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# Ã¢â?¬Å?Key strategy of ICARS is to develop and test context-specific solutions for AMR mitigation"

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**Dr Renu Swarup, Former Secretary, Department of Biotechnology, Ministry of Science & Technology, India and Vice Chair, International Centre for Antimicrobial Resistance Solutions (ICARS), Denmark highlights the importance of Ã¢â?¬Ë?One Health' approach to effectively tackle the threat of superbugs in the APAC region.**



**In your opinion, which APAC countries have shown significant progress in addressing AMR? What specific measures or interventions have contributed to their success?**

The Asia Pacific region, home to two-thirds of the world's population and ten of the least developed countries, is considered a regional hot-spot for the emergence and spread of antimicrobial resistance (AMR). WHO analysis data indicates that over 90 per cent of the APAC countries have developed their AMR-national action plans (NAPs) and nearly 50 per cent of them have operationalised and implemented them. AMR requires a multisectoral approach focussing on governance, regulation and standards for AMR; a comprehensive, integrated national surveillance system; antimicrobial stewardship and measures to reduce antibiotic use; well structured systematic infection prevention and control programmes; research and development; and education, communication and stakeholder engagement. The emphasis has to be on how the Universal Health Coverage strategies should integrate AMR challenges. An analysis of implementation of NAPs indicates that the APAC countries have successfully achieved the implementation of key indicators of human and animal health. However, environmental factors, plant health, food safety require more efforts for integration into the NAP strategic plans.

The COVID-19 experience gave us sufficient understanding of how to collaborate both within national stakeholders and. Global partners help expedite the response. AMR is a multisectoral issue with complex connections between human, animal, plant and environmental health. This clearly requires a 'One Health' approach to implement the strategies effectively involving all stakeholders. Coordination between countries is imperative not just for knowledge and data sharing but also for adoption of best practices and moving technologies and interventions across borders. Transboundary movement of pathogens is a challenge and this requires very robust surveillance systems and the need for setting up coordinated regional networks will be essential if we need to address this challenge on priority.

**What strategies or policies do you recommend for governments and healthcare systems in the APAC region?**

To tackle AMR and 'One Health' in the Asia Pacific region it is imperative that there is a major emphasis on intersectoral and intercountry collaboration focussing on research and development; monitoring and evaluation; regulation, guidelines and governance and finances. There has to be a strong national and political commitment at the senior leadership level to build a strong research and innovation component, invest in new and emerging technologies to tackle the key challenges, build strong networks on surveillance, ensure that the antibiotic use policies are effectively implemented not just for human use but also in the animal health sector.

Evidence and data based policies need to be developed to identify local challenges and ensure the global best practices are brought in to find the appropriate solutions. A well coordinated regional network will be important to tackle this 'One Health' challenge across Asia Pacific countries and the world.

We must deliberate on launching a multi-stakeholder and multidisciplinary platform which defines a clear and articulate 'OneHealth Action plan' which can be adopted with the needed changes as per local needs in different countries with varying cultures, and ecosystems. We need to come up with a short and long term action plan and recommend specific policy initiatives which are based on a gap and need analysis and well integrated with national and regional policies on universal health coverage, treatment guidelines and regulations, investment strategies for research and innovation and the overall policies for meeting the Sustainable Development Goals (SDGs).

**How is the International Centre for Antimicrobial Resistance Solutions (ICARS) focusing on the APAC region?**

ICARS has been set up by the Danish Health Ministry with support from the World Bank and Quadripartite organisations - Food and Agriculture Organization of the United Nations (FAO), United Nations Environment Programme (UNEP), World Health Organisation (WHO), and the World Organisation for Animal Health (WOAH). It adopts a 'One Health' approach in creating science based evidence which will help guide policy and NAPs to reduce the impact of AMR. Working with low- and middle-income countries (LMICs), the effort of ICARS is to identify country specific issues and, working with the local government, develop the required need-based solutions through interventions and implementation research. ICARS provides a unique value proposition – a funded partnership, collaborating with the country to co-develop evidence-based, context specific, cost-effective and sustainable solutions to combat AMR, advancing each country's individual NAPs.

ICARS is currently implementing over 32 projects in 16 countries, many of them in the Asia Pacific region. India also has a partnership agreement with ICARS. The key strategy of ICARS is to develop and test context-specific solutions for AMR mitigation, support the translation and uptake of existing evidence and innovation into policies, programmes and practice, advocate for context- specific, country-owned AMR mitigation solutions and support targeted capacity and capability building.

**Dr Manbeena Chawla**

**manbeena.chawla@mmactiv.com**