

Political will: necessary but not sufficient for control of an outbreak of acute watery diarrhoea in the Sudan, 2016-2018

Abstract

Background: During the period between August 2016 and April 2018, an outbreak of Acute Watery Diarrhea (AWD) spread all over the Sudan. The aim of this paper is to assess the role of political will of the government in institution of control measures.

Methods: A total of 269 high-level decision-makers in the country were interviewed using detailed, adapted standardized tools with open-ended questions. Interviewees including selected Federal and five state Ministers of Health, parliamentarians, Country Representatives for selected UN agencies, senior officials in the government, media were conducted. Furthermore, many Focus Group Discussion (FGD) among others with healthcare workers, community groups, and partner organizations were held. Issues discussed during the interviews and focus group discussions included in-depth review of thematic and cross-cutting intervention areas; e.g., surveillance, case management, environmental health, health promotion, resource mobilization including funding, supplies and logistics; coordination and leadership in outbreak response.

Results: High-level officials made containment of the outbreak a top priority, paid field visits to the affected areas, mobilized resources, closely provided sound stewardship for inter-sectoral activities and nurtured a collaborative environment for different stakeholders. The Humanitarian Aid Commission facilitated the activities of registered national and international NGOs and their international staff movement in the country, permitted easy and unlimited access to 92% of the country to ensure the safety of the international staff. Indicators reflected high political will of the government to respond to the AWD to its best ability. Yet, the outbreak continued for almost two years. Donors and UN agencies demonstrated flexibility to support response activities as they reprogrammed some ongoing activities to secure funds.

Discussion: Inadequate transparency, primarily related to difficulties in sharing results of laboratory investigations during the AWD outbreak constrained and limited the potential benefits from partners. The Government needs to foster stronger coordination between water and health sectors; and explore information sharing portals e.g. website and Epi-bulletin; with partners. Partners and the government should jointly clarify their mandates and map their roles during outbreaks so as to avoid duplication, competition, and delays in response.

Conclusion: Political will is a high level enabler which is necessary but not sufficient for control the AWD outbreak. "Health in All Policies" initiative offers a platform to address observed gaps both in financing of outbreak response and addressing underlying root causes for AWD outbreak.

Keywords: acute watery diarrhoea, outbreak, political will, Sudan

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Abbreviations: ARC, American refugee committee; AWD, acute watery diarrhea; CBOs, community-based organizations; CBS, community-based surveillance; CFR%, case-fatality rate percent; CSOs, civil society organizations; DGEHA, General Directorate for Emergency, DGs, director generals; EOC, emergency operation center; EMRO, eastern mediterranean regional office; EWARS, early warning and response system; FGDs, focus group discussions; FMOH, federal ministry of health; FRC, free residual chlorine; HAC, humanitarian aid commission; IDP, internal displaced population; IHR, international health regulations 2005; IW, international week; KI, key informants; MOF, ministry of finance; MOWR, ministry of water resources; MSF *médecins sans frontières*; NGOs, non-governmental organizations; NPHL, national public health laboratory; NPP, national preparedness plan; NPRP, preparedness and response plan; OD, open defecation; ODF, open defecation free; PHEIC, public health

emergency of international concern; RDT, rapid diagnostic test; RRT, rapid response team; SHF, Sudan humanitarian fund; SPHL, state public health laboratories; SRCS, Sudanese red crescent society; TCs, treatment centers; TOR, terms of reference; WHO, world health organization; UNICEF, united nations children fund; UNDP, united nations development program; UNOCHA, united nations office for coordination of humanitarian affairs

Introduction

Political will is defined as the desire and commitment of the government to undertake actions to achieve a set of objectives and to sustain the costs of those actions over time.¹ It also deals with advocacy of politicians to promote change. Political will exists when a sufficient set of decision-makers with a common understanding of a particular problem on the formal agenda are committed to supporting

a commonly perceived and potentially effective policy solution.² On the other hand, public will is related to whether or not people are willing and able to do something about the issue of concern. When both complement and have synergy, the likelihood of success such as delivery of health services or control of a disease outbreak becomes very high.² During the period between August 2016 and April 2017, an outbreak of Acute Watery Diarrhoea (AWD) spread all over the Sudan. The national disease surveillance system which is based on reporting from 1560 sentinel sites and treatment centers reported 36,962 AWD cases, including 823 deaths (Crude case-fatality rate percent [CFR%]=2.2%). The outbreak most likely spread from imported cases from a neighboring country where a similar outbreak was being reported. One year after the emergence of the outbreak (end of Phase I), the government established an Inter-Ministerial Committees (IMCs) to control the outbreak (start of Phase II), which helped to intensify different control measures, including community mobilization, chlorination of water and improvement of clinical management of AWD cases. The Government led coordination of the activities of different stakeholders through the IMCs, activating task-force committees at State and locality levels and mobilizing resources.

Material and methods

We used detailed, adapted standardized tools to interview and conduct Focus Group Discussion (FGD) with a total of 269 high-level policy and/or decision-makers. We interviewed the Minister, Federal Ministry of Health (FMOH), State Minister of Ministry of International Cooperation, five State Ministers of Health, the Undersecretary of FMOH, and States Ministries of Health, Federal DGs for Planning, Emergency Humanitarian Affairs (EHA), National Health Insurance, Curative Medicine, States' Director Generals (DGs), Coordinators, Program Officers, Task Force and Rapid Response Teams (RRT) members; DGs for Water Resources; Education, Humanitarian Action Commission (HAC), media (Radio and TV) and FMOH Advisory Group Members. Similarly, we interviewed Parliamentarians (Deputy Chair and Members of Health Committee of the National Assembly), Country Representatives for UN agencies (WHO, UNICEF, Resident Coordinator (UNDP), and UNOCHA) and Heads of Sub-offices for UNICEF, UNHCR, WHO in some States. Furthermore, we interviewed representatives and senior officials from selected International Non-Governmental Organizations (INGOs) including the Italian Cooperation, MSF Spain, SRCS, OXFAM, ARC, CARE.

Focus Group Discussions (FGDs) were also conducted with Task Force members, RRT, EHA, Surveillance, Health Promotion and Environmental Health, healthcare workers at Treatment Centres and community members in charge of civil and societal organization (CBOs and CSOs), technical officers in Health and Water, Sanitation and Hygiene (WASH) Clusters and Water Resources. We made field visits to six States, Water Treatment Plants, water tankers, wells, AWD Treatment Centers at Hospitals and Health Centres, and reviewed data on laboratory testing of water. We conducted in-depth qualitative review of thematic and intervention areas; e.g., surveillance, case management, Environmental health, health promotion, supplies and logistics. We developed definitions and indicators based on published reports to assess high-level issues such as political will, leadership, coordination and partnerships, transparency and resilience of health systems. We discussed and evaluated some high-level enablers such as political will and leadership, resilience of the health system, transparency; and coordination and partnerships during outbreaks. We used analysis matrices to minimize subjectivity and increase

objectivity. A limited summary of basic surveillance data was obtained from the Federal Ministry of Health (FMOH).

Results

During Phase I of the outbreak, the FMOH managed the outbreak alone according to its best available technical capacities in collaboration with SMOH and few technical partners. This practice continued for almost a year. The FMOH shared some of the epidemiologic data with representatives from the WHO Country Office who were invited to attend expanded daily meetings that monitored the spread and control activities. However, when the outbreak of AWD spread to eleven states, the FMOH had to inform high-level policy/decision-makers in the country. Then, the Cabinet created IMCs of different compositions.³ IMCs included representatives from many ministries, including Chamber for Federal Governance (Chair), Federal Ministry of Health (Co-Chair), Governors of all States, Education, Information, Finance, all SMOH Ministers, Undersecretary of Health, Water Resources, Irrigation and Electricity, Environment and Director General for Water and Sewerage System, President of Women's Union, President of Workers' Union. States varied considerable in involving community leaders.

High-level officials including the Federal and State Ministers of Health, Minister of International Cooperation, Undersecretary of FMOH, many Director General (from FMOH, SMOH, HAC and MOWR) made containment of the outbreak a top priority. Accordingly, they visited the affected areas, mobilized resources, closely provided sound stewardship for inter-sectoral activities and nurtured a collaborative environment for different stakeholders. The Humanitarian Aid Commission (HAC) facilitated the activities of registered national and international NGOs and their international staff movement in the country. As a result, they had access to almost all parts of the country (92%). Only 8% of the country required approval from HAC to ensure the safety of the international staff.

During the outbreak, FMOH established an AWD taskforce at Federal, State and locality levels to provide guidance and leadership to the response. Among others, members of the taskforce include FMOH/SMOH, Water Resources Cooperation, selected UN agencies, national and international health and WASH partners. At FMOH level the task force was led by Undersecretary while at the States level it was chaired by Director General of SMOH. At the locality level the locality commissioners usually chaired the sessions. In their absence, head of locality health department led taskforce meetings. The key issues discussed at these meetings were situation updates, response actions, follow-ups on gaps in response.

Table 1 summarizes the governance and some constitutional and legal elements that address public health emergencies, involvement of the Cabinet during the course of the outbreak of AWD; and how the Government supported development of policies, strategies, guidelines, SOPs and related preparedness and response activities to the AWD outbreak in accordance to the requirements stated in the international health regulations (IHR) and mobilized the community and resources in the response to AWD outbreak. At a community level local leadership often, organized discussion forums which directed community level efforts. For example, States of Blue Nile, Khartoum, River Nile made relatively more visible efforts as compared to other States. Table 2 summarizes findings on leadership during the AWD outbreak response. The table highlights issues related to effective decision-making, management of partnerships, advocacy and communication and other matters related to incident command and

control. The Emergency Operation Center (EOC) facilitated execution of leadership functions such as Effective Decision-making, Managing Partnership, Advocacy and Communication, and Incident Command and Control during outbreak.

Table 1 Summary of political will to respond to the AWD outbreak, Sudan, 2016-2018

High: Demonstrated or exceeded expectations of the corresponding criterion. Medium: Demonstrated many corresponding criteria. Low: Demonstrated a few or none of the expected criterion.

No	Criteria	Remarks/Observations/Findings	Level of PW
1	The constitution recognized public health emergencies and appropriate National Public Health Laws exist	Constitution contained clear statement on public health emergencies Δ The national public health law addressed outbreaks and other public health emergencies.	High
2	The cabinet discussed the course of the outbreak of AWD.	There was a national coordinating body that engaged and mandated various ministries to assist with appropriate response. Discussed at 3 tier (inter-ministerial chaired by the Minister of Chamber for Federal Governance, technical committee chaired by Undersecretary/national IHR focal point, and Government/UN/NGOs committees) Ω	High
3	The government support development of policies, strategies, guidelines, SOPs and related preparedness and response activities	Developed health in all policies. Existed national health strategies exists. Preparedness plan exists. Free health care services for patients with AWD. Government approved a new initiative entitled 'Health in All Policies'. FMOH planned to study root causes for AWD.	High
4	The government complies to the requirements stated in the international health regulations (IHR).	The national IHR focal point informed WHO about emergence of the outbreak without referring to the causative organism. The EOC platform daily discussions were not communicated regularly to the States and UN agencies other than WHO at the initial phase. At a later stage more, information was forthcoming to partners (at sector meetings).	Medium
5	The government mobilized the community (religious, CSOs and other leaders) and resources in the response to AWD outbreak.	Higher officials (Ministers, Governors) led teams to affected communities and hospitals. Youth and women Unions were mobilized University Students mobilized for response. Consumer Protection Society were involved in mobilizing the public Grass root community leaders engaged. Mobilized additional funding from government Little funds mobilized from intl donors. Limited engagement of social media. Mosques conveyed messages in Friday prayers. Engaged Quranic schools (Khalawas). Negotiated access to AWD treatment and prevention activities in conflict affected areas.	High

Δ The Interim National Constitution of the Republic of the Sudan, 2005. Part 14 (pp 92):The President declares state of emergency including epidemics and Schedule D: "The national and state governments, shall have legislative and executive competencies on any of the matters.....(No. 13 pp 106) disaster preparedness, management, relief, and epidemics control".

Ω Ministries involved include Chamber for Federal Governance (Chair), Federal Ministry of Health (Co-Chair), Governors of all States, Education, Information, Finance, all SMOH Ministers, Undersecretary of Health, Water Resources, Irrigation and Electricity, Environment and Director General for Water and Sewerage System, President of Women's Union, President of Workers' Union.

Discussion

The findings of the study showed that, in general terms, there was medium-to-high level commitment by the government to respond to AWD outbreak, as demonstrated by making timely field visits by high-level officials, and supporting mobilization of the affected communities. The demonstrated political will are concordant with the clear constitutional, policies and legislations mentioned in the Interim National Constitution of the Republic of the Sudan, 2005 (Part 14, pp 92) which states that the President declares state of emergency including epidemics. Schedule D (Item No. 13, pp 106) of the constitution states that "The national and state governments shall have legislative and executive competencies on any matters related to disaster preparedness, management, relief, and epidemics control."³

The formation of the Inter-Ministerial Committees (IMCs), another sign of political commitment, has significantly helped in gaining momentum to the control activities. The IMCs influenced

the pace and strength of implementation of AWD control activities by bring more resources, mobilizing the public, positioning control activities; and thus contributed to the observed sharp drop in the number of cases and related fatalities. The IMCs created platforms for partners coordination meetings to regularly share information on any impending outbreaks, including forecasts based on epidemiological, metrological and population movements. The IMCs offered the FMOH the ability to influence, motivate, bring changes, and enable others to contribute towards the effectiveness and success of an organization to attain pre-established goals.⁴ The IMCs was an opportunity to advocate and maximize the effectiveness of the new initiative "Health in All Policies"; and ensure funding for implementation of the national AWD preparedness and response plan. Nevertheless, the establishment of the IMCs was rather late. It would have led to much better outcome (timely control and improved case management) if the FMOH had involved the higher officials at an earlier stage, during Phase I of the outbreak.

Political will could influence accountability, authority, responsiveness and transparency.⁵ Parliamentarians play a crucial role in the overall effort against outbreaks by serving as a crucial link between the people and the government, mobilizing the political will and the resources to master these global challenges.⁶ Yet, political will cannot move towards the desirable goals singlehandedly. The role of leadership, coordination and other managerial interventions should not be overlooked. Moreover, containment efforts could be hampered by weak and fragile health systems, including public health surveillance and weak governance, certain socio-anthropological factors, fast travels and globalization.⁷ The concept of political commitment could be multidimensional,^{8,9} Communities have a responsibility to advocate for health system investment and development and for fundamental pro-poor changes to economic and power relations in their areas¹⁰ Engaging politicians appeared to be an effective method of education and constructive lobbying for the fight against

epidemics, predicting and addressing social responses to epidemic control measures and planning interventions.^{11,12} The initiatives and active involvements of different sectors of the community to control the outbreak as well as the consultative and daily meetings held under the FMOH leadership were instrumental in mobilizing and realigning resources required for the interventions. Inadequate transparency, primarily not sharing results of laboratory investigations during the AWD outbreak constrained and limited the potential benefits from partners (WHO, UNICEF, Donors, INGOs). Nevertheless, donors and UN agencies demonstrated flexibility to support response activities as they reprogrammed some ongoing activities to secure funds. Concerns of many partners relate to delays in sharing of information at the initial phase of the outbreak which could explain the delay in mobilization of needed resources. Partnership enablers could be disrupted by external political influences and the internal politics of health promotion practice.¹³

Table 2 Summary of findings on leadership during the AWD outbreak response, Sudan, 2016-2018

No.	Criteria	Observations and findings	Rank(Strong, medium, weak)
1	Effective Decision-making • Systems and structures that facilitate timely evidence generation for appropriate decision in place. • Identify risk factors and recommended actions and lessons learned to inform strategic decisions.	<ul style="list-style-type: none"> Organized daily TF meetings during outbreak Reinforced sentinel surveillance with zero-reporting and active case finding Inter-ministerial Committee rallied significant support to and guided response activities. Delayed and limited data analysis on risk and spread to support timely decision. There were no formal channels for routine exchange of data between the health and water authorities No documentation of outbreak investigation that identifies risk factors, follow-up actions. 	Medium
2	Managing Partnership • Establish mechanisms that foster and motivate partnerships with national/international stakeholders • Effective delegation and effective coordination of resources and response	<ul style="list-style-type: none"> Established platform for information sharing Activated State and locality level Task Forces Resource mobilization was inadequate due to delayed and limited transparency Request to partners were not prioritized and aligned to mandates of organizations No signed MOUs with partners to ensure concerted response activities during AWD outbreak States engaged community-based organizations and religious leaders in response activities UN agencies and donors insisted that FMOH declare laboratory results to release funds 	Medium
3	Advocacy and Communication • Systems and procedures for public communication established • Regular/frequent communication is in place to inform problem solving/decisions. • Forum for advocacy with relevant partners is in place	<ul style="list-style-type: none"> FMOH with support from WHO shared weekly updates. Communication strategy during public health emergencies including outbreaks FMOH designated the Federal Minister of Health and Undersecretary/IHR focal point as spokesperson during the outbreak. Held press conferences, media briefing and expert panel discussions at Federal and State levels Delayed communication resulted to wide-spread of undesirable rumors about AWD Delayed engagement/advocacy with the Cabinet Did not conduct burden of disease outbreaks that could have been used to substantiate advocacy efforts. 	Medium
4	Incident Command and Control • Governments must take ownership of response • Establish a clear organizational algorithm with well-defined roles and responsibilities. • Systems to mobilize timely and effective distribution of resources are established.	<ul style="list-style-type: none"> Government demonstrated ownership and stewardship The constitution stated that outbreak response is shared-responsibility between federal and state There was no strategy for mobilizing and pooling resource during PHEs. Proposed budget for the AWD preparedness and response plan was not fully funded. There were no clear and widely communicated accountability directives and legislative clauses that relate to refusal of health care givers at federal and state levels to participate in outbreak control. FMOH did not question clinicians and public health officers on justifications for lack of adherence to recommended protocols and guidelines; e.g., clinical case management, IPC, etc. 	Medium

Incident Management entails a single management structure shared management facilities single planning process or consolidated goals and objectives and coordinated process for requesting and managing resources.

There were gaps during the outbreak period in coordinating the activities of both the legislative and executive wings sectors. During outbreaks and other public health emergencies, effective leadership is critical for institution of proficient public health responses; some leadership attributes such as effective communication, command and control, and coordination are more needed to rally timely, sound and effective support from different stakeholders¹⁴. Coordination mechanisms between the WASH sectors need some revision in order to increase the efficiency of the sectors. Similarly, the overlapping of mandates of different ministries requires clarity and mapping their respective roles and responsibilities during an AWD outbreak (e.g., water source development vs. quality monitoring). The Government needs to foster stronger coordination between water and health sectors; explore information sharing portals e.g. website and Epi-bulletin; whereas partners should clarify their mandates to avoid duplication and competition. Although the FMOH embraced the advices of the panel of experts; implementation of these recommendations remained a challenge for the FMOH. It was also noted that the FMOH was not able to bring everyone together from the Ministry itself such as Directorates of Curative Medicine and Health Promotion from the outset and the course of the outbreak. There is need to review the performance of the managers of the outbreak at both Federal and State levels, channels of communication, and to develop SOPs for the Federal and State Emergency Operation Centers (EOC), RRTs and other emergency response staff along with accountability component. The daily EOC meetings were useful to update partners' responses, identify challenges and constraints, and to identify steps needed to rectify.

The demonstrated political was a plausible reaction to widely-spreading outbreak and should not wane by the end of the outbreak. The FMOH need to take steps to sustain the gains and yield of the political will by establishing a national center of excellence for training and management of diarrheal diseases, promoting cross-border information sharing on potential public health emergencies (including for disease outbreaks), advocating for and supporting establishment of Horn of Africa Epidemic Alert and Response (HEAR) network, addressing root causes and risk factors (notably latrine construction, use and access to safe drinking water); scaling up good practices in all States, and building capacities at the Federal and State EOCs and related SOPs, database of experts, RRTs, stockpiling, etc. Establishment of IMCs, EOCs and RRTs should be coupled with training and retaining the trained surveillance officers, strengthening the laboratory capacities at the State and National PHL to be transparent, timely release of funds and to change erroneous behavior and misconceptions. Political will alone was not enough; and overlooking or delaying in implementation of other discussed factors have continued to a prolonged outbreak that continued for almost two years with a CFR% five times higher than a country with an ongoing civil water.

Declarations

- I. Ethics approval and consent to participate.
- II. Not required because there is no human subject involved.

Consent to publish

Not applicable.

Availability of data and materials

Authors used surveillance and published data. References cited.

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Authors' contributions

Dr Ayana Yeneabat prepared the tools used for the study. All authors participated in field visits, interviews, review of surveillance data, and discussions, interpreting observations. H El Bushra prepared the manuscript from the evaluation team report. All authors reviewed and discussed the manuscript.

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Conflicts of interest

None.

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