

Helping Vietnam to Face the Antibiotic Resistance Problem



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The Catholic University of Louvain in brief (1 of 2)

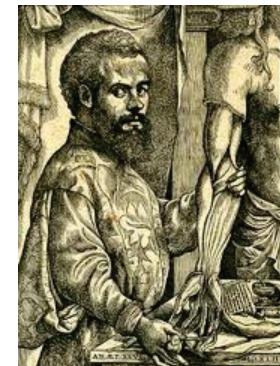
- It was one of the major University of the so-called "Low Countries" in the 1500 – 1800 period, with famous scholars and discoverers (Vesalius for anatomy, Erasmus for philosophy, ...). Teaching was in Latin, Greek, and Hebrew (College of the 3 languages...)



The University in the 1500's



Erasmus



Vesalius

The Catholic University of Louvain in brief (2 of 2)

Today, there are two Catholic University of Louvain

- The Flemish-speaking **Katholieke Universiteit Leuven** that remained in Louvain (Leuven in Flemish) and is named in English "Catholic University of Leuven".
- The French-speaking **Université catholique de Louvain** that moved to Brussels (Woluwe) for the Health Science Sector and about 25 km South in a place called "Louvain-la-Neuve for the other parts of the University



- Together, the two Universities have about 55,000 students

Our campus in Brussels (Health Sciences)...

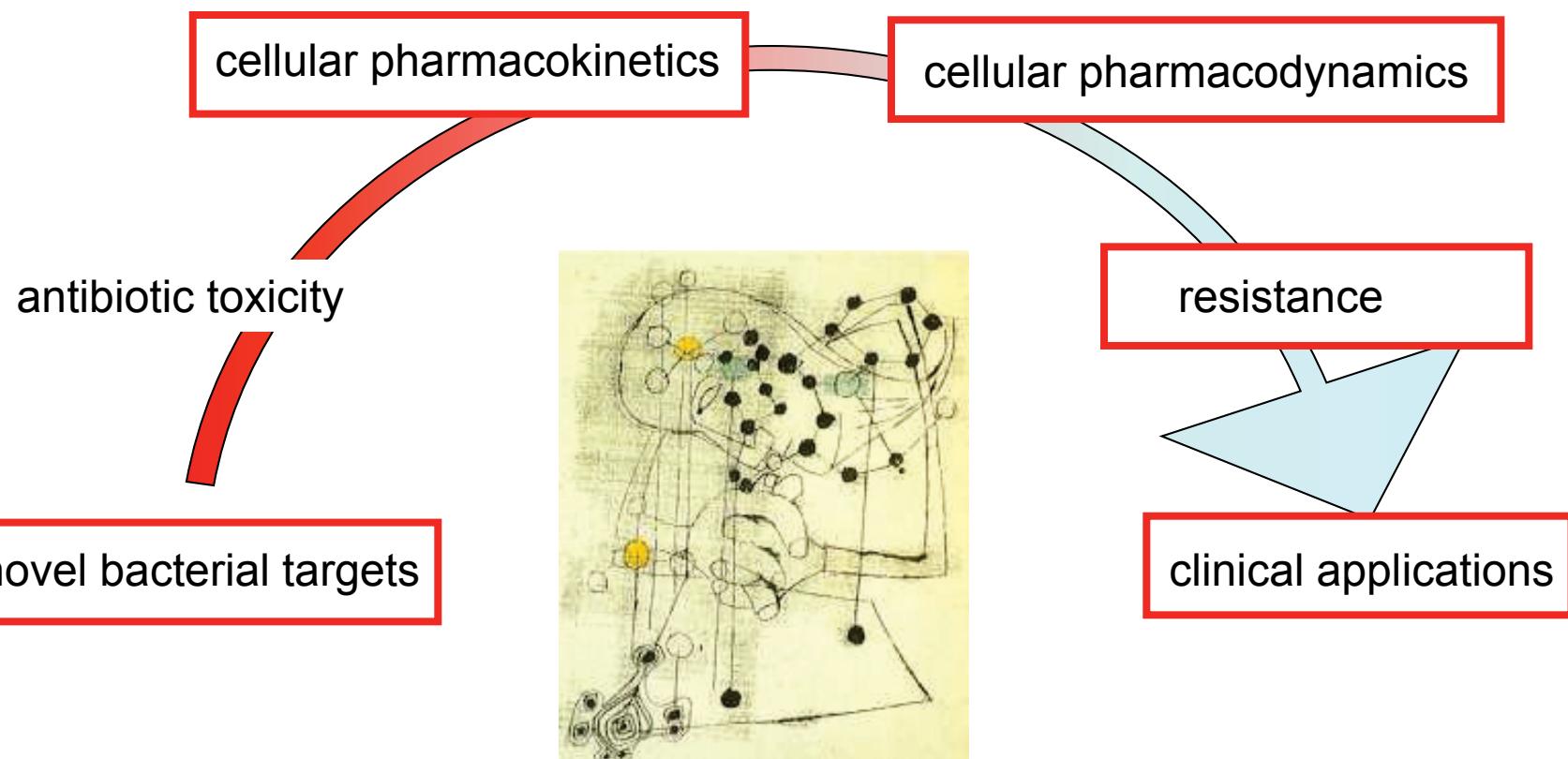


The antibiotic crisis

- Resistance to antibiotics has become a major problem in many countries, but especially in Asia including Vietnam
- Hospitals are now forced to use last resources antibiotics that are
 - very expensive (carbapenems, e.g.)
 - toxic (old molecules, such as colistin)
 - prone to cause additional resistance (fosfomycin, e.g.)
 - need to be given in associations (increased costs and risks)
- Vietnam cannot ignore this problem and must take actions
 - at the hospital level
 - at the community level



What do we do in Belgium ?



Why did we take interest in Vietnam ?

We had two young and active Vietnamese post-doctoral fellows

- Dr Pharm. Anh Hoang Nguyen (graduated in France and came to Brussels in 2007-2009; → now at the **University of Pharmacy in Hanoi**)
- Dr PhD Thi Thu Hoai Nguyen (graduated in Germany and came to Brussels in 2009-2011) → now the **International University in Ho Chi Minh**



What do we do in Vietnam ? *

1. Launching Clinical Pharmacy

Pharmacists who are close to the patients and help Doctors for the correct use of drugs

Achievements (so far)

- at the University of Pharmacy
 - 3 sessions of visits and advanced courses (in 2011)
- at Bach Mai Hospital (active programs):
 - Department of Endocrinology
 - Department of Poisons
 - Study of vancomycin (efficacy)
 - Conditions of correct use of colistin



* with the active support of Wallonie-Bruxelles International)



What do we do in Vietnam ? *

2. Helping for the appropriate use of antibiotics

Making the link between the laboratory and the ward and promote a prudent use of antibiotics

Achievements (so far)

- at the University of Pharmacy:
2 sessions of pharmacokinetics / pharmacodynamics
- at Bach Mai Hospital (visits and discussions):
 - Laboratory of microbiology
 - Department of Intensive Care
 - Department of Pneumology
 - Creation of an Antibiotic Management Team



* with the active support of Wallonie-Bruxelles International)



What could Vietnam do further (and Belgium help *) ?

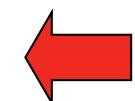
1. In the hospital:

- improve the quality of the infection control
→ less nosocomial infections (and savings)
- decrease the inappropriate use of antibiotics
→ less emergence of resistance (and savings)



How ?

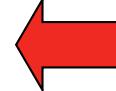
- local presence of an efficient hygiene control
- improving the diagnostic capabilities of the laboratory
- creation of an antibiotic management committee in each hospital for coordination of local activities
- creation of a National Antibiotic Committee for coordination of national actions



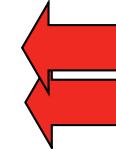
* based on Belgian experience

What could Vietnam do further (and Belgium help*) ?

2. In the community:

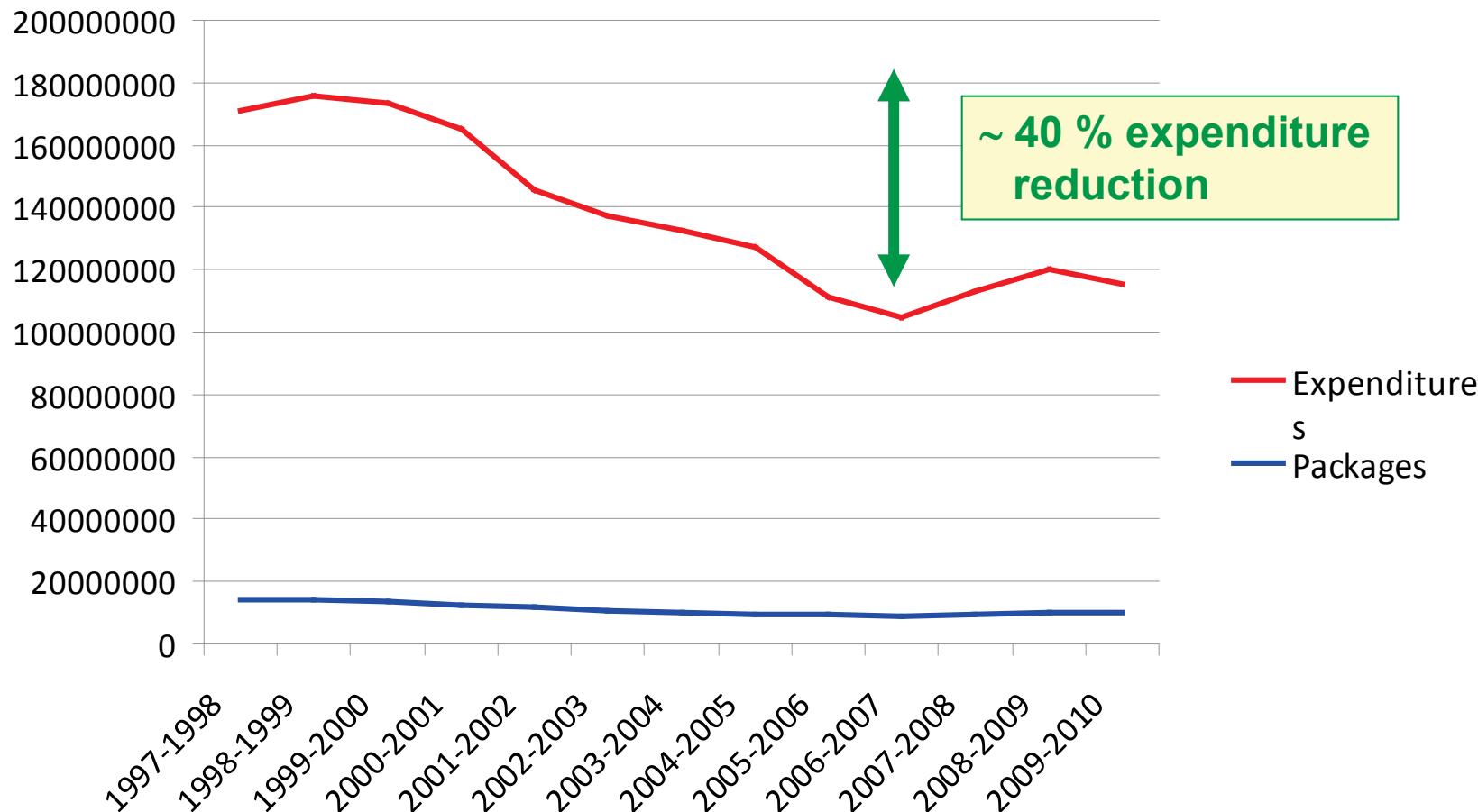
- decrease the public demand for antibiotics
→ less resistance (and savings)
- train doctors and pharmacists to use antibiotics more effectively
→ less emergence of resistance and better care

How ?

- public campaigns
- education of Doctors and Pharmacists
- decreasing / suppressing non-prescription use of antibiotics

* based on Belgian experience

Prescription of antibiotics in Belgium



From the presentation of J. De Cock, CEO of the Belgian National Institute for Health and Disability – Ho Chi Minh, Vietnam - 15-03-2012

I did not invent all that by my-self !



ESSAY

Tackling antibiotic resistance

Karen Bush, Patrice Courvalin, Gautam Dantas, Julian Davies, Barry Eisenstein, Pentti Huovinen, George A. Jacoby, Roy Kishony, Barry N. Kreiswirth, Elizabeth Kutter, Stephen A. Lerner, Stuart Levy, Kim Lewis, Olga Lomovskaya, Jeffrey H. Miller, Shahriar Mobashery, Laura J. V. Piddock, Steven Projan, Christopher M. Thomas, Alexander Tomasz, Paul M. Tulkens, Timothy R. Walsh, James D. Watson, Jan Witkowski, Wolfgang Witte, Gerry Wright, Pamela Yeh and Helen I. Zgurskaya

Nat Rev Microbiol. 2011 Nov 2;9(12):894-6.

But Vietnam and Belgium could do better together ...

THE VINMEC INTERNATIONAL HOSPITAL OFFICIALLY OPENED



posted on January 7, 2012



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Building an hospital in Hanoi is nice ...

<http://www.vkgroup.be/en/news/the-vinmech-international-hospital-has-officially-opened>

But saving antibiotics cold be better !

<http://www.antibiotiques.org/english>



Antibiotics:

use them less often
but **better**

Official WEB site of the Belgian National Campaign for a more appropriate use of antibiotics in 2001-2003

English being not one of the national language of Belgium, the material shown on this site is mainly geared at presenting to foreign professionals what has been done in Belgium for promoting a more appropriate use of antibiotics. Please, move down for access to the public WEB sites ...

PROFESSIONAL PRESENTATIONS (in English • as PDF files)

- 11th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Istanbul, Turkey, Apr. 2001 ([Poster](#))
- 41st Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC), Chicago, Ill., Dec 2001 ("Late breaker" [oral presentation in 14 slides](#))
- Why and how a public campaign in Belgium ? ([detailed presentation in 63 slides](#))
- 43rd Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC), Chicago, Ill., Sept 2003 ([Poster](#))
- . Journal of the American Medical Association (JAMA)
Association between Antibiotic sales and public campaigns for their appropriate use.

Thank you !



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