The stress of registrarship

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A survey of 39 paediatric registrars was undertaken to determine the major stresses of training and their suggested solutions. The overwhelming majority (96%) considered registrarship to be stressful, with the major hardships being workload-related. Talking to someone was the most frequently used coping strategy. Reduced work schedules were regarded as the intervention that would best help alleviate stress. The findings may assist in the prioritisation of interventions to diminish the stress of registrarship.

S Afr Med ./ 1995: 85: 586-587.

The subject of stress during postgraduate training has received increasing attention in the past decade. While there is consensus that changes to the system of registrar training are needed, there is no agreement about which changes are most urgent. Should attention first be directed at working conditions, finance or educational issues?

The aim of this study was to determine the stressors local paediatric registrars were exposed to, what coping strategies they used, and how they felt stress could be reduced.

Methods

The study population consisted of all 43 paediatric registrars employed and available for study during December 1991 at the hospitals served by the Department of Paediatrics at the University of the Witwatersrand. Three registrars were unavailable for study. A confidential, anonymous questionnaire was used. Statistical analysis was performed by the Institute of Biostatistics using the SAS and BMDP computer packages.

Results

Thirty-nine of the 40 questionnaires distributed were returned, a response rate of 97%. Registrars worked a mean of 67 hours per week (range 40 - 85 hours). They had five 'intake' responsibilities per month (28 hours per shift) during which they averaged 2,5 hours of sleep per intake.

Ninety-five per cent of respondents regarded registrarship as physically strenuous, while 90% considered it an emotional strain. One registrar reported that the stress was so great that she had seriously considered suicide during registrarship. Despite this, 74% of trainees found registrarship a fulfilling experience.

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Two-thirds of respondents had seriously considered leaving the programme at some stage. The reasons given for this included disillusionment with paediatrics as a specialty, dissatisfaction with the training programme and poor working relationships with consultants.

Happiness

Most respondents (71%) agreed that the past year had generally been a happy one in their lives, though fewer (61%) thought that it had been a happy one professionally. Black registrars, as compared to white registrars, were significantly less likely to have found the year a happy one. either in general (P = 0,019) or at a personal level (P < 0,001). Junior registrars were more likely to have found previous non-registrarship years happier and to believe that the following year would not be a happy one. Fewer registrars who engaged in 'moonlighting', compared to 'nonmoonlighters', found it a happy year generally, but the difference was not significant (P = 0.081).

Sources of stress

During registrarship, the trainee is exposed to multiple sources of stress, including dealing with sick patients and their families, heavy workloads, difficult working relationships, financial difficulties, educational demands and personal problems. Respondents evaluated 35 different stressors, covering each of these areas, on a 5-point Likerttype scale. The ten situations considered most stressful are shown in Table I.

Table I. Ten most stressful situations

Situation	Mean ± SD	Quite/ excessively stressful (%)	
Making a mistake	$3,3 \pm 0,64$	90	
Working long hours	$3,3 \pm 0,74$	85	
Irregular working hours	$3,3 \pm 0,94$	82	
Chronic fatigue	$3,2 \pm 0,70$	85	
Not enough time to study	$3,2 \pm 0,97$	82	
Frustrating situations	$3,0 \pm 0,87$	69	
Inadequate sleep	$2,9 \pm 1,00$	74	
Lack of time for friends/family	$2,9 \pm 0,98$	74	
Constant strain	$2,9 \pm 0,77$	72	
Level of income	$2,9 \pm 1,25$	72	
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Scale: 0 = not stressful, 1 = mildly stressful, 2 = somewhat stressful, 3 = quite stressful, 4 = excessively stressful

Coping with stress

Registrars also evaluated the frequency with which they used 25 defined stress-coping strategies on a Likert-type scale. Communication with someone was the most frequent strategy used to combat stress; this person was usually a fellow registrar, followed in frequency by a spouse or significant other, and a friend. Talking to ward consultants or the head of the department ranked low on the list of strategies used.

'Self-understanding', attempts to see humour in the situation and watching television were other frequently used coping methods. The use of alcohol, drugs or professional counselling ranked lowest among strategies employed to combat stress.



Interventions

Respondents assigned scores to 23 possible interventions designed to reduce the stress of training. They also ranked their top three choices. Favoured solutions are shown in Table II.

Table II. Eight most important interventions to reduce stress

	Most important strategy		
Intervention	1st	2nd	3rd
Fewer intake (on-call) responsibilities	13	2	5
Allowing registrar to go home at			
08h00 post-intake	6	4	10
Reducing number of hours worked	6	5	2
Increased departmental assistance			
in preparing for examinations	2	5	6
Appreciation by consultants of stress			
in registrars	2	3	4
'High-quality' rounds and meetings	0	4	3
Better hospital facilities	2	2	0
More vacation time	0	4	2

Discussion

Not surprisingly, the overwhelming majority of trainees considered registrarship to be physically and emotionally strenuous. Since the breaking of the so-called 'conspiracy of silence' in the late 1970s, registrars are no longer embarrassed to admit the negative effects of registrarship on their personal and professional lives.

A disconcerting finding was the number of subjects who had considered leaving the programme. However, because very few registrars actually leave prematurely, the department may be falsely reassured that its trainees are satisfied with the programme. What was satisfying was that despite the perceived rigours of their training and the many causes of dissatisfaction identified, three-quarters of the registrars still considered the experience to be fulfilling.

The major hardships of registrarship were all workloadrelated. Long and irregular working hours, chronic fatigue and strain, frustrating situations and insufficient sleep generated the most stress in respondents, a finding congruent with many other studies of the same issue.

'Making a mistake' was rated the single most important source of stress. This underlines the importance that registrars attribute to performing well, and may explain their observed difficulty in dealing with criticism. It is noteworthy that mistakes induce much stress, even in an environment where litigation rates are low.

As documented in previous studies,1-3 communication with someone was the most frequently used stress-coping strategy utilised by registrars. Usually this involved a fellow registrar. Training programmes could respond to this finding by establishing regular group programme evaluation sessions. Such sessions would help each registrar realise that many of his/her own problems are not unique or insoluble, and also serve as a forum to express anger and discuss frustrations. Furthermore, joint representation by a group of trainees is more likely to be successful in initiating and instituting change.

The three top-ranked interventions to reduce stress were all related to working conditions - fewer intakes, shorter intakes and reduced working hours. The message is clear reduce working hours and registrars will be happier, less stressed, more willing to participate in the training programme and able to deliver improved patient care. But, is this realistic?

Studies from the USA and the UK caution that the solution is not straightforward or easy. In one study,4 reduced hours were partially successful in diminishing stress levels, but no demonstrable effects on patient care or registrar education were documented.

Conclusion

Registrars believe their working conditions to be the major source of stress, and consider an improvement in these conditions to be of primary importance. As academic departments are unlikely to find funding to employ more registrars, it is imperative that innovative strategies be devised to reduce/redistribute working hours without increasing the workload.

Training programmes that recognise that stress can be a major problem for registrars, and which observe a few basic rules such as reduction of exceedingly long 'intake' duties and prevention of sleep deprivation, may assist immensely in alleviating the distress of registrarship.

This paper is based in part on a dissertation submitted by Dr Saloojee for the degree of M.Sc. (Med.) at the University of the Witwatersrand. We thank the University of the Witwatersrand Research Committee for its financial support, and the Institute of Biostatistics.

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Accepted 24 Oct 1994.