

## **STRESS IN TRAINEE RESIDENT DOCTORS: WHAT CAN BE DONE?**

Stress among doctors is a global phenomenon. Stress in medical practice can arise in the context of patient care and in the context of working environment.<sup>1</sup> In view of the nature of work, doctors are exposed to different emotions in varied situations, like the need to save a seriously ill patient, sense of failure and frustration in the face of progression of disease of their patients, sense of powerlessness against illness and its associated losses, grief, and fear of contacting illnesses.<sup>1</sup> Besides the stress in the context of doctor–patient relationship, other contributors to the stress in the life of doctors include increasingly litigious and unforgiving environment, changing work environment, negative publicity in the media, ever-changing medical knowledge and need to update themselves, asked to take responsibilities for which they are not trained, need to fulfill the given targets, and poor working environment.<sup>1</sup> Among the various phases of life of medical professionals, available data suggest that training period, especially residency, is the most stressful period in the life of a doctor.<sup>2</sup>

Although there is a large amount of data from various developed countries on the stress during residency, the data from India are limited.

### **What are the different Stressors during Residency?**

Stress during training can arise due to situational, professional, and personal factors. The various situational stressors in the life of a resident doctor include long working hours, sleep deprivation, excessive workload, fatigue, excessive clerical and administrative work-related responsibilities, poor or inadequate support from allied health professionals, managing too many difficult or terminally ill patients, exposure to blood and body fluids and poor learning opportunities. Stressors arising out of professional responsibilities include taking responsibility of patient care, supervising the junior colleagues, handling difficult situations and problems, and issues of information overload and career planning. The personal stressors include handling family issues, financial issues, relocation for training to a place away from family and friends, lack of free time to relax, developing new support systems, and other psychosocial problems arising due to stress of residency.<sup>3,4</sup> A recent qualitative study which evaluated first-year postgraduate students of medicine and psychiatry for the situations which were perceived as stressful showed that most of the stress was related to the learning environment and this was compounded by feelings of being under-equipped, overwhelmed, or out of time.<sup>5</sup>

In the Indian set-up, stress among residents is compounded by many factors, such as excess patient load and need to do all kinds of patient-related work—right from shaving a patient's body part prior to surgery, sending investigations, collecting investigation reports, and writing discharge summary, to name a few. Additionally, during the training, residents are expected to present and participate in academics and complete their research work in the form of dissertation or thesis. Issues of resident doctors being physically and verbally abused often make headlines. Above all, residents have to do all this, with lack of empathy from and also bias from seniors.<sup>6</sup>

### **How has the Stress been evaluated in different Studies?**

Stress during the training period has been evaluated in the form of perceived stress, burnout, depression, suicidal ideations, anxiety, and lack of sleep, etc. Other parameters which have been studied and are considered indicators of stress include substance use, use of sleep medications, and medical errors.<sup>2,7</sup>

Among the various psychological outcomes, burnout is one of the most commonly evaluated outcomes. Burnout is understood as a reflection of complex interaction among the environmental stressors, genetic vulnerabilities, and the coping abilities of the person in dealing with the stressors. Burnout can lead to or contribute to negative outcomes like fatigue, physical symptoms (aches and pains), psychological symptoms like depression, suicidal tendencies and anxiety, substance abuse, poor quality of life, impairment in providing quality patient care (higher incidence of medical errors, patient safety-related issues, and quality of care provided), ability to learn and teach, and overall morale of the resident.<sup>8</sup> Burnout has mostly been evaluated by using the Maslach Burnout Inventory, which is a self-administered, 22-item questionnaire, and is considered as a “gold standard” to measure burnout.<sup>9</sup>

## **What is the level of Stress among Resident Doctors?**

A review of studies of burnout among residents suggests a prevalence of 27–76%.<sup>8</sup> In contrast to the Western data, a study from our institute indicates burnout in 90% of the residents.<sup>6</sup> Other studies from India have used the 42-item Depression Anxiety and Stress Scale (DASS) or other instruments and have reported prevalence of stress to range from 30.3 to 80%.<sup>10-13</sup> Data from our institute suggest that about two-thirds of the residents experience moderate level of stress and another 13% of participants report high level of stress. About 30% of residents screen positive for depression and one-sixth of them have suicidal ideations.<sup>6</sup> All these findings suggest that burnout rate and psychological distress is much higher in Indian setting and needs immediate attention.

Studies which have concurrently evaluated depression, burnout, and stress show high level of correlation between these variables,<sup>14</sup> and findings from our center also support the same.<sup>6</sup>

However, it is important to remember that stress during residency is not always bad. Exposure to various stressors during residency also helps a doctor to develop self-confidence, maturity, ability to tolerate ambiguity, and acquire new knowledge and skills.<sup>3</sup>

## **What are different Risk Factors for Stress Perception?**

Risk factors for higher perception of stress include female gender and initial period of residency (1st year of residency).<sup>3</sup> Higher stress perception among females is attributed to having fewer female role models in a male-dominant medical profession, prejudice faced in the hands of patients and other staff, being out of synchrony with other female peers (i.e., delay in marriage and child-bearing compared with females in other professions) and higher probability of conflict between personal and professional demands.<sup>3</sup> Data emerging from India suggest association of higher level of stress with being in the 1st year, belonging to clinical specialties, lack of satisfaction with job, lack of close friends, having done graduation outside the place of residency, not spending time with friends and family, and having children.<sup>12</sup>

## **What are the Consequences of Stress?**

Impact of stress on the residents has been evaluated in terms of personal impact and impact on patient-related outcomes. Besides burnout, fatigue, depression, suicidality, substance use, and sleep deprivation, high level of stress among resident has been shown to be associated with academic under-performance, absenteeism, and poor quality of life.<sup>15-17</sup> In terms of patient-related outcomes, high level of stress and associated psychological consequences have been shown to be associated with higher frequency of medical errors,<sup>18</sup> lack of empathy for the patients,<sup>16,17,19</sup> and providing suboptimal care to the patients.<sup>20</sup> A study conducted in the emergency setting suggests that burnout among residents is associated with early admission and discharge of patients, not discussing various treatment options or answering questions, ordering more investigations, not addressing the patients' pain, not communicating important information during the handover, and not discussing plans of action/treatment with other staff.<sup>21</sup>

## **What has actually gone wrong?**

Nowadays, when one looks at the current lot of residents joining the postgraduate programs and compare them with those who joined the postgraduate program 20 years back or earlier, one fact becomes very clear—the “crop has changed”. Now, the residents joining the postgraduate courses are more vulnerable, less resilient, have poor interpersonal skills, have poor skills to navigate through a stressful situation and enter the postgraduate program with very poor exposure to clinical situations. Most of them are not even conversant with drawing blood and other samples and have not managed patients during the undergraduate training and internship. The recent trend shows that due to pressure of entering into the postgraduate courses, undergraduate students aspiring for postgraduation, join coaching classes as early as 3rd year of the graduation, at the cost of sacrificing clinical rotations. This is compounded by the current schooling system and parenting skills. Current schooling system has taken away all the powers bestowed on a teacher, and as a result, children are minimally exposed to stress in their life and are less resilient. Due to reduction in family size and emergence of nuclear family structure as the norms and less number of children in each household, children are brought up in an environment in which all their wishes are fulfilled and they are minimally exposed to any kind of frustration and failures. All these factors make them very vulnerable to experience stress.

In the past, entry into the postgraduation was preceded by a house-job/housemanship in the specialty of choice of the candidate and entry into the postgraduation involved assessment of clinical skills. Although this system

of selection was not foolproof and had its demerits, it was possibly better in assessing the candidates entering into the various postgraduation courses. The people entering into the residency were surer about the specialty of their choice, were prepared to demonstrate clinical skills in that specialty and were exposed to the working environment of the institutes, where they wanted to pursue the course. This system prepared the residents for the specialty and also the institute and they would come mentally prepared to go through the rigmarole of the residency.

At present, entering into the postgraduation course is by the multiple choice questions (MCQs), without any assessment of clinical skills, aptitude, vulnerability, and resilience of the doctors entering the courses. Further, many of the residents are not sure about the specialty of choice which they want to pursue. This leads to entry of some of the confused lots of doctors to the residency program, who are actually very good in MCQs, but are totally deficient in clinical and life skills to deal with the stress.

Further, when one compares the current working environment for the residents with what was there about two or more decades back, it can be said that the expectations of the trainers have not gone down much. Further, over the years, the working environment has become more hostile towards doctors, which is evident by negative publicity towards doctors every day in the media and stories of physical and verbal abuse faced by the doctors at the hands of patients and their caregivers. Erosion of student–teacher relationship is also quite evident in the present world. With the passing of time, medicine is becoming more defensive and this trend is going to increase over time, with more and more legal issues arising in the context of clinical practice. All this is compounded by the fact that there is tremendous increase in the patient load in most of the teaching institutes and the medical colleges. So, basically, we are exposing less resilient doctors to higher stress.

### **What can be done to prevent and reduce Stress?**

Various strategies have been suggested to minimize the level of stress among the resident doctors. These can be broadly understood as system-level changes—strategies to identify people vulnerable in handling stress and equipping them with stress reduction measures and psychological interventions.

Among the system-level changes, it is expected that the people coordinating the residency program are expected to have good knowledge about the issues involved in the training program in their institute/departments, needs of the residents and the vulnerabilities of the residents.<sup>3</sup> The program coordinators must not be involved in evaluating the academic performance of the residents, as this can lead to a conflict situation.<sup>3</sup> Some of the authors suggest that people at the decision-making positions like resident program directors should focus on creating opportunities for the trainees to have meaningful connection among themselves, to provide better social support to one another and resultantly minimize the negative impact of stress.<sup>22</sup> Further, at the system level, there is a need to change the working environment. The work assignment of the residents requires a closer look; nontechnical work which can be done by the paraprofessionals must not be assigned to the resident doctors. Additionally, there is a need to improve the work environment by providing opportunities to residents for recreation, socialization, and providing them good food and safe water in the work environment.

In the Indian set-up, at most places, there is no orientation of the residents to their work environment. This possibly contributes to higher level of stress perception. Accordingly, orienting the residents to the working environment and supporting them at the face of crisis can also help in managing stress. In Indian setting, there is no limit to working hours and the residents are often assigned 24–36 hours or, at times, more time of continuous duty. This is sometimes impossible to carry out and is associated with poor patient-related outcomes. Data from the West suggest that rather than having fixed duty schedule, flexible duty hours can help in reduction of perception of stress and increase work-related satisfaction, without compromising the patient care.<sup>23</sup>

In Indian setting, many residents face difficulty in their working environment as a result of interpersonal relationship issues with their immediate supervisors (i.e., senior resident supervising the junior resident or senior resident being supervised by the faculty members). Many times, even though the trainee residents are not at fault, they are not able to voice the discomfort in the relationship and suffer from severe stress. Residents often feel that their perspective is not heard before opinions are made about their conduct and behavior by the seniors, including those at the helm of managing the departments. At the system level, there is a need to develop mechanism to address the interpersonal issues by giving enough opportunities to the junior residents to clarify their stand. Further, the residents must be closely observed by other members of the department, who are not involved in the conflict to evaluate their conduct. During this period, the concerned residents must be given timely feedback to correct themselves to adjust to the system.

At few institutes in India, like ours, academics and thesis are given a lot of importance. Residents are expected to excel in these areas. It is agreed that these exercises prepare the residents to become a better professional and researcher. However, many times, residents are faced with difficult situations, where they are exposed to unnecessary stress due to lack of appropriate skills and guidance by their guides, interpersonal relationship issues of their guides with other members of the department, ethics and thesis committee. There is a need to develop a system in which the resident is not exposed to stressful situation, for no fault of her/his.

System-level change is required to address the issue of ever-increasing patient load. The ever-increasing patient load is leading to compromise in the quality of the patient care at the cost of providing quantitative care. When compromise in the quality of care is scrutinized by the legal authorities, providing care to higher number of patients at the cost of quality of care will not be acceptable. Accordingly, this issue requires proper assessment and its solution.

Assessment of the residents for their stress perception can be done on an ongoing basis, by using clinical interviews, psychological testing, and use of screening questionnaires. The various screening questionnaires can provide information about stress perception, burnout, depression, anxiety, and substance use. These can be used at the time of entry into the residency program and periodically during the residency. Developing a mentorship program in which every resident is groomed properly to get adjusted to the demands of the residency and perform adequately during the residency can help the residency program in imparting specific skills and knowledge of the residents, leading to their professional and personal growth. Residents need to be provided with help at the time of crisis or in the face of psychological stress/distress. Training institute must have helpline services available for the residents to contact at the time of need. Residents must be made aware of availability of help in the face of stress. At present, there is a crisis helpline in our institute, which is managed by the Department of Psychiatry, which can be assessed by anyone, including the residents. There is a need to provide the information about the same to all the residents joining the institute.

Besides these, many other specific interventions can be done to reduce the perception of stress among residents. The various interventions which are suggested to be of benefit can be broadly divided into workplace-driven and individual-driven measures.<sup>8</sup> The various workplace interventions that have been proposed include educating the residents about burnout, modifications of workload, stress management training, mentoring, wellness workshops, resilience-promoting programs, and emotional intelligence training, etc.<sup>8</sup> The various individual-driven measures to manage stress include behavioral, social and physical activities, which promote interpersonal professional relationships, meditation, counseling, and physical exercise.<sup>8</sup> The help can be provided at the departmental level or at the level of the institute.

If all these interventions are not possible, at least, counseling services must be available not only to the residents but also to their family members. This kind of counseling can be provided by people of the department in which the resident is being trained. However, when the residents demonstrate obvious psychopathology, they must be sent for psychiatric consultation and treatment. Further, the residents must be provided with the follow-up opportunities and services while continuing their residency.

It is also important to note that many people at the faculty position are not very much tuned at picking up the psychological problems. Further, people dealing with residents with psychological problems are not able to pick up all the psychological problems in the residents under stress in the limited time-constraint encounter. Seeking help is further compounded by lack of confidentiality, ensuing punishment, stigma of being labeled as mentally ill or considered as a person who is trying shuffling the work. Some of the studies suggest that people supervising the work of residents are in a better position to detect stress and burnout among residents than the psychologists. Hence, it is important to organize orientation program for the faculty to identify, deal with, and manage the burnout and stress-related issues among the residents.

It is advisable that issues of stress faced by a specific resident must be brought to the notice of the higher authorities, by ensuring confidentiality as per the need. It is suggested that confidentiality must be given priority and must be maintained; however, when required, most pertinent information about the resident may be shared with the need-to-know person. Records pertaining to the residents must be kept confidential in a locked file, which are accessible to only those persons who are involved in the care of the residents.<sup>8</sup>

Residency is the most stressful period in the life of a doctor. Unfortunately, it is not possible to change the working of existing systems overnight to suit all the trainees entering into the system, but it is possible to take certain corrective measures, which are easily manageable, on priority, to reduce stress among the residents. These corrective measures will not only lead to reduction in stress among residents, but also possibly improve the working environment in the institutes like ours. Further, these measures can also help in improving the patient care in the long run.

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