Rebuilding health post-conflict: case studies, reflections and a revised framework

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Accepted on 21 February 2019

Abstract

War and conflict negatively impact all facets of a health system; services cease to function, resources become depleted and any semblance of governance is lost. Following cessation of conflict, the rebuilding process includes a wide array of international and local actors. During this period, stakeholders must contend with various trade-offs, including balancing sustainable outcomes with immediate health needs, introducing health reform measures while also increasing local capacity, and reconciling external assistance with indigenous legitimacy. Compounding these factors are additional challenges, including co-ordination amongst stakeholders, the re-occurrence of conflict and ulterior motives from donors and governments, to name a few. Due to these complexities, the current literature on post-conflict health system development generally examines only one facet of the health system, and only at one point in time. The health system as a whole, and its development across a longer timeline, is rarely attended to. Given these considerations, the present article aims to evaluate health system development in three post-conflict environments over a 12-year timeline. Applying and adapting a framework from Waters et al. (2007, Rehabilitating Health Systems in Post-Conflict Situations. WIDER Research Paper 2007/06. United Nations University. http://hdl.handle.net/10419/63390, accessed 1 February 2018.), health policies and inputs from the post-conflict periods of Afghanistan, Cambodia and Mozambique are assessed against health outputs and other measures. From these findings, we developed a revised framework, which is presented in this article. Overall, these findings contribute post-conflict health system development by evaluating the process holistically and along a timeline, and can be of further use by healthcare managers, policy-makers and other health professionals.

Keywords: Health system development, health system reconstruction, post-conflict, state-building, Cambodia, Afghanistan, Mozambique

key Messages

• Applies a health system framework to three post-conflict countries.
• Expands on the literature pertaining to health system development.
• Presents a revised framework for post-conflict health system development.
• Delineates sequencing of state-building activities across a 12-year period.
Introduction

War and conflict have changed dramatically over the course of the last century; what was once a widespread, global occurrence has now largely become concentrated to resource-poor countries in the Global South (Waters et al., 2007; Brown et al., 2008; Kruk et al., 2010). Indeed, of the 28 global conflicts currently being monitored by the Council on Foreign Relations, all but one (the European refugee crisis) are among low- and middle-income countries, with the majority being concentrated to Sub-Saharan Africa and the Middle-Eastern region (Council on Foreign Relations, 2018). While damaging all facets of society, conflict instigates particular devastation on the health and health sector of these countries (Rubenstein, 2009; Gordon, 2013). For example, a recent study from the World Bank (The World Bank, 2017) estimating the economic damage caused by the Syrian conflict found ‘more people may have been killed in Syria due to a breakdown of the health system than due to direct fatalities from the fighting’ (40). Therefore, investment and proper research towards post-conflict healthcare reconstruction is imperative for addressing these problems and establishing an effective response.

The present article will introduce and explore how conflict impacts health and health systems and identify the main challenges that must be overcome during the post-conflict period. Strategies employed by international and local actors during the reconstruction process are then evaluated across three post-conflict case studies, and the strengths and weaknesses of the various approaches are determined along a 12-year timeline. The findings from the case studies are then presented in a revised framework for sector-wide post-conflict development.

The conflict period: effects on health and health systems

Civil and armed-conflict negatively impact both the health of the population, and the health system of the region. The magnitude of this devastation is extensive, with nearly all facets affected in some capacity. Concerning the health of the population, morbidity and mortality dramatically increase due to the immediate effects of conflict, and include (but are not limited to) war-related injuries, sexual violence, forced labour, exploitation and unlawful detention (Waters et al., 2007; ICRC, 2016). Additionally, the mass displacement of populations during times of conflict not only intensifies poor health conditions, but also serves to increase the prevalence of communicable diseases such as malaria and respiratory infections (Waters et al., 2007; Kruk et al., 2010). Finally, exposure to war-related atrocities contributes to an increased prevalence of psychological disorders, including post-traumatic stress disorder, depression and anxiety (Panter-Brick, 2009; Abo-Hilal and Hoogstad, 2013).

Conflict has an equally destructive effect on the health system of the region. Based on the World Health Organizations (WHO) ‘six building blocks of a health system’ framework (WHO, 2007), all modalities are negatively affected to some degree. As health professionals are increasingly being targeted during times of conflict, doctors, nurses and pharmacists are fleeing conflict zones in rising numbers (Fujita et al., 2011; Gordon, 2013; Fouad et al., 2017). This not only serves to reduce the ‘health workforce’ of the region, but it also prevents the proper provision of ‘service delivery’ following the end of the conflict (Fujita et al., 2011; Gordon, 2013). Additionally, the destruction of health infrastructure, including health facilities (hospitals and clinics), monitoring systems and public health institutions, decreases the amount of available ‘health information’ and the necessary ‘medical products, vaccines and technologies’ required for a health system to function effectively (The World Bank, 1998; Gordon, 2013). Finally, with the collapse of ‘leadership and governance’, both state health policy and ‘financing mechanisms’ essentially become non-existent (Gordon, 2013).

The post-conflict period: definition and delineation

Due to the unpredictable nature of post-conflict zones, a consideration of the time-frame is paramount. Yet, the idea of ‘post-conflict’ is not easy to define (Haughton, 1998; Waters et al., 2007; Ohiorhenuan and Stewart, 2008). This is especially true in modern warfare, where conflicts are typically intra-state, protracted over years, if not decades, and have multiple groups entering and exiting the conflict at various points in time (Haughton, 1998; Ohiorhenuan and Stewart, 2008). For general purposes, however, the post-conflict period is usually defined by the ceasing of hostilities, signing of a peace agreement or the demobilization, disarmament and reintegration of forces (Ohiorhenuan and Stewart, 2008).

Moving into the post-conflict period, delineation of the rebuilding process becomes somewhat vague and malleable. The first year following successful conflict resolution is usually termed ‘transitional’, in that it involves the presence of an interim government and the continuation of emergency health services (Haughton, 1998). With the establishment of a more permanent government and increased local capacity, the next few years generally focus on health sector ‘rehabilitation’ and ‘reconstruction’ (Haughton, 1998; Csis, 2002). This eventually leads to ‘sustainable development’, and at this point, the health sector should be indistinguishable from those of other developing countries, irrespective of the damage from the conflict (Haughton, 1998).

The end goal of this process is to return the health sector to a pre-war functioning capacity (Haughton, 1998; The World Bank, 1998; Waters et al., 2007). However, this process can take years, if not decades, and is generally delayed by unforeseen set-backs and challenges (Haughton, 1998; The World Bank, 1998; Ohiorhenuan and Stewart, 2008). Indeed, an analysis from Haughton (1998) found that out of 15 countries experiencing civil war prior to 1991, only 1 country achieved pre-war peak levels of gross domestic product (GDP) per capita within a decade after conflict. Therefore, when planning for the rebuilding process, organizations should anticipate a slow recovery, and sequence their activities accordingly.

The post-conflict period: development and reconstruction

Given the challenges related to the timeline of post-conflict health system development, what is the actual process, and what are some of the main challenges? Concerning the process, there are essentially two options for the health sector. The first is to simply maintain the emergency relief programmes provided during the war; however, this strategy is generally considered to be unsustainable, and further risks undermining restoration of the national health sector (Rubenstein, 2009). The second, more viable option, is the construction or reconstruction of the pre-conflict health system (Rubenstein, 2009).

Nonetheless, the ubiquitous destruction previously outlined poses unique and significant challenges. Factors such as displacement, trauma and political volatility contribute to problems not normally seen in regular development strategies (Waters et al., 2007; Kruk et al., 2010). Additionally, the scale of reconstruction requires significant donor input, and further necessitates a multi-faceted rebuilding process that the state cannot support in isolation.
Post-conflict health system development, namely; it is a long process.

Purpose of the present paper

There are a multitude of international and local actors involved in the process, who must act in concert to address an array of initiatives, including: the provision of health services; the establishment of a disease prevention and surveillance system; supply-chain management of pharmaceuticals, vaccines and medical equipment; and monitoring, evaluations and financing of the health system, to name a few (Rubenstein, 2009; Kruk et al., 2010).

Undermining all these challenges is a series of seemingly impossible paradoxes that must be reconciled throughout the development process. Health system programmes must be both not only effective enough to address immediate health needs, but also efficient enough to function in the long run (Rubenstein, 2009; USAID, 2009). Balancing these short- and long-term goals is also divisive, as stakeholders must attend to immediate health needs while also laying the groundwork for addressing long-term health complications that arise from conflict, such as mental disorders and physical rehabilitation (Haughton, 1998; USAID, 2009). This raises additional debate as to the level of reform measures that should be implemented, as the post-conflict environment is sometimes seen as a ‘window of opportunity’ for reform (Haughton, 1998; USAID, 2009). However, too many reform measures also risk overwhelming the already severely weakened health sector. Further complicating matters are issues related to ownership of the health system, as the international community will generally assume responsibility for the health system initially, as the state will not have the capacity to implement the required measures (Haughton, 1998; USAID, 2009; Kruk et al., 2010). Nevertheless, without proper attention given to the eventual transfer of this ownership towards local institutions, the whole endeavour risks continued reliance on foreign aid, and may ultimately prove unsustainable.

A final, key consideration is the necessity for contextualization, as each post-conflict period will be unique, exposing specific geographic, demographic and political problems (Waters et al., 2007; Brown et al., 2008; Kruk et al., 2010). While some of these contextual problems are more prevalent than others, such as gender disparities, refugee resettlement and the re-emergence of communicable diseases (Waters et al., 2007; Brown et al., 2008; Rubenstein, 2009), others are much more unique, such as the American military involvement in Afghanistan (Gordon, 2014), the influence of European, free-market ideologies in Kosovo (Shuey et al., 2003) and persistent sectarian tensions in Lebanon (Traboulssi, 2012). However, because integrating these contextual factors requires insight from local organizations and time on behalf of the development community, they are frequently overlooked, thereby aggravating the situation.

Methodology

Selection of countries for analysis

While there is a tendency to homogenize post-conflict countries, in reality, they differ in many aspects, and require different policies to properly contextualize each situation (Brown et al., 2008). Therefore, case studies were selected based on economic similarities, using a typology of post-conflict environments as posited by Brown et al. (2008). In brief, the authors determined three major economic criteria as the basis for this categorization: the state of the economy, mainly regarding its level of development (using the Human Development Index and GDP); the presence of high-value natural resources; and the extent of horizontal inequalities (both defined and measured previously by Brown et al. 2008). Using a list of post-conflict countries from Ohiornhenuan and Stewart (2008), those with a low level of economic development, an absence of high-value natural resources and sharp horizontal inequalities were identified. These characteristics were selected as they are the slowest kinds of countries to recover from conflict, and therefore require the greatest amount of external assistance post-conflict (Brown et al., 2008). From this, Cambodia (1992–2003), Afghanistan (2001–2012) and Mozambique (1993–2004) were selected, as all countries additionally experienced an extremely protracted, civil conflict period, with a high number of civilian deaths, and significant, post-conflict foreign intervention.

Data collection

This was a non-systematic review that did not employ any interviews or observations to collect data. PubMed, Embase and Google Scholar were used to search for published literature, while Google and the WHO database were used to search for grey literature; additionally, publications from the reference lists of identified literature were also used. Search terms such as ‘health system’, ‘post-conflict’ and the names of countries chosen as the case studies were used as search terms.

Studies which did not pertain to the health system specifically, fell outside of the time-period chosen for analysis, or did not contain information which fell into the framework chosen for analysis were not included. While recognizing that varying observations and conclusions will be drawn from studies in post-conflict countries, neutrality and biases were minimized by referring back to the original policy document when possible, including findings that were only supported by evidence, and presenting discrepancies openly in the case studies. Overall, case studies were built from a total of 33 publications: 15 for Cambodia, 13 for Afghanistan and 8 for Mozambique (see Supplementary Data).

Framework for analysis and measures

To systematically describe the development process, a framework developed by Waters et al. (2007; Figure 1) was applied at three ‘segments’ of the development process. The framework outlines two
overarching needs for the rehabilitation of health systems in post-conflict environments: policy issues and health system inputs. Specifically, the authors identified five principal policy issues related to rehabilitation of the health system, namely: co-ordination among donors (such as sharing information and system-wide agreements); political commitment by host governments (such as the presence of a national strategy or policy); partnerships with non-governmental organizations (NGOs; such as formalized agreements or effective co-ordination); planning, prioritization and integration of health services (again via national strategies and policies); and the sustainability of the rehabilitation effort (the level of dependence on international assistance). Assessment of these policy issues were based on definitions more extensively described by Waters et al. (2007). All measures were assessed qualitatively from published studies and grey literature, including government documents, organization reports and demographic profiles.

Regarding health system inputs, the framework outlines a further five needs, namely: financing, human resources, physical infrastructure, information systems and essential drugs. For financing, three measures were evaluated using World Bank data; the percent of external financing directed towards the health sector; health expenditure per capita; and health expenditure as a percent of GDP. Human resources, physical infrastructure and information systems were all assessed qualitatively, using published and grey literature (government documents, reports, policies, etc.). For essential medicines, the average immunization rates of four commonly administered vaccines, DTP3 (diphtheria, tetanus toxoid and pertussis), Pol3 (polio), MCV1 (measles) and BCG (tuberculosis) were assessed using WHO data. While the supply of vaccines is much simpler than that of essential medicines (Foster et al., 2006), this measure was chosen as no reliable data exists for the distribution of essential medicines during time periods evaluated. Furthermore, effective vaccination coverage still requires significant input from governments and donors and is commonly used in the literature as an indicator of supply-chain management in health systems research (Foster et al., 2006; Perehudoff et al., 2018).

Independent of this framework, quality of governance was chosen as an additional measurement, which included accountability, monitoring and evaluation, and prevention of corruption. These measures were chosen independently by the authors based on their experience and knowledge of this field. Accountability and monitoring of the health system was evaluated by clear responsibilities and roles among stakeholders and the presence of health information systems and monitoring and evaluation networks, respectively. Corruption was defined as per the extent to which public power is exercised for private gain (The World Bank, 2018) and measured via World Bank data (Figure 2). All measures were assessed against three commonly applied health outputs, specifically; average life expectancy, infant mortality, and under-five mortality (Wang et al., 1999), again, using World Bank data. In order to gain a complete picture of the development process and not just a snapshot at one point in time, all measures were evaluated over a 12-year period, and segmented into three distinct time-frames (years 1–4, years 5–8 and years 9–12).

Limitations

There are a few notable limitations in this study. First, all of the case studies are based off secondary data sources and findings from the literature (some of which were in-turn based off of secondary data sources); consequently, they are quite prone to biases and the overall quality of evidence is low. Secondly, as this is a non-systematic review, it does not contain the methodological robustness, i.e. characteristic of these studies, including a formal assessment of bias. However, there is criticism regarding the application of systematic reviews within the field of international development research, as they tend to value quantitative over qualitative evidence, thereby overlooking the context and processes which are paramount to this kind of research (Mallett et al., 2012). Based on this, the authors determined that a literature review was a more suitable design for evaluating this research question. Finally, while the authors attempted to ensure homogeneity among case studies, this was severely limited by the non-homogenous nature of post-conflict countries. For example, while Afghanistan is broadly referenced by the literature as being in a ‘post-conflict’ period, in reality many areas of the country continue to experience heavy fighting and a continued military presence (Frost et al., 2016). Due to these differences, the reader should keep in mind that comparisons between post-conflict countries are not an exact science, and differential health outcomes may not necessarily be linked to the specific inputs or policies evaluated in these case studies.

Case studies and reflections

Overview of health system development

An overview of the conflicts in each country can be found in Box 1.

One- to four-years post-conflict

Following the end of hostilities, Cambodia, Afghanistan and Mozambique each had to contend with similar challenges, including: extreme reductions in health outcomes, sometimes stratified along certain demographics such as gender or class; an influx of NGOs that needed to be co-ordinated and managed; a severely weakened Ministry of Health, with minimal capacity and legitimacy; a power vacuum, or a weakened and conflicted governing body; widespread destruction of health infrastructure, particularly in rural areas; the collapse of the health workforce, sometimes due to purposeful targeting of said workforce; and finally, simmering tensions leftover from the conflict.

The health sector in post-conflict Cambodia had to deal with a rapid influx of international and local NGOs, all under the highly contentious and fragmented governing body of the United Nations Transitional Authority in Cambodia (UNTAC; UNRISD, 1994;
**Box 1. Background of case studies**


**History:** As per the United Nations Research Institute for Social Development (UNRISD, 1994), Cambodia has been subject to decades of protracted conflicts and brutal political regimes. Following a US supported military coup in 1970, the country became substantially involved in the Vietnam War. Extensive carpet-bombing by US forces on the Vietnamese–Cambodian border caused widespread devastation and internal displacement. This instability allowed the Khmer Rouge political party to gain power in 1975, and a radical return to Cambodia’s agricultural and traditional roots was implemented. During this period, an estimated half a million to 2 million people, mainly intellectuals and minorities, were systematically detained and killed in the now infamous ‘killing fields’.

The Khmer Rouge was overthrown in 1979 with support from the Vietnamese, who then established their own republic. Initially, the regime received substantial emergency support and aid relief from Western powers; however, upon declaration of the UN of an ‘end to the emergency’ in 1982, an aid embargo was imposed on the country in an effort to stop the Vietnamese occupation (UNRISD, 1994). This drastically reduced the amount of foreign funding assistance, and further aggravated internal conflict within the country between various power factions. It was not until the establishment of the State of Cambodia and signing of the Paris Peace Accord in 1991 that negotiations to end the conflict were successful, allowing for Cambodia’s re-entry into the international community (UNRISD, 1994).

**Key challenges:** Entering this post-conflict period, Cambodia had some of the worst health indicators in Asia; the Ministry of Health in Cambodia (MoH(C)) estimated life expectancy to be 47 years for men and 49 years for women, and infant mortality was 120 per 1000 births (Heng and Key, 1995). Public health infrastructure was equally devastated; under the Khmer Rouge the number of health professionals was reduced to 25 doctors and 3 members of staff at the MoH(C) (Heng and Key, 1995). A two-tiered health system also emerged under the Vietnamese-backed regime, with the public sector being severely under-funded and many health facilities falling into extreme disrepair, particularly in rural areas (Heng and Key, 1995).


**History:** Prior to 1979, Afghanistan had a relatively sizeable and functioning health sector, albeit with less services in rural areas. However, much of this infrastructure was destroyed following the Soviet invasion of 1979. During the invasion, the Soviets attempted to depopulate rural areas in order to reduce support for the indigenous ‘mujaheddin’; this included the systematic destruction of healthcare facilities. Consequently, when Soviet troops withdrew in 1988, over 60% of rural health facilities had been destroyed (Cook, 2003).

Following Soviet withdrawal, Afghanistan plunged into a civil war as infighting broke out between different ‘mujaheddin’ groups. Gradually, the Taliban began to take power, and by 2001, they controlled roughly 90% of the country. During this time, the limited capacity of the government to provide proper services resulted in NGOs playing a crucial role in health service delivery. Prior to the US-led occupation invasion in 2001, an estimated 20 International NGOs (INGOs), and 200 Local NGOs were providing 80% of the available healthcare in Afghanistan (John, 2001).

**Key challenges:** With the collapse of the Taliban in 2001, US forces established an interim government, thereby bringing about the ‘post-conflict’ period. The Ministry of Public Health in Afghanistan (MoH(A)) was faced with some of the worst health outcomes in the world; estimated life expectancy was 54 years for men and 56 years for women, and in some regions the infant mortality rate was 165/1000 births—the highest ever recorded (Newbrander et al., 2014). There was roughly one physician for every 50,000 people (Cook, 2003), and only 10% of the population lived within an hour walking distance from a health facility, largely in rural areas (Newbrander et al., 2014). Additionally, because of the restrictions placed on women under the Taliban, there were substantial gender inequities, including a deficiency of midwives and female doctors (Cook, 2003).


**History:** The Mozambican Civil War lasted from 1977 to 1992, and is commonly characterized as a proxy war to the Cold War (Robinson, 2006). Following independence from Portugal in 1975, Mozambique’s ruling party, the Mozambican Liberation Front (FRELIMO), began to implement extreme authoritarian socialist reforms. These measures created some backlash, and resulted in the creation of the militant/political movement, the Mozambican National Resistance (RENAMO) group. Hostilities broke out into full-blown conflict in 1977, with FRELIMO backed by the Soviet Union, and RENAMO backed by white-ruled Rhodesia and the South African apartheid regime (Robinson, 2006).

RENAMO employed many guerrilla war techniques and carried out raids against rural towns and important infrastructure, including much of the rural health network. FRELIMO was unable to properly defend against these attacks, and relocated much of its population and health sector to urban areas. A military stalemate, combined with the collapse of the Soviet Union and the ending of apartheid in South Africa, contributed to peace-talks, and culminated with the signing of the Rome Peace Accords in 1992 (Robinson, 2006).

**Key challenges:** Entering the post-conflict period, Mozambique had the worst health indicators of the three countries that were included, with an estimated life expectancy of 42 for men and 45 years for women, and an infant mortality rate of 155/1000 births. Additionally, the Ministry of Health in Mozambique (MOH(M)) faced challenges mainly relating to the severe rural and urban inequalities, persistent tensions between RENAMO and FRELIMO groups, and high number of amputations and mutilations resulting from the extensive use of landmines during the conflict (Pavignani and Colombo, 2001). Notably, the situation in Mozambique is unique in that, with support from the WHO and the World Bank, the MoH(M) started planning for health system reconstruction in 1989, 3 years before the end of the conflict (Pavignani and Colombo, 2001).
NGOs (Lanjouw et al., 1999; Gellman, 2010). While many attempts were made to co-ordinate these stakeholders, the MoH(C) lacked the necessary capacity and authority to properly implement these measures (UNRISD, 1994; Lanjouw et al., 1999). Consequently, the initial reconstruction process was largely driven by the agenda of donors via allocation of funds towards international and local NGOs (Lanjouw et al., 1999; Gellman, 2010).

A similar narrative occurred in Mozambique, where the post-conflict governing body, the United Nations Operation in Mozambique (UNOMOZ), was unable to properly manage and coordinate the large number of NGOs who had entered the country (Barnes, 1998; Pavignani and Colombo, 2001). Indeed, the co-ordinating arm of the operation, the UN Office for Humanitarian Assistance Coordination (UNOHAC), was met with competitiveness and resistance, even within UN departments (Pavignani and Colombo, 2001). Accordingly, NGOs mainly worked and were influenced by donors with minimal government input (Barnes, 1998). This was despite extensive planning for health system development conducted by the MoH(M) prior to the end of the conflict (Pavignani and Colombo, 2001).

The post-conflict period in Afghanistan was able to resolve these co-ordination problems by introducing a contracting-out model through performance-based partnership agreements (PPAs; Akashi et al., 2006). Under this scheme, NGOs would bid for regional contracts via the MoH(A) (with support from the World Bank and WHO) to implement a Basic Package of Health Services (BPHS; Ameli and Newbrander, 2008; Fujita et al., 2011). Designed by the MoH(A) with funding from the major donors (World Bank, WHO, and USAID), the BPHS focused on addressing immediate health needs through the delivery of primary health care (PHC) services (Michael et al., 2013). While this approach succeeded in co-ordinating the NGO sector and rapidly scaling up health services, it had some notable disadvantages. Primarily, NGOs were less willing to bid for more remote contracts due to insecurity, creating geographical inequalities (Michael et al., 2013). Furthermore, the autonomy and stewardship of the MoH(A) in deciding which activities to fund was minimal, as the MoH(A) only truly managed three provincial contracts, while the World Bank, the European Union, and USAID were responsible for managing all others (Michael et al., 2013; Newbrander et al., 2014).

The managerial climate of these post-conflict environments had an impact on the progression of infrastructure rehabilitation and human resource mobilization. As development in Cambodia and Mozambique was undertaken without a clear national strategy, it was largely donor-driven and projects with immediately visible outputs were highly favoured (Martínez, 2006; Lanjouw et al., 1999). Consequently, funding directed towards health infrastructure rehabilitation was prioritized, although some critics characterized it as disproportionate to other health system inputs in Cambodia (Lanjouw et al., 1999), and slow and expensive in the rural areas in Mozambique (Pavignani and Colombo, 2001). Conversely, because the BPHS mainly focused on delivering PHC services, infrastructure development in Afghanistan focused on expanding access to these services through the construction of PHC and Community Health Care Centres (Ameli and Newbrander, 2008).

Regarding the mobilization of health workers, there are a few things the development community must consider, including; how to increase the quantity of the health workforce while also ensuring both the quality and diversity of delivered services; guaranteeing equal coverage; and addressing any country-specific, contextual barriers (Roome et al., 2014). In Cambodia and Afghanistan, a national health workforce assessment was conducted early-on, revealing a lack of healthcare workers across all professions in both countries, and a lack of female health professionals in Afghanistan (Fujita et al., 2011). Both countries focused on increasing the quantity of the healthcare workforce, with Afghanistan specifically prioritizing the development of midwives and increasing the number of female health workers (Fujita et al., 2011). In Mozambique, as would eventually be the case in Cambodia, the high number of NGO-provided services combined with a drop in the salary of national health workers from austerity measures imposed by international funding agencies created an ‘internal brain-drain’ and the emergence of a two-tiered health system (Pfeiffer, 2003). On a more innovative note however, the MoH(M) integrated FRELIMO and RENAMO health workers from austerity measures imposed by international funding agencies created an ‘internal brain-drain’ and the emergence of a two-tiered health system (Pfeiffer, 2003).
workers to promote social cohesion and diffuse underlying political tensions (Pavignani and Colombo, 2001).

Five- to eight-years post-conflict
At this point in the narrative, we begin to see somewhat of a divergence in the approaches taken towards health system development. The consequences of specific actions and policies begin to manifest themselves, contextual factors become more pronounced, and the political climate accentuates considerably. However, there persists key similarities during this period, namely; a priority to claim national ownership of the health system and reduce reliance on external aid; a Ministry of Health that continues to contend with limited capacity and legitimacy; a more pronounced division between local institutions and the NGO-donor sector; the persistence or re-occurrence of conflict; and continued differences between rural and urban healthcare coverage.

In Cambodia, adoption of ‘The Health Coverage Plan (1995)’ framework by the MoH(C) represented an attempt to shift towards government ownership of the health system (Hill and Eang, 2007). The framework outlined plans to decentralize the health sector, with the introduction of Operational Districts, and expand health-care facilities to the entire population (Annear et al., 2015). However, due to continued fighting with remnants of the Khmer Rouge, in reality operations were limited at the district level, and the health sector remained fairly centralized throughout this period (Annear et al., 2015; Witter et al., 2016). Development of the national health system was further challenged by a sector dominated by NGO-driven projects and services (Godfrey et al., 2002; Pfeiffer, 2003; Martínez, 2006). The MoH(C) attempted to address this through the ‘Health Financing Charter (1996)’ which approved the right for public health facilities to levy official user-fees in order to generate additional revenue to become more competitive (Hill and Eang, 2007; Annear et al., 2015; Witter et al., 2016).

Similarly, the health sector in Mozambique became increasingly fragmented; however, the government lacked the capacity to both compete with NGO services and implement planned initiatives (Martínez, 2006). Taking a somewhat different approach than Cambodia, the MoH(M) focused on aligning the NGO-donor sector with the national health system (Pavignani and Durao, 1999; Pfeiffer, 2003; Martínez, 2006). They established multiple, cross-cutting co-ordination mechanisms, including a Pooling Arrangement for Technical Assistance in 1996 (Pavignani and Hauck, 2002), and a Sector Coordination Committee in 1998 (Martínez, 2006). Both of these were formed with the intention of moving towards a Sector Wide Approach (SWAp) to management of the health sector (Ministry of Health, 2001; Martínez, 2006; Negin and Hort, 2010).

By integrating a purchaser-provider split from the outset, the PPA mechanism in Afghanistan allowed the MoH(A) to bypass many of the challenges faced by Cambodia and Mozambique. Moving into this period, the MoH(A) managed to revise the BPHS to include services for mental health and disabilities, and introduced the Essential Package of Hospital Services (EPHS) to expand services to secondary and tertiary care (Frost et al., 2016). However, while the MoH(A) made attempts to increase coverage in rural areas through monetary incentives, their success was minimal at best (Michael et al., 2013; Frost et al., 2016). Attempts to reconcile financial challenges were also undertaken, including the removal of user-fees at PHC centres to promote equity (Steinhardt et al., 2013), and the piloting of community funds to decrease reliance on foreign aid (Rao et al., 2009).

Box 2: Health information systems: issues with monitoring and evaluation
A key requirement for effective health system development is the presence of reliable health indicators, reporting mechanisms, and accountability measures (Kruk et al., 2010). Without these, the process risks the misallocation of funds towards ineffective programmes and projects, the development of inefficient policies and initiatives, and further long-term consequences concerning sustainability and stewardship. However, post-conflict environments are extremely susceptible to these problems, as the climate is generally very volatile, lacks a legitimate government structure, and is particularly vulnerable to ulterior motives on the part of donors, political parties, or militia factions (Gordon, 2013).

Indeed, some form of corruption or inconsistencies in reporting were observed across all case studies. Afghanistan, scoring the lowest on control of government corruption (Figure 2) was particularly adept to this, with many researchers questioning the reliability and accuracy of official reports documenting health outcomes, coverage, and accessibility (Michael et al., 2013; Frost et al., 2016). Even in Mozambique, which scored the highest on the same measure (Figure 2), there were discrepancies and reports of purposeful misreporting in rural areas (Ministry of Health, 2001; Martínez, 2006). These examples illustrate the need for effective and impartial monitoring and evaluation mechanisms which can be implemented throughout the entirety of the development and reconstruction process.

With support from the Asian Development Bank (ADB), the MoH(C) made significant advances in infrastructure development (Asian Development Bank, 2004). Through the Basic Package of Health Services ‘Project (1998)’, community health centres were renovated and provided with equipment and essential drugs, and district hospitals were strengthened (Asian Development Bank, 2004). Afghanistan continued to strengthen its’ PHC network; however, inequalities continued to persist in rural areas (Ameli and Newbrander, 2008; Frost et al., 2016). Additionally, the first signs of corruption began to manifest, with reports that health facilities were mainly concentrated in the villages of provincial health directors (see Box 2; Newbrander et al., 2014; Frost et al., 2016). In Mozambique, the MoH(M) made attempts to strengthen their referral/tertiary care system by investing in urban infrastructure; however, rural areas continued to remain in a poor state of repair, with a general lack of basic equipment (Ministry of Health, 2001).

During this time, both Cambodia and Mozambique shifted focus from increasing the quantity of healthcare workers to improving the quality-delivered services. This strategy proved to be unsustainable in Cambodia, as staffing standards were not met for nurses and midwives, particularly in rural areas (Fujita et al., 2011; So and Witter, 2016). Although the same did not occur in Mozambique, the quality of training was criticized by some as being inadequate and financially unsustainable (Pavignani and Colombo, 2001), and specialized staff, such as doctors for tertiary care, continued to be recruited through expatriate technical assistance (Ministry of Health, 2001). However, significant gains were made in expanding the workforce...
to rural areas through resource re-allocation (Pavignani and Colombo, 2001, Ministry of Health, 2001). Afghanistan continued to invest in midwifery education, and ultimately established an accreditation system to ensure service quality (Fujita et al., 2011; Turkmani et al., 2013), while also diversifying services by investing in community healthcare workers (Fujita et al., 2011; Najafizada et al., 2014). Despite significant efforts, however, rural inequalities in workforce distribution and quality continued to persist (Fujita et al., 2011; Turkmani et al., 2013).

Nine- to 12-years post-conflict

Despite the ever-increasing distance we are now reaching from the conflict period, its effects and subsequent response from the development community continued to reverberate throughout the health sector. This period is uniformly characterized by a transition towards some form of a SWAp to health, with all countries presenting some kind of initiative or agreement outlining this. Additionally, it is during this period in which we finally begin to see increased national ownership of the health system, with a move towards decentralization, either through the strengthening of rural networks, or through the use of contracting-out agreements. Finally, based on the case studies, the limitations of assistance begin to become apparent, with countries either overcoming key challenges or being unable to properly reconcile them.

The 1998 general elections in Cambodia, which served to incorporate Khmer Rouge guerrillas into government forces, ushered in a period of social and economic stability (Gollogly, 2002). Following the successful piloting of an external contracting model (Bhushan et al., 2002; Asian Development Bank, 2004; Akashi et al., 2006), where, similar to Afghanistan, international NGOs were subcontracted by the MoH(C) to deliver health services, the MoH(C) adopted a SWAp initiative (Anear et al., 2015). As per this agreement, all stakeholders would work under the MoH(C) to deliver an

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**Box 3: Immunization campaigns: vertical vs horizontal programmes**

The combined average immunization rates for DTP, Pol3, MCV1 and BCG in each country are presented in Figure 3 (detailed rates per vaccine found in the Supplementary Data). While all countries initially had relatively low vaccination rates post-conflict, only Afghanistan followed a linear, upward trend; immunization rates in Cambodia dipped, surged quickly and then tapered off; and immunization rates in Mozambique steadily improved, then plateaued. The trend seen in Cambodia may be attributed to the National Immunization Programme (NIP), a centralized, vertical programme managed by the MoH(C). While the campaign was successfully expanded in the early- to mid-years post-conflict, there remained shortages of drugs and other programmes at the district and local levels (Egami et al., 2012). This created large gaps in vaccination coverage between rural and urban areas, and was unsustainable in that it contributed to the declining immunization rates seen in Figure 3 (Soeung et al., 2007; Egami et al. 2012). Indeed, as evidenced by Afghanistan and Mozambique, horizontal immunization programmes with greater integration at the district and local levels, while not as immediately effective, are more sustainable and efficient in the long run (Jani et al., 2008; Mbaeyi et al., 2017).

Although data from the WHO shows significant gains in immunization coverage for Afghanistan and Mozambique, these numbers have been questioned and refuted by other researchers. Specifically, they have pointed to numerous problems, including; discrepancies between individual survey results, reports from the government, and reports from multilateral organizations (Mavimbe et al., 2005; Michael et al., 2013; Mugali et al., 2017); the quality of data and the administrative capacity required to record this data (Mavimbe et al., 2005; Michael et al., 2013); and inconsistencies relating to outbreaks of diseases and high reported vaccination coverage (Jani et al., 2008; Mugali et al., 2017). This further exemplifies a larger problem within post-conflict countries; namely, high levels of corruption, low accountability and the need for effective monitoring and evaluation mechanisms (see Box 2).

**Figure 3.** Average immunization rate by country.
agreed-upon framework of health services (Annear et al., 2015). In a further effort to increase ownership of the health system, there was also increased focus on prioritizing MoH(C)-delivered services as opposed to INGO-delivered services (Annear et al., 2015).

In Afghanistan, the continued reliance on NGOs for health services under the PPA mechanism created a strained relationship with the Afghan government (Michael et al., 2013). The MoH(A) expressed concerns, mainly citing the need to maintain state

Box 4: Financial resources
External resources for health. All three countries substantially relied on external financial assistance at varying degrees throughout the 12-year post-conflict period (Figure 4). Cambodia received large amounts of financial assistance in the first 4 years following the end of the conflict, but this eventually tapered off, and the country became the least-reliant on external aid of all the case studies. Afghanistan received low-levels of external aid initially; however, this increased substantially at around 4 years post-conflict, most likely influenced by the election of a donor-friendly, US backed administration in 2004 (Newbrander et al., 2014). Mozambique received the highest percentage of external aid throughout all 12 years. In terms of absolute amounts, Afghanistan received far more external assistance than both Cambodia and Mozambique, equal to roughly 30USD per capita in the last year of the period evaluated (compared with 10USD per capita in Cambodia, and 16USD per capita in Mozambique).

Health expenditure. Two measures of health expenditure were assessed; per capita health expenditure (Figure 5), and health expenditure as a percent of GDP (Figure 6). Cambodia had mid-levels for both measures compared with the other case studies; Afghanistan spent the most on healthcare per capita, but the least as a percent of GDP; conversely, Mozambique spent the least on healthcare per capita, but the most as a percent of GDP.

Figure 4. External resources for health by country.

Figure 5 Health expenditure per capita by country.
legitimacy, as well as the higher costs of implementing the PPA mechanism for service delivery (Palmer et al., 2006; Michael et al., 2013). These tensions, as well as continued reliance on foreign aid, were addressed by the System Enhancement for Health Action Transition (SEHAT) fund initiative—a World Bank proposal considered to be a precursor to SWAp (Michael et al., 2013; The World Bank, 2013). This initiative aimed to increase national ownership of the health sector by ensuring long-term sustainability through the strengthening of national health institutions and decreasing reliance on external aid (The World Bank, 2013); however, based on data from Figure 4 (external resources for health by country) there is no concrete data to support the success of this policy.

Mozambique also saw a move towards a SWAp with the signing of the ‘Kaya Kwanga’ agreement (Martínez, 2006; Negin and Hort, 2010). This was a non-binding agreement between all development partners outlining a shared vision for health between the MoH(M) and donor community, and prioritizing that technical assistance be driven by national, and not donor, priorities (Pfeiffer, 2003; Martínez, 2006; Negin and Hort, 2010). These initiatives were further established through the ‘Health Sector Strategic Plan’, a national document which prioritized a SWAp to policymaking, decentralization and the correction of rural and urban inequalities (Ministry of Health, 2001; Negin and Hort, 2010).

In Cambodia, development of health infrastructure continued to focus on strengthening community health services as per the Basic Package of Health Services Project (1998)’ (Asian Development Bank, 2004; So and Witter, 2016). In alignment with the decentralization reforms, measures were also taken to enhance the management of district health centres (Asian Development Bank, 2004). Regarding human resources, local recruitment initiatives were undertaken to address the continued gaps in rural health services (Fujita et al., 2011; Witter et al., 2015; So and Witter, 2016), while the integration of Khmer Rouge staff served to dissipate tensions (Ui et al., 2007; So and Witter, 2016).

Afghanistan continued to face barriers in increasing the number of healthcare workers in rural areas, with a report finding there to be 17 public health workers per 10 000 people in rural areas, compared with 36 per 10 000 in urban areas (Frost et al., 2016). While the MoH(A) attempted to address these inequalities with the deployment of mobile health teams, persistent conflict with the Taliban, particularly in the south, blocked these initiatives (Frost et al., 2016). Mozambique saw strides in human resource mobilization resulting from the implementation of their ‘Human Resources Development Plan 1999’ (Ministry of Health, 2001). This successfully increased the number of university-trained personnel working within the health sector, thereby reducing workforce imbalances; however, these professionals mostly remained concentrated in urban areas (Ministry of Health, 2001).

Health outcomes

As per percent change, Mozambique saw the greatest gains across all health outcomes, followed by Cambodia, then Afghanistan (Table 1). While these results are impressive, Mozambique still had the worst relative health outcomes of all three countries, with a life expectancy of 51 years in the final year assessed; comparatively Cambodia had the best at 61 years, with Afghanistan at a close second with 60 years (Table 1; details in Figures 7–9). However, it should be noted that the improvement or worsening of health outcomes does not always occur linearly (Wang et al., 1999). Indeed,

![Figure 6. Public health expenditure as percent of GDP by country.](https://academic.oup.com/heapol/article-abstract/34/3/230/5423845)

**Table 1.** Percent changes and health outcomes 12-years post-conflict by country

<table>
<thead>
<tr>
<th>Health outputs</th>
<th>Cambodia, n (%)</th>
<th>Afghanistan, n (%)</th>
<th>Mozambique, n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy</td>
<td>61 (13.0)(^a)</td>
<td>60 (7.1)</td>
<td>51 (15.9)</td>
</tr>
<tr>
<td>Infant mortality(^b)</td>
<td>62 (27.9)</td>
<td>70 (23.1)</td>
<td>95 (37.5)</td>
</tr>
<tr>
<td>Under-5 mortality(^b)</td>
<td>79 (33.1)</td>
<td>97 (25.4)</td>
<td>141 (38.2)</td>
</tr>
</tbody>
</table>

\(^a\) Health outcome 12-years post-conflict (percent change).

\(^b\) Per 1000 births.
when observing infant and under-5 mortality rates in Cambodia, one can clearly see a plateau, almost worsening, in the first 8 years, followed by a sharp improvement in the last 4 years (Figures 8 and 9). Therefore, these results should be interpreted with some degree of caution.

**Revised framework**

**Overview**

The revised framework depicted (Figure 10) is constructed purely from the application of the framework to the case studies; it expands on the framework originally presented by Waters et al. (2007) to reflect best-practice development processes across a 12-year timeline from the post-conflict year. Within this process, specific inputs are delineated, and the organizations that should be responsible for said inputs are also included. New inputs were also added, namely prevention of government and donor corruption, accountability among stakeholders, and monitoring and evaluation of the health system, all falling under the section of ‘Governance’.

For organizational purposes, the development process is separated into four phases, each characterized by a certain end goal or trait, specifically:

1. **The Response Phase:** This refers to the first year after the conflict; it is characterized by an absence of functioning local institutions and the beginning of the international community’s involvement in the reconstruction process.
2. **The Transitional Phase:** This phase is characterized by the re-emergence of local institutions, such as a Ministry of Health and a national government. Development of the health sector is primarily managed by the international community. It is transitional in that the main challenge during this time is moving from an emergency-based health system to a more permanent one.
3. **The Reconstruction Phase:** This is the main development phase, with large-scale reconstruction and development initiatives...
undertaken within the health sector. This period also sees the transition of stewardship from the international community towards the local institutions and organizations.

4. The Sustainable Development Phase: This phase is mainly characterized by promoting sustainable development, namely; ensuring national ownership and financing of the health system. It should be noted that none of the countries selected in the case studies reached this phase within 12 years as is characteristic of the vast majority of post-conflict countries (Haughton, 1998). Therefore, this phase is an ‘ideal’ endpoint, and may not necessarily be achievable in practice.

The framework further depicts how specific policies and inputs should be sequenced throughout these phases, as well as which stakeholders should be responsible for said policies and inputs. The sequencing and responsibility of specific policies and inputs are outlined below.

**Governance**

**Corruption**

Preventing corruption and promoting stability within the health system requires the presence of an impartial auditing body that has the

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Figure 9. Under-five mortality by country.

Figure 10. Adapted framework for post-conflict health system development.
necessary authority and capacity to control and prevent corruption across all levels of governance (Mackey and Liang, 2012). This approach has seen some success in Afghanistan, which established a High Office of Oversight and Anti-Corruption (HOO) body to implement anti-corruption strategies (Spector, 2012). However, this again requires the presence of a functioning local government. The framework therefore proposes that the primary multilateral organization handling the reconstruction process (the WHO, or a major donor such as the World Bank) assume this responsibility throughout most of the development process, as they can develop and implement monitoring tools to prevent corruption such as health expenditure auditing and tracking, adoption of a code of conduct and ethics, and earmarking of funds (Mackey and Liang, 2012). This system should be implemented by this organization throughout the ‘Transitional and Reconstruction Phases’, and will ultimately be transferred over to a government institution during the ‘Sustainable Development Phase’.

Monitoring and evaluation
This should be undertaken by donors, and indeed, as the primary source of funding for most of the development process, it would be in their best interest to do so. The main concern here is the need for an impartial system, and the influence of donors must not interfere with the priorities of the national health system. Therefore, to achieve this separation between funding and implementation, there needs to exist a legitimate state institution and a clear national health strategy (as opposed to donors channelling funds through third parties, such as NGOs). This monitoring system should be managed by the donor community until the ‘Sustainable Development Phase’, at which point responsibilities can be transferred to a government institution. Again, this approach saw some success in Afghanistan with the establishment of the HOO body (Spector, 2012).

Accountability
Lastly, a fundamental yet rarely asked question concerns responsibility; namely, who is accountable for the failure or success of projects, and the outcome of the health system as a whole? Put simply, there are no easy answers to this question; post-conflict health system development involves an array of different stakeholders with overlapping responsibilities and obscure boundaries, a major challenge for establishing good governance. Indeed, ascribing accountability can be somewhat of a meaningless process if one begins to think about who these institutions might be accountable to. SWAp can be a useful tool for establishing this; however, due to the lack of functioning local institutions this is difficult to implement during the early stages of post-conflict reconstruction. Therefore, throughout the ‘Response and Transitional Phases’, accountability should rest mainly with donors and the international community; this should shift during the ‘Reconstruction Phase’ with adoption of a SWAp initiative and increased government accountability; and ideally, local governments being completely accountable by the end of the ‘Sustainable Development Phase’.

Policies
Following the end of hostilities, marked by either a peace agreement or UN-sponsored resolution, the ‘Response Phase’ will see minimal national involvement in the reconstruction process, and instead, there will be an influx of international NGOs, foreign donors and multilateral organizations. During this brief period, the primary multilateral organization (such as the UN, the World Bank or the WHO) handling the reconstruction process should begin conducting a situational health needs assessment for the purposes of developing a national health policy.

Moving on to the ‘Transitional Phase’, the primary multilateral organization should work closely with the emerging national or transitional government to re-establish an effective and visible Ministry of Health. This can be done by supporting the Ministry via the implementation of the national health policy, the development of new policies to expand health services and address contextual problems as they arise throughout the process, and the co-ordination of the NGO-donor community. The latter can be achieved through the use of a contracting-out PPA mechanism, as it proved successful in both Cambodia and Afghanistan. The primary multilateral organization should be responsible for managing these contracts initially; however, the long-term goal during this phase is to transfer management of these contracts to the Ministry of Health. At the end of this period, a system similar to what was seen in Afghanistan should be in place, with funding being directed through the Ministry towards NGOs who have been contracted-out to deliver a package of health services as outlined in the national health policy.

The ‘Reconstruction Phase’ should prioritize expanding on the national health policy to begin encompassing secondary and tertiary health services, as well as contextual factors, such as urban and rural inequalities, gender disparities and specific health disorders. Based on the case studies, planning during this phase should prioritize the adoption of SWAp, which saw success in co-ordinating stakeholders when implemented earlier. This usually involves the pooling of donor-funds towards a national health policy, and prioritizes local capacity building by mandating sectorial leadership to the MoH through partnerships with donors and other organizations (Peters and Chao, 1998; Hutton and Tanner, 2004; Peters et al., 2013). Essentially, these reform measures aim to promote a sustainable, government-led partnership with donor agencies (Peters and Chao, 1998; Peters et al., 2013), and have been characterized as a suitable option for countries emerging from conflict (Peters and Chao, 1998).

Moving to the ‘Sustainable Development Phase’, policies should focus on the continued implementation of SWAp reform measures. This phase should prepare for the eventual exiting of the international community, and ultimately, complete national ownership of the health system. Specifically, this involves the gradual phasing out, integration or replacement of management responsibilities; co-ordination mechanisms; and the replacement of international NGOs with local institutions.

Inputs
Based on the case studies, there are very few inputs that the development community will realistically be able to implement during the ‘Response Phase’, and services during this time will mainly be maintained via the emergency services that were provided by NGOs and other organizations during the conflict period. However, donors and NGOs can still use this time to develop and implement a NIP as soon as possible.

Moving to the ‘Transitional Phase’, the donor community should focus on funding projects that facilitate implementation of the national health policy via NGOs. This will be somewhat contextual and will ultimately be determined by the health needs of the population, the geography of the region and the level of destruction caused by the conflict. However, all things considered, in order to achieve a rapid response, the construction of PHC centres is a smart option; this can also be done in tandem with initiatives to rehabilitate...
hospital and other health centres. Additionally, the MoH should work to increase the number of national health workers, as there will most likely be an overall deficiency due to the conflict. These health workers can be employed within the NGO contracting-out system through a national hiring strategy, in order to promote national ownership and sustainability. Due to the likely reduced capacity of the national health system during this time, high-level, technical assistance, such as doctors and other specialists, will have to be recruited through expatriates and the INGO system. It should be noted that this model only functions with sufficient support to national institutions and a co-ordinated health strategy, again appealing to the importance of SWAp initiatives in post-conflict countries.

During the ‘Reconstruction Phase’, the MoH and donor community should begin to pilot and develop strategies for decreasing reliance on external aid. This is easier said than done, and many post-conflict countries are unable to ever fully sustain themselves financially. Potential solutions include limiting prior external assistance to an amount that the country can realistically support, raising communities health funds and introducing user-fees. However, this last strategy should be used sparingly as it may serve to increase inequalities. Additionally, there should be a focus on expanding reconstruction activities to more specialized facilities, such as hospitals and outpatient clinics. Regarding health workers, training should also be expanded to more specialized services, such as doctors and surgeons, while also maintaining a sufficient quantity of other health workers. Lastly, immunization programmes previously administered by NGOs should start to be transferred to the MoH, with planning for integration at the local level.

In the final ‘Sustainable Development Phase’, the development community should continue to work towards supporting specialized equipment and care but shift priorities towards ensuring stable national ownership of the health sector. While this will be facilitated via the aforementioned SWAp reform measures, the international community can take further steps to ease this transition by continuing to train and support health workers, provide technical assistance for the use of specialized equipment and facilitate the transfer of management responsibilities to government institutions.

Conclusion

To summarize, this article applied a health systems framework from Waters et al. (2007) to three post-conflict case studies, with additional measures taken for levels of corruption and specific health outcomes. Measures of governance, inputs and policies were then continued to be evaluated over a 12-year period following the end of conflict in Cambodia, Afghanistan and Mozambique. From these case studies, the Waters et al. (2007) framework was revised to reflect the most effective development practices along this 12-year timeline.

The revised framework identifies key activities and their proper sequencing throughout the development process. Acting as a roadmap, this framework can be used as a tool throughout the reconstruction process and can be further expanded upon through continued in-depth analyses of post-conflict countries. By identifying which stakeholders should conduct certain activities and when, this framework also advocates for a co-ordinated approach, and hopes to promote effective and efficient policy design and implementation among all members of the development community throughout the entirety of the reconstruction process.

Lastly, there are some findings and observations from the case studies that warrant further discussion or research. Primarily, this study further highlighted the need to develop sustainable financing mechanisms (Witter, 2012) and effective governance measures (Mackey and Liang, 2012) within post-conflict countries. Additionally, while many individuals in the development community contribute the successful outcomes in Afghanistan to the PPA model (Newbrander et al., 2014), a simpler explanation may be the high proportion of funding received by Afghanistan compared with other countries (see Box 3). The extent to which this funding is politically determined should not be discounted, and this begs the question: is financial aid to post-conflict countries determined purely by the needs of the health sector, or by other factors? Future research should aim to evaluate this in order to hold donors and the international community accountable to equitable funding among post-conflict countries.

Supplementary data

Supplementary data are available at Health Policy and Planning online.

Ethical approval

None required.

Conflict of interest statement

None declared.

References


