

## Fatigue and stress in medical students, interns and residents: It's time to act!

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In this issue of *CMAJ* (pages 21 to 24) Lewittes and Marshall report the results of a 1984 survey of 1805 interns and residents in Ontario in which they found that house staff worked long hours, often felt fatigued and were concerned about the quality of care that they provided. They also found that house staff who were in the early years of training, when more hours were spent on clinical responsibilities, were more concerned about quality of care than those who were further along in their training. However, the relation between fatigue and concerns about patient care varied from specialty to specialty; for example, residents in surgery, who frequently reported high levels of fatigue, were no more concerned about the quality of care they delivered than residents in other specialties.

None of this information is particularly new or surprising. Recent reviews by Levin<sup>1</sup> and Butterfield<sup>2</sup> have clearly pointed out that fatigue and inadequate amounts of sleep rank high among the many factors that cause stress in interns and residents. It is also not surprising, therefore, that depression<sup>3</sup> and anger<sup>2</sup> emerge as significant mood changes during residency. What is surprising is the paucity of evidence linking mood change to the quality of patient care.

The fatigue and stress that physicians face is a fact of life to which most of us have learned to adapt. Indeed, some of our colleagues, I think, take pride in the amount of stress and fatigue they have endured. To remove all stress and the inevitable heavy workload from the residency program not only is impossible but also would poorly prepare physicians to face the realities of clinical practice. However, much remains to be done to lessen the stress, to prepare medical students and residents to adapt to the pressures of clinical practice and to help those who are in real difficulty.

First, medical educators and postgraduate program directors need to implement and evaluate programs to help students and house staff learn to cope with stress. No longer is it acceptable to assume that continuing stress will itself teach most students to adapt. An educational program probably will not ensure that all physicians will be able to cope, but it will provide them with skills that are very difficult to learn in the midst of a particularly stressful clinical situation.

Second, medical students and residents need to be trained to work efficiently. It is unreasonable to simply throw students and house staff into the mêlée of an emergency department or an intensive care unit and expect them to become skilled at being efficient. In addition, program directors could eliminate much of the educationally irrelevant work — the “scut” — that physicians-in-training are required to do; the service work that house staff do must never be allowed to impede their education.

Third, faculty and program directors must become more sensitive to the factors that cause stress in house staff, more observant of the signs of stress and fatigue, and more willing to initiate discussion about the problem. House staff must be assured that an admission of fatigue or stress to their supervisors is not unprofessional or detrimental to their careers.

Fourth, training programs and schedules must be carefully designed to allow house staff sufficient time for their families, social activities, recreation and study. Prolonged absence from family not only creates stress<sup>4,5</sup> but also deprives the physician of a valuable social support system.<sup>3</sup>

Fifth, students, interns and residents must learn to deal with the ambiguity and uncertainty that attend many clinical problems. The drive for perfection that was the key to gaining admission to medical school and residency programs may not be as useful in complex clinical situations. Clinical teachers can help by admitting their own uncertainty in making clinical decisions.

Finally, program directors must encourage the

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development of formal and informal social support systems, particularly for house staff in the early years of training. Ford and Wentz<sup>6</sup> have concluded that the quality of interns' social support is directly related to the levels of stress. Social support systems include formal counselling programs and informal support from families, faculty and fellow house staff.

None of these solutions will ever abolish the inevitable stress that house staff endure in dealing with difficult patient problems, suicide, untimely death and so on. But much can be done to ease their stress and to help them cope. In times of decreasing numbers of residency slots and growing workloads the stress on house staff can only increase. Postgraduate program directors must make every effort to ensure that the level of stress is controlled and that their interns and residents have the skills, support and time to cope with stressful situations. Otherwise, episodes of anger,

depression and emotional withdrawal will become more frequent, and, inevitably, the quality of patient care will suffer.

## References

1. Levin R: Beyond "the men in steel": the origins and significance of house staff training stress. *Gen Hosp Psychiatry* 1988; 10: 114-121
2. Butterfield PS: The stress of residency. A review of the literature. *Arch Intern Med* 1988; 148: 1428-1435
3. Hsu K, Marshall VW: Prevalence of depression and distress in a large sample of Canadian residents, interns, and fellows. *Am J Psychiatry* 1987; 144: 1561-1566
4. Landau C, Hall S, Wartman SA et al: Stress in social and family relationships during the medical residency. *J Med Educ* 1986; 61: 654-660
5. Kelner M, Rosenthal C: Postgraduate medical training, stress, and marriage. *Can J Psychiatry* 1986; 31: 22-24
6. Ford CV, Wentz DK: Internship: What is stressful? *South Med J* 1986; 79: 595-599

## Meetings

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**Feb. 15-18, 1989:** International Symposium on Effects of Therapy on Biology and Kinetics of Surviving Tumor  
Hotel Vancouver

Dr. Joseph Ragaz, Cancer Control Agency of British Columbia, 600 W 10th Ave., Vancouver, BC V5Z 4E6; (604) 877-6000, FAX (604) 872-4596

**Feb. 17, 1989:** AIDS: a Matter of Care  
Holiday Inn Downtown, Toronto  
Canadian Nurses Association, 50 The Driveway, Ottawa, Ont. K2P 1E2; (613) 237-2133, FAX (613) 237-3520

**Feb. 17-19, 1989:** Anaesthesia Highlights 1989: Clinical Judgement in Anaesthesia  
New World Harbourside, Vancouver  
Elizabeth M. Zook, Continuing Education in the Health Sciences, University of British Columbia, 105-2194 Health Sciences Mall, Vancouver, BC V6T 1W5; (604) 228-2626, FAX (604) 228-2495

**Feb. 22-24, 1989:** Colloque de l'Association mondiale des médecins francophones: la médecine francophone et le praticien  
Chateau Lake Louise, Lake Louise, Alta.  
Dr Jacques Bissonnette, Polyclinique St-Eustache Inc., 75 rue Grignon, St-Eustache, PQ J7P 4J2; (514) 473-6514

**Feb. 22-24, 1989:** Teen Parenting: Let's Stop Kidding Around  
Fantasyland Hotel, Edmonton  
Rose-Marie McCarthy, symposium coordinator, Alberta Provincial Advisory Committee on the Family, Box 2, Site 9, RR 4, Edmonton, Alta. T5E 5S7; (403) 973-6897

**Feb. 22-26, 1989:** Canadian Association of Pharmacy Students and Interns: Professional Development Weekend  
University of Alberta, Edmonton  
Lonnie Johnson, 14532 37th St., Edmonton, Alta. T5Y 2K2; (403) 478-1855

**Mar. 1-3, 1989:** 10th Annual Winter Symposium: Grand Rounds in Medicine  
Bahama Princess Resort, Freeport, Grand Bahama Island  
Christine Smith, director, Continuing Medical Education, Sir Charles Tupper Medical Building, Dalhousie University, Halifax, NS B3H 4H7, (902) 424-2062; or Rose Alaimo, Continuing Medical Education, McMaster University Health Sciences Centre, Rm. 1M7, 1200 Main St. W, Hamilton, Ont. L8N 3Z5, (416) 525-9140, ext. 2219 or 2223

**Mar. 1-4, 1989:** Courses in Basic and Advanced Colposcopy, Gynecologic Laser Surgery and Laser Nursing  
Pointe at Squaw Peak Resort, Phoenix, Arizona  
Dr. V. Cecil Wright, 887 Richmond St., London, Ont. N6A 3J1, (519) 438-1411; or Mary Ann Riopelle, Biomedical Communications, 3609 Cason St., Houston, TX 77005, USA, (713) 224-7580

**Mar. 1-4, 1989:** Psychiatric Update  
Whistler Conference Centre, Whistler, BC  
Dr. Alan Buchanan, 192-810 W Broadway, Vancouver, BC V5Z 4C9; (604) 261-3870

**Mar. 5-7, 1989:** Canadian College of Health Service Executives National Congress — Consumers, Caregivers, Creativity and Cooperation: Foreseeing the Future  
King Edward Hotel, Toronto  
Charles A. Shields, Jr., vice-president, Professional Development, Canadian College of Health Service Executives, 201-17 York St., Ottawa, Ont. K1N 5S7; (613) 235-7218

**Mar. 9-10, 1989:** La dermatologie du praticien  
Auberge des gouverneurs (centre-ville), Québec  
Annie Alberro, Service de formation continue, Fédération des médecins omnipraticiens du Québec, 1100-1440, rue Ste-Catherine ouest, Montréal, PQ H3G 1R8; (514) 878-1911, ou 1-800-361-8499 pour les indicatifs 514, 819, 418 et 613

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