ORIGINAL ARTICLE

Frequency of Anxiety and Depression among Doctors at Postgraduate Resident Level

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ABSTRACT

Aim: To determine the frequency of Anxiety and Depression among doctors working at Post graduate resident level in a tertiary care hospital.
Study design: Cross sectional study
Place and duration of study: The study was carried out in January 2012 in all medical and surgical wards functioning at postgraduate level in Services hospital, Lahore, Pakistan.
Methods: All available doctors working as postgraduate residents in medical and surgical wards were questioned using a simple standardized questionnaire based on Hospital Anxiety and Depression Scale (HADS).
Results: A total of 250 doctors fulfilled the inclusion criteria, out of which 195 participated in this study. Out of 55 remaining residents 20 didn't properly and completely fill and return the questionnaires and 35 were not present at the time of study. Out of 195 residents 53(27%) had anxiety and 27 (14%) had depression. Anxiety and depression were found concomitantly in 15 (7.65%) doctors. Borderline anxiety was found in 127(65.1%) doctors and borderline depression in 53 (27%) doctors. Anxiety was seen in 22% females and 20% males. Depression was seen in 8% females and 11% males. All doctors who were separated had both anxiety and depression. Anxiety was seen in 57% and depression in 43% of divorced group. Married group had least levels of anxiety (19%) and depression (6%). Frequency of depression was almost equal in residents and government employed medical officers i.e 10% and 11% respectively. Anxiety was found in 19% of medical officers and 27% of residents. Anxiety was found in 32% of unpaid doctors as compared to 19% in paid doctors. Whereas depression was found to be 10% in both groups.
Conclusion: It is concluded from the study that significant levels of anxiety and depression exist in our doctor working at tertiary care level . However Further studies are required to determine magnitude of this problem, factors linked to it and measures which can be taken in order to halt the escalating anxiety and depression among doctors.
Keywords: Anxiety, Depression , postgraduate residents, HADs

INTRODUCTION

Occupation related stress is commonly associated with almost every profession in this world. Repeated stressful experiences may lead to depressive symptoms. Doctors in particular are exposed to major stressors related to their profession, however this aspect has not been well studied in our population[1].

Post-graduate residency is an established stressful entity, linked to physical, emotional and intellectual challenges. This might lead to potential adverse effects in term of physician and patient well being.[2-4]A study has shown that prevalence of psychological disturbances in doctors was around 27% and they had alarming suicide rate of twice that of general population[5].

Certain factors that could contribute to anxiety and depression in doctors include work overload, lack of job incentives ,lack of friendly social set-up and conflicting views in terms of patient management[6]. Also insufficient communication at all levels and administrative mismanagement is directly related to increased stress and depression in resident doctors[5]. Stress at resident level can be reduced by avoiding these factors and indirectly improving level of job satisfaction[5]. Raised levels of anxiety and depression among residents can lead to physical and emotional ailments ,poor performance, absenteeism and negativity in terms of attitudes and behaviour[7]. Other factors contributing to job stress and anxiety include time pressure, frequented unwanted interruptions, difficult patients and work/home conflicts[8].

Another important point is that better patient-doctor and doctor-staff relationship leads to high levels of job satisfaction[5]. High HAD scores in resident doctors may lead to poor performance and poor delivery of medical care[9].

A number of steps can be taken to manage high anxiety and depression levels among young residents. These include stress management training

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, improved coaching by senior physicians and organizing workshops.[10] Job satisfaction is highly required in field of medicine as this profession is directly linked to human health.[11]

The purpose of this study is to assess the magnitude of problems caused by existing anxiety and depression among postgraduate resident doctors of different specialities working in a tertiary care hospital of Pakistan and associated factors so that steps can be taken towards solving this issue in our set up.

MATERIALS AND METHODS

This cross sectional study carried out in all medical and surgical wards functioning at postgraduate level in Services hospital, Lahore, Pakistan. A total of 195 postgraduate doctors were included in the study. Sampling technique was convenient. Doctors under 40 years of age doing postgraduate training in any discipline were included in the study. House officer, doctors who have completed their residence period and doctors under any other training programme were excluded from the study.

The study was approved from hospital ethical committee. This cross-sectional study was conducted in January 2012, using a sample of 195 consenting anonymous doctors employed in Services Hospital Lahore. Data was obtained using a self-administered 14 point questionnaire, including 7 questions related to anxiety and 7 questions related to depression. Each question scored 0-3 and total score >10 was labelled as having anxiety and depression and 8-10 was labelled as borderline and <8 was normal. Data was then analysed using SPSS version 14. Descriptive analysis was done for numerical variables such as age and reported as mean; median and standard deviation for continuous variables like age whereas frequencies were calculated for categorical variables such as gender, Level of residency. marital status, salaried, employment status and severity of anxiety or depression according to HAD scoring at the time of study.

RESULTS

A total of 250 doctors fulfilled the inclusion criteria, out of which 195 participated in this study. Out of 55 remaining residents 20 didn't properly and completely fill and return the questionnaires and 35 were not present at the time of study. Age range of participants was 24-38 years, mean 27 and median 27. Out of 195 residents 53 (27%) had anxiety and 27 (14%) had depression**.** Anxiety and depression were found concomitantly in 15 (7.65%) doctors. Borderline anxiety was found in 92(47.1%) doctors and borderline depression in 53 (27%) doctors.

Of the 195 doctors 127 were male and 64 were females and 4 doctors didn't mention their gender. Anxiety was seen in 22% females and 20% males. Depression was seen in 8% females and 11% males (Fig. 1)**.** When stratified on the basis of marital status, anxiety and depression were present more in the separated and divorced group as compared to married and unmarried group. All doctors who were separated had both anxiety and depression. Anxiety was seen in 57% and depression in 43% of divorced group. Married group had least levels of anxiety (19%) and depression 6%.(Fig. 2).

Frequency of depression was almost equal in residents and government employed medical officers i.e., 10% and 11% respectively. Anxiety was found in 19% of medical officers and 27% of residents. Anxiety was found in 32% of unpaid doctors as compared to 19% in paid doctors. Whereas depression was found to be 10% in both groups (Fig. 3).

Fig 1: Frequency of anxiety and depression according to gender

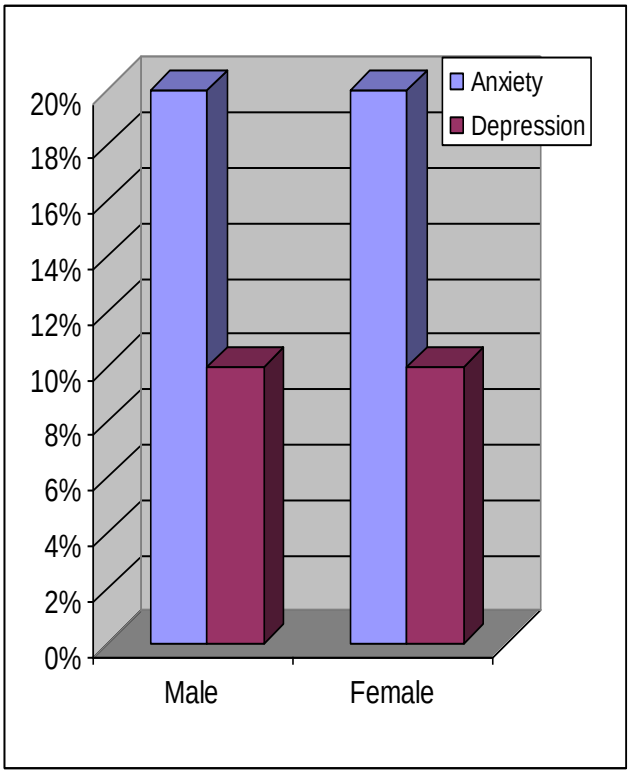


Fig 2. Frequency of anxiety and depression according to marital status

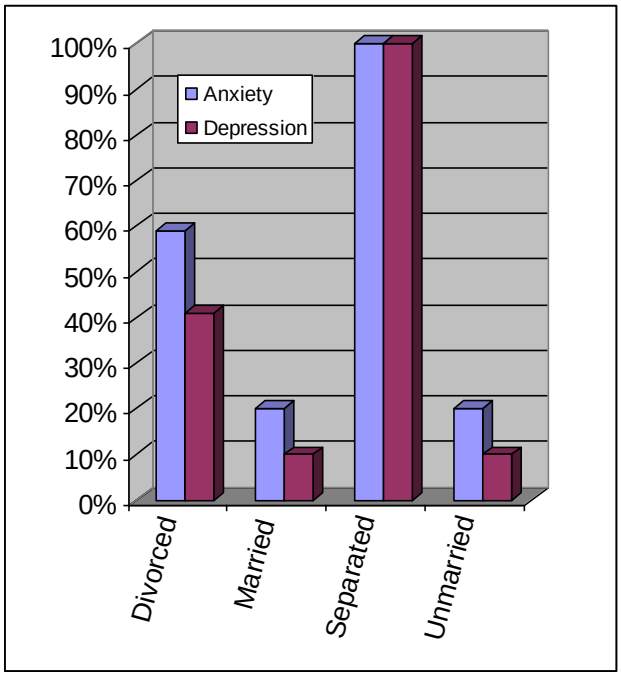
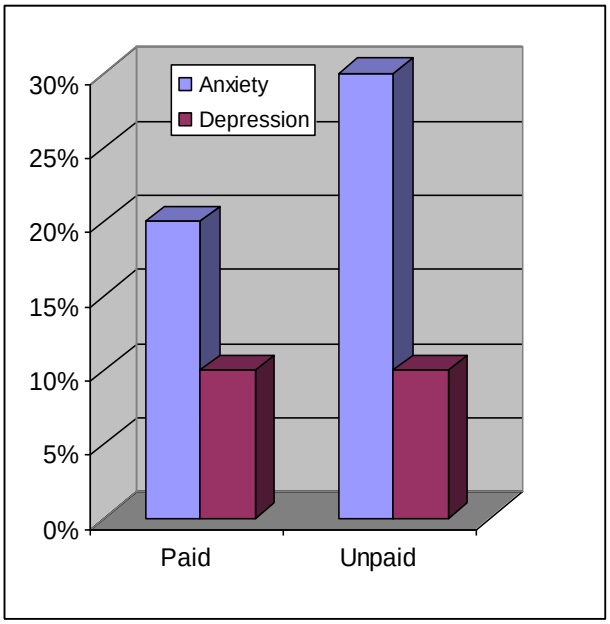


Fig 3: Frequency of anxiety and depression according to paid status



DISCUSSION

This is an unfortunate fact that working hours of medical and surgical postgraduate residents in our tertiary care hospitals extend from 60 to 80 hours per week on an average[12]. This undoubtedly leads to adverse outcomes in terms of physicians health, mental and physical performance and delivery of medical care. Sleep deprivation along with other factors leads to onset of psychological disorders such as anxiety and depression[12].

In this study anxiety was found in 27% and depression in 14% of residents which is quite low compared to other study in which these are 47% and 35% respectively. Possible reasons for this could be smaller number of participants or use of different tools for analysis[13].

In this study existence of anxiety and depression among trainee doctors was highlighted. Age is found to be directly related to high levels of anxiety and depression scores, however in our study no significant difference was studied as almost all residents belonged to younger age group[11]. There was no significant differences regarding gender as shown by various other studies no significant gender differences were found regarding incidence of anxiety and depression[14]. However in another study females were found to have high levels of anxiety. This has been shown in another European study as well, although this gender difference can be explained by multiple factors[15,16].

In our study doctors in first year of residency had higher levels of anxiety as compared to seniors. Reduced stress level in senior levels of residency may be attributed to adaptation to the stressful environment[13].

Multiple factors were found to be responsible for high levels of anxiety and depression among postgraduate residents as shown by higher HAD score in the unpaid doctors as compared to paid group of doctors in this study. Higher scores in doctors having disturbed marital status was also seen in our study. It has been observed that stress levels are high in non-training doctors as compared to postgraduate residents[14].

One interesting fact noted in results of our study was the significantly high level of borderline anxiety (47%) in postgraduate residents. I think intervention needs to be done at this level to prevent elevation of this ratio into frank cases of anxiety. It is strongly suggested that measures should be adopted to reduce anxiety and depression in doctors working at resident level by reviewing and reforming training structure and introducing stress management training workshops[17].

CONCLUSION

It is concluded from the study that significant levels of anxiety and depression exist in our doctor working at tertiary care level. However further studies are required to determine magnitude of this problem, factors linked to it and measures which can be taken

in order to halt the escalating anxiety and depression among doctors.

REFERENCES

1. Embriaco N, Hraiech S, Azoulay E, Baumstarck-Barrau K, Forel JM, Kentish-Barnes N, et al. Symptoms of depression in ICU physicians. Ann Intensive Care. 2012;2:1186/2110-5820-2-34.
2. Gaba DM, Howard SK. Patient safety: fatigue among clinicians and the safety of patients. N Engl J Med. 2002;347:1249-55.
3. Owens JA, Blum J. Sleep, fatigue, and medical training: an overview. Med Health RI. 2002;85: 82-5.
4. Sotile WM, Sotile MO. The resilient physician: effective emotional management for doctors and their medical organizations. Chicago: American Medical Association; 2002.
5. Ramirez AJ, Graham J, Richards MA, Cull A, Gregory WM. Mental health of hospital consultants: the effects of stress and satisfaction at work. Lancet. 1996;347:724-8.
6. Maslach C, Leiter MP. The truth about burnout: how organizations cause personal stress and what to do about it. San Francisco, CA: Jossey- Bass;1997.
7. Campbell DA Jr, Sonnad SS, Eckhauser FE, Campbell KK, Greenfield LJ.Burnout among American surgeons. Surgery. 2001;130:696-705.
8. Chan OMA, Huak CY. Influence of work environment on emotional health in a health care setting. Occup Med 2004;54:207-12
9. Barden CB, Specht MC, McCarter MD, Daly JM, Fahey TJ 3rd. Effects of limited work hours on surgical training. J Am Coll Surg.2002;195:531-8.
10. Blanchard P, Truchot D, Albiges-Sauvin L, Dewas S, Pointreau Y, Rodrigues M,et al. Prevalence and causes of burnout amongst oncology residents: a comprehensive nationwide cross-sectional study. Eur J Cancer. 2010;46:2708-15.
11. Uncu Y, Bayram N, Bilgel N. Job related affective well-being among primary health care physicians. Eur J Public Health. 2007;17:514-9.
12. Steven K. Howard, David M. Gaba. Trainee fatigue: Are new limits on work hours enough? CMAJ .2004.170;6.
13. Alvi T, Assad F, Ramzan M, Khan FA. Depression, anxiety and their associated factors among medical students.JCPSP . 2010 ;20:122-6.
14. Adám S, Torzsa P, Gyorffy Z, Vörös K, Kalabay . [Frequent high-level burnout among general practitioners and residents]. 2009 Feb 15;150:317-23.
15. Kaya M, Genc M, Kaya B, Pehlivan E. [Prevalence of depressive symptoms, ways of coping, and related factors among medical school and health services higher education students]. Turk Psikiyatri Derg.2007; 18:137-46.
16. Dahlin M, Joneborg N, Runeson B. Stress and depression among medical students: a cross-sectional study. Med Educ 2005;39:594-604.
17. Thomas NK.Resident burnout. JAMA. 2004;292:2880-9.