

Okan Isikci, General Manager- MSD Levant: Antimicrobial Stewardship and Research to fight Antimicrobial Resistance



In this very interesting interview, Mr Okan Isikci talks about antimicrobial resistance and sheds the light on the gravity of this health problem. Mr Isikci also underlines that MSD's answer to microbial resistance is characterized by an ongoing work based on two main pillars: Research and Development of new antimicrobials and the Antimicrobial Stewardship.

Q – Could you please explain WHAT Antimicrobial resistance (AMR) IS?

A – Antimicrobials are medicines to treat and prevent infectious diseases caused by pathogens such as bacteria, viruses, fungi and parasites. Antibiotics, which are used to treat bacterial infections, are one of the most important types of antimicrobials.

Antimicrobial resistance (AMR) is resistance of a microorganism to an antimicrobial treatment that was originally effective for treatment of infections caused by the microorganism.

Q – Why is AMR a problem and how serious is it?

A – AMR is a major global concern primarily because new resistance mechanisms are emerging and spreading around the world, severely affecting our ability to treat common infectious diseases. Antibiotic resistance leads to longer hospital stays, higher medical costs and increased mortality.

In addition to this, what is worrying is that AMR is not only an immediate problem, but it is a growing health threat that will in future affect our ability to prevent and treat infections and carry out medical procedures such as organ transplantations, other major surgeries and cancer chemotherapy.

Unless action is taken to address this major global issue, it

is estimated that AMR could cost the world an additional 10 million lives a year by 2050.

Q – What is the main contributor to the spread of AMR?

A – For the past 70 years, antimicrobial treatments have been used to treat patients with infectious diseases, saving millions of lives worldwide.

The development of AMR has been an inevitable consequence of the use of antimicrobial medicines, but widespread unnecessary and excessive use accelerates the process and exacerbates the problem.

Q – What is the solution?

A – New antibiotics are urgently needed to address growing resistance.

While the pace of resistance may be slowed through programs that promote the responsible and appropriate use of antibiotics, research must continue into new antibiotics and additional therapeutic and vaccine strategies that address this critical unmet need.

As we work to develop new antimicrobials to treat resistant pathogens, we also need to implement evidence-based policies and programs to slow the development of resistance to current medicines.

Q – How is MSD Taking Action to Combat AMR?

A – MSD is deeply committed to the research and development of new antibiotic and antimicrobial medicines. Our commitment to fighting antimicrobial resistance began more than 70 years ago and today we are one of the few large biopharmaceutical companies with active antibiotic and antifungal discovery and development programs.

Our role in the global fight against AMR includes not only ongoing research and development into innovative medicines and vaccines to treat and prevent infections, but also the promotion of appropriate use of these products through antimicrobial stewardship and global education and surveillance initiatives.

We believe that the response to AMR requires a comprehensive, global approach and meaningful collaboration between stakeholders, including governments, industry, health care providers, and patients.

Q – How is MSD collaborating with the public sector?

A – One of the main things we are doing as a company is to advance Antimicrobial Stewardship (AMS) and collaborate with hospitals around the world to develop and implement patient-centered AMS programs to improve patient outcomes and slow the development of AMR.

Q – What do you mean by Antimicrobial Stewardship?

A – Antimicrobial Stewardship (AMS) refers to coordinated activities designed to improve and measure the appropriate use of antimicrobials by encouraging the informed selection of the optimal antimicrobial treatment, right dose, duration of therapy, and route of administration. It is a systematic approach to optimize the setting of care for a given diagnosis, with de-escalation of therapy when appropriate.

The primary goal of AMS is to optimize clinical outcomes while minimizing unintended consequences of antimicrobial use, including toxicity, the selection of pathogenic organisms and the emergence of resistance. The combination of effective antimicrobial stewardship with a comprehensive infection control program has been shown to limit the emergence, and transmission of antimicrobial-resistant bacteria.

Q – Could you please elaborate more on the work done?

A – Since 2008, MSD has worked with over 1,240 hospitals in 30 countries. Through these programs, more than 10,000 health care providers have been trained and over 520 clinical treatment pathways have been implemented based on local hospital microbiological data. MSD serves as an AMS resource, knowledge and/or logistics partner, depending on the needs of the hospital. This collaborative model allows for customization at the local level based on epidemiology, formulary and patterns of use, resource availability, clinical setting and institutional infrastructure.

“Okan Isikci is General Manager for MSD Levant. For more than a century, MSD has been inventing for life, bringing forward medicines and vaccines for many of the world's most challenging diseases. Today, MSD continues to be at the forefront of research to deliver innovative health solutions and advance the prevention and treatment of diseases that threaten people and animals around the world.”