OIE virtual meeting: Review implementation of action plans on combatting antimicrobial resistance (AMR) in animal sectors in East Asia

3pm (Tokyo time), Wednesday 8th July 2020

Background to meeting

In recent decades, the world has been confronted by the accelerated emergence of antimicrobial resistance (AMR) due to the overuse and misuse of antimicrobial agents. "The OIE Strategy on Antimicrobial Resistance and the Prudent Use of Antimicrobials" was published in 2016. Action plans were developed in many countries in line with the principles of the "Global Action Plan on AMR". Most action plans for AMR in East Asia cover the period 2016-2020. The East Asia Chief Veterinary Officers (CVO) Forum—established in 2016—designated AMR/AMU as a regional priority area for activities. There is strong commitment amongst the political and technical leadership in East Asia to acknowledge the significance of AMR and its impact on human health, animal health and environmental health. This virtual meeting was therefore organised to share status of implementation of AMR action plans and strengthen collaboration amongst the Members in the sub-region.

Participants

The focus of this meeting was on animal health sectors; however, we understand the multi-sectoral importance of AMR and welcomed relevant participants from other sectors. We encouraged Delegates to share details of the meeting with colleagues for whom it would be relevant – including AMR Focal Point(s) for livestock health and aquaculture, representatives of Technical Working Groups (or equivalent) on AMR/AMU (including laboratories) involved in the animal health sector, and of course the OIE Focal Point for Veterinary Products.

Registered participants

More than 30 participants representing the animal health sectors of OIE Members from the East Asia Sub-Region including China (People's Republic of), Japan, Korea (Republic of), Chinese Taipei and Hong Kong SAR participated in the meeting. Mongolia acknowledged the meeting and tried to join, but their business conditions did not allow them to fully participate.

Summary of the meeting

The meeting was moderated by Dr Lesa Thompson, Regional Project Officer at the OIE Regional Representation for Asia and the Pacific. After the welcome session, a short poll was conducted which showed that most of the participants worked for governance including policy matters on AMR/AMU.

Presentations

Dr Kinzang Dukpa, Regional Project Coordinator, made a presentation on "OIE Activities on AMR/AMU in the Asia and Pacific Region" before representatives from Members presented overviews of their action plans. These included: details of the OIE's strategies, standards, working group and other mechanisms in place to propel the implementation of OIE activities. The OIE activities anchored on its Global Strategy 2016 focussing on four objectives in creating awareness on AMR/AMU, supporting the governance and capacity building on AMR surveillance and AMU monitoring, enhancing coordination amongst stakeholders involved in AMU data management, and creating a network of AMR leading institutions in the region to better support the needs of the members.

A summary of presentations made by the Members follows:

China (People's Republic of)

Dr Shixin Xu, a researcher from the China Institute of Veterinary Drugs Control, Ministry of Agriculture and Rural Affairs (MARA) gave a presentation on China's Action Plan on AMR (2017-2020) which aims to strengthen antimicrobial stewardship, AMR/AMU surveillance and monitoring, and phase out antimicrobials as growth promotor. The government also banned the use of fluoroquinolones, olaquindox, arsenic acid and roxarsone in food-producing animals. MARA also organised a pilot project to support 100 selected farms to reduce the use of antimicrobials; the Vice-Ministry of MARA attended the launching meeting for the project and several related events. Training for farm owners was organised during the World Antibiotic Awareness Week to share knowledge on prudent use of antimicrobials and regulations and guidelines developed by the government. As a result, the use of antimicrobials in animals has significantly reduced since 2014. In the aquaculture industry, the government has carried out continuous annual surveillance of AMR in fish pathogenic bacteria since 2015 and selected some aquaculture farms to join the pilot project in 2017.

Japan

Dr Tomoko Ishibashi, AMR focal point from the Ministry of Agriculture, Forestry and Fisheries (MAFF) presented Japan's action plan on AMR (2016-2020) that is led by the cabinet secretariat. This plan is unique in that it contains a component on international cooperation. The AMU supply chain in Japan was well regulated by current legislations even before the action plan was instituted. The Japanese Veterinary Antimicrobial Resistance Monitoring System (JVARM) has expanded its scope to include all cultured fish and companion animals since 2017. The outputs of JVARM contribute to the Nippon AMR One Health Report published annually since 2017. The National Veterinary Assay Laboratory (NVAL), an OIE Collaborating Centre, has provided training on AMR surveillance for Members in the region since 2016.

Japan started to survey sale amounts of human antimicrobials to veterinary clinics to ascertain AMU quantities, especially for companion animals, since 2017. Japan is also considering introduction of a new system of farm-level AMU monitoring to promote prudent use of antimicrobials. Risk assessment forms an integral part of the policy on rational use of antimicrobials in animal production and a prescription system has been introduced for aquaculture since 2018.

Korea (Republic of)

Dr Suk-Kyung Lim from the Korean Veterinary Antimicrobial Resistance Monitoring System, Animal and Plant Quarantine Agency (APQA), and Dr Kwang-Jick Lee from South Korea's Ministry of Agriculture, Food and Rural Affairs (MAFRA) presented the action plan (2016-2020) that promotes prudent use of antimicrobials, increases HACCP certified farms to reducing AMU, and strengthens the Korean Veterinary Antimicrobial Resistance monitoring system (KVARMS). The Republic of Korea introduced a compulsory electronic prescription system and AMU guidelines to strengthen AMU stewardship and collection of farm-level AMU data by species. The Republic of Korea also established a web portal for real-time sharing of AMR/AMU data in humans and animals and has included companion animals in AMR surveillance since 2018. Antimicrobials as feed additives have been banned since 1990.

Chinese Taipei

Dr Wenyuan Yang, Section Chief of the Bureau of Animal and Plant Health Inspection and Quarantine (BAPHIQ), Council of Agriculture, Executive Yuan, shared Chinese Taipei's action plan on AMR in animal sectors (2020-2024). The action plan was developed using a One Health approach together with the human health sector. Currently Chinese Taipei collects AMU data from customs and pharmaceutical companies, reporting AMU data to the OIE. BAPHIQ utilizes the AMU data to evaluate the trends of antimicrobial usage in animals. Regarding AMR surveillance, BAPHIQ collects bacterial isolates from both healthy and diseased animals and integrates the data in the annual AMR report. To increase AMR awareness in different sectors, BAPHIQ translated the OIE "We Need You" awareness materials into the local language and organized an AMR education programme for veterinary medicine students.

Hong Kong Special Administrative Region

Dr Michelle Yeung, senior veterinary officer of the Animal Health Division, Agriculture, Fisheries and Conservation Department (AFCD), Hong Kong SAR presented Hong Kong's Action Plan on AMR (2017-2022). Key areas covered by the action plan include surveillance, optimised use of antimicrobials, reduced incidence of infection, awareness and strengthened partnerships. Hong Kong have expanded their AMR surveillance and research in the companion animal sector. To establish baseline levels of AMR and AMU in companion animals, an 18-month research study on AMU and AMR is being conducted in the local companion animal sector (starting in 2019).

Each presenter shared challenges encountered in implementing their action plan on AMR and experiences in addressing the problems. Some of the challenges faced by included weak intersectoral coordination, lack of awareness and cooperation from livestock producers, lack of national guidelines on prudent use of antimicrobials for livestock production and companion animals, an inadequate national AMU monitoring system that includes monitoring of field-level usage data, and inadequate capacity for advanced molecular techniques for AMR surveillance. In order to address these challenges, Members have already developed strategies and activities in their new action plans under development.

Q&A

Following these presentations, a Q&A session was held wherein participants asked their colleagues in the East Asia about specific topics.

- Japan collects data on antimicrobials of human origin used in animals. MAFF currently obtains the data on human antimicrobials that pharmaceutical organisations (drug producers organisations) sell to veterinarian clinics.
- Regarding use of genotypical or phenotypical testing for AMR studies, it was clarified that the FAO-OIE network of AMR leading institutions in Asia and the Pacific Region is considering this in its consultation with members in the region.
- Japan started veterinary education on AMR to students in 2019 and video lectures were uploaded to YouTube this year. It is now proposed to develop E-learning materials targeting graduated veterinarians. Japan also proposed the OIE could facilitate sharing of good practices on AMR and AMU in the Sub-Region by creating a "library of good practices".
- Japan raised concerns about combining and comparing human and animal AMU data as this might be misinterpreted. There is a common perception amongst the human health sector that the use of antimicrobials in animal production is largely unregulated and contributes to emergence of resistance in human health. Naïve comparisons of animal and human AMU would not have any meaning without consideration of risk levels related to antimicrobial classes, human and animal populations which vary among countries, and difference of bodyweights.

Discussion on future actions

All participating Members from East Asia thanked the OIE for organising such a timely webinar on AMR action plans as they were able to appreciate the progress and challenges in each Member.

After detailed discussion, some other activities were suggested:

- OIE to create a library of information about good practices and success stories on AMR/AMU that members can share and utilise to augment AMR actions.

- OIE to organise similar technical webinars on AMR/AMU with sharing of experiences from Europe and North America for the benefit of the Members.

A short poll before the end of the meeting showed that Members were most interested to learn more about:

- AMU monitoring and good governance
- AMU monitoring in livestock
- Use of AMU data for policy making
- AMU data monitoring in companion animals
- Using AMR data to make policy changes
- AMR laboratory network in the sub-region
- AMR laboratory data interpretation
- Communication skills for AMR awareness.

A more detailed evaluation form was shared with participants after the meeting.

Closing

Dr Hirofumi Kugita, OIE Regional Representative for Asia and the Pacific, closed the meeting and thanked all the participants for their active participation. In particular, he thanked the Members for preparing pre-recorded videos and for sharing AMR videos produced to share at the meeting. He highlighted that this is the first AMR meeting following the East Asia CVO's meeting in 2016 wherein AMR was identified as one of the priority topics. Lastly, he reiterated that OIE RRAP as the secretariat of the East Asia CVO's forum will organise similar events on AMR in the future.

Follow-up

RRAP staff will follow up on activities as requested by participants.