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Medicine, Conflict and Survival

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ISSN: 1362-3699 (Print) 1743-9396 (Online) Journal homepage: http://www.tandfonline.com/loi/fmcs20

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To cite this article: A.M. Ali, J. Handuleh, P. Patel, S. Whitwell, K. Harris, F.R. Ali, R.J. Southgate, B. Godman, N. Al-Hadithy, L.L. Gustafsson & A.E.T. Finlayson (2014) The most fragile state: healthcare in Somalia, Medicine, Conflict and Survival, 30:1, 28-36, DOI: 10.1080/13623699.2014.874085

To link to this article: http://dx.doi.org/10.1080/13623699.2014.874085

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Medicine, Conflict and Survival, 2014
Vol. 30, No. 1, 28–36, http://dx.doi.org/10.1080/13623699.2014.874085

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COMMENTARY

The most fragile state: healthcare in Somalia

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(*Accepted 2 November 2013*)

Introduction

Somalia currently performs poorly against the United Nations' definition of 'human security', which encompasses 'freedom from fear, freedom from want and freedom to live in dignity' (UNDP 1994). The multiple ways in which poor security has manifested itself across all spheres of society renders Somalia the most insecure nation included in the Human Security Index (ranked 232 out of 232) which combines elements of social, economic and environmental security (Human Security Index n.d.). In this context, it is unsurprising that Somalia performs poorly on numerous metrics of population health, with a life expectancy at birth of 50 years and under-five mortality rate of 18% (WHO 2013).

This paper outlines some of the key political and socio-economic drivers to instability in Somalia and the challenges faced in delivering healthcare in a country where neither economic support nor stability of the healthcare workforce can be assured. We will describe the scope of international assistance and explore key priorities for healthcare system strengthening in the future.

Political and economic context

Somalia has been ravaged by internal and international conflicts for decades, with the power vacuum left by the overthrow of the Barre regime in 1991 leaving competing factions and numerous transitional governments battling for authority (UCDP 2011). In the violent conflicts that ensued, weak agricultural

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communities and minority groups faced destruction and looting of their property with an estimated 250,000 Somalis dying as a result of war and famine from 1991–1992 (World Bank 2005). Whilst some regions of the country seceded and managed to achieve relative stability, most notably the semi-autonomous region of Somaliland in 1991, there remained a lack of central government authority across the county as a whole. The most concerted attempt to establish this was the Transitional National Government (2000–2003). However, this struggled to extend its authority beyond Mogadishu and had little impact on the plethora of local conflicts and attempts at law enforcement that emerged (World Bank 2005).

The violence has transformed the social fabric of the country, uprooting an estimated 1.5 million people who are currently internally displaced (Internal Displacement Monitoring Centre 2011) and at present Somalia is ranked second worst of all countries measured in the Global Peace Index (Institute for Economics and Peace 2011) and repeatedly classified as 'Not Free' in terms of civil liberties and political rights (Freedom House 2011).

The economy of Somalia has also been greatly affected by the conflict, leading to reliance on an informal economy based around livestock, remittances and, notably, telecommunications. Gross Domestic Product per capita (at Purchasing Power Parity) is US$600, less than half of that of neighbouring Kenya, at US $1600 (Human Security Index n.d.). Piracy is estimated to have cost the global economy between $7 and $12 billion in 2010. Off the coast of Somalia, these costs extended to the payment of $238 million dollars in ransoms in 2010. The costs included deployment of expensive security vessels ($2 billion per annum), insurance excess ($460 million to $3.2 billion per annum), diversion costs ($2.4–3 billion per annum) and a reduction in trade for countries in the region (estimated cost to Egypt alone of $642 million) (see Oceans Beyond Piracy 2011). Despite the palliative attempts of the international military in Somali waters, it is a problem which is unlikely to disappear until stability is achieved on land.

Alongside the prolonged political instability, Somalia represents great environmental insecurity classified as 'Vulnerable' by the Environmental Vulnerability Index (EVI 2005), with recurrent droughts leading to famines and

Table 1. Summary of key data for measures of security in Somalia (Institute for Economics and Peace 2011).

Economic security	e.g. GDP per capita (PPP): US $600
Social security	e.g. Global peace index ranking 148/149
Environmental security	e.g. Environmenal vulnerability Index classification vulnerable
Political security Context	Conflict summary: Conflict between government (Transitional federal government) and insurgents rages on. Insurgents (Al Shabaab and Hizbul Islam) control most of southern and central Somalia

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Table 2. Table of Health Indicators for Somalia 2004–2011 (Source: World Bank)[15,16].

	Metric	2004	2005	2006	2007	2008	2009	2010	2011
Health outcomes	Life expectancy at birth (total, years)	50	50	50	50	50	51	51	51
	Life expectancy (men, years)	48	48	49	49	49	49	49	50
	Life expectancy (women, years)	51	51	52	52	52	52	53	53
	<5 mortality rate/1000 live births	180	180	180	180	180	180	180	180
Nutritional factors	Low birthweight babies (% of births)	–	–	11.2	–	–	–	–	–
	Malnutrition prevalence (weight for age)/% of children under 5	–	–	32.8	–	–	–	–	–
	Malnutrition prevalence (height for age)/% of children under 5	–	–	42.1	–	–	–	–	–
	Prevalence of wasting/% of children under 5	–	–	13.2	–	–	–	–	–
Socio-demographic factors	Population (millions)	8.16	8.35	8.54	8.73	8.93	9.13	–	–
	Urban population (% of population)	35	35	36	36	36	37	37	38
	Improved sanitation facilities (% of total population with access)	22	22	23	23	23	23	23	–
	Improved sanitation facilities (% of urban population with access)	49	50	51	52	52	52	52	–

subsequent humanitarian crises in 1992 and again in 2011. Between October 2010 and April 2012, it is estimated that more than 260,000 people died as a result of famine in Somalia (United Nations News Centre 2013) (Table1).

In combination, these parameters contribute to Somalia's classification as a 'failed' or 'fragile' state, also ranking as the worst performer on the 2011 Failed States Index (Fund for Peace 2011) on its inability to provide basic, functional needs and services to the populace. The international interventions to remedy the state's failure to address the humanitarian crises produced by conflict and droughts (e.g. the deployment of UN peacekeeping troops, Kenya's 2011 military intervention, and humanitarian non-governmental organizations) have sometimes served to fuel tensions between warring parties jostling for power (UCDP 2011). It would therefore appear that efforts to reduce insecurity are failing and the fragile situation in Somalia is set to remain for some time to come. This is also indicated by Médecins Sans Frontiers (MSF) leaving the country in August 2013 due to widespread insecurity and violent attacks against MSF staff (MSF 2013).

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Somali health context

Currently, health in the Somali population is extremely poor and compares unfavourably to its neighbours, and indeed, to most conflict-afflicted countries in the world (World Bank 2013). Finding reliable and consistent health metric indicators is difficult and often impossible. Although the life expectancy at birth has been very gradually rising in recent years, standing at 50 years by 2010 estimates, by rank it stands at 205th of 215 available countries, considerably below neighbouring Kenya and Ethiopia with estimates of 58.8 years and 55.8 respectively (World Bank 2013). It also has the fifth highest infant mortality rate in the world and a maternal mortality of 1200 per 100,000 live births by 2008 estimates. These figures in the context of current and ongoing instability do not auger well to meet the Millennium Development Goals. Table 2 shows high levels of malnutrition by height and weight amongst children under five years old. This is a major cause of mortality in Somalia and a particularly pertinent concern with the recent famine. Infectious and parasitic diseases, particularly malaria in infants, tuberculosis in adults, outbreaks of cholera and mental ill health are some of the leading causes of mortality and years of life lost (World Bank 2013).

The ousting of the Barre regime and onset of civil strife in 1991 brought significant deterioration to the healthcare system of Somalia. It effectively meant the privatization of what had previously been a largely public sector administered health service, albeit with relatively poor government funding. The conflict has negatively impacted on the health system from various angles in terms of the available health workforce, infrastructure, method of health service delivery and the regulatory framework. At the highest level, the health

sector suffers from a lack of leadership, lack of an implemented professional regulatory framework and insufficient financing (Leather et al. 2006).

The lack of a centralized government has led to a considerable growth in the private healthcare system. The introduction of user fees for healthcare in a country with widespread poverty is unaffordable for many. Access is reduced further in rural regions due to the urban bias of providers, even within the semi-autonomous regions of Somaliland and Puntland. These states, where functional but limited ministries of health with strategic health plans exist, rely heavily on the input of international agencies and non-governmental organizations (NGOs). Local monopolization of services, compounded by desperate needs and lack of regulation, are a cocktail for possible exploitation of users in a private health market as well as widening health and social inequalities.

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Health systems strengthening

The United Kingdom's Department for International Development (DFID) currently has 44 active projects in Somalia at a total cost of US$100 million, a level of spending which has been fixed until 2015. United States Agency for International Development spent $239 million in Somalia in 2010 alone (Global Humanitarian Assistance 2011). Both the UK and US focus their funding on projects to encourage the development of stable government over humanitarian and health projects. Stripping inflation from the figures, total aid to Somalia has risen significantly from $103 million in 2001 to $683 million in 2009 (Anderson 2009). This equates to $75 per Somali citizen, making Somalia amongst the top 10 largest recipients of aid on the planet.

Within the health sector, funding for horizontal health system strengthening programmes has lagged behind vertical programmes (DFID 2011). However, in 2007, DFID funding for a consortium of NGOs working in Somaliland adopted a broader health systems strengthening approach. The programme included support for health training institutions (two medical schools and five nurse training schools); support for professional associations (Somaliland Medical Association and Somaliland Nursing and Midwifery Association); work towards the introduction of a regulatory framework for the health sector; the introduction of a medical internship programme for newly qualified doctors, including salary and educational support; the promotion of reproductive health training; and the delivery of community health promotion.

In 2010, DFID funding for a more ambitious health systems strengthening approach across Somaliland, Puntland and south-central started with a new consortium of NGOs working more closely with Ministries of Health (Anderson 2009). This programme included many of the aspects of the initial work but included a greater focus on service provision through the launch of a pilot project to provide basic health services – an approach used in other post-conflict countries.

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Health workforce in Somalia

The existence of semi-autonomous regions in Somalia, coupled with lack of resources dedicated to the collection of national statistics, has resulted in a paucity of information regarding the health workforce. Through our work in providing internet-based teaching and mentoring to medical students and doctors in the Somaliland medical schools, we have been able to retrieve some information on the local health workforce from NGOs and other health system contacts on the ground (Medicine Africa 2013). However, much of this locally used data are abstracted from the patchy, inaccurate and often heavily extrapolated data available from the international registries. As most of the figures regarding the health workforce in this report have been retrieved from such sources, the statistics offered here should be treated with caution, as they may not accurately reflect the situation on the ground.

That said, the data we have gathered does suggest that there is a critical shortage of healthcare professionals in Somalia, even when compared with other African countries, with physician numbers having remained relatively stable since 1997 (WHO 2011). In 2010, there was less than one physician per 1000 people in Somalia (World Bank 2013). Numbers of nurses and midwives are also critically low at only 0.1 per 1000 of the population compared to 0.8 per 1000 in neighbouring Kenya and 9.5 per 1000 in the UK (World Bank 2013). Although some patchy information does exist in official statistics, particularly in Somaliland (Somaliland Ministry of National Planning and Development 2010), crucial indicators, such as the number of community health workers, have simply not been recorded in a way which is generalizable to the whole of Somalia. Similarly, we have found no reliable data regarding the distribution of healthcare workers between urban and rural settings or their gender distribution.

Predictably, shortages of health workers have resulted in poor access to healthcare for most of the population. Between 2005 and 2009, only 26% of expectant mothers had at least one antenatal care appointment (UNICEF 2011). Insufficient access to health professionals and services has disproportionately affected the poorest in society. In 2006, 77% of women from the highest wealth quintile were able to access a skilled attendant at birth; in the lowest wealth quintile that proportion was only 11% (WHO 2011). Another consideration is that, given the limited official regulation of health services or professionals, the types and standards of care which people can access may be subject to wide variation. There are, however, some hopeful signs that the situation may be improving with regards to the size of the healthcare workforce. For instance, in south-central Somalia, the first medical students graduated in 2008 after nearly a two- decade-long pause in training.

Conclusion

The greatest challenge to health in Somalia for the last two decades has been political instability, both in crippling the ability of Somalis to nurture a

functional healthcare infrastructure and in limiting the willingness and ability of foreign agencies to lend their support. Until the volatile socio-political climate in the country has abated and the economy has recovered, establishing a stable healthcare service will not be possible. However, despite the gravity of the situation, recent years have given much cause for hope. Foreign aid has increased more than six-fold in the past decade and the broader approach to healthcare systems strengthening adopted by most development organizations has focused attention on key priorities, such as medical education, the need for a regulatory framework governing healthcare and the establishment of primary healthcare services in isolated communities.

So what are the current priorities? Supporting the new wave of doctors emerging from the semi-autonomous regions of Somaliland and Puntland is critical as it is through them that lasting change will be effected. As the medical and nursing workforce increases in size, retaining them within Somalia and distributing them according to regional population health demands will be key to improving the health of the population and moving towards the Millennium Development Goals. In order to achieve this, more accurate data on population health metrics are needed to allow such demands to be identified.

Positive steps towards improving population health have been taken in Somalia and this should soon begin to be reflected in measures of health outcome. Although foreign aid is still desperately needed, it is the local workforce that will be most important in effecting lasting change and we must not underestimate the importance of using resources, not only in service delivery but in improving service organization and training the medical workforce.

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B. Godman has been actively involved researching ways to improve the quality and efficiency of healthcare systems across continents. The main focus has been on pharmaceuticals resulting in multiple publications in peer-reviewed journals. More recently, the author has been involved with initiatives to try and improve the health of patients in Fragile States using ICT and other measures.

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