

WORKLOAD AND HEALTH PROBLEMS IN MEDICAL STUDENTS

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ABSTRACT

The inability to cope successfully with the enormous stress of medical education may lead to a cascade of consequences at both a personal and professional level. Although common, depression associates with a high degree of disability and chronicity, with symptoms such as low mood, lack of energy, poor concentration, low self-esteem, and a lack of interest in the environment however stress has been shown to have deleterious effects on one's physical and mental well-being. The extreme stress levels inherent in the medical profession, put premedical and medical students at risk for both physical and psychological problems. The aim of this study is to determine the workload stress which leads to different health problems in medical and dental students during their undergraduate training. It was a self-administered questionnaire based survey conducted on 114 medical and dental students (32 males and 118 females) who were randomly selected in Fatima Jinnah Dental College and Dow University of Health Sciences. The result of this study shows that undergraduate medical students are suffering with stress and anxiety due to their hectic schedule and vast syllabus. From this study we can evaluate that health problems such as muscular aches and pains especially in neck, head, lower back and shoulders have increased which leads to sleep disorders. Data was analyzed using SPSS 20.0. This study suggests that a small percentage of medical students experience physical and mental distress throughout their medical undergraduate training.

KEYWORDS

Self-esteem, workload. Stress, medical students

INTRODUCTION

Medical undergraduate training is deep and emotionally demanding. Several studies have declared high rates of psychological distress (Firth-Cozens, 1987; Miller, 1991 & Guthrie, 1995) in medical students at various stages of their training. Repeated indication that medical students are prone to considerable stress has been published over the last decades (Firth-Cozens, 1989; Wallin, 2003 & Aktekin, 2001). It has been demonstrated that mental distress during medical school forecasts later problems in physicians (Firth-Cozens J 1998; Tyssen R et al, 2001) which in addition to the personal agony of the individual doctor might badly affect patient care (Firth-Cozens, 1997). Stress can be enhanced by one's personal system of beliefs, behaviors and attitudes. Stress can either motivate the student to peak performance or reduce their effectiveness in different degrees (Grandy, 1989). A number of factors—including academic pressure, workload, financial concerns, sleep deprivation, exposure to patients' suffering and deaths, student abuse, (Silver, 1990; Elnicki, 1999; Richman, 1992 & Sheehan, 1990) and a "hidden curriculum" of cynicism (Hafferty, 1998; Stern, 1998; Hafferty, 1994; Feudtner, 1994; Christakis, 1993; Wear, 1998; Hundert, 1996 & Kassebaum, 1998) have been hypothesized to contribute to this decline in students' mental health. Typical sources of stress for dental students include frequent examinations, examination phobia, reduced leisure time, demanding curricula, requirements to perform specified types and numbers of procedures, anxious patients, time limits, complicated treatments, possible conflicts with patients, fellow students, staff and faculty, lack of self-confidence, and the differences between the students expectations and reality (Newton, 1994; Heath, 1999). This study found that the heavy workload, the repetitive nature of the work, fear and anxieties concerning treatment outcome and payment were all stress factors among general practitioners (GP) as well as other dentists. This agrees with other studies, reporting that occupational stress results when dentists find themselves overloaded with work. The overload can be either quantitative in nature (i.e., too much work to do) or qualitative (i.e., work is too difficult). (Sloan, 1986; Cox, 1980 & Freeman, 1995)

According to a 2006 Mayo Clinic study, students enter medical school with mental health profiles similar to their peers from college. But they begin to show higher rates of mental distress as they progress through medical school. The same study found that the most depressed students often are the least likely to reach out for help because of stigma related to mental illness. Stuart Slavin, M.D., dean of student affairs at Saint Louis University School of Medicine (SLU), started working on a "multifactorial" approach when he found students at his own school showed a high prevalence of mental distress. At the same time, he considered the suicide rates of physicians compared with the general population—40 percent higher for male doctors and 130 percent higher for female doctors, according to a 2005 New England Journal of Medicine study. High levels of stress can result in a variety of physical and psychological distress which in turn can affect the well-being and performance of the student.

Symptoms of distress can include anxiety, depression, phobia, hostility, fear, tension, dizziness, fatigue, sleeplessness, tachycardia, gastrointestinal symptoms, irritability and cynicism (Hendricks, 1949; Tedesco, 1986; Westerman, 1993; Yap, 1996; Heath, 1999; Sanders, 1999; Rajab, 2001 & Acharya, 2003). Furthermore, there is evidence that high stress levels impair the immune system function (Sanders, 1999).

METHODOLOGY

A cross sectional study was done on 114 medical students. Performa was distributed randomly to the medical and dental students from first year level to house officers, age ranges from 18-26 years. Data was collected from Fatima Jinnah dental college & Dow University of Health Sciences, accommodation along with age, gender, personal problems and academic problems. Data was analyzed on SPSS 20.0, Excel 2007, and PowerPoint 2007 in which frequencies, percentages & graphs were plotted. Graphs given below are related to their personal problems including Muscular Aches, addictive, worries, sleep disturbance, lack of time for social circle, lack of time for relaxation.

RESULTS

Data was analyzed on 114 complete forms. Result demonstrates that there were 27 males and 87 females who filled the Performa. This study was divided into two subscales, the personal problems and the health problems to determine relationship between workload and health problems. My results shows that 88(77.2%) students out of 114 complained about muscular aches they are facing, it's been a major problem for medical and dental students who are undergraduates, having their house jobs or practicing in clinics with standard

deviation of ± 0.421 , 77(67.5%) about lack of time for friends/ family and ignorance of their interests, hobbies and entertainment, 35 (30.7%) complains about addiction(increased intake of tea and coffee even smoking) with mean of 1.69 and standard deviation of ± 0.464 , 94(82.5%) about lack of time for relaxation, 72(63.2%) worries too much, and 96(84.2%) complained about their sleep disturbance (sleeplessness/ insomnia). Students also experience crying spells and grinding teeth, changed appetite and mood swings. The standard deviations mean, median, mode and standard errors are given in figure below.

Descriptive Statistics

	N	Sum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Lack of relaxation	114	134	1.18	.036	.382	.146
Intake of addicted things (Caffeine.)	113	191	1.69	.044	.464	.216
Worrying too much	114	156	1.37	.045	.485	.235
Often dishearten	114	149	1.31	.043	.463	.215
Lack time for hobbies	114	143	1.25	.041	.437	.191
Lack time for family/friends	114	151	1.32	.044	.470	.221
Muscular Aches	114	140	1.23	.039	.421	.178
Sleep disturbance	114	133	1.17	.037	.397	.158
Change in appetite	114	159	1.39	.046	.491	.241
Valid N (list wise)	113					

Table #1 showing descriptive statistics about personal and health problems

DISCUSSION

A student's life is subjected to different kinds of stressors, such as the pressure of academics with hindrance of success, uncertain future and complications envisaged for integration into the system. These students face social, emotional and physical and family problems which may affect their learning capability and academic performance (Fish, 1996; Chew-Graham, 2003). Some of them find it hard to cope with the stress and lag behind, while others see the pressure as challenge to work harder. . 64% people can't take part because of lack of time due to their academic schedule or lack of interest. (Maria, 2013) Medical students particularly perceive themselves more likely to become ill in contrasts with others (Raj, 2000). Stress can lead to disruptions in both physical and mental health. "By definition medical school is stressful," Slavin said. "We wanted to do what we could to reduce unnecessary stressors without compromising the quality of education."

Students experience psychological distress throughout their medical undergraduate training. Although these students found the first year of the medical course more stressful than did their fellow students, this was not true of subsequent years. It is possible that emotionally vulnerable in year 1 students find it more difficult than their peers to adjust to Base line changes and thus finds the first year at university particularly stressful.

There were some confirmations (not statistically significant), failed that psychological distress is associated with poor performance on the course, since those who failed examinations or dropped out had numerically lower grades in exams than those who intercalated (usually the brightest students) or continued through the course in an uninterrupted fashion. A larger study would be required to confirm or refute this possibility.

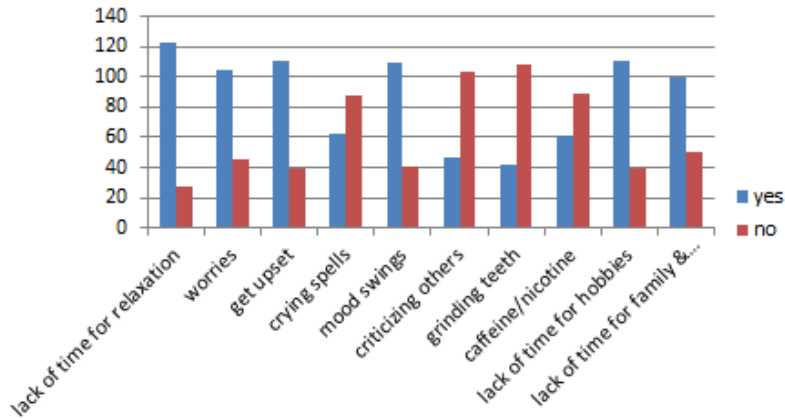
One of the demographic variables related to the problem scores was gender. Female students reported higher scores in both the overall problem score and the clinical problem score than males. This is especially evident in the top ranked problem items. Most of their perceived problems centered on the feeling of being overloaded, lack of time, and increased responsibilities.

My findings suggest that medical schools are currently admitting a small group of students who are distressed at the beginning of their training and may remain distressed throughout. These few individuals are at high risk of emotional disturbance during postgraduate training. Further work needs to be done so that they can be identified either before they have entered medical school or early in their medical training.

With students showing such high levels of distress, Dyrbye said the burden of seeking help should not fall on them alone, adding that institutions should play an active role in helping students handle burnout or depression. “It’s certainly important for the student to learn the right coping strategies, time management skills, and stress reduction techniques,” Dyrbye said. “All of that is important, but it is not the entire answer. We also have to look at school-level initiatives. There needs to be organizational change.”

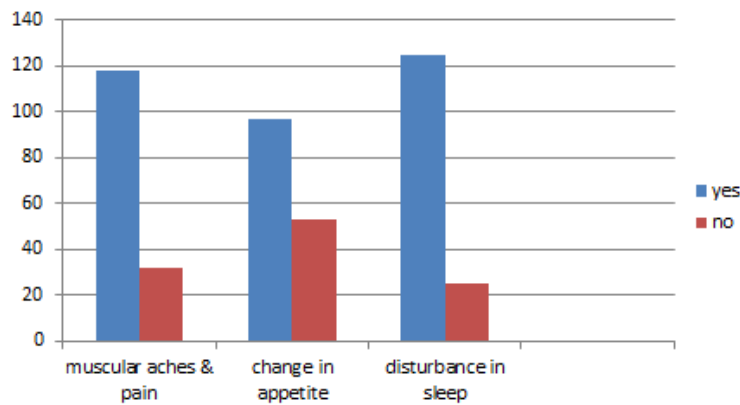
Students living with their families had higher overall problem scores, and higher problem scores for the categories of personal and administrative issues and clinical training. These findings may be explained by lack of time and the increased demands of social activities that may limit time in general and lead to a feeling of being overloaded.

Personal problems



Graph#1: Personal problems faced by doctors

Health problems



Graph#2: Health problems faced by doctors.

CONCLUSION

“We point out that distorted ways of thinking can have consequences,” Fendell said. “If you can learn to think more accurately and rationally about a situation, it increases your options for how to respond.”

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