

Factors affecting female or male consultant stress in an Australian teaching hospital

Colleen T Bruce,* Margaret M Sanger,†
Paul S Thomas,‡ Jonathon R Petkus,§
Deborah H Yates¶

* Research Assistant, † Senior Lecturer, Faculty of Medicine, University of New South Wales, Randwick, NSW; ‡ Deputy Medical Director, Concord Repatriation General Hospital, Concord, NSW; § Medical Student, ¶ Senior Lecturer, Faculty of Medicine, University of Sydney. Correspondence: Dr Deborah H Yates, Department of Respiratory Medicine, St Vincent's Hospital, Darlinghurst, NSW 2010. deborahy88@hotmail.com

TO THE EDITOR: The demands of practising medicine can have significant effects on general health, work satisfaction, professional and non-professional life.¹ We conducted a survey among senior medical staff in a metropolitan teaching hospital. The survey explored the pressures of work, social and family demands on consultants, and whether there was a difference between sexes.

Participants completed a self-reported questionnaire on quality of life, levels of stress and feelings of work satisfaction, using previously validated questions and scoring from the General Health Questionnaire (GHQ-28, a 28-question subset of the GHQ)² and Specialist Doctors Stress Inventory (SDSI).³ (Questionnaire available from authors on request.) Respondents answered anonymously and gave informed consent.

Fifty-seven per cent of consultants (54/94) returned surveys, of whom a third (18/54) were women. The response rates were comparable to those of other physician surveys.⁴

On average, consultants had been employed at the hospital for 10.8 (SD, 8.0) years, had been qualified for 22.2 (SD, 9.6) years, and were working 47.7 (SD, 14.0) hours per week. Eighty-one per cent (44/54) were married, 74% (40/54) had children and 54% (29/54) lived in a double-income household. Half (27/54) reported an unreasonable ratio between work hours and leisure time, and 50% (27/54) reported feeling stressed. Despite this, 65% (35/54) believed they had or would achieve their ideal medical career.

Female consultants worked fewer professional hours, but more hours in

unpaid domestic work, than male consultants. Furthermore, female doctors were more likely to have had their career modified by family or social factors; more likely to use paid support to cope with their domestic workload; and, if they had children, more likely than men to have modified their careers to look after dependants (see Box).

Consultants who reported feeling stressed were more likely than other consultants to report an unreasonable ratio between work hours and leisure time (74.1% [20/27] v 48.1% [13/27]; $P=0.05$). Forty-one per cent (22/54) scored above 4 on the GHQ-28, indicating that a high level of stress and psychiatric "caseness" (ie, clinically significant levels of psychiatric disturbance) is experienced by senior doctors. This result is similar to that of a UK study in which 46% (30/65) of senior doctors reported experiencing high levels of stress.⁵ From our data there appears to be a significant relationship

between stress, psychiatric "caseness" and hours worked ($P<0.001$).

Our study and others have identified potential reasons why women work fewer hours in medical work and have a shorter working life. These include having and caring for children, stress, dual-career marriages, personality and social expectations.⁶ Our survey highlights the fact that female consultants in Australia face undue pressure in balancing their medical and domestic roles compared with male consultants. There is a continuing need for flexibility in workplace and training environments for women in medicine to ensure equal career choice, balance between work and domestic commitments, and professional satisfaction.

1. Payne R, Firth-Cozens J. Stress in health professionals. Chichester, UK: John Wiley and Sons, 1987.
2. Goldberg DP, Gater P, Sartorius N, et al. The validity of two versions of the GHQ in the WHO study of mental illness in general health care. *Psychol Med* 1997; 27: 191-197.
3. Agius RM, Blenkin H, Deary IJ, et al. Survey of perceived stress and work demands of consultant doctors. *Occup Environ Med* 1996; 53: 217-224.

Comparison of self-reported factors between female and male consultants (n=54)

	Female consultants (n=18)	Male consultants (n=36)	P value
Mean age in years (SD)	45.3 (10.5)	47.7 (8.1)	0.43
Mean hours in medical work per week (95% CI)	33.4 (28.5–38.4)	54.7 (51.5–58.0)	<0.001*
Mean hours in unpaid domestic work per week (95% CI)	22.9 (8.0–37.8)	10.6 (7.6–13.5)	0.02*
Uses paid domestic support	14/18 (78%)	18/36 (50%)	0.05*
Has children	11/18 (61%)	29/36 (81%)	0.12
Expects to achieve future medical goals	12/18 (67%)	24/36 (67%)	0.78
Has had career expectations modified by:			
Workplace	8/18 (44%)	22/36 (61%)	0.25
College/training	4/18 (22%)	7/36 (19%)	0.81
Family/social factors	12/18 (67%)	14/36 (39%)	0.05*
Illness	1/18 (6%)	4/36 (11%)	0.51
Has had career opportunities modified by care for dependants	9/11 (82%)	10/29 (34%)	0.02*
Reports partner is inconvenienced by respondent's career goals	10/18 (56%)	9/36 (25%)	0.03*
Mean score on GHQ-28 (95% CI)†	2.24 (1.81–2.68)	2.10 (1.95–2.26)	0.45
Psychiatric "caseness"‡	8/18 (44%)	14/36 (39%)	0.30
Median job satisfaction score§	3 (range, 3–4)	3 (range, 1–4)	0.15
Median life stress score§	2 (range, 1–2)	1 (range, 1–3)	0.13

GHQ-28 = 28-item General Health Questionnaire.

* Difference between men and women significant.

† Minimum score = 0; maximum score = 28.

‡ ie, Clinically significant psychiatric disturbance (GHQ-28 score > 4).

§ Minimum score = 1; maximum score = 4.

Data were analysed by Pearson's χ^2 test, Student's *t*-test or the Mann-Whitney test and stratified by sex.

4. Kellerman SE, Herold J. Physician response to surveys. A review of the literature. *Am J Prev Med* 2001; 20: 61-67.
5. Caplan RP. Stress, anxiety, and depression in hospital consultants, general practitioners, and senior health service managers. *BMJ* 1994; 309: 1261-1263.
6. Bowman MA, Allen DI. Stress and women physicians. 2nd ed. New York: Springer-Verlag, 1990. □

A simple intervention to improve hospital antibiotic prescribing

Jill S Butty

Quality Facilitator, Werribee Mercy Hospital,
300 Princes Highway, Werribee, VIC 3030
jbutty@mercy.com.au

TO THE EDITOR: It was refreshing to see the report by South et al, describing a simple, inexpensive intervention which resulted in a positive effect on the appropriate prescribing of antibiotics and a cost saving for the organisation.¹

In the current climate, it has been much more fashionable to suggest computerised prescribing as the cure-all for medication and prescribing errors. As demonstrated by Newby et al,² computerised prescribing has inherent problems, including an increase in repeat ordering of antibiotics.

The Australian Council for Safety and Quality in Healthcare suggests

computerised prescribing as one of several strategies to reduce medication critical incidents.³ However, the costs of establishing such a system in smaller hospitals and community health centres can prove prohibitive. This can lead to an attitude of "too expensive" so do nothing.

Other strategies and interventions can be introduced at minimal cost to the organisation and yet prove effective in reducing both inappropriate prescribing and the number of critical incidents or errors. The provision of easily accessible standardised protocols and guidelines, the review of medication charts and their ease of use, changing the times of daily medication administration to maximise access to clinicians, and empowering patients to be more aware and responsible for their medications are just a few.

In summary, other strategies need to be developed and their success or failure reported. There should also be awareness that familiarity with procedures can lead to errors and reinforcement is required for all interventions. Computerised prescribing should not be viewed as the solution to all medication adverse events, but one of several strategies that

healthcare organisations can use in their battle with medication errors.

1. South M, Royle J, Starr M. A simple intervention to improve hospital antibiotic prescribing. *Med J Aust* 2003; 178: 207-209.
2. Newby DA, Fryer JL, Henry DA. Effect of computerised prescribing on use of antibiotics. *Med J Aust* 2003; 178: 210-213.
3. Australian Council for Safety and Quality in Health Care. Second national report on patient safety. Improving medication safety. Canberra: ACSQHC, 2002. Available at: <http://www.safetyandquality.org/> (accessed May 2003). □

Saji S Damodaran

Associate Professor, Department of Psychological Medicine, Monash University, and Clinical Director, Monash Medical Centre, 246 Clayton Road, Clayton, VIC 3168 saji.damodaran@med.monash.edu.au

TO THE EDITOR: Australia has a high rate of antibiotic use. Increasing antibiotic resistance, spiralling pharmaceutical cost, need for evidence-based practice, public awareness, and widespread variation in prescribing practice, which may lead to quality and safety issues, are reported as the drivers for improving antibiotic use and prescribing.

South et al are to be commended for the introduction of a laminated card for doctors as a simple intervention to improve prescribing practices.¹ Despite the passive nature of the intervention,

www.medicalpioneers.com

READERS INTERESTED IN MEDICAL HISTORY may like to know about the Australian Medical Pioneers Index (AMPI), which is the first major Australian medical history website, and the first published encyclopaedia of Australian medical biography.

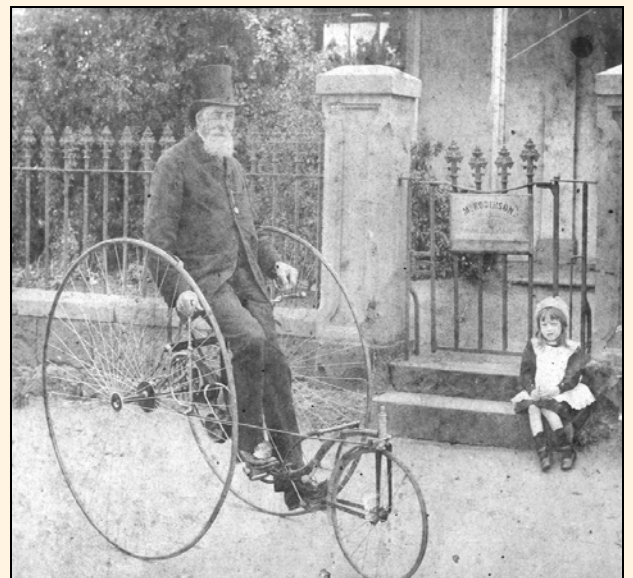
AMPI aims to provide basic personal and professional information on every doctor resident in Australia, or professionally connected with Australia, up to the year 1875. This includes medical officers on immigrant and convict ships, doctors who practised in Australia, and doctors who pursued other occupations here. Over 3000 pioneer doctors are listed.

In addition to biographical data, the website provides interesting material on the medical profession in colonial times, including a picture gallery containing rare images of pioneer medical life (Box). There is also a section on sources of information about early doctors.

The original compiler of AMPI was Dr David Richards (1937-1998) of Nottingham, England, whose card file was computerised at the Geelong Hospital Library. The website was developed in conjunction with the State Library of Victoria as a community service. Anyone with additional data about a particular doctor is encouraged to contribute to the project.

Stephen C Due

Editor, AMPI, Geelong Hospital Library
PO Box 281, Geelong, VIC
due@barwonhealth.org.au



Colonial medical transport. Dr S R Robinson adopted this modern mode of transport when most of his colleagues still kept horses and buggies. (Geelong Heritage Centre — reproduced with permission.)