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**Fourth Training Workshop and Symposium MURIA Group in conjunction with ISPE 18 – 21  
June 2018  
University of Namibia, Windhoek**

**Theme: Medicine utilisation research in Africa influencing patient care and policy**

**Title: SELF MEDICATION USING ANTIBIOTICS AT COMMUNITY PHARMACIES IN LOW AND MIDDLE INCOME COUNTRIES: A SYSTEMATIC REVIEW AND META-ANALYSIS**

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**Background:** Self medication with antibiotics has become increasingly common in low and middle income countries. It has been identified as a key driver to antimicrobial resistance. Factors contributing to self purchasing of antibiotics include: low socioeconomic status, lack of access to prescribers and weak legislation, among others.

**Objectives:** To establish the extent of antibiotic self-medication in low and middle income countries especially Africa and the impact of potential policies to address this.

**Methods:** Potential studies for inclusion in the review were identified through direct searches on the Cochrane Library, EMBASE, Scopus, University of Strathclyde Library and PubMed. Google Scholar was also used to complement our searches. The search terms used were “self-medication”, “non-prescription”, “self-treatment”, “antimicrobial”, “antimalarial”, “antibiotic”, “antibacterial” and combining them using Boolean operators.

We searched for studies published between January 2007 to March 2018. Study results were summarized narratively for a sub-set of studies where the data on outcomes and methodology varied significantly. The quality of the available evidence about the pre-specified outcomes to support a given intervention was assessed Critical Appraisal Skills Programme (CASP) cross sectional study Checklist. Two reviewers independently assessed study quality; disagreements were resolved by discussion.

**Results:** A total of 64 potentially relevant articles were identified from literature searches. 21 studies were deemed eligible for inclusion. There is a huge variation in the prevalence of self-medication using antibiotics across low and middle income countries. It ranged from a low of 12% in Iran to as high as 93% in Uganda. Data on the type of antibiotics used for self-medication was not commonly reported. Some of the recurrent reasons for self-medication included inaccessible health facilities, long waiting time for consultation, familiarity of patients with symptoms, bad experience with doctors and ambiguous professional boundaries.

**Conclusions:** Generally the prevalence of self medication with antibiotics was high, with variations across countries. Reasons for self medication should be addressed to reduce the prevalence. Policies should be put in place to address these as there was scanty data on this.

