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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 A countrywide Point Prevalence Study in South Africa – using technology to determine use and appropriateness

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Background: Antimicrobial resistance (AMR) is a serious world-wide health concern and a direct threat to future patient safety, with the misuse and overuse of antimicrobials increasing AMR rates. Consequently, it is imperative to measure current antibiotic utilisation within hospitals to guide future quality initiatives. However, data on antimicrobial utilization among public hospitals and primary health care centres (PHCs) in South Africa (SA) is currently lacking and needs to be addressed.

Objectives: To describe and quantify how AMs are currently utilised in selected public sector hospitals and PHC centres in SA; to determine how mHealth techniques can be used to monitor AM utilisation in selected public sector hospitals and PHC centres in SA; to assess current programmes among public sector hospitals and PHC centres to improve AM prescribing as part of AMSPs and pharmacy and therapeutics committee (PTC) activities; to develop interventions, including mHealth techniques, to enhance the role and activities of AMSPs and PTCs; to measure prescriber compliance to STGs for ID in public sector hospitals and PHC centres in SA; to develop interventions, including mHealth techniques, to monitor and enhance prescribing compliance to STGs; to determine the utilisation, uptake and timeliness of vaccines (EPI and seasonal influenza) in selected public and private sector facilities across SA, as part of an AMS strategy to reduce AMR; finally, to develop interventions, including mHealth techniques, that can be used to enhance the appropriate use of vaccines in selected public and private sector facilities across SA.

Methods: A web-based application tool was developed in South Africa based on previous PPS studies conducted in Botswana and South Africa using paper-based collection tools,and evaluated during July 2017. Key variables measured included antimicrobial utilisation patterns and appropriateness of treatment for sepsis in the Intensive Care Units (ICUs) and paediatric diarrhea in the CHCs

Results: Preliminary results will include data from three provinces with 2455 patient files reviewed with all of their antimicrobial therapy and related results

Conclusions: The PPS method offers a standardized tool that can be used to identify targets for quality improvement programmes in hospitals. The development of a web-based application (APP) has allowed the team to collect large datasets throughout Southern Africa.