

Title: How prepared are our medical students to take on prescribing responsibilities upon graduation?

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Context and setting: Prescribing is an essential skill for doctors, and the General Medical Council expects all UK medical students to be competent to prescribe at the point of graduation. At present, the 5-year medical curriculum of the University of Malaya (UM) does not have a structured programme specifically for prescribing skills training or its assessment.

Why the idea/change was necessary: In recent years, there have been studies globally which showed poor prescribing behaviours among house officers and medical students. And in the local scenes, there have been anecdotal accounts of perceived incompetence of our medical graduates in prescribing medications upon graduation. There were, however, no local studies that provided evidence to verify this perception. This study therefore aimed to investigate the perceptions of medical students and house officers on their preparation and competency to prescribe upon graduation, as a first step to designing a structured training programme.

What was done? A nominal group discussion was held with nine Year-5 medical students (January 2008) to obtain a consensus on their responses to the exploratory question “What are the factors that affect your learning in acquiring prescribing skills?” A questionnaire was constructed based on these agreed responses and a published questionnaire (in UK). In February 2008, this questionnaire was administered to the whole class of 152 UM Year-5 students, a month before the final examination. Another questionnaire, adapted from two published studies (in UK and USA), was developed to obtain responses from house officers regarding their current prescribing practices, their learning experience as house officers, and their previous undergraduate training on prescribing skills. This questionnaire was sent, in June-July 2008, to house officers (both UM and non-UM graduates of 2007) serving in 16 randomly selected government hospitals throughout Malaysia. For most questions, respondents were required to rate their perceptions based on a 5- or 7-point scale.

Evaluation of the results and impact: The interview with nine Year-5 students identified 17 factors that affected their learning of prescribing skills. The top ten agreed factors were incorporated into the questionnaire for study on the whole class. In the first survey, 123 UM students (81% of those graduating in 2008) completed the questionnaires. Their responses on factors affecting their learning of prescribing skills confirmed the findings of the earlier interview with the nine students, i.e. there was a lack of integration in the teaching of basic and clinical pharmacology and also a lack of opportunities for practising prescribing skills in the clinical years. The undergraduate training experience on drugs and prescribing reported by students were similar to that reported by house officers (17 UM and 70 non-UM graduates in 2007) in the nation-wide survey. While both medical students and house officers agreed that the amount of basic and clinical pharmacology lectures during their undergraduate training was adequate, they indicated a deficiency in the provision of other learning styles in teaching drugs and prescribing. Undergraduate experience of relevant clinical skills for prescribing practice was varied and showed some unique

differences associated probably with the place of undergraduate clinical training. There was a generally poor use of the various resources for drug information, especially during houseman year. Despite the second survey showing that >25% house officers felt ill-prepared to take on prescribing responsibilities at the point of graduation, most of these medical graduates appeared to have acquired safe prescribing behaviours by the end of their housemanship training. This suggests that the learning of prescribing skills took place predominantly while on the job as house officers.

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