

## Antimicrobial resistance: implementing the global action plan in the Region

### The need for urgent action on antimicrobial resistance

Antimicrobial resistance (AMR) is now recognized as a serious and growing threat to global health security. The continued irresponsible use of antimicrobials in general (and antibiotics in particular) in humans and animals as well as in the agriculture industry has led to this situation. Moreover, the limited prospects for the development of new classes of antibiotics in the short run make the situation more complex: in the past 30 years no major new class of antibiotics have been developed<sup>1</sup>. The problem is so serious that it threatens the achievements of modern medicine: a post-antibiotic era in which common infections and minor injuries can kill is a very real possibility for the 21st century.

In recent years, WHO and partners have raised the prominence of AMR within the public health agenda both globally and regionally, including among the countries in the Eastern Mediterranean Region. The first *Antimicrobial resistance global report on surveillance*<sup>1</sup>, published in April 2014, revealed extensive antibiotic resistance across the Region, in particular, high levels of resistance in common bacteria to wide-spectrum antibiotics in use, such as third generation cephalosporins and fluoroquinolones.

The situation regarding the structures and activities for containment of AMR in the Region is also alarming. The *Worldwide country situation analysis: response to antimicrobial resistance*<sup>2</sup> report, published in April 2015, showed major gaps in knowledge among policy-makers, health care providers and the general public about AMR, the surveillance systems for AMR, access to safe, effective antimicrobial medicines, control of the misuse of antimicrobials in the human and animal health sectors, and infection prevention and control programmes. Quality-assured antimicrobials are essential for treating infections successfully; poor quality, degraded and counterfeit antimicrobial medicines can lead to AMR, and counterfeit medicines are a particular problem in the Eastern Mediterranean Region.

In January 2015, the WHO Executive Board adopted the draft global action plan on AMR<sup>3</sup>, the overall goal of which is “to ensure, for as long as possible, continuity of the ability to treat and prevent infectious diseases with effective and safe medicines that are quality-assured, used in a responsible way, and accessible to all who need them” through five strategic objectives (awareness raising, evidence-based knowledge, infection control, responsible use of medicines, and development of an economic case for sustainable investment). The action plan provides key actions to be taken in the next 5–10 years by the countries, WHO and partners to defeat AMR.

In consideration of the draft global action plan, a Regional AMR Steering Committee and Task Force were established (including experts on AMR from the Region and relevant WHO staff members) in 2015, and the first meeting was held in Cairo from 26 to 28 April 2015. The objectives of the meeting were to develop the outline of a Regional Operational Framework for implementation of the draft global action plan on AMR and to develop a timeline and plan for implementing the action plan in Member States of the Region.

### Challenges to implementing the global action plan in the Region

Given the imminent threat of AMR and its complexity, strong political will and commitment, a multi-disciplinary, multi-sectorial approach, community engagement and allocation of resources are essential.

Some of the challenges to tackling AMR are:

- irresponsible use of antimicrobials
- inadequacies of health systems in managing the problem
- deficiencies of antimicrobial stewardship
- Unrestricted access to antimicrobials by farmers without veterinary oversight
- Lack of knowledge of the general population as well as among health care providers and decision-makers about AMR
- Lack of shared responsibilities and coordinated global activities to address health risks at the animal–human–ecosystem interface

<sup>1</sup> Antimicrobial resistance: global report on surveillance. Geneva: World Health Organization; 2014 ([http://apps.who.int/iris/bitstream/9789241564748/1/112642/10665\\_eng.pdf](http://apps.who.int/iris/bitstream/9789241564748/1/112642/10665_eng.pdf), accessed 6 December 2015).

<sup>2</sup> Worldwide country situation analysis: response to antimicrobial resistance. Geneva: World Health Organization; 2015 ([http://apps.who.int/iris/bitstream/9789241564946/1/163468/10665\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/9789241564946/1/163468/10665_eng.pdf?ua=1), accessed 6 December 2015).

<sup>3</sup> Global Action Plan on Antimicrobial Resistance. Geneva: World Health Organization; 2015 ([http://apps.who.int/iris/bitstream/9789241509763/1/193736/10665\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/9789241509763/1/193736/10665_eng.pdf?ua=1), accessed 6 December 2015). In May 2015, the Sixty-eighth World Health Assembly endorsed the Global Action Plan.

- Weak policies and systems for AMR surveillance and for regulation of antimicrobial usage
- Lack of primary resistance data.

### Key actions agreed

The frameworks for each strategic objective provided in the Global Action Plan were discussed with the objective of developing the outline for the Regional Operational Framework.

The following points were agreed on.

- The proposed framework in the Global Action Plan should be simplified in line with agreed needs, key priority interventions and indicators (benchmarking) so that countries are able to apply the framework easily.
- The operational framework will follow the five strategic objectives of the global action plan.
- The operational framework is to be used jointly by the human and animal health sectors.
- Four cross-cutting activities should be integrated in all interventions pertaining to each strategic objective:
  - engagement of the private sector,
  - attention to marginalized/vulnerable populations, in particular in complex emergencies,
  - undertaking of operational research for guiding evidence-informed decisions,
  - close collaboration and joint action with the animal health sector.
- High-level ministerial events, such as the Regional Committee, provide an excellent opportunity to secure high-level political commitment.

- There is a need for a functional structure (such as focal points) at the country level to oversee the interventions.
- There is a need to identify champions in each field.

For AMR surveillance, the terms of reference will be developed based on the actual situation in each country, however, they should include the minimum requirements for participation in the global surveillance. Building on structures already existing in the countries, all health laboratories engaged in AMR surveillance (clinical laboratories, central public health laboratories, food, agriculture and veterinary laboratories, etc.) will be integral to the network of surveillance sites. The extent of this network will depend on the available capacities and resources; malaria and tuberculosis programmes will continue with their routine surveillance.

### Next steps

The draft outline for the regional operational framework needs to be turned into a usable document for the countries. Given the size of this undertaking, which will be done by several thematic working groups, and considering the current constraints in resources (shortage of dedicated staff, tight timeline, etc.), a document should be prepared that can be presented to ministers of health. The thematic working groups should be assigned tasks for further technical input and to develop practical guidance documents for countries to apply during the development and evaluation of their national action plans. The final documents should provide details of actions to be taken and relevant tools to be used by the countries.

The meeting concluded with agreement on a number of action points for future work aimed at advancing the development of the framework (Box 1).

### Box 1 Actions to advance the development of the regional framework on antimicrobial resistance

- Revise the functions, membership, roles and responsibilities of the Regional AMR Steering Committee.
- Identify and nominate qualified experts from the Region for membership in the Regional AMR Steering Committee.
- Draft a work plan for discussion with the committee members.
- Collect evidence on all five areas of action according to the framework of the Global Action plan, specifically:
  - narrative reviews on different areas of interest (structures, behaviours, medicines, policies, etc.)
  - studies on the burden of AMR in selected countries of the Region.
- Finalize and publish the Regional Operational Framework.
- Develop the terms of reference for the national AMR focal points.
- Collect/develop a set of protocols/tools for country situation analysis, including burden estimates (through outsourcing or establishing thematic working groups).
- Map the WHO collaborating centres and centres of excellence in the Region.