The issue of antimicrobial resistance

Microbial resistance presents a significant challenge to global public health, endangering the effectiveness of essential medications and threatening healthcare systems worldwide. The proliferation of antimicrobial resistance (AMR) undermines the efficacy of antibiotics, antivirals, and antifungals, leading to increased mortality, and healthcare costs. Addressing microbial resistance requires surveillance, antimicrobial stewardship, research, and public education.

➤ In the United States, efforts to combat antimicrobial resistance include the Centres for

Disease Control and Prevention's (CDC) Antibiotic Resistance Solutions Initiative, which aims to improve antibiotic use and stewardship in healthcare settings. The CDC also collaborates with partners across the country to implement antibiotic stewardship programs and promote public awareness of antimicrobial resistance.

➤ Sweden has implemented strict regulations to control antibiotic use since the 1980s.

These regulations include restrictions on antibiotic prescribing, public education campaigns to raise awareness about the risks of antibiotic overuse, and surveillance programs to monitor antibiotic resistance. As a result, Sweden has one of the lowest rates of antibiotic consumption and antibiotic resistance in the world.

> Denmark has implemented a "Yellow Card" system, where farmers are required to obtain a prescription from a veterinarian before using antibiotics in livestock. This system has helped to reduce antibiotic use in agriculture and curb the spread of antibiotic resistance in food-producing animals.

Ensuring global cooperation and coordination in implementing measures to limit antibiotic use and combat antimicrobial resistance (AMR) is essential to effectively address this global health threat. While individual countries have implemented various strategies to tackle AMR, a collective effort is necessary to maximise impact and prevent the spread of resistant microorganisms across borders.

Points to consider:

- Should we provide education for the public regarding antibiotic use and its threat to antimicrobial resistance?
- Should we develop a global surveillance network to track the spread of resistant pathogens?
- Should we harmonise antibiotic prescribing guidelines across countries?

- Do we need to provide foreign aid to countries that rely too much on antibiotics?

Useful links:

https://www.who.int/news-room/fact-sheets/detail/antimicrobial-resistance

https://www.who.int/news/item/26-04-2024-who-reports-widespreadoveruse-of-antibiotics-in-patients--hospitalized-with-covid-19

https://www.who.int/news/item/13-02-2024-information-note---glass-data-visualization-dashboard

