What is the impact of antimicrobial resistance on medicine today?

Infection **in focus**

Antibiotics have saved millions of lives since they were first discovered.

Our generation, and that of our parents, has benefited enormously from these important medicines. (1)

We are heading rapidly towards a world in which our antibiotics no longer work. (1)

Many situations will still require the use of effective antimicrobials, for example in medical procedures such as organ transplants, and in cancer chemotherapy, diabetes management and major surgery. (2) (3)

Without effective antibiotics, infections would complicate medical procedures frequently and even lead to death. (2)

The history of AMR

BEFORE

Before the discovery of antibiotics, thousands of people died from bacterial diseases, even in the case of mild or superficial infections. (4)

NOW

Drug-resistant diseases cause Today around 700,000 deaths globally a year. (5)

THEN

Around 2.4 million people could die in high-income countries between 2015 and 2050 without a sustained effort to contain AMR. (5)

AMR impact on Cancer

Infection in focus

AMR will potentially have devastating consequences for cancer treatment (3)

✱ The growing cancer burden, in combination with increasing AMR, is a threat to every society in every country in the world and is thus a true wake-up call. (3)

✱ Antibiotic resistant bacteria could set cancer treatment back for decades, while the incidence of cancer cases will continue to rise in the years to come. (3)

Bacterial infections are one of the commonest causes of complications in cancer patients (3)

Every year 4.6 million people are newly diagnosed with cancer in WHO European Region. (3)

12.9 million live with cancer. (3)

114.000 are children and adolescents. (3)

Cure and Therapy

✱ A significant proportion of cancers can be cured with surgery, radiotherapy or chemotherapy, especially when detected early. (3)

✱ Radiotherapy and chemotherapy kill cancer cells, but also cells that are part of our defenses against infections. As a result, these patients often require treatment with antibiotics. (3)

Sources

1) Tackling antimicrobial resistance 2019–2024 | The UK's five-year national action plan.
2) Antimicrobial resistance (AMR) and its impact on cancer care.
3) The fight against Antimicrobial Resistance is significant for cancer prevention and treatment.
4) Factsheet for general public.
5) No Time To Wait: Securing The Future From Drug-resistant Infections.