Safety and efficacy of antiseptic cleansing to reduce vertical transmission of multi-drug resistant pathogens to neonates (NeoVT-AMR)

This study examined whether using antiseptic solutions during labour or shortly after birth can reduce harmful bacteria on the skin of newborn babies, which may increase their risk of infection. Mothers and babies received either chlorhexidine 1%, chlorhexidine 2%, or octenidine 0.1% with phenoxyethanol 2%, given as either a single application or multiple applications, or standard care. The study was undertaken at Zomba Central Hospital in Malawi.

Chlorhexidine 1% was the most effective treatment for reducing harmful bacteria in both mothers and newborn babies compared with standard care, and performed better than octenidine 0.1% with phenoxyethanol 2%. In mothers, a single application was effective, while in babies repeated applications appeared to give additional benefit over time. There was no clear advantage of using a higher concentration of chlorhexidine. No safety concerns were identified.

This was the first study to compare these antiseptics in women during labour and their newborn babies. The findings suggest that chlorhexidine 1% is a promising and safe option, and it could be included in larger studies testing combined approaches to prevent infections in mothers and newborns.