Main topic : Antimicrobial resistance: A worldwide concern

Improvement of Antimicrobial Resistance Surveillance Systems in the food and agriculture sectors: main outputs of FAO-ATLASS assessments in Africa

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Introduction:
The increase in capacities for antimicrobial resistance (AMR) surveillance and monitoring in the food and agriculture sectors constitutes a pillar of the action plan on AMR by the Food and Agriculture Organization of the United Nations (FAO). As part of this effort, FAO has developed an ''Assessment Tool for Laboratories and AMR Surveillance Systems'' (FAO-ATLASS) to assist countries in systematically assessing their AMR surveillance systems in the food and agriculture sector. The FAO-ATLASS includes two modules, one for surveillance assessment and another for laboratory assessment. Each module has two questionnaires that collect both qualitative and semi-quantitative data to describe and score the performance of national AMR surveillance systems and laboratory networks in a standardized manner. Within the framework of various AMR projects, FAO-ATLASS has already been implemented in many countries and regions around the globe, thereby enabling the assessments and to provide tailored recommendations. By 2023, nearly 25 African countries have been evaluated using FAO-ATLASS and this was achieved by about 50 assessors specifically trained to use the tool.
Methods:
A regional review of FAO-ATLASS findings was conducted for countries assessed in Africa.The compilation of the collected data enabled the mapping of countries based on their scores and the identification of common gaps to promote collective actions to improve AMR surveillance at regional level. This joint analysis of findings from African countries was necessary to learn from countries experiences, discuss the assessment outcomes and highlight common gaps and strengths.
Results:
For each country, the identified recommendations focused on the main components of an AMR surveillance system which are 1) Governance (e.g. formalization of the roles of multisectoral working group on AMR, definition of surveillance objectives and indicators) 2) Data production network (e.g. harmonization of antimicrobial susceptibility testing (AST) practices, definition of data exchange modalities, implementation of quality assurance for AST, designation of a national reference laboratory for AMR), 3) Data collection and analysis (e.g. designation of an office responsible for data collection and analysis, definition of data workflow), 4) Communication (e.g. definition of the policy for communicating AMR surveillance results to decision-makers and stakeholders, identification of the expectations of key stakeholders regarding the results of the surveillance system, 5) Sustainability (e.g. definition of performance indicators, establishment of training programs for the epidemiologists and laboratory staff, provision of resources for the surveillance activities).
The tool results analysis and post FAO-ATLASS discussions on all those issues led to: i) Identification and prioritization of tailored actions at both national and regional levels to address the FAO-ATLASS recommendations; ii) Mapping of available resources to support actions; and iii) Development of an advocacy package.
Conclusions:
FAO-ATLASS results analysis and post FAO-ATLASS discussions provide a solid ground for data sharing including information on the priorities to support countries and regional efforts to improve their national AMR surveillance systems. These discussions encourage both the harmonization of regional and global AMR surveillance plans and the data compilations within food and agriculture sectors.