



UNIVERSITÉ
DE LORRAINE

ANTIBIOTIC STEWARDSHIP (ABS): CURRENT CHALLENGES AND DEVELOPMENTS

Prof Céline Pulcini

Infectious Diseases specialist

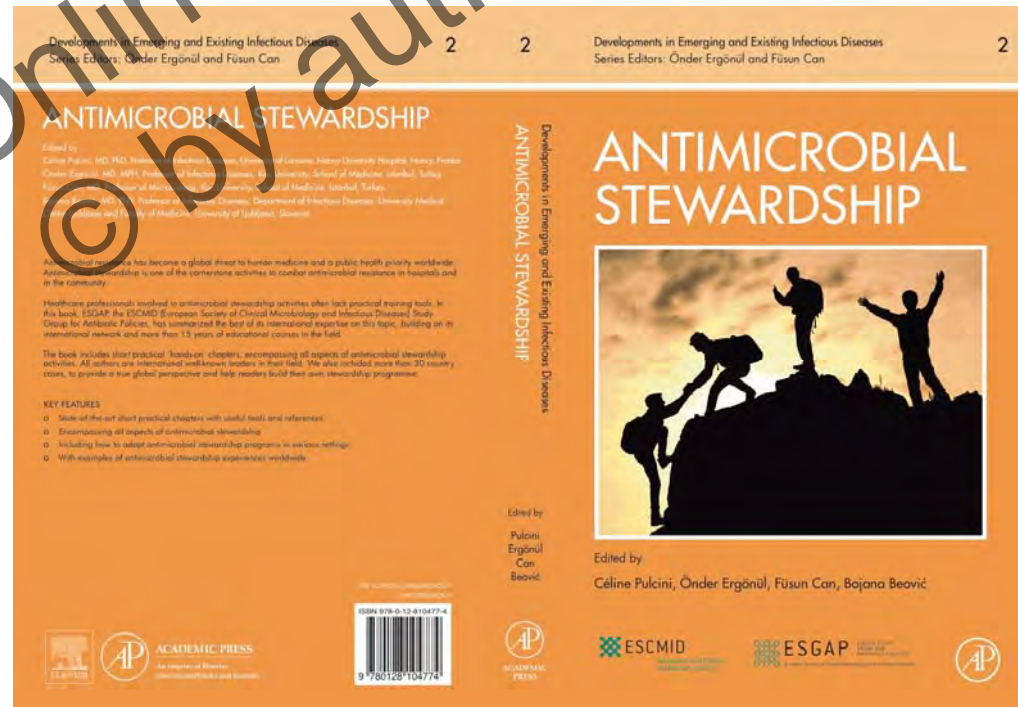
ESGAP Secretary

Nancy University Hospital (France)

ESCMID Summerschool 2017 (Germany)

A very brief overview !

- Two-day ESGAP courses
 - ABS course in Istanbul October 2017, and Madrid 2018
 - Antibiotic prescribing course in Madrid in November 2017
- ESGAP book



Antimicrobial Stewardship: Managing Antibiotic Resistance

Join now – started 28 Sep

INTRODUCTION

Understand antibiotic resistance, and how antimicrobial stewardship can slow down or reduce it, with this free online course

WATCH THE TRAILER



HOT TOPIC

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International crisis



Less antibiotics

More resistance



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3 main strategies to curb resistance



All settings, all professionals

ABS



Infection control
Environment



Vaccination

One Health approach



GENERAL ASSEMBLY OF THE UNITED NATIONS

President of the 71st session



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PRESS RELEASE: High-Level Meeting on Antimicrobial Resistance

21 September 2016 in Media, PGA Press Releases

OPGA/WHO/FAO/OIE Joint News Release 206



HIGH-LEVEL MEETING ON ANTIMICROBIAL RESISTANCE



21 SEPTEMBER 2016, UN HEADQUARTERS, NEW YORK

CALENDAR

September 2016

M	T	W	T	F	S	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		
« Aug					Oct »	



March 2017: Interagency Group

VIEW BY RESEARCH
AREA

Antibiotic Resistance (304)

Malaria (53)

Health and Development (49)

Disease Control Priorities (23)

Environmental Health (6)

Alcohol and Tobacco (5)

VIEW BY CATEGORY

CARA: The Conscience of Antimicrobial Resistance Accountability, and the next big thing for CDDEP



15 Nov 2016

Author: Hellen Gelband

A UN Declaration is a great thing.

This includes the “*political declaration of the high-level meeting of the General Assembly on antimicrobial resistance*,” which, this September, gave the world its marching orders to do what’s necessary to ensure that everyone in the world has access to effective antibiotics for the long term. It provides a role for everyone to play, building on the World Health Organization’s Global Action Plan for antimicrobial resistance (AMR), which already has buy-in from the UN’s Food and Agriculture Organization (FAO) and World Organization for Animal Health (OIE) for a One Health front.



Risk of losing political momentum

PROBLEM OF DEFINITION AND WORDS

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nature

International weekly journal of science

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NATURE | COMMENT



Antibiotic resistance has a language problem

[Marc Mendelson](#), [Manica Balasegaram](#), [Tim Jinks](#), [Celine Pulcini](#) & [Mike Sharland](#)

03 May 2017

A failure to use words clearly undermines the global response to antimicrobials' waning usefulness. Standardize terminology, urge Marc Mendelson and colleagues.



PDF



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Subject terms: [Antibiotics](#) · [Diseases](#) · [Language](#)

Definition of antibiotic stewardship?

- No consensus
- Difficult to translate

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INNOVATION VS CONSERVATION

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Funding allocation

Innovation

- New antibiotics
- New diagnostics

Lack of priority

- Existing antibiotics
- Human resources for ABS teams

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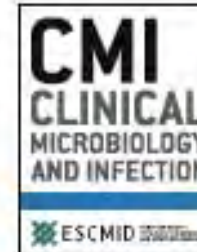


ELSEVIER

Contents lists available at ScienceDirect

Clinical Microbiology and Infection

journal homepage: www.clinicalmicrobiologyandinfection.com



Commentary

Ensuring universal access to old antibiotics: a critical but neglected priority

C. Pulcini^{1,2,4,*}, B. Beovic^{3,4}, G. Béraud^{3,5,6,7,8}, J. Carlet⁸, O. Cars⁹, P. Howard^{3,10},
G. Levy-Hara^{11,12}, G. Li¹³, D. Nathwani¹⁴, F. Roblot^{5,15}, M. Sharland¹³

MORE INTERNATIONAL COLLABORATION

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WHO activities

- Newsletter
- Essential Medicines List
- Priority Pathogen List for R and D
- Point-prevalence survey methodology in hospitals
- GLASS
- Interactive map showing progress of national action plans
- Community of practice

Challenges

- Lack of regulatory framework
- Not enough networks, collaboration and sharing of experiences/resources/mentorship

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PERSPECTIVES

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**Cochrane
Library**

Cochrane Database of Systematic Reviews

**Interventions to improve antibiotic prescribing practices for
hospital inpatients (Review)**

Davey P, Marwick CA, Scott CL, Charani E, McNeil R, Brown E, Gould M, Ramsay CR, Michie S

**Current evidence on hospital antimicrobial stewardship
objectives: a systematic review and meta-analysis**

Emelie C Schuts, Marlies E J L Hulscher, Johan W Mouton, Cees M Verduin, James W T Cohen Stuart, Hans W P M Overdiek, Paul D van der Linden, Stephanie Natsch, Cees M P M Hertogh, Tom F W Wolfs, Jeroen A Schouten, Bart Jan Kullberg, Jan M Prins

CMI Theme issue – November 2017

Too much focus on hospitals

- We know what to do in hospitals
- We 'just' need:
 - Resources
 - Leadership
 - A facilitating system
 - To share tools and experiences
 - More training courses for stewards
- We need more focus on community and LTCFs settings
- And we need to involve new health professionals (nurses, community pharmacists, primary care doctors...)

Broaden the target audience

- Educate all healthcare professionals
- Reach other specialties
- Communication and engagement of the public

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Fun games and teaching resources about
microbes and antibiotics

Teachers

Students

Junior	Junior
Senior	Senior
Young Adult	Young Adult

Teacher Home	Partners
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Educator Training	Community Resources	Peer Education
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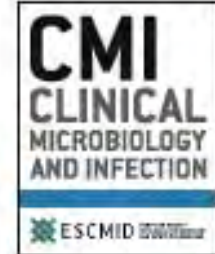
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journal homepage: www.clinicalmicrobiologyandinfection.com



Review

Managing responsible antimicrobial use: perspectives across the healthcare system

O.J. Dyar^{1,4}, G. Tebano^{2,4}, C. Pulcini^{3,*}, on behalf of ESGAP (ESCMID Study Group for Antimicrobial stewardship)

- *System approach*
- *Input from social sciences*
- *Governance*
- *Certification and accountability*

Other needs

- IT tools
- Real synergy with infection control teams

RESEARCH ON
ANTIBIOTIC STEWARDSHIP

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Right now

- Many papers on antibiotic stewardship
- Often lacking:
 - Novelty
 - Social sciences input
 - Good methods
 - Relevant outcomes

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The way forward: good methods

Accepted Manuscript

Good epidemiological practice: A narrative review of appropriate scientific methods to evaluate the impact of antimicrobial stewardship interventions

Marlieke EA. de Kraker, Mohamed Abbas, Benedikt Huttner, Stephan Harbarth



Focus on the unmet needs



Interventions to improve antibiotic prescribing practices for hospital inpatients (Review)

Davey P, Marwick CA, Scott CL, Charani E, McNeil K, Brown E, Gould IM, Ramsay CR, Michie S

IF YOU ARE PASSIONATE
ABOUT THIS TOPIC...

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References for further reading

- ESGAP : <https://www.escmid.org/index.php?id=140> and <http://esgap.escmid.org>
- WHO : <http://www.who.int/drugresistance/en/>
- ECDC : http://ecdc.europa.eu/en/healthtopics/antimicrobial_resistance/Pages/index.aspx
- CDC : <http://www.cdc.gov/drugresistance/>
- UK: <https://www.gov.uk/government/collections/antimicrobial-resistance-amr-information-and-resources>
- Australia : <http://www.safetyandquality.gov.au/our-work/healthcare-associated-infection/antimicrobial-stewardship/>
- Practical guide (D. Nathwani et al.): <http://www.biomerieux-industry.com/node/886>

You like AMS... join ESGAP!

The screenshot shows the ESCMID website at the URL https://www.escmid.org/research_projects/study_groups/antibiotic_policies/esgap_membership_application/. The page features a navigation bar with links for Home, Contact, Sitemap, and Forum. Below this is a menu with categories: Dates & Events, News & Discussion, Research & Projects, ESCMID Library, Profession & Career, and Membership & Organization. The main content area is titled "Research & Projects" and includes a section for "Study Groups" with a list of various infection topics. A central image shows a group of people, and below it, a text box states: "IMPORTANT: Only ESCMID members can become Study Group members. If you are already ESCMID member, please log in with your ESCMID login and password. If you are not yet ESCMID member, please apply for ESCMID membership. If you have difficulties or if you are not sure about your ESCMID membership status, please consult the online membership FAQ on the ESCMID membership website to know how to check your status." To the right, there is a "LOGIN" section with fields for Member ID / email address and Password, and a "QUICK NAVIGATION" dropdown. Below the login section is an "ESCMID Newsletter Sign Up" form with an email field and a "Sign Up" button.

Any question ?

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