## Outbreaks of Enteric Disease in Zambia

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This issue, featuring some papers and a review on outbreaks of enteric disease, is a timely reminder that complacency is not a good strategy, and that we need to be watchful for outbreaks so that they can be reported and controlled. Typhoid is a case in point. Some years ago, I supervised a MPH student who wrote a dissertation on the acceptability of typhoid vaccine. The overwhelming response from physicians was that typhoid wasn't much of a problem in Zambia. Mothers of children were likewise unaware of typhoid as a potential problem, with 22% of respondents saying they had never heard of it (unpublished data). Surgeons, however, have for many years dealt with a steady trickle of bowel perforations, one of the severe consequences of typhoid. The evidence was there if we had we listened to the health care providers talking about their daily work. Now we are seeing the consequences of our unprepared state, with typhoid outbreaks occurring on a regular basis.

We have a national programme of rotavirus immunisation so we can congratulate the Ministry of Health heartily on this good work. The problem for surveillance and prevention of diarrhoeal disease is that there are so many enteric infections which may be responsible. We need to focus on those infections with the largest attributable risk or the worst impact on outcomes; rotavirus is responsible for 20-25% of childhood diarrhoea [1]. We also need to monitor the effects of our interventions, such as monitoring rotavirus vaccine effectiveness, and strategies are in place for that. Other high priority enteric infections include cholera, which causes large outbreaks and great anxiety among the public and cryptosporidiosis which is less obvious but which has a disproportionate effect on long-term health of children and people with AIDS.

Currently Zambia is experiencing an outbreak of cholera in Lusaka district. Close to 4000 cases including adults and children with 80 deaths have been recorded since 6<sup>th</sup> October 2017[2]. Many other countries within Africa and beyond are experiencing cholera outbreaks affecting atleast 47 countries across the globe, resulting in an estimated 2.9 million cases and 95,000 deaths per year worldwide [3]. On a positive note, the Global Task Force on Cholera Control (GTFCC) which brings together partners from around the world to support affected countries in mitigating the cholera outbreaks experienced has launched an effective platform hosted by Who through a strategy titles 'Ending Cholera: A Global Road Map to 2030'. The goal is to reduce cholera deaths by 90% ad if all stakeholders remain committed up to 20 countries affected would eliminate Cholera by 2030. Zambia has endorsed this strategy and is putting in place activities to actualise the goal [4].

There are active research programmes in Zambia on rotavirus, cholera and cryptosporidiosis, at CIDRZ, in UTH and at UNZA vet school. More could be done, and we should encourage all front-line health care workers to be vigilant for those odd patterns of consultation that may herald outbreaks or just changing epidemiology. Such patterns might include unusually high numbers of patients presenting with diarrhoea, diarrhoea in unusual age groups, etc. We must also bear in mind that not all enteric infections cause diarrhoea: typhoid for example, is primarily a febrile illness, and hepatitis A and E which present with jaundice are acquired through the gut. We should also learn from the very unusual outbreak of enterohaemorrhagic *E. coli* infection in Germany in 2011[5] that primarily affected adults, not children. Vigilance is the key. Be watchful!

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