

Structured medication checking workshops: student attitudes and performance

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Introduction One of the core roles of any practising pharmacist is to ensure that the medicine given to a patient is appropriate and safe. This is usually performed by completing a final check on a dispensed prescription prior to issue.

Current dispensing assessments concentrated on the processing of prescriptions including checks for legality and safety but not a final check of an assembled product undertaken by a third person.

Undergraduate and preregistration trainees get little or no opportunity to practise this skill before they qualify. The objective structured clinical examination (OSCE) was therefore adapted to encourage final year BSc pharmacy undergraduates to develop individual strategies toward the art of checking other people's work.

Method Students undertook two workshops. The first was a dummy run, followed by small group tutorials giving feedback and guidance on how to check prescriptions; the second was conducted under examination conditions. In each workshop, students were asked to check 17 prescriptions involving a total of 38 items. All but one prescription (a private prescription) were based on a National Health Service FP10 prescription form, and contained between one and four items. Each prescription had been previously dispensed and labelled but incorporated a number of deliberate errors. Errors included technical and clinical problems, such as wrong product dispensed, drug interaction and overdose. A limit of two minutes per prescription was set after which students rotated to the next prescription. Marks were awarded on a pass (1 mark) or fail (0 mark) basis for each prescription. A maximum score of 17 could therefore be attained if all errors were spotted. On completion of the OSCE checking workshops, students were asked to

FOCAL POINTS

- A new structured format of teaching and learning was successfully implemented
 - Student performance improved under the system
 - Students actually enjoyed the experience
 - OSCE style workshops have now become part of the undergraduate curriculum
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complete a self-administered questionnaire on the new practical format.

Results A total of 83 students participated in both practical sessions. The mean student score for the dummy workshop was 5.6 ± 0.3 (95 per cent confidence intervals); only 23 students attained the pass mark of over 40 per cent. After attending a tutorial on checking procedures, the mean student score for the assessment rose to 8.3 ± 0.29 ; 67 students exceeded the 40 per cent pass mark. The improvements in scores were highly significant ($P < 0.001$, paired t-test). Only four students scored a lower mark in the assessment than the dummy workshop.

A 100 per cent response rate was obtained to the student questionnaire ($n=83$). Almost half (49 per cent) of the students felt that the number of prescriptions to check was not excessive, although nearly two-thirds (64 per cent) said that two minutes per prescription was insufficient time to check the prescriptions, especially those that had four items. However, 71 per cent stated that the marking criteria were fair. Nearly all students (94 per cent) said they benefited from having the dummy run and found the tutorial useful. Subsequent to the tutorial, 87 per cent devised their own checking routine prior to the assessment. Overwhelmingly (94 per cent), students endorsed the format of the workshops, stating they would like to have more sessions and recommending (90 per cent) that they

should be given to future final year students.

Discussion OSCE workshops have long been part of the undergraduate curriculum for medical students¹ and have gained universal widespread acceptance as a useful teaching and assessment tool. Furthermore, medical students themselves have positively endorsed this method of teaching.² From our experience OSCEs do have a role to play in undergraduate pharmacy teaching. Students performed poorly in the dummy workshop, but after becoming familiar with the format and with tutorial support performed significantly better second time round.

These findings were endorsed by student feedback indicating that they found the exercise useful and that they were able to reflect on and develop personal strategies for checking prescriptions. Portsmouth University has decided to adopt and extend OSCE style teaching to cover other areas of pharmacy practice to final year students commencing in 2001.

References

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