Policy Paper on Antimicrobial Resistance

"Antimicrobial Resistance is not a future threat looming on the horizon. It is here, right now, and the consequences are devastating," states Dr. Margaret Chan, director of the World Health Organisation. Over the past decade antimicrobial resistance has exponentially evolved from an imminent threat to becoming a global catastrophe.

The day that Alexander Fleming discovered penicillin in 1928 was a day that marked the start of the antibiotic era. Antimicrobials were first used on a global scale during World War One with little regard to judicious use, despite Alexander Fleming warning of the possibility of resistance developing after bacterial mutations. The continued indiscriminate use of antimicrobials in all sectors of health has led to an incredible rise in the prevalence of antimicrobial resistance (AMR).

Background:

This policy paper seeks to provide goals and guidelines to improve education for veterinary medical students and graduates on how to seek appropriate information on antimicrobial resistance, gain involvement in promoting AMR education, and tackle this rising issue.

The availability of antimicrobials in the animal industry is essential to the health and welfare of animals and people alike.[1] Unfortunately, the risk of AMR due to the improper use of antimicrobials in animals has a very real implication in public and human health that cannot be ignored by the animal health field. Therefore, the International Veterinary Students' Association (IVSA) advocates for both the animal and public health sectors to strive for an appropriate and judicious balance of antimicrobial use on a global level.

Animal health fields, specifically the swine, poultry and cattle industries, use more antibiotics than the entire human population. The predominant use of antimicrobials in production medicine is for growth promotion and disease control.[2] In order to reduce the continued development of AMR, it is of the utmost importance that a proper risk analysis of antimicrobial use be made, particularly in the food industry for appropriate differentiation between growth promotion and disease control.

Areas of Focus:

- Education of veterinary students concerning AMR
- Promotion of research regarding most effective use of antimicrobials in animals
- Promotion of interprofessional collaboration to combat public health concerns

- Promotion of student involvement within professional organisations working in the AMR field

Principles upholded by IVSA in regards to AMR:

1. Globally, there is a general lack of awareness and education within veterinary medical universities, and IVSA believes that students should approach their educational facility and request additions to the curriculum.
2. IVSA promotes and supports students in their pursuit to include more education regarding AMR at their respective faculties. This view is outlined in the recent Position Statement on Antimicrobial Resistance Week 2015.[3]
3. IVSA will strive to make resources available to students online via educational websites in order to promote more awareness and information on AMR.
4. IVSA member organisations should take an active stance within their local areas to promote responsible antimicrobial use, and educate all members of the community to the dangers of rising AMR.
5. IVSA urges global, national, and local health organisations to communicate with and involve students in the promotion of AMR education. Students are a great source of knowledge and are readily available to expand the reach of projects.
6. IVSA supports veterinary student involvement in AMR research in order to better understand the role played by the animal sector and to improve and gain knowledge on a global scale.
7. IVSA encourages pharmaceutical companies to invest heavily and without bias in the development of new antimicrobials for both animal and human health.
8. IVSA promotes and supports the guidelines of responsible antimicrobial use set out by the World Organisation for Animal Health and the World Health Organisation.[4]
9. IVSA advocates for interprofessional collaborations with other health professionals on both a global and local scale to combat AMR in order to approach this threat together in a One Health initiative.
10. IVSA supports active student involvement within AMR Technical Advisory Groups.

Cited articles:

1. Jorna, Tjeerd, Fouzi Kechrid, and Duane Landals. "World Veterinary Association Position on Responsible Use of Antimicrobials." *www.worldvet.org*. World Veterinary Association (AISBL), Sept. 2011.
2. "Center for Disease Dynamics, Economics & Policy (CDDEP)." *Global Antibiotic Resistance Partnership*. http://www.cddep.org/garp/home. (Last visited 24/6/2016)
3. "Antimicrobial Resistance Week 2015 by IVSA Policies." *https://issuu.com/ivsapolicies/docs/amr_week_2015_-_position_statement*. International Veterinary Students' Association, Nov. 2015. (Last visited 24/6/2016)
4. "Global Action Plan on Antimicrobial Resistance." *www.who.int/drugresistance/global_action_plan/en/*. World Health Organization. (Last visited 24/6/2016)