Managing Antimicrobial Resistance Through Behavior Change, March 2021

Antimicrobial resistance (AMR) is a silent, slow-moving pandemic in the shadows of Covid-19, with potentially devastating effects on global health and national economies. With drivers deeply embedded in our societies' financial, social and political structures, efforts to reduce the risks of the growing resistance require strong political will power, economic investments and collaboration across sectors and borders. In essence, it means limiting the spread of infection and changing the way we use our medicines for fair and timely access where they are needed.

However, changing behaviours and practices is intrinsically hard, especially given the complexity of AMR and the need for solutions at multiple levels. Further complicating matters are the differing motivations and possibilities for action of each stakeholder group, including their surrounding environment, their socio-economic and political realities, and a range of other factors that powerfully influence behaviours.

On March 15–18, 2021, over 600 representatives from research and policy institutions, industry and civil society from 72 countries convened for a digital summit on how to limit the development and emergence of AMR through behavioural change. The conference consisted of five plenary sessions and eight workshops focusing on different pieces of the complex AMR puzzle. The summit was organised by researchers from Uppsala University and the Swedish University of Agricultural Sciences along with six other not-for-profit partners with recognised expertise in multi-disciplinary research, practice and advocacy on AMR.

In workshops and in plenary sessions, veterinary and human medicine perspectives met with views from social sciences, including education, economics, behaviour sciences, anthropology and sociology. Practical experience of policy implementation at different levels and in different contexts were central to the discussions.

Drawing on vital lessons from the Covid-19 pandemic response, the dialogue centred around the **prevention of infections**, to reduce the need for antimicrobials, on the one hand, and **restrictive and responsible** use of antimicrobials based on strict medical rationales, on the other.

As the emergence of resistance connects the use of antimicrobials in the health sector to that in the livestock sector and to occurrence of antimicrobials in the environment, discussions were permeated by a **One-Health Approach**. This was reflected in the broad topics of the presentations in the plenary sessions as well as in the workshops, ranging from challenges in

getting livestock vaccinated among pastoralists communities in the Sahel to monitoring antimicrobial use and awareness within the human population in Thailand.

Speakers and participants emphasised the need for evidence-based, multi-component interventions to influence consumer behaviours, vaccine hesitancy and hygiene practices or other behaviours that relate to AMR. This family of interventions should be adapted to and firmly anchored in local settings and realities, and include regulations and incentives, communication for behavioural change and interventions based on behavioural insights, to help people make the right decisions.

The way we talk about, visualise and explain the complicated topic of AMR can make an important difference in public understanding, attitudes, and the actions that people are willing to take to help the situation. If people are empowered to act and public support for the issue is strengthened, this can lead to more action also among political leaders. Appropriate messaging regarding AMR to different target groups was discussed by speakers in plenary sessions and explored in greater depth in one of the workshop.

When designing interventions, there are some basic principles to bear in mind, principles that unite all humans regardless of where we live and who we are. This was touched on by Dr Cass Sunstein, co-author of the concept of Nudging and that of Choice Architecture, which entails organising the context in which people make decisions, to facilitate behavioural change. He gave a presentation on the last day of the summit, sharing the principles of a FEAST Framework for Change, according to which interventions should be **F**un, **E**asy, **A**ttractive, **S**ocial, **T**imely to have an effect.

In summary, the meeting was an opportunity for deep reflection and dialogue on how we should approach the antimicrobial resistance crisis with a greater focus on the social and behavioural factors that drive it. We are deeply grateful to all the speakers and participants who joined us to share their knowledge and perspectives. The discussions resulted in eight policy briefs that we hope will contribute to more efficient and thoughtful ways of managing AMR going forward.

Ulf Magnusson

Professor, Swedish University of Agricultural Sciences, Chair of the Uppsala Health Summit Programme Committee

Kerstin Stewart

Programme Coordinator, Uppsala Health Summit 2021

POLICY BRIEFS IN THIS KIT

Why not practice knowledge: The art of disease prevention
Roadmap for guiding the implementation of incentives to stimulate antibiotics $R\&D$
Consumer Behaviour and Antibiotic Resistance
Antibiotics and antibiotic-resistant bacteria in the environment: How can behavioural change become part of the solution?
Making Sense of Antimicrobial Resistance: Communicate for Change
Children and the wild: Potential Benefits and Perils in Human-Animal Encounters
Where are our antibiotics? Three possible solutions to address shortages and improve global supply
Teaching AMR: Educating children to be Change Agents

