

Work stress on resident doctors in a tertiary care hospital in Eastern India: A qualitative study from the outlook of residents

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ABSTRACT

Background: Hospitals present a complex and challenging environment to resident doctors. The perception of ever-increasing work stress on residents has been the topic for multiple studies previously. In this study, we explore the perspective of resident doctors working in a premier tertiary care hospital in Eastern India about their work stress. **Objectives:** The objectives of the study were to investigate the causes of work stress on residents in a tertiary care hospital in Eastern India and to find out the perceived solutions to ease the work stress on residents. **Materials and Methods:** The study was done in the department of urology at a tertiary health care center in Eastern India. The study comprised of in depth interviews and focus group discussions. The interviews were audio recorded and later transcribed. Data analysis was done through deductive approach. Results were reviewed by all the authors. **Results:** Work stress on residents was considered to be additional pressure which was in excess of individual capacity and led to work and personal life imbalance and depression among residents. The principal causes were lack of manpower and infrastructure, inadequate time for family, political influence in hospital functioning, and role of media in causing and aggravating patient distrust on doctors. It had a harmful effect on academic learning of residents. A combined and sustained effort is needed to reduce the work stress to improve performance and patient outcomes. **Conclusion:** Persistent and disproportionate work stress on residents leads to their poor work–life balance and depression and translates into poor performance and patient outcomes. The problem is multifactorial and solutions can be found out by a concerted effort from the hospital administration, political class, and media. Mutual trust among doctors and patients can play the most important role to reduce resident work stress.


KEY WORDS: Work Stress; Residents; Qualitative Research

INTRODUCTION

Resident doctors face complex and challenging conditions in the present day hospitals. Hospitals provide an environment where newer skills are learnt every day in the face of evolving science. It is coupled with the desire and passion of doctors to improve

their skills continuously and aim for the best. Doctors respond to these challenges differently, some finding it adventurous and exciting while others deem the same environment as one which stresses them out and leads to burnout.

The workload of any tertiary care hospital is tremendous, more so in the government setup where the masses have direct access because financial constraints usually do not pose a problem. The major brunt of this workload is borne by the resident doctors who work as the backbone of the system. They work for long hours, sometimes round the clock in clinical disciplines. Moreover, they are expected to always take correct decisions in the face of uncertainty and maintain compassion^[1] while coping with distress and death.

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It is unsurprising that medical training is associated with mental health problems.^[2] A recent review concluded that lack of work–life balance, female sex, lack of job satisfaction, long hours at work, and younger age are important predictors of burnout in doctors.^[3] The well-being of doctors has a great impact on health-care provision and directly influences patient care, including patient satisfaction, adherence to treatment, and interpersonal aspects of care. Female doctors have been found to be exceedingly susceptible to burn out due to work stress during residency and are often forced to choose less demanding disciplines to maintain a balance between work and personal life.^[4]

It is well documented in literature that the residency program in medical science is overwhelmingly stressful.^[5] They are under enormous stress to perform and the duration of their work has no limits or boundaries. They are expected to fulfill their designated jobs, often at the cost of their health and well-being. They are expected to deliver not only on the academic front but also as dedicated professionals. This expectation on multiple fronts, along with time limitations and family responsibilities, makes residents tread on a thin line where they need to be perfect or perish.^[6] Resident doctors have been found to be at increased risk for substance abuse, suicide, and psychiatric illness due to the stress involved in their daily work as well as the inability to balance work and personal life in a desirable manner.^[7]

This perception of ever-increasing work stress on residents has been the topic for multiple studies in various parts of the world including India. These studies have stemmed from the idea of trying to find reasons for early burnout of doctors to exodus of doctors to other countries where perceived work stress is less. These studies have all tried to define causes of work stress of resident doctors from their viewpoint and the viewpoint of trainers. Yet, most of these studies are questionnaire based and true response of candidates is often lost.

In this study, we set out to explore the perspective of resident doctors working in a premier tertiary care hospital in Eastern India. The objectives of the study were to investigate the causes of work stress on residents in a tertiary care hospital in Eastern India and to find out the perceived solutions to ease the work stress on residents. We have used qualitative approach as we wanted a detailed and in-depth perspective of resident doctors about this issue. It was done by the help of series of in-depth interviews (IDIs) and focus group discussions (FGDs) among resident doctors of different specialties from the same hospital. Ethics approval was taken from the institutional ethics committee for the study.

MATERIALS AND METHODS

The study was conducted in the urology department of a tertiary medical college in Eastern India. The study was one

of the qualitative descriptive type involving in-depth face-to-face interviews (IDIs)^[8] of 28 residents including those from medical, surgical, and superspecialty streams of the institution. Three FGDs were done involving 32 residents of different streams of the institute. Participants were selected purposively and requested to participate in the study. They were explained beforehand regarding privacy of identity. A verbal and written consent was taken and interviews were fixed at their suitable time. A distinct and explicit consent for audio recording of the interviews was taken. All the interviews were conducted by the first author. Before the beginning of the study, a structured questionnaire^[9] was prepared by the authors after thorough literature review.

All the interviews were conducted in a convenient place and each of the interview lasted for 10–15 min. No repeat interview was conducted. All the interviews were conducted mostly in English language; however, a few of the participants used Bengali and Hindi languages during the interviews. Field notes were taken during IDIs by the first author and by the second author during FGDs. Any ambiguity about statements made during the interview was clarified at the end of the interview by showing a verbatim transcript of the interview to the interviewee.

Non-participants were not allowed to remain present while conducting the interview. Thorough handwritten notes were taken which were verified by the participant after the completion of the interview. Audio recording of the interviews was done.

In the first FGD, there were a total of nine participants, in the second FGD, there were a total of eleven participants, and in the third FGD, there were a total of 10 participants. All the participants were well informed in advance about the purpose of the study. All the questions used during the interview were open ended. All interviews were conducted in a free-flowing manner with minimal intervention from the first author who was the interviewer or moderator. The purpose was to gather the total number of themes that emerged from the interview and not the numerical number of respondents that had similar responses. The data collection process continued until a saturation level was achieved (no new information was present). The interviews were transcribed and typed into English. The transcripts were handed over to the participants for confirmation.

The data analysis was performed manually by deductive approach. Descriptive “codes” of the text information were made. The consolidated criteria for reporting qualitative research guidelines were followed.^[10] The script was written and then reviewed and revised by the other authors. Finally, the script was prepared for publication.

RESULTS

This qualitative study was undertaken from June to December 2018 over a period of 7 months. A total of 28 IDIs and three

FGDs were done involving residents of different streams. 24 of the participants were residents in the department of general medicine, 13 were from the department of urology, nine were from general surgery, 10 were from gynecology, and two each were from the department of pediatric medicine and pulmonary medicine. Seven other residents who were invited for interviews refused citing a lack of interest and time.

All the participants were resident doctors at the same tertiary care center in various departments. They have an average duty of 8–10 working hours every day in the hospital and they closely interact with an average of 40–50 patients on daily basis including outdoor, emergency, and indoor patients. As they are the first tier of medical professionals in day-to-day contact with the patients and their relatives, they get firsthand information about the happiness and satisfaction of patients. Furthermore, the residents are the first to face anguish, anger, and disappointment of patients and their relatives when their expectations are not met.

Our first question was regarding the perception of what comprises work stress for residents and how they would like to define their work stress. There were varied responses to this question. Some of them were as follows:

- *It is the stress caused due to additional and increased responsibility given to me in excess of what I can handle, to compensate for lack of manpower and supportive staff.*
- *I would define work stress as the additional pressure imposed upon me to fulfill my work demands which makes impossible for me to fulfill my family responsibilities and causes work–life imbalances.*
- *Work stress for me comprises an environment where I am unable to maintain balance between academics, work, and personal life, leading to stressful conditions and depression.*
- *I can explain what work stress is for me. It is the pressure to complete an endless work list with patients spread across several wards which need to be completed at the cost of social and personal life.*
- *For me, work stress does not emanate from my work, but from the additional work, I need to do due to inefficiency and understaffing of support staffs such as nursing staff and ward boys. As I am answerable for patient management to my consultants, I need to complete their work in the interest of patient care and management.*

Our next question was to the residents to express how much work stress they have while working in their institution. In reply to this question, there was some uniformity in the fact that all residents did face stress related to their work. Furthermore, the work stress was notably more on residents who were married and on female residents who had children. This additional stress emanated from their prolonged periods of staying away from their family and children. This gave rise to both dissatisfactions of spouse and guilt of being unable to give adequate time to

the child. When asked to rate on a scale of 1–10, there were no ratings below six. Higher ratings came from surgical specialties, female residents, and married residents.

We next asked residents to mention the factors responsible for their work stress. Some of the responses were as follows:

- *The lack of adequate infrastructure in the hospital and disproportion of patient-doctor support staff ratio leads to work stress in excess of capabilities of residents. They struggle to complete the required work despite all effort just due to the magnitude of the work each resident is designated to complete.*
- *The role of political and other powerful influence on hospital administrative staff to push through patient admission out of turn has ultimate bearing on the residents who are pressurized further to look into these “Catch” patients with additional care.*
- *Media and its role in highlighting medical flips and keeping mum on achievements lead to deterioration of doctor-patient relationship. Patients are suspicious of every action of doctors’, especially junior doctors and residents. This environment of suspicion leads to additional work stress on residents.*
- *Residents work under extreme stress due to increasing intolerance and disbelief of patients and party. They are not only under mental stress but also under constant threat to physical security due to increased incidence of violence against doctors.*
- *Lack of personal family time and adequate leave days creates dissatisfaction and leads to additional stress and poor performance of resident doctors.*

Our next question was what residents felt regarding how work stress affects their academic learning. Residents responded that although their primary purpose of residency was academics and patient care, due to the increasing workload and persistent work stress, academics does take a back seat. One resident responded that he felt afraid to clear academic doubts with his consultant when he failed to complete ward work.

Our last question in the focus groups and IDIs pertained to the perceived solutions to this work stress on residents. The following are few of the elicited responses:

- *The lackadaisical attitude of the political administration toward infrastructure and manpower deficiencies needs to be looked into at the earliest. This will lead to better work distribution, less work stress, and better performance, all translating into better patient outcomes.*
- *Adequate and compulsory leave to residents and strict adherence to work hour guidelines need to be followed to prevent burn out and to maintain proper work–life balance.*
- *Adequate checks on external influences, especially political, need to be enforced for smooth functioning and less work stress.*
- *Media are the backbone of a progressive society, but it*

needs to play its role correctly and responsibly. Making scapegoats out of doctors just to gather cheap popularity and television rating points are not the way to function for responsible media. They need to highlight both deficiencies and achievements of hospitals and can play a big role in confidence building between patients and doctors.

- *Finally, most residents were of the view that maximal stress emanates from deteriorating doctor-patient relationship. Confidence building measures and proper counseling will lead to improved patient perception and will bring down work stress significantly.*

DISCUSSION

The principal findings of this work are that the residents do work under pressurized circumstances with lack of work-life balance and often land up with depression due to lack of job satisfaction. They are mostly expected to prioritize work over personal and family needs. The role of external influences such as political interferences and lack of adequate workforce and infrastructure double up to increase resident work stress. The role of media is often irresponsible and detrimental to doctor-patient relationship, often creating mistrust and further increasing stress on residents.

The previous studies into resident work stress in India and the US also have shown work stress to be one of the leading causes of growing mental problems among residents.^[11,12] These studies were mostly quantitative and survey based and looked into resident stress using various scales and tools. On the other hand, our study is a purely qualitative outlook into resident work stress and goes on to find in details the perception of residents. It defines which factors residents perceive as causative and their perceived solutions to their work stress. Another study on work stress from India stressed on the high prevalence of work stress on medical residents and showed how it negatively affected the performance and well-being of residents. They identified residents of the 1st year and in clinical branches to be most prone to work stress.^[13] Another study from the UK shows the increasing work stress among residents in training might be responsible for more residents sticking to general practice and discontentment among them joining the National Health Service.^[14] Another study from Maharashtra found no gender difference in stress among residents^[15] which is contrary to our study where female residents reported more stress.

Strength of this study is in the qualitative, in-depth inquiry into the problem with over 50 participants. The problems were discussed first by one-to-one interaction in the interviews and later on by FGDs which allow crossing of data. In FGDs, some of the ideas were agreed on while the others were discarded. The major limitation of the study was the fact

that it was done in a single hospital and there are some local factors in play which may not be applicable everywhere. Even with this limitation, we feel that the findings may be applicable to most of the population in India. There will be a few extra factors in different areas, but this study paints an overall general picture. This can be the basis of the much-needed reforms in the system we need today to address this grave problem.

CONCLUSION

Persistent and disproportionate work stress on residents not only leads to poor work-life balance and depression for residents but also translates into poorer performance and poor patient outcomes. The problem is multifactorial and thus the solutions can be found out by a concerted effort from the hospital administration, political class, and media. Most importantly, both doctors and patients must realize that they exist for each other and if their relationship is strained, doctors would be stressed and poorer outcomes ensue. Mutual trust among doctors and patients can play the most important role to reduce resident work stress.

REFERENCES

1. Shanafelt TD, Hasan O, Dyrbye LN, Sinsky C, Satele D, Sloan J, *et al.* Changes in burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014. *Mayo Clin Proc* 2015;90:1600-13.
2. Visser MR, Smets EM, Oort FJ, De Haes HC. Stress, satisfaction and burnout among dutch medical specialists. *CMAJ* 2003;168:271-5.
3. Amofo E, Hanbali N, Patel A, Singh P. What are the significant factors associated with burnout in doctors? *Occup Med (Lond)* 2015;65:117-21.
4. Drinkwater J, Tully MP, Dornan T. The effect of gender on medical students' aspirations: A qualitative study. *Med Educ* 2008;42:420-6.
5. Cohen JS, Patten S. Well-being in residency training: A survey examining resident physician satisfaction both within and outside of residency training and mental health in Alberta. *BMC Med Educ* 2005;5:21.
6. Pino Morales Socorro M, López-Ibor Aliño JJ. Stress and adjustment at the beginning of postgraduate medical training. *Actas Luso Esp Neurol Psiquiatr Cienc Afines* 1995;23:241-8.
7. Saini NK, Agrawal S, Bhasin SK, Bhatia MS, Sharma AK. Prevalence of stress among resident doctors working in medical colleges of Delhi. *Indian J Public Health* 2010;54:219-23.
8. Dongre AR, Deshmukh PR, Kalaiselvan G, Upadhyaya S. Application of qualitative methods in health research: An overview. *Online J Health Allied Sci* 2009;8:3-4.
9. Kim Y. The pilot study in qualitative inquiry: Identifying issues and learning lessons for culturally competent research. *Qual Soc Work* 2010;2:190-206.
10. A reporting guide for qualitative studies. *Can Commun Dis Rep* 2016;42:179-80.
11. Gobbur SB, Nigudgi SR, Reddy S. Prevalence of stress among

- post graduate doctors at Mahadevappa Rampure medical college, Kalaburagi, Karnataka. *Int J Comm Med Public Health* 2016;3:576-80.
12. De Oliveira GS Jr, Chang R, Fitzgerald PC, Almeida MD, Castro-Alves LS, Ahmad S, *et al.* The prevalence of burnout and depression and their association with adherence to safety and practice standards: A survey of United States anesthesiology trainees. *Anesth Analg* 2013;117:182-93.
 13. Sahasrabuddhe AG, Suryawanshi SR, Bhandari SR. Stress among doctors doing residency: A cross-sectional study at a tertiary care hospital in the city of Mumbai. *Natl J Community Med* 2015;6:21-4.
 14. Hunter DJ. Wider political context underlying the NHS junior doctors' dispute. *BMJ* 2015;351:h6317.
 15. Gawande AV, Barnwal RK, Narlawar UW. Psychological stress among post-graduate medical resident doctors: A cross-sectional study in a tertiary care hospital in central India. *Int J Med Sci Public Health* 2019;8:275-9.

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