MULTIDISCIPLINARY LEARNING WITHIN THE MPHARM DEGREE

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Presentation outline

- How to become a pharmacist.
- Why is pharmacy changing?
- Educational research within Aston Pharmacy School – The Teaching, Learning and Assessment study.
- The future?
How to become a pharmacist

PHARMACY SCHOOL

Entry

Undergraduate – 4 years

Pre-reg 1 year

Holiday Work experience

MRPharmS

Postgraduate training
Changes to Pharmacy Profession

- New roles.
- The role of pharmacy technicians.
- Pharmacists’ role in supply.
- Commercialisation of primary care.
  - ‘Outside NHS’.
Schools of Pharmacy

Number of Schools
16
↓
28
↓
32?
Baseline study

- MPharm Programmes: Where are we now?
- Funded by the Pharmacy Practice Research Trust.
- Carried out during 2004 and based upon the 2003/4 academic year.
- Aim: To undertake a baseline review of the current approaches to teaching, learning and assessment in UK schools of pharmacy.

Keith Wilson, Jill Jesson, Chris Langley, Laura Clarke and Katie Hatfield.
Aston University
September 2005
Pluralist methodology design

- In depth interviews. In 2004 relating to the 2003/4 academic year.
- Focus groups with BPSA students. Completed at the annual conference 2004.
- Survey all final year students in all established schools of pharmacy.
  - n=1847; response rate 51%.
  - 15/16 completed.
Interviews: Pre-registration year

- Little or no formal interaction with the RPSGB on the pre-registration year.
  - Content of the pre-registration year.
  - Articulation of the MPharm degree with the pre-registration year.
- Reliance upon knowledge and experience of individual staff in schools.
- Seen very much as two separate processes.
What is taught on an MPharm?

Curriculum by Subject Area for the 16 UK schools of pharmacy, 2004. Data shown as mean and standard deviation (n=16).
The science / practice balance

- In most programmes, science was front loaded.
- Practice/clinical builds through years 3 & 4.
  - Year 1 13% of content.
  - Year 2 25% of content.
  - Year 3 45% of content.
  - Year 4 75% of content.
- On average 50:30 science:practice.
Practice science balance
The science / practice balance – Student opinions 1

- Based on final year UK students only.
- Perceptions on time devoted to pharmaceutical sciences.
  - 53% about right.
  - 35% too much science, 12% not enough.
- Was science necessary for later professional studies.
  - 53% agreed.
  - 18% no view.
  - 28% disagree.
The science / practice balance – Student opinions 2

- 70% considered that there was not enough material relevant to practice in the 1st year.
- 82% agreed that Dispensing and Law and Ethics should be taught through all 4 years.
- 88% agreed that Clinical Pharmacy should be taught through all 4 years.
- 82% agreed that “There should be more pharmacy practice in year 1 – to allow continual development of skills”.
Shared curriculum

- No major shared component of the curriculum.
- Most shared components are taught early in courses and are science based.
- Logistical problems.
  - Size of student group.
  - Timing of shared components for different student groups.
Multidisciplinary learning

- 5 multidisciplinary learning.
  - 2 with first year students (roll in).
  - 3 with third/final year students.
- 2 multidisciplinary teaching.
- 5 with some multidisciplinary science teaching.
- 4 pharmacy only programmes.
- Widespread support for the concept from schools but logistical problems.
MPL – the barriers

- Logistics – numbers, geography, transport.
- Balancing student numbers and levels.
- Engaging all the participants.
- Resources – particularly staffing. Best with multi-professional teaching team.

“It has to be quite skilfully managed because you have to try and encourage them to co-operate without appearing to be too authoritarian and they try to congregate into mono-disciplinary groups.”
Students view of MPL(1) - Usefulness of MPL (UK students only)

n = 132
Students views of MPL (2) - MPL should be a requirement for all undergraduate MPharm degrees (UK students only)
Placement education

- Only 2 schools required vacation work.
- Formal work based teaching.
  - All schools in hospital.
  - 2 schools in community pharmacy.
- Most in 3\textsuperscript{rd} or 4\textsuperscript{th} years of study.
- Large variation in amount.
- 2 schools have NHS workforce funding to support staff.
- Heavy reliance upon professional staff.
Placements: the challenges

- Local capacity.
- Logistics – travel, group size and student numbers.
- Resources – mainly staffing.
- Dependence upon TPs and hospital based staff.
- Engaging external partners – hospitals and community pharmacy.
Placements – the frustrations!

“*We are very much aware that we need to expand the ward based teaching, we’ve been forced to curtail that somewhat over the last 2 or 3 years ... it can’t be handled by the local city, the hospitals are uneasy and unwilling really to absorb what we would like to do.*”

(School B)

“*We can wait for the DOH and HEFCE to decide that pharmacy really should be funded in a different category – I’ll probably be retired by then – or we can take the opportunity locally to wedge them in with other professionals.*”

(School E)
The student view
There should be a placement in -

% Respondents

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

At least one year
All Years
Respondents from the Schools had difficulty in defining competence to practice in relation to the undergraduate programme. Several expressed the view that they were uncertain of what the necessary competencies were and there were concerns about the lack of definitions.
“I think it’s probably within the group we have an idea of what competence is - although if you are saying is it formally decided or written down anywhere then no, I don’t think it is.” (Practice Lead, School B)

“I don’t think anyone has to be honest - and what we have to do is, I think, in the profession agree about levels of practice.” (Practice Lead, School E)
In summary - the strengths

- Consistency within the sector.
- Strong knowledge base to the degree
- Strong science base.
- Wide variety of teaching and learning methods in use.
- Increasing practice/clinical component.
- Some work-based learning in all programmes.
- A dynamic process.
In summary - the weaknesses

- A prescriptive accreditation process and dated EU requirements (e.g. hours, project).
- Focussed on knowledge? High volume and relatively didactic.
- Professional Preparation.
  - Poor articulation with pre-registration training.
  - Isolation from other health education.
  - Limited work placed learning.
  - Definition of core professional criteria (Skills, Values and Attitudes).
What does this all mean?

- Pharmacy is changing.
- Pharmacy education needs to change to meet future needs.
- Need better links with the profession.
  - Articulation with the pre-registration year.
  - Commitment to education of future professionals from the profession.
- Attract more suitable entrants?
… the bulk of a pharmacist’s clinical training still takes place away from the undergraduate experience, as a separate one-year pre-registration period, typically in either a hospital or a community pharmacy.

Other clinical professions, such as medicine, are adopting a different line on undergraduate training, where small group learning from day one is stimulated by clinical cases designed to promote clinical reasoning.
Therefore the Government, working with all relevant parties, including the profession, schools of pharmacy, the regulator, the Higher Education Funding Council for England, Universities UK and employers, will begin planning to ensure that there is:

- meaningful clinical context and experience throughout the undergraduate programme and determine whether this can be maximised by integrating the degree course with the pre-registration training year;
- an appropriate funding framework in place to support academia and clinical practice in delivering the new programme; and
- sufficient capacity in the academic workforce and an appropriate infrastructure in clinical practice to provide high quality education.

The Government wishes to see pilots of this new approach in place by October 2010.