



Medicine

A STUDY ON PSYCHOLOGICAL DISTRESS AMONG POST-GRADUATES AND JUNIOR DOCTORS IN MEDICAL COLLEGES, INDIA

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ABSTRACT **Background:-** This is a well known fact that medical education in India is quite stressful, right from the beginning of preparation for pre medical test till completion of post graduation and post doctoral course, a medical student undergoes a highly competitive environment. They suffer unacceptably high levels of psychiatric illness, depression and suicide, dependence on alcohol and drug abuse.

Aims and objective:-The aim of the study was to know how far the Postgraduate students and junior doctors were under psychological distress related to their work. For this a cross sectional study was conducted on junior doctors in VCSG medical college, Srinagar, Uttarakhand and post graduate medical students from NRI medical college, Guntur, Andhra Pradesh. MVJ Medical College, Hoskote and J.S.S. Medical college Mysore in Karnataka by a self-administered General Health Questionnaire (GHQ-12) as a tool for assessment of psychological distress.

Observations: - Among the 105 doctors who participated, the first group of 25 were junior doctors from Government Medical college, Srikot, Uttarkhand and other 55 were Post graduate students from private medical colleges in Karnataka in South India and 20 were postgraduate students from NRI Medical College, Guntur Andhra Pradesh. Those who scored above 12 points in GHQ-12 questionnaire measured on Likert Scale were considered positive for psychological distress.

Conclusions: Of the 105 resident doctors who participated in the study questionnaire; among the four medical colleges, the MVJ medical postgraduates had a higher prevalence of distress (60%) than the junior resident doctors of Uttarakhand. There is statistically no significant difference in distress between the two sexes from all colleges put together.

KEYWORDS : Psychological distress, resident doctors, GHQ-12**Introduction:-**

Studies all over the world have shown that medical practitioners seem to suffer unacceptably high levels of psychiatric illness, depression and suicide, dependence on alcohol and drug abuse¹⁻⁴. Although these problems may develop over many years, there is evidence that mental distress during medical school predicts later problems in physicians.^{5,6} Repeated evidence that medical students are subjected to considerable stress has been published over the last decades,^{7,8} which in addition to the personal suffering of the individual doctor might negatively affect patient care.¹¹ It is known that physicians do not seek the kind of professional help for themselves as they would provide for their patients.¹² However, we know about the prevalence of clinically significant mental distress junior residents¹². While burnout or stress-reactions are conceived of as reactions to a pressing environment, psychiatric disorders such as bipolar disorder, depression, anxiety are considered inherently multi-factorial, with e.g. hereditary contributions^{7,8}. Knowledge about presence of psychiatric conditions is important in itself and if found, needs attention. That the junior doctors and postgraduates working near metropolis in the plains and those working in remote hilly areas there is difference in stress among the two groups. This study was undertaken to address the above issue.

Aims and Objective: - The present study was undertaken among resident doctors of four rural medical colleges one located in the hills of Uttarakhand and others in rural area of Andhra Pradesh, and two were from Karnataka, with the aim of gaining knowledge on psychiatric morbidity using GHQ-12 screening questionnaire.

Methodology

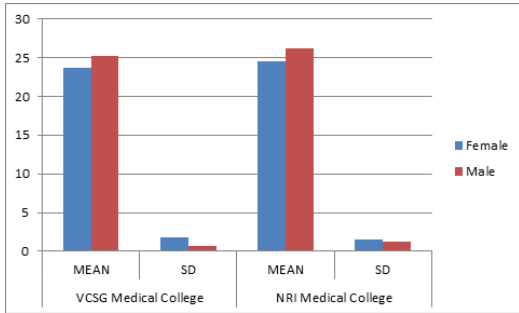
A cross sectional study was conducted among junior resident doctors of two rural medical colleges one located in the hills of Uttarakhand and another in rural area of Andhra Pradesh. The data was collected in the month of March 2016 at VCSG medical college and residents were

selected for convenience. The third author a post graduate student from NRI medical college gathered information at the same time from his colleagues. A self-administered General Health Questionnaire (GHQ-12) was used as a tool for assessment of psychological distress among them. General health questionnaire is short and is simple to complete. The questionnaire comprises of 12 questions which assesses general and psychological health among subjects during past one month. Each question had 4 responses which range from 0 to 3 where '0' indicates 'no distress' and '3' indicates 'maximum stress'. Those having scores of more than 12 were considered positive for psychological distress.

The 25 junior doctors who had recently finished internship and preparing for PG Entrance test in VCSG medical college and who were working as junior resident doctors on contract basis in the institution in various departments. Of the 20 first year PG trainees from NRI Medical College, Guntur, 50% got admitted on merit basis 50% on management quota and were financed by their parents. The demographic characteristics of the participants are shown in table 1. The two groups were comparable as for age and work conditions for assessment of stress among the junior doctors. The only difference being NRI medical college is a private institution whereas VCSG Medical College is government institution.

Table 1 .Showing the demographic characteristics of the Participants.

Institution	VCSG Medical College		Participants No.	NRI Medical College		Participants No.
	MEAN	SD		MEAN	SD	
Age						
Female	23.7	1.8	13	24.6	1.5	15
Male	25.2	0.7	7	26.2	1.20	10
Total			20			25



Graph1. Showing demographic characteristics.

Observations

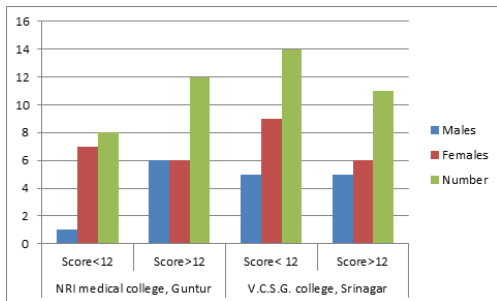
The mean age of the female participants was 23.7 + 1.8 and the male participants were 25.2 + 0.7 from VCSG Medical College. The mean age of the female participants was 24.6 + 1.5 and the male participants were 26.2 + 1.2 as shown in table 1.

The Andhra Pradesh group had 20 residents, out of which 7 were male and 13 were female residents, while the Uttarakhand group consisted of 10 males and 15 female residents.

The counts of GHQ-12 scores were as shown in table 2 and graph 2. Among the residents 23 (51.1%) turned positive for psychological distress. 12 out of 20 junior residents from NRI Medical colleges were under psychological distress with score above 12. In VCSG medical college junior doctors 11 out of 25 had score above 12. Null hypothesis was formulated that there is no difference in stress between two college groups.

Table 2. Showing the details of GHQ-12 scores

College	NRI medical college, Guntur		V.C.S.G. college, Srinagar		Total
	Score<12	Score>12	Score< 12	Score>12	
Males	1	6	5	5	17
Females	7	6	9	6	28
Number	8	12	14	11	45



Graph 2. Showing the GHQ-12 Scores.

As the samples were small size (i.e., 20 from NRI and 25 from VCSG) student t- test statistical tool was applied to know the difference in stress between two groups of college's residents. The calculated Z value was 3.51 which is above the table value 1.96 (p-value =0.05), hence the null hypothesis was rejected. The PG students from NRI Medical College were more distressed (60%) then the junior doctors in VCSG medical college, Srinagar (44%).

Out of 19 males, 11 were found suspects of a psychiatric morbidity as compared to the female, where in only 12 out of 28 were found positive on GHQ-12. Again the two tailed students t-test was applied to know the sex differences in stress from both colleges put together. The calculated Z value was 1.79 for 5% level of significance (p value=0.05). The table value was between, -1.96 and +1.96. Hence null hypothesis cannot be rejected. So, there is no statistically significant difference in distress between males and females from both colleges put together. Over all stress with both groups was 51.1%.

Table 3. Showing the distress among the junior doctors of 4 colleges

college	No	NRI GUNTUR	N	VCSG M Uttarkhand	N	MVJ Med R&C Bengalur	No	J.SS.My sore				
GHQ		S<12	>12	S>12	>12	S<12	>12	S<12	S>12			
Males	9	3	6	4	6	20	6	14	10	4	6	
female	11	6	5	15	9	6	20	5	15	10	5	5
total	20	9	11	25	13	12	40	11	29	20	9	11

Observations:

Comparing distressed doctors, NRI medical postgraduates (11/20) 55% to MVJ medical college PGs(29/40) 72% there was not much difference (P= 0.1738). comparing MVJ PGS (29/40) to VSGS medical college Uttarkhand (12/25) there is a significant difference of 72% to 48%. (p<0.04).

Over all distressed doctors were 60% (63/105). Males predominated with (32/49) 65% compared to Females(31/56) were 55%.(p<0.298). Comparing the junior doctors from Uttarkhand (12/25) 48% were distressed. All other medical colleges put together PG s (51/80) 63.75% were distressed (p<0.016).

Discussion: It was noted by me as doctor and teacher working in various hospitals India and abroad that the resident duty doctors were under stress while on 24 hours working day and they were not fresh in the morning rounds to answer simple questions related to the cases they had seen. They were confused and distressed and sometimes kept mumb. May be because of lack of sleep and continuously attended to emergencies in the casualty, the general wards and doing CPR on terminally ill patients in ICU they were burnt out. So I discussed this matter with Dr.Prem Singh psychiatrist with whom I was associated in Uttarkhand, a remote rural medical college in the hilly areas and he gave me similar studies performed in various institution. I gathered the information from associated colleges in Andhra Pradesh and Karnataka where I had worked and compiled this paper. There is abundant evidence in literature with respect to the psychiatric morbidities in medical students references1,2. The distress noted among the junior doctors was comparable to similar study by Frith and Cozens' AD Youssuf². The doctors working in remote rural areas like uttarakhand and Mysore were less distressed than doctors working in Metropolis like Bengaluru. The male doctors were more distressed than female doctors. The Postgraduate students were more distressed than the junior doctors. These were the new findings in our study. We the above doctors are junior doctors and PGs are of the opinion that the junior doctors and should not be posted to 24 hours duty.

Conclusions

Among the 4 medical colleges, the NRI medical postgraduates had a higher prevalence of distress (60%) than the junior resident doctors of Uttarakhand (44%). There is also statistically significant difference in distress between the both sexes; males are more distressed than the females. However there is need to probe by further investigation as to why the post graduates were more distressed than the junior doctors. There is a need to spare the post graduates students and the junior doctors from posting to 24 hours duty. Like in the Ministry of Health hospitals abroad they should be posted for 8 hourly duty only and spare them from psychiatric morbidities.

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