

Medical Education

Post graduate training in medical colleges of India: Resident Physicians' perspective

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Received : 24 November 2020

Accepted : 06 May 2021

Published : 25 February 2022

DOI

10.25259/IJPP_353_2020

Quick Response Code:



ABSTRACT

Objectives: Specialty training is one of the most crucial phases in the life of a doctor. The period involves intensive training to develop appropriate knowledge, psychomotor skills, and attitude related to the area of specialization. The students may struggle over issues during training which may prevent them from giving their best performance. The present study was aimed to assess perception of quality of academic facilities and training provided to postgraduate trainees in medical colleges and institutes in India.

Materials and Methods: The present study was conducted in the form of questionnaire based survey. Anonymous responses were collected from the participants ($n = 274$) from all over the country.

Results: The survey revealed that regular academic activities are being organized by various departments for their training as reported by 79.9% respondents. About 72.8% of the respondents agreed that they had regular post graduate training on practical skills. About 58.6% respondents reported that they were comfortable in interacting with faculty. About 24.8% participants were not satisfied with their research guidance and merely 12.9% participants received funds to pursue their thesis research. About 51.5% study participants reported that their institutes have no provision for care on mental health and workplace safety.

Conclusion: Training facilities in majority of medical colleges meet the standard of postgraduate training however students reported their concern on few genuine issues which need resolution to optimize quality of postgraduate training in the country.

Keywords: Postgraduate, Respondents, Medical colleges, Residency program, Medical education

INTRODUCTION

Postgraduate medical education is an important phase in the life of a doctor. The training imparts various competencies so that these bright minds emerge as successful independent medical specialists.^[1] The curriculum of postgraduation training is meticulously designed in a way that it focuses on development of cognitive domain, psychomotor skills, up to date subject knowledge, attitudinal changes, and communication skills and ingrains the attitude of a lifelong learner in the trainees. Further, they are also primed for developing teaching skills so that they may fit into the role of medical teachers. During this period, they are also encouraged for innovative practice, and temperament for medical and educational research is also embedded.^[2] Such training is imparted under the guidance of mentors and is generally painstaking and requires student's dedicated involvement. It is expected that these students after completion of their training will be able to be proficient enough to manage effectively the health services at all levels of healthcare and may have capability to act as an effective leader. Further, after completion of the coursework,

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these specialists would be able to provide a standard of care comparable to any other country's health-care system.^[1]

In India the postgraduation courses which are recognized presently by Medical Council of India (MCI) are classified as super-specialty courses, namely, DM and MCh, PhD, postgraduation degree course as MD, MS, and diploma courses.^[3] The students seeking admission into these postgraduation courses have to take up a highly competitive entrance exam which requires immense efforts and preparations to qualify.^[4] Thereafter, based on their merit in the entrance examination they are allotted various specialties in different medical colleges across the country. The most sought after medical schools sequentially are the national medical institutes followed by state government run medical colleges and private colleges.

Majority of these medical schools in the country are regulated by guidelines laid down by the MCI except certain autonomous institutes which are governed by Ministry of Health and Family Affairs, Government of India.^[5,6] The course curriculum designed for postgraduate medical education in all these medical schools is uniform.

Although guidelines have been laid down by regulatory bodies which must be followed by all medical colleges and institutes for uniform pattern of postgraduate training, there remains some lacunae in actual implementation of these guidelines due to some reasons, which affects postgraduate training. Hence, the present survey was aimed to focus on these lacunae from the postgraduate trainee students' view point enrolled in various medical schools across the country about the existing training scheme followed during their training period in the form of academics, faculty interaction, research facilities, institutional facilities, departmental amenities, mental health, and work culture environment.

MATERIALS AND METHODS

The present study was conducted after seeking ethical approval from Institutional Ethical Committee (Letter No. AIIMS/IEC/19/287; Dated-19/7/2019). The survey questionnaire was shared with the postgraduate students of various medical colleges across India in the form of Google form. The participants had to fill up the questionnaire and the response was recorded through the Google form. Participation was purely voluntary and anonymous.

A total of 274 respondents participated in the study. The questionnaire was divided into different sections and was designed in a way as to incorporate questions associated with demographic details, academic information, departmental postgraduate activities, mentor-mentee and faculty interaction, financial status, institutional facilities, working culture, perceptions of students, and suggestions for

improvement [Tables 1 and 2, Appendix A]. The survey was conducted from May 2020 to June 2020.

Statistical analysis

The data were organized in MS Excel file. The responses were analyzed and expressed as percentages. These percentage values were used to derive results. Likert scale (1-Strongly agree; 2-Agree; 3-Neutral; 4-Disagree; 5-Strongly disagree/1-Happy and satisfied, 2-Satisfied to some extent, 3-Not sure, 4-Unsatisfied, 5-Extreme stress/suicidal thoughts/1-Very Motivated, 2-Motivated, 3-Not Sure, 4-Sometimes motivated, 5-Not motivated at all/1-Very Safe, 2-Safe, 3-Not sure, 4-Some safety, 5-Not safe at all/1-Very much equipped, 2-Equipped, 3-Not sure, 4-Some equipped, and 5-Not at all) was used to access student's perceptions on some issues [Tables 1 and 2, Appendix A].

RESULTS

Demographic details

The survey was taken up by 274 postgraduate students. Of these, 55.5% were males, 44.2% were females, and rest 0.3% belonged to others. The age group of respondents varied from 24 to 44 years with mean age of 29.5 ± 4.1 years. Most of these respondents (80.6%) were pursuing postgraduation course from medical colleges located at urban areas whereas 16.9% students were studying in medical colleges located in small townships. The rest were pursuing the courses in colleges located in rural areas.

The students were pursuing various postgraduation courses, namely – 61.3% were pursuing MD, 24.8% had taken up MS, 2.9% and 2.6% were enrolled for DM and MCh courses, respectively. Of these, 4.4% were pursuing diploma courses, 3.3% were registered for DNB courses, and the remaining were pursuing MSc, Senior residency, observership, and fellowship programs and private practice. About 47.8%, 27%, and 18.2% respondents were in 3rd year, 2nd year, and 1st year junior residency program, respectively. Rest had completed their junior residency and were working as senior residents or pursuing super specialization, fellowship courses. Of these, majority of students (42.7%) were enrolled in government owned medical colleges and institutes. These respondents were in colleges which were run by central government (39.4%) and state government (21.9%). Some of these students were registered in autonomous institutes (10.6%) or affiliated to university (13.5%) or in private medical schools (12.4%). About 0.4% respondents were enrolled in defense institute.

Marital status results revealed that 54.7% of these students were unmarried or single whereas 43.8% were married and 1.5% were divorced/separated/widowed. Further 77.9% of

them responded that they had no children and 22.1% of the candidates had children.

Academic information

Academic activities were organized at departmental level in majority of the medical colleges as accepted by 79.9% respondents whereas 20.1% students declared that there were no academic activities held in their departments. These activities were organized daily as reported by 25% students, on weekly basis as agreed by 34.9% students and on every month in case of 12.9% respondents. Of these, 9.6% students accepted that these activities were organized once in many months and rest responded that the activities are organized once in fortnight or over a period of 3 weeks in some cases. According to 67.8% respondents, journal clubs were organized by their department whereas 86.8% agreed that regular seminars were medium of post graduate academic activities. About 74.4% students voted for case presentation and 42.5% reported for group discussions as a part of their academic activities. The remaining participants responded that lectures, tutorials, mortality meets, clinical meets, bedside teaching, grand rounds, clinic-pathologic meets, classroom teaching, cadaveric dissection, and slide seminars were a regular part of their training. Of these, 3.3% students accepted that there were no post graduate academic activities organized by their departments. The teaching activities were in the form of didactic lectures (38.5%), small group teachings (62.3%) whereas 24.2% agreed for peer based learning as the main academic activity and 45.8% agreed that they were not taught by anyone and were self-taught.

Further, 72.8% respondents agreed that they were able to get enough exposure to cases as a part of their practical training whereas 17.3% could get some exposure and 9.9% students did not get any exposure. During practical sessions 68.4% respondents agreed that they were able to get enough hands-on opportunities (with patients) to learn and use their skills, 15.2% could get some opportunity whereas 16.4% of them did not receive any hands on experience during their training.

During their postgraduate training curriculum, the students are often exposed to multiple skill sets. 62.4% respondents agreed that they have frequent laboratory or unit rotations, 39% have been exposed to peripheral postings, 25.8% reported that they visit various labs, and 17% reported that they do not have any such exposure. Some of the remaining respondents accepted that they have rotations in other departments, OPD, OT, FNAC procedures, and visit to other reputed institutes in country.

Assessment was conducted quarterly as reported by 45.1% respondents, monthly as reported by 17.6% respondents, only at the time of completion of the course as reported by 25.6% participants. These included both subjective and objective

pattern of assessment as replied by 44.1% participants, only subjective assessments were conducted according to 45.2% respondents whereas 6.3% students replied that they had only objective assessment. Practical assessments were in form of full experiments or cases as confirmed by 55.1% respondents, structured OSCE as replied by 40% students.

Emphasis on soft skills and ethics were laid during their training period according to 60.4% participants, 19.2% responded that they were sometimes emphasized on this part whereas 20.4% did not get any guidance on this aspect.

Mentor-mentee and faculty interaction

Receiving adequate supervision from faculty was reported by 56.8% participants, 23.6% participants answered that they could get guidance only sometimes whereas 19.8% were not supervised at all by their faculty during their training. Similarly, 58.6% of the participants reported they were comfortable while interacting with faculty and clarifying doubts at all times, 23.1% could interact only sometimes whereas the rest did not interact with the faculty. Of these, 48.9% participants responded that their supervisors demonstrated new techniques and skills, 28.9% agreed that they were sometimes demonstrated newer techniques whereas 22.2% did not learn new techniques from their mentors. In similar veins, 52.9% got appropriate and adequate feedback from their supervisors, 25% received feedback only sometimes while the remaining did not get feedback.

Research activities

Research activities are inseparable component of postgraduate training; however, only 54.1% participants were satisfied with the fact that they got adequate and appropriate guidance from the faculty for their thesis research and writing, 21.1% students were somewhat satisfied but 24.8% were not satisfied on this aspect. About 66.9% participants affirmed that they were taught basics of statistics and research methodology in their institute, whereas 33.3% students were not taught these basics and were either taught by their peers or they tried to study by themselves.

Further 77.8% of these participants agreed that they were encouraged to publish their research study in professional journals whereas 22.2% participants answered that they were not encouraged for the same. Similarly, 68.6% students were encouraged to participate in conferences/workshops/training programs, 18.1% were allowed to participate in some selected events only and the rest were not encouraged for participating. As reported by 37.3% candidates that their department conducted CMEs regularly, 41.7% reported that their departments conducted such events once in a while and 21% stated that their departments did not conduct such events at all.

Institutional facilities

Adequate institutional amenities play an important role in postgraduate training. Financial support for promoting research activities in institute may help postgraduate students to pursue their thesis work. To this issue, 54.4% participants replied that they did not receive any grant, 30.1% students did not need funds for their thesis project, and 12.9% received funds and the remaining either had no idea of such facility or had applied for grants or did not start with their thesis work. Further, 75.5% respondents agreed that their institute has no provision for travel grants/funding to support their participation in academic events such as conferences, workshops, and trainings, 16.1% students received travel grants from their institutes, and 8.9% respondents were not sure about such grant support.

Institutional library facility were available in most of the institutes as responded by 82.2% participants; however, 17.8% participants answered that they could not avail the library facilities. In continuation, 45.8% agreed that their institute library had abundant electronic media/journals/books available, 38.4% agreed that although they had such facility but in limited manner, and 15.9% responded their institute library did not have such facility.

Extracurricular activities act like a rejuvenating medium for students overburdened with their coursework assignments. However, only 44.3% participants accepted that their institutes encouraged such activities among students and faculty and 55.7% responded that their college did not promote such programs.

Mental health of students and employees is a key to success for any institute. Surprisingly only 20.7% respondents answered that their institute has deputed student counselor to take care of their emotional concerns whereas 51.5% responded on a negative note and the remaining had no clue or were not sure of such initiative from their colleges.

Further 46.5% participants confirmed existence of Resident's Association in their institute to take care of issues faced by the residents whereas 45.8% participants answered that there were no association for addressing their problems and subsequently the remaining respondents were not sure about the existence of association.

The participants responded that they were entitled to 21.3 ± 10.8 leaves in a year on an average which included casual leaves, academic leaves, earned leaves, and medical leaves. Of these, only 56.5% respondents agreed that they could avail the entitled leaves, 32% answered they could avail the leaves sometimes whereas the rest responded that they were not allowed to avail their leaves and some stated that their pay was deducted for their leave.

Department facilities

About 67.2% participants stated that their departments have enough equipment for teaching and patient care whereas 20.3% accepted that they have the facility to some extent and 12.5% reported that their departments are not well equipped. Further, 69.4% accepted that their departments provide them with a proper place to work whereas in case of remaining participants they did not have proper working areas in their department. Interestingly, 60.1% agreed that newer technologies are used in their departments, and 36.2% did not agree with the same and remaining students responded that most of the equipment are not used or they need repair and have not been upgraded.

Efficiency of a department and its outcome is dependent on adequate manpower. However, only 25.2% participants strongly agreed and 26.6% agreed that their departments have adequate manpower, whereas 20.3% opted for a neutral response, 14.7% disagreed, and 13.3% strongly disagreed with the availability of adequate manpower in their departments [Table 1 and Figure 1].

Further, 24.4% respondents strongly agreed and 28% agreed that their departments foster team work and healthy interaction; 25% of the respondents were neutral on this issue; however, 12.5% disagreed and 10% strongly disagreed about presence of such team work and interaction [Table 1 and Figure 1].

The postgraduate students were working 42–168 h/week on an average. About 51.8% study participants were of the view that the working hours/shift duties were managed efficiently by their departments, 19.1% voted that duties were managed to some extent by their departments but 29.1% were against such view and stated that their working duration was not adequately managed by their departments. Further, only 44.2% students could get adequate rest/sleep to be able to perform their duties effectively, 38.2% could get rest to some extent, and 16.6% could not get enough rest or sleep.

Other facilities

About 95.6% respondents replied that they were able to manage their financial requirements through the stipend earned during their training while 4.4% students did not receive any financial support during training. Institutional hostel accommodation facilities were utilized by 64.8% participants whereas 27% students were staying in rented apartments, 2.2% were staying in private hostels or as paying guests, and remaining were living in their homes. Furthermore, 63% students accepted that their institute have adequate food facilities, 28.1% responded that their institute have cafeterias which are not well maintained and the remaining students replied that there was either poor arrangements or no canteens available in their college

premises. Similarly 65.7% students agreed that there are adequate sanitation facilities in their institute, rest replied that there are inadequate sanitation facilities in their premises.

Work culture/Psychosocial factors

Eustress promotes achievement of best performance in life. Similarly during postgraduate training period little stress along with a supportive working environment helps to improve a trainee's output in practice. The results of the survey were disturbing on this aspect. Hardly 15.5% strongly agreed and 23.2% agreed that they were in a happy and satisfied mental state during postgraduation. Of these participants, 36.9% chose for a neutral response, whereas 18.1% disagreed and 6.3% strongly disagreed with the fact that they were satisfied and happy in their postgraduation period, instead they were under extreme stress [Table 1 and Figure 2].

On a similar note, 27.7% strongly agreed and 31% agreed with the fact that they felt motivated towards their profession. About 17.3% of the participants gave a neutral reply to this whereas 15.1% disagreed and 8.9% strongly disagreed with their counterparts and did not feel motivated [Table 1 and Figure 2].

In addition to these, only 32.1% students strongly agreed and 29.5% agreed that they feel safe and comfortable in their work environment. Contrary to this, 14.4% students disagreed and

10.3% strongly disagreed about feeling safe while working whereas 13.7% students chose for a neutral reply [Table 1 and Figure 3].

Further, 17% students strongly agreed and 22% agreed that they were able to maintain work life balance during postgraduation. Similar percentage (21.5% disagreed and 16.5% strongly disagreed) of students were not in coherence regarding this issue. Remaining 23% students chose for a neutral response on the subject [Table 1 and Figure 1].

Interestingly, 23.6% respondents strongly agreed and 29.2% agreed that they felt equipped to pursue their future career independently, whereas 12.5% disagreed and 11.1% felt that they are unequipped for practicing independently after their postgraduation. About 23.6% respondents had neutral opinion [Table 1 and Figure 3].

The survey revealed numerous suggestions for improvement from the respondents like number of faculty must be increased; there should be more interaction on one to one basis and in groups with faculty along with regular formative assessments. New equipment must be procured by departments to train the trainees and infrastructure must be strengthened. It was also emphasized that the students should be taught like MBBS students. There should be more involvement of faculty for postgraduate teaching. They also suggested for integrated CME with other departments so

Table 1: Responses about work culture/psychosocial factors expressed as percentage

Questions	Strongly agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly disagree (5)
Does your department foster team work and healthy interaction?	24.4	28	25.1	12.5	10
Are you able to maintain work life balance during post-graduation?	17	22	23	21.5	16.5
Do you think there is enough manpower in your department to carry out all the duties efficiently?	25.2	26.6	20.3	14.7	13.3
	Happy and satisfied (1)	Satisfied to some extent (2)	Not sure (3)	Unsatisfied (4)	Extreme stress/ suicidal thoughts (5)
How is your usual mental state during postgraduation?	15.5	23.2	36.9	18.1	6.3
	Very Motivated	Motivated	Not Sure	Sometimes motivated	Not motivated at all
How motivated do you feel toward your profession?	27.7	31	17.3	15.1	8.9
	Very Safe	Safe	Not sure	Some safety	Not safe at all
Do you feel safe and comfortable in your work environment?	32.1	29.5	13.7	14.4	10.3
	Very much equipped	Equipped	Not sure	Some equipped	Not at all
How equipped do you feel to pursue your future career independently?	23.6	29.2	23.6	12.5	11.1

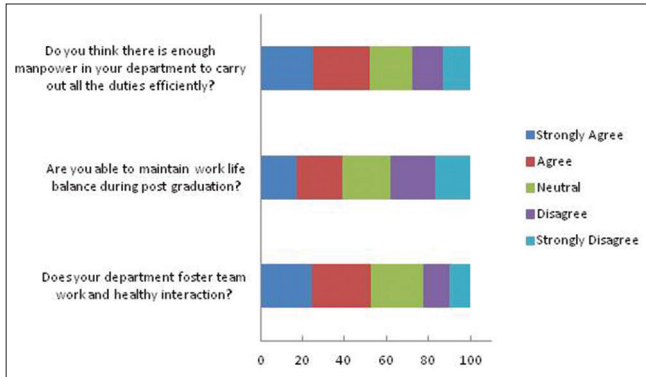


Figure 1: Graphical representation of responses on work culture/ psychosocial factors.

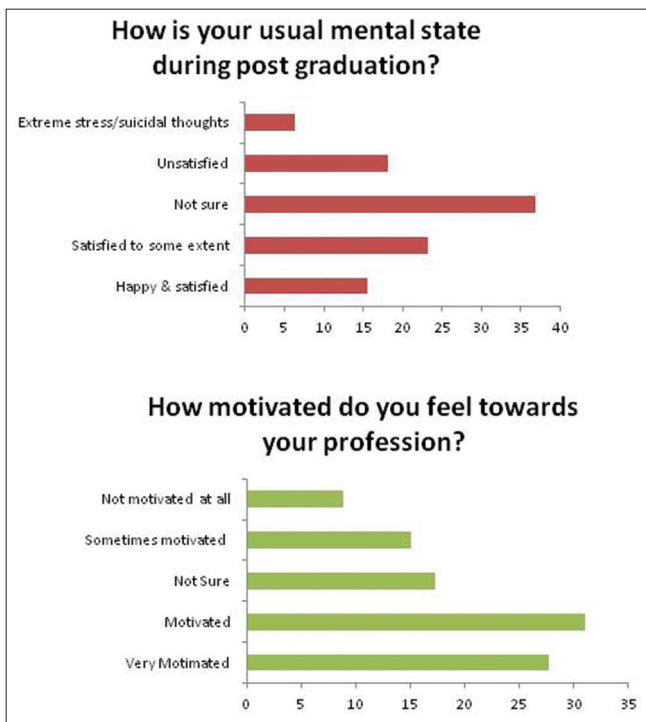


Figure 2: Graphical representation of responses on work culture/ psychosocial factors.

that knowledge sharing can improve their training. Students also suggested that faculty must trust students and not bully or humiliate them. The respondents suggested for a lighter environment among the consultant and residents. Residents should get the required support from the administration and consultants. It was also emphasized that facility for personal counseling must be made available for students. There must be safe environment to work without fear and faculty must show empathy to them and encourage them. Further mess, hostel and library facilities need to be improved as suggested by some respondents.

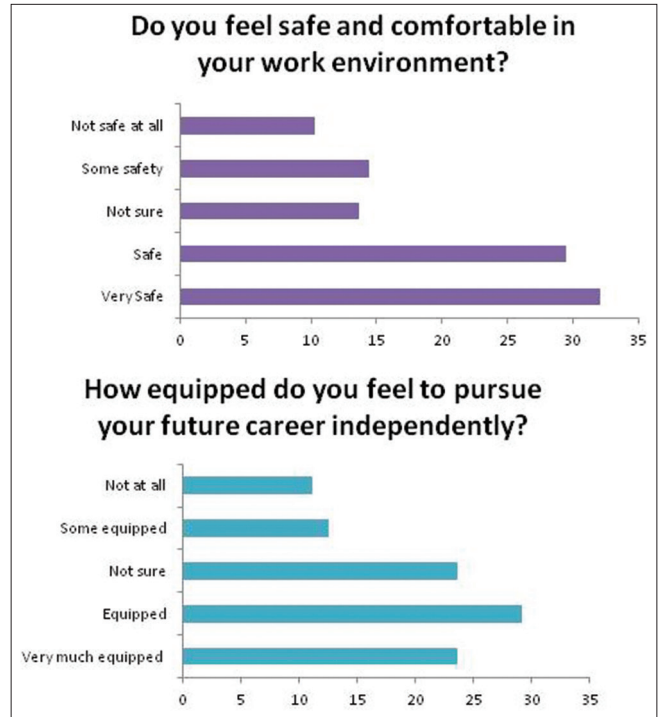


Figure 3: Graphical representation of responses on work culture/ psychosocial factors.

DISCUSSION

The results obtained from the present survey reflect the status of medical postgraduation education across the country. The survey was taken up by post graduate students from different medical colleges across the country from various states.

Most of the participants responded that they were provided with adequate academic support in the form of regular journal clubs, case presentations, seminars, group discussions, clinical meets, mortality meets, teaching activities, etc., however, it was quite surprising to find that nearly one-fifth of the respondents did not receive guidance and nearly a little less than half of the students were not taught by faculty during the duration of their training.

There has been an alarming increase in violence against doctors in the recent years.^[7,8] It is a time to ensure good communication skills and skills for negotiations and conflict management. About 40% of the participants reported that they were not given any training on soft skills and ethics.

Mentoring is a symbiotic relationship between a more experienced person and a less experienced person to achieve desired goals. During postgraduate training period a healthy mentor/faculty interaction with the student is highly needed, so that the student acquires the skills under supervision. It was surprising to find that only half of the respondents could interact with faculty and receive adequate supervision.

Table 2: Response of postgraduate trainee students to various questions expressed as percentage

Questions	Response		
	Yes (%)	No (%)	Sometimes (%)
Academic activities organized by department	79.9	20.1	-
Do you get adequate supervision from the faculty?	56.8	19.1	23.6
Do you feel comfortable in interacting with the faculty and clarifying doubts?	58.6	18.9	23.1
Do you get enough exposure to cases as a part of your practical training?	72.8	9.9	17.3
Do you get enough hands-on opportunities (with patients) to learn/use your skills?	68.4	16.2	15.4
Do your supervisors demonstrate new techniques and skills?	48.9	22.2	28.9
Do you get appropriate and adequate feedback from your supervisors?	52.9	23.1	25
Are soft skills and ethics emphasized on in your department?	60.4	20.4	19.2
Are you satisfied that you got adequate and appropriate guidance from the faculty for your thesis research and writing?	54.1	24.8	21.1
Are you encouraged to publish your research in professional journals?	77.8	22.2	-
Are you encouraged to participate in conferences/workshops/training programs?	68.6	13.3	18.1
Are you taught basics of statistics and research methodology in your institute?	66.9	33.3	-
Does your department conduct CMEs regularly?	37.3	21	41.7
Did you receive any financial support for your thesis from your institute?	12.9	54.4	30.1 (did not need funds)
Do you have adequate food facilities in the institute?	63	9.9	28.1 (cafeterias not maintained)
Do you have adequate sanitation facilities in the institute?	65.7	34.3	-
Does your department have enough equipment for teaching and patient care?	67.2	12.5	20.3
Does your institute have a proper library from where you can access professional books?	82.2	17.8	-
Is there availability of electronic media/journals/books?	45.8	15.9	38.4 (limited facility)
Are newer technologies used in your department, for example, new instruments, audiovisual aids?	60.1	36.2	3.7
Do you get your entitled leaves when you need them for academic/personal reasons?	56.5	11.5	32
Do you get adequate rest/sleep to be able to perform your duties effectively?	44.2	16.6	38.2
Do you think working hours/shift duties are managed efficiently by your department?	51.8	29.1	19.1
Does your institute encourage extracurricular activities such as art, music, and sports among students and faculty?	44.3	55.7	-
Do you have a student counselor to take care of your emotional concerns?	20.7	51.5	17.8 (not sure)
Do you have a Resident's Association in your institute to take care of issues faced by the residents?	46.5	45.8	7.7 (not sure)

Further, the survey results revealed that research activities are not given due importance to the extent it should be in many colleges. Students remain unaware or they struggle to learn even the basics of research methodology. At many places, they are not allowed to participate in conferences, are not provided with any financial support to conduct their thesis project, have limited access to library facilities. They are either not taught latest technology or they do not have upgraded facilities in their department.

Over the last decade, there has been emphasis on promoting research activities in medical schools in the country. Each postgraduate student is mandated to take up a research study and write thesis during their training period.^[9] This amounts to huge quantum of research since nearly 40,000 students get enrolled for postgraduation course every year across the country. Contrary to the notion, a study elsewhere reported for the poor state of post graduate research activity in a medical college in India.^[10] The study results revealed

that the thesis dissertations were compiled in inadequate and non-uniform manner, which reflects that they remain unguided for research. This may be the outcome of lack of funds, inadequate research facilities, and poor mentoring. Subsequently, the students fail to learn the principles of research ethics and do not conduct their research studies appropriately.^[11] They find the assignment irrelevant and have tendency to compile their thesis reluctantly. Hence, the publications from their thesis do not find a place in reputed journals. Further, the students are mandated to publish their findings before appearing for their final exams,^[9] the pressure of which leads them to publish in substandard journals or predatory journals at times. This often leads to loss of good data and study reports to a large extent merely due to poor student research management. Therefore, there may be loss of effort and man-hours devoted to research activities, on the one hand, and loss of good data to substandard publications, on the other hand.

Maintaining a sound mental health is of paramount significance for post graduate trainees since they work relentlessly during this phase. It was alarming to find that in majority of the colleges there are no provisions for taking care of the mental health of these students. Similarly, lack of extracurricular activities was also reported by the participants. Many students reported that they are not allowed to avail the leaves entitled to them and in worst situation if they avail, they remain leave without pay for the duration of their leave. The students are working tirelessly and in many places they are working overtime, which is likely to affect their performance.^[12] Further, basic facilities such as food and sanitation are also inadequate in many colleges. At many places, hostel accommodation is either not provided or the rooms are in inappropriate condition and hence students prefer staying in rented apartments or their homes. They are not able to resolve their issues as they lack resident doctor's association in many colleges and individually do not gather courage to report their issues to higher authorities. These basic facilities must be provided to the students and their issues must be addressed so that they feel supported by their departments and are able to devote best efforts to their work.

Workplace security is a matter of great concern for these trainees so as to render smooth patient care services. To this, some respondents answered that they feel that the workplace is not secure and they are not happy with their present state.

These results are depressing and bring into light the unaddressed problems from a post graduate student's perspective. It may be argued that the aforesaid problems were reported merely by 20–30% respondents and majority of the participants have confirmed that they were provided with academic guidance, and receive departmental and institutional support which meet the standards of post graduate education. To this, the authors admit and appreciate the efforts of medical colleges and institutes which maintain such environment. However, by neglecting the responses from remaining students who although constitute lesser percentage of the cohort, will eventually lead to hiding of the lacuna prevailing in the quality of postgraduate medical training in India. This small percentage actually reflects the large figure when we consider all the post graduate students in the country and these students when enter into the mainstream cannot compete with their counterparts who have received a better training in all spheres.

There may be numerous factors which affect the postgraduation medical education in these colleges.^[13] These may be in form of excessive workload on the faculty as India is an overtly populated country with a poor doctor-patient ratio. Further, the guidelines from MCI which permits the departments to work with bare minimum faculty number puts on additional burden on the

faculty and hence they are left with much lesser time and energy to focus on the post graduate students.^[14] There may be lack of funds provided to the colleges which hamper incorporation of advanced facilities and up gradation of equipment and departments.^[15] Limited funding and availability of resources dismantles the entire system and hence the postgraduate students suffer. Sometimes there may be lack of initiative and resistance from faculty as well to improve the post graduate education since they are themselves not trained well.

The questionnaire had a section for comments where the participants could mention their perception. The comments were quite revealing: "Postgraduate medical education needs to be reformed;" "Colleges without proper facilities for postgraduate training must not be displayed for admission." The questionnaire forms were flooded with similar comments by students.

It is suggestive from the present survey that there exists myriad of problems which prevents effective and uniform execution of postgraduation training curriculum in various medical schools in the country. These may be overcome by implementing certain changes in the existing pattern of training, for example, fixing the number of academic activities such as journal clubs, seminars, case presentations, and the practical skills to be compulsorily learnt by a student. Separate funds for thesis research may be allocated or the students may be associated to work under guidance of faculty who has funded research so that paucity of funds may not deter a student from taking up research studies. A separate unit may be created with collaboration of psychiatry department of the college and NGO to take care of mental health issues of the students and spread awareness. The administrative heads of the medical schools need to take special interest to provide work place security to students.

The authors admit that only 274 respondents participated in the study and since approximately 40,000 postgraduate students register every year in the course; this might be a limitation of the study. The participants belonged to different medical schools from the entire country and their responses represent reflection of quality of postgraduate education in the country. It is time for all faculties to introspect and the policy makers to look into the strategies to improve the quality of postgraduate medical education.

CONCLUSION

The unaddressed and genuine problems faced by the postgraduate students during their training period needs to be taken care of at all levels so that the students can put their best performance and contribute happily to the health care delivery system and academics.

Declaration of patient consent

Patient's consent not required as there are no patients in this study.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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How to cite this article: Mohan L, Pant J, Agrawal M, Shah Z. Post graduate training in medical colleges of India: Resident Physicians' perspective. *Indian J Physiol Pharmacol* 2021;65:245-55.

30. Does your department provide you with a proper place to work?
31. Does your institute have a proper library from where you can access professional books?
32. Are newer technologies used in your department for eg, new instruments, audiovisual aids etc?

Work culture/Psychosocial factors

33. How is your usual mental state during post graduation?
34. Do you feel safe and comfortable in your work environment?
35. Does your department foster team work and healthy interaction?
36. How many leaves (casual/ academic/ earned/ medical/ maternity) are you entitled to during a year? (specify)
37. Are you able to maintain work life balance during post graduation?
38. Do you get adequate rest/ sleep to be able to perform your duties effectively?
39. Do you think working hours/ shift duties are managed efficiently by your department ?
40. What are your working hours like on a weekly basis (hrs/ week)?
41. Do you think there is enough manpower in your department to carry out all the duties efficiently?
42. Do you think there is enough manpower in your department to carry out all the duties efficiently?

Untitled Section

43. Does your institute encourage extracurricular activities like art, music, sports etc among students and faculty?
44. Do you have a student counselor to take care of your emotional concerns?
45. Do you have a Resident's Association in your institute to take care of issues faced by the residents?
46. How equipped do you feel to pursue your future career independently?

Open Questions

47. How do you think post graduate training can be improved in your institute/department?
48. Any other comments/feedback.