

Public–private partnerships for health: their main targets, their diversity, and their future directions

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Abstract The global burden of disease, especially the part attributable to infectious diseases, disproportionately affects populations in developing countries. Inadequate access to pharmaceuticals plays a role in perpetuating this disparity. Drugs and vaccines may not be accessible because of weak distribution infrastructures or because development of the desired products has been neglected. This situation can be tackled with push interventions to lower the costs and risks of product development for industry, with pull interventions providing economic and market incentives, and with the creation of infrastructures allowing products to be put into use. If appropriately motivated, pharmaceutical companies can bring to partnerships expertise in product development, production process development, manufacturing, marketing, and distribution — all of which are lacking in the public sector. A large variety of public–private partnerships, combining the skills and resources of a wide range of collaborators, have arisen for product development, disease control through product donation and distribution, or the general strengthening or coordination of health services. Administratively, such partnerships may either involve affiliation with international organizations, i.e. they are essentially public-sector programmes with private-sector participation, or they may be legally independent not-for-profit bodies. These partnerships should be regarded as social experiments; they show promise but are not a panacea. New ventures should be built on need, appropriateness, and lessons on good practice learnt from experience. Suggestions are made for public, private, and joint activities that could help to improve the access of poor populations to the pharmaceuticals and health services they need.

Keywords Intersectoral cooperation; Public sector; Drug industry; Pharmaceutical preparations/supply and distribution; Social justice; Motivation; Forecasting (*source: MeSH*).

Mots clés Coopération intersectorielle; Secteur public; Industrie pharmaceutique; Préparations pharmaceutiques/ressources et distribution; Justice sociale; Motivation; Préviation (*source: INSERM*).

Palabras clave Cooperación intersectorial; Sector público; Industria farmacéutica; Preparaciones farmacéuticas/provisión y distribución; Justicia social; Motivación; Predicción (*fuentes: BIREME*).

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Voir page 719 le résumé en français. En la página 720 figura un resumen en español.

Introduction

The disparities in health between rich and poor populations are, in a significant measure, attributable to a lack of access to drugs and vaccines as well as to differences in the geographical distributions of certain disease agents and sanitation. Historically, drugs and vaccines have become available through an informal division of responsibilities between public entities and private companies, all undertaking activities in

accordance with their mandates or motivations. This division of labour constitutes a poorly defined partnership in which the outcomes desired by different parties have never been explicitly negotiated. In the more economically advanced countries it is generally regarded as reasonably successful, having led to the availability of a broad range of effective drugs and vaccines. However, this kind of system is not particularly responsive to the specific health needs of the world's poorest populations.

Substantial differences in health status have probably always existed between rich and poor populations and have certainly been documented for decades. Improved comparative data are now reinforcing the long-standing humanitarian and ethical concerns about inequalities in access to health

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products, health services, and resource allocation. Trends in increased travel, global awareness, information flow, and commerce — collectively termed globalization — have raised the level of interest about the possible causes and consequences of the uneven distribution of disease, particularly of emerging infections. As a result, increasing attention is being directed at the need to reduce global disparities in health.

Globalization has been accompanied by a reassessment of the strengths and limitations of public/governmental, private/commercial, and civil society institutions in grappling with world problems. Particularly in the health arena it seems to be recognized that intractable problems require not just better coordination of traditional roles but also new ways of working together in order to achieve a synergistic combination of the strengths, resources, and expertise of the different sectors.

With the aim of stimulating discussion on the most effective types of future action this paper presents a preliminary examination of experience in public–private partnerships. The focus is on partnerships between international or governmental agencies on the one hand and commercial pharmaceutical companies on the other. Most of these partnerships also include civil society bodies, e.g. nongovernmental organizations. Simple donations of funds or products by pharmaceutical companies, while potentially useful, are not considered here, nor is general corporate philanthropy.

Disparity in health between rich and poor

The health disparity between rich and poor countries results in average life spans of 77 and 52 years respectively (1). Deaths attributable to infectious diseases (Table 1) contribute most to the disparity. Deaths associated with diarrhoea and respiratory infection are rare in industrialized countries but are the major killers of children in developing countries. Diseases that do not occur in industrialized countries, e.g. malaria and schistosomiasis, or ones that are comparatively rare in these countries, e.g. tuberculosis and HIV/AIDS, impose a heavy burden on both adults and children in developing countries. The burden of morbidity from a number of untreated, debilitating but rarely fatal diseases in developing countries, including sexually transmitted infections, has a substantial impact on productivity.

An analysis of the differences in the disease burden between the poorest and the richest 20% of the world's population suggested that, in 1990, nearly 80% of the difference between the poor and rich in terms of death and disability-adjusted life years was attributable to communicable diseases (4). This is still likely to be true, as the incidences of HIV, malaria, and tuberculosis are increasing. Furthermore, the ageing of the population in the developing world can be expected to bring increases in the absolute burden of noncommunicable diseases (5).

Table 1. Deaths from infectious diseases worldwide, 1998^a

Causes ^b	Deaths
No satisfactory vaccine available when data compiled	
AIDS	2 285 000 (27.47) ^c
Tuberculosis	1 498 000 (18.01)
Malaria	1 110 000 (13.34)
Pneumococcus	1 110 000 (13.22)
Rotavirus	800 000 (9.62)
Shigella	600 000 (7.21)
Enterotoxigenic <i>E. coli</i>	500 000 (6.02)
Respiratory syncytial virus	160 000 (1.92)
Schistosomiasis ^d	150 000 (1.80)
Leishmaniasis	42 000 (0.50)
Trypanosomiasis	40 000 (0.48)
Chagas disease	17 000 (0.20)
Dengue	15 000 (0.18)
Leprosy	2000 (0.03)
Subtotal	8 319 000 (100)
Satisfactory vaccine available	
Hepatitis B	1 000 000 (30.55)
Measles	888 000 (27.12)
<i>Haemophilus influenzae</i> type B	500 000 (15.27)
Tetanus	410 000 (12.52)
Pertussis	346 000 (10.57)
Cholera	120 000 (3.67)
Diphtheria	5000 (0.15)
Japanese encephalitis	3000 (0.09)
Poliomyelitis	2000 (0.06)
Subtotal	3 274 000 (100)
Grand total	11 593 000

^a Source: unless otherwise indicated, ref. 2.

^b Some pathogens are not included because etiology-specific estimates were not available.

^c Figures in parentheses are percentages.

^d Source: ref. 3.

Gwatkin & Guillot have also analysed the poor–rich health disparity in terms of the fraction of total burden attributable to various diseases (4). Pharmaceuticals exist that can treat most and prevent many of the diseases causing the bulk of morbidity and mortality in the poorer countries, with the caveat that for some diseases the available therapies require improvement in respect of ease of administration or length of treatment. Moreover, vaccines need to be improved for tuberculosis and developed for HIV/AIDS, malaria, and some other diseases. The disparity in health status probably results largely from differential access to drugs that are already available as well as to sanitation and safe water, which influence the transmission of some diseases.

Determinants of access to pharmaceuticals

The determinants of appropriate access to pharmaceuticals of acceptable quality can be categorized as in

Box 1. In debates on how to improve access, drug affordability — interpreted as manufacturers' selling prices — is often simplistically singled out because it appears to be especially amenable to control. However, access presents a multifaceted problem and action is required on many fronts.

Each year, WHO compiles estimates from national experts on the percentages of countries' populations thought to have access to the essential drugs on the basic minimum list, most of which are off-patent. Fig. 1 shows that in many countries, large numbers of people still have unacceptably low levels of access to basic drugs.

It is difficult to identify which of the determinants of access should be dealt with in order to achieve the greatest possible benefit. A lack of availability of any useful product is the dominant determinant of access for only a few diseases. In some instances, a better preventive product, such as a vaccine, would lead to improved disease control; in these cases, the product development step is essential. For many diseases, however, access is determined by the systems of pharmaceutical distribution and by economic factors.

An analysis of access to pharmaceuticals in sub-Saharan Africa during the 1980s and early 1990s indicated that there were major losses in therapeutic benefit because of inefficiencies in distribution systems (7). Given the economic problems in sub-

Saharan Africa it is hardly surprising that the situation is similar today, as confirmed by WHO's estimates of the scale of unsatisfactory access to essential drugs (Fig. 1).

It is clear in sub-Saharan Africa, and it is probably also true in other parts of the world, that one of the major areas requiring attention is the inefficiency of pharmaceutical distribution systems. This is principally a responsibility of national governments. Additional analysis is needed so that global efforts can be guided. In this connection it would probably also be useful to assess the fraction of the burden attributable to each disease that might be reduced by access to off-patent drugs and vaccines (comprising 95% of the WHO model list of essential drugs); access to recently licensed/patented drugs and vaccines; and new products, yet to be developed. Different actions are already possible and are needed for each of these categories, but the required analysis has not yet been conducted.

It is important to recognize that the term "developing countries" now covers a wide range of economic well-being, ranging from poverty to relative affluence. In Brazil, China, India, Indonesia, and Mexico, for example, there are moderate to large populations that are comparatively rich. Thus in the developing world there are countries and populations that can afford, much more easily than the poorest, to pay for health products and services either directly or, preferably, through schemes based on the principle of collective health insurance.

Box 1. Determinants of access to pharmaceuticals

- **Availability** (i.e. whether a satisfactory product has been developed)
 - basic research
 - discovery
 - development
 - marketing
- **Accessibility**
 - Quality, selection, prescribing, and use**
 - Assurance of quality
 - Rational selection
 - Appropriate prescribing
 - Appropriate use, including patient compliance
 - Effectiveness and efficiency of distribution system**
 - reliable sources of supply
 - availability where needed
 - Economic factors**
 - resources for financing
 - costs
 - pricing policies and controls
 - price at point of use, including distributor mark-ups
 - Knowledge and health-seeking behaviour of consumers**
 - social norms
 - educational interventions
 - variations with socioeconomic status of potential consumers

Interventions to improve access

The prospective market for products needed largely or exclusively in poorer developing countries is commercially unattractive in comparison with, for example, that linked to chronic health problems in affluent populations. In other words there is an unfavourable outlook for return on investment (Fig. 2, segment B relative to segment A). The balance can be moved positively by the reduction of commercial expenditure (segment A) or by increased prospects of revenue (segment B).

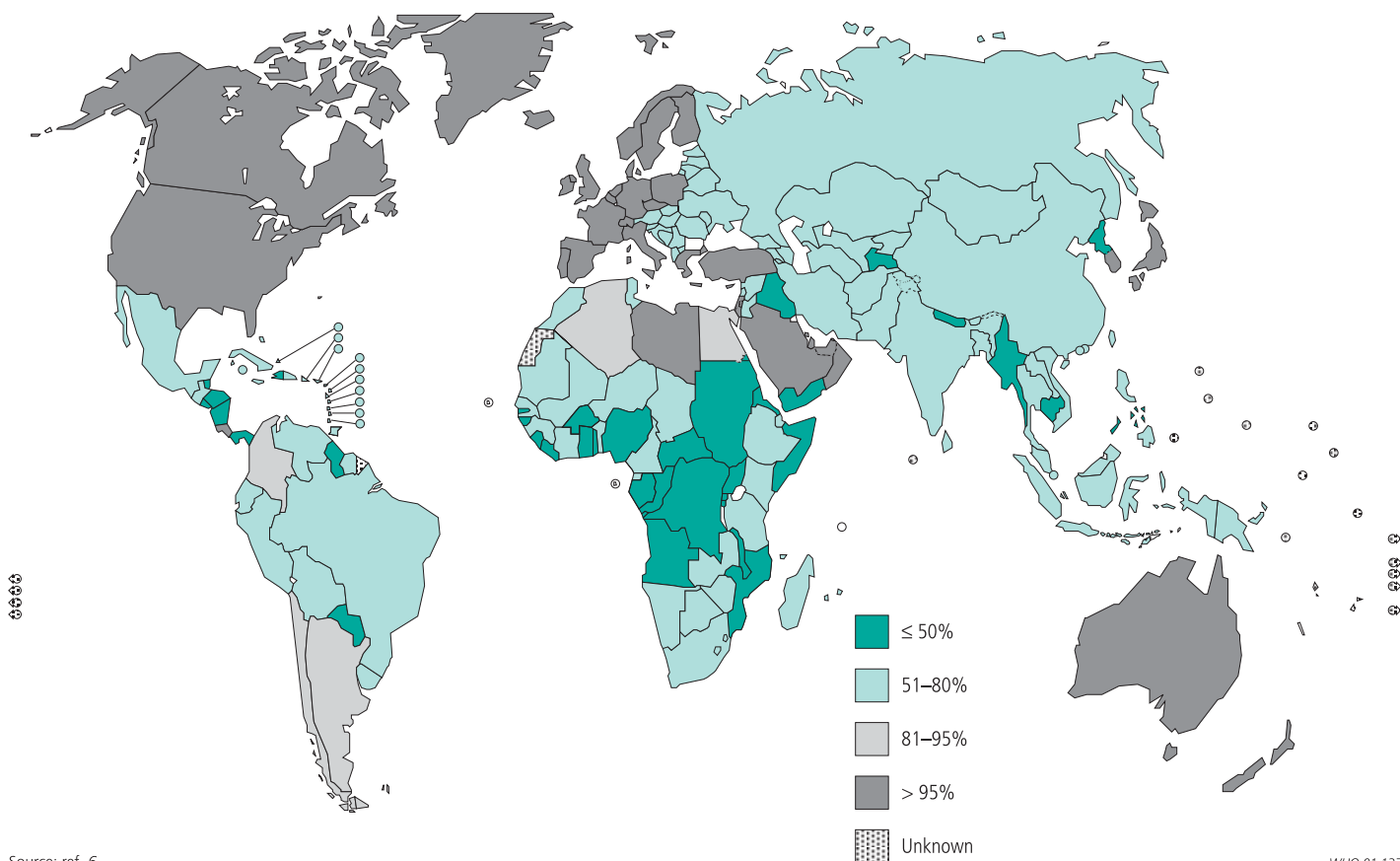
Although there is considerable diversity in size, orientation, country location, and motivation among pharmaceutical companies, they consistently pay less attention to poor populations than those that are rich because of the need to provide a return to investors from the worldwide market (Fig. 3).

Various interventions have been considered for stimulating product development and/or reducing infrastructural and economic barriers to access. These are generally grouped into pull and push interventions, as described below.

Pull interventions

An economic incentive is required for industry to address the needs of developing countries in a sustained manner. Pull mechanisms should ideally include more attractive markets in the larger middle-income countries, where individuals themselves or

Fig. 1. Percentage of population with regular access to essential drugs, 1997



Source: ref. 6.

WHO 01.137

their governments can afford to purchase products and, in the most impoverished countries, some sort of market-guarantee funding from external aid. Other possible pull interventions include tax credits on sales for priority products and early recommendations for product introduction from international organizations. The creation of health service infrastructures, allowing products and services to reach people in need, is essentially a pull mechanism since it is necessary to achieve a return on investment.

Push interventions

For industry to be attracted to the development of products for neglected diseases there must also be push interventions. These reduce the costs and risks to industry of developing the products. Push mechanisms can take many forms, such as public investment in basic research, sharing the costs of efficacy trials or other aspects of development, sharing the costs of production facilities, harmonizing international regulatory requirements, and introducing tax credits for investment in research and development.

Push and pull interventions typically require legislation or funding appropriations. They are generally created for a category of products, as in the orphan drug legislation in the United States of

America. It was concluded at a recent conference that the most effective solution would probably be to create a mix of the two kinds of intervention (10).

However, a unique combination of challenges is faced in the progression of each product from research concept to wide utilization. In order to facilitate this progression there has frequently been a joining of forces by public and private sector organizations in new collaborative mechanisms. These public–private partnerships allow the different skills of the two sectors to be focused on the challenges specific to the products and diseases in question.

Although pharmaceutical markets in developing countries may expand, it appears that special arrangements will be necessary to meet the drug and vaccine requirements of some countries for the foreseeable future, including external financial assistance and, perhaps, concessionary or tiered pricing. Concessionary supply to the poorest countries is one of the most promising, although difficult, areas for public–private sector dialogue.

What forms have public–private partnerships taken?

The term “partnership” has recently been used to cover collaboration in general and the emerging

forms of collaboration. However, it poorly represents the diversity of new relationships, a wide variety of which have been placed under the umbrella term of “public-private partnerships” (11).

Commercial pharmaceutical and other health-related companies have entered into a remarkable number of collaborations with public sector and civil society organizations in order to improve access to health products for poor populations. An initial inventory of over 70 collaborative relationships, mostly at the international level, has been established under the Geneva-based Initiative on Public-Private Partnerships for Health. These ventures involve a diversity of arrangements, varying with regard to participants, legal status, governance, management, policy-setting prerogatives, participants, contributions, and operational roles (11). Public-private partnerships for health should be distinguished from the trend to privatization, i.e. the private sector for-profit provision of health services. In the latter case, the public health policy goal and the rules under which for-profit entities operate are set and enforced solely by government agencies. The objectives of health partnerships are outlined in Box 2.

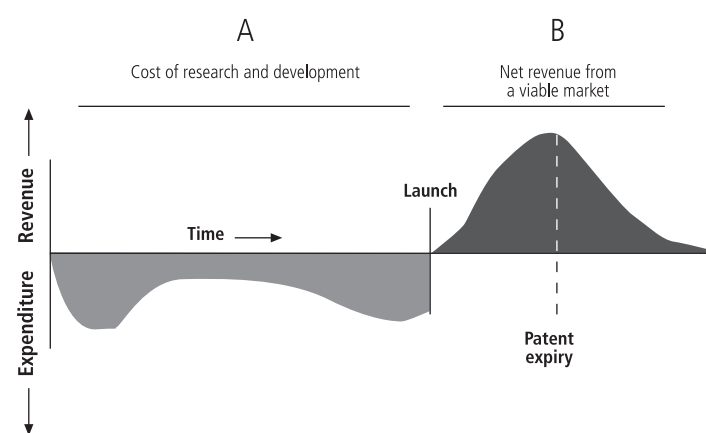
Among the legally independent, not-for-profit, public-private partnerships that have been established to deal with requirements for product development are the Medicines for Malaria Venture (for malaria drug replacements) (12), and the International AIDS Vaccine Initiative (for HIV/AIDS vaccines) (13). The Global Alliance for TB Drug Development is one of a number of partnerships that have just been launched (14).

The best known of the partnerships for disease control are the donation/distribution partnerships involving donations of albendazole (15), efloornithine (16, 17), leprosy multidrug therapy (MDT) (18), Malarone® (19), Mectizan® (20, 21), and Zithromax® (22). The contributions from the companies concerned have gone beyond the provision of products and have included involvement in supporting activities to ensure efficient distribution and effective use. Most of these donation/distribution programmes use products that are curative and relatively easy to administer in that few doses are required. Notwithstanding the health benefits, concerns have been expressed about these partnerships (23). When other services are absent, partnerships directed to the distribution and utilization of donated products may not tackle the health problems of highest priority, as perceived

Box 2. Objectives of a health partnership

- developing a product
- distributing a donated or subsidized product, to control a specific disease
- disease control through product donation and distribution
- strengthening health services
- educating the public
- improving product quality or regulation
- coordinating multifaceted efforts

Fig. 2. Industry costs and revenue associated with product development^a



^a For commercially attractive products, potential revenue (B) substantially exceeds the average costs to industry of research and development, including failures (A).

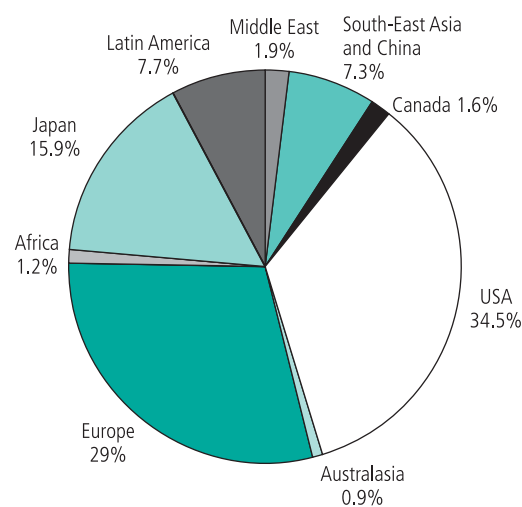
Expenditure on clinical studies, manufacturing, marketing, etc. continues after the launch but in the diagram are deducted from revenue in the interest of simplicity.

Costs to industry for vaccine development are reported to be approximately the same as those for drugs but with lower amounts spent in early development of vaccine concepts (that typically come from publicly funded basic research) and higher costs for production process development and efficacy trials. Many (but not all) vaccines have a relatively long life-cycle but revenue falls as competition increases.

Source: ref. 8.

WHO 01.138

Fig. 3. World pharmaceutical market, 1997



Source: ref. 9.

WHO 01.139

locally. However, they are likely to be welcomed if they meet a need.

Particularly in relation to HIV/AIDS, partnerships are emerging which aim to strengthen health services. They include the Gates Foundation/Merck Botswana Comprehensive HIV/AIDS Partnership (24). Other partnerships, mostly aiming to improve coordination, are managed from within international organizations. The lodging of a partnership within a host organization significantly influences the rules governing its operations. Some so-called public-private partnerships could be more accurately described as public sector programmes with private sector participation. Collaborations in this category include the former Children's Vaccine Initiative, which had a secretariat in WHO, and the current Roll

Back Malaria (25), Safe Injection Global Network (26), and Stop TB initiatives (27), all of which have secretariats in WHO. The successor to the Children's Vaccine Initiative, the Global Alliance for Vaccines and Immunization (28) has its secretariat in UNICEF, but the major funding vehicle associated with its work, the Global Fund for Children's Vaccines (29), is a legally independent, not-for-profit, private sector body.

Most partnerships have relied on the altruism of pharmaceutical companies and the prospect of good public relations. Few of the identified partnership have explicitly attempted to expand the sale of health products, for example by tapping new market segments. The exceptions include the social marketing of contraceptives and oral rehydration salts, and the creation of an otherwise unserved market of the poorest countries for new vaccines, proposed by the Children's Vaccine Initiative in conjunction with UNICEF and WHO and subsequently implemented under the Global Fund for Children's Vaccines.

Apparent good practices for public–private partnerships are being analysed by various groups, including the Initiative on Public-Private Partnerships for Health.

Where should individual sector and partnership efforts focus in the future?

Partnerships between public/governmental entities, private/commercial entities, and civil society have a contribution to make in improving the health of the poor by combining the different skills and resources of various organizations in innovative ways. Public agencies clearly benefit from working in collaboration with the private sector in areas where the public sector lacks expertise and experience, e.g. in product development, production process development, manufacturing, marketing, and distribution.

However, there are areas, such as public health policy-making and regulatory approval, where the concept of partnership with for-profit enterprise is not appropriate. The purposes of partnerships should therefore be carefully considered and well articulated.

Partnerships appear to be most justified where: traditional ways of working independently have a limited impact on a problem; the specific desired goals can be agreed by potential collaborators; there is relevant complementary expertise in both sectors; the long-term interests of each sector are fulfilled (i.e. there are benefits to all parties); and the contributions of expertise and resources are reasonably balanced.

Public–private partnerships should not be expected to substitute for action on responsibilities that properly rest elsewhere. In particular, public sector agencies should continue to: fund fundamental research; set standards for product safety, efficacy,

and quality; establish systems whereby citizens have adequate access to health products and services; use public resources in an efficient manner; and create environments in which commercial enterprise is appropriately motivated to meet the needs of whole populations.

Constructive analysis of the appropriateness, governance, accountability, operations, and benefits of partnerships is only possible when the subjects of analysis are properly defined. Such analysis requires the variation in arrangements for partnerships, particularly as regards legal status, to be taken into account.

Public–private partnerships should generally be viewed as social experiments that are attempting to learn how to tackle intractable health problems in better ways. There is no formula for constructing them and it is unlikely that a universally applicable one will be found. Criticisms of partnerships have been made (30) but it should be borne in mind that, without them, little new would be happening to tackle certain problems.

Public–private partnerships can be helpful but they are not a panacea. In the poorer countries, action is needed to overcome market failure and weak delivery systems that limit the availability and accessibility of pharmaceuticals and result in health disparities.

Certain actions by the public sector alone would mobilize new resources, strengthen demand, and allow market mechanisms to meet health needs in a broader range of countries, and more broadly within countries. Similarly, the for-profit private sector could also take some actions unilaterally to build a better base on which to construct partnerships. Building on these actions, collaborative efforts between the public and private sectors would yield added value. Examples of the contributions each sector could make individually and jointly are given in Box 3. Identifying the components of an appropriate strategy is relatively easy in comparison with the difficulties of implementation. It is necessary for all players, including many who are distrustful of those with whom they need to collaborate, to adopt a long-term view. Implementation requires long-term commitment. The onus of seeking new and more effective ways of working on intractable health problems rests as much — if not more — on the public-sector, governmental and intergovernmental agencies as on the private sector institutions, as the former carry the responsibility for the public's health. ■

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Box 3. Action that could be taken by the public and private sectors

The **public sector** could:

- mobilize new resources for financing health, both within countries and from external sources, to help the poorest people;
- establish public health priorities for drugs, vaccines, diagnostics, and other health products;
- create fair health care financing systems to cover all people;
- assess the disease burden for major pathogens, country by country;
- assess the economic impact of diseases, country by country;
- conduct cost-effectiveness assessments for existing and anticipated products;
- strengthen research capability, including that associated with clinical trial sites in areas where certain diseases are endemic, through increased funding and training;
- support legislation that provides incentives or lowers the costs and risks of developing new or improved products for neglected diseases;
- support market segmentation for the poorest countries and price-tiering policies by industry;
- support market assurance mechanisms not only politically but also with solid financial appropriations.^a

The **for-profit private sector** could:

- increase the use of devices such as licensing, tiered royalties, market segmentation, and tiered pricing to make products more accessible to all in need;
- allow wider access, under appropriate legal conditions, to chemical compound libraries in order to facilitate the search for new indications for old drugs;
- broaden personnel exchanges in order to allow public sector programmes to benefit from private sector skills, e.g. market/demand forecasting;

- create information policies in order to permit easier identification of partners for potential collaboration by interested parties.

The **collaborative efforts between the public and private sectors** could:

- agree on a working definition of the neediest countries and on how to target resources and special attention to them;
- estimate the need, demand, and uptake for existing and new products in developing countries collaboratively, since the public sector has the data and the private sector has the expertise;
- manage the challenges of concessionary supply to the poorer countries, including preventing the diversion of products from intended beneficiaries to markets where prices are higher and the potential erosion of revenue from the richer markets necessary to support continued research and development;
- test and pilot new products earlier in developing countries to establish their potential benefits and reduce the delays that occur before the products become widely available;
- review partnerships engaged in donation/distribution and strengthening of health services, for lessons on distribution systems in poorer countries, and devise ways in which future efforts can apply the lessons within the framework of national plans and priorities;
- create additional partnerships, where necessary, in order to develop the products most needed to meet the health needs of the poor. This work should aim for products suitable for use under the conditions prevailing in poorer countries: simple administration and short-course treatment are desirable characteristics. Given the anticipated increase in the burden of noncommunicable diseases, it is advisable to look now at partnerships that would tackle the requirements of developing countries in this area.

^a In the absence of efforts to make markets function effectively to meet health needs in as many countries as possible, the bilateral development assistance community will be faced with the unmanageable prospect of subsidizing health in many countries for the foreseeable future. In the absence of a prospect of some revenue and effective delivery systems, there is little reason to think that the interest of the pharmaceutical industry in the needs of poorer populations can be markedly increased solely by push interventions for product development.

Résumé**Partenariats public-privé pour la santé : cibles, diversité et orientations futures**

La charge mondiale de morbidité, notamment la partie imputable aux maladies infectieuses, touche de manière disproportionnée les populations des pays en développement. L'accès insuffisant aux produits pharmaceutiques contribue à pérenniser cette disparité. Les difficultés d'accès aux médicaments et vaccins peuvent être dues à la faiblesse des infrastructures de distribution ou au fait que le développement des produits voulus a été relégué au second plan. Mais il est possible de remédier à cette situation par des mesures dissuasives (*push* interventions) visant à réduire, pour l'industrie, les coûts et les risques afférents au développement de produits, par des mesures incitatives (*pull* interventions) prévoyant des incitations économiques et commerciales, et par la création des infrastructures nécessaires. Correctement motivées, les sociétés pharmaceutiques peuvent apporter aux partenariats leurs connaissances techniques pour le développement des produits, la mise au point de méthodes de production, la fabrication, la commercialisation et la distribution, autant d'aspects dans lesquels le secteur public n'a guère d'expérience. Un vaste éventail de partenariats public-privé s'est créé, réunis-

sant les compétences et les ressources d'une grande variété de collaborateurs dans les domaines du développement de produits, de la lutte contre la maladie au moyen de dons ou par la distribution de produits, ou encore du renforcement général ou de la coordination des services de santé. Sur le plan administratif, ces partenariats peuvent soit comporter une affiliation à des organisations internationales – c'est-à-dire être essentiellement des programmes du secteur public avec une participation du secteur privé – soit être des organismes à but non lucratif juridiquement indépendants. Ces partenariats doivent être considérés comme des expériences sociales : ils sont prometteurs mais il ne faut pas en attendre des miracles. Les nouveaux projets doivent reposer sur l'appréciation des besoins, être adaptés au contexte et profiter des leçons tirées de l'expérience pour ce qui est des pratiques à adopter. L'article se termine par des suggestions concernant les activités du secteur public, du secteur privé ou des secteurs public et privé, qui puissent contribuer à améliorer l'accès des populations pauvres aux produits pharmaceutiques et aux services de santé dont elles ont besoin.

Resumen

Alianzas de los sectores público y privado en pro de la salud: principales objetivos, diversidad y futuras orientaciones

La carga mundial de morbilidad, en especial la parte atribuible a las enfermedades infecciosas, afecta desproporcionadamente a las poblaciones de los países en desarrollo. El acceso insuficiente a los productos farmacéuticos contribuye a perpetuar esa disparidad. Los problemas de acceso a los medicamentos y vacunas pueden deberse a deficiencias de la infraestructura de distribución o al hecho de haber relegado a segundo término el desarrollo de los productos deseados. Esta situación puede abordarse mediante intervenciones impulsoras encaminadas a reducir los costos y los riesgos del desarrollo de productos para la industria, mediante intervenciones atractoras basadas en incentivos económicos y de mercado, y mediante la creación de infraestructuras que permitan utilizar los productos. Si se las motiva adecuadamente, las empresas farmacéuticas pueden aportar a las alianzas conocimientos técnicos sobre el desarrollo de productos, la puesta a punto de métodos de producción, la fabricación, la comercialización y la distribución, aspectos todos en los que el sector público apenas tiene experiencia. Se han

forjado muy diversas alianzas de los sectores público y privado que combinan las competencias y los recursos de una amplia gama de colaboradores en el terreno del desarrollo de productos, la lucha contra las enfermedades mediante la donación y distribución de productos, o el fortalecimiento o la coordinación generales de los servicios de salud. Desde el punto de vista administrativo, esas alianzas entrañan ya sea la asociación a organizaciones internacionales, como los programas fundamentalmente públicos en los que participa el sector privado, o bien la constitución de órganos no lucrativos jurídicamente independientes. Esas alianzas pueden considerarse experimentos sociales: son prometedoras, pero no son una panacea. Las nuevas iniciativas deberían basarse en las necesidades, la idoneidad y las lecciones extraídas de la experiencia en cuanto a las prácticas adecuadas. Se hacen algunas propuestas para el desarrollo de actividades –del sector público, del sector privado o de ambos– que puedan ayudar a mejorar el acceso de las poblaciones pobres a los productos farmacéuticos y a los servicios de salud que necesitan.

References

1. Sachs J. Helping the world's poorest. *The Economist*, 14 August 1999: 16–22.
2. Children's Vaccine Initiative, 1999. *CVI Forum*, 1999, **18**: 6.
3. R. Bergquist, personal communication, 1999.
4. Gwatkin DR, Guillot M. *The burden of disease among the global poor*. Washington, DC, World Bank, 1999.
5. Murray JLC, Lopez AD. *Global burden of disease: a comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990 and projected to 2020*. Boston, MA, Harvard School of Public Health, 1996.
6. M. Everard, personal communication, 1999.
7. *Better health in Africa*. Washington, DC, World Bank, 1994.
8. R. Ridley, personal communication, 2000.
9. Market report: 5 year forecast of the global pharmaceutical markets. IMS Health (Internet communication, 13 July 2001 at <http://www.ims-global.com/insight/report/global/report.htm>).
10. *Creating global markets for neglected drugs and vaccines: a challenge for public-private partnerships*. Report of a meeting held at Quail Lodge, Carmel Valley, CA, 18–21 February 2000. San Francisco, CA, Institute for Global Health, University of California, Berkeley, CA.
11. Widdus R et al. Towards better defining public-private partnerships for health. Geneva, Global Forum for Health Research, 2001 (in press).
12. *Medicines for Malaria Venture*. Geneva (Internet communication, 4 June 2001 at <http://www.mmv.org/>).
13. *International AIDS Vaccine Initiative*. New York (Internet communication, 4 June 2001 at <http://www.iavi.org/>) (4 June 2001).
14. *Global Alliance for TB Drug Development*. Geneva (Internet communication, 4 June 2001 at <http://www.tballiance.org>).
15. *Lymphatic filariasis*. Geneva, World Health Organization (Internet communication, 4 June 2001 at <http://www.filarisis.org/>).
16. *Sleeping sickness eflornithine*. Strasbourg, Aventis (Internet communication, 4 June 2001 at <http://www.aventis.com/main/0,1003,EN-XX-10590-42250-,FF.html>).
17. *Sleeping sickness eflornithine*. Geneva, International Federation of Pharmaceutical Associations (Internet communication, 4 June 2001 at <http://www.ifpma.org/African.htm#WHO>).
18. *Leprosy*. Geneva, World Health Organization (Internet communication, 4 June 2001 at <http://www.who.int/lep/>).
19. *Malarone*. GlaxoSmithKline (Internet communication, 4 June 2001 at <http://www.malaredonation.org/>).
20. *Mectizan*. Atlanta, GA, Task Force for Child Survival and Development (Internet communication, 4 June 2001 at <http://www.taskforce.org/MDP/>).
21. *Mectizan*. Geneva, World Health Organization (Internet communication, 4 June 2001 at <http://www.who.int/ocpl/apoc/>).
22. *International Trachoma Initiative/Zithromax*. New York, International Trachoma Initiative (Internet communication, 4 June 2001 at <http://www.trachoma.org/>).
23. Kale OO. *Review of disease-specific corporate drug donation programmes for the control of communicable diseases*. Paper presented at conference on Drugs for Communicable Diseases: Stimulating Development and Securing Availability. Paris, Médecins Sans Frontières Foundation, 14–15 October 1999.
24. *Botswana Comprehensive HIV/AIDS Partnership*. Bill and Melinda Gates Foundation, Seattle, WA, (Internet communication, 4 June 2001 at <http://www.gatesfoundation.org/pressroom/release.asp?PRindex=243>).
25. *Roll Back Malaria*. Geneva, World Health Organization (Internet communication, 4 June 2001 at <http://mosquito.who.int/>).
26. *Safe Injection Global Network*. Geneva, World Health Organization (Internet communication, 4 June 2001 at <http://www.injectionsafety.org/>).
27. *Stop TB initiatives*. Geneva, World Health Organization (Internet communication, 4 June 2001 at <http://www.stoptb.org/>).
28. *Global Alliance for Vaccines and Immunization*. Geneva, UNICEF (Internet communication, 4 June 2001 at <http://www.vaccinealliance.org/>).
29. *Global Fund for Children's Vaccines*. Lyon, c/o Parteurop (Internet communication, 4 June 2001 at <http://www.vaccinealliance.org/reference/globalfund.html>).
30. *HAI*. Amsterdam, Health Action International (Internet communication, 4 June 2001 at http://www.haiweb.org/pubs/hailights/mar2001/mar01_lead.html).