

the highest or 2nd-highest rating (on a 5-point Likert scale) to the instructional techniques used, to the course format and to perceived gains in their understanding. In 2004, students were asked to 'rate the value of learning EM within the scheme of medical education' on a scale of 1–5, where 5 was 'every student ought to understand EM' and 4 was 'very valuable'. The mean score on this single item was 4.7. One student commented, 'EM adds a valuable new perspective that has profound implications for how we absorb and synthesise medical information, but also has strong clinical relevance and gives us the knowledge to better treat and educate patients'. Several students suggested that the basic concepts of EM should be introduced earlier in medical school. Thus, we have scheduled the first introductory EM session for all 1st-year students.

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### Critical evaluation of drug promotion using role-plays

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**Context and setting** The pharmacology department trains medical students to use drugs rationally in their future practice. Essential drugs, selecting personal or P-drugs for different diseases, individualising a P-drug for a particular patient, writing proper prescriptions and conveying drug-related and non-drug information to patients are emphasised. Students are taught how to analyse critically sources of drug information.

**Why the idea was necessary** The pharmaceutical industry is an easily accessible source of information for doctors. However, the industry is interested primarily in promoting its products and information from industry sources should be analysed critically and compared with independent sources. Medical representatives (MRs) play a crucial role in promoting drugs. Unethical drug promotion is a major problem. Teaching future doctors about various strategies used by MRs for drug promotion,

critical analysis of promotional materials and how not to be influenced by the sale pitches of MRs is essential.

**What was done** During the practical sessions (each of 2.5 hour duration) students were divided into small groups of 7 or 8 and were asked to enact a role-play of a MR describing a medicine to a doctor according to their preconceived ideas of drug promotion. The various groups enacted their role-plays. Lacunae and unethical promotion practices observed were discussed by the student body and the facilitators. The 'World Health Organization Ethical Criteria for Medicinal Drug Promotion' was taken as the standard. Following the discussion the groups were asked to modify the role-plays if necessary and describe the medicines ethically. In the second session after 2 weeks one of us (PS), who had worked as a MR previously, presented a role-play of a MR promoting his medicine before the students, who were asked to analyse the role-play. The students were taught how to optimise time spent with MRs. As a group activity they had to design a role-play for ethical promotion of a particular medicine, taught during the preceding 2-week period. The third session of role-plays and critical analysis of drug advertisements and promotional materials carried out after a 1-month period re-emphasised the concepts.

**Evaluation of the results and impact** The 2nd, 3rd and 4th semester students completed an anonymous questionnaire at the end of the third session. Gender, semester of study, nationality, method of financing of education, profession of parents and medium of instruction at school were noted. The students' attitudes towards the sessions were obtained using a Likert-type scale (total of 13 statements). Three statements were negative and their scores were reversed while calculating the total score. A total of 174 students participated and the median total score was 45.5 (maximum score 65). The 2nd semester students had a more positive attitude compared to other semesters. No significant differences in scores were seen among other subgroups. The strengths and weaknesses of the sessions were elicited. The sessions helped students understand the impact of unethical promotion and they were taught to optimise time spent with MRs. The weakness was that not all students participated actively. The respondents wanted more sessions in the future.

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