EDITORIAL

World Antibiotic Awareness Week

World Antimicrobial Awareness Week (WAAW) previously known as World Antibiotic Awareness Week is held since 2015 to accomplish one of the key objectives of the Global Action Plan to improve awareness and understanding of AMR through effective communication, education and training.

WAAW is a global campaign that aims to raise awareness of antimicrobial resistance worldwide and encourage best practices among the general public, health workers and policymakers to slow the development and spread of drug-resistant infections. The theme of WAAW 2022 is "Preventing Antimicrobial Resistance Together" implying the need of multisectoral action to combat MR to achieve the Sustainable Development Goals (SDGs).

Antimicrobial resistance (AMR) is one of the top 10 global public health threats facing humanity. Misuse and overuse of antimicrobials are the main drivers in the development of drug-resistant pathogens. The emergence and spread of drug-resistant pathogens that have acquired new resistance mechanisms, leading to antimicrobial resistance, continues to threaten our ability to treat common infections. Especially alarming is the rapid global spread of multi- and pan-resistant bacteria (also known as "superbugs") that cause infections that are not treatable with existing antimicrobial medicines such as antibiotics. The success of modern medicine in treating infections would be at increased risk without effective antimicrobials.

The main drivers of antimicrobial resistance include the misuse and overuse of antimicrobials; lack of access to clean water, sanitation and hygiene (WASH) for both humans and animals; poor infection and disease prevention and control in health-care facilities and farms; poor access to quality, affordable medicines, vaccines and diagnostics; lack of awareness and knowledge; and lack of enforcement of legislation.

The clinical pipeline of new antimicrobials is dry. In 2019 WHO identified 32 antibiotics in clinical development that address the WHO list of priority pathogens, of which only six were classified as innovative. New antibacterials are urgently needed – for example, to treat carbapenem-resistant gram-negative bacterial infections as identified in the WHO priority pathogen list. Furthermore, a lack of access to quality antimicrobials remains a major issue. Antibiotic shortages are affecting countries of all levels of development and especially in healthcare systems. However, if people do not change the way antibiotics are used now, these new antibiotics will suffer the same fate as the current ones and become ineffective.

The cost of AMR to the economy is significant. In addition to death and disability, prolonged illness results in longer hospital stay, the need for more expensive medicines and financial challenges for those impacted. It affects productivity of patients or their caretakers through prolonged hospital stays. Efforts by just one sector cannot prevent or eliminate the problem, thus, professionals with a range of expertise in different sectors—e.g., public health, animal health, plant health and the environment—should join forces to support One Health approaches. Importantly, the adoption of good agricultural practices that limit total microbial contamination of foods of plant origin is a critical first step in reducing the introduction of AMR organisms into the food chain.

Strong antimicrobial stewardship practices, such as treating only after a correct diagnosis, appropriate application and dosing are important in reducing AMR in animals and human beings. Greater innovation and investment are required in operational research, and development of new antimicrobial medicines, vaccines, and diagnostic tools. Infection control Practices need to be strengthened. A paradigm shift in behavior and management is needed to reduce AMU (antimicrobial use).

Let's do it Together to Prevent Antimicrobial Resistance.

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