

## *Editorial*

# Stress and suicides among medical students: Time to act?

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*“Getting things right for patients means first getting things as good  
we can for those who deliver their care.” (Firth-Cozens)*

Students, residents, and young physicians appear to be at an increased risk for suicidal thoughts and even actual suicide.<sup>1</sup> Interestingly, students begin their medical college with almost similar rates of depression as their non-medical counterparts. Unfortunately, the mental health worsens throughout the course of medical school as indicated by numerous studies.<sup>2,3</sup> The prevalence rates of depressive and anxiety symptoms in medical students may reach as high as 25-56%, exceeding those of students' age cohort as well as the general population.<sup>3,4</sup> Stress is a major underlying factor for mental morbidity among medical students/residents. Only a few previous studies and commentaries have highlighted the stress/suicidal ideation among medical students in India.<sup>4,5</sup>

Current issue of *Journal of Mental Health and Human Behaviour* has published two original articles,<sup>6,7</sup> which have focused on stress and suicidal ideation among medical students/residents in India. First, the study by Goyal et al<sup>6</sup> has assessed the prevalence of suicidal ideation amongst medical students of Delhi, which was found to be as high as 53.6%; nearly 5% contemplated it seriously and 2.6% attempted at least once in their lifetime. Second, the study by Jain et al<sup>7</sup> assessed the perceived stress and subjective well being among residents from clinical and non clinical departments in a medical college of Rajasthan. The residents

from the clinical departments were found to be particularly affected.

Perceptions of stress among medical students/residents may have serious professional and personal ramifications. Stress negatively impacts the medical students' empathy, interest in caring for patients, ethical conduct and professionalism.<sup>8</sup> Students/residents with burnout are less likely to hold altruistic views regarding physicians' responsibility to society and even consider dropping out of medical school.<sup>9</sup> Stress also predisposes the student/resident to adverse personal consequences e.g. likelihood of substance abuse, difficulties in interpersonal relationships and suicidal ideation.<sup>9</sup>

A variety of stressors (personal, academic, social) may contribute to the stresses of medical students.<sup>3-5,9</sup> The first year medical student is still an adolescent, relocated away from his home to a hostel where he is yet to make close friends. The initial period is an especially vulnerable period, with a multitude of adjustment problems and possibly, a limited reservoir of coping skills. Many students do adjust well eventually, but it may not be true for all students. As the college progresses, the academic pressures, expansive curriculum and frequent assessments begin to put an increasing higher demands on the students. There may be ongoing personal problems and social stressors, which if

unattended to, may cause a further deterioration of student's mental health. Inability to form new friends and/or loneliness in the hostel environment may predispose the student to mental morbidity by depriving the social support. During residency, the nature of stresses may change, with increasing assumption of personal responsibilities like marriage, child care etc and increased work-related stressors e.g. long duty hours, demanding work atmosphere, dissatisfaction/quarrels by patient's attendants, witnessing the terminal illnesses/deaths closely on a daily basis in clinical departments.

The roots for well-being of a physician are laid quite early. It is, therefore, important that a timely action is initiated to improve the mental health of medical students/residents. Some of the possible steps which may be taken are as follows:

- *Psychological assessment and counseling at the time of admission:* The psychological assessments and counseling at the time of admission to MBBS/MD will help to screen and support the students who may require help from an early stage. The students with anxiety predispositions, pre-existing mental illness e.g. a history of depression or a familial history of suicide may be provided the necessary counseling. The Department of Psychiatry at A.I.I.M.S. has been regularly involved for past few years in the psychological assessment and counseling of medical students at the time of their intake. This initiative was taken for prevention of mental morbidity and suicides among medical students/residents at the Institute. It is a student-friendly initiative aimed at early identification, and does not bear any negative consequences, whatsoever, for the medical students/residents. More importantly, it sensitizes the medical students to the existence of psychological help/services at the Institute, where they can contact anytime for support and counseling.

Further, students with significant recent life events, those with repeated academic failures and changes in their mood/behavior as observed by the friends or teachers should be referred for psychological support.

- *Supportive academic atmosphere:* The amount of support needed by students in various subjects may vary widely, depending on their background and individual differences. It is important to ensure that the students can get the extra academic help, wherever needed. A system of nurturing mentorship programmes for students, as in western settings and some Indian colleges, may be useful, as a mentor takes more personal interest and is more closely involved in the professional aspects of a student/resident's career.
- *Incorporation of Stress Management:* Recently, the Regulations on Graduate Medical Education, 2012 released by the MCI has allotted nearly 4% of the total teaching hours in the first two years of MBBS to sports and extracurricular activities including yoga.<sup>11</sup> This is a welcome step in the right direction. Stress management is a broad term which may mean a variety of interventions e.g., directed and non-directed support groups, relaxation training (including meditation and hypnosis), *time-management and coping skills* and mindfulness-based stress reduction. A review<sup>10</sup> focusing on 24 studies evaluating stress management in medical trainees found that the medical trainees participating in stress-management programs demonstrated (a) improved immunologic functioning, (b) decreases in depression and anxiety, (c) increased spirituality and empathy, (d) enhanced knowledge of alternative therapies for future referrals, (e) improved knowledge of the effects of stress, (f) greater use of positive coping skills, and (g) the ability to resolve

role conflicts.<sup>10</sup> In view of a robust evidence base, it is important that stress management interventions be delivered in a structured fashion for the medical students/ residents on a regular basis. It is important to seek participation of the students' and resident's associations in order to sensitize the students towards the role of stress management.

- *Workplace interventions for residents:* One of the significant factors underlying stress and burnout among residents, especially those from surgical and trauma-related specialties, is the extremely long work hours. The prolonged duty hours take a toll on the marital relationships and personal life of the residents. Residents who reported working more than 80 hours had higher rates of burnout (69.2%) compared with a burnout rate of 38.5% in rest.<sup>12</sup> *Curtailing the resident's duty hours, and restricting the workload to humanely possible hours is a highly needed step* to ensure mental health of residents and quality care for the patients. However, restriction of work hours should be coupled with other workplace interventions for maximal efficacy. An increase in variety of workplace roles (research, teaching, and supervision) in addition to performing clinical care improves the job-related satisfaction for young physicians. Emotional intelligence training, social skills and team building for residents may decrease stress/burnout. The modules being developed to manage the stress through *intra-workday rather than post-workday* activities.<sup>12</sup>
- *Attitudinal changes (at student and organizational level):* Givens and Tjia<sup>13</sup> identified barriers that keep students from obtaining mental health treatment including lack of time, fear of compromised confidentiality, stigma, cost, fear of documentation on academic record, and fear of unwanted intervention. It is important to address the

stigma of mental health screening and treatment right at the student level, by promoting awareness, disseminating information and enhancing sensitization. Both faculty and students must be the recipient of the interventions aimed at enhancing awareness of mental health issues. The issues related to confidentiality and discrimination must be addressed at the policy level in a medical college, so that students do not feel compelled to hide their stress and mental health issues from the authorities.

- *Suicide prevention:* Suicide is considered to be a common cause of death in adolescents in industrialized countries. Suicide rates in Indian adolescents appear to be several-fold higher than anywhere else in world, accounting for 25% of deaths in boys and 50-75% of deaths in girls aged 10-19 years.<sup>14</sup> In medical student population, there is an easy accessibility and availability of means of suicide. The media has, on various occasions, highlighted the stress and suicides among doctors in training. It is important to address this issue of *life and death* of a doctor by means of policy and organizational initiatives. The suicide helplines may provide an easily accessible/ anonymous means of help seeking for students. The departments of psychiatry/ psychology at medical colleges should be actively involved in order to prevent such unfortunate incidents in an institute. The faculty members, in general, should be readily available, receptive and willing to discuss the student's concerns and discuss the remedies thereof. The students-at-risk should be identified and referred timely to a psychologist/psychiatrist who may work closely with the student and involve the close friends and family members.
- *Need for more research/ better understanding:* Most of available information on

assessment and interventions to handle stress in medical students comes from western literature. Recently, a scale for assessing psychological distress specifically in medical students has been developed.<sup>15</sup> However, the expectations, demands, curriculum and teaching differs tremendously in Indian setting and there is a need to understand the prevalence, causes, consequences of stress among Indian medical students.

- To conclude, medicine is an academically, emotionally and physically demanding career. The stresses and pressures may take a toll on the mental health of the medical student/resident in training. Ensuring their optimum mental health and wellbeing is the shared responsibility of the medical student/resident/physician and the organizational environment in which he or she functions.

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