

Job Stress, Satisfaction, and Coping Strategies Among Medical Interns in a South Indian Tertiary Hospital

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ABSTRACT

Background: It has previously been demonstrated that there is a significant drop in all domains of quality of life among interns during internship. **Aims:** A modified version of the health consultant's job stress and satisfaction questionnaire (HCJSSQ) was used to assess and quantify aspects of internship that were perceived as stressful and satisfying. Methods used to cope with work place stress were explored. **Settings and Design:** A prospective cohort study was undertaken among 93 medical interns doing a rotating internship at the Christian Medical College and Hospital, a tertiary-care hospital in southern India. **Materials and Methods:** After completion of 6 months of internship, the modified version of the HCJSSQ was administered to all participants. **Statistical Analysis:** The data were entered into Statistical Package for the Social Sciences (SPSS) Version 9 by double data entry technique. Percentages of interns reporting high levels of stress, satisfaction were calculated. **Results:** While 63.4% of interns reported high levels of satisfaction, 45.2% of the interns experienced high levels of stress, 17.6% coped with work stress by using alcohol and nicotine, and 37% coped through unhealthy eating habits. **Conclusion:** More people found internship satisfying than stressful. However, a high proportion found it stressful, and many reported unhealthy coping mechanisms.

Key words: Coping methods, job stress, medical interns, satisfaction

INTRODUCTION

Internship in India refers to the year after the undergraduate medical course and includes compulsory rotations in medicine, surgery, obstetrics, gynaecology, and community medicine. It has previously been described that the quality of life among interns in India declines during internship.^[1] This decline in the

quality of life may be explained in part by increased responsibility and work load thereby causing workplace stress. This paper seeks to explore the prevalence of job-related stress, satisfaction, and the methods used by interns to cope with job stress.

To our knowledge, this is the first paper from India to explore factors contributing to internship being considered stressful or satisfying. Coping strategies among interns have not previously been reported.

MATERIALS AND METHODS

This is a prospective cohort study of all doctors doing their 1-year rotating internship at the Christian Medical College, from October 2010 to September 2011.

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Of 104 recruited candidates, 7 dropped out of the internship program and 4 had taken prolonged leave. Ninety three interns provided data for this study.

Details about the recruitment of the cohort and initial evaluations have previously been described.^[1] The nature of the study was explained to the interns and written informed consent was obtained. The study was approved by the Institutional Review Board.

Six months after beginning internship, all the participants were asked to fill up the modified Health Consultant's Job Stress and Satisfaction questionnaire (HCJSSQ -modified 1994 version).^[2] This has two sections:

1. Factors contributing to job stress and overall job stress: A list of 21 specific sources of stress is rated on a Likert scale of 0-3.
2. Factors contributing to job satisfaction and overall job satisfaction: A list of 13 specific sources of stress is rated on a Likert scale of 0-3.

The respondents were also asked to rate their overall job stress and satisfaction on a Likert scale of 0-3.

Several methods of coping with stress at work were enumerated and the respondents were requested to indicate how often they adopted the same on an ascending scale of 0-3.

Some items in the original questionnaire not considered relevant to interns were omitted or modified [Table 1].

Responses of 0 and 1 corresponded to 'not at all' and 'little' respectively and were grouped together for the purposes of analysis. Responses of 2 and 3 corresponded to 'quite a bit' and 'a lot' and were grouped together.

The data were entered into Statistical Package for the Social Sciences (SPSS) Version 9 by double data entry technique. The percent of individuals responding 0 or 1 and 2 or 3 were computed.

RESULTS

Job stress

Among the 93 participants 42 of the respondents (45.8%) perceived their work stress to be high or very high [Table 2].

Job satisfaction

63.4% of the respondents reported being happy or very happy with their job [Table 3].

Factors contributing to job stress

Disruption of home life through spending long hours at work was the source of stress in 65.6% respondents,

followed by having too great an overall volume of work (49.5%) and being responsible for the quality of work of others (47.3%) [Table 4].

Factors contributing to job satisfaction

Having good relations with other staff members was satisfying for 82.8% of the respondents, followed by putting clinical skills to good use (78.5%), having variety in one's tasks (78.5%) and being perceived by colleagues as doing a good job (76.3%) [Table 5].

Methods of coping with job stress

Most respondents chose to cope with job stress through conversations with colleagues and friends/family (61.5% and 69.2%, respectively). A large percentage

Table 1: Modifications made to health consultant's job stress and satisfaction questionnaire (HCJSSQ)

Original	Changes made
Job stress section	
Dealing with the threat of being sued for malpractice	Question deleted
Having to take excessive financial responsibilities	Question deleted
Feeling that your accumulated skills and expertise are not put to their best use	Question deleted
Uncertainty over the future job prospects	Question deleted
Keeping up to date with current clinical and research practices	Question modified to 'keeping up to date with current clinical practices'
Encountering difficulties in relation with paramedical staff	Question modified to 'encountering difficulties in relation with managers'
Job satisfaction section	
Deriving intellectual stimulation from teaching	Question modified to 'deriving intellectual stimulation from work'
Deriving intellectual stimulation from research	Question deleted
Feeling you have a high level of job security	Question deleted
Feeling you have adequate financial resources to do a good job	Question deleted
Being involved in activities which contribute to the development of your profession	Question deleted

Table 2: Stress among interns after 6 months of internship

Level of stress	Frequency	Percentage (%)
Lower stress	51	54.8
Higher stress	42	45.2
Total	93	100.0

Table 3: Satisfaction among interns after 6 months of internship

Level of satisfaction	Frequency	Percentage
Lower satisfaction	34	36.6
Higher satisfaction	59	63.4
Total	93	100.0

Table 4: Prevalence of factors that contribute to a large extent to job stress

Individual stressors	Percentage (%)
Disruption of home life through spending long hours at work	65.6
Having too great an overall volume of work	49.5
Feeling under pressure to meet deadlines	49.5
Keeping up to date with current clinical practices	48.4
Being responsible for the quality of work of other staff	47.3
Having inadequate staff to do your job properly	45.2
Disruption of home life due to being on call	45.2
Encountering difficulty in relation with senior medical staff	43.0
Having conflicting demands on your time	41.9
Being involved in physical suffering of patients	38.7
Feeling you have insufficient input into the management of your unit/institution	38.1
Having a conflict of responsibilities	37.6
Being involved with the emotional distress of the patients	36.6
Having to deal with angry, distressed or blaming relatives	33.3
Having to take up managerial responsibilities	30.1
Feeling poorly paid for the job you do	29.0
Encountering difficulty in relationships with administrative staff	26.9
Disruption of home-life due to taking paper work home	25.8
Encountering difficulty in relation with colleagues	23.7
Having inadequate facilities to do your job properly	22.6
Encountering difficulty in relation with managers	18.3

Table 5: Prevalence of factors contributing to a large extent to job satisfaction

Individual sources of satisfaction	Percentage (%)
Having variety in your job	78.5
Having opportunities for personal learning	75.3
Having good relations with your patients	78.5
Having good relations with other staff members	82.8
Having a high level of responsibility	67.6
Having a high level of autonomy	61.3
Feeling you have adequate facilities to do a good job	75.3
Feeling you deal well with relatives	58.7
Feeling you clinical skills are used to the full in the job you do	78.5
Feeling that you have the staff necessary to do a good job	50.5
Deriving intellectual stimulation from work	74.2
Being perceived to do the job well by your colleagues	76.3
Being able to bring about a positive change in your institution/unit	45.2

coped through working longer hours (50%) and through unhealthy eating habits (37%). The use of alcohol (13.2%) and nicotine (4.4%) was also reported as a coping strategy [Table 6].

DISCUSSION

Despite demonstrating a decline in the quality of life within the same cohort, and despite high levels of perceived stress we note that most interns find their jobs highly satisfying.^[1]

Table 6: Prevalence of methods of coping with stress

Individual methods of coping	Percentage (%)
Talking to friends/family	69.2
Talking to colleagues informally	61.5
Working longer hours	50.5
Reorganizing your work	44.6
Not eating as healthily as you would wish	37.0
Talking to colleagues formally	36.3
Taking annual leave	33.7
Pursuing hobbies	26.4
Taking exercise/sport	22.0
Drinking alcohol	13.2
Learning relaxation techniques	13.0
Obtaining formal psychological support	7.6
Smoking cigarettes	4.4
Taking prescription drugs	3.3
Taking other drugs	1.1

While it may be argued that stress is a natural part of the process of learning and skill acquisition and helps interns grow into mature, confident doctors — high levels of stress are a matter of concern as stress not only reduces attention and concentration thereby impairing judgement capacity; it also impedes formation of a therapeutic alliance between physician and patient.^[3,4]

An overwhelming majority feel that disruption of the work life balance caused by spending long hours at work as well as a large volume of work were the major causes of stress. This is consistent with reports from interns overseas.^[5] Unlike interns overseas inadequate financial remuneration was not a major stressor.^[3]

Interns in our study derived satisfaction from good interpersonal relations — with colleagues, patients, and other staff. A sense of fulfilment arising from adequate utilization of training and skills contributed greatly to their job satisfaction. This is in keeping with findings from overseas.^[6]

Consistent with studies overseas interns derived maximal support from their peers and family.^[5]

However, only 26.4% reported pursuing hobbies and 22% reported exercising or playing sport as a means of tackling stress when compared to 88% among residents overseas.^[5]

The prevalence of alcohol use as a coping measure was 13.2% which is substantially higher than those reported from consultant anaesthesiologists in India (2.5% and 2% for alcohol and drugs, respectively) as well as that reported from residents overseas (5% and 1% for alcohol and smoking, respectively).^[5,7]

These are worrisome findings and should prompt

action to education of interns on appropriate adaptive strategies to cope with stress.

Limitations

While it was emphasized to the respondents that they describe their experience during the past 4 weeks, interpersonal variations in experiences and frame of mind at the time of data collection might have clouded the assessment. While this study describes the experience of interns at a single centre in the south of India — we believe that, owing to a common structure of the internship program our experiences will be similar though not identical to centres elsewhere.

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