

# WARNING in Surgery

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## Abstract

Surgeons prescribing antibiotics have two potentially conflicting responsibilities. First, they should offer optimal therapy for all patients under their care by offering antibiotics. Second, they should preserve the efficacy of antibiotics and minimize the development of antimicrobial resistance (AMR).

The Global Alliance for Infections in Surgery and the World Society of Emergency Surgery have promoted a coalition that should call for increased awareness and action across all surgical departments worldwide in order to combat AMR.

The project has been named *World Antimicrobial Resistance Nationally Internationally Networking Globally in Surgery* (WARNING in Surgery).

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## The World Antimicrobial Resistance Nationally Internationally Networking Globally in Surgery project

Although most physicians are aware of the problem of antimicrobial resistance, most underestimate this problem in their own hospital and prescribe inappropriately antibiotics.

The growing emergence of antimicrobial resistance (AMR) has caused an impending public health crisis of international

concern, threatening modern medicine, animal health and food security.

AMR is a natural phenomenon that occurs as microbes evolve. However, human activities have accelerated the pace at which micro-organisms develop and disseminate resistance. Inappropriate use of antibiotics and other antimicrobials, as well as poor prevention and control of infections, are contributing to the development of such resistance.<sup>1</sup>

The problem of AMR is widespread worldwide. Its impact is significant, both in economic terms, and clinical morbidity and mortality.

Clinicians should be always aware of their role and responsibility for maintaining the effectiveness of current and future antibiotics.

However, although most surgeons are aware of the problem of antimicrobial resistance, most underestimate this problem in their own hospitals worldwide.

Surgeons can help to tackle AMR in four different ways: i) enhancing infection prevention; ii) prescribing and dispensing antibiotics when they are truly needed; iii) prescribing and dispensing appropriately antibiotics; iv) controlling the source of infection when it is needed.

Surgeons regularly have to make complex decisions about antibiotic use, balancing the benefits of effective treatment against the risks to individual patients and public health from overuse of antibiotics.

Not surprisingly, they may be confused by conflicting messages about how resistance should influence their prescribing and how their prescribing influences resistance. Furthermore, because medical professionals have already established their knowledge, attitudes, and behaviours about antibiotic use, it is difficult to change their deeply established views and practice patterns.<sup>2</sup>

The necessity of improving awareness of the need for optimising antibiotics use, both for prophylaxis and therapy, has become increasingly urgent.

The battle against AMR should be fought by all health care professionals. However if surgeons around the world participate in this global fight and demonstrate awareness of the major problem of antimicrobial resistance, they will be a pivotal element in this fight.<sup>2</sup>

The Global Alliance for Infections in Surgery and the World Society of Emergency Surgery have promoted a coalition that should call for increased awareness and action across all surgical departments worldwide in order to combat AMR.

This coalition will be able to join all the surgical scientific societies interested in combating AMR in the world.

The project has been named *World Antimicrobial Resistance Nationally Internationally Networking Globally in Surgery* (WARNING in Surgery) (Figure 1).

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Key words: World Antimicrobial Resistance Nationally Internationally Networking Globally in Surgery; project.

Received for publication: 27 December 2017.

Accepted for publication: 8 January 2018.

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Journal of Peritoneum (and other serosal surfaces) 2018; 3:82

doi:10.4081/joper.2018.82

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**World Coalition to Combat  
Antimicrobial Resistance in Surgery**



Figure 1. Logo of the WARNING in Surgery project.

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