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Raviteja Innamuri

Ambuja Dacha

Rajendhar Soorinedu

Siva Kumar Chennam Setty

Kishor Manohar Rao

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#### **ORIGINAL STUDY**

# Perceived Adequacy of Training and Identification of Barriers to Choosing Academic Faculty Positions Among Psychiatry Postgraduate Students in India

Raviteja Innamuri <sup>a,\*</sup>, Ambuja Dacha <sup>a</sup>, Rajendhar Soorinedu <sup>a</sup>, Siva Kumar Chennam Setty <sup>a</sup>, Kishor Manohar Rao <sup>b</sup>

#### **Abstract**

The increasing burden of psychiatric morbidity will proportionately increase the need for teachers of psychiatry in medical colleges. There are no studies on the current postgraduates' perception about taking up faculty positions. We conducted an online cross-sectional study among 101 postgraduate students using self-reporting questionnaires from October 2021 to November 2021. Majority were female, in 25-30 years age group, studying final year in private medical colleges. They were willing consider teaching positions and expressed interest in training programs. There was perceived inadequacy of training in psychotherapy with majority of students seeking resources outside the teaching curriculum to make up for the deficits. Politics was reported as a significant barrier to taking up faculty positions in medical colleges.

Keywords: Barriers, Facilitators, Psychiatry faculty

#### 1. Introduction

There is an increasing burden of psychiatric morbidity across the world [1]. In 2016, more than 1 billion people were affected with mental and addictive disorders globally with 7% and 19% of disability-adjusted life years (DALYs) and years lived with disability (YLDs) respectively [2]. The global burden of disease study reported that 197.3 million Indians i.e., 14.3% of the total population were suffering from various mental disorders with 4.7% and 15.5% of DALYs and YLDs [3]. The National Mental Health Survey (NMHS) revealed the overall prevalence of mental disorders as 10.6 percent [3,4].To deal with this high burden, there is a need for a proportionate number of mental health professionals.

Despite the studies revealing increasing prevalence of mental disorders, the availability of mental health professionals is worrisome [1]. In 1982, National Mental Health Programme (NMHP) was introduced in India to provide mental health services alongside general healthcare system at the community level. However, several resource constraints and insufficient infrastructure have limited its impact [5]. According to the WHO data for 2016, while the desirable number of Psychiatrists is anything above 3 per 1,00,000, India has 0.292 psychiatrist for every 1,00,000 population [5].

Currently, 243 of the 554 medical colleges in India have psychiatry postgraduate curriculum that cater to about 1003 psychiatry postgraduates per year [6]. These postgraduate seats are unevenly distributed across the 29 states and 7 UTs. The number of psychiatry trainee seats are higher in government institutes (65.89%) than in private institutes (34.10%). One psychiatry trainee seat indicates the availability of at least four full-time psychiatrists in

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E-mail addresses: drravitejainnamuri@gmail.com (R. Innamuri), dachaambuja@gmail.com (A. Dacha), rajsoorineedu@gmail.com (R. Soorinedu), siva080@gmail.com (S.K.C. Setty), drkishorjss@gmail.com (K.M. Rao).

<sup>&</sup>lt;sup>a</sup> Department of Psychiatry, Government Medical College, Nizamabad, Telangana, India

<sup>&</sup>lt;sup>b</sup> Department of Psychiatry, JSS Medical College, Mysuru, Karnataka, India

<sup>\*</sup> Corresponding author.

that institute or state (as per the requirement of the Medical Council of India or National Board of Education regulations) [5].

Following postgraduation, most psychiatrists join medical colleges as faculty. The primary objective of faculty position in medical college is teaching, apart from patient care and research. However, there is a scarcity of studies that have explored the postgraduate's perception about taking up this position. This survey attempts to explore the perceived adequacy of training and identification of barriers to choosing academic faculty positions among Psychiatry Postgraduate students in India. The findings from this study will help in identifying deficit areas in the current training curriculum of post graduates and may help in designing specific training modules to assist, empower and enhance the quality of training to create more confident teachers of psychiatry in India.

#### 2. Methods

#### 2.1. Study design & setting

We conducted an online cross-sectional study using self-reporting questionnaires. Institutional Ethical Clearance was obtained. Study participants were identified through social networking platforms i.e., WhatsApp and Telegram. Informed consent was obtained from the participants. We conducted this study from October 2021 to November 2021. It was a convenient sample which included consenting postgraduate students from all years of postgraduation training including Diploma in Psychological Medicine (DPM), Doctor of Medicine (MD) and Diplomate of National Board (DNB).

#### 2.2. Questionnaire

A questionnaire was designed using semi-structured questions with expert consensus from 2 senior faculty members. The questionnaire was entered as a Google Form. The hyperlink to the Google Form was sent to online groups (including WhatsApp groups of various institutes and discussion groups dedicated to psychiatry). Postgraduate students were invited to participate in the study and others were requested to forward to postgraduate students who might be interested in participating in the study. Reminders were posted on each of the groups once every week, over a span of 4 weeks.

Data were collected using multiple choice and open question questionnaires consisting of 4 subsections; (i) socio-demographic data, details of course and medical college, (ii) details regarding academic and clinical training, any perceived inadequacy of training and resources being used apart from the curriculum, (iii) exploring anticipated facilitators and barriers to faculty posts based on their interest, (iv) exposure to teaching skills required for a teaching faculty.

#### 2.3. Statistical analysis

The collected data were analysed using version 24 of the IBM Statistical Package for Social Science (SPSS) program. A chi-square test was employed to explore the relationships between demographic and other categorical variables. ANOVA was used to compare means of perception scores among different subgroups. A p-value less than 0.05 was considered significant.

Dependent variables included postgraduate curriculum training details, interest to join as faculty and learning teaching skills required for a faculty. Independent variables were socio-demographic characteristics (e.g., age, gender), academic details (institution name and university, type of institution, designation, years of training in Psychiatry). This would help us identify the differences across the various institutes, if any. We have anticipated bias and thus undertook both statistical and methodological strategies to minimize the same. The questionnaire was forwarded online to various online groups. The sample population is a convenience sample. Some of the questions did not receive any response. Response rates are also unpredictable as we are not aware of the number of postgraduate students who have received the link to the study.

#### 3. Results

## 3.1. Socio-demographic variables and details of training

Hundred and one participants successfully completed the survey questionnaire. Among the survey participants, majority (55%, n = 55) were female and were between the age group of 25–30 years (77%, n = 77). Majority of the participants were from private medical colleges (60%, n = 60) and were pursuing their final year of training (53%, n = 53).

## 3.2. Perceived inadequacy of training and out-of-curriculum resources

Most (61%, n = 61) of the participants rated their overall training in psychiatry as 'average and

above'. 70% (n = 70) reported their academic performance and 52% (n = 52) reported their clinical skills as 'average and above'.

As shown in Table 1, Participants reported that Psychotherapy (70% n = 70), neuromodulation including Electro Convulsive Therapy (ECT) and Repetitive transcranial magnetic stimulation (rTMS) (64%, n = 64), and sub-specialities (58%, n = 58) are not given adequate exposure during their training. While comparing postgraduate students in government and private colleges, training in psychotherapy was significantly deficient in government colleges.

Majority (65%, n = 65) seek resource material from Training Initiative for Postgraduate Psychiatry Students [TIPPS]. Other sources include YouTube channel (49%, n = 49), Workshops [mainly IPS] (47%, n = 47), and conferences (45%, n = 45) for academic material apart from their curriculum. Almost all (n = 99, 99%) of the postgraduate students seek other resources beyond their training curriculum. The main reasons cited are 'for ease of learning/access to the resources' (70%, n = 70), 'to acquire theoretical knowledge' (52%, n = 52), 'for staying up to date with recent advances' (49%, n = 49), and 'to improve clinical skills' (47%, n = 47). While comparing reasons between postgraduate

Table 1. Showing frequency distribution among various factors, perceived barriers and facilitators of postgraduate students to choosing faculty positions in Psychiatry

Factor	(%,n)	Significance GvP; NvS
Deficits in psychiatry postgraduate curriculum		
Psychotherapy	70 (70)	0.002; 0.170
Neuromodulation	64 (64)	0.285; 0.435
Sub-specialities	58 (58)	1.000; 0.797
Resource utilisation		
TIPPS	65 (65)	0.675; 1.000
YouTube channel	49 (49)	0.221; 0.613
Workshops [IPS]	47 (47)	0.417; 1.000
Conferences	45 (45)	0.681; 0.801
Facilitators to utilising resources		
For ease of learning/access	70.7 (70)	0.497; 0.048
To acquire theoretical knowledge	52.5 (52)	0.839; 0.133
newer developments	49.5 (49)	1.000; 0.613
To improve clinical skills	47.5 (47)	0.014; 0.341
Barriers to utilising resources		
Scarcity of time	50.7 (38)	0.103; 0.768
Lack of information	30.7 (23)	1.000; 1.000
Facilitators to taking up faculty positions		
interest in both teaching and research	66.7 (52)	1.000; 0.210
interest in an academic career	76.9 (60)	1.000; 0.137
better work-life balance.	41 (32)	0.352; 0.376
Barriers to taking up faculty positions		
inadequate pay	38.8 (26)	0.439; 0.381
politics	38.8 (26)	0.038; 0.017
needing more independence	31.3 (21)	1.000; 1.000

GvP: Government Vs Private; NvS: North Vs South.

students in North India Vs South India, ease of access to resources outside curriculum was significant. 75 participants cited reasons for difficulty in using these resources. The main reasons cited are 'scarcity of time during training' (50.7%, n = 38), and lack of information about resources' (30.7%, n = 23).

#### 3.3. Facilitators and barriers to faculty posts

As shown in Table 1, Of the study participants, majority (78%, n=78) expressed interest to join back medical college as faculty following graduation.

The reasons cited by them for their interest in faculty position is mostly 'interest in an academic career' (76.9%, n=60). Other reasons include 'interest in both teaching and research' (66.7%, n=52), 'more secure and stable life' (46.2%, n=36), and 'better work-life balance' (41%, n=32).

The reasons reported for disinterest in research include 'inadequate pay and delayed growth in medical colleges' (64.1%, n=43), 'not interested due to politics in medical colleges' (38.8%, n=26), and 'prefer more independence' (31.3%, n=21). While comparing postgraduate students, politics is seen as a influencer in decision to join medical college as faculty in South India (p=0.017) or Private medical colleges (p=0.038).

#### 3.4. Interest in teaching skills

Also, nearly 51% (n = 51), of the participants reported that they are having adequate opportunity to learn teaching skills during their training. Many (63.2%, n = 55) reported that the exposure is mostly through 'mandatory and integral training through pedagogy and teaching juniors and allied courses'. This reflects the impact of the mandatory presentations and teaching undergraduate MBBS and allied health students. While 24.1% (n = 21) reported that they have attended a course/workshop to improve teaching skills, 23% (n = 20) reported that they are learning to teach by modelling their faculty/teachers.

Finally, majority of them (73%, n = 73) reported that there is a role of training programs for improving teaching skills outside the routine curriculum and expressed interest to participate in a program to improve their confidence to take up faculty positions in the future.

#### 4. Discussion

Significant differences exist based on the geographical region (north vs south) or affiliation

(government vs private). Majority of the medical colleges are located in Southern India. The quality of their training may further vary based on government or private funding, affiliation to state or central or deemed university. Common assumptions exist about training being superior in government medical colleges due to higher patient foot fall, and greater funding and resources available for department of psychiatry.

Interestingly, while comparing postgraduate training between north vs south or government vs private, we noted no statistical difference in the quality of training in terms of academics or clinical skills. Despite many reports on the quality of infrastructure and human resources in private sector medical schools in India compared to public sector schools, there does not seem to be a significant difference in student characteristics, motivations or career aspirations between medical students studying private or public sector medical schools [7].

On the contrary, training in psychotherapy was significantly deficient in government colleges. Very few colleges have structured psychotherapy programs. Recently, a psychotherapy subcommittee has also been established by the Indian Psychiatric Society [IPS] [8]. Neuromodulation which includes Electroconvulsive therapy is quintessential but is missing in several colleges. The National Institute of Mental Health and Neuro-Sciences [NIMHANS] and All India Institute of Medical Sciences [AIIMS] have been conducting small workshops to bridge the gap but may not be sufficient to cover all the current postgraduate students and practising psychiatrists [9,10].

In our study, majority reported deficit areas in their training including psychotherapy, neuromodulation, and sub-specialities. Contrary to conventional understanding, most of the postgraduate students (99%) were utilising resources beyond their training curriculum. This may also be influenced by the rise of several online resources such as Virtual Knowledge Network [VKN] and other initiatives by NIMHANS, Training Initiative for Psychiatry Postgraduate students [TIPPS] [11] Telegram group and YouTube channels during the COVID pandemic. Ease of access to resources was cited as the primary reason which may been influenced by the lockdown when classroom teaching was paused, availability of the internet over mobile phones and no time constraints.

With regard to facilitators and barriers, several reports highlight the lack of faculty and teachers in medical colleges with the common reason cited as disinterest in academic positions, and research. In our study, majority of the participants reported interest in taking up teaching positions following their graduation with majority showing interest in an academic career, interest in teaching and research, and better work-life balance. The reasons identified as barriers such as inadequate pay and politics in medical colleges and needing more independence in professional life. Policies that can change these modifiable factors may further attract more postgraduate students to consider an academic career.

Interestingly, many feel exposure to learning teaching skills is adequate. The role of programs to help improve teaching skills is being appreciated. Recently, Indian Teachers of Psychiatry forum [IToP], an initiative of Minds United for Health Sciences and Humanity Trust, Mysore has been formed to improve training of psychiatry for undergraduate and postgraduate students in India. Another such initiative is the 'Sunday Special with psychiatry teachers' that provides an online platform by bringing the experiences of teaching psychiatry across India. This is a joint initiative of Indian Psychiatric Society [IPS] faculty training task force, IPS Undergraduate education subcommittee and IPS Postgraduate education subcommittee supported by Minds United for Health Sciences & Humanity Trust and Infosys foundation to improve teaching-learning in psychiatry [12]. Such programs seem to have a great scope in the present and future.

#### 5. Limitations

The present study has several limitations. The present study was a cross-sectional study. The study was conducted using a semi-structured questionnaire that has not been validated. The number of students who participated in the survey was small. Some students who have received the link to questionnaire may have opted not to participate, and details of non-responders is not available. No exclusion criteria were adopted in this study. Only completed entries were considered for analysis.

#### 6. Conclusion

This study showcases the inequality of education of psychiatry for postgraduate students in India based on geographical region, and affiliation. Irrespective of these disparities, majority of the postgraduate students reported satisfactory training, and were using various online resources to make up for the perceived deficits. Majority were also willing to consider taking up teaching and academic positions following graduation. Interestingly, many are confident about teaching skills and are further interested to enhance their skills.

#### 7. Future directions

Further studies could use validated tools when conditions permit. A larger sample size could reveal statistically significant results that could be generalizable. A qualitative study may help in understanding the perceived inadequacy and barriers better. Regulatory bodies could take cognizance of the various deficits in the current curriculum and do the needful. Teachers of psychiatry may find it encouraging that several postgraduate students are interested to join as faculty and take steps required to encourage and empower them with required skills. Current postgraduation curriculum may benefit by incorporating these online resources into the existing program to bridge the inequality and develop more such resources to encourage learning in the Generation Z.

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#### **Disclaimers**

None.

#### **Author contribution**

Concept: Raviteja Innamuri; Kishor Manohar Rao Study Design: Raviteja Innamuri; Rajendhar Soorinedu.

Data Collection: Raviteja Innamuri.

Statistical Analysis: Raviteja Innamuri; Ambuja Dacha; Siva Kumar Chennam Setty.

Literature overview: Raviteja Innamuri; Ambuja Dacha; Kishor Manohar Rao

Discussion: Raviteja Innamuri; Rajendhar Soorinedu; Kishor Manohar Rao.

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#### Conflicts of interest

The authors declare no conflicts of interest.

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