

The role of pressure ulcer prevention in the fight against antimicrobial resistance

Every year over 25,000 patients die in the EU alone as a result of infections caused by antibiotic-resistant bacteria. Globally the number of deaths due to antimicrobial resistance (AMR) was estimated to be 700,000¹ in 2014 and that number has been calculated to rise to at least 10 million by 2050. The continuing emergence of AMR has become a recurring topic in the international health agenda as the increasingly serious threat to cross-border public health is recognised. From WHO to OECD, international bodies are constantly monitoring, reporting and formulating strategies to contain AMR.

AMR is defined by WHO as the ability of microorganisms to survive antimicrobial treatments; consequently, prophylactic and therapeutic regimens are ineffective in controlling infections caused by resistant bacteria, fungi, parasites and viruses.² The situation has deteriorated dramatically in the past decade with AMR reaching levels of 80% in some countries.³

How has this happened? Whereas greater investment and skill in reporting of AMR may be one reason, an important consideration is that **AMR** is a natural and inevitable process which is aggravated by the inappropriate use of antimicrobial agents. Healthcare authorities have been aware of the consequences of overuse of antibiotics in animal and human health, yet relatively few actions have been implemented to slow the process down.⁴

The good news is that the EU has made a significant step forward to gain a global lead in the fight against AMR. In June 2017 the Commission adopted the ambitious EU One Health Action Plan against AMR⁵ (as requested by the Member States in the Council Conclusions of 17 June 2016). ⁶ The key objectives of the new plan are founded on three pillars: (1) making the EU a best practice region; (2) boosting research, development and innovation; (3) shaping the global agenda. The most urgent actions (under the first pillar) are reducing inappropriate use of antimicrobials, better prescribing practices, respecting the recommended dosages and fostering infection prevention.

Wound care and pressure ulcer prevention can play a key role in addressing AMR: better wound care and early detection of pressure ulcers can prevent affected tissue infection, allowing faster resolution by uninterrupted healing and avoiding the need for antimicrobial interventions.

¹ European Commission, *AMR: a major European and Global challenge*, Factsheet 2017. Available at: https://ec.europa.eu/health/amr/sites/amr/files/amr_factsheet_en.pdf

² The World health Organisation, *Key Facts on Antimicrobial Resistance*, last update February 2018. Available at: http://www.who.int/en/news-room/fact-sheets/detail/antimicrobial-resistance

³ The Parliament Magazine, Antibiotic resistance: A silent tsunami, 7 July 2017. Available at: https://www.theparliamentmagazine.eu/articles/news/antibiotic-resistance-silent-tsunami

⁵ https://ec.europa.eu/health/amr/sites/amr/files/amr action plan 2017 en.pdf

⁶ http://www.consilium.europa.eu/en/press/press-releases/2016/06/17-epsco-conclusions-antimicrobial-resistance/



Pressure ulcers, also known as bedsores, decubitus ulcers and pressure injuries, are wounds involving the skin and often the tissue that lies underneath. Pressure ulcers may become infected, affecting people's quality of life and require antimicrobial therapies when systemic symptoms occur. It is important to identify the patients at risk to act promptly, avoid complications and ultimately reduce the use of antibiotics. People at risk of developing pressure ulcers include those with spinal cord injuries, those who are immobile, or have limited mobility, such as elderly people, and people who are ill, as well as children and neonatal patients in intensive care units.

Once pressure ulcers become infected, antibiotics, or antiseptics are used to treat the microorganisms causing the infection and prevent an infection from getting worse, or spreading. This helps the ulcer to heal. A range of treatments with antimicrobial properties are widely used in the treatment of pressure ulcers. However, antibiotics are often misused when infections do not occur. It is highly important to foster prudent use of antimicrobial agents in human medicine, such as in the care of pressure ulcers.

Pressure ulcers are one of the most frequent types of complex wounds and are a commonly occurring condition in healthcare settings. On average, 20% of persons will suffer from pressure ulcers in our hospitals. Both EPUAP and EWMA have (jointly and separately) been working to place prevention of pressure ulcers as a major health care and patient safety issue. As most of health stakeholders, the two organisations believe that AMR is one of the most serious global public health threats of this century, and they strongly advocate acknowledgement of the importance of the prevention of pressure ulcers and their complications (e.g. infections) as part of the solution.

Awareness of the seriousness of the situation and urgent actions are required globally, at EU and national level. Following the recent adoption of the EU Action Plan on AMR and the vote at the European Parliament plenary on 13 September 2018, it is very important that EU institutions and countries gain momentum and build something more concrete on infection prevention and patient safety, especially recognising severe pressure ulcers as a big threat for citizens well-being and their prevention as part of the AMR strategy.

The European Health Forum in Gastein in October 2018 is representing a valuable opportunity to tackle Europe's health challenges head on and a chance to talk about pressure ulcer prevention and appropriate wound care as key assets in the fight against antiseptic and antibiotic misuse.





⁷ J. Norman, Z. Moore, J. Tanner, J. Christie, S. Goto, *Antibiotics and antiseptics for pressure ulcers*, 4 April 2016, Cochrane Wounds Group. Available at: