

Review of: "A Systematic Review of Antibiotic Use in Humans in Nigeria and Its Potential Contribution to Rising Antimicrobial Resistance"

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Potential competing interests: No potential competing interests to declare.

This is a systematic review of reports published in English, from 2000 to 2017 and available in Nigeria, on the use of antibiotics. This was undertaken to support policy makers in establishing a national AMR surveillance system in 2016, in response to the 2015 World Health Assembly adoption of a global action plan on AMR.

A previous review of 12 developing countries had highlighted that Nigeria contributes 60% of the use of health products in ECOWAS with a total population of 600 million.

826 papers were identified by searches on PubMed and AJOL databases, of which 11 articles were finally selected after screening for inclusion in the analyses.

Data was entered on a pre-prepared proforma focused on identifying prescription use and patient demand for antibiotics.

90% of the studies were undertaken in a clinical setting, 2 only enrolled medical doctors, and none were from the north eastern or northern regions of the country. The papers reviewed differed in participants but also in approach to the topic – some evaluated prescriptions written, in and out of the National Health Insurance Scheme, others on non-prescription (over-the-counter) availability and use of antibiotics, others looked at the demand (or perceived demand) from patients for antibiotics.

The most common antibiotic use was for diarrhoea (metronidazole) and for sore throat (penicillin), and the use was greater in children <5 yrs than in older cadres.

Comments:

- Only PubMed and AJOL were screened for papers. This could have been much wider.
- It would be helpful to know the numbers of participants in the studies that were analysed.
- Are there new papers to consider that have been published after 2015?
- The results (proportionate rate) of antibiotic use vary widely – why?
- The authors put forward a number of good reasons for why there is overuse of antibiotics, but many reasons proposed could not be substantiated in their analyses. Is it the intention to do in-depth studies to understand the reasons for

overuse to be able to target restorative activities?

- This review was undertaken in 2017 when the country introduced AMR guidelines. Six years later, it would be interesting to see what the effect of those guidelines has been.
- Why the delay in wishing to publish the review?