

ORIGINAL ARTICLE

ANXIETY AND DEPRESSION IN DOCTORS UNDERGOING POSTGRADUATE TRAINING COURSES AT ARMED FORCES POSTGRADUATE MEDICAL INSTITUTE RAWALPINDI

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Background: In the recent past doctors own physical and mental health care has been a focus of research worldwide. The estimated suicide rate among doctors is approximately one per day. Various other studies reveal high scores of anxiety, depression, job dissatisfaction and burnouts. The study was carried out to determine the prevalence of anxiety and depression in doctors undergoing various postgraduate training courses at AFGMI, Rawalpindi. **Methods:** This cross-sectional study was carried out from June to December 2010 at Armed Forces Postgraduate Medical Institute, Rawalpindi. All willing available trainee doctors were included in the study. Urdu version of Beck's anxiety and depression scale was used. **Results:** Average anxiety score of all doctors was (8.05). The anxiety score was 15.7 in ENT, 12.0 in Pathology, 8.5 in Medicine, 7 in Basic Medical Sciences, 5.7 in Ophthalmology, 3.61 in Surgery, 3.3 in Radiology, and 3.05 in General Duty Medical Officers. With overall average score of (9.2), the average score on depression was highest in Anaesthesiology (20), followed by Radiology (10.05), Pathology (10.02), Basic Medical Sciences (9) Ophthalmology (8.2), Medicine (7), and General Duty Medical Officers (4.1). **Conclusion:** This study reveals an important area of doctors' own health which remains relatively neglected. Rectification measures are required to reduce anxiety/depression, and mortality and morbidity among doctors.

Keywords: Anxiety, Depression, Doctors, Morbidity

INTRODUCTION

In the recent past doctors' own physical and mental health care has been a focus of research worldwide. All physicians are under stress due to multiple factors, i.e., over worked, job dissatisfaction, security reasons, and financial problems. These factors have not only affected physical but also the mental health of physicians of Pakistan. A number of psychiatric illnesses were found in physicians including anxiety disorders, depressive illnesses, adjustment disorders, and substance abuse not only in Pakistan but also in other countries.

Depression in physicians not only affects their own personal and family lives, but also may have serious impacts on health behaviour of the community in general. Furthermore, depression may seriously affect physicians' professional function. Among all physicians, resident doctors have an exceptional position. Residency training is a stressful course with frequent encounters with severely ill patients, lengthy work hours, persistent threat of being sued by patients, and a need to study regularly to keep up to date. These factors make them vulnerable to depression¹.

Although the rate of depression among physicians is comparable to that of the general population, physicians' risk of suicide is markedly higher. A review of 14 studies found that the relative risk of suicide in physicians compared with the general

population is between 1.1 and 3.4 for men, and 2.5 to 5.7 for women.²

After completing residency, the risk of depression persists. The lifetime prevalence of depression among physicians is 13% in men and 20% in women.³ It is estimated that 300–400 doctors kill themselves in USA per year. The average suicide rate is approximately 1 per day. This is a cause of great concern and that the importance of the aspect that level of psychological distress in doctors is higher as compared to the general public cannot be overlooked.⁴

Most studies showed that symptoms of mental health problems, particularly of depression, were highest during the first postgraduate year. They found that individual factors, such as family background, personality traits (neuroticism and self-criticism), and coping by wishful thinking, as well as contextual factors including perceived medical-school stress, perceived overwork, emotional pressure, working in an intensive-care setting, and stress outside of work, were often predictive of mental health problems.⁵ In all countries, the recognition of depression by clinicians in the primary care setting is low (generally less than 50%), and the consensus group recommends a 2-step process to aid the recognition and diagnosis of depression. In line with the low recognition of depression and anxiety disorders is the finding that only a small proportion of patients with depression or anxiety are receiving appropriate treatments for their

condition.⁶ The studies suggest a high prevalence of depression and anxiety among medical students with levels of overall psychological distress consistently higher than in the general population and age-matched peers by the later years of training. Overall the studies suggest psychological distress may be higher among female students.⁷

In a study conducted by Khawaja AK, *et al*, in doctors of Karachi revealed 39% of Family Practitioners having anxiety and depression.⁸ Salman Ahmed and Nasir Saeed Khan from Services Hospital Lahore reported that 10.5% of doctors were candidates of burn out.⁹ Majority of the doctors was not satisfied with their jobs. Overall, the mean scores for satisfaction were low for workplace characteristics. Lowest scores were found for pay and benefits, safety and security and workload.¹⁰

Burnout produces both physical and behavioural changes, in some instances leading to chemical abuse. The health professionals at risk include physicians, nurses, social workers, dentists, care providers in oncology, AIDS-patient care personnel, emergency service staff members, mental health workers, and speech and language pathologists, among others.¹¹ A study carried out by Muhammad H in medical colleges of Saudi Arabia found higher level of psychological distress among medical students during training period; prevalence of stress of all types was found in 57%; severe stress was found among 19.6% of students.¹² Prevalence of psychiatric and somatic morbidity was higher amongst physicians. Furthermore, female physicians consumed more anxiolytics, reported exhaustion more frequently, and exhibited poorer health maintenance behaviour than male colleagues.¹³

The objective of this study was to assess the symptoms of anxiety and depression in our local community of doctors.

MATERIAL AND METHODS

It was a cross-sectional study carried out at Armed Forces Postgraduate Medical Institute Rawalpindi, from 1st June to 31st December 2010. A total of 135 doctors were included in the study. All the available willing doctors (100) undergoing various training courses were included in the study. Those who were unwilling to participate in the study were excluded.

A questionnaire of Beck's anxiety and depression scale (Urdu version) was distributed to each of the participants. Beck Depression Inventory (BDI) contains a list of 21 items, each question has a set of at least four possible answer (0–3) choices.

The total score is compared to a key to determine the depression's severity. The standard cut-offs of BDI are as follows: 0–9 indicates minimal depression, 10–18 indicates mild depression, 19–29

indicates moderate depression, 30–63 indicates severe depression. Higher total scores indicate more severe depressive symptoms.

Whereas the Beck Anxiety Inventory (BAI) has a maximum score of 63, 0–7 indicates minimal level of anxiety, 8–15 shows mild anxiety, 16–25 shows moderate anxiety and 26–63 shows severe anxiety.

RESULTS

The average anxiety scores of all doctors was 8.05 which indicate mild level of anxiety with highest scores in ENT (15.7), which shows moderate level of anxiety. The score in doctors doing training in Pathology was 12 which shows mild anxiety whereas the score in Medicine was 8.5 showing mild anxiety level. The scores in others including Basic Medical Sciences (7), Ophthalmology (5.7), Surgery (3.61), Radiology (3.3), and General Duty Medical Officers (3.05) showed minimal level of anxiety.

The average scores on depression were highest in Anaesthesiology (20), which shows moderate level of depression. The scores in Radiology (10.05) and Pathology (10.02) were mild, whereas scores in Basic Medical Sciences (9), Ophthalmology (8.2), Medicine (7), and General Duty Medical Officers (4.1) were minimal with overall average score of (9.2). Considering the gender difference total of 8% of moderate anxiety was noted in both the gender, i.e., 3% in females and 5% in males. The details of results are given in Tables 1–3.

Table-1: Anxiety average scores in males and females of all specialties (%)

Intensity of anxiety	Overall scores	Males	Females
Minimal	74	41	33
Mild	18	13	5
Moderate	8	5	3

Table-2: Specialty-wise scores of anxiety

Specialty	Average	Intensity
GDMO	3.05	Minimal
Radiology	3.3	Minimal
Surgery	3.61	Minimal
Gynaecology	4.6	Minimal
Eye	5.7	Minimal
Basic Sciences	7	Minimal
Pathology	12	Mild
ENT	15.7	Moderate
Anaesthesia	20	Moderate

Table-3: Specialty-wise scores of depression

Specialty	Average	Intensity
GDMO	4.1	Minimal
Surgery	6.4	Minimal
Gynaecology	7	Minimal
Eye	8.2	Minimal
Basic Sciences	9	Minimal
Pathology	10.2	Mild
Radiology	10.5	Mild
ENT	18.5	Moderate
Anaesthesia	20	Moderate

DISCUSSION

We have used Beck Depression and Beck Anxiety inventory. All the doctors were having at least some symptoms of depression and anxiety. The situation is self-explanatory pointing towards 'not an encouraging psychological well being' of doctors. In case of depression, maximum scores were present in Anaesthesia followed by ENT, Radiology, Pathology, Ophthalmology, and Basic Medical Sciences, while GDMOs had minimum scores on anxiety scale. Regarding anxiety, maximum scores were present in ENT followed by Anaesthesia, Ophthalmology and Gynaecology, while GDMOs had minimum scores. Job satisfaction is an important protective factor in medical profession therefore it should be given due importance.

Risk was also elevated in nurses, physicians and dentists compared with the rest of the general population, the relative risk increasing following adjustments for psychiatric service contact, marital status, gross income and labour market status. Results were similar in both genders.¹⁴

Neuropsychiatric disorders and injuries in particular were major causes of lost years of healthy life as measured by Disability Adjusted Life Years (DALYs), and were vastly under-appreciated when measured by mortality alone. The original GBD study estimated that no communicable diseases, including neuropsychiatric disorders, caused 41% of the global burden of disease in 1990, only slightly less than communicable, maternal, perinatal, and nutritional conditions combined (44%), and that 15 percent of the burden was due to injuries. Earlier assessments of global health priorities based on mortality data attributed no deaths to mental health disorders and less than half (7%) of that suggested by DALYs to injuries.¹⁵ Mental illness was mentioned by only 3% of respondents, although concerns about stigma acted as a barrier to seeking help for some young people. Bullying and serious problems at home were highlighted as psychosocial stressors that need to be addressed.¹⁶ Cultural, social and religious mores account for variations in the presentation of depression across cultures. Somatic symptoms are common presenting features throughout the world and may serve as cultural idioms of distress, but psychological symptoms can usually be found when probed. Feelings of guilt and suicide rates vary across cultures and depression may be underdiagnosed.¹⁷

CONCLUSION

Many doctors are facing psychological distress which requires prompt strategies. These measures will be likely to result in improved well being of doctors and will result in better quality of care offered to patients.

RECOMMENDATIONS

Adequate salaries/fringe benefits should be offered to doctors. Adequate recreational facilities, leaves and suitable pays should be granted to doctors. The placement of doctors at various appointments should be in accordance with their capabilities/experience and qualifications. Security of doctors/healthcare organizations should be assured. WHO should play an important part in this regard at global level and the state governments should play their role at national level.

REFERENCES

1. Sadeghi M, Navidi M, Sadeghi AE. Depression among Resident Doctors in Tehran. Iran. Iran J Psychiatry 2007;2:50-2.
2. Lindeman S, Laara E, Hakko H, Lonnqvist J. A systematic review on gender-specific suicide mortality in medical doctors. Br J Psychiatry 1996;168:274-9.
3. Frank E, Dingle AD. Self-reported depression and suicide attempts among US women physicians. Am J Psychiatry 1999;156:1887-94.
4. Clayton PJ, Reynolds CF, Zisook S. Out of the Silence: Medical Student Depression and Suicide, 2008. Available from: http://www.afsp.org/content/download/3008/54572/file/Out_of_the_Silence.pptx
5. Frith-Cozens J. Emotional distress in junior house officers. BMJ (Clin Res Ed) 1987;295:533-6.
6. Reidar Tyssan, Per Valgum. Mental health problems among young doctors. An updated review of prospective study. Harv Rev Psychiatry 2002;10:154-65.
7. Dvrbve LN, Thomas MR, Shanafelt TD. Systematic review of depression, anxiety, and other indicators of psychological distress among US and Canadian medical students. Acad Med 2006;81(4):354-73.
8. Khuwaja AK, Azam SI. Prevalence and factors associated with anxiety and depression among family practitioners in Karachi, Pakistan. J Pak Med Assoc 2004;54(2):45-9.
9. Ahmed S, Khan MNS. Burn out in medical professionals: A cross sectional study carried out in doctors in Services Hospital Lahore. Esculapio J Services Inst Med Sci 2005;1(3):35-40.
10. Khuwaja AK, Qureshi R, Andrades M, Fatmi Z, Khawaja NK. Comparison of job satisfaction and stress among male and female doctors in teaching hospitals of Karachi. J Ayub Med Coll Abbottabad 2004;16(1):23-7.
11. Felton J. Burnout as clinical entity—its importance in healthcare workers. Occup Med (Lond) 1998;48(4):237-50.
12. Abdulghani MH. Stress and depression among medical students at a medical college in Saudi Arabia. Pak J Med Sci 2008;24(1):12-7.
13. Adam S, Gyorfly Z, Hamatta J, Tury F, Kopp M, Szényei G. Psychiatric and somatic morbidity among Hungarian psychiatrists. Psychiatr Hung 2010;25(1):55-61.
14. Hawton K, Agerbo E, Simkin S, Platt B, Mellanby RJ. Risk of suicide in medical and related occupational groups: a national study based on Danish case population-based registers. J Affect Disord 2011;134(1-3):320-6.
15. Lopez AD, Mathers CD, Ezzati M, Jamison DT, Murray CJL. Measuring the Global Burden of Disease and Risk Factors, 1990-2001. In: Lopez AD, Mathers CD, Ezzati M, Jamison DT, Murray CJL, (Eds). Global Burden of Disease and Risk Factors. Washington (DC): World Bank; 2006.p. 1-13.
16. Fortune S, Sinclair J, Hawton K. Adolescents' views on preventing self-harm. A large community study. Soc Psychiatry Psychiatr Epidemiol 2008;43(2):96-104.
17. Bhugra D, Mastrogianni A. Globalization of mental disorders, over with relation to depression. Br J Psychiatry 2004;184:10-2.

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