysis and record review was conducted in 12 countries and extensive primary data collection was carried out in eight countries (Burkina Faso, Cambodia, Ethiopia, Haiti, Malawi, Peru, Tanzania and Zambia). One of the strengths of the study was the inclusion of its District Comprehensive Assessment Tool to quantitatively assess interventions and their impacts at the district level in 114 districts across eight countries, although data availability was a problem, revealing weak country health information systems. The report provides a useful chapter on health systems and scaling up of services, which suggests that the access divide between HIV services and health services as a whole is narrowing; for example, as HIV and AIDS funding has increased, so has maternal and child health funding in absolute terms. However, in many facilities there is a shortage of essential general medicines and basic amenities. The scale of this report is impressive, although it acknowledges the need for further multi-country analysis including an attempt to explain differences in countries' performance. Macro International Inc. (2009) also presents a useful synthesis of major messages from Study Areas 1, 2 and 3.

Much of the literature on the effects of GHIs on country health systems has focused on the expected and unexpected effects of vertical programmes—hence we have concentrated on this in the resources discussed above. However, there is currently an active debate about whether GHIs should directly fund health systems strengthening (HSS), particularly centring on the GAVI Alliance and the Global Fund. Our final resource is **Global health partnerships in practice: taking stock of the GAVI Alliance's new investment in health systems strengthening** (Naimoli 2009). This paper provides a mid-term analysis of the first phase of GAVI's experiences with HSS in order to improve immunization coverage and other maternal-child health outcomes, and offers lessons learned for moving it forward. Indeed, direct HSS support marked a broadening of GAVI's mandate. Data were collected through documentary analysis of minutes of committee meetings, task teams and advisory groups and participant observation of the same. From the outset, there was disagreement among stakeholders underlying the need for and strategy for HSS investment. These arguments for and against are well tabulated by the author. While GAVI has been credited for taking this initiative forward, criticisms include the crisis management mode necessitated by the pressure to disburse rapidly; confusing application guidance to countries; and few incentives to engage in HSS activities. There are also concerns amongst stakeholders around monitoring and evaluation frameworks contained in the applications and capacity to undertake these. The quality of applications was questioned by partners; for example, crucial constraints such as financing were overlooked and certain proposed interventions had already proved unsuccessful. It has also been pointed out that the separate application processes were actually 'in contradiction with HSS country-driven and alignment-harmonisation principles'. This analysis is timely given its mid-term stock take and it points to lessons which can be learned by GHIs more broadly.

The GHI arena is by no means static. Discussions surrounding the establishment of a joint GAVI Alliance, World Bank and Global Fund *Health Systems Funding Platform* are currently

underway, and there have been calls to amalgamate the activities of major GHIs to form a *Global Health Fund* to co-ordinate global funding for broader health programmes (Walt *et al.* 2009). Evidence is needed to keep pace with these and other changes, as GHIs mature and as the effects of the global financial crisis are fully felt.

Resources

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2. Brugha R. 2008. Global health initiatives and public health policy. In Heggenhougen K, Quah S (eds). *International Encyclopedia of Public Health*. San Diego, CA: Academic Press, pp. 72–81.
3. Center for Global Development HIV/AIDS Monitor website: http://www.cgdev.org/section/initiatives/_active/hivmonitor.
4. Global HIV/AIDS Initiatives Network website: <http://www.ghinet.org/>
5. Biesma R, Brugha R, Harmer A *et al.* 2009. The effects of global health initiatives on country health systems: a review of the evidence from HIV/AIDS control. *Health Policy and Planning* **24**: 239–52.
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Conflict of Interest

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Endnotes

- ¹ Total contributions from donors to the Global Fund were US\$18.1B by 2010 (Global Fund 2010); PEPFAR financed US\$19B in HIV/AIDS programmes between 2004–08 (PEPFAR 2009); World Bank financing of HIV/AIDS programmes totalled US\$3.1B for 1989–2009 (World Bank 2009).
- ² GAVI also mobilizes substantial resources, totalling US\$4.5B by 2009 (GAVI Alliance 2009).
- ³ There is considerable variation in the degree to which different GHIs harmonize and align their programmes in countries. For example, Knack *et al.* (2010) present evidence on how donors including GHIs rank with respect to harmonization and alignment. GAVI Alliance and World Bank rank strongly (GAVI 3 of 38 for harmonization, 3 of 38 for alignment; World Bank 11 of 38 for harmonization, 7 of 38 for alignment), while the Global Fund and US Government are less strong (Global Fund 22 of 38 for harmonization, 14 of 38 for alignment; US Government 28 of 38 for harmonization, 35 of 38 for alignment).

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