

**OA-020 IMPACT OF TARGETED INTERVENTIONS AGAINST DIARRHOEA IN ZAMBIA**

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**Background** Diarrhoea is a leading cause of morbidity and mortality with the brunt of diarrhoea felt most in developing countries like Zambia where 13% of all deaths of children between 1–59 months are attributable to the disease. The Ministry of Health, in partnership with the Centre for Infectious Disease Research in Zambia (CIDRZ) and other stakeholders, implemented the Programme for the Awareness and Elimination of Diarrhoea (PAED) in 2012 to reduce all-cause under-five mortality by 15% in Lusaka Province.

**Methods** Baseline data were collected in 2012 and endline data were collected 3 years following PAED implementation. The primary outcome of interest was all-cause under-five mortality rate. Additionally, a case-control study to estimate rotavirus vaccine effectiveness (VE) was undertaken.

**Results** The percentage of children under age 5 who had diarrhoea in the last 2 weeks preceding the survey declined from 15.8% (95% CI: 15.2–16.4%) in 2012 to 12.7% (95% CI: 12.3–13.%) in 2015. Post-neonatal mortality declined by 34%, from an estimated rate of 29 (95% CI: 26–32) to 19 (95% CI: 16–21) deaths per 1000 live births. The adjusted 2-dose VE was 26% (95% CI: 30%–58%) among children  $\geq 6$  months of age. VE against hospitalised children  $\geq 6$  months of age was 56% (95% CI, –34%–86%).

**Conclusions** Well-packaged preventive and treatment interventions against diarrhoea could reduce probability of death among children aged 1–59 months. VE results from Zambia were consistent with others in the region, and while we observed a higher point estimate for VE against increased severity of illness compared with milder disease, the study was not powered to detect a low level of VE against milder disease.