

Antimicrobial resistance (AMR) is a global health problem, yet its extent is not well evaluated, notably in low-middle income countries. The SARS-COV-2 pandemic demonstrates the link between humans, animals, and the environment. AMR is considered a silent pandemic and a global threat facing humanity. In order to promote policies that will effectively address AMR at the local level, one must establish a baseline assessment of AMR prevalence locally. This study reviewed published articles of AMR prevalence across human-animal-environmental domains in Zambia. PubMed, Cochrane Libraries, Medical Journal of Zambia and African Journals Online databases were searched from inception to April 2021 for articles in accordance with PRISMA guidelines. Retrieval and screening of articles were done with strict inclusion/exclusion criteria. A total of 716 articles were retrieved, of which 25 articles met inclusion criteria. AMR data was not available for six of the ten provinces of Zambia. Twenty-one different organisms from the human, animal and environmental sectors were tested against 36 antimicrobial agents, across 13 classes of antibiotics. All the studies showed a degree of resistance to more than one class of antimicrobials. The majority of studies focused on antibiotics, with only three studies (12%) highlighting antiretroviral resistance. Antitubercular drugs were addressed in only five studies (20%) despite an epidemic in sub-Saharan Africa. No studies focused on antifungals. The most common organisms tested, across all three sectors, were *Staphylococcus aureus*, with a diverse range of resistance patterns found; followed by *Escherichia coli* with a high resistance rate found to cephalosporins (24- 100%) and fluoroquinolones (20-100%). AMR is understudied in Zambia, but the level of resistance to commonly prescribed antibiotics is significant across the human-animal- environmental sectors. Improved standardization of antimicrobial susceptibility testing in Zambia could help to better delineate AMR patterns, allow comparisons across different locations, and allow tracking of AMR evolution over time.