

# **Implementation of Clinical Pharmacy services in a teaching hospital: opportunities and difficulties**

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**Clinical Pharmacy :  
from foreign experiences to realizations in Belgium**



# Starting point ...

- Would implementation be easier in a university or a non-university hospital ?
  - the next speaker will deal with non-university hospitals
  - I will, therefore, restrict my-self to the University hospital and will insist on the opportunities.
- University environment offers two main opportunities
  - the mission of the University
  - a flow of students, which in this case, means young pharmacists in training ...



# The missions of the University ...

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- Universities have three basic missions

- teaching
  - research
  - service to the Society



→ You only teach well what you actually practice and on which you perform research ...

- University Hospital Pharmacies must (and actually do) demonstrate evidence of qualitative and quantitative activities (in the three basic missions), which justifies their specific funding

→ This is a major opportunity (and is shared with the medical staff...)



# The missions of the University: how to put them in practice ...

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- The obligations existed since 1991, but were not used early on to develop Clinical Pharmacy...
  - lack of a strong drug delivery system within the hospital
  - lack of specific funding
- Did we loose time ? ... Perhaps, but not in the long term ...
- The first goal, indeed, was to guarantee the correctness of the drug delivery process from the pharmacy down to the patient
- Opportunity for a University hospital:
  - ➔ implementation of a high quality delivery approach through a hierarchical structure

# The presence of pharmacists in training ...

- the main goal of the training in Hospital Pharmacy has always been to allow students to catch both a theoretical and a practical experience in contact with colleagues who develop new approaches and skills
  - ➔ those who teach are those who do ...
- typical examples since 1976 ...:
  - preparation of cytostatic agents
  - parenteral nutrition
  - running the pharmaceutical parts of FDA- and EMEA-approved clinical trials
  - on-line electronic prescription (allowing a true individualized drug delivery)
- the presence of students allows to develop new approaches, and Clinical Pharmacy has been the one selected since 2002 once the process of prescription – drug delivery had been optimized and fully implemented ...



**La Pharmacie clinique ...**  
**Un nouveau programme de formation continue à l'UCL**

# Local opportunities for launching Clinical Pharmacy

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- existence of an active and effective Medico-Pharmaceutical Committee
- excellent cooperation between the Pharmacy and several Medical Departments
- contacts with foreign colleagues (in Canada) with experience in similar approaches
- opening of local funding opportunities to pharmacists in training
- launching of a Doctoral Thesis in Clinical Pharmacy at the School of Pharmacy

# An active Medico-pharmaceutical committee...

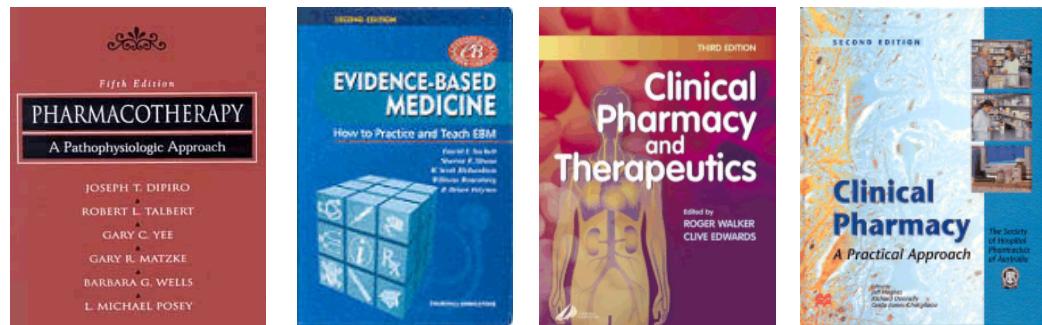
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- Structure and functions
  - comprises 8 MD's, 2 pharmacists, and one nurse
  - holds regularly scheduled meetings (every 2 weeks)
  - supervises the whole drug policy in the hospital
- Large experience of medico-pharmaceutical cooperation
  - Drug use evaluation programs ...
- Budget allowing to finance research projects for 1 to 2 years ...
- Hiring of a pharmacist for 2 years

# Cooperation between the Pharmacy and the Medical Departments

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- presence (and supervision) of students in Pharmacy (5th year), young pharmacists in training, and pharmacists hired by the Medico-pharmaceutical committee in several clinical wards ...
- help for the teaching of Pharmacotherapy and of Evidence-based Medicine to the pharmacists in training (17 medical collaborators !!)



# Contacts with foreign colleagues (Montréal, Qué.)

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- visits for "de visu" study of a successful experience...
- help for defining what training in Clinical Pharmacy should be...
- help and active participation in our teaching of Clinical Pharmacy in Belgium
  - presence of Prof. L. Mallet each year since the launching of the training in Clinical Pharmacy
  - more than 60 young pharmacists trained so far ...

FARM3591      Introduction à la pharmacie clinique [30h] (3 crédits)    [Louise Mallet](#), [Pierre Wallermacq](#), [Léon Wilmette](#) (coord.)

- welcoming (and supervision) of young pharmacists in training in Montréal ...



# Opening of local funding sources for pharmacists ...

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- The "*Fondation Saint-Luc*", which aims at improving the quality of patient's care, has accepted applications from pharmacists
- 3-months fellowships to study abroad have been awarded.





# Doctoral Theses in Clinical Pharmacy ...

- Any project must be based on strong scientific grounds
- Doctoral Theses are part of this construction and give the opportunity to improve the quality of the training of Clinical Pharmacists
  - through weekly seminars and discussion meetings between the PhD students and the pharmacists in training
  - by fostering the quality of our project and linking it to publications in first class scientific journals
- Academic activities linked to the PhD program also have been critical for the creation of essential University-based activities such as
  - the "*Certificat Universitaire*" in Clinical Pharmacy
  - the Centre for Clinical Pharmacy

The screenshot shows a web browser window with the URL <http://www.pharmacie-clinique.be>. The page has a green header with the word 'PHARMACIE' and a logo. Below the header, the text reads: 'La Pharmacie clinique ...' and 'Un nouveau programme de formation continue à L'UCL'. It also mentions 'Certificat universitaire' and '(accessible aux pharmaciens hospitaliers)'.

The screenshot shows a web browser window with the URL <http://www.md.ucl.ac.be/pharma/cfd/intro.htm>. The page features the 'UCL' logo. The text includes 'Université Catholique de Louvain (UCL-Bruxelles)', 'Department of Pharmaceutical Sciences', and 'Centre for Clinical Pharmacy'.

# But what about difficulties ?

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- Difficulties tend (usually) to be proportional to the opportunities
- Opportunities offered by the scientific approach can be exploited only if carefully validated in the every day life ....
  - ➔ failure to do so will ruin our efforts,
  - ➔ but success in a given area will open new doors ...
- A main difficulty, however, is to convince the decision-making bodies that the Clinical Pharmacy not only is financially self-supporting but also yields a positive financial return for the Institution ...



# Financial indicators ...

- Indicators are critically dependent on how the hospital is being financed ...
- In a "fee-for-service" system, the simple "drug acquisition cost approach" is not usable, and other criteria must be used (and proposed...) such as an analysis of the quality of the interventions (by a panel of MD's) with respect to
  - duration of hospital stay,
  - patient's satisfaction,
  - prevention of adverse effects, ...
    - direct demonstration in Internal Medicine and Surgery wards ...
    - ongoing program in Pediatrics ...
- But in the new system of "Global Budget" for drug-related expenses (which will be implemented on July 1st, 2006), things will change ...

Forfaitarisation de l'intervention de l'assurance pour les spécialités pharmaceutiques remboursables en hôpital

$$E_h = \sum S_{h.xy} * M_{xy}$$

$$E'_h = E_h + O_h + T_{x_h}$$

# The real problem ?

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I'm convinced that, in the next years,  
the greatest challenge will be to recruit  
a sufficiently large number of students  
for Pharmacy ...

