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 26 Sep

INTRODUCTION

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

WATCH THE TRAILER

UNIVERSITY OF DUNDEE

The British Society for Antimicrobial Chemotherapy
International crisis

Less antibiotics

More resistance
3 main strategies to curb resistance

- All settings, all professionals
- ABS
- Infection control
- Environment
- Vaccination

One Health approach
March 2017: Interagency Group
Risk of losing political momentum
PROBLEM OF DEFINITION AND WORDS
Antibiotic resistance has a language problem

Marc Mendelson, Manick Balasubraman, Tim Jinks, Céline Puicini & 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.

Subject terms: Antibiotics • Diseases • Language
Definition of antibiotic stewardship?

- No consensus
- Difficult to translate
Funding allocation

Innovation

- New antibiotics
- New diagnostics

Lack of priority

- Existing antibiotics
- Human resources for ABS teams
Commentary

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

C. Pulcini1,3,4, B. Beovic3,4, G. Béraud3,5,6,7,8, J. Carlet8, O. Cars9, P. Howard3,10, G. Levy-Hara11,12, G. Li13, D. Nathwani14, F. Roblot5,15, M. Sharland13
MORE INTERNATIONAL COLLABORATION
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

http://www.who.int/antimicrobial-resistance/en/
Challenges

- Lack of regulatory framework

- Not enough networks, collaboration and sharing of experiences/resources/mentorship
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
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
Fun games and teaching resources about microbes and antibiotics.

Teachers
- Junior
- Senior
- Young Adult

Students
- Junior
- Senior
- Young Adult

Teacher Home
Partners
Educator Training
Community Resources
Peer Education
• System approach
• Input from social sciences
• Governance
• Certification and accountability
Other needs

• IT tools

• Real synergy with infection control teams
Right now

• Many papers on antibiotic stewardship

• Often lacking:
  • Novelty
  • Social sciences input
  • Good methods
  • Relevant outcomes
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)

IF YOU ARE PASSIONATE ABOUT THIS TOPIC...
References for further reading

- WHO: http://www.who.int/drugresistance/en/
- CDC: http://www.cdc.gov/drugresistance/
- UK: https://www.gov.uk/government/collections/antimicrobial-resistance-amr-information-and-resources
- Practical guide (D. Nathwani et al.): http://www.biomerieux-industry.com/node/886
You like AMS… join ESGAP!
Any question?

celine.pulcini@univ-lorraine.fr