



PARALLEL SESSION 2.2

AMR: ADDRESSING EXCESSIVE AND INAPPROPRIATE USE OF ANTIBIOTICS



| BACKGROUND

The tripartite, Food and Agricultural Organization, World Health Organization and World Organization for Animal Health and other relevant organizations had declared Antimicrobial resistance (AMR) a serious and growing global public health threat. The loss of effective antibiotics is reducing an ability to protect people from infectious diseases, with profound impacts on healthcare systems, global trade, agriculture, environment and health sectors. Based on World Bank Group projections of the world economy in 2017-2050, if AMR problems continue at the current pace, the annual global GDP would fall by 1.1-3.8% by 2050 and the global healthcare cost would range from US\$ 300 billion to more than US\$ 1 trillion.

Though AMR is a natural mechanism of pathogen survival; the excessive and inappropriate use of antibiotics are key drivers of the emergence of antimicrobial resistance. Decision to prescribe antibiotics by health professionals still occurs in the absence of adequate information about the nature of the infection or before the results of diagnostic and sensitivity tests become available. Moreover, the regulation of antimicrobial use is poorly enforced in some areas, such as over-the-counter, unregulated use of antibiotic in agriculture, substandard medicines for both human and animal antibiotics.

Several attempts to optimize use of antibiotics in human and animal sectors have shown in the last decade at global, regional and national levels. To fulfill key action proposed by the Global Action Plan, countries need to strengthen the evidence base through surveillances of AMR and the consumption of antimicrobials, and strengthen regulation of the distribution and use of antibiotics in human and animals. The information on AMR and antibiotic consumption will guide the treatment of patients and inform local and national actions. Thus, antibiotic, as a global public good requires regulation on distribution and use.

It is imperative that PMAC audiences recognize the drivers contributing to excessive and inappropriate use of antibiotics; but more importantly, learn and share practical and successful solutions.

| OBJECTIVES

The panelists in this session will address the following questions

On problem streams

- 1. Why there are excessive and inappropriate use of antibiotics in humans, animals and crops (i.e. in citrus for treatment of greening disease), such as self-medication of antibiotic from over-the-counter purchases, inefficiently regulated the use of antibiotic. Stakeholder analysis are helpful to unpack the complexity. Key actors involved in the use of antibiotics:
 - a) Demand for antibiotics: patients and farmers,
 - b) Supply of antibiotics: pharmaceutical industry, professionals: veterinarians, physicians and pharmacists,

On solution streams

- 2. What are the good practices and lessons for countries or regional organization such as ECDC and networks such as ESAC and ESVAC, to develop and maintain an effective system for surveillance of AMR, antimicrobial consumption and Point prevalence survey in human, and animal?
- 3. How evidences of surveillance of antimicrobial consumption are used:
 - a) To guide antibiotic prescribing decisions of health professionals
- b) To formulate, support and monitor policies which curb down antimicrobial consumption and promote rational use of antibiotics
- 4. What are the challenges of use of antibiotics in crops? Is there any monitoring system on impacts of antibiotic use in crops, such as antibiotic resistance in food crops and environment, and antibiotic residue in environment and food crops?
- 5. How does the regulatory system support the control of antibiotic use?

On recommendations

6. What are the policy interventions on "demand" and "supply" sides, which address the excessive and inappropriate use of antibiotics in developing countries?









Panelist

Lilit Ghazaryan

Deputy director

Scientific Center of Drug and Medical Technology Expertise of Ministry of Health
Armenia

Lilit Ghazaryan is a pharmacist graduated from Yerevan State Medical University in 1991. She began her career in a regional pharmacy and in 1997 started work in the Armenian Medicines Regulatory Authority under the Ministry of Health: Scientific Centre of Drug and Medical Technology Expertise. Since 2004 she is the deputy director and responsible for coordination the activities of the marketing authorisation, pharmacovigilance and information departments. She has taken part in developing of many pharmaceutical legislative documents and participated in several national and international programs in the field of medicines regulation. Since 2011 she is also focal point with the responsibility to create and maintain Antimicrobial consumption (AMC) monitoring system in Armenia, as well as for the development and implementation of the National action plan on Antimicrobial Resistance. She is a member of AMC network and coordination team lead by Health Technologies and Pharmaceuticals programme in WHO Regional Office for Europe.



