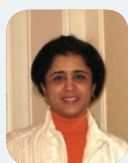


# Global governance to tackle antimicrobial resistance: The way forward

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This article summarises the governance-related recommendations of the Ad Hoc Interagency Group on Antimicrobial Resistance (IACG) that aim to bring about a paradigm shift in the global response to antimicrobial resistance through establishing a shared goal and vision for impact and result in countries. Stronger and sustained global leadership and advocacy, and a more powerful global narrative, are needed to advance the global response to antimicrobial resistance. The core leadership mandate of the Tripartite agencies of WHO, FAO and OIE to facilitate the One Health response on antimicrobial resistance, in close collaboration with other UN and international agencies including UN Environment and the World Bank, is recognised and needs to be stepped up.

In the 2016 Political Declaration of the High-Level Meeting of the United Nations General Assembly on antimicrobial resistance (1), Member States requested the UN Secretary-General, in consultation with the Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (OIE) and the World Health Organization (WHO), to convene an ad hoc interagency coordination group co-chaired by the Executive Office of the UN Secretary-General and the Director-General of WHO to provide practical guidance for approaches needed to ensure sustained, effective global action to address antimicrobial resistance, including on options to improve coordination. The IACG was convened in March 2017 with membership drawn from United Nations and multilateral agencies, as well as individuals with expertise in human, animal and plant health, food safety, trade, development and the environment and handed over its report with 14 recommendations to the Secretary General in April 2019 (2).

In developing its recommendations, the IACG was guided by several key principles. These included a focus on promoting and supporting a One Health approach to antimicrobial resistance; strengthening existing systems and mainstreaming efforts to combat antimicrobial resistance so as to leverage gains across the Sustainable Development Goals (SDGs); supporting mobilization of all stakeholders, including governments, international organizations, academia, civil society and the private sector, at global, regional, national and local levels, with

a strong emphasis on enabling country-level action and with due consideration to country-specific context, capacity and infrastructure; and that recommendations should be practical and feasible to implement.

The IACG report focuses on three key messages. First, antimicrobial resistance needs to be understood as a global crisis that is placing a century of progress in human health and achievement of the SDGs at serious risk, including the goals related to health, food security, clean water and sanitation, responsible consumption and production, and poverty and inequality. Although alarming levels of antimicrobial resistance have been reported in countries of all income levels, low- and middle-income countries are at particular risk due to higher disease burden; weaker health and surveillance systems; inadequate regulatory frameworks; poor infection prevention and control in health facilities and farms; lack of access to clean water, sanitation and hygiene; and lack of access to quality-assured antimicrobials, vaccines and diagnostics. Misuse and overuse of antimicrobials in human, animal and plant health are major drivers of the emergence and spread of resistant pathogens in many countries. At the same time, it also recognizes that millions of lives are lost every year due to lack of access to existing antimicrobial agents: inadequate access to antibiotics alone kills nearly six million people annually, including a million children who die of preventable sepsis and pneumonia (3).

Secondly, the IACG emphasizes the need for far more

urgency in the global response, without which the health and economic and impact of antimicrobial resistance could reach disastrous levels within just a generation as a result of increased morbidity and mortality, escalating healthcare costs and damage to food production, trade and livelihoods. On the other hand, the IACG report notes that many of the tools needed to address antimicrobial resistance are readily available: the Organization for Economic Cooperation and Development (OECD) estimates that in higher-income countries, for example, a package of simple interventions to address antimicrobial resistance, such as handwashing and more prudent prescribing of antibiotics, could pay for itself due to costs averted (4), while in lower-income countries, additional but still relatively modest investments are urgently needed. If investments in and action against antimicrobial resistance are delayed any further, the world will have to pay far more in the future to cope with its growing impact.

Thirdly, because the drivers of antimicrobial resistance lie in humans, animals, plants, food and the environment, a more robust and sustained One Health response is critical to engage all stakeholders, at all levels, across sectors and disciplines, around a shared vision and goals. Such a response requires that programmes, policies, legislation and research to address antimicrobial resistance be designed and implemented in a way that enables multiple sectors and stakeholders engaged in human, terrestrial and aquatic animal and plant health, food and feed production and the environment to communicate and work together to achieve better public health outcomes.

The IACG recommendations focus on addressing gaps and challenges in five key areas of the response to antimicrobial resistance: 1) Accelerating progress in countries; 2) Innovating to secure the future; 3) Collaborating for more effective action; 4) Investing for a sustainable response and 5) Strengthening accountability and global governance (Table 1).

This article focuses primarily on the IACG recommendations relating to global governance and accountability.

### Accountability and global governance

The IACG recommendations on accountability and global governance recognize that stronger and sustained global leadership and advocacy and a more powerful global narrative and vision are needed to

**Table 1: The IACG recommendations**

#### **A. Accelerate progress in countries**

- ➔ A1: All Member States ensure equitable and affordable access to existing and new quality-assured antimicrobials as well as alternatives, vaccines and diagnostics, and their responsible and prudent use by competent, licensed professionals across human, animal and plant health.
- ➔ A2: All Member States accelerate the development and implementation of One Health-focused NAPs within the context of the SDGs.
- ➔ A3: All Member States phase out the use of antimicrobials for growth promotion, consistent with guidance from the Tripartite agencies and the Codex Alimentarius, starting with an immediate end to the use of antibiotics categorized as the Highest Priority Critically Important Antimicrobial Agents on the WHO List of Critically Important Antimicrobials for Human Medicine.

#### **B. Innovate to secure the future**

- ➔ B1: Public, private and philanthropic donors and other funders increase investment and innovation in new quality assured antimicrobials (particularly antibiotics), novel compounds, diagnostics, vaccines, waste management tools, and safe and effective alternatives to antimicrobials for all sectors as well as implementation and operational research.
- ➔ B2: Existing and future global access initiatives promote and support equitable and affordable access to existing and new, quality-assured antimicrobials, diagnostics, vaccines, waste management tools and safe and effective alternatives to antibiotics in all sectors.
- ➔ B3: Public, private and philanthropic research funders and other stakeholders build upon current research and development efforts, strengthen implementation and operational research, and research coordination and collaboration in a One Health context.

#### **C. Collaborate for more effective action**

- ➔ C1: Systematic and meaningful engagement of civil society groups and organizations at all levels.
- ➔ C2: Systematic and meaningful engagement of and enhanced action by the private sector at all levels.

#### **D. Invest for a sustainable response**

- ➔ D1: Governments; global, regional, national, bilateral and multilateral financing and development institutions and banks; and private investors systematically apply standards to assess risks and impacts related to antimicrobial resistance when making investments.
- ➔ D2: Additional and increased investments including from domestic financing in all countries; existing and future financing mechanisms in human, animal and plant health, and the environment give greater priority to antimicrobial resistance in their resource allocations; public, private and philanthropic donors contribute additional funding, including to support implementation of NAPs.

#### **E. Strengthen accountability and global governance**

- ➔ E1: The Tripartite together with UNEP, other United Nations agencies and the World Bank, in the context of United Nations reform, strengthen joint One Health action based on target-setting, country priorities and needs by enhancing organizational capacity and providing adequate and sustainable core funding for antimicrobial resistance activities.
- ➔ E2: The urgent establishment of a One Health global leadership group on antimicrobial resistance, supported by a joint secretariat managed by the Tripartite.
- ➔ E3: The Secretary-General, in close collaboration with the Tripartite agencies, UNEP and other international organizations, convene an independent panel on evidence for action against antimicrobial resistance to monitor and provide Member States with regular reports on the science and evidence related to antimicrobial resistance, its impacts and future risks, and recommend options for adaptation and mitigation.
- ➔ E4: The Tripartite agencies and UNEP expedite the process led by Member States to develop the global development and stewardship framework to combat antimicrobial resistance in line with the scope described in the 2015 World Health Assembly resolution on antimicrobial resistance (WHA68.7). As Member States finalize this process, they should also consider the need for new international instruments.

advance the global response to antimicrobial resistance. These recommendations strongly underpin the need to accelerate progress in countries, which lies at the heart of the global response to antimicrobial resistance. Although many countries have developed National Antimicrobial Resistance Action Plans, many of them are focused narrowly on human health and many countries lack resources and capacity to effectively implement them. The following are the key recommendations and structures proposed for the global governance of the antimicrobial resistance response.

#### *Tripartite agencies at the core for the global response:*

The Tripartite collaboration between FAO, OIE and WHO has provided leadership in the global response to antimicrobial resistance for many years. The IACG recognizes the core leadership mandate of the Tripartite agencies to facilitate the One Health response on antimicrobial resistance in close collaboration with other UN and international agencies, including UN Environment and the World Bank. Their role is critical in providing Member States with normative guidance, standards and tools to tackle antimicrobial resistance for human, aquatic and terrestrial animal and plant health, as well as in food and feed production and food safety. They have an important role in identifying priorities for research and development and facilitate implementation research in a One Health context, as well as defining the financial needs and gaps for national and global responses, including the costs of inaction and anticipated returns on investment.

The IACG has strongly emphasized the need to ensure that these organizations have adequate organizational capacity and core funding to collaborate effectively and to perform their key roles. Work is already underway to strengthen the Tripartite agencies and step up their response. The Tripartite agencies already have a Memorandum of Understanding to boost their collaboration on antimicrobial resistance and have developed a joint workplan that includes UN Environment. The Tripartite also facilitated the work of the IACG through a jointly resourced Secretariat. All recent meetings of the governing bodies of the Tripartite discussed antimicrobial resistance, including the implication of the IACG recommendations. WHO has raised its response to antimicrobial resistance from a single department into a division level with consolidation of all antimicrobial resistance-related activities and paving the way for its central role to lead the global One Health response, along with the Tripartite and other UN and international agencies. OIE has a department dealing with antimicrobial resistance.

#### *Global Leadership Group on Antimicrobial Resistance*

The IACG has proposed the creation of a Global Leadership Group on Antimicrobial Resistance comprising current

and former Heads of State and Ministers of Agriculture, Environment, Finance, Health, and Water and Sanitation, as well as other eminent individuals, to play an enhanced political advocacy role that will help to increase and maintain urgency, public and political support, and visibility of antimicrobial resistance on the global development agenda. The key function of the Leadership Group will be to maintain urgency, public support, political momentum and visibility of the antimicrobial resistance challenge on the global agenda, as well as advocating for action, including support for the expanding work of the Tripartite agencies, UN Environment and other international and regional entities. It can monitor and report on progress, gaps and accountability in the global response to antimicrobial resistance. The One Health Global Leadership Group should oversee the preparation of a plan of action with key performance indicators, particularly to ensure that its activities are supporting country-level action. It should be supported by a Secretariat managed by the Tripartite agencies. This Secretariat can also develop and facilitate a partnership platform for global coordination and action.

#### *Multi-stakeholder partnership platform*

With support from the Joint Tripartite Secretariat, a constituency-based partnership platform will strengthen coordination and communication among stakeholders in the response to antimicrobial resistance. The key function of the platform will be to advocate for multi-stakeholder engagement with the participation of Member States, UN agencies, international and intergovernmental organisations and regional entities, civil society, the private sector, researchers and other key stakeholders to develop and work towards a shared global vision, goals and coordinated action on antimicrobial resistance. The platform should have diverse representation (e.g., governments, private sector and civil society representing human, animal, plant and environment health, as well as agriculture and food and feed production). Such a platform, with support from the Secretariat, would create opportunities to collectively address diverse areas of importance by all stakeholders, serve as a venue for information sharing and collaboration, and promote leadership by key partners around the shared global vision and narrative.

#### *Independent panel on evidence for action against antimicrobial resistance*

While the Tripartite agencies collect and analyse data on antimicrobial resistance in their respective sectors, there is currently no entity with the responsibility to collate and review the available evidence on antimicrobial resistance across the human, animal, plant and environmental sectors, and to assess the implications for One Health policy and action.

For this reason, the IACG has also proposed the creation of an Independent Panel on Evidence for Action against Antimicrobial Resistance that would provide robust and authoritative assessments of the science, data and evidence related to antimicrobial resistance across all sectors, assess its potential impacts and future risks, and recommend options for adaptation and mitigation to governments and all stakeholders in the form of periodic reports. The Panel would have representation across the One Health spectrum, including experts from human, terrestrial and aquatic animal and plant health as well as the environment, food and feed production and food safety sectors. Terms of reference and composition of the Independent Panel will also be the subject of stakeholder consultations, drawing on the experiences and lessons of similar, existing entities, such as the Intergovernmental Panel on Climate Change.

#### *International instruments*

Finally, recognizing that there are differing views among stakeholders about the potential need for and merits of developing binding or non-binding international instruments to combat antimicrobial resistance, the IACG has urged Member States, the Tripartite agencies and UN Environment to conclude the current, ongoing process of developing a Global Development and Stewardship Framework to Combat Antimicrobial Resistance (GDSF) – an effort called for in both the 2015 World Health Assembly Resolution and the 2016 Political Declaration – as soon as possible. The IACG also noted that the GDSF may provide an initial platform for Member States to advance a stepwise approach towards new, binding or non-binding international instruments, and emphasized that any such instruments should include a stronger focus on supporting the distribution, responsible and prudent use of existing and new antimicrobial medicines, diagnostics, vaccines and other interventions, while also preserving existing antimicrobial agents, including those used against priority pathogens identified by WHO. In the meantime, the IACG recommends that countries give priority to adopting and implementing global standards and best practices to tackle antimicrobial resistance developed by the Tripartite agencies and other international and national authorities.

#### **Conclusion**

Overall, effective implementation of the IACG governance and accountability recommendations will require an unprecedented collaboration across human, animal and plant health, as well as the food and feed production and environmental sectors, to advance a One Health response that is truly commensurate with the threats posed by antimicrobial resistance. To maintain their leadership role, the Tripartite agencies will need to step up their joint and individual efforts, mobilize additional resources and institutional capacity, and implement flexible and novel ways of working across sectors and disciplines, backed by strong commitment and support from their governing bodies. The challenges of antimicrobial resistance are complex and multifaceted, but they are not insurmountable. Implementation of the recommendations in the IACG report will help to save millions of lives, preserve antimicrobials for generations to come, and secure the future from drug-resistant diseases. ■

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