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Who's role in combatting the drug resistance epidemic.

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Introduction

Antimicrobial resistance (AMR), often referred to as drug resistance, is one of the most pressing global health threats of our time. It occurs when bacteria, viruses, fungi, and parasites evolve to resist the effects of medications, rendering standard treatments ineffective and leading to persistent infections, increased mortality, and soaring healthcare costs. It undermines the effectiveness of life-saving procedures such as surgeries, chemotherapy, and organ transplants [1, 2].

The misuse and overuse of antimicrobials in humans, animals, and agriculture are key drivers of resistance. The crisis is exacerbated in low- and middle-income countries due to limited access to quality healthcare and diagnostics. WHO's response to AMR is anchored in its Global Action Plan on Antimicrobial Resistance, adopted in 2015. This plan outlines five strategic objectives: WHO also developed the AWaRe classification system, which categorizes antibiotics into Access, Watch, and Reserve groups to guide responsible use and stewardship [3, 4].

WHO's Global Antimicrobial Resistance and Use Surveillance System (GLASS) is a cornerstone of its strategy. GLASS collects standardized data on AMR and antimicrobial consumption from participating countries, enabling evidence-based policymaking. As of 2023, 90 countries were enrolled, with 74 reporting national data. However, global participation remains uneven, highlighting the need for expanded surveillance infrastructure. The WHO has emphasized the urgent need for new antibiotics, diagnostics, and vaccines. The current pipeline is inadequate to meet rising resistance levels. WHO supports innovation through partnerships and funding mechanisms, and it advocates for equitable access to new treatments, especially in vulnerable regions [5, 6].

To combat AMR effectively, WHO invests in education and training. The WHO Academy offers online courses to improve understanding and use of antibiotic data, helping countries build capacity for stewardship and surveillance. Public awareness campaigns also play a vital role in changing behaviors around antibiotic use. WHO works closely with international bodies such as the United Nations, the World Bank, and the World Economic Forum to keep AMR on the global agenda. Despite past commitments, including the 2016 UN High-Level Meeting and the 2022 Muscat Ministerial Manifesto, progress has been slow. WHO continues to push for bold, measurable targets akin to climate change goals to galvanize action [7, 8].

In 2023, WHO released a core package of 13 interventions to guide countries in developing and implementing national AMR action plans. These interventions focus on people-centered approaches, addressing barriers to accessing health services and promoting responsible antimicrobial use. Despite WHO's efforts, AMR has dropped off the global agenda in recent years2. Many countries lack the infrastructure, funding, or political will to implement effective strategies. There is also a significant gap in access to Reserve antibiotics in low-income regions, where drug-resistant infections are most prevalent [9, 10].

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Conclusion

The World Health Organization (WHO) has emerged as a central force in the global response to this crisis, coordinating efforts, setting standards, and guiding nations toward sustainable solutions. AMR is responsible for an estimated 1.27 million deaths annually and contributes to nearly 5 million deaths worldwide. With coordinated global action, the tide of drug resistance can be turned. WHO's leadership, expertise, and advocacy are indispensable in this fight.

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