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AWARENESS ABOUT APPROPRIATE ANTIBIOTIC USE IN A RURAL DISTRICT IN SUB-SAHARAN AFRICA: WHERE IS THE STARTING POINT FOR PREVENTION OF ANTIBIOTIC RESISTANCE?

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Misuse of antibiotics and antibiotic resistance (ABR) are global concerns particularly affecting low-and middle income countries. In Mozambique, the community awareness of antibiotics and ABR has not yet been explored. This study aimed to describe community understanding of antibiotics and ABR, as a means of providing an empirical basis for message development and positioning. The study was conducted in Manhiça, a rural district of Southern Mozambique, from 2016 to 2018, and followed a qualitative research design. 16 in-depth interviews and 4 focus group discussions were conducted among community members. The data was analyzed following a grounded theory approach. Half of the participants recognized the term antibiotic, even though their definition was rarely aligned with the biomedical. Participants associated antibiotics to colors, shapes and diseases. The majority of participants did not recognize the term ABR and only two had an understanding of it. Limited knowledge about the biomedical terms and definition of antibiotics and ABR was the main finding of this study. However, community members were willing to build constructs around these terms. Such constructs were built from own experience, exposure to antibiotics, contact with different formal and informal sources and social interactions. Our findings support the need for educational interventions based on the current local knowledge, perceptions and experience to increase antibiotic awareness.

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AN OPEN SOURCE PLATFORM FOR THE DEVELOPMENT OF CLINICAL TRIAL PROTOCOLS FOR POVERTY-RELATED DISEASES

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The most important preparation for successful clinical trials is the conception, development and refinement of a clinical trial protocol that is of high quality and integrity. Protocols are typically being conceived, reviewed and finalised within relatively small groups of researchers. With the support of The Global Health Network (TGHN), The European & Developing Countries Clinical Trials Partnership (EDCTP) aims to develop an open source platform for designing and refining protocols for clinical trials that will be performed in resource-limited settings on medicinal products such as drugs, vaccines, microbicides and medical diagnostics for poverty-related infectious diseases (PRDs). The goal of the platform is to provide guidance for researchers from low- and middle-income countries, who want to develop clinical trial protocols using input from limited, closed groups or the entire scientific community ("open source") for the optimisation of the final protocol. First, we will conduct a landscape analysis of existing resources and a gap analysis of resources, tools and repositories for clinical protocol building. Second, we will create a repository of resources and tools about data repositories and guidelines related to clinical protocol development and develop appropriate training material applicable to trials in resource-limited settings for PRDs. Third, we will develop an online, interactive toolkit to assist researchers in protocol planning and development and allows any interested party to make comments and suggest improvements to the protocol. This will include a dynamic web space to host the web tools and will combine a community of practice made up of researchers in low- and middle-income countries, with resource areas, eLearning courses, examples of well-written protocols etc. This toolkit will be linked with the EDCTP data sharing resource platform (accessible via 'EDCTP Knowledge Hub' currently developed by TGHN) to support researchers to think about data sharing from the outset of clinical trial planning.

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DEVELOPING AN EARLY WARNING SYSTEM TO SCREEN FOR GONORRHEA INFECTION IN GHANA USING COST SENSITIVE CLASSIFICATION AND REGRESSION TREE

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Statistical regression models, such as logistic regression, have been widely employed to analyse gonorrhea occurrence. However, this model has its own assumptions between dependent and independent variables which when violated, can lead to erroneous estimation of gonorrhea occurrence likelihood. To overcome this challenge, a non-parametric model such as Classification and Regression tree (CART) can be used. CART has been employed in business administration, industry, engineering and Medical diagnosis. It is a powerful tool for dealing with prediction and classification. However, most researchers who have used this method in medical diagnosis do not integrate misclassification cost in their model development process. Instead, they focus to improve prediction accuracy assuming equal misclassification cost i.e that the cost of false positives is equal to the cost of false negatives.. This work seeks to develop an early warning system using Cost Sensitive Classification and Regression Tree (CS-CART) which would reduce the false negative (Type II error) prediction when classifying gonorrhea infection status. Gonorrhea surveillance data from five Health facilities in Ghana and spanning the years 2012 to 2016 included 906 patients; 254 positive and 652 negative gonorrhea cases diagnosed by Nucleic Acid Amplification Test (NAAT) were analyzed. The dataset was partitioned into two; training (637 patients) and testing (269 patients) data.A CART model assuming equal and unequal misclassification cost was developed to classify gonorrhea infection status. The results indicate that false negative rate of the CART and CS-CART was 57% and 0% respectively for the training data while for the testing data, the false negative rate for CART and CS-CART was 82% and 26%, respectively. CS-CART can be used as an early warning system in which most individuals who are not at risk of gonorrhoea would likely be identified and those who are at risk of gonorrhoea would be confirmed using laboratory techniques. This could help save treatment cost and lessen the potential burden of antimicrobial resistance in Ghana.

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BURNOUT AND WHO'S WHO IN PEDIATRIC GLOBAL HEALTH: A LOOK AT NATIONAL TRENDS

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Burnout affects up to 50% of residents, yet little is known about the relationship between participation in global health (GH) and burnout. Secondary analysis of a national cross-sectional electronic survey,