

Abstract

Analysis of policies for the utilization of important antibiotics in animals in Namibia and the implications for future antimicrobial stewardship

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Background: Globally, the overuse of medically important antibiotics in animals is common and a considerable driver of antimicrobial resistance (AMR) with implications on mortality and costs. Consequently, among African countries with high AMR rates there is a need to analyse policies and resistance patterns with the ongoing use of medically important antibiotics in animals. The findings can be used to guide future policies. **Methods:** Descriptive analysis of the appropriateness of policies and their current impact on resistance patterns of medically important antibiotics in Namibia against the WHO AWaRe guidance on antimicrobial stewardship. **Results:** Out of the 45 medically important antibiotics currently registered for use in animals in Namibia, 77.8% are in the AWaRe Access category, 68.9% are broad-spectrum and 60% are non-prescription – mainly tetracyclines, penicillins and sulphonamides. Consequently, there is currently misalignment in policies for human and animal use in Namibia alongside global recommendations. There is also currently no guideline for the use of antibiotics in animals in Namibia. Most medically important antibiotics that are currently being used are indicated for control of gastrointestinal (77.7%), musculoskeletal (71.1%) and respiratory (46.7%) infections in addition to growth promotion (4.4%). Resistance is high among humans to commonly used AWaRe Access antibiotics including penicillin (13.5%-100%), sulphonamides (19.5%-100%) and tetracyclines (56%-100%). **Conclusion:** Whilst Namibia has banned the use of antibiotics in farming, current policies are not aligned to global AWaRe guidance, and promote the overuse of broad-spectrum antibiotics. This needs addressing in a multi-sectoral one health coalition alongside advancing antimicrobial stewardship.

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