Disrupting global health

The Gates Foundation and the vaccine business

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Recent critiques of the Bill & Melinda Gates Foundation (BMGF) acknowledge, to varying degrees, the malign effects of ‘philanthrocapitalism’ on the people’s health (Aschoff, 2016; McGoey, 2015). Yet these effects are typically portrayed as the unintentional consequences of misguided benevolence. The multi-billionaires mean well, it is suggested, but are somehow too naïve to recognise the inherent limitations of market-based solutions to health crises.

It is more realistic to assume that Bill Gates and his ilk are highly sophisticated capitalists who know what they want and how best to get it. While critics are correct in pointing out that BMGF has failed to deliver the public health miracles it promises, this line of argument may be missing the point. BMGF is only secondarily concerned, if at all, with saving lives; primarily, it is devoted to expanding worldwide markets and facilitating commerce on behalf of Western capitalism. The Foundation’s embrace of the practices and organisational norms of corporate capitalism is neither accidental nor misguided, but is central to a deliberate strategy for bringing ‘disruptive innovation’ to the public health field.

The concept of disruptive innovation entered management theory in the late 1990s at a time when global capital, liberated by the fall of the Soviet Union, had set about tearing down old monopolies in order to make room for new ones (Lepore, 2014). The term is flattering to entrepreneurs, because it connotes bold, original thinking, but in reality it describes a process as old as capitalism itself: the more or less ruthless restructuring of existing systems and norms to create space for even more profitable replacements.

Originally associated with high-tech startups, the concept soon became central to business ideology and is now applied to neoliberal ‘reforms’ in every sector: workforce reductions made possible by automation and digital outsourcing, union-busting measures aimed at the privatisation of public schools, the substitution of private health insurance markets for health care entitlements, etc. Newly minted philanthrocapitalists were naturally inclined to impose familiar business practices on their charitable endeavours; hence, ‘disruption’ has become a watchword and a guiding principle throughout the field of philanthropy. For Bill Gates, who became the world’s richest human being through notoriously anti-competitive business practices (Gavil and First, 2014), the public health field offered a global laboratory for further experimentation with disruptive strategies.
**Vaccines and the pharma business**

BMGF’s style of disruption is nowhere more evident than in the area of vaccines, Bill Gates’s particular focus and historically the central business of his foundation. When Seth Berkeley, CEO of the Gates-controlled vaccine consortium GAVI, advised a conference of pharmaceutical entrepreneurs that ‘GAVI is a disruptive instrument’, he was not merely mouthing a management shibboleth. He was describing, in a rare moment of frankness, the true business of the Gates Foundation. Today, traditional systems of vaccine procurement and distribution are rapidly giving way to vast public–private supply chains, steered and substantially funded by the Gates Foundation in collaboration with the pharmaceutical industry (Gates, 2013).

The symbiosis between the world’s most powerful charitable enterprise and Big Pharma, infamous for its cynicism and criminality, arises from the particular requirements of pharmaceutical capital. Despite annual revenues approaching US$1 trillion, the industry has been unable to reverse a declining rate of profit and finds itself in a perpetual state of crisis. The search for exploitable new molecules is becoming increasingly frantic and expensive (Roy, 2012). Advertising costs, meanwhile, are skyrocketing as the industry attempts to wring revenue from wary and financially strapped customers (Dobrow, 2015).

Industry publicists like to frame the business as a noble quest to meet society’s relentless demand for new cures. In reality, Big Pharma manufactures and shapes demand, not vice versa. The nature of the drug business, like every industry under capitalism, is conditioned by the need to dispose of surplus profitably: ‘In order to absorb potential economic output and forestall excess capacity, business interests must continuously search for new markets to exploit …’ (Wrenn, 2016, p. 63).

Market pressures are particularly acute in the pharma business because of unusually high development costs and a narrow patent window. Pharmaceutical firms rely on high-reward ‘blockbuster drugs’ – those with annual sales of US$1 billion or more – to boost stock prices and generate sometimes astonishing profit margins (Anderson, 2014). However, US and EU patent protections grant pharmaceutical firms a 20-year period of exclusive rights to new drugs.

Consequently, Big Pharma must take exceedingly aggressive measures to maximise profits as the so-called ‘patent cliff’ approaches. The ostensible market for newly developed drugs – i.e., people who actually suffer from the conditions that the medications are meant to treat – is rapidly saturated. New buyers must then be found, or manufactured. Multi-million-dollar advertising campaigns are devised to push treatments for dubious conditions such as ‘restless leg syndrome’ or ‘female sexual dysfunction’ (Allen, 2009). Doctors are pressured to write off-label prescriptions that permit the dispensing of medications for unapproved uses (Stafford, 2008). These unethical but technically legal tactics are supplemented with a wide range of criminal activities, including falsifying the results of clinical trials, suppressing information about side effects, and paying kickbacks to health care professionals (Groeger, 2014; Srinivasan, 2010b). Such practices are so common in the industry that massive criminal fines are considered merely ‘the cost of doing business’ (Tozzi, 2015).

Big Pharma’s well-deserved notoriety is not due to exceptional wickedness on the part of executives and shareholders. Rather, it reflects a logical response to imperatives that shape every facet of the pharmaceutical industry:

- The largest possible markets for approved ‘blockbuster drugs’ must be found, expanded, and ruthlessly exploited. Where no market exists, it is necessary to create one – or many.
- The scramble for new blockbusters is ceaseless and fraught. Factors that hinder rapid commercialisation of new drugs – e.g., safety testing requirements or national regulatory regimes – must be ameliorated, subverted, or outflanked.
- The substantial capital investment required to bring drugs to market – i.e, R&D, safety testing, and marketing – must be reduced or defrayed wherever possible. Subsidies from government and charitable institutions that support high drug prices must be pursued energetically.
• Investment must be steered towards products targeting large worldwide markets, like vaccines, in pursuit of an attractive risk-return tradeoff. A drug of dubious efficacy that targets a large population may be more profitable than a highly efficacious drug targeting a rare disease.

This state of affairs has serious implications for the health and well-being of the world’s poorest billions. Increasingly, Big Pharma seeks to supplement declining sales in wealthy Western countries by exploiting largely untapped ‘pharmerging markets’ (Smedley, 2015, n.p.). Since 70 per cent of the world’s population lives in countries so designated, profits are potentially enormous.

The growing number of sick people in the South offers unprecedented scope for selling putatively therapeutic medicines; vaccines, by contrast, promise revenue because they can be sold to vast numbers of healthy people. Revisions to national immunisation calendars can expand the addressable population for patented vaccines by hundreds of millions. No wonder emerging markets are seen as ‘the next big growth engine in Pharma’ (Mooraj, 2013, n.p.).

For these reasons, manufacturing new channels of demand in poor countries is a business necessity. Barriers to entry – price controls, regulatory regimes, lack of health care infrastructure – must be outflanked by innovative tactics. Extensive collaboration with Western NGOs, PPPs, foundations, and private firms is considered essential to overcoming such obstacles, both in ‘top-tier’ markets (i.e., BRICS) and in the poorest nations of the global South (Badoria, et al., 2012; Levy, 2015). Hence the requirement for ‘disruptive innovation’: existing mechanisms of health care delivery must be restructured or even destroyed in order to make way for a profit-directed value chain.

In another sense the people of the South figure prominently in Big Pharma’s business strategies. Cost-cutting on the development side is seen as an answer to declining revenues; offshoring is an effective expedient. Hence the relocation of clinical trials to emerging markets, where drug safety testing is seen as relatively cheap, speedy, and lax. GlaxoSmithKline CEO Jean-Pierre Garnier has frankly characterised this process as ‘massive arbitrage’ facilitated by globalisation: ‘arbitrage in labour cost, in financial cost, but also in pools of skilled employees and in regulatory and administrative hurdles’ (Petryna, 2009, p. 82).

According to anthropologist Adriana Petryna, ‘the geography of clinical testing is changing dramatically. In 2005, 40 percent of all trials were carried out in emerging markets, up from 10 percent in 1991’ (Petryna, 2009, p. 13). In India in 2011 more than 150,000 people were involved in at least 1,600 clinical trials, conducted on behalf of British, American, and European firms (Buncombe and Lakhani, 2011). R&D offshoring is now so widespread in the global South that clinical trials are considered a ‘normal part of healthcare delivery’ (Petryna, 2007, p. 22). As a South African newspaper declared, ‘We are guinea pigs for the drugmakers’ (Child, 2013).

Thus the imperatives of the pharmaceutical business have created a perfect storm centering on the people of the South. It is in this context that BMGF’s interventions are critical to the industry. With its worldwide organisation, resources, and muscle, BMGF is ideally situated to facilitate profitable connections between Big Pharma, the global health bureaucracy, and state health ministries. It functions as an essential link in a pharmaceutical value chain that extends all the way from BMGF’s US$500 million headquarters in Seattle to the poorest villages of Africa and South Asia.

Enter the Gates Foundation

The Gates Foundation’s ties with the pharmaceutical industry are intimate, complex, and longstanding. Soon after its founding, BMGF invested US$205 million in pharmaceutical companies, including Merck & Co., Pfizer Inc., Johnson & Johnson, and GlaxoSmithKline (Colorni, 2013). The relationship has grown in subsequent years, creating a revolving door that now routinely shuttles executives between BMGF, Gates-controlled NGOs, and pharma’s big five (Herper, 2011a). The leadership team for BMGF’s Global Health Division includes former executives of AstraZeneca, Baxter International Healthcare Corp., Eli-Lilly,
Novartis, Parke-Davis, Pfizer, and Wyeth (BMGF, 2017c). PATH, described by The Lancet as virtually an ‘agent of the Foundation’ (Global Justice Now, 2016, p. 21), functions openly as a facilitator for more than 60 corporate partners, creating ‘market-based solutions’ for pharmaceutical companies such as Merck and Sanofi.

It is unsurprising, then, that BMGF’s goals align closely with the needs of the pharmaceutical industry. The Foundation is openly committed to supporting R&D strategies tailored to the realities of the developing world, where ‘[t]o speed the translation of scientific discovery into implementable solutions, we seek better ways to evaluate and refine potential interventions – such as vaccine candidates – before they enter costly and time-consuming clinical trials’ (BMGF, 2017a, n.p.). In plain language, BMGF promises to assist Big Pharma in its efforts to circumvent Western regulatory regimes by sponsoring cut-rate drug trials in the periphery. At the same time, BMGF steers the budgets of sovereign nations towards investments that create markets for Western transnational corporations (TNCs), even when such investments require radical reallocations of funds away from traditional public health programmes. The goal, as frankly stated in a USAID report, is to ‘leverage market actors and dynamics to stimulate demand’ (USAID, 2014, p. 51).

BMGF entered the field in 1999 with a US$50 million contribution establishing the Malaria Vaccine Initiative. Here Bill Gates saw an opportunity for his fledgling foundation to dominate, instantly and decisively, an entire field of charitable endeavour: ‘With one grant … we became the biggest private funder of malaria research. It just sort of blows the mind’ (Strouse, 2000, n.p.). Since then, BMGF’s involvement in vaccine production and delivery has been transformative, integrating private corporations and investment capital into a field where, until quite recently, the profit motive had played a relatively minor role.

State-sponsored immunisation programmes spread widely during the twentieth century and doubtless saved millions of lives, especially in countries that were able to integrate vaccine administration into robust public health programmes. For the pharmaceutical industry, vaccines became a source of steady but meager profits. The most widely administered vaccines were not patented: when Jonas Salk was asked who owned the patent on his polio vaccine, he replied ‘the people’, adding, ‘There is no patent. Could you patent the sun?’ (Hiltzik, 2014, n.p.). Although Big Pharma spokesmen were happy to take credit for immunisation successes, vaccines were in fact a ‘neglected corner of the drugs business’ (The Economist, 2010, n.p.); industry involvement was a matter of manufacturing doses and selling them in a buyer’s market shaped by government procurement programmes that tended to depress prices. Margins were so slim that by the mid-2000s many firms contemplated exiting the business altogether (The Economist, 2010).

Countries in the non-socialist periphery, meanwhile, found it difficult or impossible to emulate the immunisation successes of the first and second world. Relying on financial and technical support from UN institutions, limited national immunisation programmes developed unevenly across the global South during the postwar era, but these were severely hampered by lack of resources and infrastructure (Miller and Sentz, 2006). Austerity regimes imposed by the West after the fall of socialism were further devastating to the national public health apparatus required for effective vaccine distribution. In business terms, the addressable market remained immense, but the supply chain was dysfunctional and the buyer base was small, concentrated, and increasingly cash-poor. By the late 1990s, money for procurement was scarce or nonexistent, and Western pharmaceutical firms had little incentive to pursue profits in low-income countries.

This bleak business landscape was radically altered by the intervention of the Gates Foundation. Working in close collaboration with pharma, BMGF and its subsidiary organisations disrupted and revitalised the industry with novel schemes to pry open emerging markets. Within a decade of BMGF’s initial investments, vaccines were no longer a neglected sector but had become the cornerstone of Big Pharma’s prodigious revenues – indeed, the global vaccine market was recently projected to reach US$77.5 billion by 2024 (GrandView Research, 2016). In an encomium to the vaccine strategies of ‘one of history’s greatest business visionaries’, Forbes praised Bill Gates for demonstrating ‘how power and capital – both literal and political – can be spent to maximize positive impact on the world.’ He had done so, the article conceded
in less grandiloquent terms, by ‘create[ing] a lasting market for big pharma that wouldn’t cost them their shirts’ (Herper, 2011b, n.p.).

BMGF’s philosophy holds that charitable endeavours need to be evaluated in much the same terms as business deals (BMGF, 2017d). Vaccines offered an irresistible opportunity to ‘meet the needs of the poor in ways that generate profits and recognition for business’ (Gates, 2008, n.p.) by employing commercial strategies adapted from Microsoft and Wall Street. These can best be summarised in the language of business theory, part of the ideology that structures the thinking of contemporary capitalists:

- First mover advantage: As the first significant occupant of a neglected market segment, BMGF could create the business conditions that would make the rules for subsequent players, ensuring its continued ascendancy in the field.
- The vertical market: A problem that might be addressed via ‘vertical’ health initiatives (programmes aimed at particular diseases as opposed to broad-based public health efforts) was readily adaptable to Microsoft’s vertical marketing strategies and would be congenial to the Foundation’s preference for benchmark-friendly quick fixes over infrastructural investments.
- Actionable measurement: By applying the simplistic business math that Gates sees as the solution to society’s ills, a field traditionally entrusted to public authorities could be more effectively managed via the supposedly superior wisdom of the private sector. Vertical programmes, due to their narrow scope and goals, would lend themselves naturally to numerical data analysis aimed at ‘optimizing scarce resources for maximum impact’ (BMGF, 2017b, n.p.).
- Value Unlocking: Partial privatisation of vaccine administration could be said to liberate the value of public capital, resulting in a projected $100 billion in economic benefits for poor countries (Lee, et al., 2013). At the same time, new forms of development funding aimed at harnessing the profit motive could be touted as unlocking the value of private markets.
- Leverage: A pre-existing but underfunded and feeble institutional apparatus (e.g., WHO’s immunisation department; state public health ministries) could easily be subordinated and steered by strategic investments. In combination with public–private partnerships founded and ultimately controlled by BMGF, the Foundation could wield vast resources with relatively little investment of its own.

In sum, Bill Gates found in the vaccine market conditions that would facilitate his wholesale appropriation of a key public health sector. Almost overnight, BMGF became the originator and final arbiter of global vaccine policy, ensuring that decisions affecting lives and health of the underdeveloped world would be centralised in Seattle. According to Melinda Gates, Bill’s partner in all things philanthropic, the choice was clear: ‘Where’s the place you can have the biggest impact with the money?’ (Herper, 2011b, n.p.).

GAVI

BMGF’s raid on the immunisation field commenced with the creation of GAVI, the Global Alliance for Vaccines and Immunization, perhaps the most influential ‘public–private partnership’ in public health. Launched by BMGF in 2000 with the ‘explicit goal to shape vaccine markets’ (GAVI Alliance, 2017b, n.p.), GAVI is a consortium connecting major international institutions (WHO, UNICEF, the World Bank) with the big powers of the pharmaceutical industry (Janssen, GSK, Merck, Sanofi Pasteur, Pfizer, et al.) – all mediated and steered by the Gates Foundation.

GAVI supplied the leverage Gates needed to direct global policy. BMGF seeded the organisation, holds a permanent seat on its board of directors, and has contributed more than US$4 billion to its operations (GAVI Alliance, 2017a). Vividly described as a ‘900 pound gorilla’ (Kingah, 2001, p. 132), GAVI sets the agenda for all players in the vaccine field: its approval is both a necessary and a sufficient condition for the launch of vaccine-related initiatives.

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From the outset GAVI promised to: (a) accelerate introduction of new vaccines, (b) expand the use of ‘existing cost effective vaccines’; and (c) fast-track R&D for new vaccines ‘relevant to developing countries’ (BMGF, 1999, n.p.). Notably, however, GAVI funds have rarely been used to support the distribution to global South countries of vaccines traditionally deemed necessary for Western children — diphtheria, mumps, pertussis, tetanus, et al. Instead, GAVI has consistently focused on promoting precisely the new and expensive ‘blockbuster vaccines’ that pad Big Pharma’s profit margins. The bulk of its early investments were geared towards immunisation against pneumococcal disease (with a vaccine developed by Pfizer), hepatitis B (GlaxoSmithKline and Merck), and the flu-like bacterial infection Hib (Merck and Sanofi). As of 2012, four of the five top-selling vaccine products — Pfizer’s Prevnar-13, Sanofi’s PENTAct-HIB, GSK’s Cervarix and hepatitis vaccine franchise — had been heavily subsidised and promoted by GAVI (EvaluatePharma, 2012).

In 2009 GAVI pioneered the use of a new type of development financing, the Advance Market Commitment (AMC), as a means of subsidising the sale of Pfizer’s new pneumococcal vaccine, Prevnar, to low-income countries (GAVI Alliance, 2009). Through GAVI, BMGF and five wealthy countries — Italy, the United Kingdom, Canada, Norway, and Russia — offered a contract guaranteeing a viable market for the drug, committing to buy new vaccines at a negotiated high price purporting to cover development costs. The pilot country was ravaged Rwanda, which was converted overnight into a market for 1.6 million doses of the patented vaccine (Sheikh and Ngoboka, 2009). As a condition of the deal, Rwanda agreed to add Prevnar to its routine national immunisation programme, though it was unclear how the country might hope to finance its commitment to future purchases once GAVI subsidies lapsed. Soon thereafter, Benin, Central African Republic, and Cameroon were also enlisted, expanding the market by further millions. AMC financing proved so lucrative that by 2012 Prevnar had become the world’s leading vaccine product, with projected 2018 sales of US$6.7 billion (EvaluatePharma, 2012). GAVI, meanwhile, had demonstrated ‘proof of concept’ of an elaborate neoliberal scheme that transferred public funds to private coffers.

A more recent addition to GAVI’s array of services is ‘innovative development financing’, a debt-based mechanism that taps capital markets to subsidise vaccine buyers and manufacturers. Through an intermediary, the International Finance Facility for Immunisation (IFFIm), GAVI floats bonds on the Japanese urudashi market. The bonds are secured by the promise of government donors to buy millions of doses of vaccines at a set price over periods as long as 20 years. The system is hailed in development circles as a neoliberal ‘win-win’: although capitalists take a cut at every stage of the value chain, poor countries are said to benefit from access to vaccines that might not otherwise be affordable. Bondholders receive a tax-free guaranteed return on investment, suited to an era of ultra-low interest rates. For GAVI, this ‘organizational form without country presence’ offers a powerful means of steering peripheral vaccine markets from the core while outflanking the political inconveniences of traditional development aid. Hence IFFIm now annually supplies as much as 39 per cent of GAVI’s cash (EvaluatePharma, 2012).

Pharmaceutical firms, meanwhile, are able to peddle expensive vaccines at subsidised prices in a cash-poor but vast and risk-free market: ‘by creating a predictable demand pull, IFFIm addresses a major constraint to immunisation scale-up: the scarcity of stable, predictable, and coordinated cash flows for an extended period’ (Atun, et al., 2012, p. 2045). Although GAVI’s involvement in vaccine pricing is typically praised as though the organisation is dedicated to setting price ceilings, in fact it acts invariably to raise the floor.

Occasionally criticised but seemingly irresistible is GAVI’s role in blurring the distinctions between private enterprise and public policy. In some cases BMGF/GAVI has effectively annexed the health ministries of poor countries (Ghosh, 2016, n.p.). The organisation seems entirely unabashed by its role in reconstituting what some have called ‘pharmaceutical colonialism’. In Sri Lanka, for example, GAVI intervened in 2002, offering to subsidise a high-priced vaccine supplied by Crucell, a subsidiary of Johnson & Johnson. The vaccine, known as pentavalent Hib, was a cocktail adding Haemophilus influenzae type b immunity to
the traditional DTwP shot; it was this new formula that made the drug patentable and thus profitable. The voices of critics, who argued that ‘new, “relatively useless” vaccines were being allowed to piggy-back on standard essential vaccines like DPT’, went unheard (Bindu, 2016, n.p.).

Since the sticker price for pentavalent Hib was nearly 20 times greater than the drugs it replaced, GAVI offered Sri Lanka temporary subsidies, so long as the country committed to adding the vaccine to its national immunisation schedule.

Within three months of the vaccine’s introduction, 24 adverse reactions including four deaths were reported, leading Sri Lanka to suspend use of the vaccine (WHO, 2013). Subsequently 21 infants died from adverse reactions in India. Critics pointed out that Hib is a minor public health issue in South Asia, and that adverse reactions could be projected to cause the deaths of 3,125 children for every 350 lives saved by the vaccine (Kalyanam, 2013). Thus the customary argument in favour of new vaccines – that the significance of a few drug-related deaths is far outweighed by the number of lives saved – was flipped on its head. Nevertheless, WHO, a GAVI partner, promptly stepped in to declare the vaccine safe – whereupon Sri Lanka reversed the suspension (Narendran, 2011).

Once pentavalent vaccine was firmly ensconced in Sri Lanka’s national immunisation programme, GAVI began to phase out its financial support. In effect, GAVI secured Sri Lanka’s legal commitment to buy patented vaccines on an ongoing basis, using subsidised prices as a loss leader, and then left the country on the hook with a perpetual obligation to buy. GAVI calls this process ‘graduation’ (Saxenian, et al., 2014). In a write-up appearing on GAVI’s promotional website, Sri Lankan health minister Ananda Amarasinghe purported to reveal ‘the secrets behind the country’s immunisation success story.’ Collaboration with GAVI has been effective, Dr. Amarasinghe suggests, because ‘our colonial masters [emphasis added] established a good foundation’ (Endean, 2015, n.p.). Evidently no irony was intended.

**PATH**

GAVI would serve to steer the overall direction of global vaccine policy, but BMGF required another subsidiary to assist in the development of new vaccines at every stage of the value chain, ‘from initial discovery through clinical trials and licensure’ (Boslego, 2012, p.700). In keeping with the principle of leverage, Gates declined to create a new organisation *ex nihilo*, but instead commandeered an existing entity. This was the Program for Appropriate Technology in Health (PATH), a Seattle-based population control NGO to which the Foundation was already connected through Gates’s father. BMGF showered the organisation with funds, installed representatives on the board of directors, and was soon in a position to name as its CEO Steve Davis, a Microsoft alumnus and former law partner of Bill Gates Sr. (Barker, 2008). The process by which BMGF remolded PATH for its own purposes resembled what is known in the business world as a friendly takeover.

Although PATH continued to boost contraceptives, supporting the development and distribution of vaccines soon became its central mission. At the back end of the value chain, PATH acts to defray pharma’s development expenses by funding research. In particular, PATH acts to connect scientists in the non-profit field with vaccine manufacturers and biotech firms, ensuring that the public and private spheres are blended throughout the process (PATH, 2017). Since PATH’s grant-making reflects the aims of BMGF and the commercial interests of Big Pharma, academic research is inevitably steered in directions regarded by the industry as potentially profitable, e.g., rotavirus, malaria, HIV/AIDS, and influenza. PATH also sometimes collaborates with BRICS-based drug firms such as the Serum Institute of India, owned by billionaire ‘vaccine king’ Cyrus Poonawalla. The partnerships arranged by PATH in this context help to ensure that local industries do not develop independently of the requirements of Western pharmaceutical capital.

PATH is heavily involved in orchestrating and funding clinical trials necessary to bring branded vaccines to market. To manage the trials, PATH hires Contract Research Organisations (CROs), which in turn recruit local organisations to carry out operations cheaply on the ground, exploiting core/periphery wage
differentials. In this Taylorised offshoring system, pressure to achieve speedy, favourable results is immense and ethical violations are rife (Elliott, 2012).

A review of the literature reveals a disturbing pattern in PATH-sponsored trials, which nearly always raise ethical questions but evidently never fail to secure the desired approvals. In 2010, for example, PATH organised a Phase III trial of Mosquirix, a malaria vaccine developed by GlacoSmithKline (GSK), and administered the experimental treatment to thousands of African infants across seven countries. GSK and BMGF declared the trials a smashing success, and their publicity was uncritically reproduced by the popular press (Boseley, 2011). In fact the vaccine was only narrowly efficacious, apparently reducing malaria rates in a range from 18 per cent to 36 per cent. The study’s fine print revealed that the trials resulted in 151 deaths and caused ‘serious adverse effects’ (e.g., paralysis, seizures, febrile convulsions) in 1,049 of 5,949 children aged 5–17 months (RTS,S Clinical Trials Partnership, 2011). The results should have raised serious questions about whether the limited benefits outweighed the serious risks. Instead, WHO moved forward with a sweeping pilot programme targeting sub-Saharan Africa, anticipating universal implementation in the near future (WHO, 2016).

Other PATH-sponsored vaccine trials in the global South revealed a similar pattern of dubious efficacy, ethical violations, and widespread deaths and injuries (e.g., GSK’s rotavirus vaccine, tested in India in 2011 [Carome, 2004], and the BMGF-financed MenAfriVac meningitis vaccine, tested in Chad in 2011–12 [Suna Times, 2013]). In these cases, too, the approval of relevant health ministries was swiftly secured.

In one highly publicised case, however, popular outrage appeared to have thwarted PATH’s designs, at least temporarily. In 2010 seven adolescent tribal girls in Gujarat and Andhra Pradesh died after receiving injections of HPV (Human Papilloma Virus) vaccines as part of a large-scale ‘demonstrational study’ funded by the Gates Foundation and administered by PATH (Srinivasan, 2010a). The vaccines, developed by GSK and Merck, were given to approximately 23,000 girls between 10 and 14 years of age, ostensibly to guard against cervical cancers they might develop in old age.

Extrapolating from trial data, Indian physicians later estimated that at least 1,200 girls experienced severe side effects or developed auto-immune disorders as a result of the injections (Mehta, et al., 2013). No follow-up examinations or medical care were offered to the victims. Further investigations revealed pervasive violations of ethical norms: vulnerable village girls were virtually press-ganged into the trials, their parents bullied into signing consent forms they could not read by PATH representatives who made false claims about the safety and efficacy of the drugs. In many cases signatures were simply forged (Dhar, 2013).

An Indian Parliamentary Committee found that PATH had ‘violated all laws and regulations laid down for clinical trials by the government’ in a ‘clear-cut violation of human rights and a case of child abuse’ (Parliament of India, 2013). In the months following release of the committee report, no action was taken: the government declined to act on its recommendations; a lawsuit on behalf of the victims remained ‘stuck in limbo’ before the Indian Supreme Court (Mittal, 2016). PATH, evidently unperturbed, steamed forward with trials of a new flavour of HPV vaccine, Merck’s Gardasil 9, with typical consequences including reports of coercion, lack of informed consent, and paralysing injuries (Chamberlain, 2015). Meanwhile, India’s state and local health ministries experienced increasing pressure from the highest levels of the global public health apparatus to embrace HPV vaccines (Narayanan, 2018).

PATH-endorsed vaccine development resembles a juggernaut that rolls irresistibly forward despite hazardous clinical trials, unsatisfactory results, or resistance from the people. According to public health journalist Sandhya Srinivasan, ‘PATH’s research agenda is to look for ways to introduce the vaccine into the national immunisation programme. The question is not “whether” but “when” and “how”’ (Srinivasan, 2011).

**Buying WHO**

Coopting the health ministries of poor countries was no great challenge for an organisation as powerful as BMGF, but the creation of a genuinely global vaccine market would require steering and investment
on an international scale. To that end, BMGF needed to ensure the collaboration of the World Health Organization. WHO is empowered to marshal and allocate financial commitments from UN member nations (securing, for example, the cash GAVI needs to raise the floor for drug prices); additionally, the agency figures prominently in the regulatory process by which underdeveloped countries issue approvals for new vaccines and other drugs. In order to assimilate WHO’s authority, BMGF employed yet another business strategy: it took an ownership stake.

BMGF’s contributions to WHO started early and rose steadily; by 2016, BMGF was investing US$227 million annually, underwriting fully 11 per cent of the agency’s annual budget – more than any member state with the exception of the US (Global Justice Now, 2016). GAVI and PATH together added US$75 million to the total (WHO, 2017). Here BMGF’s strategy emulated the cross-ownership deals by which business firms routinely seek to disrupt or neutralise competitors. Gates saw no need to fund a majority of WHO’s budget; rather, his Foundation invested just heavily enough that the agency would be unable to function without BMGF’s ongoing participation.

Exploiting this financial leverage, BMGF was able effectively to seize control of the global health agenda: According to public health insiders, ‘Gates’ priorities have become the WHO’s’ (Huet, et al., 2017). Bill Gates was widely understood to have been the kingmaker in the 2017 choice of Tedros Adhanom Ghebreyesus to succeed Margaret Chan as director-general of WHO, where Gates is now treated ‘like a head of state’ (Huet, et al., 2017). In the same year, despite a letter of protest signed by 30 health advocacy groups, BMGF secured appointment as a non-voting member of WHO’s governing board, solemnising what had become a de facto partnership between a once-prestigious multilateral institution and one of the world’s most powerful capitalists (Kadama, et al., 2017).

The arrangement with WHO consolidated BMGF’s disruptive project, securing the long-term global interests of Western capital. Longstanding structures of health care delivery had been deliberately dismantled, subordinating public health to the ruthless imperatives of profit-seeking. The Gates model seemed likely to spread, offering a template for Mark Zuckerberg, Jeff Bezos, and other billionaires embarking on large-scale and systematic interventions in various sectors of philanthropy. As Melinda Gates informed a 2013 Gates-organised conference on ‘Positive Disruption’, the couple’s endeavours are ultimately intended ‘to give more people the courage to be disruptive and in doing so, unlock the potential of many others all over the world’ (Anderson, et al., 2013). A plausible translation of this thinly coded language might read: ‘to be disruptive [is to] unlock potential profits from the people of the global South.’

**Note**

1 An exception is polio vaccine, which GAVI consistently supports in keeping with Bill Gates’ frequently stated commitment to ridding the world of polio. Although polio is no longer a major public health threat – only 48 cases were reported in 2015 – its final eradication appears to be of tremendous symbolic importance to Gates.

**References**


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Levich


