

Postgraduate education in clinical pharmacy –

from specialisation led by professional organisations to
an academic degree within the Bologna framework

Professor Espen Molden

School of Pharmacy, University of Oslo

Moving from professional specialisation to an academic degree

- Historical background
- Discussions with the employers
- Definition of specifications
- Legal framework
- Collaboration with employers and practitioners in preparation of curriculum
- Framework for the new master degree
- Financing
- Experiences so far

Historical background

- 1990: a formal specialist education for hospital pharmacy established
 - Administered by Norwegian Pharmaceutical Association
 - Elective theoretical courses, supervised practice
- 1997: Administrative responsibility transferred to Department of Postgraduate and Continuing Education, School of Pharmacy, University of Oslo (UiO)
- 2002: A new framework for specialist education finalized
- 2003: The full formal responsibility for the specialist education is transferred to The School of Pharmacy, UiO
- 2004: The Norwegian hospital pharmacies signals that the new specialist education does not fulfil their needs
- 2006: Hospital Specialist Education is formally closed

Hospital Specialist Education



Discussions with the employers

- Discussions initiated with Hospital Pharmacy Enterprises
- Investigated future market for specialisation
 - 88 hospital pharmacy specialists educated in the period 1990-2006
 - Estimated future need within the hospital pharmacies: 4 candidates per year
- Hospital pharmacies wanted a more structured approach
- Focus needed,- not just another generalist education
- Discussion with three main community pharmacy chains
 - Need to enhance competencies in clinical pharmacy
 - Want to establish role models for the *new patient oriented pharmacist*
- Carrier opportunities for candidates must be defined

Specifications for a new specialist education

- Clinical pharmacy the preferred focus
- Relevant for candidates from hospital and primary pharmacies
- Structured and compact curriculum
- Internationally recognised degree
 - Accredited educational institution
 - Mobility/international collaboration
 - Formally recognised within the Bologna system

Legal framework

- Bologna framework:
 - First cycle: 3 year bachelor
 - Second cycle: 2 year master
 - Third cycle, research training: 3 years Ph.D
 - Third cycle, advanced practitioner training: missing
- Regulation regarding requirements for Master degrees:
 - Master degree, 120 ECTS (2 years)
 - Master degree, 300 ECTS (5 years integrated bachelor and master)
 - Experience based master, 90 or 120 ECTS (1,5 -2 years)



Concept of experience-based master degree

- Defined as a continuous education/specialist degree in a public regulation for master degrees (2005)
- Courses: 60 study points (1 y full-time)
- Master project: 30 study points
- Requirements
 - Minimum 2-y relevant working experience (defined by educational site)
 - *drug information to health care professionals and/or patients**
 - Minimum bachelor degree as basic education with marks C or better

**experience must include services beyond regular pharmacy practice*

Development of curriculum: collaboration with employers and practitioners

- Study plan development committee:
 - 4 from faculty, School of Pharmacy, 4 practitioners
- Study plan hearing:
 - Employers' organisations, Employees' organizations, Government, Pharmacy chains etc.....
- Formal hearing committee:
 - 2 from School of Pharmacy, 2 representatives from hospital pharmacy owners, 2 representatives from hospitals
- Course development committee:
 - Faculty members and practitioners
- Uptake committee:
 - Faculty and administrative staff from School of Pharmacy
 - 1 representative from the pharmacy owners association

Experience-based master in clinical pharmacy

Courses (part time over 2 y, 50% progression)

- **The pharmacist in the health care system [NEW]**
(main focus: communication and practice at a clinical unit)
- **Clinical chemistry [EXCISTING]**
- **Advanced pharmacotherapy I [NEW]**
(main focus: individual variability)
- **Advanced pharmacotherapy II [NEW]**
(main focus: problem issues in different therapeutic areas)

-
- **Master project (full time over ½ y)**
(integrated as a part of regular practice)

Annual intake of students (15 places)

Financing

- **Basic financing over state budget**

Annually 1 mill NOK (~125 000 Euro) per 15 students

- **Student fee**

Annually 50 000 NOK (~6 000 Euro) per student*

**A minimum of 10 qualified candidates required*

Experiences so far; Admission 2009

- 34 applications
 - 7 not qualified
- 15 offers
 - 13 from hospital pharmacies
 - 10 with master degrees
 - 3 with bachelor degrees
 - 2 from community pharmacies
 - 1 master
 - 1 bachelor