Antimicrobial Resistance (AMR) Status in Africa from the One Health approach perspective

Rationale

Antimicrobial resistance (AMR) has been recognized as one of the greatest global threats to the health of humans and animals, plants, and ecosystems, as well as a threat to the strengthening of health security and health systems and the achievement of Sustainable Development Goals (SDGs). In our globally connected world, resistance to antimicrobials may spread among humans, animals, plants, and the environment, necessitating a "One Health" approach. One Health acknowledges the interconnection and interdependence of humans, animals, plants, and the wider environment (including ecosystems) in the emergence and spread of AMR. Collaborative, multisectoral One Health approaches can leverage expertise and mandates across different organizations and sectors to prevent and control AMR, with the potential to facilitate health and economic benefits for all. The factsheet highlights the One Health approach's key accomplishments, barriers, and further actions.

Key Results

- All AFRO Member States (47) have National Action Plans (NAPs) on AMR in the context of the "One Health" approach.
- 15 countries capacitated on the WHO costing and budgeting tool across the human health, agriculture, and environment sectors.
- 12 countries were trained on AMR multisectoral coordination and leadership skills.
- Tracking AMR Country Self-Assessment Surveys (TrACSS) have been conducted, and 46 countries responded during the 7th round of the 2023 survey. Findings from 2023 TrACSS highlighted that only 22 countries have functional multisector coordination mechanisms.
- WHO AFRO supports Member States in establishing and enhancing integrated One Health AMR surveillance system, with eight countries supported so far.
- Recent data shows that 37 (80 %) countries have laws/regulations on prescription and sale of antimicrobials for human use.
- 12 countries have been trained to consider AMR awareness and stewardship interventions within the context of medical products regulatory inspections and environment waste management.
AMR National Action Plan

- All AFRO Member States (47) have National Action Plans (NAPs) on AMR in the context of the "One Health" approach.
- The NAP benefits countries by facilitating resource mobilization and engaging in potential AMR funding.
- The skills for using the WHO costing and budgeting tool for AMR NAPs has allowed countries like Tanzania to adequately cost other plans and sensitize high level national authorities in the spirit of the One health approach.
- 15 countries capacitated on the WHO costing and budgeting tool across the human health, agriculture, and environment sectors.
- Capacitated countries are now able to facilitate resource mobilization and engaging in potential AMR funding opportunities to secure necessary resources for AMR priority interventions.

Governance and Coordination

- AMR governance and coordination mechanisms committee members in 11 countries (Comoros, Eswatini, Ghana, Kenya, Lesotho, Madagascar, Mauritius, Nigeria, Seychelles, South Africa, and Zimbabwe) have undergone AMR multisectoral coordination and leadership skills training.
- This focus on accelerating and transforming the implementation of One Health National Action plans for greater impact.
- WHO AFRO coordinated regular monitoring and evaluation of the implementation of NAPs through the Tracking AMR Country Self-Assessment Survey (TrACSS).
- So far, there have been seven rounds of the TrACSS jointly administered by FAO, WHO, WOAH, and UNEP. 46 (98%) countries responded during the 7th round of the 2023 survey.
- Findings from 2023 TrACSS highlighted that only 22 countries have functional multisector coordination mechanisms.
Integrated One Health AMR surveillance system

- WHO AFRO supports Member States in establishing and enhancing integrated One Health AMR surveillance system.
- Eight countries implement the “Tricycle” model, a standardized protocol to assess the occurrence of an emerging type of AMR (extended-spectrum beta-lactamase [ESBL]-producing E. coli) across the human, animal, and environmental sectors.
- Findings from Ghana revealed that about 7% of all ESBL-producing E. coli from humans, the environment, and animals are interrelated.
- The two-year study from Madagascar showed a high prevalence of ESBL-producing E. coli responsible for antimicrobial resistance in samples from human health, the food chain, and the environment sectors.

Awareness and understanding of AMR

- WHO is improving awareness and understanding of AMR and promoting behavioural change through public communication programs.
- 15 countries have launched nationwide government-supported AMR awareness-raising campaigns targeting most priority stakeholder groups.
- WHO/AFRO commemorated the continental World AMR Awareness Week (WAAW) jointly with the regional quadripartite (FAO, WHO, WOAH, UNEP).
- The regional quadripartite and the Africa Union Commission published the Africa Regional Strategy on Antimicrobial Resistance Communications and Advocacy.
Optimizing use of antimicrobial medicines

- WHO supports countries in developing and implementing legislative and regulatory frameworks for the appropriate use and disposal of antimicrobials across the One Health sector.
- Recent data shows that 37 (80%) countries have laws/regulations on prescribing and selling antimicrobials for human use.
- Interventions to optimize the use of antimicrobials have a strong regulatory component.
- WHO-AFRO has carried out various activities involving National Medicines Regulatory Authorities and Environment Waste Management Authorities in mitigating the spread of AMR.
- To this end, 85 manufacturing inspectors of antimicrobial products from 12 countries have been trained to consider AMR awareness and stewardship interventions within medical products regulatory inspections and environment waste management.
- Zambia national medicines regulatory authorities and environment waste management authorities piloted mainstreaming AMR into routine regulatory inspections using the AMR Inspection Tool.

![Figure 5: Countries with laws/regulations on prescription and sale of antimicrobials in 2023 source: TrACSS](image)

AMR Governance, Multisectoral partnership and Coordination

- The WHO Regional Office is undertaking efforts to strengthen AMR Governance, Multisectoral partnership and Coordination through effective regional and national multisectoral coordination and partnership with quadripartite.
- The focus is on developing, implementing, and monitoring national action plans in the context of the One Health approach.
- The Quadripartite supported resource mobilization for seven countries to receive US$ 1 million each through multi-partner trust funds (MPTF) to support the implementation of NAP activities in the human, animal, and environmental sectors.

Key Challenge

- The One Health approach has created an opportunity for engagement with multiple partners and good practice for multisector actions to address AMR in the Region. Despite the strong multisectoral partnership and coordination at global and regional level, One Health coordination and collaboration is not yet optimal at national level.

Further Actions

- Support functionality of regional and National One Health coalitions to implement AMR National Action Plans effectively.
- Support to mobilize partners and actors to support the implementation of AMR activities across the region.
References

1. TrACSS Database: https://amrcountryprogress.org/#/response-overview
3. WHO integrated global surveillance on ESBL-producing E. coli using a “One Health” approach: implementation and opportunities: https://www.who.int/publications/i/item/9789240021402

Sources

The Integrated African Health Observatory supported production of the infographic.

Photography: https://www.istockphoto.com/photos/e-coli

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