

# ANTIBIOTIC USE IN INFANTS WITH ACUTE WATERY DIARRHOEA IN SUB-SAHARAN AFRICA

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## Background

- The appropriate treatment of diarrhoea is simple, yet it remains a problem in many low- and middle-income countries (LMICs).
- Recent reviews of diarrhoea management in children in LMICs revealed a high degree of inappropriate practice including excessive fluid curtailment and antibiotic prescribing [1-3].
- The inappropriate use of antibiotics in children with diarrhoea can result in the development of antibiotic resistance and increase the risk of subsequent diarrhoea.

## Research aim

- This study was conducted to estimate the proportion of infants with acute watery diarrhoea that were treated with antibiotics in sub-Saharan Africa (SSA).

## Methods

- A meta-analysis of demographic and health survey data sets from 30 countries in SSA was performed.
- Pooled estimates of the proportion of infants treated with antibiotics were determined using random effects model.

## Results

- The data sets covered 9,307 infants with acute watery diarrhoea.
- Pooled proportion of antibiotic use among cases of acute watery diarrhoea in infants in SSA was 21.8% (95% CI 18.3 – 25.4).
- Regional estimates ranged from 18.0% (95% CI 12.7 – 23.4) in East Africa to 25.5% (95% CI 14.8 – 36.2) in Central Africa.

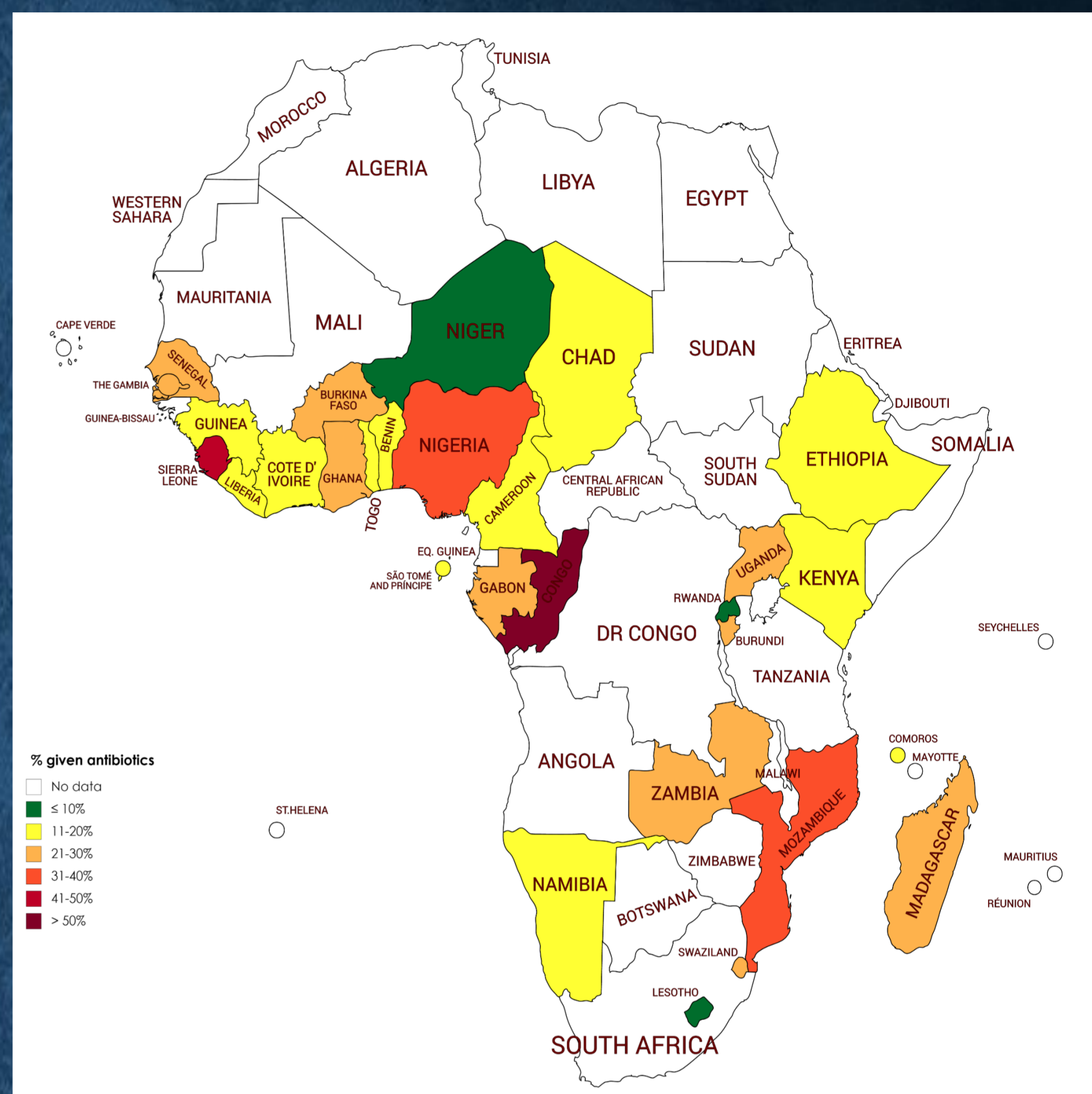


Figure 1: Prevalence of antibiotic use among infants with diarrhoea in various countries

- Antibiotics were commonly used in Congo-Brazzaville, Sierra Leone and Nigeria with estimates of 59.4% (95% CI 53.8 – 65.0), 44.9% (95% CI 37.9 – 51.9) and 34.1% (95% CI 30.4 – 37.9), respectively.

## Conclusion

- This study found high use of antibiotics in the treatment of acute watery diarrhoea in infants.
- It underscores the need to educate prescribers and parents in SSA on appropriate management of diarrhoea and the consequences of inappropriate use of antibiotics in children.

## References

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