

## Understanding the stresses and strains of being a doctor

Geoffrey J Riley

The educational mission statement of Brown Medical School in the United States states, in part, “We intend that our students follow in the altruistic tradition of medicine, placing the welfare of their patients and society above self-interest.”<sup>1</sup> In the context of medical practice today, is this tradition adversely affecting doctors and their ability to practise?

Many studies have documented stress<sup>2</sup> and higher than expected rates of psychiatric morbidity in doctors and medical students.<sup>3,4</sup> Doctors are particularly subject to substance misuse,<sup>3,5</sup> and one study found suicide rates in male doctors to be about double those expected.<sup>6</sup> The impact of this morbidity on doctors and those around them is profound and serious.

However, most of us enjoy reasonably good health. Our physical health is comparable to that of the general population,<sup>7</sup> and our overall mortality rate is low.<sup>6</sup> Members of our profession are comparatively well off, resource-rich, financially secure and reasonably well regarded in the community. Doctors are arguably as comfortable and content as our contemporary value system permits.

Nevertheless, surveys continue to suggest that, as a profession, we feel stressed. As a member of a Medical Board and a psychiatrist who cares almost exclusively for doctors, I have wondered: are we suffering because of the nature of our work, or is it more to do with the character of doctors? And what should we be doing about it?

### The nature of work stress

Work stress is defined by the discipline of occupational health psychology, which is founded on a core set of notions that help us to think more clearly about the nature of stress at work (Box 1). Karasek's model of “demand–control imbalance”<sup>8</sup> or “job strain” states that jobs are stressful if they combine high demands with no power or authority to alter the situation. In this model “perceived low control” is considered the major source of work stress and a predictor of poor physical (including cardiovascular) and mental health outcomes.<sup>11</sup> Subsequently, Siegrist showed that “effort–reward imbalance” is also a powerful source of work-related ill health.<sup>9</sup> Finally, the concept of “support” was added to capture the notion of having the right tools for the job and supportive relationships in the workplace.<sup>10</sup>

I believe that these concepts resonate with doctors' current concerns regarding their work. Surveys among doctors identify similar subjective issues as sources of work stress (Box 2).<sup>12,13</sup> Doctors consistently experience high intensity of work, conflicting time demands, and heavy professional responsibility, often in systems where physical and social resources are deficient, and there is the ever-present threat of medicolegal action. Further,

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### ABSTRACT

- Stress in doctors is a product of the interaction between the demanding nature of their work and their often obsessive, conscientious and committed personalities.
- In the face of extremely demanding work, a subjective lack of control and insufficient rewards are powerful sources of stress in doctors.
- If demands continue to rise and adjustments are not made, then inevitably a “correction” will occur, which may take the form of “burnout” or physical and/or mental impairment.
- Doctors need to reclaim control of their work environment and employers need to recognise the need for doctors to participate in decisions affecting their working lives.
- All doctors should be aware of predictors of risk and signals of impairment, as well as available avenues of assistance.
- Relevant medical organisations (eg, the Colleges, hospital administrations, and medical defence organisations) need to develop and rehearse effective response pathways for assisting impaired doctors.

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doctors often have limited power to alter the conditions under which they work. Indeed, most of the survey responses listed in Box 2 relate to lack of control or lack of reward in the face of unrelenting effort. For example, the threat of litigation, which emerged as the number one source of stress for general practitioners in the study by Schattner and Coman,<sup>13</sup> illustrates perfectly the sense of powerlessness and negative reward felt by doctors.

### The nature of doctors

What of the doctor's disposition? What aspects of our personalities affect our work and our experience of it?

There is general agreement in the medical literature that some degree of obsessiveness of personality is extremely common in doctors.<sup>14-16</sup> This quality, combined with high intelligence, generally results in conscientiousness and commitment, which are considerable assets in any endeavour. However, in doctors, it is also a source of vulnerability. An excessive obsessional trait results in dysfunctional perfectionism, inflexibility, overcommitment to work, isolation of affect, dogged persistence and an inability to relax. These overly obsessional individuals have an intense perceived need to control their environment.

Applying psychoanalytic theory, Johnson has looked at doctors' personalities and suggested that a subset of doctors at least is especially vulnerable to a poor sense of self and low self-esteem.<sup>17</sup> This may result from “childhood experiences of parental impotence and emotional neglect”. Attempts at reparation by the individual may lead to “dependence on patients, emotional detachment and denial of personal vulnerability”.<sup>17</sup> This proneness to dependency also commonly affects impaired doctors.

If dependent traits dominate, then a doctor will be too prone to appease patients, including unreasonably demanding patients, and

unable to prioritise demands, particularly those of family, and the need for recreation. This type of doctor may enter a cycle of increasingly using patients as the primary source of self-affirmation and avoiding deteriorating relationships at home. A doctor in this situation becomes at risk of boundary violation (see Galletly, page 380).

### Mismatch between job and personality

It has been said that the major contributor to work stress is disposition,<sup>18</sup> rather than the nature of the work — how we experience work depends largely on our interpretation of it through the lens of our temperament. However, I would argue that the work of doctors is uniquely stressful, and it is reasonable to posit a model of “mismatch” between the nature of the job and doctors’ personalities.

When demands are excessive and loss of control threatens a doctor who by reason of temperament needs to be in control, the scene is set for a bad outcome. Likewise at risk is a doctor whose disproportionate need for self-affirmation is not met. Commonly, the initial response is to absorb the demand and work harder, and as long as busy periods are moderated by quieter periods this strategy may be successful. But, if demands continue to rise and substantive intentional adjustments are not made, then, in market-speak, a “correction” will inevitably occur. This often takes the form of “burnout”, but sometimes it is a physical health scare that precipitates a review. And, if the warnings are still not recognised, then formal psychiatric decompensation is almost inevitable.

Stress results in strain, manifest as chronic arousal. This is not simple wakefulness, but persistent heightened mental and physical alertness, and it is exhausting. Research shows that doctors are chronically aroused.<sup>19</sup> Burnout is often defined as emotional and physical exhaustion, resulting in poor self-image, negative attitude

to work and a drop in personal involvement.<sup>20</sup> Another model that accords particularly well with models of occupational health psychology is that of Meier,<sup>21</sup> who describes burnout as “a state in which individuals expect little reward and considerable punishment from work because of a lack of valued reinforcement, controllable outcomes or personal competence.”

### Achieving a better balance

Well-meaning exhortations from within the profession for doctors to “get a better balance” can be reformulated in the light of the present discussion as “reclaim control of your work and build in rewards”. Specifically, doctors need to change their lives in ways that address the imbalance between excessive demand and perceived low control, and between effort and insufficient extrinsic reward. The goal is to restore the pleasure of work — the satisfaction inherent in meaningful work done well.

This is hardly earth-shattering! So, why don’t we do it? What are the barriers to taking our own advice? Much has been written about this,<sup>22</sup> but an obvious answer is that we don’t want to — we actually like to be busy, and even to be stressed. This may be a benign reaction — intelligent and conscientious individuals with a good deal to contribute do gain intrinsic rewards from being productive and effective. Indeed, Karasek calls this “active work”.<sup>8</sup>

On the other hand, work may be more comfortable than home life or a holiday and be used, as mentioned earlier, as a way of avoiding these personal aspects of life. Moreover, the serious work of a doctor is difficult for a spouse to repudiate. As family life deteriorates, avoidance grows, stress levels peak and depression and even suicide may become real prospects.

The self-employed doctor can more easily make changes. Perhaps the single most powerful and obvious personal intervention is to change the intensity of demand (ie, to confront and resolve

## 1 Some principles of occupational health psychology

### Demand–control imbalance<sup>8</sup>

- Demand  
Insufficient time, conflicting demands, high expectations, emotional intensity of the work
- Control  
Decision latitude (sufficient authority or seniority to make decisions)  
Skill discretion (sufficient training and practice to give a sense of mastery)

*Strain results from simultaneous high demand and low control*

### Effort–reward imbalance<sup>9</sup>

- Effort  
Demands (extrinsic), coping (intrinsic)
- Reward  
Work satisfaction, remuneration, recognition, esteem, status

*Strain results from lack of reciprocity between effort and reward*

### Support<sup>10</sup>

- Instrumental support  
Physical environment, effective infrastructure
- Relational support  
Agreeable and supportive work colleagues and appreciative superiors

*Strain results from inadequate physical and social support*

## 2 Sources of subjective stress in doctors<sup>12,13</sup>

- Intensity of demand on doctors, conflicting demands and time pressure
- The gravity, emotional intensity and responsibility entailed in the job
- Insufficient resources provided in the public sector
- Constraints and demands (“interference”) of various government agencies (eg, Authority prescriptions)
- Requirements for accreditation and continuing professional development
- Medicolegal threat and unreasonable expectations and demands of patients
- Demanding, hostile and emotionally difficult patients and even actual violence
- Maintaining amicable relationships with colleagues and staff within the work environment
- Managing the demands of small business, finance and accounting
- Loss of the traditional status of doctors, and negative media representation
- After-hours and on-call work
- Interference with family life
- Poor remuneration (compared with expended effort)
- Lack of appreciation

time pressure, conflicting demands and workload). Paradoxically, relinquishing control of the appointment diary to a pragmatic secretary is an example of a simple but effective personal strategy. (Delegation of control is what an obsessional person finds so difficult.) Such a strategy deals with the myth of doctors’ indispensability, and over time can produce behavioural change in a doctor as he or she experiences the real benefits of reduced intensity, slower pace and genuine recreation.

Those who manage health systems that employ doctors need to recognise that, as well as realistic workloads, there is a need to

- provide opportunities for doctors to participate in administrative decision-making,
- respect their reasonable need for autonomy and control, and
- nurture their sense of being valued.

A recent survey of 608 physicians in the United States found that a sense of control over the practice environment was the most important predictor of psychological wellbeing, satisfaction and professional commitment.<sup>23</sup> This sense of control included the “opportunity to participate in decision making, to work autonomously and to dictate the work schedule”. If healthcare organisations want healthy, happy doctors, they need to engage them in the design and delivery of healthcare.

Generally, this has been well managed in Australia, but there has been a preparedness to condone the obsessional doctor’s “workaholism” by sometimes applauding it as conscientiousness (“going the extra mile”), when, in fact, it may be pathological. This may ultimately be detrimental for the doctor, and for other staff who may be affected by collateral emotional damage, not to mention the potential effect on patient care. Institutions have a responsibility to monitor and moderate the excessive commitment of some doctors, and this may need to go as far as mandating leave in an effort to preclude a breakdown.

## Responding as a profession

What should we be doing as a profession? Prevention should be the first priority. The issues of health and wellbeing of doctors — self-care, stress management and so on — should be part of undergraduate curricula and kept on the agenda in continuing professional development programs. Australian medical schools have incorporated these topics, and most branches of the established profession appear to have taken up the cause also. The message that all doctors should have their own GP has also been strongly promoted in recent years. Shorter working hours, leave entitlements and better conditions generally have been built into awards as institutional employers recognise the need to respond to quality and safety issues.

Developing reliable and effective strategies for when concern has been raised about a doctor has been more difficult for the profession. To better address this problem there are some issues to note. First, we should recognise predictors of risk and “red flags” for impairment. Then we must be better prepared as individuals and as organisations to respond to the early signs of distress. The major barrier here is not knowing what to do. The old adage “I only diagnose what I know I can do something about” is apposite. Collusive avoidance is common and usually based in a lack of knowledge and confidence about how to respond. Accordingly, relevant professional organisations need to devise and become familiar with pathways for responding.

Predictors of risk of impairment, as indicated by calls to Doctors’ Health Advisory Services in Australia, include not having been locally trained; lacking a network of colleagues; not being involved in continuing professional development; coming from a non-English-speaking background; practising in a rural area, in solo practice, not being married, or being a woman. All these risk factors have in common the notion of isolation. But, these are generalisations, and we should remember, for example, that young

**3 “Red flags” indicating doctor impairment\***

- Increasing incidence of complaints about a doctor
- Uncharacteristic interpersonal and other behaviour
- Falling standards and clinical errors
- Failure to keep abreast of administrative demands (eg, paperwork)
- Lack of responsiveness and poor punctuality when called
- Overt signs or symptoms of substance misuse or psychiatric illness

\* Unpublished data (Medical Board of Western Australia)

doctors working in the anonymity of a large hospital may be isolated and at risk, just as solo practitioners, particularly women, in the suburbs may be.

Next, we need to be able to recognise the red flags indicating impairment (Box 3). These are essentially signs of decompensation and failure to cope, and are often ignored until “too late”. Medical boards, health complaints authorities and hospital administrations are alert to the fact that complaints about a doctor may be an indicator of impairment. Obviously, it is preferable to respond to impairment or distress before it comes to attention through complaint channels.

Finally, we need to be alert to early but overt signs and symptoms of substance misuse and formal psychiatric illness.

To effectively respond to a colleague in need, the profession must put in place well-defined programs and pathways of response. Some excellent work in this regard has been done in Australia, a good example being the strategies developed by the Doctors’ Mental Health Implementation Committee of the New South Wales Medical Board<sup>24</sup> (see Wilhelm and Reid, *page 372*). This program shows the need for a systematic approach if we are to expedite effective responses. We need to provide pathways to increase the likelihood of concerned doctors or others taking action. Hospital administrations, medical defence organisations, the Colleges and other relevant organisations must have clear pathways of response that are promulgated and rehearsed by appropriate personnel (“rehearsed” in this context means discussed, learned and even practised — for example, in role-play).

The essential elements of the response pathway must be in place. First, colleagues need to know who to contact to share their concern and have a preliminary discussion about the problem. Identified contacts must have a clear sense of what needs to happen in response to a concern being raised, so that they can give advice, suggest an intervention, or, when appropriate, implement the intervention. Further, they need ready access to identified clinicians, usually psychiatrists, who can take responsibility for referred cases.

Doctors’ Health Advisory Services already provide invaluable assistance in this regard, but this system is voluntary and best reserved for those who refer themselves or for referrers who are unaware of alternatives. The existence of this safety net does not diminish the need for a concerted effort to develop effective, institutionally based systems of response.

**Conclusion**

Doctors continue to report that they experience considerable stress and strain. A model which posits an interaction, and sometimes a “mismatch”, between doctors’ personalities and the nature of their

work may be useful in understanding the origins of their stress and in thinking about ways to prevent it, to minimise its impact and to manage its adverse consequences. The profession must establish better ways of responding when doctors’ functioning is compromised. We should develop clear, well-rehearsed, institutionally based systems of response. For the individual doctor, the goal is to improve the balance and discover sustainable ways of remaining healthy while honouring the demands of the altruistic traditions of our profession. A doctor’s career should be experienced as inherently satisfying in response to a meaningful job well done. The prospect of a lifetime of joyless striving is unacceptable.

**References**

- 1 Brown Medical School, Providence, Rhode Island, USA. Educational mission statement. Available at: [biomed.brown.edu/Medicine/Administration/General\\_Information.html#EduMission](http://biomed.brown.edu/Medicine/Administration/General_Information.html#EduMission) (accessed Aug 2004).
- 2 Payne R, Firth-Cozens J. *Stress in health professionals*. London: John Wiley, 1987.
- 3 Firth-Cozens J. Individual and organizational predictors of depression in general practitioners. *Br J Gen Pract* 1998; 48:1647-1651.
- 4 Brooks A. Many junior doctors misuse drugs and drink excessively. *BMJ* 1998; 317: 700.
- 5 Serry N, Bloch S, Ball R, Anderson K. Drug and alcohol abuse by doctors. *Med J Aust* 1994; 160: 402-407.
- 6 Schlicht SM, Gordon IR, Ball JR, Christie DG. Suicide and related deaths in Victorian doctors. *Med J Aust* 1990; 153: 518-521.
- 7 O’Hagan J. Doctors and their health. In: O’Hagan J, Richards J, editors. *In sickness and in health*. 2nd ed. Wellington, NZ: Doctors’ Health Advisory Service; 1998: 1-9.
- 8 Karasek RA. Job demands, job decision latitude, and mental strain: implications for job redesign. *Admin Sci Q* 1979; 24: 285-307.
- 9 Siegrist J. Adverse health effects of high-effort/low-reward conditions. *J Occup Health Psychol* 1996; 1: 27-41.
- 10 Johnson JV, Hall EM. Job strain, work place social support, and cardiovascular disease: a cross-sectional study of a random sample of the Swedish working population. *Am J Public Health* 1988; 78: 1336-1342.
- 11 Bosma H, Stansfeld SA, Marmot MG. Job control, personal characteristics, and heart disease. *J Occup Health Psychol* 1998; 3: 402-409.
- 12 Richards J. Work stress and its causes. In: O’Hagan J, Richards J, editors. *In sickness and in health*. 2nd ed. Wellington, NZ: Doctors’ Health Advisory Service, 1998: 112-123.
- 13 Schattner P, Coman G. The stress of metropolitan general practice. *Med J Aust* 1998; 169: 133-137.
- 14 Hamilton TK, Schweitzer RD. The cost of being perfect: perfectionism and suicide ideation in university students. *Aust N Z J Psychiatry* 2000; 34: 829-835.
- 15 Lawrence J. Stress and the doctor’s health. *Aust Fam Physician* 1996; 25: 1249-1256.
- 16 Rucinski J, Cybulska E. Mentally ill doctors. *Br J Hosp Med* 1985; 33: 90-94.
- 17 Johnson WDK. Predisposition to emotional distress and psychiatric illness amongst doctors: the role of unconscious and experiential factors. *Br J Med Psychol* 1991; 64: 317-329.
- 18 McCranie EW, Brandsma JM. Personality antecedents of burnout among middle-aged physicians. *Behav Med* 1988; 14: 30-36.
- 19 Celentano DD, Johns JV. Stress in healthcare workers. *Occupational medicine: state of the art reviews* 1987; Jul-Sep 2(3).
- 20 Maslach C, Jackson SE. The measurement of experienced burnout. *J Occup Behav* 1981; 2: 99-113.
- 21 Meier ST. Towards a theory of burnout. *Hum Relat* 1983; 36: 899-910.
- 22 Davidson S, Schattner P. Doctors’ health-seeking behaviour: a questionnaire survey. *Med J Aust* 2003; 179: 302-305.
- 23 Freeborn DK. Satisfaction, commitment, and psychological well-being among HMO physicians. *Permanente J* 2000; 2: 22-30.
- 24 NSW Doctors’ Mental Health Implementation Committee of the NSW Medical Board. *NSW doctors’ mental health program*. Sydney: NSW Doctors’ Mental Health Implementation Committee, Nov 1999.

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