

Learning procedures during house job

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Abstract

House job is the important year of the clinical experience under supervision before the start of the own practice as a physician. It is understood that clinical experience of new medical graduates are poor and they are expected to learn clinical skills by one year house job experience. Hence there is need to assess the basic clinical skills competency. A questionnaire was given to thirty house officers regarding the ten basic clinical procedures which are expected from all of them to learn and carry out independently till the end of their house jobs. They were asked to fill it up according to their competency level at the beginning and end of their jobs. The purpose of the study was to assess the competency level of the house officers individually which will provide information to the supervisors what needs attention so that remedial action can be taken in time.

This study was undertaken to find out how much confidence the house officers acquire during house job in carrying out specified procedures.

Introduction

Acquisition of expertise in clinical skills requires repeated practice and rigorous assessment.¹ Basic clinical skills are acquired through ward teaching in a random, unpredictable manner, which may account for considerable variation found between student ability.² Many students graduate without receiving formal skills training and many practical skills are then performed during the house job.³ There is evidence that medical students continue to feel that clinical skills training in the undergraduate year is insufficient thus they do not feel confident to carry out clinical procedures such as catheterization and suturing,⁴ when they enter their clinical phase of training. The maximum amount of clinical skills learning is then done during the house job phase and inadequate learning at this stage leaves them at a great loss at the end of their house job.

However the acquisition of competence in clinical skills is a continuous process that is achieved only through actual experience of managing patients throughout the career of a doctor.⁵

The aim of this study was to determine the competency of clinical skills of house officers before and after completing their house job, thus helping them to

improve in skills learning at this early stage.

Subjects, Methods and Results

A prospective cohort study was conducted on thirty house officers of Ziauddin University Hospital. They were given a list of procedures which had been a part of their undergraduate training (Table).

TABLE

Procedure	Pre House job		Post House job
	Level	Number	Number
Insert a urinary catheter	2	14	30
	1	8	0
	0	8	0
Insert an NG tube	2	7	29
	1	12	1
	0	11	0
Insert an IV cannula	2	9	22
	1	14	7
	0	7	1
Correctly use a nebulizer *	2	13	23
	1	7	6
	0	8	1
Interpret a routine Chest X-ray	2	22	29
	1	5	1
	0	3	0
Perform ECG	2	11	11
	1	11	18
	0	7	1
Apply and remove stitches	2	7	27
	1	11	3
	0	12	0
Perform CPR	2	4	12
	1	13	18
	0	13	0
Administer oxygen therapy safely	2	9	24
	1	15	5
	0	6	1
Carry out surgical scrubbing	2	20	30
	1	7	0
	0	3	0

The questionnaire was handed out to house officers just after commencing the house job. They were asked to record whether they could carry out the specified procedure independently, perform under supervision or could not perform. The same questionnaire was again given to the house officers just before they finished their 12 month of house job.

At the end of their training the number of the house officers who acquired the confidence to carry out the procedures independently is shown in the Table. The two procedures that all of them felt confident carrying it out independently were passing a catheter and surgical scrubbing. Except for one all the others felt confident in independently passing a Naso-Gastric tube and interpreting a Chest X-ray. In case of Cardiopulmonary resuscitation (CPR) (12/30) and recording an ECG (11/30) the majority did not feel confident to perform it independently. For the other six procedures, the doctors feeling confident varied between 22/30 to 27/30.

Conclusion

It was assumed that by the end of their 12 month training, all house officers would have acquired the confidence to carry out the specific procedures independently. The list of procedures and the expected competency was given to house officers at the start of their job. The limitation of house officers to do these procedural skills points out the deficiency to monitor their learning in the house job programme which needs the attention of the trainers.

CPR is a life saving skill that all house officers are required to learn during their 12 month of house job. Being deficient in this skill can have serious outcome when managing patients. The hospital has a well equipped skills laboratory with a CPR mannequin. Hence incompetency in carrying out the procedure of CPR indicates that the skill lab has not been availed to its full capacity. The supervisors need to determine the reason/s why some house officers have not acquired the required confidence in these basic skills.

Recommendations

1. All institutions offering house jobs should prepare a list of the procedures that the house officers are expected to learn during their training. It should also mention the level of competency the trainees are required to achieve.
2. All new house officers should be tested for their level of competency at the start of the programme. For the supervisors this will provide information about areas which need attention. It will also help them identify individual trainees who need more attention in respect to specified skills.
3. A log book listing all the procedures the trainees are required to learn should be provided to all new trainees. This should be monitored regularly, so that remedial action can be taken in time.
4. At the end of the year trainees should be asked to again fill up the questionnaire that they filled on joining. This will, as this study has shown, help the supervisors in planning future programmes.

References

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