

Confidence in performing core clinical skills: preliminary results of a survey of trainees completing internship training in Kuwait

I.G. Premadasa¹, Daaa Shehab², Khaled F. Al-Jarallah³, Lukman Thalib⁴

Background Several surveys suggest the under-emphasis of the learning of practical skills during internship training. While the proportion of interns that had performed some of the common practical procedures during training appeared inadequate, the interns themselves had rated their development of practical skills as not high. Many interns had also indicated that they felt confident to initiate management of conditions although they were not experienced in those areas. We did not encounter any publications dealing specifically with internship training in the Arabian Gulf region.

Objective This study was aimed at determining the confidence of interns in performing core clinical skills.

Methods Interns who completed rotations in the major specialties during 2005/06 responded to a questionnaire that listed 48 core clinical skills. Out of the 124 eligible for the study, 85 responded. They indicated their confidence to perform the skills in future and the number of times these had been performed.

Results The majority of the interns felt confident with routine skills, while approximately half felt confi-

dent with emergency resuscitation skills. A third of the trainees were confident in performing artificial ventilation and endotracheal intubation. Similarly, a half was confident in performing pericardiocentesis, indirect laryngoscopy, lumbar puncture, irrigation of the ear, insertion of thoracic drainage, venous cut-down and insertion of central venous catheter. Only about a third of trainees, with no significant gender variation, felt confident to perform common skills in obstetrics & gynecology.

Conclusions While half the trainees were confident in performing emergency resuscitative measures, many others lacked confidence in doing these skills or clinical skills needed in routine situations. Interns who may not acquire competency in the core skills need to be identified early and corrective measures taken. The findings may have implications in the review of the medical undergraduate curriculum as well as in internship training.

Key words: internship training, clinical skills, performance, Kuwait

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Introduction

The internship year provides the new medical graduates with the opportunity of supervised practice, during which they acquire a set of core clinical skills. In addition, the internship rotations, which are undertaken in the major specialties, allow the trainee to function in the professional role of a medical practitioner and develop essential attitudes and values.

One of the important attributes that the graduate needs to develop during training, initially at the intern and later at the post-graduate trainee phase, is adequate confidence to undertake the requisite procedures when the situation demands. The trainee, therefore, needs to be exposed to the different situations that require the performance of those skills. Such interactions in the clinical situations would help in laying the foundation for engaging in independent practice later on, while enhancing the level of confidence for performing the different skills and procedures satisfactorily.

Several surveys regarding the perceptions of interns suggest that the learning of practical skills receives inadequate attention during training. Fewer than 15% of interns had performed five or more common practical procedures after their first posting,¹ and new

¹Director, CME Center, Kuwait Institute for Medical Specialization; ²Internist and Physiatrist, Associate Professor, Department of Medicine, ³Internist and Rheumatologist, Associate Professor, Department of Medicine, Faculty of Medicine; ⁴Medical Statistician, Associate Professor, Department of Community Medicine & Behavioral Sciences, Faculty of Medicine, Kuwait University.

Correspondence: Dr. I.G. Premadasa, CME Center, Kuwait Institute for Medical Specialization, P.O. Box 1793, Kuwait 13018. e-mail: premadasa@kims.org.kw

doctors did not rate their development of practical skills as high.² Other reviews of interns' perception of preparedness indicated that newly qualified doctors were not adequately prepared for internship duties.³

Self-reported confidence of interns and supervisors' assessments of interns' competence have been shown not to be related.⁴ A matter that should be of concern is that many interns had felt confident to initiate management of conditions in which they were not experienced. Turner et al. had pointed out that the interns surveyed had felt very confident in performing practical skills for which they had not received any additional training in those areas compared to the minimal level of experience gained at undergraduate level.⁵ In the study by Clayton et al.,¹ too, a high proportion of interns indicated that they felt confident to initiate management of conditions in specialties in which they had little or no experience.

A review of the PubMed and Medline listings did not reveal any publications specifically dealing with internship training in the Gulf Cooperation Council (GCC) region. If adequate information on the acquisition of core skills by interns is available, planning for intern training in the institutions concerned could be undertaken more effectively. With the increasing attention that is being given by the authorities for the development of health manpower resources in the member countries, it is imperative that internship trainers and program directors take a close look at current training programs and institute remedial measures where deficiencies are observed. An important element of such actions should be instilling in the trainee the importance of recognizing own limitations and guarding against over-confidence in one's own abilities.

In Kuwait, the Kuwait Institute for Medical Specialization (KIMS) administers internship training, with trainees posted for attachments in the specialties of Medicine, Surgery, Obstetrics & Gynecology, and Pediatrics at the major teaching hospitals (Adan, Amiri, Farwaniya, Maternity, Mubarak and Sabah) and for an elective rotation in Primary Care practice. This report presents the preliminary findings of an investigation on the confidence that interns had in performing clinical skills.

Objective

This study aimed to determine the confidence that new graduates who completed internship training possessed for performing a set of core clinical skills.

Materials and Methods

In consultation with clinical trainers and program directors responsible for internship training in Kuwait, and considering the skills that had been listed in previous investigations,⁶ a list of 48 clinical skills that all interns should have performed by the time they completed internship training was selected. The 48 skills were grouped under Medicine, Surgery, Obstetrics & Gynecology and Investigative Procedures. The skills that came under more than one specialty were categorized under a fifth group, Generic Skills. Interns who completed rotations in Surgery, Medicine, Obstetrics & Gynecology, and Pediatrics during 2005/06 was given a questionnaire that listed these skills.

Out of the 124 eligible for the study, 85 responded. The respondents indicated their confidence to perform the skills in future and the number of times the skills had been performed during training.

The data obtained were analyzed based on the counts and percentages of responses in each category, and the results correlated with the perceptions of confidence for performing each of the skills listed.

Results

85 questionnaires were available for analysis (response rate 69%). The majority of the interns felt confident with routine skills [basic X-ray interpretation (88%), basic ECG interpretation (87%), inserting intravenous line (72%), inserting urethral catheter (73%), and nasogastric feeding (66%)]. Approximately half the trainees felt confident with emergency resuscitation skills such as securing airway (55%) and administering cardiopulmonary resuscitation (48%), with a third being confident in performing artificial ventilation (38%) and endotracheal intubation (33%). Similarly, a half was confident in performing indirect laryngoscopy (53%), lumbar puncture (51%), irrigation of the ear (48%), insertion of thoracic drainage (48%), venous cut-down (48%) and

insertion of central venous catheter (47%). Only about a third of trainees, with no significant gender variation, felt confident to perform common skills in obstetrics & gynecology such as repair of episiotomy (42.5%), conducting normal deliveries (35.5%), high vaginal swab (27.5%), collection of cervical smear (22.5%), artificial rupture of membranes (19.5%) and application of fetal electrodes (19.5%).

Discussion

The perception of preparedness and confidence to perform clinical skills appears to be insufficient among the group of trainees surveyed, as has also been shown in other studies investigating the preparedness of new graduates for their role as interns.⁷ Substantial proportions of trainees stated that they lacked confidence in performing some of the emergency resuscitative measures as well as clinical skills that are needed in routine situations.

A diagnostic screening tool used by Ben-David⁸ during 1992-2002, and later developed further by Hesketh et al.⁹ has helped keep track of the performance of junior doctors throughout their first postgraduate year. Frankel and English highlight the importance of communication between the medical school and the employers of interns in taking remedial measures.¹⁰ With the introduction of a course on student self-direction in the final year, which was aimed at helping build confidence in the future role of intern, encouraging results have been reported.¹¹ A period of induction had helped in improving perception and competence levels in clinical skills, history taking and examination.¹²

Conclusions

It is necessary to identify at an early stage in the training interns who may not receive the relevant opportunities for learning and to implement appropriate measures to ensure that the trainees acquire competency in the core skills. Additionally, the utilization of the training opportunities needs to be closely monitored so that all trainees get experienced in the core skills. Where it is found that there is a better opportunity to acquire specific skills, the curriculum for training needs to be reviewed and objectives related to these skills moved to a later phase.

References

1. Clayton RA, Henderson J, McCracken SE, Wigmore SJ, Paterson-Brown S. Practical experience and confidence in managing emergencies among preregistration house officers. *Postgrad Med J.* 2005;81:396-400.
2. Hesketh EA, Allan MS, Harden RM, Macpherson SG. New doctors' perceptions of their educational development during their first year of postgraduate training. *Med Teach.* 2003;25:67-76.
3. Evans DE, Wood DF, Roberts CM. The effect of an extended hospital induction on perceived confidence and assessed clinical skills of newly qualified pre-registration house officers *Med Educ.* 2004;38:998-1001.
4. Barnsley L, Lyon PM, Ralston SJ, Hibbert EJ, Cunningham I, Gordon FC, Field MJ. Clinical skills in junior medical officers: a comparison of self-reported confidence and observed competence. *Med Educ.* 2004;38:358-67.
5. Turner KJ, Brewster SF. Rectal examination and urethral catheterization by medical students and house officers: taught but not used. *BJU Int.* 2000;86:422-6.
6. Bax ND, Godfrey J. Identifying core skills for the medical curriculum. *Med Educ.* 1997;31:347-51.
7. Evans DE, Roberts M. Preparation for practice: how can medical schools better prepare PRHOs? *Med Teach.* 2006:549-52.
8. Ben-David MF, Snadden D, Hesketh A. Linking appraisal of PRHO professional competence of junior doctors to their education. *Med Teach.* 2004;26:63-70.
9. Hesketh EA, Anderson F, Bagnall GM, Driver CP, Johnston DA, Marshall D, Needham G, Orr G, Walker K. *Med Teach.* 2005:219-33.
10. Frankel A, English S. Transfer of information from medical schools. *Hosp Med.* 2004;65:170-3.
11. Whitehouse CR, O'Neill P, Dornan T. Building confidence for work as house officers: student experience in the final year of a new problem-based curriculum. *Med Educ.* 2002;36:718-27.
12. Lempp H, Cochrane M, Seabrook M, Rees J. Impact of educational preparation on medical students in transition from final year to PRHO year: a qualitative evaluation of final-year training following the introduction of a new year 5 curriculum in a London medical school. *Med Teach.* 2004;26:276-8.