Promoting sustainable national action to tackle antimicrobial resistance: a proposal to develop an antimicrobial resistance accountability index

Antimicrobial resistance (AMR) is one of the most crucial and complex public health crises of the present world.[1,2] Modelling the effect of AMR on human health indicated that in 2021, 1·14 million deaths worldwide were directly attributable to bacterial AMR.[3] If not addressed optimally, then by 2035, AMR is projected to cost the global economy US$412 billion annually due to additional health-care costs and $443 billion annually due to lost workforce productivity.[4]

International and national efforts to combat AMR have grown steadily over the last decade. Two major landmark developments to combat AMR include the launch of the 2015 WHO global action plan on AMR that directed all countries to develop national action plans by 2017[5] and the 2016 UN political declaration on AMR that included commitments to work at national, regional, and global levels to implement multisectoral action plans in accordance with the One Health approach.[6] Within the WHO European region, member states agreed upon an AMR roadmap for 2023–30 to identify, prioritise, implement, and monitor high-impact interventions to tackle AMR.[7]

Despite these developments, countries are not consistent in the implementation of the recommended policies, such as those on stewardship of antimicrobials, infection prevention and control, promotion of public awareness, and investment in research and development of novel antimicrobials and alternatives.[8,9] Several factors influence the global inconsistency in the implementation of the strategies, including differences in available resources, political commitment, health-care infrastructure, and public health priorities.[10] Additionally, in many countries, a vacuum in terms of responsibility and mechanisms to ensure accountability hinders sustained action to tackle AMR. Evidence suggests a clear association between weak governance mechanisms and AMR rates.[11,12] Conversely, some countries such as Sweden, the Netherlands, and the UK have best practices for combating AMR by implementing policies that include measurable goals, robust monitoring and evaluation plans, and well defined accountability mechanisms.[8,13]

Policy makers and the academic community have been calling for a target-based approach to stimulate more consistent implementation of AMR policies globally. Mendelson and colleagues proposed the global 10–20–30 targets by 2030, which include a 10% reduction in mortality from AMR, 20% reduction in inappropriate human antibiotic use, and 30% reduction in inappropriate animal antibiotic use (all relative to a prepandemic 2019 baseline).[14] The latest draft of the 2024 UN political declaration on AMR incorporates targets to achieve by 2030, including a reduction in mortality from bacterial AMR by 10% (using 2019 as a baseline), for access group antibiotics to compromise at least 70% of overall human antibiotic consumption, at least 80% of countries to achieve capability to test resistance in all bacterial and fungal Global Antimicrobial Resistance and Use Surveillance System pathogens, at least 60% of countries to have a funded AMR national action plan, and at least 95% of countries to participate in the annual Quadripartite Tracking Antimicrobial Resistance Country Self-Assessment Survey (TrACSS).[15]

In Europe, the EU agreed-upon targets for antimicrobial utilisation by 2030 (which use 2019 as a baseline as well) include a 20% reduction in total antibiotic consumption by humans[16] and 50% reduction in total antibiotic sales for consumption by farmed animals and in aquaculture.[17] In addition, the EU-level targets to reduce bloodstream infections by 2030 include a 15% reduction in infections caused by meticillin-resistant *Staphylococcus aureus*, 10% reduction in infections caused by third-generation cephalosporin-resistant *Escherichia coli*, and 5% reduction in infections caused by carbapenem-resistant *Klebsiella pneumoniae*.[16]

Targets are highly valuable tools in the global response to AMR as they provide clear, measurable objectives that focus efforts and resources on key areas, motivating stakeholders, including governments, health-care providers, and organisations, to prioritise AMR as a crucial public health issue. In addition, setting common targets enhances coordination efforts at the global and regional levels by providing a framework for international

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cooperation. Targets also align the actions of various stakeholders towards shared objectives, promoting consistency and coherence in policy and practice. By establishing specific goals, targets create urgency and accountability, prompting action in areas that might otherwise be neglected. Furthermore, targets can drive innovation by encouraging the development of new interventions to meet established goals.

However, targets do have limitations. Targets can oversimplify the complex issue of AMR when focusing only on specific indicators or infection rates, and this narrow focus can overlook broader drivers that influence AMR, such as human behaviour, veterinary practices, environmental conditions, global trade, antimicrobial usage, infection control, and socioeconomic factors.[18] Targets can also lead to unintended consequences such as threshold effects owing to which stakeholders might not be motivated to exceed the set goals or might prioritise short-term actions over comprehensive, long-term strategies to combat AMR. Poor clarity regarding who is responsible for achieving these targets is another limitation. Without mechanisms to ensure accountability and designated leadership, ensuring coordinated efforts and sustained commitment to reach the targets can be difficult.

Recognising all these limitations and considering the inherent complexity of developing a sustainable and comprehensive response to AMR, we propose the development of an AMR accountability index to benchmark and measure national performance in tackling AMR. The development of the index will be based on robust evidence synthesis and consensus-building methodologies. The index would need to encapsulate several domains relevant to the governance of AMR, such as policy commitment and leadership, funding and resource allocation, surveillance and data reporting, implementation and enforcement of policies, public and professional engagement, and monitoring and evaluation of outcomes.[19]

The index will draw upon existing initiatives such as the Quadripartite TrACSS to avoid duplication of efforts and also introduce many novel indicators and subject some TrACSS indicators to independent verification. Relevant targets would be incorporated and indicators would be weighted to develop a composite ranking that will be easily understood and regularly updated by the policy makers and civil society to enhance accountability for policy action.

The 53 member states of the WHO European region agreed that the WHO regional office should develop a monitoring, evaluation, and accountability framework as part of the AMR roadmap for 2023–30. With this mandate, the WHO regional office now has the optimal environment to develop and pilot the AMR accountability index in Europe and central Asia, with the index being the first of its kind globally. The AMR accountability index will be a key lever in driving action on AMR in the European region. Once developed and implemented in the WHO European region, the aim is to begin consultation to adapt and extend the application of the index to other WHO regions.

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