

Stress and burnout in junior doctors

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Abstract Questionnaires were sent to doctors who had graduated 2½ years previously from two English-medium universities in South Africa. Findings showed that 77,8% of doctors had experienced symptoms consistent with burnout since graduating. Incidence of burnout was found to be related to an inability to communicate freely with patients in their own language. Although those doctors who saw more than forty patients a day reported more burnout, the difference was not statistically significant. The highest incidence of burnout was among doctors working in day hospitals and clinics, followed by those in hospital posts. Doctors working in their own practices experienced least burnout. Sixty-three per cent of doctors felt that a support group would be helpful.

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When discussing stress and burnout with doctors, I was impressed by how many identified with the symptoms of burnout and encouraged me to do the study. One doctor said of her internship: 'They never told me I would start hating my patients.'¹

This study was undertaken to determine the extent of perceived stress and burnout in doctors who had recently graduated. It examines those characteristics of work associated with perceived burnout. Doctors were asked how they coped with feelings of burnout and whether they felt a support group would be helpful.

Stress is a subjective experience and depends on one's perception of a given circumstance. While one person may regard the circumstance as a welcome challenge, another may perceive it as a threat and feel stressed.

Many definitions of burnout exist, but for the purposes of the study I have used Pines and Maslach's¹ definition: 'a syndrome of emotional exhaustion involving the development of a negative self-concept, negative job attitudes and loss of concern and feeling for clients'.

Doctors may experience stress as a result of their own personal characteristics and the characteristics of the job. An intense need to be needed and high expectations of self are some personal attributes that may contribute to burnout. McCue² believes that a doctor is prone to stress as a result of working with 'intensely emotional aspects of life governed by strong cultural codes of behaviour, e.g. suffering, fear, sexuality and death; inadequate training for fundamental tasks, e.g. handling "problem" patients; and demands from society or patients that cannot reasonably be met, e.g. the need for certainty when current medical knowledge allows only approximation'. The effects of stress are seen by Maslach³ to play a major role in the poor delivery of health services. As McCue² puts it, 'It is unlikely that optimal medical care can be delivered by unhappy or maladapted physicians. Empathic concern for a patient's distress, placing the patient's interests before those of

the physician and considering all the ramifications of therapeutic or diagnostic intervention require concentration by a physician who enjoys the work and brings to it an emotional stability derived from his or her personal life.'

Subjects and method

Questionnaires were sent to all doctors who had graduated from two English-medium South African medical schools 2½ years previously. Addresses were taken from the South African Medical and Dental Council register and if the doctor was not registered, the questionnaire was sent to the address given in the final-year class lists. Neither address was available for 12 of the doctors and they were excluded from the sample. Thus of the 376 doctors in the sample, questionnaires were sent to 364.

The questionnaire was accompanied by a self-addressed, stamped envelope and a covering letter explaining the project and assuring confidentiality.

The questionnaire asked for demographic details and the type of work the doctor was currently doing. Perceived burnout was assessed in the light of Maslach's definition of burnout, which was phrased as a question: 'Do you ever feel so emotionally exhausted that you feel negative about yourself and about your job and lose the feeling of concern for your patients?' Respondents were asked about previous episodes of these feelings, what job they were doing at the time and what they had done about them. They were also asked if they thought that a support group for doctors would be helpful.

A Physician Stress Inventory (PSI) drawn up by Revicki and May^{4,7} was included. It has been shown to be both reliable and valid⁸ and consists of 22 questions, the answers for which are marked on a scale of 1 to 4. The inventory looks at four factors: (i) internal professional stress (doctor's perception of dissatisfaction with and discouragement in professional life, and associated feelings of frustration and disenchantment); (ii) perceived work productivity; (iii) interference with family life; and (iv) external professional stress (doctor's perception of support, recognition and contribution of colleagues and others in the environment).

Results were stored on database and analysed with the help of the Epi-Info programme.

Results

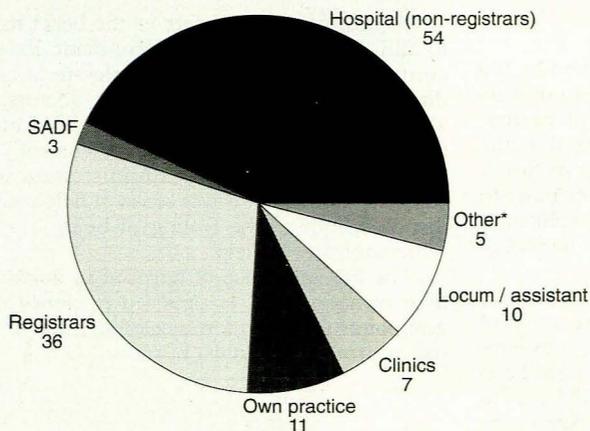
Of 364 questionnaires sent out, 126 completed questionnaires were returned. Twenty-two questionnaires were returned unanswered (either because the doctor was overseas or no longer at the address). The response rate was thus 36,8%.

Demographic details of respondents

The mean age of respondents was 27,79 years. The gender distribution of the respondents did not differ significantly from that of the total sample ($P = 0,06$), i.e. the sample was not biased in favour of either sex. Fig. 1 shows that most respondents were working in hospitals and 40% of these hospital doctors were in the process of specialising.

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* Two were studying, 2 not in medicine and 1 in administration.

FIG. 1.
Jobs of respondents.

Incidence of burnout

Of the respondents, 77,8% had experienced burnout since graduating; 52,4% were experiencing burnout in their present jobs and 61% had experienced burnout in a previous job since graduating.

Validity of definition of burnout

The mean PSI score for those respondents who reported feelings consistent with burnout was significantly higher than the mean score of those doctors who reported no burnout ($P = 0,000001$).

Ways of dealing with burnout

The 66 doctors who had experienced burnout were asked what they had done about the problem. This was an open question, not multiple choice. Table I lists the actions taken by respondents.

TABLE I.
Actions taken in response to burnout (81 responses from 66 doctors)

	No.	%
Nothing	27	40,9
Positive attitude and use of internal resources*	16	24,2
Changed jobs	10	15,2
Spoke to family and friends	5	9,4
Rest and relaxation	5	7,5
Counselling/psychotherapy	4	6,0
Took time off	4	6,0
Became depressed	3	4,5
Other†	7	10,5

*This includes responses such as 'handled it', 'accepted that internship lasts only 1 year', 'hoped that things would improve', 'persevered', 'own coping mechanisms', 'optimism', 'positive thinking', 'became aware of it and changed my behaviour'.

†This includes 'moaned', 'attended a support group at work', 'approached the authorities about work conditions', 'became ill', 'spoke to colleagues'.

Burnout and characteristics of the doctor

There was no significant difference between the incidence of burnout in men and women ($P = 0,489$), or between those in different age groups ($P = 0,982$). The differences between the mean PSI scores were also not

significantly different for men and women ($P = 0,301$) or for different age groups ($P = 0,187$).

Burnout and characteristics of the work

Respondents were asked about feelings consistent with burnout in their current job. Although numbers are small, these figures (Fig. 2) give an idea of the incidence of burnout in different jobs.

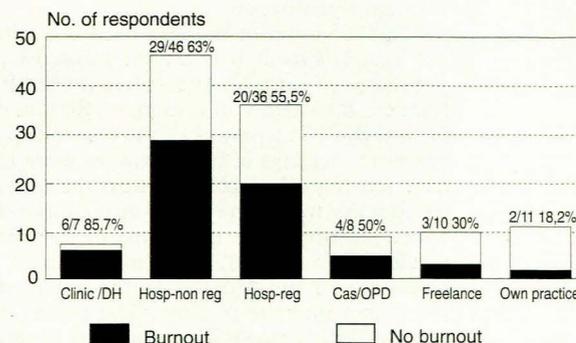


FIG. 2.
Incidence of burnout (current jobs of respondents).

Forty-seven respondents reported experiencing symptoms of burnout during their internship. If one assumes that all respondents had done an internship, this means that the incidence of burnout during this period, reported retrospectively, is 37,3%.

Number of patients seen per day

Doctors who were dissatisfied with the number of patients they were required to see each day had an incidence of burnout of 63,8% compared with 50% of the group who were satisfied with their number of patients. However, this difference was not statistically significant ($P = 0,228$).

Of the doctors who saw more than 40 patients per day, 66,7% experienced symptoms of burnout compared with 53,3% of those who saw fewer than 40 patients per day. This difference is not statistically significant ($P = 0,315$); neither were the PSI scores significantly different ($P = 0,401$).

Language

Ability to communicate freely with the majority of one's patients, i.e. in terms of ability to understand each other's language, was found to be a significant factor in protecting against burnout. Those doctors who were able to communicate freely had an incidence of burnout of 48,1% compared with 70% of those who were unable to communicate ($P = 0,03795$). The mean PSI score of the former group was significantly lower than the mean score of the latter group ($P = 0,0377$). One-third (33,6%) of all the doctors were unable to communicate easily with patients in their own language.

Full-time and part-time work

Only 1 of the 7 doctors who worked part-time experienced burnout in his present job.

Support groups

When questioned about their perception of the usefulness of a support group, 62,7% of doctors thought such a group would be helpful.

Discussion

The poor response rate can partially be explained by the high number of graduates from English-medium universities who work overseas either temporarily or permanently soon after graduation. This also means that the sample was biased towards doctors remaining in South Africa. A common factor that caused doctors both to remain in the country and to suffer burnout might have been present, e.g. bursaries conditional on a period of work post-graduation.

The definition of burnout used is a fairly loose one, but the relationship between the subjective perception of symptoms of burnout and scores on the PSI help substantiate the validity of responses. Bias might have been present due to the nature of the respondents. Doctors to whom the feelings of burnout were more familiar might have felt more inclined to return the questionnaires. If we assume that none of the non-respondents experienced burnout, the incidence of measured burnout would fall from 77,8% to a minimum of 26,6%. This is still a worrying figure given the implications for both the doctor and the patients. The results of this survey are similar to those of a study of junior doctors in Nottingham,⁸ which showed that 72% experienced feelings of disillusionment and cynicism.

The relationship between difficulty in communicating with patients and burnout might indicate another important factor. Those doctors who were unable to communicate freely with their patients were most likely to be working with black patients. It might have been the Third-World environment of black hospitals and clinics with their overcrowding and more limited resources that contributed to burnout, rather than language *per se*. None the less, ability to communicate easily may be protective and an effort at learning one's patients' language may be rewarded with less stress and burnout. From this one might extrapolate that any additional communication skills would have a similar stress-relieving effect.

Responses show that when the doctor is suffering from symptoms of burnout, he/she tends to endure them rather than seek help. This may cause further dysfunction. One doctor described becoming very depressed and experiencing difficulty with all relationships.

Stan Levenstein⁹ writes about some of the reasons why doctors do not seek help. Firstly, they might have done medicine to compensate for underlying feelings of weakness and inadequacy which they are loth to face again. Secondly, they find it difficult to relinquish the idealised image their patients have of them. Some doctors confirmed this in their response to the question on support groups, e.g. 'Most of the doctors I am in contact with would probably see the joining of a formal support group as a reflection of not coping, something few of us would admit despite the fact that it was true.'

'Locus of control' refers to the belief in one's ability to influence events in the environment. External locus of control implies a learned helplessness and has been directly linked to burnout.⁴ Many doctors, when asked about feelings of burnout, show a sense of helplessness in their answers, e.g. 'beyond my control', 'endured it', 'hang in there' 'went to administration who were no support'. Perhaps it is this sense of helplessness that predisposes both to the feeling of being burnt out and a reluctance to seek help.

The low incidence of burnout in doctors who are in their own practices, as opposed to clinics and hospitals, also points to the importance of an internal locus of control as protection against burnout.

Recommendations

Doctors need to acknowledge burnout. We need to be able to recognise the early signs in ourselves and our colleagues and develop strategies for prevention and management. Poorly functioning doctors, absenteeism and rapid turnover of staff are uneconomical. In the present economic climate with limited resources available it is especially necessary to recognise the importance of developing and maintaining human resources.

The concepts of stress and burnout need to be addressed in medical schools.⁸⁻¹¹ If we are to teach students to care for their patients, we need to teach them to care for themselves. Junior doctors' frustrations must be heard and action taken, to prevent the feelings of helplessness that predispose to burnout. Access to non-judgmental counselling needs to be readily available.^{8,9}

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