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ORIGINAL ARTICLE

Prioritization in Somali health system strengthening: a qualitative study

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Background: After years of decline and disintegration, the Somalia Federal Government alongside international and domestic partners is beginning the process of rebuilding its national health system. In this study, we aim to shed light on the current approaches to health system strengthening, as viewed by stakeholders closely involved in its development.

Methods: Key informant interviews were undertaken with health and development professionals working within all three administrative regions of Somalia, as well as with Somali ministry of health officials, global health and policy specialists with interests in health system reconstruction in fragile states. A review of published and grey literature on Somalia, health systems, fragile and conflict-affected countries using PubMed and Reliefweb was also conducted. Technical documents designed for Somali health system building by external development partners were also reviewed.

Results: Key priorities identified by participants were, strengthening of local governance and management capacity, scaling-up efforts to structure a robust health financing mechanism, engagement with the burgeoning and dynamic private sector, as well as investing in the appropriate human resources for health.

Conclusions: The study found that there was widespread agreement among participants that health system strengthening through a coordinated system would improve long-term capacity in Somalia's health sector. Future research should focus on the evaluation of the modalities by which health system strengthening interventions are implemented, on neglected topics such as mental health within the Somali health system, as well as on population-level barriers to accessing health systems.

Keywords: Aid, Capacity, Health system, Somalia

Introduction

Somalia is seriously off track in reaching the Millennium Development Goals.[1] Over the past two decades Somalia has become one of the world's most enduring humanitarian crises causing enormous damage to health and development. After a prolonged civil war, the health of the Somali people has suffered tremendously. Armed conflict has destroyed health infrastructure, resulting in poor access to essential health services, exposing an already vulnerable population to high disease burden and malnutrition.[1–3] With a life expectancy of 53 and 56 years for males and females, respectively, as well as a staggering maternal mortality ratio of 850 deaths per 100 000 live births, Somalia's health system ranks as one of the world's weakest.[1] There are an estimated total of 846 health facilities in Somalia including seven referral hospitals, 27 district hospitals, 248 maternal and child health clinics and 544 health posts.[1] However, most of these healthcare facilities are poorly staffed and inadequately distributed, largely due in large part to the historical concentration of the majority of health services in urban areas. This is despite only 42% of the 12.3 million Somalis being urban dwellers, with the remainder comprising of rural dwellers, nomads and internally displaced persons (IDPs).[1]

The Somali public health system has been dysfunctional for over 20 years with development and humanitarian NGOs having played a vital role in bridging gaps in healthcare services in a sector that is almost entirely private.[4] Somalia is also one of the most restrictive and insecure environments for development and humanitarian actors.[5] Humanitarian aid has been a critical part of the Somali economy and political power has been built upon it and used to control access to it.[6] Somalia poses serious security threats for expatriate aid workers and consequently, health service delivery relies almost exclusively on Somali national staff who face constant security threats.[4] As a result, the Somali

health system is demonstrative of the many challenges faced by fragile states.[7]

After the collapse of the Somali state at the central level, regional administrations have emerged. Somaliland (located in the northwest of Somalia), which has yet to gain international recognition despite declaring independence from Somalia in 1991, has relatively better health indicators than the rest of the country due to relative stability. Puntland (located in the northeast of Somalia), formed a semi-autonomous government in 1996. The south and central regions of the country remain the most conflict-affected regions, in large part due to the presence of Al-Shabaab, an Al-Qaeda affiliate that has hostility towards humanitarian organizations.[8] There are currently three ministries of health for each administrative region of the country (Somaliland, Puntland, and south and central Somalia), each with its own unique opportunities and challenges. Alongside these institutions, there are several UN agencies and international NGOs that operate from Nairobi which influence the direction of the Somali health system.[9]

Since the New Deal Somalia Conference in Brussels in 2013, the country is at a turning point in terms of entering a new phase of political and economic development, with a Compact by the Federal Government and the international community for sustainable peace, increased service provision and economic development.[10] Health system strengthening was seen as one of the areas in which Somali leadership was paramount. This has taken the form of drafting of regional health sector strategic plans, led by the respective ministries with continued support of UN agencies. These plans are currently being implemented through the multi-donor funded Joint Health and Nutrition Program (JHNP), in which the state has taken on the role of contracting out health services to implementing partners under the technical guidance of UN agencies. Under the framework of the Health Sector Strategic Plan 2013–2016 (HSSP) and through the implementation of the JHNP, governments in the three regions, alongside local and international health sector partners and donors, have developed their respective health sector strategic plans for 2013–2016.[1,11,12] The implementation of the HSSP and JHNP signals a concerted effort towards rehabilitation and development,[13] which offers both an occasion to tackle some of the most pressing health system issues in Somalia and a learning opportunity for policy practitioners working in similar contexts. To our knowledge, there has been very limited research on the health system in Somalia in recent years.[13] This study focuses on key areas of prioritization in the Somali health system strengthening efforts, by providing an analysis of current challenges and opportunities for local and international stakeholders involved in the process, in all three administrative regions of the country (Somaliland, Puntland, and south and central Somalia).

Methods

Key informant interviews (n=14) were undertaken with health and development professionals working within the three administrative regions of Somalia, as well as with Somali Ministry of Health (MoH) officials and global health and policy specialists with expertise in health system reconstruction in fragile states. Participants were given a list of questions as a tentative topic guide for the discussion alongside an outline of the WHO building blocks as a topic guide (see Supplementary data). Interviews lasted about 30–60 minutes. Participants who provided consent for their views to be published include: senior health advisors in WHO Somalia, UNICEF Somalia, former ministers of health, regional directors of health and planning, national professional officers from WHO Somalia, health sector coordinators for Somalia, senior regional advisors to WHO and other UN organizations, health systems advisors to the Somalia Federal Government and members of academia. These participants consented to be interviewed and for their views to be represented in this study. One participant preferred to provide personal communication, expressing his views rather than undertake an interview.

We also conducted a non-systematic review of published and grey literature on Somalia, health systems, fragile and conflict-affected countries using PubMed and Reliefweb. We also reviewed technical documents designed for Somali health system building by external development partners. We used the following keywords: Somalia, Puntland, Somaliland, South Central, health systems, health systems strengthening, healthcare, health services, health workforce, governance, leadership, health financing and fragile, conflict-affected countries.

For the purpose of this study, a health system is broadly defined as organizations, people and actions whose primary intent is to promote, restore or maintain health. Components include service delivery, human resources, information, products and supplies, vaccines and technology, financing and governance.[14] Health system strengthening is comprehensive changes to policies and regulations, organizational structures and relationships, across the health system to motivate changes in behavior which might allow for more effective use of resources and to improve multiple health services.[15]

Ethical approval for the study was granted by the King's College London War Studies Group Ethics Panel.

Results

Strengthening leadership and governance

Poor governance in the Somali Health System has been symptomatic of the breakdown in the wider governance of the country, which has been in a state of extreme fragility for more than two decades. As a result, there has been a limited capacity for stewardship, accountability, as well as the technical capacity associated with effective health system management. This has been both a cause and a result of weak linkages between the governance building block and other health system building blocks such as human resources, health services, health policy and health financing.[16] The flight of skilled human resources has left an enormous gap in MoH capacity to provide health services, form effective health policies and regulate health services throughout the country. This is especially challenging in the financing arena where financial management procedures are not well understood and subsequently not well utilized (WHO participant, personal communication). Although the MoH were present during the conflict, no capacity existed until recently, to focus on long-term development and the strengthening of key governance pillars with regards to the health system. Nevertheless, great strides have been made in the understanding of the central role that strong governance plays in health system reconstruction and the leadership role that the MoH must take on.[17]

The long absence of a central government is a significant factor, contributing to weak leadership and governance in the health sector. 'The MoH has exited the stage completely. It existed in name only but there was no tangible work produced by it' (Ministry of Health participant, 10 May 2014). However, following the return of an internationally recognized central government, several participants were optimistic about strengthening leadership and governance in the health sector. Primary among the challenges, was recruiting suitable personnel to work in the public sector. 'No one wanted to become a minister or a DG (Director General) because you would become a target' (MoH participant, 10 May 2014). Retaining individuals within the Ministries of Health is still a challenge. 'There are few individuals who have the capacity; when they leave, the system collapses… capacity is tied to the individual rather than the institution' (WHO participant, 15 April 2014).

The potential of the newly launched JHNP was seen as a step in the right direction towards strengthening leadership and governance in the Somali health system. 'The JHNP is different from other programs in that, at the very least, the Ministry was in the picture' (MoH participant, 10 May 2014).

The ambiguity of the different health authorities' relationship to each other was also cited as a challenge. As a result, several participants have stated the necessity of clarifying these relationships as a means of assigning clear roles and responsibilities (UNICEF participant, 16 April 2014). All participants mentioned the need for government to gradually assume control and responsibility of health services. 'We aren't saying they should provide services, but we are saying they should take a lead in being decision makers in consultation with all stakeholders' (UNICEF participant, 16 April 2014). Several participants have strongly recommended the decentralization of authority, to regional and state levels to improve the efficiency and oversight of the health system.[17] Additionally, they recommended strengthening ownership and leadership in the health sector through a review of the Somali national health policy and strategy.

Increasing health workforce quality and quantity

'The human resource is actually the weakest element of the health system in my opinion and it's the one without which none of the other pillars will work' (Health Systems Advisor, 1 August 2014). The key challenge appears to be with regards to the availability of health service providers. A large number of participants ascribed this challenge to the rapid and sustained 'brain drain' triggered by the civil war. In addition to the inadequate numbers of public sector health providers, there are the additional challenges of equitable geographical distribution and quality of care. In particular, several categories of health workers such as mental health providers, were noted as lacking. Many participants felt the quality of service provision has been in large part hampered by the quality of education and training. Furthermore, a large number of health service providers are concentrated in large urban zones, leaving a significant gap in rural healthcare (WHO participant, 15 April 2014).

The retention of health workers in the public sector, in the face of a dynamic and thriving private sector has been very challenging. Several suggestions have been put forward to incentivize public sector workers, but no concrete mechanism is currently in place (WHO participant, 15 April 2014). Participants also mentioned the need to recruit talented local health workers on a meritocratic basis. 'In Somaliland, the government has recruited large numbers of health workers but lack of incentives has had a detrimental effect on retention' (MoH participant, 16 August 2014). A long-term recommendation for improving the quantity of the health workforce would be the establishment of a 1-year mandatory national service for graduating health professionals. Recommendations for improving the quality of the health workforce included, setting standards for the basic qualification levels of the different health workforce categories through the establishment of a National Health Workforce Regulatory System of certification, credentialing and licensing. This would be done by establishing and strengthening of National Health Professional Associations responsible for delineating the standard of ethical practice. Additionally, there would need to be strong engagement with NGOs in engaging jointly in setting mechanisms for health workforce coordination and capacity building.

Delivering equitable health services through functioning health facilities

Several participants commented on the overwhelming size of private sector health provision in relation to public sector provision. It has continued to be the primary source of health service provision for a large proportion of the population, where it has not only managed to survive but thrive (Health Sector participant, 25 April 2014). Many participants made reference to the Somali National Health Conference Declaration as a starting point for engaging with the private sector.[17] The Declaration recognizes the role of the private sector and has proposed regulation via the formulation of a national strategy for improving public-private partnership, engagement of the private sector on issues of developing health care financing strategies, as well as improving participation through the establishment of a National Health Council.[17]

Several participants highlighted the need to focus on community level or primary care interventions as a means of increasing equitable access to services, given the geographical dispersion and mobile lifestyle of a large proportion of the Somali population. 'The concept is taking the services to the population not waiting in a facility for them to come to you which doesn't happen for several reasons' (WHO participant, 15 April 2014). When considering community level interventions, participants highlighted the need to tailor interventions to context and needs of specific communities.

Ensuring provision of drugs and other medical supplies

The provision of safe and reliable pharmaceuticals has been a persistent challenge in the Somali health system. The sale of pharmaceuticals represents one of the largest sections of the privatized Somali health economy. One of the challenges of this largely unregulated industry is that it is difficult to assess quality and authenticity of medicines (MoH participant, 10 May 2014). This is due, however, to the weak capacity of health authorities and deep economic interests in the industry. 'There is a prerequisite of having security and power and a legitimacy that enables us to say you can or can't open a pharmacy or sell drugs' (MoH participant, 10 May 2014). This has meant that the largest share of quality assured pharmaceuticals is procured by UN agencies and donors. However, one participant mentioned the need for improvement in this system. 'So it's a push system, which is

convenient but at the same time not very efficient and there's a lot of wastage. Some are out of stock some are excess' (WHO participant, 15 April 2014).

Developing a nationally financed and locally prioritized health financing system

Participants noted the volatility of service provision in the face of uncertain donor funding and limited government spending. 'Because of a largely nonexistent tax base, the current system is highly donor dependent which means the system is totally vulnerable. It is 100% dependency' (MoH participant, 14 August 2014). This sentiment was also echoed by development partners who also cited low government expenditure and largely ear-marked donor funding as key financial challenges (UNICEF participant, 16 April 2014). A number of participants have called for the integration of vertical programs within the health system to support long-term strengthening. The channeling of funds by donors directly to NGOs in an effort to mitigate fiduciary risk, was cited as a key challenge (UNICEF participant, 16 April 2014). However, participants acknowledged that trust and state legitimacy were key obstacles that needed to be addressed by improving governance and building capacity to mitigate fiduciary risk (UNICEF participant, 16 April 2014).

Establishing a comprehensive information system

Several participants agreed on the necessity of strengthening information systems as a method of strengthening the health sector. The link between quality of the health information system and improvements in efficiency and effectiveness was highlighted (Health Systems Academic participant, July 2014). However, utilization of data for effective decision-making and planning is a key area for improvement (Health Systems Advisor participant, 1 Aug 2014). Participants have suggested several potential approaches for strengthening the information system. In the short-term, participants have recommended a dual approach of capacity building of human resources for information management, as well as an advocacy campaign to raise the importance of health information systems amongst health professionals in the country. In the long-term, the creation of a data collection policy which encompasses civil registration, population-based surveys, notifiable communicable disease as well as health facility-level information was suggested by participants. Participants also suggested a comprehensive review of the national health indicators to strengthen the evidence based policy approach.

Long term challenges

Insecurity was seen by most participants as a crucial challenge for the Somali health system, particularly in some areas of south central Somalia. Security in the long-term was mentioned as a prerequisite for retaining and attracting talented health professionals. Political instability and the subsequent high turnover rate in the federal Ministry of Health were also listed as a major hurdle towards sustainable progress.

Discussion

The protracted civil war negatively impacted on the health system from various angles in terms of health workforce, infrastructure, health service delivery and the policy and regulatory framework.[18] Many participants suggested that support for a health system approach at national and donor level is strong, reflecting a shift from a service delivery-oriented approach towards a system building approach.[19] Several inter-related priorities for health system strengthening emerged from the interviews and literature review, are discussed below.

Strengthening leadership and improving governance

Strengthening leadership in the health system was identified by many participants as a vital component to the health system strengthening in Somalia. In response to this challenge, the HSSP aims to build capacity in governance and leadership to better manage the rebuilding of the health system and improve services to the whole population.[20] The MoH is currently implementing a leadership and management development program that has already been designed and agreed. However, the creation and roll out of separate HSSP in both Puntland and Somaliland also recognizes the different priorities in each region.[21] The draft National Health Policy will be finalized and an annual planning, budgeting and reporting cycle to implement this strategic plan will be introduced. Harmonization of external support to the health sector through a new government–donor coordination system will begin. Improved citizens' engagement in the management and financing of the health services will be built through health boards and committees. The leadership and governance programme aims to equip the senior management level with the skills to better regulate and manage the health system across the country, as recognized in Afghanistan and other similar contexts.[22,23] Concurrent efforts are also being made to finalize and adopt a federal constitution which would help greatly in defining the relationship of different governing bodies and subsequently delineating their roles and responsibilities in the health arena.[24] Strengthening governance as a means of strengthening the health system has been attempted in other fragile, conflict-affected states such as Afghanistan and has met with some moderate success.[25] Among the many recommendations put forward for strengthening accountability in governance, has been supporting decentralization to regional and state levels. Further recommendations include, strengthening ownership through conducting a review of the national health policy and strategy. Lastly, the formation of a national health council with participation from all sectors of society has been recommended as a means of increasing participation in the health system development and ultimately increasing oversight.

Addressing the critical shortage of health workers and building local capacity

There is a critical shortage of healthcare professionals in Somalia. The low health workforce ratios before the war have depreciated through high levels of healthcare worker emigration, leaving an estimated three physicians per 100 000 population (total 253 physicians), 11 nurses per 100 000 population (861 nurses) and two midwives per 100 000 population (116 midwives) serving the whole country.[2] Sustaining salaries of national health staff, is a key challenge.[26] However, appropriately distributed incentives for health staff may also have the potential to redress the

imbalance of rural and urban health workers. Although several participants mentioned the large-scale reliance on donor funding and the need to shift towards locally generated financing mechanisms, one review found that there was little evidence to support the occurrence of this transition in several fragile states.[27] Building local capacity in Somalia is a key priority which requires transitioning from service providers to capacity builders on the part of some international NGOs. It will also require a long-term commitment and adequate resources. In south central Somalia, the first steps towards local capacity building have been taken through the piloting of a community-based female health worker program. Although successfully applied in a number of countries, this model has yet to be evaluated in Somalia. Additionally, a standard package of remuneration for different categories of health staff has been developed following the trajectory set out in the HSSP.[11] Conflict settings demand innovative approaches for the provision of healthcare and experiences from Somalia offering support for medicine at a distance, or e-health, could be a way forward.[4] One recent study indicates that health-workers in post-conflict settings such as Somaliland are responding to the challenge of isolation by adopting e-health innovations that connect them to an international network of health workers.[28,29] Additionally, the need to prioritize the strengthening of human resources for health in terms of quantity, quality and geographical distribution, has been acknowledged as a key priority in similar countries.[30] In Sierra Leone, a country emerging from prolonged conflict, there is an acute shortage of health staff, low access to essential health services and a similar urban/rural disparity. In South Sudan, as in Somalia, the health workforce has limited capacity and managerial experience alongside a large urban/rural disparity. In both countries, as in Somalia, authorities have prioritized the strengthening of human resources for health, through the formulation of strategic development plans, which have focused on improving service conditions for all staffing cadres, improving staff retention measures and increasing the number of adequately staffed health facilities, as well as strengthening local training institutions.[30]

Addressing urban bias

Access to key health services is reduced further in rural regions due to the urban bias of providers, even within the semi-autonomous regions of Somaliland and Puntland. This geographic bias has been observed even prior to the collapse of the state[31] and has been a persistent challenge in many other fragile states such as Sierra Leone, Zimbabwe and South Sudan.[30] Somaliland and Puntland, where functional but limited MoH with strategic health plans exist, rely heavily on the input of international agencies and NGOs.[18] Coverage of public health services in rural areas, for nomadic populations, is very limited. It is estimated that less than 15% of the rural population has access to any health provider. However, new initiatives such as the community based female health worker program modeled after those in other developing countries (such as Pakistan, Nepal and Bangladesh), as well as the successfully piloted Essential Package of Health Services seeks to redress this balance.[17,32,33] The development of a comprehensive workforce development plan by the directorate of health, is also set to tackle geographic distribution of health staff.[11]

Regulation of the private sector in health and addressing equity

The lack of a centralized government has led to a considerable growth in the private healthcare system.[18] A profit-based motivation distorts the range and distribution of health services provided and leaves significant proportions of the population without access to any health care.[34] The introduction of user fees (albeit relatively low levels) for healthcare, in a country with widespread poverty, is unaffordable for many. Local monopolization of health services by the private sector, compounded by desperate health needs and lack of regulation, are a cocktail for possible exploitation of users in an overwhelmingly private health market, as well as widening health and social inequalities.[18] Some policy makers have suggested the introduction of an Independent Service Authority (ISA), as a possible mechanism for the regulation of the private sector, in the face of health authorities with limited capacity. The ISA, analogous to a central bank, would act to bridge the gap between government policy and health implementers, through independently overseeing service provision by the private sector.[35] However, to date, there has been little discussion of such an agency in Somalia. The three administrations do exert differing levels of influence on private health provision and this is reflected in the key priorities of each administration.[36]

Security of health workers and health facilities

The power dynamics that govern the political economy of aid, particularly in south central Somalia, have become so entrenched, that trust has been significantly eroded between stakeholders as well as increased insecurity for humanitarian personnel, including health workers living in the most conflict-affected areas, severely constraining humanitarian space.[5] The climate of distrust stemming from the conflation of humanitarian aid and state-building in Somalia has limited principled humanitarian action in many parts of the country. As a result, assistance has been concentrated on areas where access has been possible, leaving a significant number of people very vulnerable and with no access to humanitarian health services. Additionally, the general insecurity has meant that many partners are continuing to coordinate their efforts from Nairobi, as a result administrative and logistical costs are increased.[36]

Health information

A strong health information system is needed to monitor progress, improve decision-making and increase accountability within a health system. However, the synergistic effects of weak governance on the development of information systems, as well as the effects of limited information on policy formulation have been raised elsewhere.[16] 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 basic health statistics and the health workforce.[18] Most agencies accept that the available statistics should be treated with caution, as they may not accurately reflect the situation on the ground.[18] There are no reliable data regarding the distribution of healthcare workers between urban and rural settings or their gender distribution.[18] Currently UNICEF has

contracted out a private healthcare firm to support the strengthening of the health information management systems in all three administrations.[37]

Study limitations

Given the lack of published health literature on Somalia, we relied on key informant interviews. Several professionals that we contacted did not wish to be interviewed citing insecurity and political challenges (for example some from Somaliland did not want to be associated with Somalia). We did not interview users of health services or the general population to gather their views on the health system as well as members of civil society, primarily due to limited access and issues of informed consent.

Key recommendations

A key recommendation would be to study perceptions of health care: population attitudes towards private health services versus public services, for example, to study barriers in accessing healthcare by gender, age, geography, religious ideology/clan basis and cost-effectiveness of healthcare interventions.

Future research should focus on the evaluation of the modalities by which these priorities may be implemented across the different regions in Somalia. Further studies should also be conducted on a number of neglected health topics within the Somali health system, such as emerging patterns of non-communicable disease, particularly mental health and substance abuse. Finally, future studies should attempt to broaden the pool of informants as much as possible in order to obtain a greater scope of views.

Conclusions

The study found that there was widespread agreement among participants that health system strengthening through a coordinated system, would improve Somalia's long-term capacity in the health sector. Key among the priorities identified by participants, were strengthening of local governance and management capacity, scaling-up efforts to structure a robust health financing mechanisms, engagement with the burgeoning and dynamic private sector, as well as investing in the appropriate human resources for health.

Supplementary data

Supplementary data are available at International Health online (http://inthealth.oxfordjournals.org/).

Authors' contributions: AW and JH, based in Somalia and Kenya, conducted face-to-face interviews with local staff in Mogadishu, Garowe and Hargeisa, from April to November 2014; PP conducted skype or telephone interviews with Somali health program staff based in Nairobi and London; all authors contributed equally in study design, analysis, interpretation and writing of the final manuscript. All authors read and approved the final manuscript. All authors are guarantors of this paper.

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