WHO’s work on Antimicrobial Resistance

STEWARDSHIP

At the national level, technical support is being provided to establish and strengthen national antimicrobial stewardship programmes in healthcare to optimize the use of antimicrobials in human health and to manage the overuse and misuse of antimicrobials.

In October 2019, WHO also launched the ‘WHO Practical Toolkit: Antimicrobial Stewardship Programmes in Health-Care Facilities in Low- and Middle-Income Countries’:
https://apps.who.int/iris/bitstream/handle/10665/329404/9789241515481-eng.pdf

MONITORING

The “tripartite organizations”, The Food and Agriculture Organization of the United Nations (FAO), the World Health Organization (WHO) and the World Organisation for Animal Health (OIE), have developed the Tripartite AMR Country Self-assessment surveys (TrACSS: https://amrcountryprogress.org/) which are conducted every year since 2016 to track progress in the development and implementation of National Action Plans to address AMR.

The tripartite organizations have also developed a monitoring and evaluation framework, with clear indicators, to measure progress, to identify key achievements and to spot persisting gaps across the human, animal, plant, food and environment sectors. The framework is based on two parallel tracks; monitoring the progress of all partners in implementing the GAP; and evaluating the impact of these interventions on curbing AMR and on the burden of disease.

Monitoring and evaluation framework:

AWARENESS AND BEHAVIOR CHANGE

Every November, World Antibiotic Awareness Week is a major global campaign to improve public awareness about the causes of antimicrobial resistance and what we can all do to help stop the spread of resistance. The overall theme, “Antibiotics: Handle with Care” is a week-long campaign providing an opportunity for countries, health-centres, academic institutions, schools and communities to get involved in raising awareness.

In 2018, 116 countries participated in the global campaign and nearly 500 events were reported across the world. November 2019 will see the second year of the global student competition, Innovate4AMR which encourages student teams worldwide to seek novel solutions to address AMR in health-care settings:
http://innovate4amr.org/

In March 2019, the third WHO technical consultation on antimicrobial resistance and behavior change focused on the application of behaviour change methodologies on WHO areas of work including the A WaRe categorization of antibiotics; the development of information, education and communication (IEC) products for AMR campaigns and; the work on AMR education and training tools for healthcare workers.

HEALTH WORKFORCE

In 2018, WHO launched a competency framework for health workers’ education and training on AMR. The Competency Framework is designed to be used as a reference guide and incorporated into pre-service and in-service training so that all health workers are equipped with the requisite competencies to address AMR in policy and in practice.

It is aimed at a wide range of health workers including prescribers, non-prescribers, public health officers and health services managers: https://apps.who.int/iris/bitstream/handle/10665/272766/WHO-HIS-HWF-AMR-2018.1-eng.pdf?ua=1

In October 2019, WHO launched the Health workers’ education and training on antimicrobial resistance: curricula guide. This document covers a global gap and builds further on the AMR competency framework by laying out learning objectives and outcomes as they pertain to the main health worker groups involved in the stewardship of antimicrobials:
https://apps.who.int/iris/bitstream/handle/10665/329380/9789241516358-eng.pdf
SURVEILLANCE
WHO has also established the Global Antimicrobial Resistance Surveillance System (GLASS) and a global monitoring system for antimicrobial consumption. As at November 2019, 85 countries had enrolled in GLASS and more are expected to join in the near future.

The 2nd GLASS report issued in Jan 2019 clearly demonstrated that emerging forms of AMR, against which we have currently few treatment options, are now present in all regions:

CONSUMPTION
The first WHO report on surveillance of antibiotic consumption was published in November 2018. It presents data from 65 countries. The report describes the methodology for data collection and highlights the challenges in monitoring antimicrobial consumption:

IACG
The Interagency Coordination Group on AMR recently delivered its recommendations to the UN Secretary General. These recommendations have been incorporated into the Secretary General’s comprehensive report (https://undocs.org/en/A/73/869) on AMR to the UN General Assembly.
IACG Report:

RESEARCH & DEVELOPMENT
WHO continues to monitor the clinical pipeline of antibiotics on an annual basis and has analyzed the landscape of access and availability for low-and-middle-income countries to determine gaps and needs, matching progress against target product profiles (TPPs).

Analysis is also underway to drive research into the highest priority needs for diagnostics going forward. In addition, models are being formulated to help prioritize research into new vaccines to address pathogens associated with resistance, or with high levels of antibiotic consumption.

INFECTION PREVENTION AND CONTROL
The IPC Technical and Clinical Hub (IPC T&C Hub) at WHO Headquarters leads the work on infection prevention and control in a cross-cutting way with a specific focus on capacity building in the context of health systems strengthening and the AMR global and national action plans. It also provides support for preparedness and response to outbreaks of newly emerging resistant strains and coordinates the work on sepsis.
During WAAW 2019, a new cornerstone document for IPC programmes will be released: the WHO IPC minimum requirements, focused on building strong and effective IPC programmes at the national and facility level:
https://www.who.int/infection-prevention/publications/core-components/en/

ESSENTIAL MEDICINES
Launched this year, WHO’s AWARe classification of antibiotics aims to improve access while preserving effectiveness. AWARe divides essential antibiotics into three groups: Access, Watch and Reserve.

It provides recommendations for first-line or second-line empiric treatments for key infections. AWARe serves as a tool to help countries monitor antibiotic consumption in their countries with the aim of reaching a target of at least 60% being from the Access group of antibiotics, and so, improve overall stewardship.
AWARe Portal: https://adoptaware.org/

GARDP
The WHO and DNDi (Drugs for Neglected Diseases Initiative) co-founded the Global Antibiotic Research and Development Partnership (GARDP) in May 2016. GARDP’s current focus is on the development of new or improved antibiotic treatments to tackle drug-resistant infections in children, newborns with sepsis, and sexually-transmitted infections, while integrating strategies for sustainable access:
https://www.gardp.org/