

American Mock World Health Organization 2016 Conference

Short Title: Stewardship and Surveillance on Antimicrobial Resistance

Sponsors: Russian Federation, Ireland, UK, Italy, Germany

Signatories: Switzerland, Netherlands, Serbia, Algeria, Seychelles, Republic of Moldova, Luxembourg, San Marino, Turkey, Slovenia, Malta

Humanitarian Index Score: 80%

Building upon, the discussions of antimicrobial resistance taking place within the European Region of the American Mock World Health Organization with a focus on stewardship and surveillance;

Referencing, the Statement of the World Health Organisation (WHO), Food and Agriculture Organisation of the United Nations (FAO) and World Organisation for Animal Health (WOAH), which states that antimicrobial agents are “essential to treat human and animal diseases and should thus be considered as a public good”;

Referencing, the World Health Organisation and Centre for Disease Control and Prevention (CDC) definition of ‘antimicrobial resistance’ (AMR), which states that “microorganisms (such as bacteria, fungi, viruses and parasites) change when they are exposed to antimicrobial drugs (such as antibiotics, antifungals, antivirals and antimalarials)” and since “antimicrobials have been used so widely and for so long that the infectious organisms the antimicrobials are designed to kill have adapted to them, making the drugs less effective”;

Recognising, the ongoing work of the WHO, FAO and WOAHA ‘One Health’ campaign, which states that “addressing the rising threat of AMR requires a holistic and multi-sectoral approach because antimicrobials used to treat various infectious diseases in animals may be the same or be similar to those used in humans”, which means that “resistant bacteria arising either in humans, animals or the environment may spread from one to the other, and from one country to another”. As such, “AMR does not recognize geographic or human/animal borders”;

Recognizing, the success of past European initiatives such as GerMap and the UK 5 Year Strategy for Antimicrobial Resistance (2013-2018), to control use of antibiotics among the agricultural sector;

Realizing, the numerous educational and economic resources present within the European region, which can be utilised for benefit within and beyond our borders, and the support of the existing European High Level Steering Group;

Desiring, to continue to control and reduce the use of antibiotics among the corporate agricultural, veterinary and medical sectors as part of the Sustainable Development Goals by 2030;

Appreciates, the need for dissemination of knowledge both within and beyond the borders of the European region because without an understanding of the problem, there is very little motivation for change, within both public and professional populations;

Deeply concerned, by the ongoing crisis of treatment-resistant influenza in the Federation of Russia;

Reaffirming the words of WHO Director General Margaret Chan, who stated that “without harmonised and immediate action on a global scale... common infections could once again kill” and seeking to enact this sense of collaborative action across the European Region.

The General Assembly Plenary,

SECTION A: SEEKING A CULTURE SHIFT IN THE INAPPROPRIATE USE OF ANTIMICROBIALS WITHIN THE AGRICULTURAL INDUSTRY THROUGH SURVEILLANCE AND #DININGWITHOUTDRUGS PUBLIC AWARENESS CAMPAIGN

1. *for* a comprehensive, sustainable surveillance network by which data is collected, analyzed, distributed and acted upon as a European Region. This would be for use in agriculture, leading to the creation of the European Agricultural Surveillance Team (EAST)
 - I. Creation of regional surveillance committees comprised of experts in pharmacy and veterinary medicine, ideally with support of national Chief Medical and Veterinary Officers,
 1. Committees will monitor antibiotic usage in agriculture, collecting data from health workers in all regions of the country and reporting their findings to the WHO Antimicrobial Resistance Information Bank.
 - a. Data collected will be used to establish guidelines and thresholds for antibiotic usage reporting.
 2. Experts will be compensated for their efforts and two will testify in the biannual conference.
 3. Delegates will take the practices from the biannual conference and implement them in a way that complements their unique environment.
 4. Establishes a sample sharing Memorandum of Understanding among countries in the European region to collaborate biological sample sharing in cases of multinational outbreak and new emerging cases, to develop new and innovated medical countermeasures and therapeutics.
 - II. Building upon the efforts of Association for the Purulent Use of Antibiotics (APUA) and Global Antibiotic Resistance Partnership (GARP) led by the Centers for Disease Control and Prevention (CDC), EAST will oversee the implementation of this regional and global surveillance network for AMR,
 1. Comprised of two experts from each country of Europe.
 2. These experts participate in already existing programs like EAAD, scientific conferences of the Institute Pasteur and Precision Medicine.
 3. Catapult Center (industry collaboration), and the EU Innovative Medicines Initiative (National Research Council collaboration).

Use standardized practices, created by the International Organization for Standardization (ISO),

4. Calls for an update to the International Health Regulations (IHR) to include antimicrobial resistant outbreaks and new emerging antimicrobial resistant cases related to antimicrobial resistance as an “Always Notifiable” event as outlined in the IHR2005.

III. Advocates for a standardized, comprehensive system for the collection, analysis, distribution, and ongoing monitoring of veterinary and agricultural use of antibiotics in a national and regional setting. This would be created and validated by the ISO for initial implementation across the European Region and, as a long-term goal, being utilized as a model applied to other regions, with support of Member States who can provide

financial aid.

2) *Encourages* member states to implement training programs or continue to share knowledge of AMR (for example, through European Antibiotic Awareness Week) and educate the general public for the benefit of the entire EURO region –

I. With the understanding that a ‘grassroots’ approach is most likely to be a more effective method of catalyzing change in the consumer market to combat corporate economic interests.

II. By connecting nations that are able to provide either financial or human resources to those in greater need:

1. Feasible through the efforts of more wealthy and knowledgeable member countries donating resources and education to countries lacking said resources
2. Keeping in mind that the benefit should be solely in regards to the reduction of antimicrobial resistance and not for other country benefits
3. Encourages a financial incentive for veterinarians and farmers who are willing to travel and educate beyond the borders of their home country

3) *Recommends* the innovative use of data collected through surveillance networks for the establishment of a unique **food industry rating system** to highlight positive and negative practices in the appropriate use of antimicrobials in agriculture. This will rate providers of meat, dairy, and other edible animal products on their reasoning behind and volume of antimicrobial use

I. This labeling system would be simplified from online comprehensive data to be used by members of the medical scientific communities to a three color grading system (red, orange, and green) by which the consumers could quickly and easily assess for themselves whether their food supplier had ethical approaches to the use of antimicrobials when raising their livestock and therefore make an informed decision about their purchases. Even if an individual government decides not to include such labelling alongside other food safety regulations currently displayed on packing, this information would be freely available online.

II. This system is universal and avoids the issue of a language barrier whilst ensuring that consumer led changes occur within the food industry who are often led by profit margin.

III. In order for the public to understand this initiative, they will be able to access clear and simple information about the threat of AMR and the ability for resistance to transfer between animals and humans. This information will be disseminated via social media, with the #DiningWithoutDrugs campaign, alongside public health leaflets and educational sessions.

4) *Urges* the implementation of a six-point approach to encourage the replacement of the use of antibiotics for the purposes of growth promotion in livestock in agriculture with new, innovative tools and methods including but not limited to the following

Prebiotics, defined as nutrients intended to modulate the digestive microbiome

- a) Probiotics, defined as healthy bacteria intended to modulate the digestive microbiome
- b) Organic Acids, defined as additives that reduces food spoilage and results in lower pathogen carriage
- c) Phage Therapy, defined as the use of engineered bacterial viruses to destroy pathogenic antigens
- d) Vaccines, defined as the use of vaccines to destroy pathogenic antigens
- e) Modified Non-Starch Polysaccharide Additives, which are low viscosity feed which improves nutrient uptake leading to increased animal growth

SECTION B: MINIMISING OUR RELIANCE UPON ANTIMICROBIALS IN HUMAN HEALTH THROUGH COLLABORATIVE EDUCATION SCHEMES AND THE PROVISION OF PREVENTATIVE CARE

1. *Underscores* the importance of approaching the issue of AMR from a preventive standpoint to curb the reliance upon antibiotics by recognizing that the existing initiatives focus on and using methods of,

I. Prevention: Vaccination

- 1) Educating parents about the need of vaccinations for young children
- 2) Modeling the WHO sentinel sites for vaccination to increase the availability of vaccines

for refugee and

immigrant communities coming into Europe

II. Stewardship: Hospital

- 1) Media campaign to more hospitals advocating for the increase of proper hand washing
 - a) Targeting pre and post-surgery cleanliness, hospital room cleanliness,
- 2) Modeling the MRSA search and destroy would begin creating pilot projects in Germany,

Russia, UK,

and Ireland. Breakdown below

- a) Defining groups at risk and defining healthcare workers at risk
- b) Strict isolation of MRSA patients and awaiting culture
- c) Managing Outbreak
- d) Follow up after Hospital discharge -community engagement
- e) Elimination of Carriage

III. Antibiotic Use and Misuse awareness

1. Creating media campaigns to present to the public and doctors the proper use of antibiotics and their proper uses.

2. *Implementing* refugee antibiotic education by:

I. Elaborating on TATFAR's European Antibiotic Awareness Day to educate the public by focusing on migrant populations through the use of three large Antibiotic Awareness events each for two weeks in the first year, working with refugee leaders to educate displaced individuals about AMR and how they can combat AMR in their new environment.

II. Creating culturally competent education by conveying this information through universally understood methods, such as images and diagrams, as well as native languages

European culture
smart consumers

- a) Education addresses cultural differences between their native culture and
- b) Education topics focus on improving sanitation in their environment and being

III. By having multiple “intervals” of antibiotic resistance events, information will be continued to be collected on the new biome and monitor how efficacy of initiative and provides the opportunity to alter events to increase efficacy

IV. Educating and testing at the same time this makes it a cost-effective initiative

V. Will provide vaccines/boosters to children and adults and vaccines to newborns to prevent superbug formations

VI. If people already encountered bacterial infection, then can utilize preexisting, less potent but equally as effective antibiotics to treat infections. If receive funding, can then provide these antibiotics to refugees and migrant children who do not have health insurance

3) *Draws attention to* the necessity of educating the public about the issue of Antimicrobial Resistance, particularly in relation to Food Labeling Program [with reference to Section A].

of the European
of disseminating

- I. Recognizing the unprecedented levels of access to online education materials as a result of the European
Antibiotic Day, the European Delegation stands behind using social media as a means of disseminating awareness.

- a) The hashtag #DiningWithoutDrugs will serve as the focus of the campaign.

populations that lack
campaign

- II. A Public Service Campaign will be implemented in order to reach vulnerable
access to social media; the delegation has opted to recommend the use a poster

- a) This campaign will place posters in public areas i.e. bus stops, schools, etc.

wording in order
may face

- b) The posters will focus on the use of colorful, interactive images and simple
to appeal to the public and especially accessible to migrant populations who
cultural or linguistic barriers

- i) Many migrants are at an equal if not greater risk for AMR, therefore educating
population is a main focus of the European Delegation.

would like to
and Doctors
of many

c) To ensure their understanding of the campaign; #DiningWithoutDrugs we utilize the aid of NGO's like UNICEF, the Refugees Alliance, Red Cross, Without Borders who will send ambassadors who speak the language migrant populations into the respective refugee camps.

1. Not only will this aid efficiently educate vulnerable populations, but can help in surveillance of such populations by means of efficiently communicating with them.
2. Furthermore, by building trusting relationships we are hopeful that we will be able to properly impact such populations, and strengthen bonds on an international scale.