



PERCEIVED STRESS, PSYCHOLOGICAL WELL-BEING AND BURNOUT AMONG MEDICAL AND PARAMEDICAL STAFF AT A MEDICAL COLLEGE OF NORTHERN INDIA

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ABSTRACT

Background: Few studies have been done about the Burnout among government employed junior residents, senior residents and nurses in India. **Methods:** A hospital based cross sectional study was done among 200 medical and paramedical staff regarding assessing their Perceived Stress and burnout with the help of Perceived Stress Scale (PSS-10), Copenhagen Burnout Inventory (CBI) respectively. 152 completely filled questionnaires were received and analysed. **Results:** Sixty nine percent (69.1%) of participants were married and 40.8% were post graduate degree holders. Personal Burnout score was 41.59 ± 15.76 ; Work related burnout score was 36.06 ± 15.95 . PSS was 50.51 ± 13.07 with minimum of 0 and maximum of 93. **Conclusions:** All forms of burnout were more among female participants as compared to males and higher among nurses followed by senior residents and least among junior residents. Personal burnout was more prevalent than other forms of burnout.

KEYWORDS : Nurses, Burnout, Perceived stress, Dr Rajendera Prasad Government Medical College.

INTRODUCTION

Burnout is a concept in human services and health care profession which first emerged in the mid 1970s. It was described by two researchers. Herbert Freudenberger proposed this term to describe a state of emotional exhaustion among people working in human service and health care.^[1] According to Maslach it is a syndrome with three major characteristics: Emotional Exhaustion, Depersonalization, and Reduced feelings of Personal Accomplishment.^[2] In the World Health Organisation's (WHO) International Classification of Diseases (ICD), 10th revision, burnout is coded as "Z73.0, Problems related to life management difficulty" and is defined as a "state of vital exhaustion".^[3]

It is a psychological experience that involves feelings, attitudes, motives and expectations. It produces physical, emotional and mental signs and symptoms in the victim. The main causes of burnout are feeling overloaded (too much to do in too little time), feeling a lack of control over one's work, and feeling a lack of meaningful connection with others.^[4]

Burnout is manifested in all organizations.^[5] Nursing profession involves spending a great deal of mental, emotional and physical energy on caring for others. They are often caught between complex hierarchy of authority of doctors, matrons, families or caretakers and administrators. Nursing is an extremely stressful profession^[6], with nursing stressors being the largest predictors of burnout.^[2]

The deleterious effects of stress in nursing have been noticed, described, and studied for more than 40 years.^[7] The stressors of nursing includes job design and work load, interpersonal relationships at work, relationship with patient and families, Work organization and management of work, and concerns of knowledge and technical skills related to patient care and treatment.^[8] The stress that a person experiences is determined more by her or his appraisal of a situation than the event itself.^[9]

Burnout negatively affects the health and personal lives of the employees experiencing it as well as services received by their patients, students, clients, or customers.^{[10] [11]} Negative outcomes of burnout include cynicism, dissatisfaction, and turnover.^[12]

The insensitive attitudes towards patients or others lead to negative or derisive behavior. Furthermore, studies have found correlations between burnout and absenteeism, intention to quit, actual turnover, and decreased job performance.^{[13] [14] [15]} Cordes and Dougherty indicated that married individuals experienced less burnout than their single counterparts.^[16]

Age and number of years in service are negatively correlated with burnout.^[17] In India, studies on burnout among professionals are limited and populations studied include Catholic priests, teachers, and human service professionals at a counseling center.^{[18] [19] [20]} Against this backdrop, the present study was undertaken with the objective of evaluating burnout among residents and nurses in our institute.

METHODS

The study protocol was approved by the institutional ethics committee, and written informed consent was taken from all the participants.

This cross sectional study was carried out at Dr Rajendera Prasad Government Medical College Tanda situated at Kangra district of Himachal Pradesh in Northern India. All junior and senior residents and nursing staff in all the wards and OPDs of DR RPGMC Tanda willing to participate were included in the study. Demographic data was collected by a specially prepared questionnaire. Items were chosen either because they had either been linked to burnout or because of their proposed theoretical relevance to the study.

The perceived stress was assessed using Perceived Stress Scale (PSS-

10).^[21] PSS scores 17 and above in females has been reported to indicate high stress levels.^[22] Level of burnout was assessed by Copenhagen Burnout Inventory (CBI), a public domain questionnaire developed by the National Institute for Occupational Health, Denmark.^[24]The key feature of the CBI is that it differentiates three forms of burnout, which were defined according to the life domain from which it may arise: (1) Personal or generic burnout, measuring the degree of physical and psychological exhaustion experienced by the person, regardless of occupational status; (2) Work-related burnout, measuring the degree of physical and psychological exhaustion which is perceived by the person as related to work; and (3) Client-related burnout – measuring the degree of physical and psychological exhaustion which is perceived by the person as related to work with clients. Scale scores are calculated by taking the mean of the items in that scale.^{[23][24]}

All items have five response categories in a Likert scale , ranging either from “to a very low degree” to “to a very high degree” or from “never” to “always”. Each scale ranges from 0 to 100 points, with high scores indicating higher levels of burnout.

The total score of burnout in each dimension of CBI for each participant was calculated.^[24] Burnout was defined as high and low burnout using the cutoff score of 50 that is mid value of 0-100 point scale of CBI for each domain. All the data obtained was entered into Microsoft Excel and analysis was done using the Statistical Package for the Social Sciences (SPSS) software(version 22). The Pearson chi square test was used to find out the association of demographic variables with personal, work and client burnout.p value < 0.05 was considered statistically significant.

RESULTS

A total of 200 questionnaires were distributed to all the junior and senior residents and nursing staff in all the wards and OPDs of DR RPGMC Tanda and 152 questionnaires were received back constituting a response rate of 76%. Means of the perceived stress and burnout scores for the total sample are shown in table (Table 1).

Table 1: Demographic Characteristics; N= 152

| Parameters | (Mean ± SD) |
|-------------------------------|------------------------------|
| Age | 31.51±5.65 |
| Years of Service | 2.32 ±1.19 |
| N (%) | |
| Married | 105 (69.1) |
| Secondary school | 21(13.81) |
| Senior secondary school | 32 (21.1) |
| Graduate | 37 (24.3) |
| Postgraduate | 62 (40.8) |
| Burnout scores by CBI* | |
| Personal Burnout score | 41.59±15.76 [Min 0, Max 88] |
| Work related burnout | 36.06±15.95 [Min 0, Max 93] |
| Client burnout | 35.83±21.24[Min 0, Max 96] |
| Perceived stress scale score | 50.51 ±13.07[Min 0, Max 93] |

*Copenhagen Burnout Inventory

Table 2
Prevalences of scores of each dimension of Copenhagen Burnout Inventory

| | Personal burnout | | Work burnout | | Client burnout | |
|------------------|------------------|---------|--------------|---------|----------------|---------|
| | N | p value | N | p value | N | p value |
| Males | 12 | 0.99 | 8 | 0.86 | 9 | 0.81 |
| Females | 51 | | 32 | | 41 | |
| Staff | | | | | | |
| Senior residents | 20 | 0.85 | 17 | 0.27 | 19 | 0.21 |

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|-----------------------|----|------|----|------|----|------|
| Junior residents | 5 | | 2 | | 1 | |
| Staff nurses | 38 | | 21 | | 30 | |
| Marital status | | | | | | |
| Single | 18 | 0.67 | 12 | 0.87 | 16 | 0.43 |
| Married | 45 | | 28 | | 34 | |
| Type of family | | | | | | |
| Nuclear | 32 | 0.81 | 18 | 0.30 | 22 | 0.17 |
| Joint | 31 | | 22 | | 28 | |

Table 2 shows that all forms of burnout were more among female participants as compared to males. The difference was not statistically significant. Study revealed high burnout (score > 50) score among staff nurses in every dimension. Senior residents had high burnout scores as compared to junior residents. It was also seen in the present study that married participants had higher burnout levels as compared to single participants. The difference in burnout scores was not much between participants belonging to nuclear and joint family types.

Discussion

The CBI was chosen over the more popular Maslach Burnout Inventory (MBI) as it had similar psychometric properties as ours.^[25] Previous studies on burnout among residents have used the MBI that makes it difficult for an exact comparison with our study. Personal burnout was higher as compared to the other two types in our study. Similar to our finding a study on doctors working in the specialities of Surgery and Gynaecology in Germany also found high personal burnout (48.7%)^[27]

Our study showed that married participants had all forms of high burnout compared to their single counterparts. This is in contrast to the finding of a research study by Cordes and Dougherty.^[16] Lesser client and work burnout could be due to the fact that participants have better stress management skills while dealing with patients and adjusting with their work when compared to personal burnout. It may need further assessment. The proportions of burnout were higher in our study than the average scores reported by Kristensen.^[24] They had reported average scores of 35.9, 33.0 and 30.9 for personal, work related and client related burnout across 15 jobs compared to 42, 36 and 36 respectively.

Limitations

Limitations of the study include that the study has been done at a single centre that might not have the same study environment in other centres. The number of residents in various specialities can vary in different institutions and in different countries making it difficult to compare results across all institutions and specialities . Our study is a hospital based cross sectional study that will not explain how burnout varies and progresses over a period of extended time and causality of stressors with outcome of burnout. Multicentre, blinded, prospective studies across all specialities will provide a better picture of burnout among residents in the country. Burnout has also been associated with depression, anxiety, drug and alcohol abuse, and deterioration in health along with suboptimal care.^[28]We could not study these factors.

Burnout can be better managed by use of interventions such as counseling, cognitive behavioural therapy, social skills training etc.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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