Making sense of apparent chaos: health-care provision in six country case studies

Enrico Pavignani, Markus Michael, Maurizio Murru, Mark E. Beesley and Peter S. Hill*

Enrico Pavignani is a Public Health Consultant and Lecturer at the School of Population Health, University of Queensland.
Markus Michael is a consultant for public health and humanitarian aid.
Maurizio Murru is a public health consultant.
Mark E. Beesley is a public health consultant.
Peter S. Hill is Associate Professor at the School of Population Health, University of Queensland.

* Enrico Pavignani has worked in poor countries for thirty years, in a variety of roles: district doctor, trainer, planner, and policy analyst. Since 2002 he has concentrated his interests on the analysis of war-torn health-care arenas, and on their post-conflict recovery. Email: enricopavignani@hotmail.com.

Markus Michael is a public health physician working as an independent consultant. His main field of expertise and interest is health system analysis in disrupted contexts, in countries in armed conflict or failed states. Email: marcos.j.michael@gmail.com.

Maurizio Murru is a public health consultant mainly interested in health services management in environments disrupted by poverty, conflict, or both. Email: maurimurru@gmail.com.

Since 1989, Mark Beesley, a UK-registered nurse, has supported recovering provincial and national health authorities in Mozambique, Somaliland, Angola, Somalia, and South Sudan in the delivery of HR development. A keen in-service trainer, he is now a freelance technical adviser. Email: titiomarcos@hotmail.com.

Peter S. Hill is a public health physician and Associate Professor of Global Health Systems at the University of Queensland. His research interests examine the development of global health policy and its translation within low- and middle-income countries, in particular where country health systems are disrupted by conflict. Email: peter.hill@sph.uq.edu.au.

This research was partly funded by the Danish Ministry of Foreign Affairs.
Abstract
This research examines the impact on health-care provision of advanced state failure and of the violence frequently associated with it, drawing from six country case studies. In all contexts, the coverage and scope of health services change when the state fails. Human resources expand due to unplanned increased production. Injury, threat, death, displacement, migration, insufficient salaries, and degraded skills all impact on performance. Dwindling public domestic funding for health causes increasing household out-of-pocket expenditure. The supply, quality control, distribution, and utilisation of medicines are severely affected. Health information becomes incomplete and unreliable. Leadership and planning are compromised as international agencies pursue their own agendas, frequently disconnected from local dynamics. Yet beyond the state these arenas are crowded with autonomous health actors, who respond to state withdrawal and structural violence in assorted ways, from the harmful to the beneficial. Integrating these existing resources into a cohesive health system calls for a deeper understanding of this pluralism, initiative, adaptation and innovation, and a long-term reorientation of development assistance in order to engage them effectively.

Keywords: health sector, state failure, conflict, health-care provision, statelessness, privatisation, commoditisation, structural violence.

The impact of conflict on health professionals, health services, and ultimately people’s health is at last being openly examined. Yet conflict also impacts on health systems; the distortions that it causes last well beyond the cessation of the violence, and become structured into the systems themselves.¹ In many settings violence may be seen as a consequence of state failure, which in turn is aggravated by it in a self-strengthening loop that is refractory to correction. The degeneration of health systems may predate the conflict, may arise directly or indirectly from it, or may be compounded by local or international responses to the societal disarray affecting these environments. In many cases, these health systems are already vulnerable, the descriptors of the states themselves reflecting differing international judgements of the aetiology of this vulnerability: fragile and conflict-affected states,² failed states.³ The problems they face are often exacerbated as a result of the challenges to their health systems, but are rarely new. Yet even for those vulnerable systems, the crisis

---

may provide opportunities for positive change, and in fact is an imperative for change.

This paper is based on an analysis of six country research case studies – Afghanistan, the Central African Republic (CAR), the Democratic Republic of the Congo (DRC), Haiti, Palestine, and Somalia – examining health service provision in severely disrupted environments, hosted by the University of Queensland and undertaken in 2010–2012, funded by the Danish Ministry of Foreign Affairs. The research recognises that for many fragile and conflict-affected states, disruption is chronic and extensive, not merely part of a transient trajectory towards recovery, and that successive attempts at state-building often defy the rhetoric that underpins them. It acknowledges the reluctance of development actors to critically analyse emergent actors and governance at the periphery of fragile and conflict-affected states, and their implications for development. This research seeks not just to examine more comprehensively the health provision mapped out within state frameworks and under their governance, but to reach beyond that. It seeks to provide insight into what provision of health services exists beyond the reach of the state and to examine the implications of these often unrecognised resources in rethinking potential health systems development.

The selection of the six case studies has been purposive. Five of these countries rank among the ten worst performers in the Fund for Peace Failed States Index, but the key to their selection has been the diversity of these countries and of their crises: Afghanistan, with its centuries of resistance to state-building initiatives, its progress towards statehood, a ‘transition without end’; the CAR, conspicuous by the paucity of analysis in the academic and political literature, and aptly characterised by the International Crisis Group, which struggled with the ‘Anatomy of a Phantom State’; the DRC, whose colonially inherited borders have left it with a fissiparous geography of ‘populated peripheries’

4 The project was hosted by the University of Queensland, which administered funding for the research and provided research ethics approval for the proposal. The research was undertaken by a core team of four public health researchers, two of whom have appointments at the University of Queensland. All researchers have extensive experience in post-conflict health systems. Additional expertise was contracted to provide specific experience where necessary. The use of independent public health consultants with extensive post-conflict health systems experience to undertake the bulk of the research was both advantageous and necessary, enabling access to more volatile areas where travel would not be approved under University travel guidelines.


6 Palestine is not recognised as a state by the international system based on UN membership, and therefore is not listed in the Fund for Peace Failed States Index.


with no core;\textsuperscript{9} Haiti, where natural disasters and disease outbreaks, compounded by social divisions, state disarray, and political instability, constitute a succession of ‘routinized ruptures’;\textsuperscript{10} Palestine, with its legacy of expropriation, occupation, forced displacement, and dependency, eternally frustrated in its quest for full statehood;\textsuperscript{11} and Somalia, the quintessential stateless nation, characterised by Peter Little as an ‘economy without state’.\textsuperscript{12}

Studying such extreme contexts offers distinct advantages. Far from being unfortunate aberrations affecting only a handful of beleaguered countries, the entrenched state withdrawal from health-care provision appears as a frequent phenomenon in the global South. Given the depth of these crises, each of the contexts we have studied may also foreshadow future developments in other peripheral countries: the extent of distortion and compensation is less transparent and open to examination in less disrupted environments, where even limited state mechanisms can deflect attention from what is still an active and pluralistic informal sector.

Each case study was informed by comprehensive documentary analysis of the available peer-reviewed and grey literature – government, bilateral, and multilateral agency reports, unpublished research, project reports and evaluations. Particular attention was given to the broader historical, geographical, political, economic, and social context in which health care is provided, in the belief that the latter is heavily influenced by the former. This effort to consider health care as part and parcel of a broader picture sheds light on health issues that would otherwise have been inexplicable. Despite their diversity, recurrent themes were evident in analyses of each of the six investigated health-care arenas. This article highlights these key themes, which offer insights that are also applicable in other distressed contexts.

Field visits enabled direct observation of the current context, both in the capital and in provincial centres. In-depth interviews were undertaken with key local informants from ministries of health, non-governmental organisations (NGOs), and bilateral and multilateral development agencies, using a common question guide, with the findings corroborated between members of the research team and local public health experts. Further triangulation was enabled through the circulation of draft reports internationally to public health practitioners with experience in each of these locations, and presentations at a series of international seminars.\textsuperscript{13}

\textsuperscript{13} An earlier version of this paper was presented as ‘Health care in disrupted environments’ at the Health Care in Danger Symposium, co-hosted by the International Committee of the Red Cross and the British Medical Association, London, 23 April 2012.
Health service provision in severely disrupted environments: six country case studies

The impact of state degeneration and violence on health systems is diffuse, its penetration pervasive throughout the system. As with the experience of distress for each country, the destructive implications for health services are unique: each system is ‘unhappy in its own way’.14 For Afghanistan, the CAR, the DRC, and Somalia, armed violence is overt and endemic. For Palestine, the strictures on movement and development are punctuated by episodic outbreaks of conflict. The violence that shadows Haiti is the structural, embodied echo of occupation, brutal dictatorship, political volatility, rural–urban inequity, and gendered abuse.15 None among the studied states presents a past of good performance in any significant aspect, be it the maintenance of law and order, sovereignty over its territory, social services, economic progress, or respect of human rights.

The health sectors of each case study share commonalities in the impact of violence on their health status – life expectancy, neonatal and infant mortality, maternal mortality, and related indicators are poor relative to their regional neighbours – but the determinants of these outcomes are frequently particular to the context. The exception among these case studies is of course Palestine, a middle-income country with parameters that are comparable to other Middle Eastern countries, other than Israel.

The World Health Organization (WHO) framework of six ‘building blocks’ for strengthening health systems16 – health services; human resources; financing; drugs, vaccines, and technology; health information; and leadership and governance – provides a structure for the analysis of these mechanisms, but given the complex nature of health systems and the societies within which they operate, the impact on each ‘building block’ produces effects that extend beyond any single system element, often profoundly distorting the whole.

What has become clear from the research is that national health systems, defined inclusively by WHO as ‘all the activities whose primary purpose is to promote, restore or maintain health’,17 are themselves networks of complex adaptive systems, constantly changing and profoundly affected by local factors. Protracted disruption leads to enormous geographical and functional diversification, the constituents of which evolve over time in response to stress. The national

---

14 Wim Van Damme of the Institute of Tropical Medicine, Antwerp, aptly describes this phenomenon in disrupted health systems as the ‘Anna Karenina effect’, based on Tolstoy’s reflection that: ‘All happy families resemble one another, each unhappy family is unhappy in its own way’. Leo Tolstoy, Anna Karenina, Oxford University Press, Oxford, 1980 (1918), p. 1.


boundaries of the health sector become irrelevant: conspicuous trans-border flows of health-care users, health professionals, diseases, medicines, organisations, and service models make the traditional concept of a ‘national’ health system too narrow to reflect such a fluid and varied landscape. It is not possible to discuss Palestine’s health system without considering the interfaces with Israel, Lebanon, Jordan, and Syria; the health system in Haiti cannot be considered without recognising the flows of patients into the Dominican Republic, or Florida in the United States; patients from Somalia may seek recourse to treatment in Kenya, but may draw on web-based health care from Toronto or London. On the other hand, internal barriers, be they geographical, political, cultural, financial, or military, tend to fragment national health sectors into fairly autonomous local health-care provision systems that differ from each other in many aspects: health services in the CAR capital Bangui, for example, contrast dramatically with those in the rural provinces of the country, with the differing profile of services in each province again reflecting the province’s own political histories and economic diversity. The collapsing of such diversity into national averages, as is usually done in health information system reports, conceals the actual patterns, papers over the dire circumstances of the most marginal regions, and obfuscates the analysis.

Health services and the disrupted state

The issue of health-care coverage is significant in every context where the state is unable – or in some cases unwilling – to provide health services. While the pre-existing coverage of health services is often poor, services contract further away from active conflict, as in Afghanistan, concentrating development resources in the limited number of secure provinces and inevitably privileging their development and capacity over the long term. While this trend is broadly true of Afghanistan and the CAR, there have been opposite outcomes in the DRC, where conflict-affected eastern provinces have attracted humanitarian assistance and subsequently have fared better in terms of health services and the resultant improvements in health status than the uncontested – and neglected – Bandundu, Bas Congo, and East and West Kasai provinces.18 The mal-distribution of staff exacerbates existing disparities in service provision, with those who have portable skills often taking advantage of these opportunities to migrate. The distortions are quickly institutionalised. Haiti, with its history of enduring ensekirite,19 has largely reoriented its medical education towards emigration and personal opportunity,
and of the minority that stays, the best find employment with international organisations or NGOs.\textsuperscript{20}

The mal-distribution of services, in the context of constrained health ministry resources and consequent administrative ‘reach’, is compounded when donors drive initiatives blueprinted on models proclaimed as successful elsewhere. Haiti’s ambitious 1998 devolution reforms based around an integrated health district – the \textit{Unité Communautaire de Services} – remains functional in two districts, generously supported by international NGOs.\textsuperscript{21} Yet the \textit{Ministère de la Santé Publique et de la Population}, with a budget a fraction of that of its international donor ‘collaborators’ and direct control of less than 20 per cent of health facilities, while recognising the potential of the structures that the reforms introduced, is not in a position to expand them.\textsuperscript{22} The ‘operational’ district model of health service delivery, which uses demographic, geographic, and socio-cultural parameters to locate a district referral hospital and its network of health clinics within an optimal catchment population,\textsuperscript{23} was pioneered in the DRC (then Zaire) and had qualified success in Cambodia, but the limited resources devolved to the \textit{Départements} in Haiti have meant that the potential of decentralisation has not been realised, except where there is external support. Donor-driven strategies such as contracting out have been promoted by the World Bank in Cambodia, Afghanistan, and subsequently Timor Leste.\textsuperscript{24} The early evangelism for the model is now being questioned for its limited coverage in insecure districts,\textsuperscript{25} its increasing dependence on NGOs at the expense of the state, and the implicit privatisation that it may introduce.\textsuperscript{26} In Afghanistan, with donors eager to translate the Cambodian ‘success’ in a parallel post-conflict scenario, competitive contracting out to non-government health-care providers has resulted in a rapid geographic expansion of primary health-care services,\textsuperscript{27} but with low levels of utilisation and persisting high out-of-pocket expenses for health, absorbed by a thriving private health sector. While the logic of the reforms may be compelling, for severely and chronically disrupted health sectors such as those of Haiti and Afghanistan, the capacity and infrastructure to sustain the massive devolution implicit in ambitious short-term donor-driven plans for achieving national health coverage is not available.


\textsuperscript{22} Interviews with senior \textit{Ministère de la Santé Publique et de la Population} personnel estimated that between 15 and 20 per cent of health facilities were under their direct control.


\textsuperscript{26} Ronald Waldman, Lesley Strong, and Abdul Wali, \textit{Afghanistan’s Health System Since 2001: Condition Improved, Prognosis Cautiously Optimistic}, Briefing Paper Series, Afghanistan Research and Evaluation Unit, Kabul, December 2006.

\textsuperscript{27} B. Loevinsohn and A. Harding, above note 24.
In contrast, the Palestinian conflict has resulted in the opposite distortion of health-care provision, encouraged by donor generosity: opportunistic development and duplication of health services, with multiple providers motivated by political, charitable, and business agendas. The resultant redundant structure features varied delivery models, dispersed decision-making centres, informal power structures, multiple funding sources, diversified supporting bodies, and traditional as well as institutional safety nets. While this may be undesirable in a more peaceful context, it appears appropriate to the current unpredictability affecting every aspect of life in Palestine, including health-care provision. The perseverance of community-based midwives despite the official policy preference for hospital deliveries is a pertinent example: with frequent conflict outbursts and daily movement limitations caused by the occupation, these midwives offer a precious spare option for care in an extremely constrained and erratic environment.\(^2\)\(^8\)

Similarly, many of the flaws that have been identified in other health-care arenas have emerged as responses to a series of stressors. Multiple providers, often with different sponsors or mandates, compete with each other to produce a range of models, often with redundant service delivery. Institutional provision for the most marginal may coexist or overlap with traditional local community ‘safety nets’. Governance for these facilities is often dispersed: decision-making may be made in provincial or national capitals, removed from the facilities themselves, or in some cases, in the international centres that are the source of funding. Local coordination is often problematic, reflecting informal power structures, multiple funding sources, and diversified supporting bodies. If the environment remains unfavourable, such flaws might constitute actual strengths: duplication of services means ready access when communities are divided by conflict, as experienced episodically in Palestine; multiple sponsors from the diaspora or international community have provided continuing financial support in Haiti when local economies fail; services based on ethnic or religious identity in Somalia provide help to those marginalised in their societies. In unstable situations, the features that would be undesirable in more socially cohesive situations now enable the delivery of health services in the least conducive conditions. These adaptive responses to stressors and neglect have, surprisingly, generated a range of services – though of questionable quality – in forbidding contexts such as Somalia or the CAR, where many observers would expect no services at all.

What is clear is that the health service gaps left by the absence or withdrawal of the state do not necessarily remain a vacuum. They are filled by health workers with limited, incomplete, or expedited training, retired staff, traditional practitioners, volunteers, and quacks. The actual services available to the customers will depend on which staff remain, the expenses incurred, the availability of drugs, access to supply lines, and adaptability to the dynamics of conflict. New priorities may emerge: trauma surgery in active conflict areas, or heavily mined agricultural

fields; malaria where the population has to retreat to infested forested areas; malnutrition as a consequence of food insecurity and disrupted agricultural cycles; abortion as a consequence of failed family planning programmes, or more sinisterly, the product of rape.

While curative services may be offered within this emergent private sector, preventive programmes become more difficult to sustain: immunisation and child health services may be curtailed due to the risks of congregating, or threats to staff during outreach activities. Tuberculosis services such as DOTS (directly observed therapy, short course), which need regular ongoing contact and predictable drug supplies, are frequently compromised. Public health programmes, however, are not always neglected, as demonstrated in the field of HIV/AIDS control: though Haiti is characterised as a low-prevalence country for HIV, generous funding from the Global Fund to Fight AIDS, Tuberculosis and Malaria has been complemented by substantial funding from other development partners there. Support for HIV/AIDS continues to dominate development aid in health, despite the paucity of epidemiological data and the limited capacity to track outcomes related to this investment.

The health-care network has been deeply affected by protracted decay in every studied setting. Thanks to investments shouldered by charities, NGOs, local entrepreneurs, and politicians, and diaspora-funded initiatives, in most contexts it has expanded in an unplanned and often undocumented way, with a burgeoning of atypical health facilities. Ubiquitous drug-selling outlets come to represent the most accessible contact points for the majority of the population. Over time, some of them acquire a micro-laboratory and a few beds. Small, lightly equipped facilities may come to dominate the landscape, as seen in the DRC. In comparatively privileged areas, donor investment in specific health programmes may lead to clusters of health-care facilities in the same district, with duplication of some services, whereas inaccessible, insecure, or destitute districts may lack even the most rudimentary services. Including atypical health facilities that specialise in specific health services or disease control when mapping health service coverage may not accurately represent access to basic services: one rural community in Haiti boasted a comprehensively equipped orthodontic clinic, courtesy of a successful former resident, but no other health-care facility.

Referrals between primary care facilities and more specialised services may be disrupted by political and military barriers (as in Palestine), by geographical, financial, and transportation obstacles (as in the CAR), by perverse incentives, by violence, sectarian, or ethnic mistrust, and by partisan partition. For women with complications of pregnancy, transfers to emergency obstetric care may not be

29 The DOTS programme, developed by WHO, has effectively transformed the management of tuberculosis, offsetting the higher cost of short-course therapy with the possibility of directly supervised daily treatment as an outpatient close to the patient’s place of residence. Interruption to therapy, however, risks the development of resistant forms of tuberculosis, with significant implications for the patient and the community.

undertaken because of the low predictability of appropriate services being available, their cost, and the risks of travel. In the end, referral flows depend more on customer preferences and opportunities than on provider decisions. The rational referral ‘pyramid’ – with broadly accessible primary care providing access to more specialised referral care – is not recognisable in most distressed settings, where health care is consumed locally. Where local provision is inadequate, access to care may be dependent on the mobility of health users.

Human resources

While the overt distortion of health services is often the result of the threat of violence to populations and the health workers that serve them, the health sector itself is increasingly a direct focus for violence, for a variety of complex reasons. In conflicts where social services are promoted by the government, any challenge to it may target such services. The participation of women in nursing and midwifery provided a focus for Taliban threats to health facilities in Afghanistan. Following the use of polio immunisation as a pretext for the identification of Osama bin Laden in Abbottabad, the Taliban have blocked polio vaccination in tribal North Waziristan, though this does not appear to have extended to Taliban-dominated areas of Afghanistan.\(^{31}\) The loss of human resources through death and injury, relocation, and migration contributes to the distortion of the health workforce, exacerbating already problematic rural–urban mal-distribution.

In Palestine, health care has gained an overtly political connotation as a field in which activists can engage, with the development of locally owned or managed health facilities that provide a politically preferable alternative to dependence on Israeli services forming a focus for contention. In the other case studies, the violence against health facilities and workers is predatory rather than political in nature. In the DRC, the widespread practice of detaining patients (or corpses) within the hospital until their bills have been settled is a bleak example of this direct, personal, and institutionalised violence.\(^{32}\)

Relocation to avoid danger is only part of the general redeployment that takes place in distressed health-care arenas: with local agriculture and employment disrupted, the need to scrape together a basic livelihood appears to be the most influential factor in most settings. Health workers themselves are mobile, both within formal health sector structures and beyond them, concentrating in areas with better earning potential. Where a concentration of practitioners may produce economic competition, health-care demand may be stimulated to meet the

---


practitioners’ financial imperatives, rather than servicing objective local needs. Arguable practices – poly-pharmacy, unnecessary investigations, non-rational use of antibiotics, injections where oral medication should suffice – contribute to soaring household expenses, but also drug-resistant disease and iatrogenic illness.

The recognition of the economic opportunities provided in health service provision has prompted the reorientation of some state-run training facilities and the emergence of private educational institutions in even the most disrupted environments. As business-oriented training institutions produce an excess of categories with higher status and earning perspectives, such as doctors and pharmacists, the imbalance between professions increases. With medical graduates from Haiti having established a solid regional reputation in previous decades, the largely hospital-based medial curriculum prepares undergraduates for an international role: educators indicated that 80 per cent of doctors emigrate on graduation. In the DRC, the spontaneous proliferation of medical schools and training institutions has led to an explosion of holders of substandard health-care qualifications, expecting employment in an already saturated market. In Somalia, new health professionals are trained in institutions created by local entrepreneurs and financed by fees and external support. In Palestine, the health-care training industry has expanded dramatically, beyond actual service necessities, in response to the scarcity of alternative job opportunities in other economic sectors. In Afghanistan, three doctors have been trained for every two nurses, with urban medical unemployment a consequence due to reluctance to serve in rural areas. Anecdotal evidence from the interviews suggests that the inflated salaries offered in non-health security-linked sectors have resulted in reports of doctors working as drivers in Kandahar province. Salaries for health workers in NGOs are at least 50 per cent higher than government salaries, eroding management and leadership capacity in key programmes.

Gender issues exacerbate the limited access to health care available to women and girls. The existing educational disadvantage for girls in Afghanistan limits the pool available for training in midwifery or nursing, and the targeting of both female education and female health workers in that country by the Taliban compounds the shortage of women doctors and even trained birth attendants in rural communities, with already disturbing levels of maternal mortality. But misconceived concurrent attempts to professionalise nursing and midwifery are producing predictably negative consequences. The decision to require completed secondary education for access to midwifery training has resulted in rural women being increasingly excluded as a consequence of their educational disadvantage. Trained urban midwives are unwilling to fill rural vacancies, preferring unemployment to undesirable rural appointments.

Training in post-conflict situations is often patchy and of poor quality, resulting in qualifications whose standards are difficult to confirm or certify. With multiple parties to a conflict, duplication of training of health professionals occurs, with multiple categories emerging. The skill base of workers will reflect the priorities of the promoting bodies, with military medics, for example, frequently experienced in the acute management of trauma but unprepared to provide emergency obstetric care. In countries bordering our case studies, post-conflict integration of health workers, including former military health personnel, has further inflated a regional workforce that is often already bloated and inadequately supplied and remunerated. Reform attempts to upgrade the skills of the workforce and to downsize it are often constrained by political or clientelist imperatives to increase opportunities for employment within the public service. Yet the inability of government to pay salaries that provide an adequate standard of living results in informal fees demanded of patients for services that are nominally ‘free’, and an unregulated private sector of ‘moonlighting’ public sector staff feeding parasitically off the failures of the state system.

Financing

Domestic public financing for health is frequently reduced during situations of conflict, as a result of shrinking revenues and increasing security-related expenditures. Military health services may be the one potential exception to this. State funding frequently contracts to (irregularly) cover salaries diminished by inflation, with limited allocations for drugs and outreach activities, and procurement, logistics, and distribution frequently disrupted. In the DRC and CAR, even diminutive salaries have failed for years to reach the employees of an absent state. The gap left by a contracting or absent public purse is filled by households, often supported by family remittances from abroad, charities, and official external assistance. Once all these financial contributions are added together, total health expenditure may attain considerable levels, with the highest proportion usually coming from out-of-pocket expenditure, despite the level of poverty of the involved population.

Private payments become integral to health service provision in all disrupted health-care arenas: health services offered by the Départements in Haiti are heavily dependent on user fees, and in Afghanistan, despite an ambitious effort to provide a basic package of health services through contracted-out NGOs, patients prefer to spend their money in the private for-profit sector, where services are perceived to offer better quality, easier accessibility, and a wider service profile. In Somalia, Islamic charities back investments in new facilities, which then charge (initially at discounted prices) for the provided services.35 Analogously, mission

health facilities have a long tradition of charging for services. With state financing for health in the DRC among the lowest in the world,\(^\text{36}\) health administrations neglected by the state budget sustain themselves through the institution of ‘la pompe aspirante’,\(^\text{37}\) siphoning off a percentage of user fees paid to health facilities, with a cut sent on up the ladder.\(^\text{38}\)

In acute interventions, international humanitarian funding for health may rise exponentially but not sustainably, with the mandates of humanitarian agencies reaching their defined end, the initial public support waning, and no development perspectives in sight. In the post-conflict phase, donor financing makes significant contributions to reforms across the sector, drawing on processes that have been trialled in other contexts: the Health Coverage Plan, trialled in Cambodia and subsequently applied with the contracting of NGOs in East Timor and then Afghanistan, is one example. Financing is inevitably framed by donor agendas, particularly where the local state is weak, and local planning frameworks are either inadequate or developed with extensive technical assistance.\(^\text{39}\) Donor funding linked to donor priorities and diplomatic interests creates donor ‘darlings’ but also results in donor ‘orphans’ – those countries unwilling or unable to follow the script assigned to them by the aid industry, or lacking strategic significance. Limited local absorptive capacity and poor local infrastructure often constrain the resources able to be channelled through government funding mechanisms, leading to preference for implementation being given to international organisations or NGOs and to alternative systems that are difficult to reconcile with crippled government mechanisms. In the countries studied (with the notable exception of Palestine), the disarray of state management structures is so advanced that the recurrent donor initiatives intended to resuscitate them are regularly frustrated.

Ironically, military aid allocations – the ‘hearts and minds’ component of the military budget, significant in Afghanistan\(^\text{40}\) – may in places exceed other aid for health, but lack the health systems and development experience required to make it effective in alignment with local practices. Furthermore, local capacity may exist to some extent but remain incompatible with donor requirements due to its high degree of informalisation. The poor grasp of the local context demonstrated by international actors leads to frequent embarrassments, as when evidence of having unintentionally or at times intentionally provided support to factions in the conflict emerges. Changes in local and geo-politics can feed into this: support for


\(^{37}\) This bleakly humorous metaphor, translated as ‘the suction pump’, draws attention to the way in which services parasite their clients to sustain their own continuing existence, inverting the conventional duty of care relationship between the care provider and the population ‘served’.


\(^{40}\) Antonio Donini, ‘Between a rock and a hard place: integration or independence of humanitarian action?’, in International Review of the Red Cross, Vol. 93, No. 881, March 2011, p. 150.
Hamas-related charities has gained increased legitimacy as a consequence of the organisation’s electoral success.

**Drugs, vaccines, and technology**

Severe disruption is characterised by a conspicuous commoditisation of health, with pharmaceuticals providing an economic rationale for sustaining private provision of selected services in the absence of the state. In fact, pharmaceutical markets appear equally buoyant in all the studied countries. Business people, petty traders, health professionals, international agencies, and vertical programmes are all active in this crowded field, alimenting big commercial interests. Despite the high visibility of such a mixed market, its study is often neglected. The informality of such pharmaceutical markets combines with their illicitness (in the eyes of international regulators and law enforcers) to challenge researchers. Besides being difficult, collecting reliable data may also be risky, particularly for in-country researchers vulnerable to political, factional, or criminal pressures. In this research, institutional travel advice constrained travel to provincial centres; researchers found the political complexities in Palestine problematic to navigate, and in Haiti they were warned of the dangers implicit in exploring pharmaceutical markets.

The porous borders of Somalia have allowed the increased importation of medicines from a range of sources, with a burgeoning network (including informal and at times murky elements) of financing and procurement put in place by local entrepreneurs; this network serves not only Somali territories, but well into the neighbouring regions. The same international dimension of the pharmaceutical trade is recognisable in Afghanistan and the DRC. The absent regulation means that poor-quality or fraudulent medicines, many with European brand names, have facilitated access. In extremely commoditised contexts such as the DRC, substandard medicines may be preferred to quality ones by customers and prescribers alike due to their lower price. Observation from the case studies suggests that self-treatment, in the absence of prescribing controls, frequently results in inadequate therapy, with implications for the development of antibiotic resistance, and the lack of Western medicines in insecure or neglected locations means that traditional healing practices are frequently substituted.

Logistics and delivery operations for centralised medical supply systems are very sensitive to state disarray, and rank among the first public functions to degenerate. As a result, local opportunistic or compensatory (depending on the point of view) supply lines emerge. Vaccination programmes are vulnerable as


access and demand are compromised because of security concerns and the cold chain is disrupted. Ironically, successful interventions may create problems, with international organisations establishing short-term, parallel supply schemes that may displace or asphyxiate existing but frail state systems. In post-disaster Haiti, the free-care policies of some NGOs, such as Médecins sans Frontières (Doctors without Borders, MSF), place them in tension with local public providers, who charge fees for services and prescribed medicines that are often perceived as being of inferior quality. While these exogenous services are valued in the short term, this temporary competition may disrupt the delicate supply equilibrium, displacing small-scale local operators and creating difficulties in re-establishing supply links once international actors depart. As NGOs reach the end of their mission, the distribution of their residual supplies – particularly where they are committed to distributing these supplies free of charge and are unable to on-sell to local providers – floods local markets, disrupting the precarious balance of supply and demand.\textsuperscript{44} Donations of expired, unneeded, unusable pharmaceuticals are a recurrent concern, particularly in crisis contexts attracting international attention. The Gaza Strip has been flooded with inappropriate supplies of medicines at several points in time, causing serious management and disposal difficulties.

State intervention, in the form of proper regulatory provisions, is constantly invoked to remedy the unruliness of these pharmaceutical markets. However, a poorly conceived and under-resourced regulation may be counterproductive, by offering opportunities to officials for extortive practices voided of benefits, and stifling informal initiatives that provide valuable alternatives to absent, erratic, or unreachable formally supplied medicines. Palestine offers the bizarre counterfactual of a pharmaceutical market highly regulated by Israel, which results in good-quality medicines sold at very high prices, out of proportion with the purchasing power of the average household.

Health information

The health information system is one of the most vulnerable components of any health-care management system. As the health sector ceases to be administered as a comprehensive system, the demand for reliable information vanishes too. Data collection is further compromised through loss or relocation of the staff responsible for recording, reporting, or analysing the data. The aggregate data now available in the CAR and DRC, while of dubious accuracy, further distorts the realities. Figures from sites that are more geographically or politically accessible – and therefore privileged – may be extrapolated to the whole of the country, and incorrect assumptions made for inaccessible areas. In the CAR, ‘in practice, the SNIS [\textit{Système...}’

National d’Information Sanitaire] is not used: not for planning, not for evaluation and not for management. Routine information systems are similarly not used in the other studied countries. Survey-originated information, largely propped up by the aid industry, was found to be much stronger in Palestine, Somalia, and Afghanistan. Its weakness resides in its piecemeal nature: alongside valuable insights about selected aspects, black spots persist. The latter may be more important than the former, as the under-study of private provision demonstrates across all health-care arenas. Comprehensive information is regularly scarce in health-care non-systems, an inadequately recognised aspect. In the absence of reliable government statistics, international organisations provide competing – and at times confusing – information. In their estimate of maternal mortality ratios for the CAR, the World Bank and United Nations agencies endorsed a figure of 850 per 100,000 live births in 2008, but included a range from 490 to 1,400 based on the 2003 Census and other estimates around the same period.

Health information is a political commodity, used with often laudable intentions. While, in the absence of accurate vital registration systems, death and cause-of-death data are so poor as to become meaningless, estimates of these statistics rapidly become ‘data’, and attempts to rationally re-examine these estimates are vigorously contested. Health data may be crucial in establishing international support for disasters, as the current Horn of Africa famine projections show, but the politics of health information make it contentious: challenges to the estimates of deaths – particularly civilian deaths – in recent conflicts have pitted claim against counter-claim, methodology against methodology.

Leadership and governance

In dysfunctional states, legitimate authority may have never existed; in conflict situations, where it is often contested or lost, the local ownership of health systems becomes a dubious concept, more likely to reside in informal social structures than in official formal ones. Even where the state is recognised by international bodies, it may look illegitimate to its citizens; moreover, its ‘reach’ may be truncated by its limited capacity. In all the case studies, health services are compromised by the limitations of the state: Afghanistan’s fragile control of contracted health services – even with substantial international support – provides coverage for a very low proportion in some provinces; in the CAR, ‘the State stops at PK12’ – that is, at the margin of the capital Bangui; and the crippling absence of state funding for the DRC’s health services results in parasitic state agents that are dependent on user fees.


47 S. Simmonds and F. Ferozzudin, above note 25, pp. 24–27.

to feed themselves. But the response to the massive measles epidemic affecting Maniema and South Kivu (in the DRC) in 2010–2011, delayed by health authorities because of their perceptions that related incentives were bypassing them in favour of more responsive NGOs, is revealing of the true motivations of such bodies.

Implications for health-care provision beyond the reach of the state

Any state unable to affirm itself over the territory supposed to be governed by it is an unlikely service provider. External support on a grand scale, such as what was provided for a decade to the Afghan state, may fail to make the state legitimate in the eyes of its population, whatever social services are provided in its name. Rather than waiting for state-provided health care, the disillusioned inhabitants of such countries have opted for alternative services, mostly privately supplied: privatisation is more visible where the state is crippled, but its reach in these disrupted environments is extensive. The expectation that a challenged state apparatus, even with generous international support, will be able to reverse such privatisation is unrealistic, and more pragmatic accommodations need to be made until sufficient governance capacity can be established.

These conclusions, then, are largely directed towards the international development community, and focus on those health service areas beyond the current reach of the state. They do not preclude state-building as a necessary component of development assistance, but they recognise that in chronically disrupted environments, complementary activities that build on the available local resources will be necessary in the medium- to long-term interim. Turbulent health-care arenas need to be managed with the long term in view. The rise of non-government and informal providers in these compromised environments exposes the limitations of an exclusive focus on public provision, and on the state capacity needed to materialise it.

Afghanistan has decided to add a ninth ‘Millennium Development Goal’ to the existing eight: that peace is a prerequisite for development. But peace cannot be attained by administrative fiat or diplomatic gestures. Functioning states are needed to negotiate peace within their borders and ensure it takes root. Otherwise, low-intensity governance of the sort adopted in northern Somalia may represent the most viable trade-off. Accepting a minimalist role for the recovering state, negotiated with and accepted by non-state actors, may be a precondition for the slow regeneration of health-care provision. The perspectives needed for that development are system-wide, initiated in anticipation of those changes, and

49 J. Von Schreeb and M. Michael, above note 32.
committed to the long term, and recognise all potential contributors to health in what are often complex and chaotic environments.

The implications of this research are far-reaching, if taken fully on board by development actors and donors. The research calls for changes in the framing of analysis of these contexts; an acknowledgement that the state is only one of many actors in health; a recognition that current time-frames, and the current expectations that shape them, are unrealistic; and a preparedness to rethink development engagement in ways that will allow effective harnessing of the diverse actors that currently provide services.

To reach beyond the reductionist official portraits of these complex, adaptive, and diverse health-care arenas will necessarily require new and substantially different analytical approaches. Aid portfolios need to be restructured to reflect the trans-border flows that are characteristic of many crisis complexes. Development actors need to take regional perspectives: with porous borders, and mobile ethnic groupings straddling post-colonial borders, the nation may no longer be the appropriate unit of analysis and planning. Only by shifting focus from territories and recognised boundaries to populations, both settled or on the move, can the constantly neglected trans-border constituent of health-care provision be adequately captured by the analysis. At the country level, to interpret current ongoing health scenarios and to anticipate future developments, adequate attention must be paid to the broader social and political environment. Conventional evaluation tools, particularly those that have been structured to examine specific sub-sectors such as disease control, are prone to miss, hide, or deform most of the key characteristics of these distressed contexts. The uncritical acceptance of government accounts of services in these disrupted environments provides a distorted understanding of the realities involved: those areas where the state still manages to influence events need to be mapped carefully, distinguishing them from areas beyond the state’s reach.

For donors, this will require a reorientation in terms of both processes and partners. These informal health-care providers, who frequently account for the bulk of the market, will need to be brought into centre stage, in the analysis as well as in the policy discussion. An understanding of their activities and business models, and of the intersections that they share with formal structures, is crucial to any health strategy. Collaboration with non-state, mostly informal actors implies difficult trade-offs, with huge implications for programming and accounting procedures. Introducing positive incentives in a pluralistic, largely informalised health-care arena, where actors play multiple, fluid roles, poses distinctive difficulties that are often not recognised. Recent assessments of performance-based financing in the DRC confirm this point. Well-meant interventions may have


unexpected harmful effects, or may generate the desired effects alongside heavy drawbacks. Appropriate financing instruments that take informal funding into account and enable informal health-care providers to be financed will need to be developed, and options can only be explored at the local level. With long-standing disruption, these spontaneous, adaptive but often stable local health systems, financed by a mix of private out-of-pocket expenditure and external support (comprising remittances and official and unofficial aid), are unlikely to transition readily into imposed top-down blueprints for services, but will have to be strengthened by adapted interventions, responding to local contexts and complementing and reorienting health services currently delivered on the ground.

New, agile funding mechanisms will be needed to support such an open exploratory approach, with some flexibility built into formal controls over operations. The detailed programming and reporting frameworks, such as logical framework analysis, which have constrained the vigilant management opportunism that can take advantage of these fluid and unpredictable environments need to be revisited iteratively, responding to the observations of field implementers rather than distant desk personnel. Donor funding decisions should be based on mid- and long-term results, assessed by well-designed, realistic evaluations, rather than on programmatic adherence to structured projects that are likely to become obsolete long before they expire.

In light of the deep disarray that has persisted over decades in conflict-affected areas, the present distorted health systems environment should be accepted as enduring. The high degree of informalisation presented by these health-care arenas is not amenable to quick correction, even should the violence subside. Instead of planning for an elusive recovery, interventions should be designed to take root and thrive within the existing constraints and exploit the opportunities offered by the absent or impotent state. External actors need to ensure long-term commitments, designing coherent, uninterrupted interventions: any exit strategy in the short term will effectively abandon distressed populations to their fate. An instructive example of this is MSF, a high-profile humanitarian agency recognised for its short-term, resource-intensive programming but currently establishing a long-term comprehensive health-care programme in the CAR, responding to the need to rethink intervention modalities in circumstances with no immediate end in sight.

In dealing with health services beyond the reach of the state, the international community has to accept its expanded responsibility: support for the development of state functions will need to continue, but in these environments, governance will need to be sought through both local and international partnerships. In the absence of functioning state governance for health, this comes to encompass policy-making as well as health-care provision. In many distressed

---

54 Logical framework analysis is a methodology for structuring the main elements in a project, facilitating its monitoring and evaluation. For more information, see, for example, Logical Framework Approach: Handbook for Objectives-Oriented Planning, Norad, 1999.

contexts, such as in Afghanistan, donor agencies are already dominating the health policy discussion without being willing to overtly acknowledge their dominance. In other situations, such as in Haiti, external assistance shapes the health field without encouraging a productive policy process in which facts on the ground precede intentions. Accepting their expanded role, and taking full responsibility for their failures, implies a thorough redesign of the way donor agencies intervene in under-governed environments. In the international development community’s relationship with the state, a more honest dialogue will be necessary: political conditionality that links the funding of health service delivery to political milestones does little to persuade political actors, and it certainly undermines health service delivery. Health-care provision should be supported because of its intrinsic merits, rather than as a constituent of ambitious state-building projects with shaky foundations and uncertain outcomes.