WASH is often promoted as a way of preventing water borne diseases such as cholera. The overwhelming opinion is that the only sustainable way of preventing outbreaks is by decent water supplies, sanitation and hygiene behaviour, yet WASH actors do not appear to be active in the fight against the disease, with initial responses being led by medical issues. The concept of the disaster cycle should lead from relief to recovery to prevention, but the handover from emergency response to development is weak, made worse by the transfer of the lead agency from health to WASH, with differing priorities, actions and data needs. The idea of early recovery tries to bring “development” closer to the emergency response but this leads to blurred boundaries and ill-defined responsibilities. A stronger emphasis on prevention with clear practical actions would provide more focus for the eradication of this preventable disease.

Preventing cholera
Cholera continually plagues endemic countries with outbreaks occurring on an annual or even intra-annual basis. It is widely acknowledged that water, sanitation and hygiene (WASH) are the best interventions to prevent cholera (see box).

“There is … total agreement within the relevant scientific and health care community that the most important factors in the elimination of cholera, in endemic areas, are sustainable access to potable water, effective community sanitation procedures and adoption of personal hygiene practices” (GAAC, 2011a).

“Supply of safe water, adequate environmental sanitation, and basic domestic and personal hygiene are critical measures for the prevention and control of cholera” (WHO, 2007a).

“Only major improvements of Haiti’s water and sanitation systems will provide durable solutions to the epidemic” (MSF, 2012).

“Investments in water and sanitation infrastructure contributed to the virtual elimination of epidemic cholera from Central and South America” (Periago et al, 2012).

“After the earthquake that devastated Haiti international health experts have called for action to improve water and sanitation infrastructure to ensure that the cholera epidemic that followed the disaster is eliminated” (Gulland, 2012).

“Supply of safe water, adequate sanitation, and basic domestic and personal hygiene are critical measures for the prevention and control of cholera” (Said et al, 2011).

“In order to eradicate cholera in Guinea-Bissau and Guinea-Conakry lasting improvements in the water supply and sanitation and hygiene situation at municipal level need to be implemented” (Cairncross, et al, 2009).

“The long term prevention of cholera will require improved water and sanitation facilities” (Sack et al, 2004).

“Until improved water supply, sanitation and good hygiene practices are widespread it will be difficult to control the occurrence of cholera” (OXFAM-GB, 2008).
A research project carried out as part of a MSc study aimed at exploring the role of WASH in the response to prevention of cholera. Despite an exhaustive literature search and consultations with key informants, very little evidence of long-term WASH investments relating directly to cholera was found. Those case studies that were found were in Latin America and proved successful, but this approach has not been replicated in Sub-Saharan Africa on a large scale. A few pilot projects are underway, notably in the Democratic Republic of Congo. (GAAC 2011b)

Prevention or cure
Disasters ideally follow a cycle, with relief agencies addressing immediate humanitarian needs with a transition to recovery and prevention. This involves handovers from those involved in emergency relief to those addressing longer-term needs (Figure 1). However, despite knowing the measures for prevention, the main approach to cholera globally is a reactive one in the form of emergency medical response. The handover to prevention not only involves different institutions (relief to development), but also different sectors (medical to WASH), with different interests and different information requirements.

“There is a need to shift the emphasis from response to prevention in order to avert outbreaks by expanding access to improved sources of drinking and improved sanitation, and by working with communities to encourage behavioural change” (WHO, 2011b, p.329)

The research project aimed at investigating this transition in reality by interviewing personnel who worked on a series of cholera outbreaks in Uganda, namely:

- Kasese: October 2011 – February 2012
- Mbale: February – May 2012
- Nebbi: March – June 2012
- Buliisa: March – June 2012
- Hoima: April – June 2012

These areas were selected as the country has established guidelines for cholera response and none of the confounding factors of fragile states and dysfunctional institutions, yet still experiences repeated cholera outbreaks. In each area, a District Cholera Task Force or Coordination Committee is meant to “ensure full
collaboration among the involved sectors and the rapid and efficient execution of control activities” (Ministry of Health, 2007, p. 22). The members of the task force include:

- District Council Chairperson
- Chief Administrative Officer
- Resident District Commissioner
- District Health Officer
- District Health Inspector
- District Water Officer

These officials were interviewed to establish what happens in practice during and after a cholera outbreak.

Findings

The findings from the field research largely confirmed many of the gaps and issues identified in the literature review. The difficulties in the transition period at the local and national level in Uganda are analogous to the wider picture presented by the literature.

Gap between relief and development

The gap was found to exist in Uganda. It was manifested in the functioning of the cholera task forces. The health sector, as the lead agency, focused on emergency response and made little attempt to include other sectors such as water. The water sector was largely absent from the response to cholera outbreaks and criticized the national task force for being too emergency focused without thinking about phases before and after the emergency. As stated by a UN report on the transition from relief to development, “decisions are made based on different criteria, with survival paramount in the humanitarian phase and MDGs and national strategies in the development phase. A ‘gap’ exists between the phases” (UN, 2006, p. 5). The health officials focused on survival during cholera outbreaks and the water sector was more focused on development. Based on these findings it can be concluded that dichotomy between relief and development is a major contributor to the transition gap in Uganda.

Transition Gap

The difficulties found in Uganda relating to the transition to recovery and the implementation of prevention programmes are very similar to those experienced by the UN early recovery cluster. Early recovery was seen as a way of bringing the development and relief activities closer together, but this approach experiences difficulties. The problem with “early recovery” is that it has essentially been instituted as a ‘plug’ between relief and development. A report by the Cluster Working Group for Early Recovery describes the challenges it meets; “most stakeholders pay little attention to early recovery...no procedures exist for immediate planning of early recovery...there are little or no human or other resources available for early recovery” (CWGER, 2008, p. 13). Although the scale of disasters in which the UN cluster system becomes engaged is on a greater scale than the outbreaks studied in the Uganda, the challenges of transition largely remain the same. The prioritization, guidance and resources for the transition from relief to recovery and development are absent. This has a negative impact on the coordination of the transition and need to be addressed at local, national and international levels.

The stakeholders in Uganda - the government and development partners – exhibited little priority for transition to the recovery stage following an outbreak. The functioning of the task forces ends with the outbreaks and both the government and development partners largely return to their usual activities. A WHO official commented on this topic and claimed that the focus on preventative activities is “very minimal”. The reactive response by the stakeholders neglects the transition following an outbreak.

Procedures for planning for recovery or prevention do not exist in Uganda. Although the National Policy for Disaster Preparedness and Management states its “overall policy goal is to promote national vulnerability assessment, risk mitigation, disaster prevention, preparedness, effective response and recovery in a manner that integrates disaster risk management with development planning and programming” it does not provide guidance for the planning of those phases of disaster management. It only suggests broad policy actions to be taken in relation to different types of disasters. Similarly, the guidelines for cholera prevention and control do not provide guidance for the recovery, but merely actions to be taken in the immediate response. This is not to blame the health officials, as they are not responsible for WASH activities.
Similarly, guidance for the development of WASH activities does not focus on cholera, as the main drivers are issues of coverage. Medical data is not always in the correct form for prioritising WASH projects.

Human and financial resources are lacking in Uganda. District officials widely stated the financial resources were seriously constrained. Existing ministerial and departmental budgets had to be reallocated to fund the response to outbreaks, taking resources away from other activities and leaving nothing for recovery or prevention. This is an issue of both interdepartmental costs and benefits and long-term vision. Expenditure on WASH (by water departments) should reduce the costs of cholera responses (saving health departments money eventually). Extremely limited sources of local revenue kept districts dependent on the national government and the priorities of each ministry. Staffing levels in the majority of districts visited were well below an adequate capacity.

**Action gap**

The lack of engagement by WASH staff was partly due to the medical nature of the interventions, with WASH being limited to some key hygiene messages, bucket chlorination and supporting cholera treatment centres. This is often the extent of advice given to WASH staff, again indicating the short-term nature of the response. Longer-term actions did not seem to be promoted with the required WASH response being business as usual rather than, for example, giving advice on collecting and using epidemiological and WASH data to target communities vulnerable to repeat outbreaks of the disease.

**Disaster Cycle**

Knowledge of the concepts of the phases of emergency and the disaster cycle was found to be poor in Uganda among government informants. This does not reflect necessarily on the concepts themselves, but more on the dissemination of policies, specifically the Uganda National Policy for Disaster Preparedness and Management. It mentions the phases of emergency, but it does little to illustrate the concept of disasters as a cycle. Guidance for activities following an outbreak does not exist and local government officials cannot necessarily be blamed for their lack of action. The reactive approach to cholera adopted by the government, and in particular the health ministry, only focuses on emergency response and leaves a void in the aftermath of an outbreak. The literature review showed this to be a trend worldwide. It is the ‘gap’ between relief and development and its contributing causes that needs to be addressed; lessons are not being learnt and preventable disasters reoccur.

**Recommendations**

Prioritization, planning and guidance, and resources all impact on the coordination of transition. Neither fully part of the humanitarian sector nor development, “transition” exists in a grey area and is poorly defined and lacks boundaries. Similarly WASH for cholera prevention is not part of either mainstream medical or water supply sectors. The lack of clarity is a major reason why there is effective links between relief and development. Instead of trying to ‘plug’ the gap with early recovery, it is suggested that an attempt be made to ‘close’ the gap by bringing development actions closer to relief activities. It is recommended that a disaster risk reduction/ prevention (DRRP) approach be adopted. The objectives of risk reduction and prevention are more clearly defined than that of early recovery and the fact that international strategies have been developed, such as the Yokohama Strategy and Plan for Action and the Hyogo Framework for Action, give risk reduction and prevention a firmer footing from which to start.

Strongly rooted in the realm of development, risk reduction and prevention should be integrated into the response to disasters as a way of ‘closing the gap’. As the humanitarian actors focus on response, the DRRP cluster/ department can begin to engage, advocate, mobilize and plan for the implementation of activities following the response phase. This would allow the process of risk reduction and prevention planning to begin while the response is being carried out by humanitarian actors. One could argue that creating another department or structure creates more bureaucracy and costs, which is true, but the counter argument is that investing in risk reduction and prevention will have returns as risks are mitigated and disasters, such as cholera, reduced or eliminated. Also, this creates a prevention focus, absent in both disaster response and ongoing development work.
Interdisciplinary approaches

Due to the focus on medical treatment by the cholera task forces in Uganda, the committees were dominated by health personnel who consider cholera a primarily a health issue and excluded other sectors from being involved in the response. This was not active, but a result of the curative focus.

With DRRP, the task force should be truly inter-sectoral. Development organizations have traditionally been more inclusive in their approach than humanitarian actors and as a development focused cluster, the DRRP groups should seek to bring government, civil society, communities and all relevant stakeholders on board. The lack of inter-sectoral cooperation and coordination in Uganda has allowed the risk factors for cholera to persist. Epidemiology needs to link to infrastructure to identify weak areas of WASH services.

The argument could be made that the challenges that plague “early recovery” or the transition phase in Uganda would trouble a DRRP cluster/department. However, it is believed that clearer boundaries would bring greater attention to the issue. The attention paid to DRRP is already greater than that towards early recovery thanks to the International Decade for Natural Disaster Reduction, the Yokohama strategy and the Hyogo frameworks for action. Specific guidance on cholera prevention is needed in addition to emergency responses on one hand and general WASH literature on the other.

The resources to be committed to DRRP will be the greatest challenge. As found in the literature review “there is no agreement among donors on whether financial support for disaster reduction should come from humanitarian or development resources” (Tsui, 2011, p. 20). Whilst disasters attract immediate funding, DRRP requires a longer-term commitment. The DRRP cluster or national department should be integrated with the emergency response coordinating groups so it can begin to plan and mobilize resources while the emergency response is still being carried out but require on-going resourcing, so should have separate budgets from a disaster response budget. The need for inter-sectoral cooperation and the inclusion of all stakeholders in the process will also help to broaden support and mobilize resources.

In summation, the gap between relief and development must not be ‘plugged’ by an ill-defined concept of early recovery, but the gap should be ‘closed’ by bringing relief and development closer together with the integration of disaster risk reduction and prevention into the phase of emergency response.

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