

LEVEL OF STRESS AMONG THE RESIDENT DOCTORS WORKING IN A TERTIARY CARE CENTRE OF EASTERN INDIA: A CROSS- SECTIONAL STUDY.

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ABSTRACT

Aim: To know the level of work related stress among the resident doctors. Material and methods: A questionnaire containing nine points and its subparts given to 71 residents of department of anesthesiology and obstetrics & gynecology to know the level of stress and work satisfaction among them. Statistical analysis: Simple percentage analysis of stress questionnaire. Results: Among the 71 residents, survey showed the highest level of stress is due to poor hostel and food facility (74.64%). As residents of both the departments are facing

heavy workload and most of the time they are engaged in emergency work so they get inadequate sleep (77.4%). There is no break or one day off from the duties in their working schedule. Conclusion: There is a high level of dissatisfaction for hostel and food facility among the residents. At least providing better accommodation and food will help in lowering down stress among them, so they can work more efficiently and in more conducive environment.

KEYWORDS: Stress, resident doctor, anesthesiology, obstetrics and gynecology.

INTRODUCTION

Morgan and king defined stress as “ an internal state that can be caused by physical demands on the body or by environmental and social situations known as stressors that are evaluated as potentially harmful, uncontrollable or exceeding our resources for coping”.^[1]

Stress is a normal phenomenon of our daily life. It is a normal physical reaction to an internal or external pressure that is placed on a person's system. Stress becomes a problem when a

person can not cope up with the situations and thus become prone for drug and alcohol addictions and in worse conditions can commit suicide also. Extended periods of stress can cause destructive changes in the body like depression, hypertension, chronic ulcers and sleep deprivation disorders leading to psychiatric illness.^[2]

Factors like excessive working hours, sleep deprivation, and repeated exposure to emotionally changed situations play an important role in causing stress in this group. Family responsibilities, financial problems, job insecurity and personal issues aggravate the stress.^[3] Resident doctors mainly of clinical branches suffers stress more in comparison to non-clinical residents as in short time period expectations from them are very high and with the less experience gained within the short period of residency they are supposed to be proficient clinicians, educationists, researchers, and administrative. Few studies showing well-being in residency: a time for temporary imbalance? Ratanawongsa N et al 2007⁴ reported that resident doctors have to manage all the things in this period of time, from hectic schedule of hospital up to the home.

MATERIALS AND METHODS

A nine point's questionnaire with subheadings given to 71 resident doctors of anesthesiology and obstetrics & gynecology department of Banaras Hindu University, which covers the largest patient input from eastern India. All the residents first year, second year, and third year of both the departments are included in this study. Among them 45 (63.3%) are resident doctor of anesthesia and 26 (36.6%) of obstetrics & gynecology. Eight points of the questionnaire are related with age, gender, marital status, family responsibilities, accommodation, choice of profession by self or imposed by family or others, after joining the profession whether they liked it or not and lastly the duration of work. The last ninth point was related with causes of stress, it has twelve subparts. There are lots of factors which affect mental as well as physical aspect of residents during the period of residency and labeled as stress causing factors. These are work load, behavior of consultants towards residents, competition among colleagues, academics, seminar, presentations, sleep pattern, financial condition or background, grant of leave, examination test, training, hostel facilities, food and departmental quality of life. The format of questionnaire is given in Table 1.

RESULTS

All 71 questionnaires were completed and returned and thus included in the analysis. All the residents were in the 25-30 yrs age group. 45 residents(63.3%) were of anesthesia and

26(36.6%) of obstetrics & gynecology. 57.7% residents were male and 42.2% female. 21 doctors were married, 3 are living in married hostel accommodation and 18 residing outside. 13(18.3%) resident doctors belong to upper class and 58(81.69%) to middle class family. 60 residents (84.5%) choose the specialty by their own interest and 11(15.49%) by other's interest. 66(92.9%) residents were satisfied by their professional work but 5(7%) were not satisfied.

The working hours of residents vary depending on the department. As residents of obstetrics and gynecology do 8-10 hrs daily work along with 2 night duties in a week and without single day off so they feel that their job is very stressful. In comparison anesthesia residents do 6-8hrs/day duty as they are more in number and also they do night duty once in a week so they come under the category of moderate workers. Academic activity is thrice weekly for obstetrics resident and for anesthesia it is bi- monthly. Most of the gynecology residents are deprived of sleep in their training periods whereas anesthesia residents sleep one by one basis. 64.7% residents have no financial responsibility from their family side, 21.1% residents are partly responsible and 14% are fully responsible for their families. Around 50(70.4%) residents stay in hostel and they labeled that the hostel facility is very bad; regarding food, bathrooms any recreational activities in the hostel. About the departmental quality of life 40 labeled as good and 31 as average.

Stress factors	Mild	Moderate	severe
Duty hrs	6-8 hrs/day(3rd year residents of anesthesia- 15)	>8hrs/day(1st yr & 2nd yr residents of anesthesia- 15+15)	>12 HRS work 2 emergency duties /week(obs &gyn residents-26)
Academic activities	Monthly (anesth)	Weekly (anesth)	3 times/week (obs &gyn)
Sleep	adequate -		inadequate
Family responsibilities	No responsibility(46) 64.7%	Partly dependent(15) 21.1%	Fully dependent(10)
Hostel facilities	Outside accommodation(21) -		Hostel(50)
Hostel food	Average(39)	Good(3)	Bad(11)
Quality of life in department	department Good(40)	Average(31)	Poor(0)

By this observation, we came to know that residents of obstetrics & gynecology department are facing much stressful situation in comparison to anesthesiology residents (because anesthesiology residents are more in number). All the residents needs recreational activities, some break from duties and stress reducing activities.

DISCUSSION

This study was done to know the work related stress among the resident doctors, which is multifactorial. Most prevalent problem among them is poor hostel facility, long working hours and multiple emergency duties. These problems are found similar to the other studies done by Saini NK *et al* (2010),^[5] Pavithra R *et al* (2011),^[6] Rachel Cherian Koshy *et al* (2011).^[7] It was found that stress level was more prevalent in the residents who were not satisfied with the subject they have chosen and also with the medical profession. Residents residing in hostel are facing much stressful conditions in comparison to those who are residing with their families. Earle *et al*^[8] also found in their study that 43.7% of residents turned to their family and or friends in hour of their need to relieve stress. This finding can be explained by the fact that family and friends are the top-most support in one's life and provide the social and mental security to a person. Relationships play important role in the Indian society and this cohort of resident doctors is no exception to the fact that spending time with significant others is relaxing and perceived as an effective mode for stress management. Cohen *et al* reported a stress prevalence of 34% among resident doctors in Canada.^[9] In 2004, Sargent *et al* did a study in USA in 2004 which reported 33% stress among resident doctors.^[10] These findings were similar to the findings of the present study. However, the geographical settings as well as the working atmosphere of the resident doctors were totally different in these studies.

This study had certain limitations. The study was conducted on subjects registered in clinical studies with the anticipation that they would be more stressed than nonclinical subjects. Hence, for future research, studies looking at the work-related stress among nonclinical resident doctors need to be performed.

CONCLUSION

The resident doctors registered for post graduation in department of anesthesia & obstetrics and gynecology at institute of medical sciences, BHU, VARANASI, India perceive stress caused by a number of factors, hostel/quarter facilities and work load of department. By

providing proper accommodation and stress busters like gymnasium, recreation rooms, good food will help them to overcome work pressure.

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