



# THE SUDD INSTITUTE

RESEARCH FOR A PEACEFUL, JUST AND PROSPEROUS SOUTH SUDAN

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## Weekly Review

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### **Cholera: A New Threat to Health in South Sudan**

*Augustino Ting Mayai*

South Sudan currently experiences existential health threats as the war devastates a third of its territory, the Greater Upper Nile region. Morbidity and mortality related to both direct and indirect consequences of war have become increasingly commonplace, especially in the displaced encampments. Recently, the News24<sup>1</sup> news agency reported cholera outbreaks in Juba, the nation's capital. Towards the end of June, roughly 30 cholera-related deaths were reported in the nation's top populated city, with the new count reflecting an increase of 12 fatalities, from 18 deaths<sup>2</sup> initially identified. So far, in the previous month alone, approximately 500 new cholera cases have been documented. This number rose to over 700 cases following the nation's 4<sup>th</sup> independence anniversary celebration<sup>3</sup>. Even more alarming, the UNOCHA projects that as many as 5,000 South Sudanese children under the age of five years could possibly die of cholera this year. The under-five children are especially vulnerable given their inability to withstand "severe dehydration due to excessive" diarrheal and vomiting episodes.

Cholera is a condition of the 'bacterium vibrio cholerae' infecting human intestine<sup>4</sup>.

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<sup>1</sup> <http://www.news24.com/Africa/News/Cholera-deaths-in-South-Sudan-rise-1-0000s-at-risk-UN-20150703?>

<sup>2</sup> <http://www.news24.com/Africa/News/At-least-18-die-of-cholera-in-South-Sudan-in-3-weeks-20150625>

<sup>3</sup> <http://www.sudantribune.com/spip.php?article55671>

<sup>4</sup>Cholera is caused by an infection of the intestine with the bacterium *Vibrio cholerae*. The bacterium causes the cells lining the intestine to produce large amounts of fluid, leading to profuse diarrhea and vomiting. The infection spreads when someone ingests food or water contaminated with the feces or vomit of someone carrying the disease. Contaminated food or water supplies can cause massive outbreaks in a short period of time, particularly in overcrowded areas such as slums or refugee camps.

Source: [http://www.doctorswithoutborders.org/our-work/medical-issues/cholera?utm\\_source=google&utm\\_medium=ppc&utm\\_campaign=cholera](http://www.doctorswithoutborders.org/our-work/medical-issues/cholera?utm_source=google&utm_medium=ppc&utm_campaign=cholera)

Naturally, the health consequences of this infection are severe diarrhea and vomiting. The disease spreads via contaminated food and water. Thus, “contaminated food or water supplies can cause massive outbreaks in a short period of time, particularly in overcrowded areas such as slums or refugee camps”. This definition reflects South Sudan’s current experience in which overcrowded settings have been hit the hardest.

This weekly review analyses the new cholera outbreaks in South Sudan. Cholera is treacherous, posing a serious threat to an-already threatened human health in a volatile nation. This analysis essentially makes a conceptual relationship between health and war and governance. A concluding portion of the review offers some remedial opinions.

### **Why should we care?**

If not handled with the care it deserves, this bout of cholera in South Sudan could devastate the nascent nation. This observation is acutely disturbing, especially in Juba where congestion and poor sanitary environments, the principal circumstances under which cholera profoundly thrives, have become an increasing disquiet. Juba hosts the national and Central Equatoria State governments and offers quantitatively and qualitatively superior basic services, consequently attracting a significant number of rural residents. Rural-urban migration gives rise to overcrowding and places considerable pressure on limited, basic services. Under such a circumstance as in South Sudan, rural-to-urban migration becomes a tragedy since it often has the potential to source population growth, as well as swelling competition over limited resources. A loosely managed cholera outbreak can trigger serious health consequences, in part due to the large concentrations of South Sudanese who are currently crammed in the UN protection sites and in part due to the treacherous South Sudan’s health environment. As the threat of cholera increases, more health catastrophe and high humanitarian costs are likely to ensue.

We note elsewhere that cholera breeds well in settings with substandard environmental health conditions. This situation could not be truer elsewhere than in Juba where environmental health control is markedly unsatisfactory, resulting in much of the city being constantly fraught with toxic wastes. For instance, many of the residents who reside in the slums defecate openly, posing a precarious health situation for the entire city. This is in part due to the fact that slum and rural residents lack appropriate toilet facilities, and in part due to social norms that frown upon some modern health practices. In some Nilotic traditions, a toilet based on the dwelling premises is considered a taboo. The resultant practice is that all household members go to the bush and clandestinely relieve themselves of waste. That human feces litter open spaces in the nation subsidizes poor environment, a recipe for dismal health.

Overpopulation and poor environmental health present a compelling anxiety given their potential to easily heighten the transmission of cholera and other infectious diseases. In this respect, historical epidemiologic experiences, such as how hygienic practices played a substantial role in the impact of plague on the 1660s relatively populated England and Wales, readily come to mind as valuable knowledge (McKeown 1962). Any policy

response aimed at managing infectious diseases partly demands addressing the issues of environmental health.

### **Health and war**

War bears substantially on population health. It violently uproots individuals and families from their homes and economic occupations. It distresses social systems that support good health. In South Sudan, hundreds of thousands who are currently housed in under-resourced displacement camps are a result of recent war. The South Sudanese violence has forced as many as nearly 50 thousand of the Juba residents alone to seek shelter in tight encampments characterized by unforgiving living and health conditions. As a result, the internal refugees live in overcrowded spaces, a recipe for increase in outbreaks of cholera and other infectious diseases. Likewise, the current violence has put a large portion of the health system in the Upper Nile region to ruin. Finally, governments facing militant threats often divert health resources toward other goals, such as training and equipping more combatants to confront insurgency. Redirecting health resources elsewhere undermines the nation's ability to prevent or adequately manage health outbreaks and deepens the risk of morbidity in the population. Here, restoring peace is a significant remedy.

### **Health and governance**

Meeting the health needs of a population is a matter of social contact, hence governance. Good health outcomes reflect good governance. In South Sudan, lack of basic services in the rural areas has sparked urban migration, facilitating population explosion and resource-based competitions in towns—all influencing the population's nature of resilience to new disease outbreaks. The government of South Sudan spends well over 80 percent of its annual budgets in the center, leaving rural residents no choice but to seek services in the urban centers (Mayai 2012). Meanwhile, the returns to urban investments remain relatively low in terms of health outcomes. In particular, environmental health, such as the management of human and oil wastes, continues to be incredibly ineffective. Essentially, even with over 80 percent of public spending occurring in towns, these areas remain unsuitable for good health because of prevailing poor sanitary services there.

### **What can South Sudan do to overcome this health problem?**

The government and its partners need to increase surveillance on cholera outbreaks, and invest more resources in preventive measures, such as closely paying attention to environmental contaminants that can amplify infections. The current health situation demands an immediate enforcement of existing national and subnational regulations on environmental protection. Keeping the streets sanitary and avoiding open urination and defecation will go a long way in curtailing cholera infection. Guaranteeing environmental sanity is key to reducing morbidity and human mortality related to cholera and other infectious diseases. Improvements in environmental health, according to McKeown (1962), led to better health outcomes in the world than has been made possible by modern medicine. In England and Wales, for example, reducing dysentery and cholera resulted in 8.9 percent decline in human mortality in the 17<sup>th</sup> century (McKeown 1978).

Distributing more resources to the rural areas and optimally using them for the benefit of all will reduce rural-urban migration, subsequently lowering the risk of disease in environmentally toxic urban centers. A successful epidemiological transition (a transition from poor health to better health) demonstrates responsible governance and respect for people-to-government social contract.

Both national and state governments need to continuously monitor food and water services. More specifically, restaurants and other public hospitality enterprises must adhere to some nationally certified health standards to minimize the outbreaks.

Cultural revolution, especially in sensitizing the rural populations to modern hygienic practices and what they constitute for the greater good of the wider community, needs to be undertaken. The governments at various levels should invest considerably in both substantive trainings and material supplies related to building sanitary systems in the country.

Finally, to achieve better health outcomes, short- or long-term, necessitates a restoration of peace and the subsequent scaling of current health investment efforts all over South Sudan. Expanding service access to the countryside by increasing health funding could result in favorable health returns for the majority of the population. With extra funding, primary healthcare institutions should be able to elevate their efforts in providing safe drinking water supplies and decent sanitation facilities nationwide. Meanwhile, prioritizing protection for the vulnerable South Sudanese, young children, during the periods of transitional hiccups, should top the agenda of public health institutions in the country. The internally displaced are particularly vulnerable and could benefit from extra consideration, supplied both locally and internationally.

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### **Author's Biography**

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