



# **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?









#### Moderator

### Klara Tisocki

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Dr Klara Tisocki B.Phar,; M.Sc Clin. Pharm. Ph.D. Regional Adviser Essential Drugs & Medicines, World Health Organization South East Asia Regional Office, New Delhi, India. Experience: Klara Tisocki is trained as clinical pharmacologist and has over 25 years of experience in improving pharmaceutical systems in developing countries. She has worked in over 30 countries across Africa and Asia on pharmaceutical policy development, medicines and medical product regulation, procurement and supply management medicines access, pricing issues and governance and accountability as an employee and consultant to WHO and other global development organizations. Current work: Klara Tisocki, since joining WHO in 2012, is responsible for the regional level coordination of WHO's technical support to countries related to medical products, including pharmaceuticals, medical devices, biologicals, blood and other medical products of human origin. She works with countries on national medicine and health technologies related policies on regulation, pricing, procurement and supply management and appropriate use of these technologies and capacity development issues to strengthen national systems for medicines and health technologies. Klara also coordinates the work related to antimicrobial resistance in the areas of antimicrobial stewardship, consumption monitoring and education awareness raising on correct use of antibiotics. She is particularly involved with work on regulatory interventions, promotion of antimicrobial stewardship and other health system strengthening actions to ensure the quality and the responsible use of antimicrobials to prevent antimicrobial resistance.



