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HAI Intervention on Ensuring Access to Antimicrobial Drugs, Diagnostics and Vaccines

World Health Organization–Non-governmental Organisations
Antimicrobial Resistance Dialogue

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Access to Antibiotics

In many countries, access to antimicrobial treatment is now viewed as effectively a citizen's entitlement. Despite this, lack of access and delays in access to antibiotics kill more people than antibiotic resistance.

Policy-makers now need to oversee the transformation of health systems that evolved to provide easy access to these drugs into ones that provide access to appropriate antimicrobial treatment whilst reducing the risk of resistance. As factors influencing the supply and demand value chains for drugs are interdependent, strategic leadership is essential.

The tension between reducing the risks of serious infection and preserving the efficacy of antimicrobials is further complicated by large inequalities between countries and between social groups in both the burden of infection and access to antimicrobial treatment. Interventions need to reflect the array of health system structures and markets that antibiotics are accessed and used in. They also need to ensure that people can obtain the appropriate drug (of acceptable quality) in the right dosage and at a price they can afford.

People are more likely to support actions to address access to antimicrobials if they believe they are fair. For example, restrictions in access to antimicrobials should be accompanied by measures to ensure universal access to appropriate and affordable treatment of common infections; investment in research and development of new antimicrobials should be complemented by investment in technologies and organisational arrangements to increase access to this treatment.

Measuring Access

Without a multi-level systems perspective, interventions aimed at access to antimicrobials involving one health system attribute can have unintended consequences.

To gain a real sense of current access needs, barriers and contexts across different health systems (public, private, mission and other sectors), Health Action International (HAI) proposes using a methodology similarly styled to the **World Health Organization (WHO)–HAI methodology, *Measuring Medicine Prices, Availability, Affordability and Price Components***, for antibiotics, paying particular attention to second- and third-line medicines. In many cases, the use of second- and third-line medicines is bypassing first-

line treatments. In addition, some essential antibiotics with unique uses are still not available, meaning inappropriate antibiotics are being used, for example, for maternal syphilis. At HAI, we propose National Action Plans incorporating such assessments into their infection control and stewardship checklist to assist in developing sustainable interventions.

Along these lines, HAI has recently started a five-year project, which will focus on developing appropriate use indicators, initially for antibiotics to treat the sexually transmitted infections: gonorrhoea, chlamydia and maternal syphilis. We will focus on three countries, Kenya, Uganda and Zambia, and analyse public, private and mission sectors in urban and rural settings. Using an adapted and extended version of the WHO–HAI methodology, we aim to measure access, availability and rational use of antibiotics and develop indicators for appropriate use and access.

There needs to be sustained action to develop mechanisms for feeding evidence on resistance into up-to-date treatment advice. This means establishing appropriate treatment guidelines for common infections in a context of changing patterns of antimicrobial resistance—can we use models such as sequential use, cycling strategies, combination uses or mixing strategies of different antibiotics? The findings need to be continuously updated based on dynamics of use and evidence of emerging resistance.

Access to Diagnostics and Vaccines

The response to antimicrobial resistance is not just one of bringing new drugs to market. It requires a balance of access with so-called excess and inappropriate use at the same time as the innovation of a suite of health technologies; effective point of care diagnostics will discourage an over-reliance on syndromic treatments and pave the way for more targeted and specific treatments. They need to be rapid, easy to use and specific; importantly, their use needs to be integrated effectively into communities. In addition, vaccines will play an important role in decreasing the selective pressure on existing antibiotics.

A Multi-systems, Multi-stakeholder Dialogue

The organisation of the value chain for production, distribution and supply of antimicrobials to patients strongly influences both the degree to which people have access to antimicrobials and the emergence of antimicrobial resistance. Strategies to reduce the proliferation of misleading information and perverse incentives in a complex health knowledge economy are needed.

We propose that the challenges of sustainable access to antimicrobials, diagnostics and vaccines are taken into account when developing strategies for making progress towards strengthening universal health coverage.

HAI proposes:

1. Monitoring the access, availability and dynamics of antimicrobial use in the array of health systems and markets antimicrobials can be accessed in;
2. Balancing strategies to control access to antimicrobials with increased access and availability of low cost rapid diagnostics and vaccines;
3. Investing in strategies to reduce misleading and perverse incentives throughout the value chain of antimicrobials through accurate health-related information, strong regulation and strategic leadership;
4. Engaging in multi-stakeholder dialogue to reflect the interdependent and varied landscape of actors involved in antimicrobial, diagnostic and vaccine access.