

ORIGINAL ARTICLE

ANTICIPATED DIFFICULTIES IN HOUSE-OFFICERSHIP FOR GRADUATING MEDICAL STUDENTS OF THE SCHOOL OF MEDICAL SCIENCES, UNIVERSITI SAINS MALAYSIA KUBANG KERIAN, KELANTAN, MALAYSIA

Ahmad Fuad Abdul Rahim, Wan Hazabbah Wan Hitam*, Mohd. Najib Mohd. Alwi**
Ghazaim Ghazali***, Siti Zaleha Abdul Rahim****

Department of Medical Education, *Department of Ophthalmology, **Department of Psychiatry
Department of Anaesthesiology, *Department of Obstetrics and Gynaecology
School of Medical Sciences, Universiti Sains Malaysia
16150 Kubang Kerian, Kelantan, Malaysia

To aid future curriculum revision and planning, a batch of newly graduated medical students were surveyed using a questionnaire containing items representing possible areas of concern during house-officership. Students rated items representing communication issues as areas of concern. They did not agree that areas concerning responsibilities as a doctor, continuing medical education, theoretical and practical skills and potentially stressful working conditions were problem areas. Communication skills should remain among the priority areas for undergraduate training. Students should also be given more information about the house-officership period prior to graduation. Further study is needed to confirm perceived strengths of the USM curriculum suggested by the study, which are skills in finding resources for further learning and skills in leadership. A task-analysis of the house-officership period is also needed.

Key words : Medical Education, Stressors, House-officership

Introduction

Stress in the medical career causes psychological morbidity at all levels of seniority. It was found in one study that consultants had higher levels of stress compared to house officers (1). There was a strong correlation between stress and work demand. House officers' stress levels correlated with job autonomy, which is the degree of control they felt they had in decision-making. Working conditions were also a contributing factor, and this in turn affects the quality of clinical training they received during work (2). It also affects the quality of care that officers in accident and emergency departments provide. Their confidence in performing a range of clinical and practical activities correlated significantly with their psychological distress scores (3). The type of educational experience received during undergraduate training has a bearing on their

confidence after graduation to assess and manage common psychiatric conditions (4).

As factors perceived to be problem areas would be the most likely to cause stress, the aim of this study is to elicit the perceived problems or stressors to be faced by graduating medical students. This information would be useful to help define areas of concern as an aid to curriculum planning and revision.

Materials and methods

A one-day course was held for newly graduated medical students from the School of Medical Sciences, Universiti Sains Malaysia (USM). Its aim was to address the concerns of the students regarding their career in medicine. This opportunity was used to administer a questionnaire to the students.

The questionnaire contained 18 items that presented potential problem areas in terms of practical skills, theoretical skills, communication skills, responsibility, preparation for the house-officership period and the handling of stress. All problem areas were further represented by several items addressing various issues in the area concerned

except for practical and theoretical skills that were represented by one item each. Students were asked to rate the items using a 7-point Likert scale (Rating: 7: Very Much Agree, 5: Agree, 3: Disagree, 1: Very Much Disagree).

Results

Table 1: Potential problem areas during house-officership as rated by newly graduated medical students from the School of Medical Sciences, USM

Areas of concern	Item	Mean (Std. Deviation)	Overall Mean (S.D.)
Communication	Interaction with patients	4.5(1.2)	4.2(1.2)
	Interaction with colleagues	4.4(1.1)	
	Lack of communication skills	4.3(1.2)	
	Interaction with support staff	4.1(1.2)	
	Interaction with superiors	3.7(1.1)	
	Ignorant about house-officership period	4.3(1.2)	
Preparation for the house-officership period	Ignorant about reality of house-officership period	3.5(1.3)	3.8(1.2)
	Unsure of potential resources for improving competency	3.5(1.2)	
	Unskilled in ways to improve competency	3.4(1.2)	
Responsibility	Being a leader in a group	3.8(1.1)	3.3(1.3)
	Responsible for the lives of patients	3.6(1.6)	
	Possibility of causing death of a patient	3.1(1.2)	
	Making own decisions concerning patients' lives	2.8(1.1)	
Lack of theoretical knowledge			3.5(1.1)*
Potential stressful work conditions	Possibility of considerable mental stress	3.6(1.3)	3.0(1.3)
	Possibility of considerable physical stress	2.9(1.3)	
	Possibility of heavy workload	2.5(1.2)	
Lack of clinical skills			3.0(1.2)*
*Only one item representing this area			

A total of 104 students (88.1%) returned the questionnaires, 33 (31.7%) were males and 71 (68.3%) females.

The rating for each item was tallied and the mean and standard deviation computed using the Excel spreadsheet software. If more than one item represented a problem area the mean for that group was also obtained. The results are summarised in Table 1.

As a group, communication issues concerned the students the most (4.2). The highest rated problem area in the group, interacting with patients (4.5 out of a maximum of 7) was also the highest rated item of the whole questionnaire.

Surprisingly, the lowest rated by the students were areas concerning the handling of stress and lack of clinical skills (both 3.0)

Discussion

A similar study in a Canadian medical school revealed somewhat different results (5). In that study, the death of a patient, fear of error in making a diagnosis or treatment and dealing with a chronic and helpless disease were the major anticipated sources of stress. In the present sample of students, issues of communication as a group were the most highly rated possible stressors. Among the items in this group, it is important to note that interaction with patients was rated highly. In fact, all items in the communications group were rated above 4.0 (midpoint). This perhaps underscores the importance of training in communication skills for undergraduate students, especially regarding doctor-patient communication.

The second-highest rated group, which concerned the students, was preparation for the house-officership period. The overall rating of 3.8 suggests that they are unsure of what to expect after graduation. This is supported by the fact that ignorance about house-officership was rated highest in the group (4.3). However, despite being ignorant about the house-officership period, the graduates appeared to have prepared themselves to work under a high-workload conditions, as potentially stressful work conditions was rated second least stressful. It may be postulated that it is not so much as the work conditions that causes stress but the sense of helplessness and lack of control of what is happening and is about to happen; a finding also shown in one study (1).

The students did not perceive issues of responsibility, including the possibility of causing

the death of a patient, making decisions and being in a leadership position, as areas for concern. This contrasted with a study from the University of Toronto (5). Possible reasons for this needs to be looked into.

It is interesting to note that theoretical knowledge and clinical skills are among the lowest-perceived areas for concern by the students. Although this can be interpreted in many ways, carrying out physical examination on patients was also the lowest rated stressor in Coburn and Jovaisas' study.

For an institution practising problem-based learning where student-centred learning is emphasised and students are trained to look for learning resources on their own, several trends in the results warrant further attention. Firstly, it is comforting to see that they did not perceive finding resources for improving competency as a problem area, although one would hope that the mean rating would be lower. The same can be said about leadership, one of the attributes that are encouraged in this curriculum. However, any conclusions as to the presumed advantageous effects of the curriculum is premature as there was no comparison done to students from another system.

One would expect that after being exposed to group learning the students would feel more comfortable with issues of communication and not see it as a potential problem during house-officership. Perhaps interaction with patients is perceived as different from interaction with colleagues in a learning environment. Another possible reason is that the students were made aware of the potential difficulties in communication with patients and colleagues after going through the communication skills posting, thus making them apprehensive about the task. This would indicate that the exposure to the posting has done some good, although this does not mean that efforts to improve the posting and investigation of other possible reasons should not be carried out.

Communication as an area of concern should be studied further to pinpoint the skills in which students feel they are lacking in. Actual communication tasks that are carried out by house officers need to be identified.

Finally it should be pointed out that this study, as well as the Canadian study (5) looked at the stressors that newly graduated students perceived to be stressful without them actually undergoing the house-officership period. As mentioned, information about these perceived stressors would be useful to

aid future curriculum planning and revision. However, it is useful to have a follow-up study of this batch of graduating students to see any changes in the nature of stressors that they face. This information would further aid curriculum planners to prepare students for the reality of the medical career. A detailed and careful task-analysis of house-officership is also needed.

Acknowledgments

We thank Assoc. Prof Zalina Ismail and PADU, the Medical Alumni Association for their assistance in organising the workshop as well as Assoc. Prof Rogayah Jaafar for constructive comments and criticisms.

Correspondence :

Dr. Ahmad Fuad Abdul Rahim,
Department of Medical Education,
School of Medical Sciences,
Universiti Sains Malaysia,
16150 Kubang Kerian, Kelantan, Malaysia.

References

1. Kapur, N., Borril, C. and Stride, C. Psychological morbidity and job satisfaction in hospital consultants and junior house officers: multicenter, cross-sectional survey, *BMJ*, 1998; **317**: 511-12.
2. Baldwin, P. J., Newton, R. W., Buckley, G., Roberts, M. A. and Dodd, M. Senior house officers in medicine: postal survey of training and work experience, *BMJ* 1997; **314**:740-45
3. Williams, S., Dale, J., Glucksman, E. and Wellesley, A., Senior house officers work related stressors, psychological distress, and confidence in performing clinical tasks in accident and emergency: a questionnaire study, *BMJ* 1997; **314**: 713-22.
4. Williams, C., Milton, J., Strickland, P., Ardagh-walter, N., Knapp, J., Wilson, S., Trigwell, P., Feldman, E. and Sims, A.C.P. Impact of medical school teaching on preregistration house officers' confidence in assessing and managing common psychological morbidity: three centre study, *BMJ* 1997; **315**: 917-18.
5. Coburn, D. and Jovaisas, Al V. Perceived sources of stress among first-year medical students, *J. Med. Educ.* 1975; **50**: 589-95