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Original Research Article

Evaluation of burnout in medical interns: an institutional study

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ABSTRACT

Background: Burnout is a psychological syndrome characterised as state of emotional exhaustion, negative attitude towards the recipient of care (depersonalisation) and a feeling of low accomplishments in human service professionals. However, there is very limited literature about Burnout syndrome among medical interns from India. Thus, this study aimed to found out the prevalence of burnout syndrome among medical interns and to find any gender differences between male and female interns.
Methods: The study was a cross sectional study with a convenient sample of 100 medical Interns. Subjects filled a pretested semi-structured questionnaire, which consisted of demographic data and measures of assessment. Burnout was assessed by application of Masalach Burnout Inventory. Definition of burnout was taken as high score (>27 points) on Emotional exhaustion subscale, along with high scores (>10 points) on depersonalization subscale and Low score (<33 points) on personal accomplishment subscale.
Results: Mean age of the sample was 23.9 years. 48 % were males and 52% were females. Burnout syndrome was found to be present in 22% subjects. 34% scored High on Emotional exhaustion subscale, while 46% scored High on depersonalization subscale and 77% scored Low on personal accomplishment subscale. Burnout status and subscales scores did not vary significantly with gender.
Conclusions: Considering the higher ratings on various domains of Burnout among medical interns there is a need for targeted action and further research for a healthy workforce development in field of Medical care.

Keywords: Burnout syndrome, Gender differences, Medical Interns, Medical education, Occupational disorder

INTRODUCTION

Burnout is a psychological syndrome in human service professionals characterised as:[1] State of emotional exhaustion, Negative attitude towards the recipient of care (depersonalisation) and feeling of low accomplishments. The term "burnout" was first used by Herbert Freudenberger in 1974.[2] The psychologist Freudenberger observed that the employees of a clinic for drug addicts in the United States were unstimulated to help the patients, because these did not make any effort to follow the treatment. Therefore, it could be observed that the employees showed some symptoms that had been associated with the Burnout syndrome

Medical training and Internship is considered particularly stressful as it is characterized by: long working hours, lack of peer support-competitive environment, imbalance between professional and personal lives, lack of recreational activities, staying away from home, financial problems, uncertain future and emergency situations.[3] Previous research has found out various consequences of burn-out in field of healthcare.[4] For patients burn-out results in-reduced patient satisfaction, suboptimal patient care and for health care workers results in- Absenteeism,

poor physical health, decreased cognitive function depression, suicidal ideations and substance abuse. Burnout rates in medical students globally range from 28% to 45%.[5] Female students reportedly are more severely affected with Burnout but conflicting reports in literature.[6]

Developing countries like India have difficult working and social conditions and examining burnout is important to address quality care and working conditions. Yet there is dearth of studies assessing Burnout in medical interns from India. Thus, we planned a study with aim and objectives of studying the prevalence of burnout syndrome among medical interns and to find any gender differences in Burn out syndrome in the sample.

METHODS

It was a cross-sectional study, conducted at Maulana Azad medical college, New Delhi during December 2014. The study sample consisted of 100 MBBS interns recruited through convenient sampling. All subjects filled a pretested semi-structured questionnaire consisting of demographic data and measures of assessment. Burnout was assessed by application of Masalach Burnout Inventory.[1] It is a 22-item self-report questionnaire which has 3 subscales: emotional exhaustion (EE), depersonalization (DP) and personal accomplishment (PA). Possible answers were categorized into seven categories (0 - never, - 6 - every day). The total score for each subscale is categorized 'low', 'average' or 'high' according to determined cut-off scores.[1]

- Emotional exhaustion: >27= high, Moderate = 19-26, Low ≤18
- Depersonalization: High ≥10, Moderate = 6-9, Low ≤5
- Personal accomplishment: High ≥40, Moderate = 34-39, Low ≤33

Definition of burnout was taken as: high (>27 points) emotional exhaustion + high (>10 points) depersonalization + low (<33 points) Personal accomplishment

Statistical analysis was performed with SPSS version 20. Descriptive statistics, Chi square test and Mann Whitney test was applied. P values lower than 0.05 were considered as statistically significant.

RESULTS

Out of 100 interns, 48 (48%) were males and 52 (52%) were females. The mean age of sample was 23.9 Years (SD ±2.59). Majority of the subjects belonged to Hindu religion (88%), followed by others (8%) and Muslims (4%). 51% of sample were day scholars and 49 % resided in Institutional Hostel.

As per our definition taken for Burnout in the study-Burnout was Present in 22 % of the sample. Table-1 shows Burn-out subscales scores categorized in high, medium and low categories.

Table 1: Burn-out subscales scores.

Burn-out level	Burn-out Subscale		
	Emotional exhaustion (%)	Depersonalization (%)	Personal accomplishment (%)
High	34	46	07
Moderate	30	19	16
Low	36	35	77

In Emotional Exhaustion Subscale -34% of subjects scored high, 30 % scored medium and 36 % scored low. In Depersonalization subscale -46 % of subjects scored high, 19 % scored medium and 35 % scored low. In Personal Accomplishment subscale- 7 % of subjects scored high, 16 % scored medium and 77 % scored low.

Out of total sample 11 out of 48 males and 11 out of 52 females students exhibited burnout as per definition taken. Table 2 shows Burnout status comparison among two genders, which was statistically non-significant (p=0.832). Also, the Burnout subscale scores did not vary significantly among two genders. Table-3 shows Burnout subscale group comparison by Gender, which came out to be non-significant for all subscales (p>0.05). Emotional Exhaustion by gender (p=0.182), Depersonalization by gender (p=0.681), Personal Accomplishment by gender (p= 0.064).

Table 2: Burnout status comparison with Gender.

Gender	Burnout present	Burnout absent	Significance (p value)
Male	11	41	0.832
Female	11	37	

Table 3: Burnout subscale group comparison by gender.

	Significance (Mann Whitney test)
EE subscales by gender	0.182
DP subscales score by gender	0.681
PA subscales score by gender	0.064

DISCUSSION

This study sought to explore Burn-out prevalence and gender differences in burnout experience among medical interns of a Medical College from India. The prevalence of Burnout in index study came out to be 22 % of sample. This figure is lower than some previous studies probably because a stricter defining criteria was implicated in index study.

Some of the earlier studies reported their results based on 1 or 2 subscales, while we used defining criteria consisting of all 3 subscales. Independent sub-scales in our study showed higher values - similarly reported in previous studies.[5] High Emotional exhaustion was found in 34 % of the subjects, High Depersonalization in 46 % of the subjects and low Personal accomplishment in 77 % of the subjects.

There were no significant gender differences in Burn out rates in study including subscale scores as well. Earlier also there are conflicting results in scientific literature about this finding.[6] Some studies showed that female residents scored significantly more burnout whereas other studies have shown the opposite and few studies reported no gender associations.[7]

Thus, implications of this study is that biological factor of gender may not be a reasonable starting point for understanding and explaining burnout among medical interns. However, there is an urgent need for to tackle the issue of burnout among interns and medical students generally like supportive academic atmosphere, incorporation of Stress management, extracurricular activities, support groups, relaxation training, time-management and coping skills.

There can be Workplace interventions like ensuring reasonable workload and working hours, attitudinal changes of authorities and finally need for more research like longitudinal interventional studies in this area.[8] There are however limitations with this study like the results cannot be generalized since it was an institutional study with convenient sample and response bias could not be ruled out. Also, due to cross sectional design, causal relationships could not be tested.

CONCLUSION

The study was able to show that medical interns also experienced burnout, which did not vary significantly with gender. Measures therefore need to be undertaken to address the mental health needs of medical students. Also there is need for further research especially prospective cohort studies to understand the causes, consequences and preventive measures regarding burnout.

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