

Clinical skills performed by Pre-registration House Officers (interns) in Kuwait

Short Report

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Introduction

Pre-registration House Officer (PRHO) training, also called internship training, has received increased attention of authorities such as the General Medical Council (GMC) in the UK during the recent past,¹ and has been studied by many investigators. It has been reported that during training PRHOs do not acquire sufficient competency in performing practical procedures, some of which may even be considered as essential.² Only about a quarter of the PRHOs in a survey in the UK felt that the experiences at medical school had prepared them well for the jobs they had undertaken.³ Similar findings have been reported in other studies.^{4,5} In another investigation, however, final year medical students and PRHOs had stated that they had acquired the majority of the required core clinical skills before the end of the final year or during the PRHO year.⁶

The internship training program in Kuwait is administered by the Kuwait Institute for Medical Specialization (KIMS). Approximately 90 interns are posted annually at five major General Hospitals to follow rotations in Medicine (16 weeks), Surgery (16 weeks), Obstetrics and Gynecology (8 weeks), and Pediatrics (8 weeks). A scheme of structured training was introduced starting with the cohort that commenced internship training in March 2002.

Objectives

This study was undertaken to determine clinical procedures performed by PRHOs during specialty rotations. This report presents preliminary data from the study with respect to the clinical skills performed during clinical rotations in Internal Medicine and the frequency of performance of these procedures.

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Subjects and Methods

A questionnaire was distributed among the PRHOs in the 2002/03, 2003/04 and 2004/05 cohorts who followed rotations at clinical units in Internal Medicine at Ministry of Health hospitals (Amiri, Mubarak, Farwaniya and Adan). Each training unit had an average of 5 to 6 trainees, with approximately equal proportions of males and female trainees assigned to it. The questionnaire listed 53 important clinical skills and was given at the end of PRHO training. The trainees responded anonymously to the questionnaire.

Each respondent indicated whether he or she performed the skill listed and, if so, the number times it was done.

Results

Table. Percentages of PRHOs who performed the important clinical skills more than once or did not perform them at all during internship training

Clinical Skill	Performed more than once (%)	Did not perform (%)
Basic X-ray interpretation	97.4	1.1
Basic ECG interpretation	95.9	2.3
Arterial puncture for blood gas analysis	84.9	4.2
Inserting intravenous line	71.7	8.7
Blood sampling	77.4	10.6
Inserting urethral catheter	77.7	12.1
Nasogastric feeding	72.5	12.5
Urine examination	64.2	25.3
Administering CPR	61.1	20.0
Pleural tap	55.1	27.2
Securing airway	50.6	27.9
Lumbar puncture	38.1	45.3
Endotracheal intubation	32.8	47.6
Cardiac defibrillation	31.3	53.6
Insertion of thoracic drainage	32.5	55.5
Inserting central venous catheter	30.9	58.9
Treatment of tension pneumothorax	26.4	57.0
Needle aspiration of knee joint	21.5	67.9

265 questionnaires were available for analysis (response rate 72%). The table on opposite page shows the percentages of trainees who performed the essential skills more than once or did not perform them. Over 95% of the respondents had performed basic X-ray and ECG interpretation. 61% had stated that they performed CPR, while 20% responded that they did not perform this procedure.

Discussion

Many essential skills that all trainees should perform had not been done by some of the trainees during the internship training period. Among these skills were tasks such as endotracheal intubation, administering cardiopulmonary resuscitation (CPR), inserting urethral catheter, and inserting intravenous line. As some of these are life-saving procedures it could be considered as unacceptable that even a small proportion of the trainees (at least a fifth of the respondents in this study) did not perform them. Moreover, other skills such as ECG interpretation, inserting an IV line, or inserting a urethral catheter are basic essentials that all trainees without any exceptions need to be able perform satisfactorily.

Conclusions

The study demonstrates that the PRHOs had not performed some basic or essential clinical skills. Among the important clinical skills that all trainees should perform whereas only some had done so were procedures such as endotracheal intubation, administering cardiopulmonary resuscitation, inserting urethral catheter, and inserting intravenous line.

Curriculum planners and trainers supervising the PRHOs need to ensure that PRHOs receive sufficient opportunities during training to have full exposure to the important clinical skills. It also is necessary to undertake future prospective studies on the clinical skills acquired by PRHOs to ensure that the minimum competency levels are achieved.

References

1. General Medical Council. *The New Doctor*. London: GMC; 1997.
2. Fox RA, Ingham Clark CL, Scotland AD, Dacre JE. A study of pre-registration house officers' clinical skills. *Med Educ* 2000;34:1007-12.
3. Goldacre MJ, Lambert T, Evans J, Turner G. Preregistration house officers' views on whether their experience at medical school prepared them well for their jobs: national questionnaire survey. *Br Med J* 2003;326:1011-2.
4. Calman KC, Donaldson M. The pre-registration house officer year: a critical incident study. *Med Educ* 1991;25:51-9.
5. Falck G, Brattebo G. Skills of pre-registration house officers: gender differences reported in Norway. *Med Educ* 1997;31:188-9.
6. Bax NDS, Godfrey J. Identifying core skills for the medical curriculum. *Med Educ* 1997;31:347-51.

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