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 stress, satisfaction were calculated. (1) More people found internship satisfying than stressful. However, a high proportion found it stressful, and many reported unhealthy coping mechanisms. 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.
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. 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). 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 63.6% 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

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**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 |

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**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         |

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**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      |
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]

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).[3,7]

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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