

## [P19] NHS funded hospital-based clinical teaching sessions: pharmacy students' perceptions of their educational value and impact on career choice

A. Hindle<sup>1</sup>, J. Aston<sup>2</sup>, M. Haddock<sup>2</sup>, J. McCarthy<sup>3</sup>, E. Payne<sup>2</sup> and M. Wright<sup>2</sup>

<sup>1</sup>Pharmacy Department, University of Wolverhampton

<sup>2</sup>Hospital Pharmacy Teacher Practitioner Team, Birmingham and the Black Country Workforce Development Directorate (BBCWDD)

<sup>3</sup>Pharmacy Department, The Dudley Group of Hospitals NHS Trust

alan.hindle@wlv.ac.uk; jeff.aston@nhs.net; julie.mccarthy@dgo.h.nhs.uk;  
michelle.haddock@heartofengland.nhs.uk; liz.payne@walsallhospitals.nhs.uk;  
matt.wright@uhb.nhs.uk

**Keywords:** teacher-practitioner, clinical teaching, hospital, pharmacy, careers

### Introduction

Teacher-practitioner led hospital-based teaching has been incorporated in to undergraduate curricula to aid the development of skills such as problem solving, communication, application of knowledge, information retrieval and professionalism (Hanning, Price *et al.* 2002; Shah 2004). The potential advantages of appointing dedicated teams of hospital pharmacy teacher-practitioners include better planning and coordination of teaching and learning activities which are of a higher quality (Hanning, Price *et al.* 2002). Barriers to hospital pharmacy recruitment may be overcome by raising awareness of hospital pharmacy and introducing hospital-based clinical pharmacy teaching in to the undergraduate course (Hatfield, Marriott *et al.* 2000; Silverthorn, Price *et al.* 2003). Traditionally, pharmacy undergraduates at Aston University have attended local hospitals within the West Midlands region to gain experience of the various aspects of hospital pharmacy careers and of clinical pharmacy practice. In 2003 the BBCWDD allocated funding for six half-time equivalent teacher-practitioner posts and one full-time lead post at West Midlands hospitals. The team's principal remit was to provide practice-based clinical pharmacy teaching to Aston University pharmacy students and to promote hospital pharmacy careers.

### Objective

To evaluate how pharmacy students at one University perceive the effectiveness of the NHS funded hospital pharmacy teacher-practitioner team in their provision of practice-based teaching and the impact of this teaching on hospital pharmacy career aspirations.

### Methods

A series of educational objectives relating to the successful attainment of skills, appreciation of the hospital pharmacist's role and relevance of hospital pharmacy to the undergraduate course were formulated. Groups of 4 to 6 students attended a series of three hour sessions. Each incorporated an initial interactive tutorial on a pre-determined topic, a student-led interview with one or more suitable patients, a group review of a

selected patient's medical notes and a final plenary discussion. Topics were selected from those which had recently been covered during pharmacology lectures. Students were assessed using a variety of methodologies including the electronic submission of pharmaceutical care plans to their teacher-practitioner, completion of a case study (fourth year undergraduates) and group case presentations (third year undergraduates). Based on the educational objectives, a semi-structured evaluation form incorporating rating scales, tick boxes and open questions was devised. Questions relating to perceived satisfaction and the impact of the visits on career choice were also incorporated. Students were handed an evaluation form at the end of each hospital visit and were asked to complete the form before leaving. Second year students attending an introductory session on hospital pharmacy were not formally evaluated.

## Results

During the 2004/2005 academic year 526 evaluation forms were completed by third and fourth year students over 120 teaching sessions. On a three point Likert scale, the majority of respondents believed that the length of the visit (91.1%) and the level of student input required (98.1%) were appropriate. The results of a four-point scale rating students' extent of agreement with a series of pre-determined statements about the session are shown in **Table 1**.

Evaluation statement/objective	% responses for each level of agreement			
	Strongly disagree	Disagree	Quite agree	Strongly agree
Pharmacist led session well	0.8	0	15.5	83.7
Visit was interesting	0.8	2.3	23.6	73.3
Improved confidence with patients	1.9	11.6	50.3	36.2
Improved communication skills	2.9	18.4	51.7	27.0
Improved awareness of multidisciplinary roles	2.7	18.5	49.4	29.4
Enabled visualisation of pharmacist's role	1.5	6.9	42.4	49.2
Enabled application of knowledge	0.4	3.3	36.5	59.8
Enhanced clinical knowledge	0.5	2.7	30.7	66.1
Work covered was easy	4.9	50.9	41.7	2.5

**Table 1:** Extent of student agreement with a series of statements about the session

On a three-point scale rating whether students viewed hospital pharmacy as a potential career option before and after each visit, the percentage of students who responded 'not at all' reduced from 15.7% to 9.4%. Similarly, the percentage of students who responded 'definitely' increased from 33.3% to 41.8%. The most commonly volunteered reasons related to a higher level of perceived interest, an increased awareness of hospital pharmacy and hospital pharmacist roles, increased clinical application and enhanced patient interaction.

## Discussion

The sessions appeared to have generated much interest with the majority of students and were also perceived to be well conducted by the teacher-practitioners involved. The appropriateness of the 'pitch' of the sessions was confirmed by the apparent normal distribution of responses around the perceived level of difficulty. Most respondents agreed that the visits had enhanced their practical application and level of clinical knowledge. Students were more likely to disagree that their communication skills, confidence in talking to patients and appreciation of the roles of pharmacists and other health professionals had improved. The team has since restructured the second year visits to focus on developing communication and case notes interpretation skills and has supported these sessions with a series of pre-visit virtual learning environment mediated interactive quizzes. A previous study identified clinical pharmacy teaching programmes and previous work experience as the largest influencing factors on hospital career choices (Silverthorn, Price *et al.* 2003). The qualitative and quantitative data presented appears to confirm the value of teacher-practitioner led hospital-based clinical teaching sessions in contextualising university-based learning and in promoting hospital pharmacy careers. However, because the career evaluation questions were undertaken at the end of each visit and because the data collection tool has not been validated, the results should be viewed with caution.

## References

- Hanning, L., Price, G., *et al.* (2002) A new approach to clinical pharmacy practice teaching in the four-year degree course. *The Pharmaceutical Journal* **269**: 163-165.
- Hatfield, K., Marriott, J., Harper, A. (2000) Raising awareness of hospital pharmacy among undergraduate pharmacy students. *Hospital Pharmacist* **7**(7): 199-201.
- Shah, R. (2004) Improving undergraduate communication and clinical skills: personal reflections of a real world experience. *Pharmacy Education* **4**(1): 1-6.
- Silverthorn, J., Price, G., *et al.* (2003) Short Report: Factors that influence the career choices of pharmacy undergraduates. *Pharmacy Education* 2003; **3**(3): 161-167.