# Burden of depression, stress and anxiety amongst faculty in a medical college

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**Abstract Background:** Stress, anxiety and depression are common nowadays with having debilitating effects on the affected person. Doctors face a lot of stress owing to various reasons. This stress affects them on a personal level and a professional level too.

**Methods:** Fifty one faculty members willingly participated in the study. A self-reported depression anxiety stress scale (DASS)-42 along with a semi-structured pro forma was distributed amongst the faculty members of a medical college and hospital at Rajpura.

**Results:** Most of the participants were female (60.8%) and married (86.3%). Majority were from the age group of 30–39 years (49%). Half of the faculty experience mild (25.5%)-to-moderate (25.5%) levels of depressive symptoms, about one-third reported moderate (33.3%) anxiety symptoms and about 43.1% reported mild stress symptoms.

**Conclusions:** High extent of depression, anxiety and stress is present in faculty of a medical college. The contributory factors related to this stress, anxiety and depression need to be studied further. Mental health and working environment of the faculty need to be addressed.

Keywords: Anxiety, depression, faculty, stress

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### **INTRODUCTION**

It is common to feel stressed or feel sad in these times. Everyone goes through these emotions at one time or another. Feelings such as these usually pass off in few days and are short lived. It was Hans Selye who described stress as the 'nonspecific response of the body to any demand' and was the first one to incorporate it.<sup>[1]</sup> Stress is a condition affecting an individual which can be caused by natural causes from outside or inside factors. It can affect people from all age groups and affect different forms or

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walks of life. Depression is one of the most common illnesses and is a very serious condition. It not only causes sadness but also interferes in an individual's day-to-day life and causes disruption of normal life. Similarly, anxiety is another illness which is very common resulting in uncertainty and restlessness and fear. Anxiety disorders occur commonly along with other physical illnesses and mental disorders.<sup>[2]</sup>

In professionals like doctors, stress can be caused by a heavy load at work and long working hours. Similarly, anxiety and

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depression can be caused by issues at job or workplace, issues with colleagues and personal issues.

The prevalence of behavioural and mental disorders globally amongst the adult population is estimated to be 10%. It was also a leading causative reason of disability in four out of ten causes, with one out of four families suffering from its burden.<sup>[3]</sup> About 197 million people in India have been reported with prevalence of mental disorders. Out of these, 44.9 million had anxiety disorders and 45.7 million had depressive disorders. The prevalence of depression and anxiety was 3.3% (3.1%-3.6%) and 3.3% (3%-3.5%), respectively, as examined by a study estimating the global burden of disease.<sup>[4]</sup> Similar studies regarding depression, stress and anxiety amongst resident doctors and medical students have been done around the world.<sup>[5-7]</sup> In relation to this, females have a more likelihood to be stressed than their male counterparts.<sup>[8]</sup>

### MATERIAL AND METHODS

The cross-sectional study was conducted at Gian Sagar Medical College and Hospital, Ramnagar, Rajpura. Institutional Ethical Committee clearance was taken before commencing the study (GSMCH/ IEC/2021/031 Dt 10-8-2021). A semi-structured questionnaire was formed which was used to note down the sociodemographic profile of the participants. Along with the proforma, the depression anxiety stress scale-42 (DASS-42)<sup>[9]</sup> was used. All the postgraduate faculty members from all the pre-clinical, paraclinical and clinical departments were included in this study. All the professors, associate professors and assistant professors were included. The faculty members who were unwilling to participate were excluded from it. The proforma along with the scale was distributed amongst the medical college faculty (pre-clinical, paraclinical and clinical departments). Informed consent was taken from all the participants willing to undertake the study. The study was conducted over a period of 1 month (November 2021). The pro forma and scale were distributed and subsequently collected from the participants.

The DASS-42 used here is self-administered, and the psychometric properties of this scale are well validated. There are 42 items on the scale, with each question having four-point Likert scale which has responses ranging from 0 (did not apply to me at all), 1 (applied to me to some degree, or some of the time), 2 (applied to me to a considerable degree, or a good part of time and

3 (applied to me very much, or most of the time). This scale can assess items pertaining to depression, stress and anxiety such as lack of interest, hopelessness, anhedonia, anxiety, skeletal muscle effects, relaxation, nervousness, agitation, irritability and impatience. Fourteen questions of depression, stress and anxiety each are randomly distributed. The scale has four-point responses which rate the extent of each response. There are five subgroups ranging from normal, mild, moderate, severe and extremely severe for each of depression, stress and anxiety. It has to be recorded regarding their experience over the last week. The scores of each (depression, stress and anxiety) are calculated by the sum of scores for each item.<sup>[9]</sup>

#### Statistical analysis

Data are presented as numbers and percentages. Data were analysed using Statistical Software for Social Sciences (SPSS) software (IBM Corp, Armonk, NY).

#### RESULTS

From the various departments, out of the total faculty of 91, only 51 fulfilled the inclusion criteria and were willing participants in the study. The sociodemographic profile of the faculty are shown in Table 1. A total of 51 faculty members working in the medical college and hospital consented to participate in this study. Along with the DASS-42, a semi-structured questionnaire was given to the participants to be filled which contained information regarding the sociodemographic profile. Females were the majority of the participants in the study (60.8%). The majority of the faculty were from the age group of 30-39 years (49%), married (86.3%) and residing at home (74.5%). Most of the participants replied in negative to substance use (82.4%). Majority had no prior history of psychiatry illness (98%) and no family of psychiatry illness (90.2%). Stress was reported by majority (72.5%). Good social support was reported by 56.9%, good family support was reported by 84.3% and intermediate workplace support was reported by 58.8%.

The prevalence of depression, stress and anxiety in the faculty members is shown in Table 2. As according to the scores of DASS-42, 54.9% had depression (mild in 25.5%, moderate in 25.5%, severe in 3.9%). The prevalence of anxiety was 51% (mild in 7.8%, moderate in 33.3%, severe in 7.8% and extremely severe in 2%). The prevalence of stress was 56.9%, (mild in 43.1%, moderate in 7.8% and severe in 5.9%).

Table 1: Sociodemographic profile of respondents (r
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Variable	No. (%)
Gender	
Male	20 (39.2)
Female	31 (60.8)
Age (years)	
20-29	4 (7.8)
30-39	25 (49.0)
40-49	12 (23.5)
50-59	3 (5.9)
60-69	7 (13.7)
Residence	
Campus	13 (25.5)
Home	38 (74.5)
Marital status	
Married	44 (86.3)
Single	7 (13.7)
Substance use	
Yes	9 (17.7)
Alcohol	8 (15.7)
Alcohol + smoking	1 (2.0)
No	42 (82.4)
History of psychiatric illness	
Yes	1 (2)
No	50 (98)
Family history of psychiatric illness	
Yes	5 (9.8)
No	46 (90.2)
Social support	
Good	29 (56.9)
Intermediate	18 (35.3)
Low	4 (7.8)
Stress	
Yes	37 (72.5)
No	14 (27.5)
Family support	
Good	43 (84.3)
Intermediate	8 (15.7)
Low	0
Workplace support	
Good	17 (33.3)
Intermediate	30 (58.8)
Low	4 (7.8)

Table 2: Prevalence	of stress,	anxiety	and	depression	ı in
faculty (n=51)					

Scale	Variables	No. (%)
DASS-D	Normal	23 (45.1)
	Mild	13 (25.5)
	Moderate	13 (25.5)
	Severe	2 (3.9)
	Extremely severe	0
DASS-A	Normal	25 (49.0)
	Mild	4 (7.8)
	Moderate	17 (33.3)
	Severe	4 (7.8)
	Extremely severe	1 (2.0)
DASS-S	Normal	22 (43.1)
	Mild	22 (43.1)
	Moderate	4 (7.8)
	Severe	3 (5.9)
	Extremely severe	0

DASS=Depression anxiety stress scale

Table 3 shows the reason and causes of stress amongst the faculty. While 27.5% had reported no stress, majority 72.5%

**Table 3: Causes of stress** 

Cause of stress	No. (%)
No	14 (27.5)
Familial only	8 (15.7)
Familial + professional	1 (2.0)
Personal only	11 (21.6)
Personal + familial + professional	2 (3.9)
Professional + personal	2 (3.9)
Professional only	12 (23.5)
Professional + familial	1 (2.0)
Total	51 (100)

had reported some reason for stress. Out of these, 23.5% reported professional as the only reason of stress, followed by personal only with 21.6% and familial only with 15.7%. Professional and familial combined were reported by 2%, professional and personal by 3.9% and professional and familial by 2%. All three reasons of professional, familial and personal were reported by 3.9%. Table 4 shows that the single reason responses were in majority (60.8%) as compared to the responses for multiple reasons (11.8%), whereas no cause of stress responses was found to be 27.5%.

Table 4: Single versus multiple responses given by faculty

Response	No. (%)
Single cause of stress	31 (60.8)
Multiple causes of stress	6 (11.8)
No cause of stress	14 (27.5)

#### DISCUSSION

In India, sparse data are available regarding stress, depression and anxiety in medical college faculty are few. Doctors are more exposed to stressful conditions and prone to stress than others. Stress amongst medical professionals is often dismissed and left underdiagnosed and untreated. Medical faculty in our country suffers from psychological stress due to various reasons such as long working hours, patient load, medical staff shortage, lack of basic infrastructure, daily basis confrontation with death and low or no appreciation for their hard work. Higher suicide rates amongst doctors are also matter of grave concern. Seeking psychiatric aid and help by medical students are less because of lack of awareness about mental health, confidentiality concerns, stigma and fear of addiction to psychotropic medication.<sup>[10]</sup> All these issues need to be addressed urgently.

The key findings of this study are that about half of the faculty experienced mild (25.5%)-to-moderate (25.5%) levels of depressive symptoms, about one-third reported moderate (33.3%) anxiety symptoms and about 43.1% reported mild stress symptoms. These findings are similar to earlier studies in the literature. A study<sup>[11]</sup> reported depression (15.1%) and anxiety (14.6%) amongst doctors.

Downloaded from http://journals.lww.com/jcsr by BhDMf5ePHKav1zEoum1tQftV4a+kJLhEZgbsIHo4XMi0hCywCX1AW nYQp/IIQrHD3i3D0OdRyi7TvSFI4Cf3VC4/OAVpDDa8KKGKV0Ymy+78= on 03/27/2023 Any sort of stress can cause an issue and result in judgemental errors, further leading to negative outcomes in relation to patient care. An association of average number of working hours per week with perceived stress and depression has been reported.<sup>[12]</sup> Depression and anxiety scores amongst doctors got lower as the years in medicine increased but still overall scores higher when compared with other professionals.<sup>[13]</sup>

Doctors face the fear of being exposed to infections during their long working hours. In addition, they may have impaired mental and physical health caused by stress and anxiety. In current times, the increase in violence against doctors has led to psychological concerns leading to stress.<sup>[14]</sup> Faculty members are involved at multiple levels of functioning in which they are expected to research, teach students and do administrative work which adds to their stress. Medical colleges should give the appropriate amount of support and guidance to faculty. They must also ensure fair policies and good environment so that it enhances their skills to deal with job stress effectively.

The rates of depression, anxiety and stress reported in this study are based on DASS-42 and not on psychiatric evaluation. The small sample size also dilutes the generalisability of results. The study carried out is a cross-sectional one and lacks longitudinal perspective. There is a need for future large sample size along with more concrete assessment of the reasons affecting the faculty members. A multicentre study can also highlight the issues pertaining to different places and should be conducted.

The study suggests a higher proportion of doctors in medical college experience stress, depression and anxiety. The presence of stress has multiple factors, with the most common ones being long working hours, personal issues and lack of social life. These can cause issues in patient care and may lead to negative patient-related outcomes. At regular intervals, institute-level screening of doctors and faculty's mental health must be carried out. Furthermore, stress management workshops should be conducted to overcome such issues amongst medical faculty. A good working environment with good support at workplace can be helpful in alleviating the stress related to work. Furthermore, mental health of faculty and doctors needs to be looked into and contributing factors to stress focussed upon so that we can improve the functioning of doctors.

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## **Conflicts of interest**

There are no conflicts of interest.

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